European Parliament

Europe's Beating Cancer Plan: Implementation findings

Study

STUDY

EPRS | European Parliamentary Research Service

Ex-Post Evaluation Unit

PE 765.809 – October 2025

EN

Europe's Beating Cancer Plan: Implementation findings

European implementation assessment

This European implementation assessment (EIA) aims to inform the ongoing work of the European Parliament's Committee on Public Health (SANT) on its own-initiative implementation report (2025/2139(INI)) on Europe's Beating Cancer Plan (EBCP). The assessment is composed of two parts. The first part is an introduction by the European Parliamentary Research Service that focuses on Parliament's role in cancer control action plans and cancer policies. It also describes the structure, governance framework and funding mechanisms of the EBCP. The second part of this EIA is a study undertaken by a team of external experts that assesses the implementation of the EBCP across all EU Member States between 2021 and 2024. The analysis focuses on three core areas: (i) gaps and delays in implementation of the EBCP, particularly in prevention, cancer care and quality of life; (ii) the EBCP's impact on cancer inequalities across the EU; and (iii) lessons learned and their applicability to future EU initiatives on non-communicable diseases. Drawing on desk research, stakeholder interviews, and eight country case studies, the study identifies key challenges and opportunities for strengthening EU health governance. It concludes with a set of recommendations to improve coordination, embed equity, and ensure sustainable progress in cancer prevention and control.

EPRS | European Parliamentary Research Service

AUTHOR(S)

1. The introductory analysis was drawn up by Susanna Tenhunen and Dr Mafalda Monda from the Ex-post Evaluation Unit of the Directorate for Impact Assessment and Foresight, within the Directorate-General for Parliamentary Research Services of the Secretariat of the European Parliament. Trainee Eleanora Takitzi provided valuable assistance in the drafting process. The data specialist was Samy Chari.

2. The study 'Europe's Beating Cancer Plan: Implementation findings' was written at the request of the Ex-post Evaluation Unit of the Directorate for Impact Assessment and Foresight, within the Directorate-General for Parliamentary Research Services (EPRS) of the Secretariat of the European Parliament. The authors are: Dr Mike Beke (Ecorys); Rana Orhan Pees (Ecorys); Dr Anna Chowaniec (Ecorys); Nicky Vulhop, (Ecorys); Dr Timothy Yu-Cheong Yeung (CEPS); Hien Vu (CEPS); Cosima Lenz (CEPS); Prof Dr Kristiina Patja (Ecorys and CEPS – peer reviewer).

ACKNOWLEDGEMENTS

The authors would like to thank the various contributors and reviewers for their valuable feedback and recommendations. Particular thanks go to the Economic Policies Unit of the Members' Research Service within the Directorate-General for Parliamentary Research Services and to the Secretariat of the Committee on Public Health of the Directorate for Directorate for Transformation, Innovation and Health within the Directorate-General for Directorate-General for Economy, Transformation and Industry.

PEER REVIEWER

In addition to internal review, the external study was subject to a double-blind external peer review by Dr Thomas Hofmarcher, Research Director at the Swedish Institute for Health Economics

ADMINISTRATOR RESPONSIBLE

Susanna Tenhunen and Dr Mafalda Monda, Ex-post Evaluation Unit of the Directorate for Impact Assessment and Foresight within the Directorate-General for Parliamentary Research Services of the Secretariat of the European Parliament.

To contact the publisher, please e-mail EPRS-ExPostEvaluation@ep.europa.eu

LINGUISTIC VERSIONS

Original: EN

Manuscript completed in October 2025.

PE: 765.809
ISBN: 978-92-848-3035-0
DOI: 10.2861/8280591
CAT: QA-01-25-203-EN-N
eprs@ep.europa.eu
https://eprs.in.ep.europa.eu (intranet)
http://www.europarl.europa.eu/thinktank (internet)
http://epthinktank.eu (blog)

Table of contents

Table of figures

Table of tables

PART I. IN-HOUSE INTRODUCTORY ANALYSIS

The attached external study, together with this introductory analysis, is part of the European implementation assessments series produced by the European Parliamentary Research Service (EPRS). These European implementation assessments are made available to committees that work on implementation reports as part of the European Parliament's commitment to the Better Regulation agenda and notably its 'evaluate first' principle.

Executive summary

Cancer is the second most common cause of death in the EU after cardiovascular diseases, with a worsening trend. Nevertheless, it is possible to control this non-communicable disease through public health measures, as about 40 % of cases are estimated to be preventable. Furthermore, early diagnostics and better treatment increase survival rates significantly, turning cancer into a chronic condition and making patients' quality of life with the disease a pivotal question. When presented in February 2021, Europe's Beating Cancer Plan (EBCP) was a groundbreaking public health programme bringing EU action and funding together with Member State measures in an approach to include all stakeholders in its governance and implementation. With the EBCP, cancer has been elevated to being a priority and part of the European health union.

The European Commission seeks to build similar action plans on other non-communicable diseases such as cardiovascular diseases. In this context, the European Parliament's Committee on Public Health has launched an own-initiative implementation report entitled 'Europe's Beating Cancer Plan' (2025/2139(INI)) to assess the EBCP's implementation. The present European implementation assessment study, prepared by the Ex-Post Evaluation Unit of the European Parliamentary Research Service (EPRS), aims to support and inform the aforementioned implementation report. The study has an introductory part, drafted by the Ex-Post Evaluation Unit, and an external part, prepared by an external contractor – a consortium of CEPS and Ecorys.

This introductory part focuses on the European Parliament's role in cancer control action plans and its development over time. It describes the EBCP's governance framework and funding mechanisms, along with the media attention it garnered across EU Member States. It also provides the context for the external part of this study and highlights its main findings. The external part of the study assesses EBCP implementation gaps, delays, and the effectiveness of the plan's governance and funding structures.

As explained in the introductory part, cancer control action plans have been part of the European agenda for 40 years. They have evolved since the first plan was launched in the mid-1980s with a combination of EU supporting actions and funding for Member States' measures, with an emphasis on sharing best practice across borders and regions. The European Parliament has taken an active role in shaping Europe's cancer control policy throughout the whole continuum of the four decades. In the building up of the EBCP, Parliament set up a Special Committee on Beating Cancer. Parliament

has been active in cancer control policies as a legislator, in terms of setting the agenda, and in overseeing implementation.

The EBCP focuses on four pillars: prevention; early detection; diagnosis/treatment; and quality of life of cancer patients and survivors. The plan includes 10 flagship initiatives and 32 measures, and is funded by €4 billion from EU programmes including EU4Health, Horizon Europe, and Digital Europe. Additional support comes from the cohesion policy funds, the Recovery and Resilience Facility, and the Technical Support Instrument. A comprehensive analysis of the media attention relating to the EBCP, using data from the Europe Media Monitor, revealed that the EBCP's launch was among the topics most frequently reported in the media across EU Member States. Belgium generated the highest number of EBCP-related articles, followed by Cyprus, Romania, Malta and Spain.

The roadmap for EBCP actions extends until the end of 2025, with several initiatives expected to be part of the European Commission's 2026 work programme. The external study evaluates implementation progress from the launch of the EBCP to December 2024, presenting an overview of the success stories, delays and pitfalls of its implementation. It builds on the Commission's review of the EBCP published in February 2025. Specifically, the external study focuses on three research tasks: (i) identify and assess the impact of remaining gaps and delays in the implementation of the EBCP; (ii) assess the EBCP's impact on cancer inequalities; and (iii) draw lessons learned from the EBCP concept and its applicability to other non-communicable diseases. Using a mixed-method approach – including desk research, stakeholder interviews, and case studies – the external study highlights that the EBCP has advanced cancer control positively at EU and national levels. However, significant delays and gaps persist in prevention, reducing inequalities, and improving quality of life for patients and caregivers. The study concludes with 17 policy recommendations to guide decision-making, helping to reuse the EBCP's integrated approach as a model for tackling other non-communicable diseases.

1. Introduction

1.1. Context of the study

Europe's Beating Cancer Plan (EBCP) addresses the growing cancer burden in the EU. With an increasing number of new diagnoses each year, cancer is the second cause of death in the EU to date, and it is projected to become the leading cause by 2035.[1] Studies show a worsening trend due to ageing societies, and underline significant regional differences.[2] When the plan was adopted in February 2021, it was an unprecedented concept that combined EU-level action and budgetary support with national efforts covering the whole disease pathway, from prevention, diagnosis and care to quality of life of patients, survivors and caregivers. This European implementation assessment study looks at the state of implementation of the plan about four years into its adoption.

The success of the concept led the President of the European Commission, Ursula von der Leyen, to announce in her 2024-2029 political guidelines that the EU would strengthen action on preventive health, building on the EBCP model. Mental health, cardiovascular diseases, treatments for degenerative illnesses and research on autism were mentioned as potential topics for similar future plans. This approach was confirmed in the mission letter sent to the Commissioner for Health and Animal Welfare, Olivér Várhelyi, and in his confirmation hearing, as well as in his first structured dialogue with Parliament's Committee on Public Health (SANT) on 19 March 2025.[3]

In this context, the SANT committee launched an own-initiative implementation report on the EBCP on 10 July 2025.[4] The European Parliamentary Research Service (EPRS) and its Ex-Post Evaluation Unit were tasked by SANT to support these discussions with a European implementation assessment study reporting on the current state of implementation of the EBCP. Based on lessons learned, this study offers recommendations on the usability of the EBCP concept as a framework for plans supporting action to manage other non-communicable diseases (NCDs).

EPRS outsourced this study to a consortium formed by CEPS, Ecorys and subcontractors. The introductory part (Part I) was drafted internally by the Ex-Post Evaluation Unit of the EPRS; the externalised study is published as Part II. The main findings and recommendations of the externalised study form the basis of this introductory part and are summarised here.

---

1 European Commission, ECIS fact sheet, 2023; A. Manzano, C. Svedman, T. Hofmarcher et al., Comparator Report on Cancer in Europe 2025 – Disease Burden, Costs and Access to Medicines and Molecular Diagnostics, IHE – The Swedish Institute for Health Economics, 2025.

2 Organisation for Economic Co-operation and Development (OECD)/European Commission, EU Country Cancer Profiles Synthesis Report 2025.

3 European Commission website on Commissioner for Health and Animal Welfare Olivér Várhelyi; European Parliament website on the 2024 confirmation hearing of Commissioner for Health and Animal Welfare Olivér Várhelyi; European Parliament Policy Department for Structural and Cohesion Policies, Commitments made at the confirmation hearings of the Commissioners-designate 2024-2029, January 2025; Minutes of the SANT committee meeting of 19 March 2025.

4 European Parliament, Europe's Beating Cancer Plan – 2025/2139(INI), Legislative Observatory (OEIL).

This introductory part is solely based on desk research covering publicly available information, while the externalised study relies also on primary data collection through 25 semi-structured stakeholder interviews. These interviews were conducted by the external contractor with a wide coverage of interviewees among EU institutions, Member State authorities, international organisations and civil society. In addition, the external analysis includes eight country case studies, which offer an overview of the EBCP'S implementation in a specific country, and provide an in-depth analysis of selected cancer control initiatives. These case studies have been chosen to reflect geographical balance and the diversity of Member States' health system structures.

The externalised study concentrates on three research tasks defined together with the SANT committee secretariat and the political groups. They are the following:

- to identify and assess the impact of remaining gaps and delays in the implementation of the EBCP;
- to assess the EBCP's impact on cancer inequalities;
- to draw lessons learned from the EBCP concept and its applicability to other non-communicable diseases.

1.2. Europe's Beating Cancer Plan: A groundbreaking initiative of EU cancer policy

Europe's Beating Cancer Plan is an ambitious initiative that put cancer back among the EU's top public health priorities. This is underscored by the fact that the plan is one of the four cornerstones of the European health union.[5] When introduced in 2021, it renewed and upgraded the EU's commitment to cancer prevention, treatment and care with its comprehensive approach that covered all stages of the disease pathway. In addition to commitments to EU-level actions, the EBCP underpins Member States' efforts to better coordinate their response to the disease.[6]

The EBCP is composed of four pillars and three horizontal themes, each addressing different aspects of cancer control. The pillars are: prevention; early detection; diagnosis and treatment; and quality of life of cancer patients and survivors. The three cross-cutting themes of research and innovation, inequalities and paediatric cancers contribute to all pillars of the plan. Inside this structure, the EBCP comprises 10 flagship initiatives, 32 additional actions, as well as multiple supporting sub-actions.

The plan is a strategic effort, adopted under Article 168 of the Treaty on the Functioning of the European Union (TFEU),[7] that builds on previous cancer control frameworks and integrates with

---

5 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021, and European Health Union, website.

6 T. Albreht, 'Europe's beating cancer plan — a new step towards more comprehensive and equitable cancer control in Europe', *The European Journal of Public Health*, Vol. 31, Issue 3, pp. 456-457; V. Trillet-Lenoir, 'Le Plan européen de lutte contre le cancer : un modèle de stratégie internationale en santé publique', *Bulletin de l'Académie Nationale de Médecine*, Vol. 207, Issue 5, 2023, pp. 636-641.

7 According to Article 4(2)k, Article 6(a) and Article 168 TFEU, EU has a mixed competence structure on public health. In the area of public health policies on non-communicable diseases, the EU holds a complementary competence meaning that it can intervene only on a limited range of issues while the Member States retain responsibility on fundamental questions concerning the organisation and financing of their healthcare services and medical care. Under

other existing initiatives. It fosters collaboration between various stakeholders, and knowledge sharing and capacity building in and among Member States. At the same time, it aims to meet different countries' specific needs, to create a common understanding of the challenges and opportunities in cancer prevention and control, and to facilitate collaboration between the various national actors. In addition to a unique concept, the EBCP has an innovative funding structure. With its €4 billion allocations, the plan pools resources from different programmes that allow mobilising financial instruments to support EU Member States in their fight against cancer.

1.3. Evolution of Europe's cancer policy

The EBCP, adopted in February 2021, is part of a continuum of common European actions stretching back for more than 40 years. The starting point was in Milan in June 1985, when the European Council emphasised the importance of launching a European programme of action against cancer, and tasked the European Commission with putting forward a proposal.[8] About a year later, in July 1986, the Council adopted the first action programme – the Europe Against Cancer action plan. It was a document of priority actions in the fields of tobacco; chemical substances; nutrition and alcohol; prevention; epidemiological data; health education; and international collaboration.[9]

This first and the following action plans covered more than 15 years of common European programmes designed to beat cancer, from 1986 until 2003.[10] They had a documented impact on increased prevention, strengthened health promotion and the establishment of cancer registration and screening programmes in EU Member States.[11] At the beginning of 2003, the emphasis of EU cancer policy shifted from the action programmes towards more common efforts to develop national cancer control programmes for and with individual EU Member States while still fostering knowledge sharing.

In 2007, the European Parliament adopted a declaration on the need for a comprehensive strategy to control cancer.[12] It was followed in 2008 by Parliament's and the Council's calls for the European Commission to take decisive action in' supporting Member States in the fight against cancer.[13] In 2009, in its communication on Action Against Cancer: European Partnership, the Commission strongly encouraged Member States to develop their national cancer control strategies by 2013.[14]

---

the European Semester process of economic governance and social coordination, the EU has encouraged Member States to draw on available comparative information to improve their public health infrastructure, among other things.

8 European Council conclusions, 28-29 June 1985.

9 Resolution of the Council and the Representatives of the Governments of the Member States, meeting within the Council, of 7 July 1986, on a programme of action of the European Communities against cancer.

10 European Parliament, Public health: extending certain action programmes – 2000/0192(COD), Legislative Observatory (OEIL).

11 T. Albreht, M. McKee, D.-M. Alexe et al., 'Making progress against cancer in Europe in 2008', *European Journal of Cancer,* Vol. 44, 2008, pp. 1451-1456.

12 European Parliament, Declaration on the need for a comprehensive strategy to control cancer – 2007/2223(DCE), Legislative Observatory (OEIL).

13 European Parliament, Resolution of 10 April 2008 on combating cancer in the enlarged European Union; Council conclusions on reducing the burden of cancer, 10 June 2008.

14 European Commission, communication on Action Against Cancer: European Partnership, COM(2009) 291, 2009.

Parliament supported this action in its related own-initiative resolution.[15] The European Partnership for Action Against Cancer (EPAAC) was launched in this context in September 2009. EPAAC was a collective action to facilitate the identification and sharing of information, capacity and expertise in cancer prevention and treatment, having as one of its goals to provide initiative and support for integrated national cancer plans. It brought together actors from the whole cancer continuum covering Member States, experts, healthcare professionals, non-governmental organisations, patient groups, civil society representatives and industry.

Several joint actions (JA) were established, for instance, under the second and third EU health programmes to coordinate the preparation of national cancer control plans (NCCPs). These include EPAAC JA (2011–2013); CANCON JA,(2014-2017); and the Innovative Partnership for Action Against Cancer (iPAAC, 2018-2021).[16] As a result, in 2013, 23 out of 27 EU Member States[17] had adopted a national cancer control plan, while four Member States were still lacking a concrete integrated plan.[18] In 2021, a study based on information collected through the CANCON and iPAAC joint actions revealed that, in the 35 countries[19] covered by the study, 30 had a national cancer control plan[20]. In the EBCP, work on NCCPs has continued under Action 40, which is about mainstreaming equality action in the plan. The JA OriON (joint action on contribution to the cancer inequalities registry to monitor national cancer control policies) assesses the implementation of the EBCP at national level and the developments of national cancer control plans.[21]

Table 1 provides an overview of the latest versions of national cancer control plans as of August 2025.

15 European Parliament, Action against cancer: European partnership – 2009/2103(INI), Legislative Observatory (OEIL).

16 Joint actions: EPAAC JA; CANCON JA; iPAAC.

17 L. Gorgojo, M. Harris, E. Garcia-Lopez et al., National Cancer Control Programmes: Analysis of Primary Data from Questionnaires, final preliminary report, European Partnership for Action Against Cancer (EPAAC), 2012. At the time of the analysis made by Gorgojo et al., the EU had 27 Member States including the United Kingdom (UK). Croatia joined the EU in July 2013 and was not part of the JA.

18 C. Espina, I. Soerjomataram, D. Forman et al., 'Cancer prevention policy in the EU: Best practices are now well recognised; no reason for countries to lag behind', *Journal of Cancer Policy,* Vol. 18, 2018, pp. 40-51; L. Gorgojo, M. Harris, E. Garcia-Lopez et al., National Cancer Control Programmes: Analysis of Primary Data from Questionnaires, final preliminary report, European Partnership for Action Against Cancer (EPAAC), 2012.

19 EU-27 plus Iceland, Montenegro, Norway, Türkiye and the UK (England, Scotland, Wales and Northern Ireland).

20 M. Jelenc, E. Weiderpass and T. Albreht, 'Developments in National Cancer Control Programmes in Europe – Results from the Analysis of a Pan-European Survey', *Cancer Control*, September 2021.

21 European Commission, OriON: Joint Action on Contribution to the Cancer Inequalities Registry to Monitor National Cancer Control Policies, website.

Table 1 – National cancer control plans in EU Member States

EU Member State	Year of the latest NCCP
Belgium	2008
Bulgaria	2023
Czechia	2022
Denmark	2025
Germany	2019
Estonia	2021
Ireland	2017
Greece	*
Spain	2021
France	2021
Croatia	2024
Italy	2023
Cyprus	2019
Latvia	2022
Lithuania	2014
Luxembourg	2020
Hungary	2018
Malta	2017
Netherlands	2023
Austria	2014
Poland	2020
Portugal	2023
Romania	2022
Slovenia	2022
Slovakia	2021
Finland	2014
Sweden	2009

* No current plan, but preparatory work ongoing, with estimated adoption in 2025.

Source: OECD Country Cancer Profiles 2025 and CEPS/ECORYS data presented in Table 14 of the external study.

Work on national cancer control strategies in the EU was in line with the global trend launched by the World Health Organization (WHO). The WHO published guidelines in drafting national cancer control plans in 1991, with a second edition in 2002.[22] A European guide for quality national cancer control programmes was developed under the EPAAC JA and published in 2013.[23]

Throughout the four decades, EU cancer control policy initiatives have been supported by several EU funding programmes, whereby the EU health programmes and the framework programmes for research and innovation featured among the most prominent. The EU health programmes formed the main Commission funding instrument to implement the EU health strategy as such, while the framework programmes supported, in particular, research and innovation in this sector.[24]

EU-level cancer policy actions have also been supported by an awareness raising initiative, the European Code Against Cancer (ECAC),[25] which was created by the WHO and its International Agency for Research on Cancer (IARC) and co-financed by the European Commission. The first edition of the ECAC was published in 1987, followed by second and third editions in 1994 and 2003, respectively. The current fourth edition dates to 2014, with a fifth update awaited by the end of 2025.[26] The EBCP's prevention pillar and Action 40, which seeks to mainstream equality action in the plan, relate to the ECAC.

The current ECAC comprises 12 recommendations on individual actions people can take in their daily lives to prevent cancer. Most of the recommendations directly address individuals seeking to promote healthy behaviour, or advise on how to reduce or avoid exposure to carcinogenic agents, while some include a call for medical intervention, such as participation in vaccination or screening programmes.[27]

22 WHO, National Cancer Control Programmes: Policies and Managerial Guidelines, 2002.

23 European Guide for Quality National Cancer Control Programmes, EPAAC 2013.

24 The latest being Horizon Europe and EU4Health.

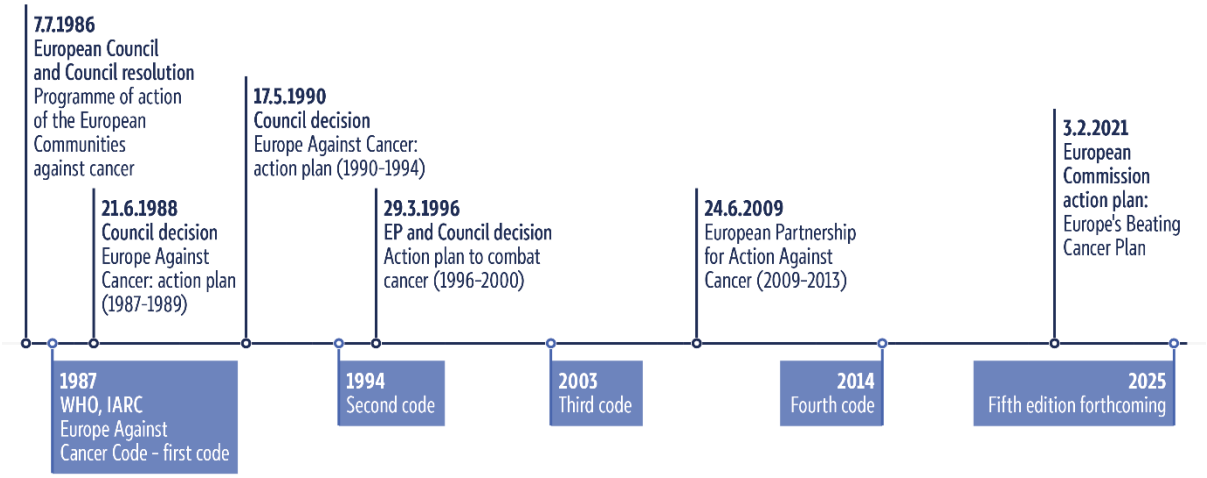
25 IARC ,European Code Against Cancer, website.

26 IARC, World Code Against Cancer Framework, website.

27 S. Minozzi, P. Armaroli, C. Espina et al., European Code against Cancer 4th Edition: Process of reviewing the scientific evidence and revising the recommendations, *Cancer Epidemiology*, Vol. 39, Suppl. 1, 2015, pp. S11-S19; IARC, European Code Against Cancer, website.

Figure 1 presents the EU action plans from the mid-1980's until today, and the different editions of the WHO ECAC.

Figure 1 – Timeline of EU cancer policy milestones



Source: Compiled by the authors.

1.4. European Parliament views on EU cancer control policy: Road to the EBCP

As long as cancer has been on the European agenda, the European Parliament has played an active role in shaping the common response to this public health issue. Parliament has contributed to all European action programmes since the first programme, adopted in 1986. During the absence of EU-level action programmes dedicated to cancer control at the end of the seventh and during the full eighth legislatures, Parliament stayed active and voiced the need for more comprehensive and coordinated action in this field through several declarations, such as on the fight against breast and colorectal cancers and on cancer research.[28]

In the preparatory phase of Europe's Beating Cancer Plan, Parliament established a Special Committee on Beating Cancer (BECA), with a mandate starting on September 2020 and ending in December 2021.[29] One of the main tasks of the BECA special committee[30] was, precisely, to look at a comprehensive approach to tackle cancer at every stage of the disease pathway, and to ensure a close link with the Horizon Europe Cancer Mission. The BECA special committee report was voted in committee in December 2021, and Parliament adopted a resolution in plenary on

[28] European Parliament, Declaration on the fight against breast cancer in the European Union – 2010/2069(DCE), Declaration on fighting colorectal cancer in the European Union – 2010/2281(DCE), Declaration on the need for increased coordination of cancer research in the European Union – 2011/2031(DCE), Legislative Observatory (OEIL); European Parliament, Resolution of 2 March 2017 on EU options for improving access to medicines and Resolution of 14 February 2017 on promoting gender equality in mental health and clinical research.

[29] European Parliament, Decision of 18 June 2020 on setting up a special committee on beating cancer, and defining its responsibilities, numerical strength and term of office.

[30] The Beating Cancer special committee was chaired by Bartosz Arłukowicz (EPP, Poland). The rapporteur of the BECA own-initiative report was Véronique Trillet-Lenoir (Renew, France).

16 February 2022.[31] In this resolution, adopted about a year after the introduction of the EBCP, Parliament welcomed the plan. Many of the actions proposed and the calls made in the resolution had already been addressed in the EBCP. BECA contributed to and influenced the European Commission's work on the EBCP both through its report and throughout the whole drafting process.[32]

During the BECA special committee's mandate, the outbreak of the COVID-19 pandemic in March 2020 took a heavy toll on the national health systems, and in particular the health of patients with chronic and non-communicable diseases. BECA organised a public consultation on the impact of the pandemic in cancer prevention, health services, cancer patients and health research.[33] The results of this consultation, which received 34 responses from stakeholder groups with different cancer-related affiliations, were considered in the BECA special committee report.[34]

[31] European Parliament, Resolution of 16 February 2022 on strengthening Europe in the fight against cancer – towards a comprehensive and coordinated strategy.

[32] The Commission replied to the specific calls presented in Parliament's resolution of 16 February 2022 based on the work of the BECA committee with an official response. According to an EPRS study, European Commission follow-up to European Parliament requests 2022–2024, published in November 2024, out of the 89 calls made by Parliament, the Commission provided a direct reply to more than 60 % (or 54) of them, and addressed several of the remaining calls in a broader sense.

[33] The public consultation was conducted between 4 February 2021 and 11 March 2021. The aim was to gather insight into the impact of the pandemic on patients, healthcare professionals and all other aspects of cancer care and research in the EU, and to draw short-term solutions as well as recommendations for future health crises to ensure continuity of cancer services.

[34] European Parliament, Public consultation Synopsis Report – The impact of the COVID-19 pandemic on cancer prevention, health services, cancer patients and research: lessons from a public health crisis, 2021.

2. Europe's Beating Cancer Plan

2.1. Structure and funding of the plan

The EBCP is structured around four key action areas: (i) prevention; (ii) early detection; (iii) diagnosis and treatment; and (iv) quality of life of cancer patients and survivors. It also includes three cross-cutting themes: (i) fostering new technologies, research and innovation at the service of patient-centred cancer prevention and care; (ii) reducing cancer inequalities across the EU; and (iii) putting childhood cancer under the spotlight. The EBCP comprises 10 flagship initiatives and 32 additional measures, each with numerous sub-actions (see Figure 2 below).

A total of €4 billion is allocated to the EBCP, drawn from various EU programmes.

The **EU4Health programme**[35] has allocated an initial €1.25 billion to initiatives under the plan, funding projects through joint actions for Member States, international organisations or eligible entities, and competitive action grants awarded through proposal calls.

The **Horizon Europe framework programme for research and innovation**[36] has allocated up to €2 billion to support the Mission on Cancer and other cancer-related research projects, including for research infrastructure and partnerships.

Erasmus+, the **European Institute for Technology (EIT)** and **Marie Skłodowska-Curie actions**[37] also provide up to a total of €500 million for projects in education, training and research in the field of cancer.

The **Digital Europe programme**[38] has allocated €250 million to support the plan's digital transformation, focusing on advancing data and digital technologies, including artificial intelligence (AI), to combat cancer.

In addition to the resources allocated to the EBCP, other EU funding streams provide additional support for initiatives aimed at strengthening healthcare systems across the EU Member States. These resources work alongside those directly dedicated to the plan, reinforcing its efforts and helping to achieve its main goals.

The **cohesion policy funds**,[39] particularly the European Regional Development Fund (ERDF), have allocated €7.6 billion in the 2021–2027 period. This funding supports modernising early detection

---

35 Regulation (EU) 2021/522 of 24 March 2021 establishing a Programme for the Union's action in the field of health ('EU4Health Programme') for the period 2021-2027; European Commission, EU4Health programme 2021-2027 – a vision for a healthier European Union, website.

36 Regulation (EU) 2021/695 of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation; European Commission, Horizon Europe, website.

37 EUR-Lex, Erasmus+ and European Institute of Innovation and Technology (EIT), summaries; European Commission, Marie Sklodowska-Curie Actions, website.

38 Regulation (EU) 2021/694 of 29 April 2021 establishing the Digital Europe Programme; European Commission, The Digital Europe Programme, website.

39 European Commission, Cohesion Policy, website.

and screening systems, establishing advanced cancer treatment centres and oncology wards, advancing telemedicine and e-health tools, and promoting research, innovation, and healthy lifestyle initiatives, while integrating infrastructure investments with the European Social Fund Plus (ESF+) to address systemic health disparities.

Additional funding that aligns with the EBCP's goals includes the following.

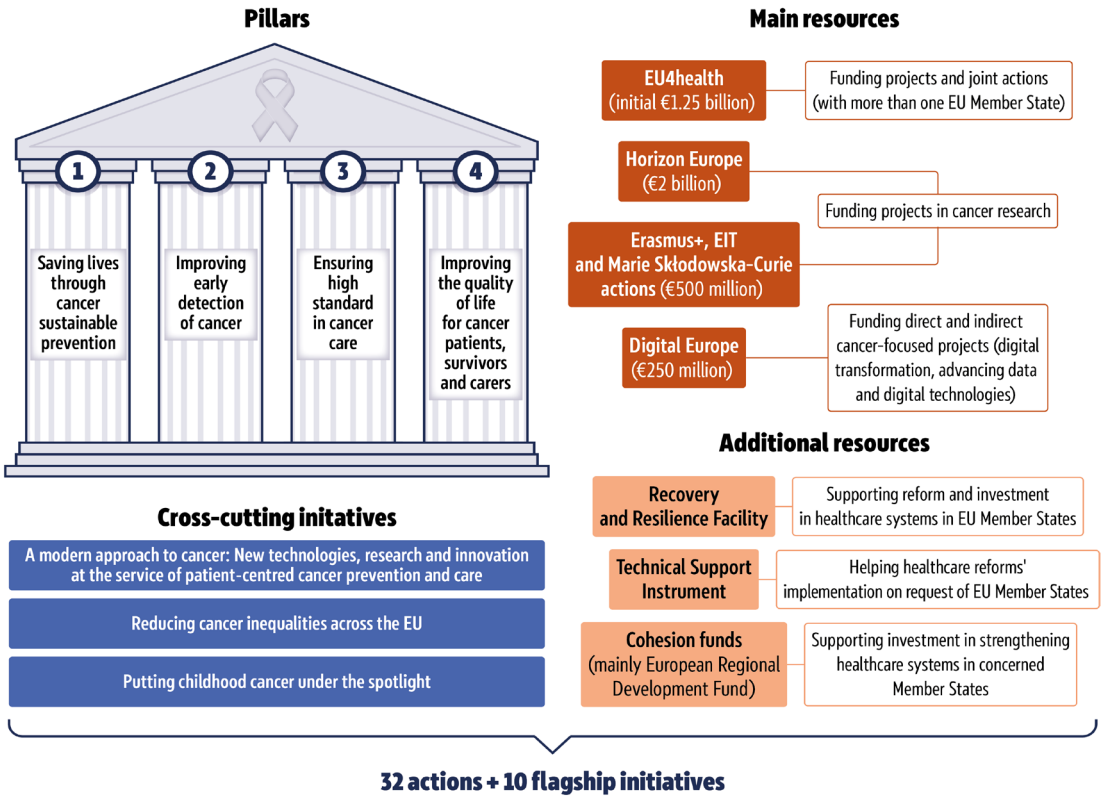
The **Recovery and Resilience Facility (RRF)**[40] has allocated €42 billion (6.5 % of total RRF funds) to strengthen EU health systems, with all 27 Member States incorporating healthcare reforms and investment into their national recovery ad resilience plans, focusing on modernising facilities, improving primary care, and enhancing cancer prevention and treatment infrastructure.

The **Technical Support Instrument**[41] supports Member States in aligning cancer prevention and care policies with the EBCP. It focuses on establishing accredited cancer infrastructure, improving governance and monitoring of population-based screening programs, and enhancing cancer registration systems.

[40] EUR-Lex, European Union Recovery and Resilience Facility, summary.

[41] Regulation (EU) 2021/240 of 10 February 2021 establishing a Technical Support Instrument; European Commission, Technical Support Instrument (TSI), website.

Figure 2 – Europe's Beating Cancer Plan: Structure and funding



Source: Compiled by the authors.

The EBCP operates with a specialised governance structure aligned with the Horizon Europe Cancer Mission, supported by three key groups:

Sub-group on Cancer (Expert Group on Public Health): composed of health and research experts from EU/EEA countries, this group advises the European Commission on implementing the EBCP and the Cancer Mission, shares updates on national efforts, highlights implementation challenges, and provides actionable recommendations.

Beating Cancer Stakeholder Contact Group (EU Health Policy Platform[42]): a forum for stakeholders in cancer prevention and care that facilitates dialogue to support the execution and monitoring of the EBCP and the Cancer Mission.

Commission-internal Interservice Group: made up of Commission representatives, it tracks progress via the implementation roadmap, reviews indicators, and updates on the plan's and the mission's execution.

The Beating Cancer Stakeholder Contact Group on the EU Health Policy Platform provides a framework for Commission engagement with stakeholders. The platform facilitates targeted discussions and supports dissemination of information on the EBCP and the Cancer Mission. The

42 European Commission, EU Health Policy Platform, website.

Commission consults the members of the stakeholder group before the launch of major initiatives, and organises webinars to inform the group about the implementation of the EBCP. For its part, the platform ensures transparency in the health policy dialogues. This structure ensures coordinated oversight and progress tracking to achieve the EBCP's goals.

2.2. Monitoring implementation of Europe's Beating Cancer Plan

The European Commission services, in coordination with Member States and other stakeholders, oversees the implementation and monitoring of the EBCP through a health-in-all-policies approach. The EBCP's progress is tracked via a roadmap[43] published by the Commission in 2021, which has since been updated in 2022, 2023, and 2024 to align with ongoing developments. The roadmap lists the actions of the EBCP on a timeline, and indicates deliverables and milestones for the corresponding actions and sub-actions.

As the second part of this study reveals, there is no official monitoring framework for the implementation of the plan. The progress made on various actions is documented in the Commission roadmaps. The lack of an official monitoring framework leads to difficulties in assessing the long-term effectiveness and impact of the EBCP. A comprehensive monitoring framework would provide concrete evidence on whether the plan successfully drives the intended outcomes.

The Commission's review of EBCP intended to assess whether the action taken was sufficient to achieve the objectives, or whether additional measures were necessary. Originally planned for the end of 2024, the review was published in February 2025 (see details in the following section).

2.3. State of play of implementation of Europe's Beating Cancer Plan

In February 2025, the Commission published the review of Europe's Beating Cancer Plan,[44] describing the state of play of its implementation, and highlighting its main progress and major achievements. The review was built on the study on mapping and evaluating the implementation of Europe's Beating Cancer Plan ('the mapping study'),[45] ordered by the Commission. According to the Commission review, as of December 2024, over 90 % of planned actions have been concluded or are ongoing under the plan's four pillars and three cross-cutting themes. The review highlights that overall, the EBCP demonstrates the potential of a health-in-all-policies approach to tackle complex health crises, and evidence-based strategies to reduce cancer's burden and improve outcomes across the EU.[46]

Specifically, the Commission review emphasises that the plan's success is underpinned by a collaborative, cross-sectoral approach, with joint governance mechanisms that ensure

[43] European Commission, Europe's Beating Cancer Plan: Implementation Roadmap, 2022.

[44] European Commission, Staff Working Document: Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025.

[45] European Commission, Study on mapping and evaluating the implementation of the Europe's Beating Cancer Plan – Final report, 2025.

[46] The external study offers an overview of the implementation status of all 42 EBCP actions and their sub-actions. Moreover, the country case studies present examples of initiatives launched under the EBCP.

coherence between research, policy and innovation. Of note: although the pandemic exacerbated existing challenges, the EBCP's adoption in 2021 has enabled progress in addressing service disruptions and systemic gaps. Alongside successes, the Commission review finds that the EBCP faces significant implementation challenges, ranging from financial and institutional barriers to clinical, behavioural, and cultural related obstacles.

Financial constraints remain the most pressing issue, with rising healthcare costs for screening, diagnostics and treatments threatening the long-term sustainability of healthcare systems. While the Commission provides funding through initiatives to improve cancer screening and the cohesion funds to reduce inequalities, Member States often lack dedicated resources for prevention, early detection and research. Furthermore, institutional barriers including fragmented governance, insufficient coordination between stakeholders, and a lack of political prioritisation for national cancer plans in some Member States have been also identified. Behavioural and cultural barriers including low health literacy, resistance to lifestyle changes, and inconsistent awareness of cancer risks also affect implementation of the plan.

2.4. Media attention on Europe's Beating Cancer Plan

To examine how the EBCP has been received in EU Member States, the European Parliament (European Science-Media Hub) and the European Commission (Directorate-General Joint Research Centre, DG JRC) conducted a comprehensive search of media articles relating to this initiative.[47] This analysis aimed to assess the media attention the EBCP received across the 27 EU Member States. The dataset was compiled using the Europe Media Monitor, a robust tool that aggregates content from 581 prominent online news sources, including national, regional and specialised outlets, in the 24 official EU languages. The analysis covers the period between February 2021 and December 2024,[48] critical for the implementation of the EBCP.

2.4.1. Media analysis

A total of 2 283 articles addressing EU efforts to combat cancer have been retrieved. Among these, 1 326 explicitly referenced the EBCP, while 202 specifically highlighted EU projects linked to the EBCP, such as the UNCAN Partnership,[49] the Cancer Inequality Registry,[50] and the Helping Children with Cancer Initiative.[51] The primary topic reported in the media was the EBCP's launch. In addition, media activity surged around two other major events: the European Parliament's political debate and criticism of cancer risk warnings on wine labels; and the Commission's announcement of four

[47] See A. Damjanovski, T. Reitis-Munstermann, O. D. Eulaerts et al., Europe's Beating Cancer Plan: an overview of European online news, European Commission and European Parliament, 2025.

[48] Articles have been retrieved by using several keywords and phrases (e.g. 'Beating Cancer Plan' and 'European Cancer Strategy') to identify the most relevant media outlets relating to the topic.

[49] The European Initiative to UNderstand CANcer (UNCAN.eu) is one of the 13 specific objectives of the Mission on Cancer under Horizon Europe and one of the 10 flagships of the EBCP.

[50] The Cancer Inequality Registry collects data on cancer prevention and care in EU Member States to identify and highlight disparities and inequalities between and within EU countries.

[51] The Helping Children with Cancer Initiative is a key component of the EBCP, which aims to ensure children have rapid, optimal access to cancer detection, diagnosis, treatment and care.

new initiatives[52] targeting cancer disparities and enhancing screening for women's cancers, including human papillomavirus (HPV) vaccination rollouts and early detection strategies.

From 2021 to the end of 2024, the overall media coverage of EU cancer initiatives maintained a consistent level, marked by recurring fluctuations and occasional spikes in attention throughout the monitoring period. This reflects sustained interest in the topic, particularly during pivotal events such as the introduction of the EBCP. However, the proportion of EU online media dedicated to this subject remains relatively modest compared with the broader volume of online news content.

Belgium led in number of articles and news reporting on the EBCP, followed by Cyprus, Romania, Malta and Spain. At the lower end of the ranking are Denmark, Germany, Finland and Estonia. The low rankings of Denmark, Finland and Estonia can be attributed to the generally limited cancer-related news coverage in these countries. Germany, however, presents a contrasting case: while it ranks among the highest in terms of cancer-related news output, it has a relatively low share of EU-focused cancer reporting.

[52] See G. Peseckyte, 'Commission targets women's cancer, inequalities in new Cancer Plan actions', *Euractiv*, 2022.

3. Parliament's views in the implementation of Europe's Beating Cancer Plan

The EBCP implementation roadmap covers actions from 2021 until the end of 2025, meaning that implementation is still ongoing at the time of the publication. In addition, several delayed initiatives are expected to be included in the 2026 Commission work programme. The EBCP follows a participatory implementation approach, where actions taken at EU level support and intertwine with those taken at national and regional levels. Diversity both of national contexts and of conditions within Member States shape the real impact of EBCP objectives on the ground. Success depends on effective collaboration among Member States, public health actors and communities, and the ability to adapt to national and local contexts.

3.1. Own-initiative reports and resolutions

The European Parliament has taken an active role in implementing the EBCP. As a co-legislator, it has passed important legislation relative to EBCP actions. In the preparatory phase of these proceedings, parliamentary committees have launched own-initiative reports to express Parliament's positions ahead of the proposal, including calls for action to the Commission and the Member States. Moreover, Parliament has adopted an own-initiative legislative report on protecting workers from asbestos.

3.1.1. Own-initiative implementation reports

The three examples below show how Parliament has used own-initiative implementation reports on the revisions of the Health Technology Assessment (HTA) Regulation, the Ambient Air Quality Directives and the Urban Wastewater Directive to inform both the Commission's preparatory work for legislative proposals relating to the EBCP actions, and the following legislative processes where Parliament acted as a co-legislator with the Council.

EBCP Action 29 set as objective the adoption of the **HTA Regulation**. Already back in March 2017, Parliament called on the Commission to harmonise transparent HTA criteria to assess the added therapeutic value of medicines. This call was made in its resolution on EU options for improving access to medicines, which was based on an own-initiative report.[53] The Commission put forward a proposal in October 2018, and the file was negotiated for more than three years under seven Council of the EU Presidencies, leading to adoption of the HTA Regulation (EU) 2021/2282 in December 2021.[54]

The revision of the **Ambient Air Quality Directives** is mentioned as Sub-action 11.1 in the EBCP. The revision started already under the Juncker Commission with a fitness check.[55] After an exchange of

[53] European Parliament, EU options for improving access to medicines –2016/2057(INI), Legislative Observatory (OEIL).

[54] European Parliament, Health technology assessment – 2018/0018(COD); L. Amand-Eeckhout, Boosting cooperation on health technology assessment, EPRS, European Parliament, 2021.

[55] European Commission, Fitness Check of the Ambient Air Quality Directives (Directives 2004/107/EC and 2008/50/EC), SWD(2019) 427, 2019; European Commission, Revision of the Ambient Air Quality Directives, website.

views on the findings of this fitness check, Parliament launched an own-initiative implementation report with the aim of contributing to the Commission's drafting process for the proposal.[56] The proposal for a recast of the directives, which considered many of Parliament's calls, was published in October 2022, and the final act was adopted in October 2024.[57]

Parliament took a strong role also in the revision of the **Urban Wastewater Directive**, where it launched an own-initiative implementation report on the implementation of the directive in January 2021 and adopted a resolution in March 2022.[58] In October 2022, the Commission proposal to recast the directive was presented, and the legislative process[59] ended in December 2024 with the adoption of the new directive. The target set in EBCP Sub-action 11.3 to explore removal of carcinogenic chemicals in the revision of the Urban Wastewater Directive was thus achieved.[60]

3.1.2. Legislative own-initiative report

EBCP Action 15 calls for a revision of EU limits for asbestos to further reduce workers' exposure. In its own-initiative legislative report (INL) on **protecting workers from asbestos**, the European Parliament requested the Commission to put forward new legislative initiatives and revisions of existing legal acts. In this INL, adopted on 20 October 2021,[61] Parliament stressed that the safe removal of asbestos is an urgent and difficult task. Members called on the Commission to present a comprehensive European strategy for the Removal of all Asbestos (ESRAA).[62] They highlighted a need for an integrated approach using synergies from several policy areas and giving priority to safe working conditions.

In this context, Parliament called on the Commission to present several legislative initiatives: (i) a framework directive for Member States to set up national asbestos removal plans;(ii) a framework directive on minimum standards for publicly accessible national digital registers on asbestos and other hazardous substances in public and privately owned buildings; (iii) an update of Directive 2009/148/EC on the protection of workers from the risks related to exposure to asbestos at work; (iv) a directive on the recognition of work-related diseases, including all known asbestos-

---

56 European Parliament, Implementation of the Ambient Air Quality Directives: Directive 2004/107/EC and Directive 2008/50/EC – 2020/2091(INI), Legislative Observatory (OEIL); E. Karamfilova, EU policy on air quality: Implementation of selected EU legislation, EPRS, European Parliament, 2021.

57 European Parliament, Ambient air quality and cleaner air for Europe. Recast – 2022/0347(COD), Legislative Observatory (OEIL).

58 European Parliament, Implementation of the directive on urban waste water – 2000/2318(INI), Legislative Observatory (OEIL).

59 European Parliament, Urban wastewater treatment. Recast – 2022/0345(COD), Legislative Observatory (OEIL).

60 Directive (EU) 2024/3019 of 27 November 2024 concerning urban wastewater treatment (recast).

61 European Parliament, Protecting workers from asbestos – 2019/2182(INL), Legislative Observatory (OEIL); EUR-Lex, Article 225 TFEU; S. Kotanides, Parliament's right of legislative initiative, EPRS, European Parliament, January 2025. According to the Treaties, the Commission has a near monopoly to initiate legislation, with special initiative rights for other institutions granted to other institutions in certain specific cases. Article 225 TFEU provides Parliament and the Council with an 'indirect' right to initiate legislation, as they may invite the Commission to submit legislative proposals. While this right to call on the Commission to make a proposal does not create an obligation to propose the legislation requested, the Commission has an obligation to provide reasons for any refusal to follow a parliamentary INL.

62 K. Müller, Protecting workers from asbestos, EPRS, European Parliament, 2021.

related diseases, with minimum standards for recognition procedures; (v) a directive on minimum standards for compensation for victims of asbestos-related occupational diseases; (vi) an amendment to Directive 2010/31/EU introducing a requirement for the mandatory asbestos screening, registering and removal of asbestos and other dangerous substances before any renovation works to protect workers' health and safety; and (vii) a legislative proposal for the mandatory screening of buildings before sale or rent and for the establishment of asbestos certificates.

The Commission responded to Parliament's INL with a letter from Commission Vice-President Maroš Šefčovič, received by the President of the European Parliament, Roberta Metsola, on 19 January 2022.[63] The Commission committed to putting forward the ESRAA strategy and to take into account Parliament's concerns relating to the implementation of the Renovation Wave strategy, which seeks to double the rate of energy renovation in the EU by 2030. This includes possible gaps in asbestos management. As a first step, the 2021-2027 EU strategic framework on health and safety at work was adopted in June 2021. The Commission also noted that the exposure limit value for asbestos needed to be lowered according to latest scientific evidence. Furthermore, the 2022 Commission work programme included a legislative proposal to further protect workers from the risks related to exposure to asbestos at work. In accordance with its commitments to update Directive 2009/148/EC, the Commission presented a proposal on the protection of workers from asbestos on 28 September 2022, which was adopted in November 2023.[64] EBCP Action 15 was thus completed.

3.1.3. Other own-initiative reports

As regards other own-initiative reports relating to cancer control, Parliament adopted a resolution on **non-communicable diseases (NCDs)** on 13 December 2023.[65] In this resolution, Parliament called for measures to reduce the health risks for NCDs including cancer. Tobacco use, an unhealthy diet, lack of physical activity and harmful use of alcohol appear high on the list of urgent calls for both general and specific actions to the Commission and the Member States. So do environmental factors, of which air, food, water and soil pollution, noise pollution, ultraviolet (UV) radiation or exposure to chemicals were mentioned as the most prominent. Members also highlighted the socioeconomic determinants of health, which greatly influence the risk of getting affected by an NCD. In these calls, Members stressed the need to prevent and reduce the prevalence of all NCDs through early diagnosis and screening, by ensuring better access to public healthcare, and by investing in disease management and treatment.

Parliament encouraged Member States to develop, implement and monitor their national NCD plans and strategies, and highlighted that comprehensive plans aim not only to reverse the trend in the

---

63 European Commission, Observations about Parliament's resolution of 20/10/2021 with recommendations to the Commission on protecting workers from asbestos, 2022.

64 European Parliament, Protection of workers from asbestos – 2022/0298(COD), Legislative Observatory OEIL); Directive (EU) 2023/2668 of 22 November 2023 amending Directive 2009/148/EC on the protection of workers from the risks related to exposure to asbestos at work.

65 European Parliament, Non-communicable diseases – 2023/2075(INI), Legislative Observatory (OEIL).

number of people suffering from NCDs, but also seek to increase the quality of life of those affected, their families and carers. Parliament called for the Commission and the Member States to launch public awareness campaigns on NCDs. The resolution supported the EBCP and underscored in particular its prevention goal to reduce the consumption of tobacco and to create a tobacco-free generation by 2040.

3.2 Parliamentary questions

Since the adoption of EBCP on 3 February 2021, Members have presented to the Commission 64 written questions that contain the words 'Beating Cancer Plan' or 'beating cancer'.[66] These questions cover a broad range of topics, ranging from cancer prevention to diagnosis, treatment, care, funding, and monitoring the plan's implementation.

Screening is one of the most popular issues among questions of parliamentarians. For instance, a question asked in May 2021 and supported by more than 25 Members from seven political groups concerned the implementation of hepatitis C virus (HCV) screening programmes in the EU.[67] This question connects with EBCP Action 20, Sub-action 1, which aims to reduce liver cancer caused by hepatitis B and C virus, and accelerate gastric cancer reduction in Europe through *Helicobacter pylori* eradication. The Commission was asked when it intends to launch initiatives to eradicate HCV and if it plans to launch pilot HCV screening programmes. In its response, the Commission expresses support for the target of viral hepatitis C elimination by 2030, and lists joint actions and other programmes facilitating Member States to detect and treat patients early, leading to a reduction in liver carcinoma. Concerning the launch of pilot screening programmes, the Commission recalls that the European Centre for Disease Prevention and Control (ECDC) monitors the prevalence and testing of hepatitis C in the EU. It also offers technical guidance to Member States to complement their policies in planning and implementation of national HCV screening programmes.

As regards preventive measures, several Members have asked about the action the Commission has taken, or plans to take, to achieve the tobacco-free generation target (EBCP Action 6).[68] In its reply of 24 November 2024, the Commission lists the Council recommendation on smoke- and aerosol-free environments, adopted on 17 September 2024, which aims to better protect people in the EU from exposure to second-hand smoke and aerosols. It also refers to the Delegated Directive amending the Tobacco Product Directive[69] as regards the withdrawal of certain exemptions in

---

66 EUR-Lex, Article 230 TFEU; European Parliament, Rules of Procedure, Rules 141-144. H. Ahamad Madatali, K Eisele, T. Jansen et al., The European Parliament's oversight powers: Tools to scrutinise the European Commission, EPRS, European Parliament, 2025. Parliamentary questions for written answers to the European Commission are the most used tool in numbers for MEPs to scrutinise the EU executive.

67 European Parliament, Implementation of hepatitis C screening programmes in the EU, Question for written answer E-002390/2021 to the Commission, Rule 138, Liudas Mažylis (PPE).

68 European Parliament, A tobacco-free generation as part of the fight against cancer, Question for written answer E-001618/2024 to the Commission, Rule 144, Nicolás González Casares (S&D), and Tobacco-free generation, Question for written answer E-000741/2023 to the Commission, Rule 138, Roman Haider (ID).

69 Directive 2014/40/EU on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco and related products; Commission Delegated

respect of heated tobacco products. It is within the Member States' remit to prohibit the placing on the market of heated tobacco products with a characterising flavour and heated tobacco products containing flavourings in any of their components. In addition, they decide on prohibiting the use of flavourings in cigarettes and roll-your-own tobacco. The Commission recalls that since 20 May 2024, the EU tobacco traceability system also covers tobacco products other than cigarettes and roll-your-own tobacco, which helps to better detect potential fraud cases and illicit trade of tobacco products. Finally, the Commission mentions the evaluation done to underpin the forthcoming revision of tobacco legislation.

Directive (EU) 2022/2100 of 29 June 2022 amending Directive 2014/40/EU of the European Parliament and of the Council as regards the withdrawal of certain exemptions in respect of heated tobacco products.

4. Presentation of the external study

The external study's main aim is to analyse the gaps and delays in the EBCP's implementation across all EU Member States, offering insight into the strengths and weaknesses of the plan's innovative governance and funding structures, as well. Based on rigorous analysis, the study concludes with 17 policy recommendations, with the final aim to support decisionmaking and contribute to the design of future interventions.

The study focuses on three research topics:

1. **Challenges and delays in the implementation of the EBCP in the areas of prevention, care, and quality of life for patients**. This research task has three sub-sections:
   a. prevention with a focus on a tobacco-free Europe, reducing harmful alcohol consumption, and improving health promotion through access to healthy diets and physical activity;
   b. cancer care with a focus on cancer workforce;
   c. quality of life with a focus on fair access to financial services and the labour market;
2. the **EBCP's effectiveness in reducing cancer disparities across EU Member States**;
3. **EBCP design and implementation processes**, with the aim of drawing lessons learned from the EBCP concept and its applicability to other non-communicable diseases.

4.1. Objectives and limitations of the study

The scope of this study has been designed in collaboration with the SANT committee to ensure it addresses specific topics of interest to Members and political groups. Moreover, it has been planned to avoid overlaps with the European Commission review on the EBCP, published on 4 February 2025. The study builds on the findings of this review and expands upon them, providing a detailed analysis of gaps and challenges in implementing the EBCP.

The study covers the period from 3 February 2021 to 31 December 2024. It uses a mixed-methods approach, which combines desk research (based on EU and national policy documents and legislation, academic literature and publicly available datasets, e.g. ECIR, EU Cancer Projects Dashboard, CORDIS, Eurostat), interviews with relevant stakeholders at national and EU levels, and case studies.

Case studies have been selected based on a set of criteria including geographical representation, health system diversity, and alignment with the EBCP's priorities. Each case study provides an overview of national healthcare systems and national implementation of the EBCP, investigating a specific cancer initiative.

The study has certain limitations. First, as each of the 27 EU Member States has its unique demographic, social, economic and environmental profiles, the study adopts a macro-level

perspective, which may overlook national-level variations and contextual factors that influence the EBCP's implementation.

Second, public health is a primary competence of the EU Member States. EU-level policies coexist with national strategies, legislation and initiatives, making it difficult to distinguish the impact of the EBCP from national cancer strategies. To address this, the study prioritises data and information directly attributable to the EBCP or broader EU initiatives. However, it also highlights some relevant developments within Member States that may have been shaped by the EBCP's launch.

Third, owing to the lack of official EU monitoring framework, the analysis of the EBCP's implementation relies on publicly available sources — such as project documentation, legislative texts and stakeholder input — rather than systematic, standardised indicators. This approach limits the ability to assess long-term outcomes or quantify the effectiveness of specific EBCP actions.

4.2. Main findings of the study

The study finds that the EBCP has made a significant positive impact on cancer control at both the EU level and within Member States. While the number of accomplished and ongoing actions is high, notable delays and gaps remain.

According to the study, implementation of the EBCP in cancer prevention shows mixed progress. Core actions, such as HPV vaccination programmes and expanded cancer screening, are largely operational and advancing at Member State level. However, delays persist in tobacco and alcohol control legislation in particular. The lack of EU-wide harmonised nutrition labelling is also hampering consumer empowerment.

As the EU is confronting a persistent and widespread shortage of healthcare professionals, particularly in oncology, the study found that the EBCP is playing a key role through Action 26. This action supports skills development in digital health, AI and personalised medicine. Furthermore, initiatives such as INTERACT-EUROPE and its expanded 100-cancer-center programme are also strengthening the oncology workforce by enhancing digital, clinical and collaborative skills across Europe.

The study shows that EBCP core actions such as disability recognition and initiatives focused on quality of life have advanced. It also highlights limited access to financial services for survivors, uneven implementation of 'right to be forgotten' laws, and stalled EU-wide codes of conduct. It finds that few countries have legislation for job retention/reintegration for survivors, and that there is inconsistent implementation of the Work-Life Balance Directive, which hinders carers' and survivors' ability to balance employment and care responsibilities.

According to the study, the European Cancer Inequalities Registry provides critical data for policymaking but needs continuous refinement to support targeted actions. In telemedicine and e-health technologies, the study shows that less digitally advanced countries are improving, while others are pioneering digital healthcare innovations. It also underscores that the EU provided funding in support of strengthening Member State healthcare systems. As for EBCP funding, the study reveals that it does not proportionally target countries with higher cancer burdens, risking

widening disparities. Nevertheless, the EBCP has prompted national cancer plans to address cancer inequalities more explicitly.

The study highlights that the EBCP is a powerful model for future EU action on other NCDs. It concludes with several lessons learned and 17 recommendations covering key aspects of the EBCP, including governance, stakeholder inclusion, the monitoring framework and funding.

Table 2 summarises the key insights from case studies conducted in selected EU Member States.

Table 2 – Case studies and key messages

Country	Health system characteristics	Case study title	Key message
Denmark	Beveridge model, decentralised, mostly public	Advancing patient-centred cancer care	MyPath is a developed solution that addresses workforce-related challenges within Denmark's cancer care system. It enhances patient-centred cancer care by implementing digital and standardised care pathways driven by patient-reported outcomes. This solution fosters interdisciplinary collaboration, streamlining care. Implementation challenges mainly relate to bureaucracy and staff retention.
Germany	Bismarck model, decentralised, mixed public and private	Bridging gaps in tobacco control	Germany's tobacco control has reduced smoking rates among young people but faces challenges from inconsistent enforcement because of rising e-cigarette use and industry influence. In addition, the absence of a comprehensive national strategy underscores the need for stronger coordination and regulatory alignment.
Estonia	Bismarck model, centralised, mixed with public financing	Addressing cancer inequalities through e-health	Estonia is advancing digital cancer care through a national data dashboard for real-time monitoring of diagnosis/treatment timelines, integrating personalised medicine and e-health to improve patient outcomes and equity. Challenges exist regarding data standardisation and interoperability. Cultural shifts are also needed to sustain a patient-centred digital health system.

Country	Health system characteristics	Case study title	Key message
Croatia	Bismarck model,[70] centralised, mixed public and private	Mainstreaming Equality in Breast Cancer Screening	Croatia's 'Mamma' breast cancer screening programme has reduced inequities and improved early detection through mobile units and awareness campaigns. It has achieved high participation (62 % in 2022) but is facing challenges such as limited resources and coordination, underscoring the need for political commitment to support its impact.
Italy	Beveridge model, decentralised, mostly public	Leveraging a network approach to strengthen health system capacity and resilience	Italy has emerged as a leader in the EBCP's network-based cancer care approach, by implementing a hub-and-spoke model. This model, exemplified by Lombardy's pancreatic cancer initiative, fosters standardised referral pathways, reduces health migration, and enhances patient outcomes through regional collaboration and telemedicine. Key lessons highlight the importance of strong regional ownership, existing Comprehensive Cancer Centre (CCC) infrastructure, and sustainable financing to ensure equitable, high-quality cancer care across the EU.
The Netherlands	Hybrid, centralised, significant private role	Best practice in actions supporting cancer patients' return to work	The Dutch Cancer Agenda's initiatives, including 'Re-turn' for work reintegration, the 'Werk als medicijn' campaign, and EU NAVIGATE's patient navigation for older adults, have enhanced cancer survivors' return-to-work rates. It has also improved care accessibility and survivors' quality of life through stakeholder collaboration, early intervention, and person-centred approaches.

[70] World Economic Forum, Health and Healthcare Systems: The world has 4 key types of health service – this is how they work, website.

Country	Health system characteristics	Case study title	Key message
Poland	Bismarck mode, decentralised, mixed public and private	Strengthening cancer care equity	The eCAN project (2022–2024), funded by EU4Health, aimed to reduce cancer care disparities in underserved regions by integrating telemedicine and remote monitoring. Poland's experience demonstrated that teleconsultations could be as effective as in-person care. However, challenges exist, such as regulatory barriers, infrastructure gaps, and the need for training to ensure operational readiness. Key lessons emphasised the importance of interdisciplinary collaboration and stakeholder engagement to overcome systemic inefficiencies and advance equitable, tech-driven cancer care in Europe.
Finland	Beveridge model, decentralised, mixed public and private	Gradual liberalisation of alcohol control policies	Finland's alcohol monopoly is an exemption to EU rules. Finland's gradual liberalisation of alcohol sales, combined with other policy measures, has stabilised consumption. However, risks exist that liberalisation can undermine cancer prevention goals.

Source: Consortium of CEPS and Ecorys.

Europe's Beating Cancer Plan: implementation findings

Part II

This study was commissioned by the European Parliamentary Research Service to support the work of the European Parliament Committee for Public Health (SANT). It assesses the implementation of Europe's Beating Cancer Plan (EBCP) across all EU Member States between 2021 and 2024. The analysis focuses on three core areas: (1) gaps and delays in implementation, particularly in prevention, cancer care, and quality of life; (2) the EBCP's impact on cancer inequalities across the EU; and (3) lessons learned and their applicability to future EU initiatives on non-communicable diseases (NCDs). Drawing on desk research, stakeholder interviews, and eight country case studies, the study identifies key challenges and opportunities for strengthening EU health governance. It concludes with a set of recommendations to improve coordination, embed equity, and ensure sustainable progress in cancer prevention and control.

EPRS | European Parliamentary Research Service

AUTHOR(S)

This study has been written at the request of the Ex-post Evaluation Unit of the Directorate for Impact Assessment and Foresight, within the Directorate-General for Parliamentary Research Services (EPRS) of the Secretariat of the European Parliament. The authors are:

Dr Mike Beke, Ecorys
Rana Orhan Pees, Ecorys
Dr Anna Chowaniec, Ecorys
Nicky Vulhop, Ecorys

Dr Timothy Yu-Cheong Yeung, CEPS
Hien Vu, CEPS
Cosima Lenz, CEPS

Peer reviewer: Prof Dr Kristiina Patja

EXTERNAL REVIEWERS

Dr Thomas Hofmarcher/ The Swedish Institute for Health Economics

ADMINISTRATOR RESPONSIBLE

Susanna Tenhunen and Mafalda Monda, Ex-post Evaluation Unit, Ex-post Evaluation Unit, Directorate for Impact Assessment and European Added Value, Directorate-General for Parliamentary Research Services

To contact the publisher, please e-mail eprs-expostevaluation@europarl.europa.eu.

LINGUISTIC VERSIONS

Original: EN

Manuscript completed in October 2025.

PE: 765.809
ISBN: 978-92-848-3035-0
DOI: 10.2861/8280591
CAT: QA-01-25-203-EN-N

eprs@ep.europa.eu
http://www.eprs.ep.parl.union.eu (intranet)
http://www.europarl.europa.eu/thinktank (internet)
http://epthinktank.eu (blog)

Table of contents

Table of figures

Table of tables

Executive summary

Introduction

Cancer remains one of the leading causes of death in Europe, with persistent disparities in outcomes across Member States. In response, the European Commission launched Europe's Beating Cancer Plan (EBCP) in 2021, as one of the four pillars of the European Health Union. Backed by a EUR 4 billion budget, the EBCP aims to reduce the cancer burden and improve patient outcomes through four pillars: prevention, early detection, high-quality care, and quality of life.

This study, commissioned by the European Parliamentary Research Service (EPRS), evaluates the implementation of the EBCP across EU Member States between 2021 and 2024. It provides evidence to support the work of the Committee on Public Health (SANT).

Scope and methodology

The study focuses on the period 3 February 2021–31 December 2024. By adopting a mixed-methods approach (i.e. desk research, interviews, and country case studies), it addresses three research tasks:

1. Identifying gaps and delays in EBCP implementation, with a focus on prevention, cancer care, and quality of life.
2. Assessing the EBCP's impact on cancer inequalities across the EU.
3. Drawing lessons from the EBCP's design and implementation for future EU-level initiatives on non-communicable diseases (NCDs).

Main findings

Gaps and delays in implementation

The analysis of the implementation status of the EBCP reveals that implementation has advanced most in areas such as regulatory frameworks for screening and treatment and digital infrastructure supporting innovation and data sharing. However, delays and gaps persist in several areas, particularly in cancer prevention, health literacy, childhood obesity, and survivor support tools.

Despite some progress, implementation of cancer prevention measures under the EBCP remains uneven and delayed across key areas. Legislative revision of the **Tobacco** Products Directive is pending, while the European Commission recently launched a proposal to revise the Tobacco Taxation Directive. Although the EU average smoking rate has declined to 18%, progress has stalled, and disparities persist. Actions on **alcohol** taxation, labelling, and marketing restrictions have faced significant delays. The European Commission has not yet tabled proposals for revising alcohol taxation or cross-border purchase rules. Mandatory labelling of ingredients and health warnings remains limited, with only a few Member States adopting comprehensive measures. Youth exposure to online alcohol marketing remains high, and implementation of the Audiovisual Media Services Directive is inconsistent. Despite strong evidence and stakeholder support, a Commission proposal on harmonised EU-wide **front-of-pack nutrition labelling** is yet to be adopted. National implementation is fragmented, with some countries using Nutri-Score, others using alternative

schemes, and many lacking any interpretive labelling. The absence of a legislative proposal risks to undermine the EBCP's goal of empowering consumers to make healthier choices.

The EBCP has contributed to strengthening **cancer care** across the EU, but significant challenges remain including the persistent shortage of healthcare professionals. The "double demographic" challenge, an ageing population and an ageing workforce, is compounded by difficult working conditions, regional disparities, and limited access to training. The EBCP addresses these issues through the Inter-specialty Training Programme. The INTERACT-EUROPE project and INTERACT-EUROPE 100 promote digital, clinical, and collaborative skills, but their long-term sustainability and integration into national systems remain open questions.

The EBCP recognises that improving survival is not enough, attention must also be paid to the long-term well-being of cancer patients, survivors, and carers. The EBCP focuses on improving **quality of life** through better access to newly created digital tools, indiscriminatory financial services, employment, and social protection. Foundational outputs such as the blueprint for the European Cancer Patient Digital Centre, the inclusion of cancer patients and survivors within the Strategy on the Rights of Persons with Disabilities, and a study on return to work have been delivered.

Access to financial services remains a barrier for cancer survivors. While 12 Member States have adopted "right to be forgotten" legislation, implementation is uneven, and a voluntary EU Code of Conduct remains under negotiation. In the labour market, most Member States lack specific legislation to support job retention and reintegration for cancer patients and survivors. While good practices in Member States have been identified, they have not been mainstreamed. Implementation of the Work-Life Balance Directive is inconsistent, with only a few Member States having fully transposed its provisions. These gaps limit the ability of carers to balance employment with care responsibilities.

Impact on health inequalities

The establishment of the **European Cancer Inequalities Registry** equips national authorities and policymakers with essential data and analytical reports to inform public communication and evidence-based decision-making. By enabling cross-country comparisons, the Registry supports Member States in benchmarking their progress and identifying areas for improvement. However, further efforts are needed to ensure that the data remains up-to-date and tailored to support more targeted and timely interventions.

Telemedicine and other eHealth technologies play a crucial role in reducing cancer inequalities, particularly by bridging the significant healthcare gap between urban centres and remote or rural areas in some Member States. Numerous initiatives have been launched to strengthen digital infrastructure and reduce the digital divide both within and across countries. Notably, while some less digitally advanced countries are making progress and converging with the EU average, leading countries continue to push the boundaries of digital innovation in healthcare.

A **resilient and effective health system** is essential for delivering high-quality care across the full spectrum of health services, including cancer prevention, diagnosis, and treatment. In this context, the EU has mobilised significant funding through EBCP and other resources. Under Next Generation EU the Recovery and Resilience Facility supports Member States in strengthening their health systems.

Even when cancer screening and treatment services are available, **effective communication and patient engagement are critical for uptake**. Screening and awareness campaigns have generally progressed well across the EU. However, the dissemination of the European Code Against Cancer remains limited, and low education levels continue to correlate with unhealthy behaviours and reduced participation in screening programmes.

Lessons learnt and recommendations

The EBCP is widely recognised as an initiative that has generated significant momentum, visibility, and investment in cancer control at both EU and Member State levels. Initiatives of this scale demonstrate the EU's unique ability to mobilise political will, coordinate multi-level stakeholders, and channel funding toward pressing public health challenges. As such, the EBCP provides as a powerful model for future EU action on NCDs.

Key recommendations include:

Integrated governance, stakeholder inclusion and monitoring framework

- Establish a dedicated governance body to improve coordination, accountability, and oversight of the EBCP and ensure consistent progress tracking across Member States.
- Ensure inclusive governance by formally involving civil society, healthcare professionals, and other grassroots stakeholders in decision-making processes to enhance transparency, responsiveness, and the effectiveness of implementation.
- Develop an official framework for monitoring and evaluating the implementation of the EBCP.
- Document centrally the information and results of EU-funded projects beyond CORDIS and EU Cancer Projects Dashboard.
- Ensure agile and timely support to cancer care and research to facilitate integration and adaptation to the latest scientific and clinical developments of the disease.

Funding

- Streamline and align EU funding mechanisms to reduce fragmentation and administrative burden by improving coordination across programmes, ensuring consistent timelines, clearer guidance, and centralised access points for applicants.
- Establish sustainable, long-term funding frameworks with reduced co-funding requirements for Member States and dedicated support for under-resourced actors.
- Initiate sustainable financial planning at the start of activities, including identifying infrastructure and partnerships to secure long-term sustainability, while embedding stakeholder-led initiatives in national frameworks to maximise social return and impact.
- Design a funding mechanism that targets cancer inequalities and systematically tracks if funds pursue equality across various dimensions and regions.
- Establish funding criteria that prioritises Member States with limited research capacity and higher cancer inequalities.

- Provide sustainable planning and financing/co-financing options for long-term implementation of activities focused on addressing inequalities such as Joint Networks and mission hub development which can foster continued sharing of experiences, lessons, and best practices across Europe.
- Invest in training, digital literacy, and learning platforms to ensure and promote enhanced and equitable digital cancer services that reach vulnerable populations.

Sharing best practices

- Provide technical support and guidance to Member States to ensure proactive inclusion of equity considerations and prioritisation in national action plans such as the application of digital health platforms.
- Collect best practices of setting up national networks for creating similar European networks that serve as the model for Member States.

EBCP as a model for future similar initiatives

- Leverage the EBCP as a model for comprehensive non-communicable disease (NCD) strategies by applying its integrated approach, combining policy, research, and awareness campaigns.
- Maintain a strategic overarching vision that guides decision making, projects, and activities to ensure alignment and cohesion.
- Facilitate collective and cooperative agenda setting in the development of strategies in other NCD domains to ensure meaningful participation from all interested and affected stakeholders for shared buy-in and ownership.

List of abbreviations and acronyms

AVMSD	Audiovisual Media Services Directive
BECA	Special Committee on Beating Cancer
CCC	Comprehensive Cancer Centre
CTIS	Clinical Trials Information System
DALY	Disability-Adjusted Life Year
DG SANTE	Directorate-General for Health and Food Safety
EBCP	Europe's Beating Cancer Plan
ECAC	European Code Against Cancer
ECII	European Cancer Imaging Initiative
ECIR	European Cancer Inequalities Registry
ECPDC	European Cancer Patient Digital Centre
EHDS	European Health Data Space
EPRS	European Parliamentary Research Service
ERN	European Reference Network
EUCAIM	EUropean Federation for CAncer IMages
FCTC	Framework Convention on Tobacco Control
FOPNL	Front-of-Pack Nutrition Labelling
HBV	Hepatitis B Virus
HPV	Human Papillomavirus
HTA	Health Technology Assessment
HTAR	Health Technology Assessment Regulation
IARC	International Agency for Research on Cancer
JANE	Joint Action on Networks of Expertise
JATC	Joint Action on Tobacco Control
JRC	Joint Research Centre

NCD	Non-Communicable Disease
OECD	Organisation for Economic Co-operation and Development
PRO	Patient-Reported Outcome
RRF	Recovery and Resilience Facility
SAMIRA	Strategic Agenda for Medical Ionising Radiation Applications
SANT	Committee on Public Health
SCP	Standardised Care Pathways
TPD	Tobacco Products Directive
TTD	Tobacco Taxation Directive
WHO	World Health Organization
WLBD	Work-Life Balance Directive

1. Introduction

1.1. Background of the study

Cancer remains one of the leading causes of death in Europe, with millions of new cases diagnosed each year. Despite significant advancements in prevention, early detection, and treatment, disparities in cancer outcomes persist across EU Member States. These variations highlight the urgent need for stronger collaboration and better communication of best practices in prevention and healthcare. Recognising this challenge, the European Commission launched Europe's Beating Cancer Plan (EBCP) in February 2021, aiming to reduce the cancer burden, improve the quality of life for patients and survivors, and ensure equitable access to prevention, diagnosis, treatment, and care.

The EBCP is a cornerstone of the European Health Union and is structured around **four pillars**: (1) cancer prevention, (2) early detection, (3) access to high-quality care, and (4) improving the quality of life for cancer patients and survivors. These pillars are supported by **three cross-cutting themes** that focus on (1) fostering research, innovation and digital technologies; (2) reducing cancer inequalities; and (3) addressing the specific needs of children and young people affected by cancer. The EBCP is also built around **ten flagship initiatives**, which represent high-profile commitments across the cancer pathway, from prevention and screening to treatment, survivorship, and paediatric care.

Prevention is at the forefront of the strategy, with measures including stricter tobacco control, reducing harmful alcohol consumption, promoting healthy diets and physical activity, addressing environmental risk factors, and increasing vaccinations against cancer-related viruses such as Human Papillomavirus (HPV) and Hepatitis B. Additionally, the EBCP emphasises awareness campaigns to educate citizens on risk factors and encourage healthier behaviours.

A major innovation within the EBCP is the European Cancer Inequalities Register (ECIR), launched in 2022. This registry tracks disparities in cancer prevention and care across EU regions, helping policymakers identify gaps and implement targeted interventions to reduce healthcare access inequalities. By bringing together stakeholders from governments, research institutions, healthcare providers, and civil society, the EBCP represents a coordinated and ambitious effort to reduce the impact of cancer in Europe. It is a testament to the EU's commitment to a healthier future, ensuring that all citizens, regardless of their background, can benefit from advancements in cancer care and prevention.

To respond to the threat and burden of cancer, the EBCP pools EUR 4 billion using various funding instruments including Horizon Europe, EU4Health and other sources. The information of the budget of each instrument is listed in Figure 1.

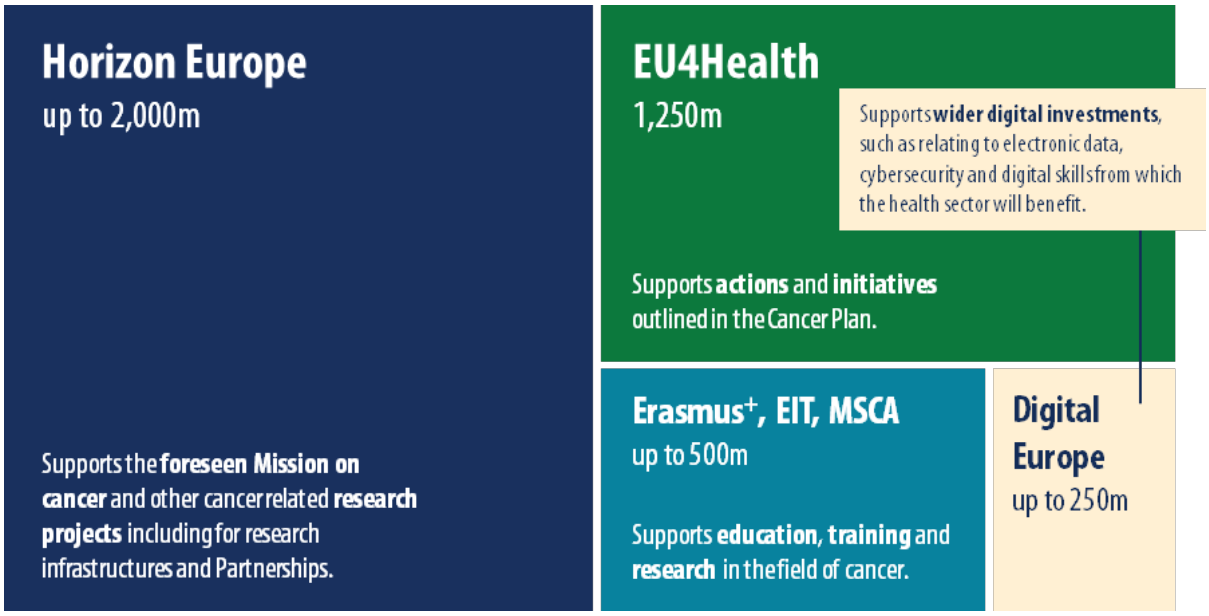
These funding instruments serve different purposes. The EU4Health funding is channelled to support actions and initiatives outlined in the Cancer Plan. Horizon Europe has a research-oriented focus and supports research projects under the Mission on Cancer[1], facilitating the advancement of

[1] European Commission, EU Mission – Cancer, website.

cancer-related research. Digital Europe meanwhile supports projects related to electronic data, cybersecurity and digital skills.[2]

In addition, the European Beating Cancer Plan (EBCP) refers to mobilising both the **Cohesion Policy Funds** (European Regional Development Fund, Cohesion Fund, and European Social Fund Plus) and the **Recovery and Resilience Facility (RRF)** under the *Next Generation EU* budget and recovery plan. While no specific budget allocation is earmarked for the EBCP within these instruments, Member States are encouraged to prioritise its measures. The Cohesion Policy Funds generally aim to strengthen the resilience, accessibility, and effectiveness of health systems. The RRF, primarily designed to support post-COVID-19 recovery, offers grants and loans for a wide range of reforms and investments, including, but not limited to, the health sector.[3] As they serve different purposes, their application procedures and approval criteria are not the same.

Figure 1 – Funding instrument underpinning the implementation of EBCP



Source: European Commission.[4]

Stakeholder feedback gathered during the development of the EBCP highlighted that effective implementation should lead to measurable improvements in population health outcomes and user experience. Delays or gaps in implementation, particularly in prevention, early detection, and access to care, were seen as risks to equity and impact.[5]

The European Parliament has demonstrated its commitment to supporting the EBCP through the establishment of the Special Committee on Beating Cancer (BECA) and the adoption of resolutions

2 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.
3 ibid.
4 ibid.
5 European Commission, Commission Staff Working Document – Stakeholder consultation – synopsis report accompanying the Communication from the Commission to the European Parliament and the Council – Europe's Beating Cancer Plan, SWD(2021) 13, 2021.

to continuously assess and adapt the plan.[6] At the end of the 9th legislature, the Parliament reaffirmed its dedication to fight against non-communicable diseases by stressing the importance of prevention, early detection, and improvement of health care capacities.[7] Recent work includes the Commission review on the EBCP published in February 2025[8] and a presentation and exchange of views on 19 March 2025 in the European Parliament[9]. Commissioner Várhelyi, on 20 March 2025, highlighted the EBCP and its potential future use for other major health issues.[10]

1.2. Scope and objectives of the study

This study has been commissioned by the European Parliamentary Research Service (EPRS). The ultimate aim of this study is to provide the SANT committee with evidence on the implementation of the EBCP to underpin the committee's work. It will offer insights into lessons learnt and recommendations for the future on cancer and other non-communicable diseases (NCDs). Specifically, the research tasks are:

1. To identify and assess the impact of remaining gaps and delays in the implementation of the EBCP, with an additional focus on:
   - Prevention, specifically a tobacco-free Europe, reducing harmful alcohol consumption and improving health promotion through access to healthy diets and physical activity;
   - Cancer care, specifically the cancer workforce;
   - Quality of life (QoL), specifically fair access to financial services and the labour market.
2. To assess the impact of the EBCP on cancer inequalities across the EU;
3. To draw lessons learnt from the EBCP concept and applicability to other NCDs.

The study's scope is limited to the EBCP's implementation across all EU Member States from 3 February 2021 until 31 December 2024. The study analyses the specific focus areas (i.e. prevention, cancer care, and QoL) of domestic implementation at the national level via case studies in a selected group of EU Member States.

6 European Parliament, resolution of 16 February 2022 on strengthening Europe in the fight against cancer – towards a comprehensive and coordinated strategy.
7 European Parliament, resolution of 13 December 2023 on non-communicable diseases (NCDs).
8 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025.
9 European Parliament, Committee on Public Health ordinary meeting, website.
10 ibid.

2. Methodology

Given the complexity of the issue, this study adopts a mixed-methods approach that combines quantitative data with qualitative insights, including stakeholder interviews and case studies, to provide a holistic assessment of the EBCP's implementation and impact.

2.1. Research design

The methodology was designed to address the study's three research tasks: (1) identifying gaps and delays in implementation, (2) assessing the EBCP's impact on cancer inequalities, and (3) drawing lessons for future EU-level initiatives on NCDs. The approach combines desk research, stakeholder consultation, and case studies, guided by principles of triangulation and transparency.

2.2. Data sources

The study draws on the following data sources:

- **Desk research:** Analysis of EU and national policy documents, EU legislation, academic literature, and publicly available datasets, such as the ECIR, EU Cancer Projects Dashboard, CORDIS, and various Eurostat datasets. Targeted searches were also conducted across EU websites to identify relevant updates, publications, and implementation evidence. The EBCP's published list of actions and the implementation roadmap were used to determine the scope of (sub-)actions assessed.
- **Stakeholder interviews:** Semi-structured interviews with EU institutions, international organisations, national competent authorities, and experts at both EU and Member State levels.
- **Case studies:** In-depth analysis of selected initiatives in eight Member States, chosen to reflect geographical balance and diversity in health system structures.

2.3. Stakeholder consultation

A total of 25 interviews were conducted. Stakeholders were selected based on direct involvement in the implementation of the EBCP or national cancer policy, recognised expertise in cancer policy, and representation across EU institutions, Member States, international organisations, and civil society. For the case studies, national competent authorities and experts were consulted. Backup contacts were identified to mitigate non-responsiveness. Interviews were tailored to each stakeholder's expertise and aligned with the study's research tasks. A full list of interviewed stakeholders is provided in Annex I.

2.4. Case study selection and design

Eight Member States were selected for case studies: Croatia, Denmark, Estonia, Finland, Germany, Italy, the Netherlands, and Poland (Table 1). Selection criteria included geographical balance, health system characteristics, and relevance to EBCP focus areas. Each case study examines a specific

initiative and its alignment with EBCP objectives, supported by desk research and interviews with national authorities and experts. The case studies contribute to all three research tasks and follow a common template to ensure comparability.

Table 1 – Overview of case study countries

Member State	Region	Financing model	Centralisation/ Decentralisation[11]	Private/public provision[12]
Croatia	Southern	Bismarck[13]	Centralised	Mixed
Denmark	Northern	Beveridge[14]	Decentralised	Mostly public
Estonia	Eastern	Bismarck	Centralised	Mixed with public financing
Finland	Northen	Beveridge	Decentralised	Mixed
Germany	Western	Bismarck	Decentralised	Mixed
Italy	Southern	Beveridge	Decentralised	Mostly public
The Netherlands	Western	Hybrid	Centralised	Significant private role
Poland	Eastern	Bismarck	Centralised	Mixed

2.5. Analytical scope and limitations

This study seeks to address several key challenges. First, the European Union (EU) comprises 27 Member States, each with distinct demographic, social, economic, and environmental contexts. As such, the analysis necessarily adopts a macro-level perspective, which may overlook important national-level nuances. Second, the EU's multi-level governance structure, where health policy and healthcare delivery remain primarily under national competence, complicates efforts to isolate the impact of the EBCP from that of national cancer strategies. To mitigate this, the study focuses on information and data that can be credibly linked to the EBCP or to broader EU-level initiatives, while also highlighting relevant developments within Member States that may have been shaped by the EBCP's launch. In addition, cancer is a heterogeneous disease with site-specific risk factors and determinants. Due to space constraints, this study does not systematically analyse site-specific

[11] Centralisation/Decentralisation refers to the degree of autonomy subnational entities (e.g. regions, municipalities) have in organising and delivering healthcare services. In decentralised systems, regional or local authorities play a significant role in planning, financing, and managing healthcare. In centralised systems, these responsibilities are primarily held at the national level.

[12] Private/Public Provision refers to the extent to which healthcare services are delivered by public versus private providers. "Mostly public" indicates that the majority of services are delivered by publicly owned or operated institutions. "Mixed" refers to a combination of public and private providers. "Significant private role" indicates a prominent role for private actors in service delivery, often within a publicly regulated framework.

[13] Bismarck system: A health system funded mainly through mandatory social insurance contributions from employers and employees, with services provided by a mix of public and private providers.

[14] Beveridge system: A tax-funded health system in which healthcare is provided and financed by the government, typically through a national health service.

cancer dynamics, though such distinctions are critical for fully understanding the cancer burden and responses across Europe. Finally, there is no official EU monitoring framework for the EBCP. As a result, the analysis relies on publicly available sources and stakeholder input to assess implementation, such as project documentation and legislative texts, which primarily reflect outputs and milestones. This limits the ability to systematically assess result-level indicators or long-term impact.

3. Impact of gaps and delays in implementation

3.1. Overall assessment

Key findings

The analysis of EBCP implementation across the four pillars and three cross-cutting themes reveals that:

- Most core actions, such as HPV vaccination, cancer screening expansion, personalised medicine, and support for young cancer survivors, have been launched and are operational. Digital platforms such as the EUCAIM are advancing innovation and data integration, though several remain in early phases and require further development.
- Some actions, particularly those related to health literacy, childhood obesity, sunbed regulation, and survivor support tools, are delayed or suspended.
- Federated research networks, clinical trial reforms, and health data initiatives (e.g. EHDS, UNCAN.eu, ECIS) are progressing, supported by Horizon Europe partnerships and joint actions. Continued investment, Member State engagement, and capacity-building are essential to ensure full operationalisation and long-term impact.

The following sections provide concise introductions to each pillar and cross-cutting theme, accompanied by summary tables that present the implementation status of all actions and sub-actions. These actions and sub-actions were identified based on the structure and commitments defined in the EBCP and its 2022 Roadmap published by the European Commission[15], which outline flagship initiatives and supporting measures under each pillar and theme.

Each table indicates the status of implementation and provides a brief assessment at the action level. The status values are defined as follows:

- **Completed:** The action or sub-action has been fully delivered as planned.
- **On track:** Implementation is progressing, with no major delays identified.
- **Delayed:** Implementation is ongoing but with major delays identified.
- **Suspended:** Implementation has been halted or postponed indefinitely.

For detailed descriptions of implementation progress, see Annex II.

3.1.1. Pillar 1: Saving lives through sustainable cancer prevention

Pillar 1 of the EBCP focuses on cancer prevention, addressing key risk factors through evidence-based measures. It covers actions to update and disseminate the European Code Against Cancer (ECAC)[16], promote healthy diets and physical activity, reduce exposure to carcinogens in food and the environment, strengthen occupational safety, and prevent infection-related cancers through vaccination and screening. Pillar 1 is closely interlinked with other areas of the EBCP. Prevention efforts such as HPV vaccination support prevention of cervical cancer (Pillar 2), while reducing

[15] European Commission, Europe's Beating Cancer Plan: Implementation Roadmap, 2024.

[16] The ECAC is a set of evidence-based recommendations developed by the International Agency for Research on Cancer (IARC) and supported by the European Commission. It provides guidance for individuals on how to reduce their risk of cancer through lifestyle choices and preventive measures.

exposure to carcinogens can lower the burden on treatment systems (Pillar 3). Many risk factors disproportionately affect vulnerable populations, making equality a key consideration in prevention and linking this pillar to the cross-cutting theme on cancer inequalities.

Table 2 provides an overview of each action and sub-action, including flagship initiatives, their current status, and a brief assessment of progress. This summary highlights where major regulatory and policy milestones have been completed, as well as areas where further work is needed.

As shown in Table 2, **Pillar 1 has made substantial progress in establishing a regulatory and policy foundation for cancer prevention**, with several actions completed and others on track. However, some actions, particularly those related to health literacy, childhood obesity, and sunbeds, remain delayed or suspended. Continued efforts are needed to ensure the timely completion and full realisation of the pillar's objectives.

Table 2 – Implementation status of actions under Pillar 1

Action	Sub-action	Status	Assessment
4: Vaccinate at least 90% of the EU target population of girls and to significantly increase the vaccination of boys and invest in related infrastructures to pursue the elimination of cancers caused by Human papillomavirus **(flagship initiative)**	N/A	Completed	All planned projects have been launched and completed, delivering a comprehensive set of tools, training, resources, and policy recommendations to support Member States in achieving the 90% vaccination target and eliminating HPV-related cancers.
Improving health literacy on cancer risks and determinants			
5: Update and boost implementation of European Code Against Cancer	5.1: Develop and launch the 'EU mobile App for Cancer Prevention'	Delayed	The revision of the European Code Against Cancer (ECAC) is underway, the mobile app has not been launched, and health literacy projects are in progress but have not yet delivered their main outputs.
	5.2: Support the project 'Health Literacy for Cancer Prevention and Care'	On track	
Achieving a Tobacco-Free Generation			
6: Tobacco control[17]	6.1: Reviewing the Tobacco Products Directive	Delayed	The smoke- and aerosol-free environments Recommendation was
	6.2: Reviewing the Tobacco Taxation Directive	On track	

[17] See Chapter 3.2.1 for a detailed analysis of the implementation of Action 6 on tobacco control.

Action	Sub-action	Status	Assessment
	6.3: Reviewing the legal framework on cross-border purchases of tobacco by private individuals in view of legislative proposals	On track	adopted, the TTD and legal framework on cross-border purchases are being revised, and Member States are being supported in implementing the WHO FCTC. The proposal for reviewing the Tobacco taxation Directive was published in July 2025. The TPD evaluation remains ongoing.
	6.4: Update the Council Recommendation on Smoke-Free Environments	Completed	
	6.5: Support Member States in full implementation of the Framework Convention on Tobacco Control	On track	
Reducing harmful alcohol consumption			
7: Alcohol control[18]	7.1: Review of EU legislation relating to the taxation of alcohol and cross-border purchase of alcohol products	Delayed	The alcohol taxation evaluation remains pending, and no EU-wide labelling proposal has been tabled; national progress remains fragmented. Projects supporting interventions are ongoing and the AVMSD application report has been published.
	7.2: Proposal for mandatory labelling of the list of ingredients and nutrition declaration on alcoholic beverage label, as well as health warnings	Delayed	
	7.3: Support Member States in the implementation of evidence-based brief interventions	Completed	
	7.4: Reduce the exposure of young people to online marketing of alcoholic beverages through monitoring the implementation of the Audiovisual Media Service Directive	Completed	
Improving health promotion through access to healthy diets and physical activity			
8: Evaluation of the 2014- 2020 EU Action Plan on Childhood Obesity and propose follow-up actions	Evaluation of the 2014- 2020 EU Action Plan on Childhood Obesity and propose follow-up actions[19]	Delayed	Several components have been delivered, while the evaluation and follow-up on childhood obesity and the mandatory FOPNL proposal remain outstanding. No Commission proposal
	8.1: Review of EU school fruit, vegetables and milk scheme	Completed	
	8.2: Proposal for mandatory front-of-pack nutrition labelling[20]	Delayed	
	8.3: Commission report on the implementation of the provisions of	Completed	

[18] See Chapter 3.2.2 for a detailed analysis of the implementation of Action 7 on alcohol control.
[19] This action does not have an official number in the EBCP but is included in the implementation roadmap.
[20] See Chapter 3.2.3 for a detailed analysis of the implementation of Action 8.2 on the mandatory FOPNL.

Action	Sub-action	Status	Assessment
	the Audiovisual Media Services Directive (AVMSD) including those on commercial communications on unhealthy food and drinks		has been brought forward on the promotion policy for agricultural products.
	8.4: Develop and implement guidance for codes of practice on reducing unhealthy food marketing to children, including online marketing through the provisions of AVMSD and a Joint Action of best practices in nutrition ("Best ReMap")	Completed	
	8.5: Publication of a study mapping fiscal measures and pricing policies on sugars, soft drinks and alcoholic beverages	Completed	
	8.6: Review of the promotion policy for agricultural products	Delayed	
9: Further reduction of the presence of carcinogenic contaminants in food by setting maximum level limits for more of these contaminants	N/A	On track	Comprehensive maximum levels have been adopted for many contaminants, and additional measures are under preparation to further reduce exposure to carcinogenic substances in food.
10: HealthyLifestyle4All initiative	10.1: HealthyLifestyle4All support to promotion of healthy lifestyles for all generations	Completed	The awareness campaign and related projects were delivered, the key policy tools for sustainable and health-oriented mobility planning have been adopted, and volunteering projects have taken place.
	10.2: Initiatives under the Sustainable Urban Mobility Planning Guide on linking transport and health	Completed	
	10.3: Revision of the Urban Mobility Package to promote and support sustainable and healthy transport and mobility	Completed	
	10.4: Volunteering Projects including Volunteering Teams in High Priority Areas, Solidarity Projects under the European Solidarity Corps Programme	Completed	
Reducing environmental pollution			
11: Align the EU's air	11.1: Align EU's air quality standards	Completed	

Action	Sub-action	Status	Assessment
quality standards more closely with the World Health Organization guidelines	more closely with WHO guidelines as part of the zero pollution ambition in the European Green Deal		Revised Ambient Air Quality Directive adopted, major legislative measures for zero-emission mobility in place; some elements, such as updated pollutant lists for water, remain pending.
	11.2: Pollutant lists & corresponding regulatory standards updated in Environmental Quality Standards, Groundwater and Water Framework Directives limiting carcinogenic pollutants	Delayed	
	11.3: Explore removal of carcinogenic chemicals in revision of Urban Waste Water Treatment Directive	Completed	
12: Measures towards zero-emission mobility and reducing environmental pollution from transport under the Sustainable and Smart Mobility Strategy	N/A	Completed	Delivered as planned.
Reducing exposure to hazardous substances			
13: Adopt a new Occupational Safety and Health Strategic Framework 2021-2027	N/A	Completed	Framework adopted; priorities set for cancer risk reduction and exposure limit updates.
14: Reduce workers' exposure to carcinogenic substances through the amendments of the Carcinogens and Mutagens Directive	N/A	Completed	Directive amended in 2022 for new or stricter exposure limits and broader scope. Commission proposal in 2025 to add new substances and adjust existing limit values.
15: Revise EU limits for asbestos to further reduce workers' exposure	N/A	Completed	Directive revised; asbestos exposure limit lowered and framework of principles set for consistent EU application of minimum requirements.
16: Survey on exposure of workers to risk factors for cancer	N/A	Completed	Survey launched; EU-wide data gathered on worker exposure to 24 cancer-linked agents.

Action	Sub-action	Status	Assessment
17: Support Member States in the implementation of the requirements of Council Directive on protection from ionising radiation, particularly from Radon	N/A	Completed	National radon action plans reviewed: all Member States compliant, but implementation levels vary.
18: Explore measures to prevent exposure to ultraviolet radiation including from sunbeds	N/A	Suspended	Planned legislation not proposed; regulatory approaches in Member States remain fragmented.
19: Launch Horizon Europe Partnership on Assessment of Risks from Chemicals to strengthen EU capacities for chemical risk assessment	N/A	Completed	Partnership launched; EUR 400 million initiative boosts EU chemical risk assessment and regulatory science innovation.
Preventing cancers caused by infections			
20: Preventing liver cancer and addressing vaccine preventable cancers[21]	20.1: Reduce liver cancer caused by Hepatitis B virus (by vaccination and investment in related infrastructures) and prevention of liver cancer caused by Hepatitis C virus and gastric cancer caused by Helicobacter pylori (by treatment with antivirals and antimicrobials respectively)	Completed	Major projects on hepatitis and H. pylori underway, Council Recommendation on vaccine-preventable cancers provides a strong policy framework; national uptake and implementation will determine ultimate impact.
	20.2: Propose a Council Recommendation on vaccine preventable cancers	Completed	

3.1.2. Pillar 2: Improving early detection of cancer

Pillar 2 of the EBCP focuses on improving early detection through high-quality, accessible cancer screening programmes. Early detection is critical for reducing cancer mortality, as timely diagnosis significantly improves treatment outcomes and survival rates. Pillar 2 is closely linked to cross-cutting theme 1 (Fostering new technologies, research and innovation), particularly through the European Cancer Imaging Initiative (EUCAIM), which supports AI-assisted diagnostics. It also connects to Pillar 3 (Ensuring high standards in cancer care), as early detection is a prerequisite for timely and effective treatment.

[21] As this action is not formally named in the EBCP or the implementation roadmap, the title used here has been assigned by the authors of this report for clarity.

As shown in Table 3, **Pillar 2 has made significant progress in strengthening cancer screening and monitoring across the EU**, with the revised Council Recommendation adopted and supporting projects underway. While technical foundations and key initiatives are in place, full operationalisation of data systems and completion of all guidelines and quality assurance schemes remain pending.

Table 3 – Implementation status of actions under Pillar 2

Action	Sub-action	Status	Assessment
21: New 'EU Cancer Screening Scheme' **(flagship initiative)**	21.1: Revision of the Council Recommendation on cancer screening, including its update and proposal for possible extension to other cancers	Completed	The revised Council Recommendation has been adopted and supporting projects and joint actions have been launched. Some elements, such as updated guidelines and the completion of all quality assurance schemes, remain pending, even though work on lung, prostate and gastric cancer will start soon, going beyond the scope of this action.
	21.2: Cancer Imaging Initiative to support the development of new computer-aided tools to improve personalised medicine and innovative solutions	On track	
	21.3: Develop Guidelines and Quality Assurance schemes on cancer screening, diagnosis, treatment, rehabilitation, follow-up and palliative care for colorectal and cervical cancer, and updating the existing guidelines on breast cancer, including accreditation/certification programmes	On track	
22: Update the European Cancer Information System to monitor and assess cancer screening programmes	N/A	On track	The technical infrastructure and indicators have been developed and tested, but full operationalisation and systematic data flow into ECIS have not yet been demonstrated.

3.1.3. Pillar 3: Ensuring high standards in cancer care

Pillar 3 of the EBCP focuses on ensuring timely, high-quality, and equal access to cancer diagnosis and treatment across the EU. It includes actions related to cancer infrastructure, workforce development, access to medicines, and the use of digital and radiological technologies. Pillar 3 is closely linked to cross-cutting theme 1 (Fostering new technologies, research and innovation), particularly through initiatives such as the European Partnership for Personalised Medicine and the 1+ Million Genomes Initiative, and to Pillar 4 (Improving the quality of life), as treatment outcomes directly affect survivorship.

As shown in Table 4, **Pillar 3 has enabled the launch and implementation of major initiatives to improve cancer care, research, and innovation across the EU**. Most actions are completed or on track, with digital platforms, networks, and regulatory frameworks in place. However, full systematic implementation and operationalisation of some platforms and networks are still in progress.

Table 4 – Implementation status of actions under Pillar 3

Action	Sub-action	Status	Assessment
23: National Comprehensive Cancer Centres and EU Network **(flagship initiative)**	23.1: Creation of 'National Comprehensive Cancer Centre(s)' (CCC) in all Member States and EU network by 2025	On track	Preparatory work for comprehensive cancer centres, new reference networks, and digital mapping is complete, with networks being established and mapping ongoing. Full operation and systematic implementation are still in progress.
	23.2: New cancer Reference Networks on cancer and cancer conditions in addition to the four existing European Reference Networks (ERNs)	On track	
	23.3: EU cancer 'Treatment Capacity and Capability Digital Mapping' project	On track	
24: Cancer Diagnostic and Treatment for All **(flagship initiative)**	N/A	On track	The initiative has been launched, projects supporting innovative diagnostics and personalised treatment are ongoing (PCM4EU and CAN.HEAL) or completed (CHIP-AML22), piloting and sharing processes have started, and ongoing monitoring is in place. Full and systematic implementation across all Member States is still in progress.
25: European Initiative to Understand Cancer **(flagship initiative)**	N/A	Completed	The initiative and digital platform have been launched; 38 data infrastructures identified, providing a strong basis for future integration and collaboration.
26: 'Inter-specialty	N/A	Completed	The INTERACT-EUROPE curriculum was

Action	Sub-action	Status	Assessment
training' programme[22]			delivered (2023); INTERACT-EUROPE 100 is implementing the ISCT curriculum, with completion expected by November 2026.
27: Create an 'EU platform to improve access to cancer medicines' to support the repurposing of existing molecules with a harmonised and sustainable EU dimension	N/A	On track	Substantial groundwork has been laid through these projects, but the core objective, an operational EU-wide platform accessible to external users, has not yet been completed.
28: Implementation of the legal framework for clinical trials	N/A	Completed	The legal framework is in force, the Clinical Trials Information System (CTIS) is operational, and additional features have been introduced to support transparency and patient engagement.
29: Adoption of the Regulation on 'Health Technology Assessment'	N/A	Completed	The Regulation is applicable as of January 2025, with all necessary structures, guidance, and tools in place to support its effective rollout.
30: Present SAMIRA Action plan to ensure quality and safety of radiation technology and the supply of radioisotopes of medical importance for diagnostic and treatment	30.1: SAMIRA: European Radioisotope Valley Initiative (ERVI)	Delayed	The SAMIRA Action Plan is adopted and actively delivered, with substantial progress in all priority areas.
	30.2: SAMIRA: European Initiative on Quality and Safety of medical applications (EIQS)	On track	
	30.3: SAMIRA: Improve workforce availability, education and training	On track	
	30.4: SAMIRA: Equal access to modern technology and	Completed	

[22] See Chapter 3.3.3 for a detailed analysis of the implementation of Action 26 on the 'Inter-specialty training' programme.

Action	Sub-action	Status	Assessment
	interventions		
	30.5: SAMIRA: EU research and innovation support	On track	
31: Personalised medicine[23]	31.1: Set up Partnership on Personalised Medicine to identify priorities for research and education in personalised medicine, support research projects relevant to cancer prevention, diagnosis and treatment	Completed	The Horizon Europe Partnership for Personalised Medicine is operational, and the roadmap for personalised prevention is in advanced development.
	31.2: Development of a roadmap to personalised prevention	Completed	
32: Launch the 'Genomic for Public Health' project along with the 1+ Million Genomes Initiative, to ensure the access to large amounts of genomic data for research, prevention and personalised medicine	32.1: Launch 'Genomic for Public Health' project	Completed	Projects launched; technical infrastructure, governance, and guidelines delivered; expansion and integration ongoing.
	32.2: 1+ Million Genomes Initiative	On track	
33: High-performance computing, AI and digital platforms[24]	33.1: Launch a new project using High-Performance Computing to rapidly test existing molecules and new drug combinations	Completed	The planned projects have been launched, digital platforms are operational, and the EU is advancing the use of high-performance computing, AI, and open science to support cancer research and personalised care. Some projects, such as LIGATE and the drug repurposing platforms, are ongoing. Education and training activities such as via EIT-Health and THCS are ongoing.
	33.2: Support collaborative projects on cancer diagnostics and treatment using High-Performance Computing and AI	Completed	
	33.3: Assist researchers working on personalised cancer treatments through tailored support and new digital platforms	On track	
	33.4: Support for health care workers, health professionals, patient organisations, wider stakeholder communities and researchers	On track	

[23] As this action is not formally named in the EBCP or the implementation roadmap, the title used here has been assigned by the authors of this report for clarity.

[24] ibid.

3.1.4. Pillar 4: Improving the quality of life of cancer patients, survivors and carers

Pillar 4 of the EBCP addresses the long-term well-being of cancer patients, survivors, and carers. It includes actions aimed at improving access to digital tools, financial services, employment, and social protection. The overarching goal is to ensure that individuals affected by cancer can live with dignity and support during and after treatment. Pillar 4 is closely linked to Pillar 3 (Ensuring high standards in cancer care) and the cross-cutting theme on inequalities, as access to employment, financial services, and digital tools varies across Member States.

As shown in Table 5, **Pillar 4 has delivered important digital innovations to improve the quality of life for cancer patients and survivors, with key concepts and prototypes developed**. However, full-scale implementation and rollout of these solutions remain pending.

Table 5 – Implementation status of actions under Pillar 4

Action	Sub-action	Status	Assessment
34: 'Better life for cancer patients' **(flagship initiative)**	34.1: 'Better life for cancer patients' initiative: Create a tailor-made 'Cancer Survivor Smart Card'	Delayed	The smartCARE app prototype has been developed and validated but has not yet been piloted or rolled out at EU level. The operational concept for the European Cancer Patient Digital Centre (ECPDC) has been delivered, but further steps towards implementation are pending.
	34.2: Create the 'European Cancer Patient Digital Centre'	Completed	
35: Address fair access for cancer survivors to financial services[25]	N/A	On track	The study on access to financial products was completed and a draft Code of Conduct was developed with stakeholders; agreement has not yet been reached.
36: Access to the labour market[26,27]	36.1: Launch a study addressing issues related to the return to work	Completed	The study and disability inclusion/PES toolkit were delivered;
	36.2: Address in the Strategy on the	Completed	

[25] See Chapter 3.4.1 for a detailed analysis of the implementation of Action 35 on fair access to financial services.

[26] As this action is not formally named in the EBCP or the implementation roadmap, the title used here has been assigned by the authors of this report for clarity.

[27] See Chapter 3.4.2 for a detailed analysis of the implementation of Action 36 on access to the labour market.

Action	Sub-action	Status	Assessment
	Rights of Persons with Disabilities 2021-2030 the rights of cancer patients and survivors considered as persons with a disability		implementation of the Work-Life Balance Directive remains uneven, with gaps in full and satisfactory transposition.
	36.2: Ensure full implementation of the Directive on work-life balance for parents and carers	Delayed	

3.1.5. Cross-cutting theme 1: Fostering new technologies, research and innovation at the service of patient-centred cancer prevention and care

Cross-cutting theme 1 of the EBCP aims to harness research, data, and digital innovation to improve cancer prevention, diagnosis, and care. It includes actions such as the launch of the Knowledge Centre on Cancer (KCC), the EUCAIM, and the development of the European Health Data Space (EHDS). This theme is closely linked to Pillar 2 (Improving early detection of cancer) through AI-assisted diagnostics, and to Pillar 3 (Ensuring high standards in cancer care) through personalised medicine and cross-border care.

As shown in Table 6, **cross-cutting theme 1 has delivered major flagship initiatives for cancer coordination, imaging, and research**. Most actions are completed or on track, with digital platforms, data systems, and partnerships in place. However, full operationalisation of some infrastructures and systematic data integration remain in progress.

Table 6 - Implementation status of actions under cross-cutting theme 1

Action	Sub-action	Status	Assessment
1: Create a 'Knowledge Centre on Cancer' to facilitate the coordination of scientific and technical cancer-related initiatives at EU level **(flagship initiative)**	N/A	Completed	The Knowledge Centre on Cancer is launched and operational, providing a comprehensive resource for coordination, data sharing, and policy support at the EU level.
2: Launch a 'European Cancer Imaging Initiative' to support the development of new computer aided tools to improve personalised medicines and innovative solutions **(flagship initiative)**	N/A	On track	The EUCAIM and its supporting projects have been launched, and the first version of the Cancer Image Europe platform is available. Some key deliverables, including full validation and population of the platform,

Action	Sub-action	Status	Assessment
			implementation of clinical use cases, and the final release of all planned tools and services, remain pending.
3: Cancer research and an innovative ecosystem[28]	3.1: Enable cancer patients to securely access and share electronic health records for prevention and treatment across borders through the EHDS	On track	The EHDS Regulation is in force, and supporting projects are underway, but full patient access and secondary use infrastructure are pending. The digital twins repository and platform are in development, with key deliverables not yet available. ECIS has expanded with new modules and estimates, but decentralised architecture and sub-national reporting remain incomplete. The IHI and THCS partnerships are fully launched and actively funding research.
	3.2: Develop a repository of digital twins in healthcare, including for more individual cancer treatment	On track	
	3.3: Expand the European Cancer Information System (ECIS)	On track	
	3.4: Launch Horizon Europe partnerships: the Innovative Health Initiative & the Partnership on Transforming Health and Care Systems	Completed	

3.1.6. Cross-cutting theme 2: Reducing cancer inequalities across the EU

Cross-cutting theme 2 of the EBCP aims to reduce disparities in cancer prevention, diagnosis, treatment, and outcomes across and within EU Member States. It includes actions such as the establishment of the ECIR, publication of country cancer profiles, and promotion of digital health tools. This theme intersects with all EBCP pillars, particularly in relation to screening (Pillar 2), treatment access (Pillar 3), and survivorship (Pillar 4).

As shown in Table 7, **cross-cutting theme 2 has progressed across data and monitoring (ECIR and country profiles), digital health and ERN collaboration (eCAN, CPMS, JARDIN), and system resilience and accessibility (resilience testing, disability access study). While core outputs have been delivered, some elements (e.g. disability access guidance) are still in progress**.

[28] As this action is not formally named in the EBCP or the implementation roadmap, the title used here has been assigned by the authors of this report for clarity.

Table 7 – Implementation status of actions under cross-cutting theme 2

Action	Sub-action	Status	Assessment
37: Establish a Cancer Inequalities Registry to map inequalities between Member States and regions **(flagship initiative)**	37.1: Reducing health inequalities through zero pollution: Regularly feed pollution monitoring and outlook data into the European Cancer Inequalities Registry (ECIR)	Completed	Outputs have been delivered as scheduled: ECIR (with age dimension), Country Cancer Profiles (2023, 2025), a 2024 spotlight report, and integration of socio-economic and environmental indicators (including factsheets).
38: eHealth	38.1: Strengthen e-health, telemedicine and remote monitoring systems	Completed	eCAN concluded with recommendations and resources; 24 ERNs completed their first evaluation in 2023; the JARDIN Joint Action was launched on time in 2024.
	38.2: Promote the virtual health professionals' panels model of the European Reference Networks (ERNs)	Completed	
39: Improve resilience, accessibility and effectiveness of EU health systems to safeguard provision of cancer care in future health crises	39.1: Establish a Resilience Testing and Support Programme	Completed	The resilience testing handbook was published (March 2024); the disability access study is ongoing with limited public reporting on interim deliverables; monitoring of RRP milestones and targets is ongoing.
	39.2: Guidelines on access to healthcare for people with disabilities, including cancer	On track	
	39.3: Monitoring implementation of health components of Recovery and Resilience Plans (RRPs) including on cancer	On track	
40: Mainstream equality action in areas addressed by the EBCP such as screening and high-quality cancer care	N/A	On track	The roadmap specifies no discrete tasks; progress is pursued through related initiatives (e.g. EUCanScreen) to support equitable access to screening and care, including for persons with disabilities.

3.1.7. Cross-cutting theme 3: Putting childhood cancer under the spotlight

Cross-cutting theme 3 of the EBCP aims to improve outcomes for children, adolescents, and young adults affected by cancer. It includes actions to strengthen paediatric oncology, improve access to essential medicines, and support survivorship through dedicated networks and research initiatives. This theme is closely linked to Pillar 3 (Ensuring high standards in cancer care), particularly in relation to access to specialised care and clinical trials, and to Pillar 4 (Improving the quality of life), given the long-term survivorship needs of children and adolescents.

As shown in Table 8, **cross-cutting theme 3 has fully delivered its flagship initiative for young cancer survivors and launched its action on paediatric cancer care**, with all planned projects launched and operational, and broad stakeholder engagement supporting improved outcomes for children and adolescents affected by cancer.

Table 8 – Implementation status of actions under cross-cutting theme 3

Action	Sub-action	Status	Assessment
41: 'Helping Children with Cancer Initiative': Create an 'EU Network of Youth Cancer Survivors' **(flagship initiative)**	N/A	Completed	The planned projects have been launched, and both EU-CAYAS-NET and OACCUs are delivering tangible support, resources, and advocacy for young cancer survivors across Europe.
42: Launch the 'Childhood cancers and cancers in adolescents and young adults: cure more and cure better' action to boost the transformation of paediatric cancer care	N/A	Completed	Projects launched and operational and stakeholder engagement in place.

3.2. Specific focus area 1 – Prevention

Key findings

- Despite some progress, implementation of cancer prevention measures under the EBCP remains uneven and delayed across key areas. These delays risk weakening the EBCP's impact on reducing cancer incidence and health inequalities across the EU.
- Tobacco control efforts have stalled, with legislative revisions to the Tobacco Products still pending, while smoking prevalence has increased in several Member States. Recently, the Commission put forward a proposal to revise the Tobacco Taxation Directive.
- Alcohol-related actions, including taxation reform, labelling, and marketing restrictions, have faced significant delays.
- Mandatory front-of-pack nutrition labelling has yet to be adopted at EU level, despite strong evidence of its effectiveness and broad stakeholder support.

3.2.1. Action 6: Tobacco control

Tobacco use remains the leading preventable cause of cancer in Europe, responsible for 19.4% of all cancer deaths in the EU in 2021.[29] Tobacco smoking, including exposure to second-hand smoke, is a major risk factor for multiple cancers, including those of the lung, mouth, bladder, stomach, throat, and kidney.[30,31] As part of its cancer prevention actions, the EBCP sets the ambitious objective of achieving a "Tobacco-Free Generation" by 2040, defined as a population in which fewer than 5% use tobacco.[32] This goal reflects the central role of tobacco control in reducing cancer incidence and mortality across the EU.

While smoking rates declined in nearly all EU countries between 2012 and 2022, from 22% to 18% on average[33], Eurobarometer data show that between 2020 and 2023, smoking prevalence increased in 11 Member States, including Austria and Estonia (+7 percentage points) and Romania (+4).[34] These trends reflect ongoing regional disparities, socioeconomic inequalities, and recent challenges in tobacco control. Although the EU average of 18% in 2022 indicates that the EU has already met the World Health Organization (WHO)[35] and EBCP interim target of approximately 20% by 2025, the slowdown in progress and reversals in several Member States suggest that intensified and sustained efforts are needed to maintain momentum and reduce inequalities.

To achieve its 2040 goal, the EBCP outlines five key actions: 6.1 reviewing the Tobacco Products Directive (TPD); 6.2 reviewing the Tobacco Taxation Directive (TTD); 6.3 reviewing the legal

---

29 OECD and European Commission, EU Country Cancer Profiles Synthesis Report 2025, 2025.

30 European Commission, Health Promotion and Disease Prevention Knowledge Gateway – Tobacco and Smoking, website.

31 Cancer Prevention Europe and IARC, Cancers caused by smoking in Europe: Country summaries, 2020.

32 European Commission, Europe's Beating Cancer Plan – Communication from the commission to the European Parliament and the Council, 2020.

33 OECD and European Commission, EU Country Cancer Profiles Synthesis Report 2025, 2025.

34 In the Eurobarometer, smoking is defined as smoking cigarettes, cigars, cigarillos or a pipe. Source: European Commission, Eurobarometer survey No 2995, website.

35 The WHO target is a 30% relative reduction in tobacco use by 2025 compared to 2010 levels. Source: UNICEF, Age-standardized prevalence of current tobacco smoking in persons aged 15 years and over, comparable estimates, website.

framework on cross-border tobacco purchases; 6.4 updating the Council Recommendation on Smoke-Free Environments; and 6.5 supporting full implementation of the WHO Framework Convention on Tobacco Control (FCTC). The progress for these actions is elaborated in the following subsections.

Action 6.1: Tobacco Products Directive

Box 1: Progress on TPD (Action 6.1)

The review of TPD (Directive 2014/40/EU) was announced in the EBCP. It has been under evaluation by the European Commission since 2022,.[36] In the roadmap, the evaluation was scheduled to be completed run from 2022 to 2024.[37] To support this process, the European Commission authorised a study to assess the EU tobacco control acquis, including the TPD and the Tobacco Advertising Directive (TAD)[38,39]; although the study was finalised in December 2023, its results remain unpublished as of mid-2025. The Directorate-General for Health and Food Safety (DG SANTE) has indicated in its 2024 Management Plan that further studies may be launched to address remaining evidence gaps.[40]

Delays in revising the TPD, as well as other tobacco control actions that are covered in the next sections, may affect the EU's public health objectives and the achievement of tobacco-related EBCP targets. In a joint letter dated 21 March 2025, health ministers from 12 Member States urged the European Commission to prioritise and allocate resources for the revision of tobacco legislation.[41] The ministers expressed concern that there is "no foreseen date in the near future for the revisions in the updated roadmap" and warned that these delays are especially harmful "considering the rapidly evolving market of tobacco and nicotine products". They called for legislative proposals to be published in 2025 and for future-proof EU legislation that includes all new and emerging tobacco and nicotine products. The letter highlighted the need for measures such as restrictions on flavours, nicotine levels, and packaging, as well as stronger rules on cross-border distance sales, framing these actions as essential to protect youth and achieve a smoke-free generation by 2040.

While the TPD 2014/40/EU contributed to a reduction in smoking prevalence, progress has slowed and the growing use of novel tobacco and nicotine products, such as such as e-cigarettes, heated tobacco products, and nicotine pouches, particularly among young people, may challenge recent public health gains. Areas for improvement include banning filters and disposable e-cigarettes, mandating plain packaging and larger health warnings, extending flavour bans to all tobacco and nicotine products, and introducing a harmonised authorisation system for novel products. These recommendations reflect both regulatory gaps and opportunities to strengthen EU tobacco control. According to the 2024 Eurobarometer survey, however, public support for such measures is divided across the EU, with large variations across Member States: 51% of EU citizens support banning flavours in e-cigarettes and heated tobacco products and 52% support plain packaging.[42]

36 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.
37 European Commission, Europe's Beating Cancer Plan: Implementation Roadmap, 2024.
38 Open Evidence, Study supporting the Evaluation of the Tobacco Control Acquis, website.
39 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.
40 European Commission, Management Plan 2024 DG Health and Food Safety (SANTE), 2024.
41 Euronews, Health ministers urge the European Commission to boost anti-tobacco action, website.
42 European Commission, Attitudes of Europeans towards tobacco and related products, 2024.

Action 6.2: Tobacco Taxation Directive

Box 2: Progress on TTD (Action 6.2)

The TTD (Council Directive 2011/64/EU), last revised in 2011, remains a cornerstone of EU tobacco control policy. It sets minimum excise duty levels for tobacco products, aiming to reduce consumption through price increases.[43] In line with Article 6 of the WHO FCTC, taxation is recognised as one of the most effective tools to reduce tobacco use.[44] The EBCP announced a review of the TTD with stakeholder consultation and impact assessment scheduled to be completed by the end of 2023.[45,46]

On 16 July 2025, the European Commission announced a proposal to update the TTD,[47] modernising the framework in response to evolving public health challenges and significant market shifts. The revised Directive is set to apply from 2028, with a four-year transitional period to ease the introduction of new excise duty rates for certain products, allowing Member States to adapt.

The revised TTD seeks to eliminate regulatory "loopholes", ensure a level playing field, and promote a more integrated and competitive market. The European Commission's proposal introduces several key changes:

- **Increases minimum excise duty rates** for tobacco products, using a partial purchasing power approach to account for differences in Member States.
- **Extends the scope** of the TTD to cover new products such as e-cigarettes, heated tobacco, and nicotine pouches, introducing new minimum tax rates for these products. Swedish snus is excluded from the scope, in line with Sweden's EU Accession Treaty.
- **Improves controls on raw tobacco** by applying the electronic excise movement and control system to raw tobacco, aiming to reduce illicit manufacturing and trade.

In recent years, several Member States have independently raised tobacco excise duties, reflecting strong public health commitments and alignment with WHO recommendations that excise taxes should account for at least 75% of the retail price.[48] For example, France's price increases between 2016 and 2019 reduced consumption by 17%, and further hikes are planned under the 2023–2027 National Tobacco Control Programme.[49] Ireland has implemented annual hikes, including a EUR 1 increase in 2024 (EUR 0.50 per ml of e-liquid).[50] Germany adopted the Tobacco Duty Modernisation Act in 2021, introducing phased increases through 2026 and extending taxation to e-cigarette liquids.[51]

However, cross-border price differentials have continued to present policy challenges, as consumers in high-tax countries often purchase tobacco in neighbouring Member States where

---

43 European Commission, proposal for a Council Directive (EU) 2011/64 of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco and tobacco related products (recast).

44 World Health Organization, WHO technical manual on tobacco tax policy and administration, 2021, p. 3.

45 European Parliament, A new plan for Europe's sustainable prosperity and competitiveness | Revision of the tobacco taxation directive, Legislative Train Schedule.

46 European Commission, Tobacco Taxation – Stakeholder event, 2022.

47 European Commission, Proposal for a Council Directive on the structure and rates of excise duty on tobacco, 2025.

48 World Health Organization, WHO technical manual on tobacco tax policy and administration, 2021, p. 53.

49 Gouvernement, Programme national de lutte contre le tabac: 2023-2027, 2023.

50 Citizens Information, Excise duties, website.

51 Bundesministerium der Finanzen (BMF), Gesetz zur Modernisierung des Tabaksteuerrechts, website.

prices are lower.[52] For example, evidence from the Netherlands shows that the impact of recent excise duty increases was partly offset by a rise in cross-border purchases, 60% in 2024 compared to 38% in 2023, particularly from Germany and Luxembourg.[53] A multi-country demand modelling study using EU panel data confirms that price differences between neighbouring Member States create incentives for cross-border cigarette purchases, with harmonising excise levels projected to reduce such activity.[54] Also, a cross-sectional survey of more than 18,000 participants in 18 European countries (including 16 EU Member States) found no significant association between higher cigarette prices and increased exposure to illicit offers, further supporting the legitimacy of taxation as a public health tool.[55]

Action 6.3: Cross-border purchases

Action 6.3 of the EBCP concerns the review of the legal framework on cross-border purchases of tobacco by private individuals. Article 32 of Council Directive 2008/118/EC[56] established that excise duty on excise goods acquired by a private individual for own use and transported by that individual from one Member State to another is chargeable only in the Member State of acquisition. This has since been replaced by Council Directive (EU) 2020/262.[57]

Box 3: Progress on cross-border purchases (Action 6.3)

The EBCP announced a review of the legal framework on cross border purchases of tobacco by private individuals. On 16 July 2025, the European Commission brought forward a proposal to update the Excise Duty Directive, aligned with the proposed revisions to the TTD.

On 16July2025, together with the changes to the TTD, the European Commission presented amendments to Council Directive (EU) 2020/262. The proposal is to broaden the coverage of the Directive to encompass emerging tobacco products and raw tobacco, aligning with the proposed revisions to the TTD. The proposal excludes small-scale tobacco growers, along with their cooperatives and associations, from the Excise Movement and Control System (EMCS) [58] requirements due to the disproportionate administrative burden and the minimal risk of tax evasion associated with their operations.[59]

By narrowing price gaps and clarifying the "own-use" regime across Member States, the legislative review supports the EBCP target a Tobacco-Free Generation, complements measures under the TPD, and addresses the long-standing concern that cross-border shopping can dilute national

52 P. Baert, Briefing: Shaping choices: Behavioural taxation in the EU, EPRS, European Parliament, October 2024.

53 RIVM, Gedragseffecten van de accijnsverhoging op tabak in 2024: Voorgenomen versus daadwerkelijke gedragsverandering, 2024.

54 M. Stoklosa, 'Prices and cross-border cigarette purchases in the EU: evidence from demand modelling', *Tobacco Control*, Vol. 29(1), BMJ Publishing, 2020, pp. 55-60.

55 L. Joossens, A. Lugo, C. La Vecchia et al., 'Illicit cigarettes and hand-rolled tobacco in 18 European countries: a cross-sectional survey', *Tobacco Control,* Vol 23(e1), BMJ Publishing Group, 2014, pp. e17-e23.

56 Council of the EU, Council Directive 2008/118/EC of 16 December 2008 concerning the general arrangements for excise duty and repealing Directive 92/12/EEC, No longer in force.

57 Council of the EU, Council Directive (EU) 2020/262 of 19 December 2019 laying down the general arrangements for excise duty (recast), 2019.

58 The EMCS is a computerised system for recording and monitoring the movement of excise goods in the EU.

59 European Commission, proposal for a Council Directive (EU) 2011/64 of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco and tobacco related products (recast); European Parliament, revision of the Tobacco Taxation Directive, July 2025.

tobacco-control policies.

Action 6.4: Smoke-free environments

Recent developments at both EU and Member State levels demonstrate growing momentum in the implementation of smoke- and aerosol-free environments. The Council Recommendation of 3 December 2024 significantly broadened the scope of protection by including emissions from electronic cigarettes, heated tobacco products, and herbal smoking products. It also extended coverage to outdoor areas such as playgrounds, beaches, restaurant terraces, and public transport hubs.[60,61] These measures align with the WHO FCTC Article 8, which has one of the highest global implementation rates.[62] Public support for such policies remains robust, including among smokers, and is reinforced by evidence-based policymaking and successful public health campaigns.[63,64] These actions support the EU's broader goal of achieving a tobacco-free generation by 2040.

Box 4: Progress on smoke-free environments (Action 6.4)

The European Commission adopted a proposal for a new Council Recommendation on Smoke- and Aerosol-free Environments on 17 September 2024, and the Council adopted it on 3 December 2024.

Despite legislative progress, several barriers continue to hinder full implementation at the Member State level.[65] Prior to the 2024 revision, the 2009 Recommendation did not address emissions from emerging products, creating regulatory gaps.[66]

The health consequences of second-hand smoke (SHS) and aerosol exposure are well-documented and severe. In 2021, SHS exposure was responsible for around 53,000 deaths in the EU, including from cancer. It also led to 1.2 million disability-adjusted life years (DALYs), with 429,000 of those related to cancer.[67] Vulnerable populations, including children and pregnant women, are disproportionately affected, facing increased risks of respiratory illness, cardiovascular disease, and cancer.[68] Both the Council and WHO stress that there is no safe level of exposure and that partial measures, such as ventilation, are insufficient to protect public health.[69,70] Comprehensive smoke- and aerosol-free environments are therefore essential to reducing disease burden and preventing smoking initiation among youth.

---

60 Council of the EU, Recommendation of 3 December 2024 on smoke- and aerosol-free environments replacing Council Recommendation 2009/C 296/02.

61 ibid.

62 WHO Framework Convention on Tobacco Control, 2023 Global Progress Report on Implementation of the WHO Framework Convention on Tobacco Control, 2024, p. 32.

63 World Health Organization, Tobacco Control Playbook: Smoke-free environments protect health and benefit the hospitality sector, 2025.

64 World Health Organization, Secondhand smoke: the invisible killer that continues to cause death and disease, website.

65 Council of the EU, Recommendation of 3 December 2024 on smoke- and aerosol-free environments replacing Council Recommendation 2009/C 296/02 (C/2024/7425).

66 ibid.

67 IHME, results from the 2021 Global Burden of Disease (GBD) study, website.

68 E.g. International Agency for Research on Cancer World Health Organization, Evaluating the Effectiveness of Smoke-free Policies, 2009.

69 Council of the EU, Recommendation of 3 December 2024 on smoke- and aerosol-free environments replacing Council Recommendation 2009/C 296/02 (C/2024/7425).

70 World Health Organization, Tobacco Control Playbook: Smoke-free environments protect health and benefit the hospitality sector, 2025, p. 5.

Action 6.5: Support for WHO FCTC implementation

In the EBCP, the European Commission has committed to supporting Member States in the full implementation of the WHO FCTC. To advance this commitment, the EU has funded **two Joint Actions specifically focused on tobacco control** under previous health programmes. The Joint Action on Tobacco Control 2 (JATC 2), co-funded by the EU Health Programme (2014–2020), ran from 2021 to 2024.[71] It aimed to strengthen cooperation among Member States and the European Commission in implementing the TPD and the TAD, while supporting the WHO FCTC. Building on the work of JATC 1 (2017–2020), which focused on data access, product compliance, and harmonised testing methods,[72] JATC 2 enhanced the usability of the EU Common Entry Gate (EU-CEF, an online reporting system established by the European Commission to support the implementation of the TPD), promoted sustainable data sharing, and improved market surveillance. It also supported updated advertising rules, smoke-free environments, and long-term strategies for a tobacco-free generation.

Under the EU4Health Programme, there has not been a dedicated Joint Action specifically titled as a successor to JATC 2. However, the programme has supported tobacco control through **calls for proposals and tenders** that align with the goals of the EBCP. One such example is the EU4H-2024-PJ-03-2 call, which focuses on health promotion and prevention of noncommunicable diseases, including actions to reduce exposure to second-hand smoke and aerosols and address risks from emerging tobacco products.[73] This call supports the development of guidelines, evidence-based recommendations, and targeted interventions for vulnerable groups such as children and young people. While these initiatives contribute to tobacco control, they are structured as project-based funding opportunities rather than a formal Joint Action such as JATC 1 or JATC 2.

Related to this EBCP action, the European Commission has taken several regulatory steps to strengthen tobacco product oversight and public health protection. **Compliance checks** have been conducted to assess the market evolution of heated tobacco products. Based on these assessments, the European Commission concluded that a substantial change of circumstances had occurred, as sales of heated tobacco products increased significantly across multiple Member States. This led to the adoption of Commission Delegated Directive (EU) 2022/2100, which removed certain exemptions for heated tobacco products under the TPD.[74] As of 23 October 2023, these products are no longer exempt from bans on characterising flavours and must carry the same health warnings as conventional tobacco products.

While legal cross-border purchases of tobacco products, such as personal imports within EU limits, are addressed under Action 6.3, the WHO FCTC also calls for action on addressing **illicit cross-border flows**. These include smuggling, counterfeit products, and tax evasion, all of which undermine national tobacco control policies and public health protections.

---

71 Joint Action on Tobacco Control, European Public Health, website.

72 ibid.

73 EU4Health call for proposals on health promotion and prevention of noncommunicable and communicable diseases, including vaccine-preventable and other cancers caused by infections, and on smoke- and aerosol-free environments - European Commission.

74 European Commission, Directive (EU) 2022/2100 of 29 June 2022 amending Directive 2014/40/EU of the European Parliament and of the Council as regards the withdrawal of certain exemptions in respect of heated tobacco products.

Two key areas of progress are enhanced enforcement coordination and the development of international legal frameworks. The European Anti-Fraud Office (OLAF) has significantly expanded its operational reach, coordinating seizures of 616 million illicit cigarettes in 2023 and dismantling a smuggling network responsible for EUR 550 million in tax fraud in early 2025.[75,76]

At the policy level, the WHO FCTC[77] and its Protocol to Eliminate Illicit Trade in Tobacco Products (ITP) have provided a global legal framework for tracking, tracing, and international cooperation. The WHO and FCTC Secretariat have actively promoted ratification and implementation of the ITP, which has been increasingly adopted by EU Member States.[78,79]

The tobacco industry has historically undermined anti-smuggling efforts by promoting ineffective self-regulatory systems (e.g. Codentify [80]), lobbying for voluntary agreements, and influencing EU-level agreements that yielded minimal enforcement outcomes, seizure payments covered only 0.08% of estimated losses.[81,82] Moreover, transparent public data on the scale of illicit trade remain limited or non-existent in many countries,[83] hampering accountability and policy design. Addressing illicit tobacco trade requires a coordinated, multi-sectoral approach involving all levels of government.[84] Effective strategies include international cooperation, stronger tax administration to secure the supply chain, enhanced intelligence and enforcement efforts, and the application of timely and robust penalties.[85]

Illicit cross-border tobacco trade challenges public health objectives by increasing access to cheap, unregulated products and weakening national control measures. Illicit products, which are typically sold at lower prices, often lack health warnings, are sold without age restrictions, and are more accessible to youth and low-income populations, exacerbating health inequalities.[86] Consequently, the availability of these products reduces the effectiveness of taxation and packaging regulations, as it allows consumers to access products that do not comply with health warnings or other

---

75 European Anti-Fraud Office (OLAF), OLAF and partners strengthen efforts against tobacco smuggling, website.

76 European Anti-Fraud Office (OLAF), OLAF and International Partners Track Down Massive Cigarette Smuggling Network, Uncovering EUR 550 Million Tax Fraud, website.

77 The WHO Framework Convention on Tobacco Control (FCTC) is the world's first international public health treaty, adopted in 2003. It provides a comprehensive framework for tobacco control measures, including policies on taxation, advertising bans, packaging, public smoking restrictions, and measures to reduce illicit trade.

78 World Health Organization, Illegal Trade of Tobacco Products: What You Should Know to Stop It, 2019.

79 United Nations Treaty Collection, Protocol to eliminate illicit trade in tobacco products, 2012.

80 Codentify is a digital tracking and tracing system originally developed and patented by Philip Morris International in the mid-2000s. It was later licensed for free to other major tobacco companies (British American Tobacco, Japan Tobacco International, and Imperial Tobacco), who collectively promoted its adoption. Although presented as an independent solution, Codentify was criticised for its lack of transparency, technical shortcomings, and continued links to the tobacco industry. The system allowed tobacco companies significant control over the generation and management of tracking codes, which is contrary to the requirements of the WHO Illicit Trade Protocol that tracking and tracing systems be independent of industry. Source: A. W. A., Gallagher, A. B., Gilmore, and M. Eads, 'Tracking and tracing the tobacco industry: potential tobacco industry influence over the EU's system for tobacco traceability and security features', *Tobacco Control,* Vol. 29(e1), BMJ Publishing Group, 2020, pp. e56-e62.

81 World Health Organization, Illegal Trade of Tobacco Products: What You Should Know to Stop It, 2019.

82 A.W.A. Gallagher, A.B. Gilmore, and M. Eads, 'Tracking and tracing the tobacco industry: potential tobacco industry influence over the EU's system for tobacco traceability and security features', *Tobacco Control,* Vol. 29(e1), BMJ Publishing Group, 2020, pp. e56-e62.

83 World Health Organization, Illegal trade of tobacco products: what you should know to stop it, 2015, p. 9.

84 ibid.

85 ibid.

86 World Health Organization, Illegal trade of tobacco products: what you should know to stop it, 2015, pp.5-6.

regulatory requirements.[87, 88] Furthermore, the illegal tobacco trade fuels organised crime networks.[89]

In parallel, the EU has expanded its **track and trace system**, originally introduced in 2019 for cigarettes and roll-your-own tobacco, to cover all other tobacco products as of 20 May 2024.[90] This system, established under Articles 15 and 16 of the TPD, requires all unit packets of tobacco products to carry a unique identifier and tamper-proof security features. It enables authorities to monitor the movement of tobacco products across the supply chain, helping to combat illicit trade and ensure compliance with EU law.

Case study Germany: Bridging gaps in tobacco control

Background

Cancer remains a major public health challenge in Germany, accounting for 23% of all deaths in 2021.[91]In 2020, the age-standardised incidence rate was 337 per 100,000 for women and 406 per 100,000 for men, placing Germany slightly below the EU average.[92,93] While overall cancer mortality is broadly in line with the EU average, gender disparities persist: mortality is higher among women in Germany than in the EU on average, and lower among men.[94,95] Lung cancer remains one of the leading causes of cancer death in both sexes.[96,97]

Germany's health system is characterised by a multi-level governance structure involving amongst others the federal government, 16 federal states, and the self-governing system of purchasers/statutory health insurance (SHI) and providers. The SHI covers around 90% of the German population.[98] Cancer care is generally free at the point of use and supported by a dense network of cancer specialists both in cancer centres and in the community setting, with above-EU-average densities of physicians and nurses per cancer case. The Federal Joint Committee (G-BA), a public legal entity comprising the four leading umbrella organisations of the self-governing German healthcare system, plays a central role in defining benefit entitlements, approving treatments, as well as in the management, organisation and in defining the technical contents of cancer screening programmes. Germany also leads the EU in access to new oncology medicines and biosimilars, with 100% of selected high-benefit cancer medicines reimbursed.

87 World Health Organization, WHO Report on the Global Tobacco Epidemic 2023: Protect People from Tobacco Smoke, 2023, p. 1.
88 European Anti-Fraud Office (OLAF), OLAF and partners strengthen efforts against tobacco smuggling, website.
89 ibid.
90 European Commission, Extension of EU tobacco traceability system to tobacco products other than cigarettes and roll-your-own tobacco on 20 May 2024, website.
91 OECD and European Commission, EU Country Cancer Profile: Germany 2025, 2025.
92 ibid.
93 Zentrum für Krebsregisterdaten and Gesellschaft der epidemiologischen Krebsregister in Deutschland, *Krebs in Deutschland für 2019/2020*, 14th edition, Robert Koch-Institut, Berlin, 2023.
94 OECD and European Commission, EU Country Cancer Profile: Germany 2025, 2025.
95 Zentrum für Krebsregisterdaten and Gesellschaft der epidemiologischen Krebsregister in Deutschland, *Krebs in Deutschland für 2019/2020*, 14th edition, Robert Koch-Institut, Berlin, 2023.
96 OECD and European Commission, EU Country Cancer Profile: Germany 2025, 2025.
97 Zentrum für Krebsregisterdaten and Gesellschaft der epidemiologischen Krebsregister in Deutschland, *Krebs in Deutschland für 2019/2020*, 14th edition, Robert Koch-Institut, Berlin, 2023.
98 OECD and European Commission, EU Country Cancer Profile: Germany 2025, 2025.

Compared to other EU Member States, Germany allocates a relatively high share of resources to health. In 2022, health spending amounted to 12.6% of GDP, higher than the EU-27 average of 10.4%. Preventive care accounted for 6.6% of health expenditure in 2021, above the EU average of 6.1% in 2021.[99] The current pace of policy implementation may present challenges for further reducing smoking rates and addressing health inequalities, as reflected in survival disparities by age and region.[100] These challenges are particularly pressing given that the cancer burden is projected to rise significantly, by 15% between 2022 and 2040[101] and 23% between 2015 and 2030[102], largely due to demographic ageing. This underscores the urgency of strengthening prevention and early detection efforts.

Overall assessment: the implementation of the EBCP in the country

Germany's **National Cancer Plan**[103] was initiated in 2008 by the German Federal Ministry of Health (BMG), the German Cancer Society, the German Cancer Aid and the Joint Working Group of German Tumour Centres. The plan places strong emphasis on early detection and high-quality cancer care, with objectives on improving screening programmes and advancing oncology care structures and quality assurance.[104] Quality of life for patients and survivors is addressed through patient-centred information and support services.

In 2024, the Federal Ministry of Health reviewed the progress made in implementing the plan and concluded that the goals set since 2008 had largely been achieved.[105] To further align with the EBCP, a national consultation process was launched to identify new areas for action. A key development in this revision is the inclusion of primary cancer prevention for the first time, by establishing a dedicated working group to analyse key areas and develop recommendations for further action. The group also addresses health disparities and aims to ensure that prevention measures reach high-risk and underserved populations. The updated plan will aim to broaden its scope by focusing on shared risk factors, such as smoking, alcohol, poor diet, and physical inactivity, that contribute to multiple NCDs, including cancer, cardiovascular disease, and diabetes. It also introduces other topics such as improving the quality and coordination of cancer care and supporting long-term survival after cancer. Research and digitalisation will play a cross-cutting role across all areas of the updated plan.

To support patient-centred cancer research, the Federal Ministry of Education and Research launched the National Decade Against Cancer in 2019. This initiative aims to strengthen cancer prevention, early detection, quality of life of cancer patients, as well as enable patients to benefit from research results more quickly.[106]

---

99 OECD and European Commission, EU Country Cancer Profile: Germany 2025, 2025.

100 Zentrum für Krebsregisterdaten and Gesellschaft der epidemiologischen Krebsregister in Deutschland, *Krebs in Deutschland für 2019/2020*, 14th edition, Robert Koch-Institut, Berlin, 2023.

101 OECD and European Commission, EU Country Cancer Profile: Germany 2025, 2025.

102 Zentrum für Krebsregisterdaten and Gesellschaft der epidemiologischen Krebsregister in Deutschland, *Krebs in Deutschland für 2019/2020*, 14th edition, Robert Koch-Institut, Berlin, 2023.

103 Bundesgesundheitsministerium, Ziele des Nationalen Krebsplan – NKP, 2008.

104 ibid.

105 Bundesgesundheitsministerium, Gemeinsame Erklärung Nationaler Krebsplan (NKP) - Fortsetzung und Neuausrichtung, 2024.

106 Federal Ministry of Education and Research, The National Decade against Cancer, 2019.

Recent legislative developments, such as the Health Data Utilisation Act (GDNG), have strengthened Germany's data infrastructure for cancer prevention by enabling better linkage and evaluation of cancer registry data with other health data. This supports more targeted prevention measures, including those related to tobacco control.

Germany is involved in several EU-level **Joint Actions** relevant to the EBCP, including the Joint Action on Networks of Expertise (JANE-2)[107], EUCanScreen[108], and EUnetCCC[109]. It also participates in JATC2, which supports Member States in implementing the TPD and strengthening tobacco control policies.[110] The PIECES project, in which Germany is involved, focuses on primary cancer prevention, including tobacco control interventions.[111] The country also contributes to the Joint Action on Preventing NCDs (JA PreventNCD), which addresses shared risk factors for cancer and other NCDs[112]; the DKFZ is part of the consortium that is currently being formed.

Description of the initiative

Germany's approach to tobacco control has primarily focused on transposing EU legislation into national law, with less emphasis on national initiatives. Germany has implemented several **tobacco control measures** at national level.[113] Smoking is prohibited on public transport, but point-of-sale advertising and vending machines remain available, and there is no licensing system for tobacco retailers.[114] A stepwise advertising ban was introduced in 2020, covering cigarettes in 2022, heated tobacco in 2023 and e-cigarettes in 2024. In 2021, Germany introduced a tobacco tax reform that included modest increases and extended taxation to heated tobacco and e-cigarette liquids based on volume (millilitre). Germany also introduced a minimum age of 18 for e-cigarettes, including those without nicotine, going beyond EU requirements. E-cigarettes are now also included in smoke-free laws. A national quitline is available, and nicotine replacement therapy has recently become reimbursable under specific conditions.[115] A new national cessation campaign was launched.

These measures are implemented nationwide and target the general population. Particular attention is given to youth. However, smoke-free laws remain incomplete, with no national bans in many indoor public spaces such as healthcare facilities, educational institutions and restaurants.[116,117] Enforcement of smoke-free laws and bans on novel products such as e-cigarettes and heated tobacco varies across federal states. Nicotine pouches have been banned, but remain available online and, anecdotally, in some shops.

---

107 European Commission, JANE-2, website.
108 European Commission, EUCanScreen, website.
109 European Commission, EUnetCCC, website.
110 Joint Action on Tobacco Control, European Public Health, website.
111 PIECES, Home, website.
112 European Commission, JA PreventNCD, website.
113 WHO Framework Convention on Tobacco Control, 2023 Global Progress Report on Implementation of the WHO Framework Convention on Tobacco Control, 2024.
114 The Tobacco Atlas, Country Factsheets – Germany, website.
115 WHO Framework Convention on Tobacco Control, 2023 Global Progress Report on Implementation of the WHO Framework Convention on Tobacco Control, 2024.
116 ibid.
117 The Tobacco Atlas, Country Factsheets – Germany, website.

Key outcomes and impact of the initiative

Germany has made measurable progress in reducing tobacco use, particularly among youth. Between 2001 and 2023, the share of 12–17-year-olds who had ever smoked more than halved, declining to 16.2 % among girls and 17.2 % among boys.[118] Among adults, smoking prevalence declined to 18.8 % in 2022, below the EU average.[119,120] However, **trends have been mixed**. While youth smoking has declined, e-cigarette use, especially disposable products, has risen.[121,122,123] Among 18–25-year-olds, one in four smokes tobacco, and 12 % use disposable e-cigarettes.

Delays in implementing tobacco control measures have slowed reductions in adult smoking and may exacerbate health inequalities.[124] The absence of binding national legislation on key issues, such as a comprehensive advertising ban or plain packaging, has contributed to slower progress compared to other Member States. Importantly, the tobacco industry in Germany has been reported to have established relationships with policymakers and sponsor public institutions and political parties. The extent of interactions between industry representatives and public officials is considerable.[125]

Key takeaways: success factors and lessons learnt

Germany has made measurable progress in reducing youth smoking, with the share of 12–17-year-olds who have ever smoked more than halving since 2001. This success reflects the long-term impact of earlier tax increases and awareness efforts. Germany has also implemented a phased advertising ban and extended taxation to novel products, aligning with EBCP objectives. The inclusion of prevention in the updated National Cancer Plan and strong data infrastructure (e.g. DEBRA, Microcensus) are further strengths. **Key enablers of Germany's progress** in tobacco control include the establishment of lasting partnerships and a strong sense of ownership among stakeholders, fostered by the National Cancer Plan's cooperative structure.

However, **progress has been uneven**. The voluntary nature of the National Cancer Plan and Germany's decentralised health system require significant coordination efforts, leading to variation in tobacco control policies across federal states. Implementation has been influenced by factors such as decentralised governance, varying levels of political support, and the tobacco industry. There is scope to further strengthen cessation services and expand training opportunities for health professionals.

Germany's experience highlights the importance of coordinated implementation and broad stakeholder involvement. The "Round Table process" and active stakeholder participation are particularly valuable in a decentralised system. Addressing emerging challenges such as digital tobacco marketing will be essential. Finally, the German case study highlights that strengthening EU

---

118 Bundeszentrale für gesundheitliche Aufklärung (BZgA), Infoblatt: Die Drogenaffinität Jugendlicher in der Bundesrepublik Deutschland 2023 – Ergebnisse zum Rauchen, 2024.

119 The Tobacco Atlas, Country Factsheets – Germany, website.

120 Statistische Ämter des Bundes und der Länder, Raucherquote – Ziel 3: Gesundheit und Wohlergehen, website.

121 Bundeszentrale für gesundheitliche Aufklärung (BZgA), Infoblatt: Die Drogenaffinität Jugendlicher in der Bundesrepublik Deutschland 2023 – Ergebnisse zum Rauchen, 2024.

122 The Tobacco Atlas, Country Factsheets – Germany, website.

123 OECD and European Commission, EU Country Cancer Profile: Germany 2025, 2025.

124 ibid.

125 DKFZ, Tobacco Industry Interference Index Germany 2023, 2023.

regulatory frameworks and improving alignment with national priorities can help Member States, especially those with complex governance structures, advance toward shared goals, such as those set out in the EBCP.

3.2.2. Action 7: Alcohol control

Alcohol consumption is a major preventable cause of cancer in Europe, contributing to approximately 4% of all new cancer cases.[126] It is a well-established risk factor for several cancers, including those of the breast, liver, colorectum, oral cavity, pharynx, larynx, and oesophagus. Even low levels of alcohol intake increase cancer risk: there is no safe threshold for consumption in relation to cancer prevention.[127]

As part of its cancer prevention strategy, the EBCP sets the objective of reducing harmful alcohol consumption by at least 10% by 2025 relative to 2021.[128] Since 2010, the EU has seen a minimal reduction in alcohol consumption per capita, decreasing on average from 11.1 litres of pure alcohol to 11.0 litres.[129]. Alcohol use in the EU is still among the highest in the world, with significant disparities between Member States and population groups. Youth exposure to alcohol marketing, particularly through digital and cross-border channels, has emerged as a key concern, undermining prevention efforts and contributing to early initiation and risky drinking behaviours.[130]

To achieve its 2025 goals, the EBCP and its roadmap outlines a set of targeted actions to reduce alcohol-related harm. These include: Action 7.1 reviewing EU legislation on alcohol taxation and cross-border purchases; Actions 7.2 proposing mandatory labelling of ingredients, nutritional information, and health warnings on alcoholic beverages; Action 7.3 supporting Member States in implementing evidence-based brief interventions; and Action 7.4 reducing young people's exposure to online alcohol marketing through strengthened monitoring of the AVMSD.

While this chapter focuses on Actions 7.1, 7.2, and 7.4, it is important to acknowledge Action 7.3, which aims to support Member States in implementing evidence-based brief interventions. These interventions, typically delivered in primary care or community settings, are a cost-effective strategy to reduce harmful alcohol use and prevent alcohol-related diseases, including cancer. However, due to limited EU-level data, this action is not analysed in detail here.

---

126 World Health Organization, Alcohol and cancer in the European Union – A call to action, 2023.

127 H. Rumgay, N. Murphy, P. Ferrari, P. and I. Soerjomataram, 'Alcohol and cancer: epidemiology and biological mechanisms', *Nutrients*, Vol. 13(9), MDPI, 2021, p. 3173.

128 While the EBCP refers to "harmful" alcohol consumption in line with (dated) WHO terminology, it is important to note that scientific evidence increasingly supports the conclusion that no level of alcohol consumption is safe for health. According to a WHO statement published in *The Lancet Public Health*, alcohol is a Group 1 carcinogen, and the risk to health begins with the very first drop. Notably, even light to moderate drinking is responsible for a significant share of alcohol-attributable cancers in Europe. Source: B. O., Anderson, et al., 'Health and cancer risks associated with low levels of alcohol consumption', *The Lancet Public Health*, Vol. 8(1), 2023, pp. e6–e7.

129 World Health Organization, Alcohol, health and policy response in the European Union, 2024.

130 World Health Organization, Alcohol marketing in the WHO Europe region, 2020.

Action 7.1: Alcohol taxation and cross-border purchases of alcohol products

Box 5: Progress on alcohol taxation and cross-border purchases (Action 7.1)

The review of EU legislation on alcohol taxation and cross-border purchases of alcohol products has not advanced as initially planned. The Commission evaluation on existing legislation covering alcohol taxation was expected in Q2 2023 but remains pending despite the closure of the public consultation in July 2022.[131] Similarly, preparatory work on revising rules for cross-border purchases of alcohol by private individuals is still ongoing as of early 2025. However, the Commission has supported Member States addressing health determinants and common risks for NCDs, including alcohol consumption, through the joint action PreventNCD under EU4Health.[132]

Under Action 7.1 of the EBCP, the European Commission committed to reviewing Council Directive 92/84/EEC[133] relating to the taxation of alcohol and the cross-border purchase of alcohol products.

At the Member State level, alcohol taxation legislation is varying. All EU Member States apply excise taxes on beer and spirits, and most use alcohol-content-based specific taxation for these beverages, aligning with public health objectives.[134] However, only 13 of 27 EU Member States apply a non-zero excise tax on wine, and 15 apply none at all on beverages, reflecting a significant inconsistency in tax treatment across beverage types. The EU's harmonised framework, established by Council Directives 92/83/EEC and 92/84/EEC, has not been updated since 1992, and minimum rates remain static despite inflation and rising incomes.[135,136] The study further notes that alcohol excise revenues have declined as a share of GDP in many EU Member States, contrasting with tobacco taxation trends.[137] Some Member States, such as Finland, Lithuania, and Latvia, have implemented repeated tax increases, demonstrating that well-designed excise policies can reduce consumption and increase revenue. In Lithuania, for example, excise revenue nearly doubled between 2015 and 2022 while alcohol consumption declined.[138]

Despite these examples, several barriers have hindered broader implementation. Many EU countries lack automatic inflation adjustment mechanisms for alcohol excise taxes; While nine Member States have legislation that mandates automatic adjustments, only Ireland (and one non-Member State EU country) have implemented adjustments since 2019.[139] This omission has eroded the real value of

131 European Commission, Have your say - Excise duty on alcohol and alcohol beverages – evaluation of excise duty rates and tax structures, website.

132 European Commission, JA PreventNCD, website.

133 Council of the EU, Council Directive 92/84/EEC of 19 October 1992 on the approximation of the rates of excise duty on alcohol and alcoholic beverages.

134 World Health Organization Regional Office for Europe, Alcohol taxes, prices and affordability in the WHO European Region in 2022, 2025, pp. 7-8.

135 Council of the EU, Council Directive 92/83/EEC of 19 October 1992 on the harmonization of the structures of excise duties on alcohol and alcoholic beverages.

136 Council of the EU, Council Directive 92/84/EEC of 19 October 1992 on the approximation of the rates of excise duty on alcohol and alcoholic beverages.

137 M. Mansour, P. Petit and F. Sawadogo, How to design excise taxes on alcoholic beverages, 2023, pp. 2-6.

138 J. Manthey, I. Gobina, L. Isajeva et al., 'The impact of raising alcohol taxes on government tax revenue: insights from five European countries', *Applied Health Economics and Health Policy*, Vol. 22(3), Springer Nature, 2024, pp. 363–374.

139 World Health Organization Regional Office for Europe, Alcohol taxes, prices and affordability in the WHO European Region in 2022, 2025, pp. 24-25.

alcohol taxes, increasing affordability. Germany and Poland illustrate the consequences of policy stagnation: Germany has not raised alcohol excise taxes since 2004 (except for alcopops),[140] and Poland's increases have been infrequent and moderate. As a result, both countries have experienced declining inflation-adjusted tax revenues.[141] Moreover, many EU countries apply lower or zero excise taxes on wine, a pattern particularly evident in major wine-producing countries such as Italy, France, and Spain, where wine is either untaxed or taxed at a much lower rate than beer or spirits. This approach is often motivated by the protection of domestic industry and longstanding cultural practices. Among Organisation for Economic Co-operation and Development (OECD) countries with non-zero excise duty on wine, France applies the lowest rate, while Italy and Spain tax wine at a zero rate. In contrast, beer and spirits are generally taxed according to alcohol content, whereas wine is typically taxed on a volume basis, which further complicates efforts to harmonise alcohol taxation across the EU. The diversity of wine strengths, producers, and product types makes it more complex to apply a single rate per alcoholic strength. [142]

Cross-border alcohol trade remains an unresolved issue. Large price and tax differentials between Member States continue to drive cross-border alcohol shopping, facilitated rules that allow near-unlimited personal imports without further excise duty.[143] This compromises national pricing policies and contributes to market distortions. For example, in Estonia, the additional increase in excise duty that was planned for July 2025 was cancelled to prevent cross-border flows.[144] For a timeline of these developments, see Figure 2.

[140] Alcopops are pre-mixed, ready-to-drink alcoholic beverages that are heavily flavoured and sweetened to taste like soft drinks or fruit juices.

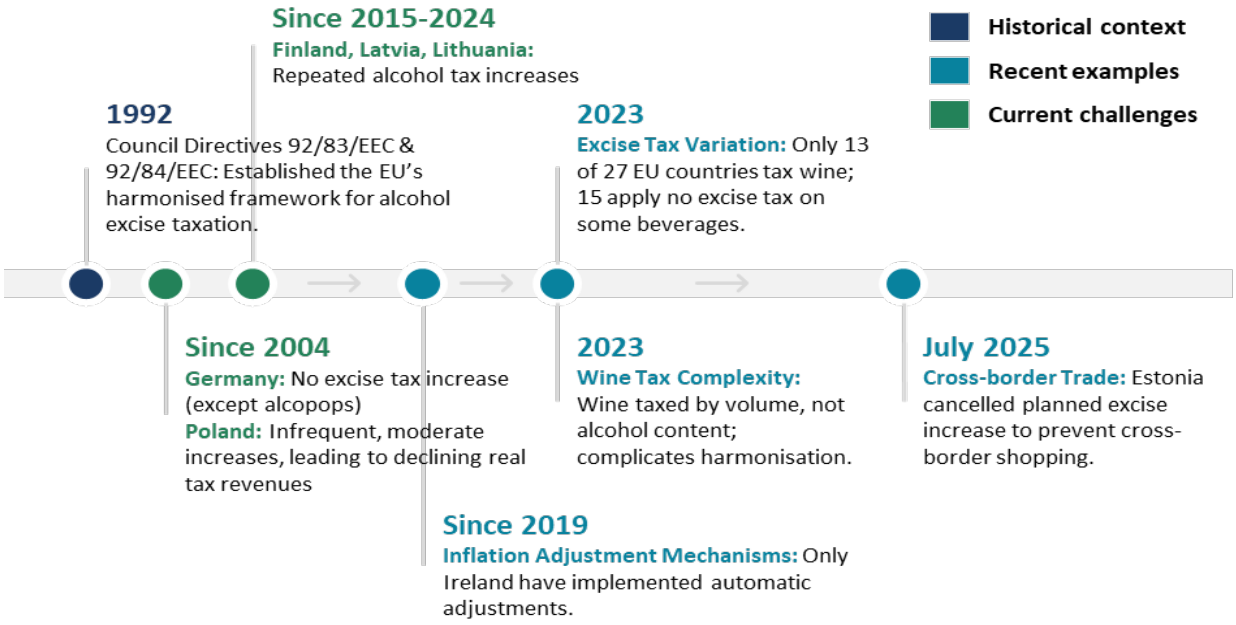
[141] J. Manthey, I. Gobina, L. Isajeva et al., 'The impact of raising alcohol taxes on government tax revenue: insights from five European countries', *Applied Health Economics and Health Policy*, Vol. 22(3), Springer Nature, 2024, pp. 363–374.

[142] M. Mansour, P. Petit, and F. Sawadogo, F., How to design excise taxes on alcoholic beverages, 2023, pp. 2-6.

[143] H. Leifman, K. Dramstad and E. Juslin, 'Alcohol consumption and closed borders – how COVID-19 restrictions have impacted alcohol sales and consumption in Europe', *BMC Public Health*, Vol. 22, BMJ Publishing Group, 2022, p. 692.

[144] Parliament of Estonia, The Rigiikou increased excise duties and established security tax, website.

Figure 2 – A timeline on cross-border alcohol taxation in the EU[145,146,147,148,149,150,151,152,153]



The public health consequences of these barriers are significant. The economic cost of alcohol consumption is estimated to range from 2% to 3.1% of GDP globally, far exceeding current tax revenues. Furthermore, evidence shows that cross-border alcohol purchases increase total per capita consumption and weaken the impact of national tax policies. [154]

145 Council of the EU, Council Directive 92/84/EEC of 19 October 1992 on the approximation of the rates of excise duty on alcohol and alcoholic beverages.

146 Council of the EU, Council Directive 92/83/EEC of 19 October 1992 on the harmonization of the structures of excise duties on alcohol and alcoholic beverages.

147 Council of the EU, Council Directive 92/84/EEC of 19 October 1992 on the approximation of the rates of excise duty on alcohol and alcoholic beverages.

148 Mansour, M., Petit, P. and Sawadogo, F., How to design excise taxes on alcoholic beverages, 2023, pp. 2-6.

149 World Health Organization Regional Office for Europe, Alcohol taxes, prices and affordability in the WHO European Region in 2022, 2025, pp. 7-8.

150 World Health Organization Regional Office for Europe, Alcohol taxes, prices and affordability in the WHO European Region in 2022, 2025, pp. 24-25.

151 Alcopops are pre-mixed, ready-to-drink alcoholic beverages that are heavily flavoured and sweetened to taste like soft drinks or fruit juices.

152 J. Manthey, I. Gobina, L. Isajeva et al., 'The impact of raising alcohol taxes on government tax revenue: insights from five European countries', *Applied Health Economics and Health Policy*, Vol. 22(3), Springer Nature, 2024, pp. 363–374.

153 Parliament of Estionia, The Rigiikou increased excise duties and established security tax, website.

154 J. Manthey, I. Gobina, L. Isajeva et al., 'The impact of raising alcohol taxes on government tax revenue: insights from five European countries', *Applied Health Economics and Health Policy*, Vol. 22(3), Springer Nature, 2024, pp. 363–374.

Action 7.2: Mandatory alcohol labelling

Box 6: Progress on alcohol labelling (Action 7.2)

The Commission committed in the EBCP to propose a mandatory list of ingredients and nutrition declaration on alcoholic beverage labels as well as health warnings on labels. As of 2024, only three Member States, France, Lithuania, and Ireland, have adopted legislation requiring health warnings, with Ireland's law (effective May 2026) being the most comprehensive.[155][156] Ireland is also the only country mandating on-label nutritional information, while nine Member States require ingredient listings.[157]

Despite evidence supporting the effectiveness of cancer-specific warnings, no EU-wide regulation mandates health warnings or full on-label ingredient and nutrition information.[158] In March 2025, the European Commission proposed a "wine package" that introduces harmonised definitions for 'alcohol-free' (up to 0.5% ABV) and 'alcohol-light' wine (at least 30% less alcohol than the usual content), and allows the Commission to specify how electronic ingredient and nutrition information should be indicated on the label, such as with a pictogram. However, the proposal does not require new health warnings or on-label ingredient/nutrition information for wine.[159]

Evidence from real-world studies and survey experiments supports the effectiveness of cancer-specific health warnings in increasing consumer knowledge and potentially reducing alcohol consumption.[160,161] Labels combining health warnings with standard drink information and drinking guidelines have shown moderate to high certainty in reducing consumption.[162] As of 2024, only three Member States (France, Lithuania, and Ireland) have adopted legislation mandating health warnings on alcohol labels, with Ireland's law, effective May 2026, being the most comprehensive, including cancer-specific messages.[163,164]

New rules for the ingredient list and nutrition declaration of wine were adopted in December 2021.[165] These regulations permit both the ingredient list and nutrition declaration to be displayed either directly on the label or via electronic means, with the exception of the energy value, which must always be shown on the label itself. In spite of that, since the launch of the EBCP, progress toward mandatory labelling of alcoholic beverages, including ingredient lists, nutrition declarations, and health warnings, has been limited and asymmetrical across the EU.

---

155 European Commission, Study on the effectiveness of health information on alcoholic beverages – Final report, 2024, p. 5.

156 World Health Organization Regional Office for Europe, Health warnings on labels of alcoholic beverages in the WHO European Region in 2024, 2024.

157 I. Katsarova, Alcohol labelling: State of play, EPRS, European Parliament, May 2025, p. 6.

158 European Parliament and the Council of the EU, amending Regulation (EU) 1308/2013 of 28 March 2025, on certain market rules in the wine sector.

159 N. Šajn, The wine package, EPRS, European Parliament, June 2025.

160 D. Correia, D. Kokole, J. Rehm et al., 'Effect of alcohol health warning labels on knowledge related to the ill effects of alcohol on cancer risk and their public perceptions in 14 European countries: an online survey experiment', *The Lancet Public Health*, Vol. 9(7), Elsevier Limited, 2024, pp. e470–e480.

161 A.M.E. Zuckermann, K. Morissette, L. Boland et al., 'The effects of alcohol container labels on consumption behaviour, knowledge, and support for labelling: a systematic review', *The Lancet Public Health*, Vol. 9(7), Elsevier Limited, 2024, pp. e481–e494.

162 ibid.

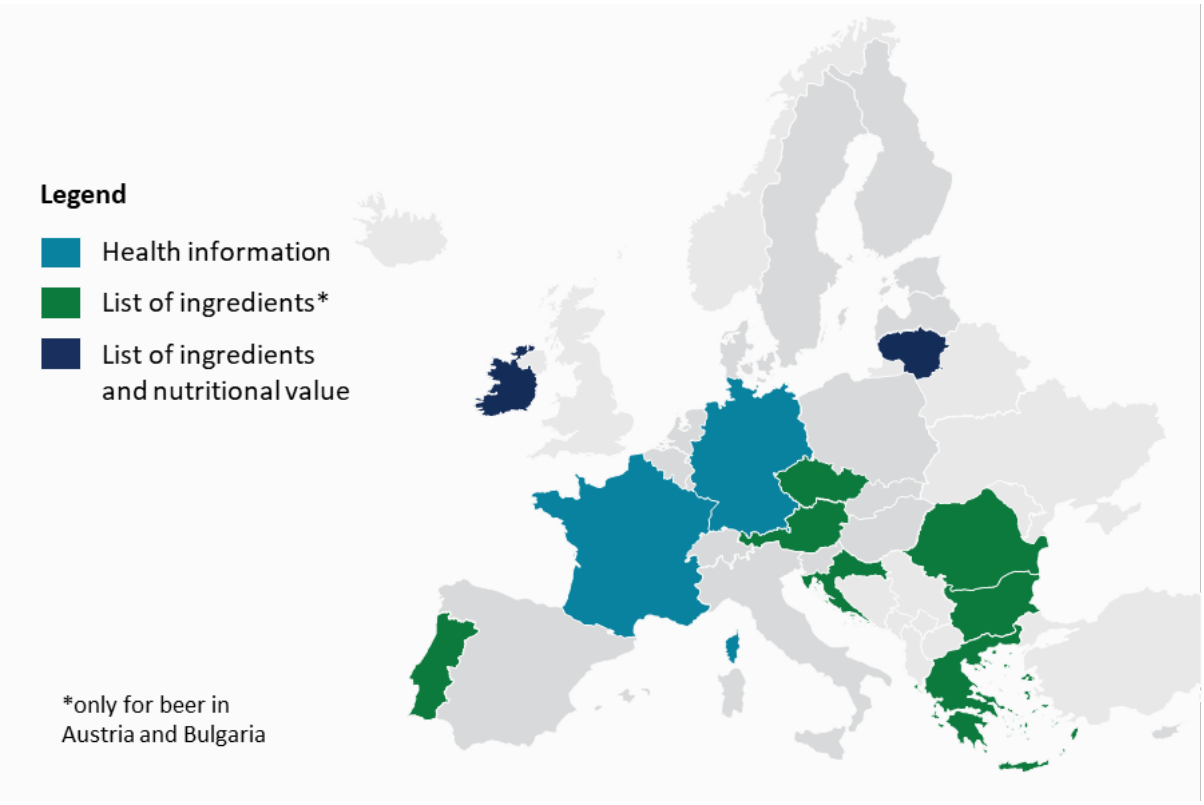
163 European Commission, Study on the effectiveness of health information on alcoholic beverages – Final report, 2024, p. 5.

164 World Health Organization Regional Office for Europe, Health warnings on labels of alcoholic beverages in the WHO European Region in 2024, 2024.

165 European Parliament and the Council of the EU, amending Regulation (EU) 2021/2117 of 2 December 2021 on definition, description, presentation, labelling and protection of wine products.

Currently, Ireland is the only EU country requiring on-label nutritional information, while nine Member States[166] mandate ingredient listing.[167] The beer sector has made notable progress through voluntary commitments, with 95% of beer volumes displaying ingredients and 88% showing energy values by 2022.[168] However, wine and spirits sectors largely rely on digital disclosures in Member States, which are less effective.[169,170] For a map of the current state-of-play concerning nutrition and health information on alcohol labels, please see Figure 3.

Figure 3 – Map of EU countries providing nutrition/health information on alcohol labels[171,172,173,174,175]



Despite the EBCP's commitment, no EU-wide regulation currently mandates health warnings or full on-label ingredient and nutrition information for alcoholic beverages. Regulatory exemptions under Regulation (EU) No 1169/2011 exclude beverages over 1.2% ABV from such requirements.[176,177] In

166 Austria, Bulgaria, Croatia, Czechia, Greece, Ireland, Lithuania, Portugal and Romania.
167 I. Katsarova, Alcohol labelling: State of play, EPRS, European Parliament, May 2025, p. 6.
168 ibid.
169 E. Jané-Llopis, D. Kokole, M. Neufeld,O.S.M. Hasan and J. Rehm, What is the current alcohol labelling practice in the WHO European Region and what are barriers and facilitators to development and implementation of alcohol labelling policy?, 2020.
170 World Health Organization Regional Office for Europe, Laws and regulations addressing the acceptability, availability and affordability of alcoholic beverages, 2025, pp. 109-112.
171 ibid.
172 European Commission, Study on the effectiveness of health information on alcoholic beverages – Final report, 2024, p. 5.
173 World Health Organization Regional Office for Europe, Health warnings on labels of alcoholic beverages in the WHO European Region in 2024, 2024.
174 Austria, Bulgaria, Croatia, Czechia, Greece, Ireland, Lithuania, Portugal and Romania.
175 I. Katsarova, Alcohol labelling: State of play, EPRS, European Parliament, May 2025, p. 6.
176 European Parliament and the Council of the EU, Regulation (EU) 1169/2011 of 25 October 2011 on the provision of food information.
177 I. Katsarova, Alcohol labelling: State of play, EPRS, European Parliament, May 2025, p. 4.

March 2025, the European Commission adopted a legislative proposal, currently under discussion in the Council and Parliament, that would allow the European Commission to specify how electronic means of providing information should be identified on the label, for example by means of a pictogram or symbol. [178] The proposal also defines the terms to be used for indicating the absence or reduction of alcohol in wine: 'alcohol-free' applies to wine with no more than 0.5% alcohol by volume, while 'alcohol-light' refers to wine with more than 0.5% ABV and at least 30% less alcohol than the usual content for that category of wine before de-alcoholisation.[179]

Resistance from parts of the alcohol industry has been documented, including lobbying activities, legal challenges, and objections to the use of graphic warnings and causal language in proposed regulations.[180,181,182] Discussions by the Word Trade Organisation have also raised trade concerns regarding Ireland's legislation.[183,184] Voluntary labelling schemes have shown low compliance and limited impact, and QR code-based disclosures are rarely accessed by consumers. [185 , 186] Fragmentation of national approaches, lack of harmonised design standards (e.g. size, placement, clarity), and insufficient enforcement mechanisms further hinder implementation.[187,188]

The implementation of alcohol control measures under the EBCP has encountered significant challenges due to persistent and coordinated influence from the alcohol industry, particularly in the area of labelling and consumer information. The case of Ireland's health warning proposal, aligned with EBCP objectives, illustrates how industry actors have employed both practical and discursive lobbying strategies to obstruct public health initiatives.[189] This pattern of interference is echoed in WHO Europe's analysis, which underscores the inadequacy of voluntary labelling schemes.[190]

The European Commission launched the "wine package" proposal in March 2025.[191] While some provisions may indirectly support EBCP goals, such as improved consumer information and reduced alcohol content, the main objectives of the proposal, as summarised in the EPRS briefing,[192] are to

---

178 European Commission, Proposal for a Regulation 2025/0071(COD) amending Regulations (EU) No 1308/2013, (EU) 2021/2115 and (EU) No 251/2014 as regards certain market rules and sectoral support measures in the wine sector and for aromatised wine products, 2025.

179 ibid.

180 European Commission, Study on the effectiveness of health information on alcoholic beverages – Final report, 2024, pp. 89-91.

181 World Health Organization Regional Office for Europe, Laws and regulations addressing the acceptability, availability and affordability of alcoholic beverages, 2025.

182 C. Ferreira-Borges, D. Kokole, G. Galea, M. Neufeld and J. Rehm, 'Labels warning about alcohol-attributable cancer risks should be mandated urgently', *The Lancet Public Health*, Vol. 10, Elsevier Limited, 2025, pp. e358–e359.

183 A.M.E. Zuckermann, K. Morissette, L. Boland et al., 'The effects of alcohol container labels on consumption behaviour, knowledge, and support for labelling: a systematic review', *The Lancet Public Health*, Vol. 9(7), Elsevier Limited, 2024, pp. e481–e494.

184 World Health Organization Regional Office for Europe, Laws and regulations addressing the acceptability, availability and affordability of alcoholic beverages, 2025, pp. 49-50.

185 ibid.

186 E. Jané-Llopis, D. Kokole, M. Neufeld, O.S.M. Hasan and J. Rehm, What is the current alcohol labelling practice in the WHO European Region and what are barriers and facilitators to development and implementation of alcohol labelling policy?, 2020.

187 ibid.

188 World Health Organization Regional Office for Europe, Health warnings on labels of alcoholic beverages in the WHO European Region in 2024, 2024.

189 M. Lesch and J. McCambridge, 'Understanding the political organization and tactics of the alcohol industry in Ireland 2009-2018', *Journal of Studies on Alcohol and Drugs*, Vol. 83(4), Alcohol Research Documentation, Inc., 2022, pp. 574-581.

190 H.P. Kluge, G. Galea, C. Ferreira-Borges and C. Paradis, 'Confronting alcohol's costly toll: why the European region needs clearer, evidence-based policy', *The Lancet Regional Health – Europe*, Vol. 48, Elsevier Limited, 2025.

191 N. Šajn, The wine package, EPRS, European Parliament, June 2025.

192 ibid.

address structural and economic challenges in the EU wine sector. Specifically, the proposal aims to clarify and harmonise definitions for 'alcohol-free' and 'alcohol-light' wines, and to empower the Commission to specify how electronic means of providing ingredient and nutrition information should be indicated on the label (e.g. via a pictogram or symbol). According to the EPRS, the proposal responds to the need to adapt the EU wine sector to changing consumption patterns, surplus production, and the need for innovation, and does not introduce new requirements for mandatory health warnings or on-label ingredient and nutrition information for wine. Its primary focus is therefore sectoral and market-oriented, rather than public health-driven. Public awareness of alcohol's carcinogenicity remains low, only 53% of Europeans associate alcohol with cancer.[193] Without mandatory labelling, consumers lack access to critical health information at the point of purchase and consumption. This perpetuates misconceptions about "safe" drinking levels and risk to undermine cancer prevention efforts under the EBCP.[194] Moreover, inconsistent labelling across Member States might be considered to lead to inequities in consumer protection and thus hamper the internal market.[195,196]

Action 7.4: Online marketing of alcoholic beverages

Box 6: Progress on online alcohol marketing and the AVMSD (Action 7.4)

The 2018 revision of the Audiovisual Media Services Directive (AVMSD) extended EU rules to digital platforms, introducing minimum restrictions on alcohol advertising targeting minors. The Directive does not cover sponsorship, retail promotions, or set limits on advertising volume, leaving key gaps.[197]

The AVMSD contains a specific monitoring and evaluation clause (Article 33) that requires the European Commission to submit regular reports to the European Parliament and the Council on the application of the Directive. These reports are to be published every three years, providing an ongoing assessment of how Member States have transposed and implemented the AVMSD, including provisions related to online alcohol marketing and the protection of minors. Currently, two application reports have been released: the first in 2020 (SWD(2020)228 final) and the second in 2024 (SWD(2024)4 final).[198,199]

Some Member States, such as Finland, Lithuania, and Sweden, have adopted stricter national rules, including bans on alcohol advertising on social media.[200]

193 World Health Organization Regional Office for Europe, Alcohol health warning labels – A public health perspective for Europe, 2025, pp. 10-13.

194 C. Ferreira-Borges, D. Kokole, G. Galea, M. Neufeld and J. Rehm, 'Labels warning about alcohol-attributable cancer risks should be mandated urgently', *The Lancet Public Health*, Vol. 10, Elsevier Limited, 2025, e358–e359.

195 European Commission, Study on the effectiveness of health information on alcoholic beverages – Final report, 2024, pp. 60 and 77-78.

196 World Health Organization Regional Office for Europe, Laws and regulations addressing the acceptability, availability and affordability of alcoholic beverages, 2025. pp. 21-22.

197 European Parliament and the Council of the EU, amending Directive (EU) 2018/1808 of 14 November 2018 on the provision of AVSDM.

198 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive", for the period 2014-2019, SWD(2020) 228, 2020.

199 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive" as amended by Directive (EU) 2018/1808, for the period 2019-2022, SWD(2024) 4, 2024.

200 G. Scobie, C. Patterson, G. Rendall et al., 'Review of alcohol marketing restrictions in seven European countries', *Public Health Scotland*, 2022.

The 2018 revision of the AVMSD marked a significant step in aligning EU audiovisual policy with evolving media consumption patterns, particularly among young people.[201] The Directive extended its scope to include digital platforms such as social media and on-demand services, requiring Member States to transpose the revised provisions into national law by September 2020.[202,203] It introduced minimum content-based restrictions prohibiting alcohol advertisements from targeting minors or associating alcohol with social or sexual success, while also banning the use of minors' personal data for targeted advertising.[204]

Several Member States have gone beyond the AVMSD's baseline requirements. Finland, Lithuania, and Sweden have implemented stricter national rules, including outright bans on alcohol advertising on social media and video-sharing platforms.[205] Finland, in particular, has pioneered legislation banning consumer-generated alcohol content and shareable marketing for strong alcoholic drinks.[206,207] Judicial enforcement has also played a role: in 2023, a French court ordered Meta to remove illegal alcohol promotions on Instagram, reinforcing the applicability of national laws to global platforms.[208,209]

Following the formal adoption of the revised AVMSD, several structural and procedural factors have hindered its effective implementation.[210,211] Many Member States experienced delays in transposing the Directive, as nearly half reported.[212,213,214] Moreover, most countries did not introduce new monitoring mechanisms.[215]

The Directive's scope is limited to audiovisual media services and video-sharing platforms, setting qualitative standards for alcohol advertising content (e.g. not targeting minors or promoting excessive consumption) but does not impose quantitative limits on advertising volume or frequency. It also does not regulate other marketing channels such as cinema, radio, print, sponsorship, or retail

201 European Parliament and the Council of the EU, amending Directive (EU) 2018/1808 of 14 November 2018 on the provision of AVSDM.
202 ibid.
203 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive" as amended by Directive (EU) 2018/1808, for the period 2019-2022, SWD(2024) 4, 2024.
204 ibid.
205 G. Scobie, C. Patterson, G. Rendall et al., 'Review of alcohol marketing restrictions in seven European countries', *Public Health Scotland*, 2022.
206 University of Helsinki, Too young to drink, old enough to see the ads? Understanding youth exposure to alcohol marketing, 2023.
207 G. Scobie, C. Patterson, G. Rendall et al., 'Review of alcohol marketing restrictions in seven European countries', *Public Health Scotland*, 2022.
208 European Alcohol Policy Alliance (Eurocare), A landmark victory against online alcohol influence, website.
209 Tribunal Judiciaire de Paris, Jugement Rendu selon la procedure acceleree au fond, 2023.
210 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive" as amended by Directive (EU) 2018/1808, for the period 2019-2022, SWD(2024) 4, 2024.
211 European Parliament and the Council of the EU, amending Directive (EU) 2018/1808 of 14 November 2018 on the provision of AVSDM.
212 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive" as amended by Directive (EU) 2018/1808, for the period 2019-2022, SWD(2024) 4, 2024.
213 European Commission, communication from the Commission Guidelines on the practical application of the essential functionality criterion of the definition of a 'video-sharing platform service' under the Audiovisual Media Services Directive, 2020/C 223/02, 2020.
214 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive" as amended by Directive (EU) 2018/1808, for the period 2019-2022, SWD(2024) 4, 2024.
215 ibid.

promotions, leaving significant gaps in coverage.[216] The "country of origin" principle means that broadcasters are generally regulated by the Member State where they are established, even if their content is received in other Member States. As a result, broadcasters can operate from countries with less stringent advertising rules and still reach audiences in countries with stricter regulations, which can undermine national efforts to limit alcohol advertising exposure. [217,218]

While the amendment of the AVMSD sought to address new developments in the media landscape, set rules for broadcasters in terms of advertising, protect minors, and tackle hate speech in all audiovisual content, some gaps remain, especially in terms of alcohol advertising.[219]

On digital platforms, enforcement challenges persist. Social media companies have been slow to respond to legal requests, and influencers often fail to comply with national advertising laws.[220,221] The blending of commercial and user-generated content, combined with opaque algorithmic targeting, further complicates monitoring and regulation.[222,223]

The delays and gaps in implementing effective alcohol marketing restrictions have had measurable public health consequences.[224,225,226] Young people across the EU continue to be exposed to alcohol advertising online, often through content that is humorous, aspirational, or embedded in peer networks, formats that are not easily captured by existing content-based rules.[227,228] Studies show that such exposure is associated with increased alcohol consumption, hazardous drinking, and online alcohol purchases.[229]

Despite the recent revision of the AVMSD, enforcement challenges persist.

Variations in regulatory approaches across Member States have resulted in differing levels of protection, which may limit the overall effectiveness of EU efforts to reduce youth exposure to

---

216 European Parliament and the Council of the EU, amending Directive (EU) 2018/1808 of 14 November 2018 on the provision of AVSDM.

217 ibid.

218 G. Scobie, C. Patterson, G. Rendall et al., 'Review of alcohol marketing restrictions in seven European countries', *Public Health Scotland*, 2022.

219 European Parliament and the Council of the EU, amending Directive (EU) 2018/1808 of 14 November 2018 on the provision of AVSDM.

220 European Alcohol Policy Alliance (Eurocare), A landmark victory against online alcohol influence, website.

221 European Parliament, The impact of influencers on advertising and consumer protection in the Single Market, February 2022.

222 University of Helsinki, Too young to drink, old enough to see the ads? Understanding youth exposure to alcohol marketing, 2023.

223 T. McCreanor, A. Moewaka Barnes, I. Goodwin et al., 'Alcohol marketing on social media: young people's exposure, engagement and alcohol-related behaviors', *Addiction Research & Theory*, Vol. 33(3), Taylor & Francis Online, 2025, pp. 161–171.

224 EUCAM, AVMSD, website.

225 K. Lauber and E. Brooks, 'A missed opportunity for public health: How impact assessment shaped EU rules on the marketing of unhealthy commodities to children', *SSM – Qualitative Research in Health*, Vol. 5, Elsevier Limited, 2024, 100369.

226 G. Scobie, C. Patterson, G. Rendall et al., 'Review of alcohol marketing restrictions in seven European countries', *Public Health Scotland*, 2022.

227 EUCAM, 'AVMSD', website.

228 University of Helsinki, Too young to drink, old enough to see the ads? Understanding youth exposure to alcohol marketing, 2023.

229 Evidence from McCreanor et al. (2025) shows that certain groups, such as older youth, females, and ethnic minorities, are more likely to engage with alcohol marketing and experience higher levels of hazardous drinking. Although this study focuses on Aotearoa New Zealand, the patterns it reveals underscore the need for EU policies to consider differential exposure and impact across population groups. Source: T. McCreanor, A. Moewaka Barnes, I. Goodwin, et al., 'Alcohol marketing on social media: young people's exposure, engagement and alcohol-related behaviors', *Addiction Research & Theory*, Vol. 33(3), Taylor & Francis Online, 2025, pp. 161–171.

alcohol marketing.[230, 231] Member States have been slow in establishing comprehensive national frameworks to systematically assess the effectiveness of alcohol marketing regulations, particularly in digital environments. This limits the ability to generate comparable data, monitor compliance, and adapt interventions based on evidence.[232] As demonstrated by the French court ruling against Meta, enforceable legal mechanisms and platform accountability are essential to closing these gaps and achieving the objectives of the EBCP.[233]

Case study Finland: De-implementation of alcohol control policies

Background

Finland's healthcare system is characterised by universal coverage, a strong emphasis on primary care, and a commitment to equity. However, according to interviewees, recent reforms have shifted responsibility for health promotion from municipalities to welfare areas, leading to budget cuts and a deprioritisation of prevention in favour of treatment. National efforts in cancer prevention and research are coordinated by several key actors. The Ministry of Social Affairs and Health, together with its administrative branch, is responsible for setting national health strategies and policies, including those related to cancer prevention and control. The Cancer Society of Finland, comprising the Cancer Foundation and the Finnish Cancer Registry, plays a leading role in public awareness, research, and advocacy. Since 2019, the Finnish Cancer Centre (FICAN) has also contributed significantly, acting as a national hub for cancer research, prevention, and care coordination, and fostering both national and international collaboration. Screening programmes for breast and cervical cancer are well-established, with colorectal screening being gradually expanded. These programmes are coordinated at the national level but implemented locally.[234,235,236,237]

Finland allocated approximately EUR 3,983 per capita to healthcare in 2020, with cancer care expenditure estimated at EUR 328 per capita.[238] The country invests significantly in prevention, dedicating 4.3% of total healthcare expenditure to preventive services, above the EU average.[239] Cancer incidence and mortality are below EU averages, but, the overall cancer burden, measured in DALY, remains high at 4,995 per 100,000 population, albeit lower than the EU average. [240,241] Of all cancer deaths, 35% is attributable to modifiable risks such as tobacco and alcohol use.[242] While public awareness of the alcohol-cancer link is high, there remains a significant gap in understanding the

230 EUCAM, AVMSD, website.
231 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive" as amended by Directive (EU) 2018/1808, for the period 2019-2022, SWD(2024) 4, 2024.
232 G. Scobie, C. Patterson, G. Rendall et al., 'Review of alcohol marketing restrictions in seven European countries', *Public Health Scotland*, 2022.
233 Tribunal Judiciaire de Paris, Jugement Rendu selon la procedure acceleree au fond, 2023.
234 Ministry of Social Affairs and Health (Finland), Substance harm prevention, website.
235 European Commission, Open Evidence and PwC EU Services, Study on mapping and evaluating the implementation of the Europe's Beating Cancer Plan. Annex 5, Country factsheets, 2025.
236 Finnish Ministry of Social Affairs and Health, Administrative branch, website.
237 Finnish Cancer Center (FICAN), What we do, website.
238 R. Luengo-Fernandez, J. Leal, A. Gray, and R. Sullivan, 'Economic burden of cancer across the European Union: a population-based cost analysis', *The Lancet Oncology*, Vol. 14(12), Elsevier Limited, 2020, pp. 174–183.
239 Eurostat, Current health expenditure by provider (hlth_sha11_hc), website.
240 DALYs are a time-based measure used to quantify the overall burden of disease. One DALY represents the loss of one year of full health.
241 OECD and European Commission, EU country cancer profile: Finland 2023, 2023.
242 ibid.

risks associated with moderate drinking, as was discussed during the interviews. Obesity and physical inactivity are rising concerns, particularly among younger populations with lower socio-economic background.[243]

While access to healthcare is universal in Finland, high co-payments (higher than the EU average) continue to pose financial barriers to cancer care.[244] The Finnish Medicines Agency reported a sharp increase in medicine shortages in recent years. Despite these challenges, Finland outperforms the EU24 average in five-year survival rates for major cancer types.[245,246,247] Important barriers to cancer control in Finland include workforce shortages, particularly in oncology and radiology, and regional disparities in access to care. Additionally, the integration of digital health tools and data sharing across regions remains unbalanced, limiting the potential of personalised medicine and real-time monitoring.[248]

Overall assessment: the implementation of the EBCP in the country

Finland has made notable progress in implementing the EBCP. FICAN has been mandated to prepare a **national cancer strategy**.[249,250] National efforts in cancer prevention and research are led by the Cancer Society of Finland, including the Cancer Foundation and the Finnish Cancer Registry, alongside FICAN. Prevention is a focus area, reflected in the fact that 8.3% of health expenditure in Finland was allocated to preventive care in 2021, well above the EU average of 6.1% and the fifth highest among EU countries. Finland's tobacco control policies are robust, and the country maintains low smoking rates and relatively low alcohol consumption. The share of the population engaging in sufficient physical activity is high, and Finland boasts the best air quality (4.9 µg/m^3 of PM2.5) across EU countries. However, overweight and obesity are significant and growing public health concerns, and occupational exposure to chemicals remains high, with almost one in three people frequently exposed to chemical products or substances at work. Recent loosening of alcohol control measures has also challenged alignment with EBCP goals.[251,252,253]

Early detection is addressed through national screening programmes for breast and cervical cancer, with colorectal screening being phased in. These are evidence-based, quality-assured, and monitored through national registries. Participation is high, though socioeconomic disparities persist. Diagnosis and treatment are guided by national clinical guidelines and delivered through a network of specialised cancer centres. Access to innovative therapies is supported by the national health insurance system, though medicine adoption delays remain a concern. Finland's digital

243 OECD and European Commission, Country Cancer Profile: Finland 2025, 2025.
244 Amnesty International, Finland: Inequality of healthcare in Finland, 2023, p. 60.
245 London School of Hygiene & Tropical Medicine, CONCORD programme, website.
246 OECD and European Commission, EU country cancer profile: Finland 2023, 2023.
247 OECD and European Commission, Country Cancer Profile: Finland 2025, 2025.
248 ibid.
249 Finnish Cancer Center (FICAN), National Cancer Strategy, website.
250 Kansallinen syöpäkeskus (FICAN), Kansallinen syöpästrategia 2025–2035 – Luonnos, 2025.
251 European Commission, Open Evidence and PWC EU Services, Study on mapping and evaluating the implementation of the Europe's Beating Cancer Plan. Annex 5, Country factsheets, 2025.
252 Finnish Cancer Center (FICAN), What we do, website.
253 Finnish Cancer Center (FICAN), What we do, website.

infrastructure, including electronic health records and cancer registries, enables data-driven care and research.[254]

Description of the initiative

Finland has historically maintained a strict **alcohol policy**, characterised by state monopoly retail above 8% alcohol by volume,[255] high taxation, regulated advertising, and restricted sales hours. In 2022, average alcohol consumption in Finland was 7.6 litres of pure alcohol per person, lower than the EU27 average (10 litres) and down from 9.3 litres in 2012, though still higher than in neighbouring Norway (6.6 litres). Despite this, a slightly higher share of Finnish 15-year-olds (24%) reported repeated drunkenness compared to the EU average (23%). This suggests that reductions in per capita consumption do not fully translate into lower risk for all groups. Given that alcohol is a known carcinogen with no safe level of consumption, early and heavy drinking episodes among adolescents and young adults may sustain long-term cancer risk despite national progress in reducing average intake.

The state-owned retail monopoly (Alko) continues to control the sale of strong alcohol, effectively limiting retail outlet density and opening hours. However, since the 2000s, reforms have gradually liberalised alcohol sales and marketing, including a 2018 law raising the alcohol content limit for grocery stores to 5.5%, and a 2024 amendment further relaxing this to 8.0%. According to both public health authorities and experts, these policy changes have been driven primarily by economic interests, pressures to liberalise markets, and a desire to align with EU internal market rules, rather than by public health considerations, according to multiple interviews. Studies estimate that removing the state monopoly could increase alcohol consumption by 9% and lead to higher alcohol-related costs and mortality.[256,257]

- **Pre-2018:** In 2004, Finland reduced alcohol taxes by 33%, leading to a sharp rise in consumption and alcohol-related harms. Tax increases followed from 2008 onwards to mitigate these effects.[258]
- **2018 Reform:** The Alcohol Act raised the alcohol content limit in grocery stores to 5.5%, expanded marketing rights, and relaxed restaurant licensing. This marked a shift toward consumer convenience and economic liberalisation.[259]
- **Post-2018 developments:** Alcohol taxes were raised multiple times between 2019 and 2024. In 2024, grocery stores were permitted to sell wines up to 8% alcohol content, and home delivery is under parliamentary debate.[260]

---

254 ibid.

255 The Finnish alcohol retail monopoly (Alko) is an exception to the EU's internal market rules, permitted under Article 36 TFEU on grounds of public health protection, provided that the measure is proportionate and non-discriminatory.

256 Finnish Cancer Center (FICAN), National Cancer Strategy, website.

257 A. Sherk, T. Stockwell, J. Sorge et al., 'The public-private decision for alcohol retail systems: Examining the economic, health, and social impacts of alternative systems in Finland', *Nordic Studies on Alcohol and Drugs*, Vol. 40(3), Sage Journals, 2023, pp. 218–232.

258 K. Herttua, 'The effects of the 2004 reduction in the price of alcohol on alcohol-related harm in Finland – a natural experiment based on register data', *Finnish Yearbook of Population Research*, Vol. XLV, Supplement, 2010, pp. 7–30.

259 L. Uusitalo, J. Nevalainen, O. Rahkonen et al., 'Changes in alcohol purchases from grocery stores after authorising the sale of stronger beverages: The case of the Finnish alcohol legislation reform in 2018', *Nordic Studies on Alcohol and Drugs*, Vol. 39(6), Sage Journals, 2022, pp. 589–604.

260 Finlex, Laki työsopimuslain muuttamisesta 1102/2017, 2 luku 16 §, website.

These changes mark a shift away from Finland's historically restrictive alcohol regime, as it prioritises economic and consumer interests over public health objectives. While the reforms have increased retail access and consumer choice, they have not been explicitly linked to cancer prevention goals. The de-implementation of earlier control measures, especially in marketing and retail access, raises concerns about increased exposure to alcohol-related harm, including cancer risk.

Key outcomes and impact of the initiative

The liberalisation of alcohol sales has altered purchasing patterns but has not significantly increased overall consumption. After the 2018 reform, per capita consumption remained stable at 10.4 litres, declining slightly to 10.0 litres in 2019, and 8.3 litres in 2023. However, subgroup trends, such as increased use among adolescent girls, warrant concern.[261,262]

Nevertheless, the increased availability and marketing of alcoholic beverages may contribute to long-term public health risks, particularly in relation to cancer. Advocacy groups have called for tighter taxation, stricter marketing regulation, and mandatory health warnings on alcohol packaging.[263]

Key takeaways: success factors and lessons learnt

Finland's alcohol policy reform indicates that **policy coherence** is essential on the road towards reduced cancer incidence. While Finland has made strong progress in implementing the EBCP in screening, tobacco control, and HPV vaccination, recent alcohol policy reforms have not aligned with cancer prevention goals, but prioritised consumer convenience and economic liberalisation, with limited consideration for long-term health impacts. However, it is important to note that, despite the easing of some alcohol control measures, overall drinking habits in Finland have improved: the amount of pure alcohol consumed per person is below the EU average and has been on a decreasing trend for several years. This nuanced picture highlights the importance of well-coordinated policies to ensure that behavioural measures support, rather than undermine, cancer prevention strategies.

This case study also underscores the vulnerability of prevention services during periods of healthcare reform. Interviewees noted that, in Finland, substance abuse prevention has been deprioritised as a result of broader system changes, specifically, the shift of responsibility for health promotion from municipalities to welfare areas.

3.2.3. Action 8.2: Mandatory front-of-pack nutrition labelling

NCDs such as obesity, type 2 diabetes, and nutrition-related cancers are among the leading causes of disability and death across the EU. According to the WHO, nearly 60% of adults in the WHO European Region are living with overweight or obesity. Among children, one in three school-aged individuals is affected, and 8% of children under five are already living with overweight.[264]

These conditions are strongly associated with increased morbidity and mortality. Being overweight and having obesity are causally linked to at least 13 types of cancer, including colorectal, breast

---

261 T. Lintonen, S. Ahtinen and A. Konu, 'Alcoholic beverage preferences among teenagers in Finland before and after the 2018 alcohol law change', *Nordic Studies on Alcohol and Drugs*, Vol. 37(2), Sage Journals, 2020, pp. 141–152.

262 Yle, Alcohol consumption continues to decline in Finland, website.

263 EHYT Finnish Association for Substance Abuse Prevention, Alcohol-related cancers: preventable, unknown, unacceptable, website.

264 World Health Organization Regional Office for Europe, Manual to develop and implement front-of-pack nutrition labelling, 2020.

(postmenopausal), endometrial, pancreatic, and liver cancers.[265] In addition, dietary patterns characterised by high intake of processed meats, refined sugars, and low consumption of fruits, vegetables, and whole grains have been independently associated with increased cancer risk.[266] In the WHO European Region, it is estimated that obesity alone is directly responsible for over 200,000 new cancer cases annually, a figure expected to rise significantly in the coming decades. Similarly, type 2 diabetes, which is closely tied to dietary patterns and obesity, has been associated with increased cancer risk and poorer cancer outcomes.[267]

Reducing the prevalence of obesity and nutrition-related cancer is therefore an important step in the prevention of cancer. Studies indicate that even modest reductions in population-level body mass index could lead to significant declines in the incidence of diabetes and cancer.[268] Instruments such as public health interventions that promote healthier food environments and help consumers to make informed dietary choices can have significant dietary and health effects. To address the rising impact of NCDs, governments have introduced policies aimed at improving the diets of their population.[269] Front-of-Pack Nutrition Labelling (FOPNL) is one of these instruments to support healthier food choices.[270]

Currently, the WHO European Food and Nutrition Action Plan recommends FOPNLs as a strategic measure.[271,272] Under Regulation (EU) 1169/2011 on food information to consumers, several Member States recommend voluntary national front-of-pack labelling schemes.[273] While nutrition labelling on the back of food packaging is mandatory for most pre-packed foods,[274] it is often overlooked by consumers, especially those with lower education or nutrition knowledge.[275,276] In contrast, FOPNL provide simplified, visible information on the front of packaging, which helps consumers make healthier decisions. Interpretative FOPNLs, which use colours, symbols, or words to assess nutritional quality, are particularly effective.[277,278]

---

265 Centers for Disease Control and Prevention, Obesity and cancer, website.

266 T.J. Key, K.E. Bradbury, A. Perez-Cornago, R. Sinha, K.K. Tsilidis and S. Tsugane, 'Diet, nutrition, and cancer risk: what do we know and what is the way forward?', *BMJ*, Vol. 368, BMJ Publishing Group, 2020, m511.

267 World Health Organization Regional Office for Europe, WHO European Regional Obesity Report 2022, 2022.

268 L. Webber, D. Divajeva, T. Marsh et al., 'The future burden of obesity-related diseases in the 53 WHO European-Region countries and the impact of effective interventions: a modelling study', *BMJ Open*, Vol 4 (7), BMJ Publishing Group, 2014, e004787.

269 World Health Organization Regional Office for Europe, Manual to develop and implement front-of-pack nutrition labelling, 2020.

270 World Health Organization, Best buys' and other recommended interventions for the prevention and control of noncommunicable diseases, 2017.

271 World Health Organization Regional Office for Europe, European Food and Nutrition Action Plan 2015–2020, 2015.

272 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.

273 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025.

274 European Parliament and the Council of the EU, Regulation (EU) 1169/2011 of 25 October 2011 on the provision of food information, p. 18.

275 Codex Alimentarius Commission - Codex Committee on Food Labelling. Comments from International Association of Consumer Food Organisations on proposal for new work concerning a global standard for front of pack interpretive nutrition labelling. Agenda item 9 FL/43 CRD/17, 2016.

276 K.G. Grunert, L. Fernández-Celemín, J.M. Wills, S. Storcksdieck genannt Bonsmann and L. Nureeva, 'Use and understanding of nutrition information on food labels in six European countries', *Journal of Public Health*, Vol. 18, Springer Nature, 2010, pp. 261–277.

277 K.L. Hawley, C.A. Roberto, M.A. Bragg, P.J. Liu, M.B. Schwart and K.D. Brownell, 'The science on front-of-package food labels', *Public Health Nutrition*, Vol. 16 (3), Cambridge University Press, 2013, pp. 430–439.

278 J.C. Hersey, K.C. Wohlgenant, J.E. Arsenault, K.M. Kosa and M.K. Muth, 'Effects of front-of-package and shelf nutrition labeling systems on consumers', *Nutrition Reviews*, Vol. 71(1), Oxford University Press, 2013, pp. 1–14.

Advances in nutrition labelling in the EU

The European Commission and the European Parliament have taken several important steps in the development and regulation of FOPNL within the broader framework of food information to consumers. Regulation (EU) No 1169/2011 on the provision of food information mandates a nutrition declaration on the back of most pre-packed food products. Under Article 35, businesses may voluntarily repeat key nutrition information, such as energy, fat, saturates, sugars, and salt, on the front of pack. Article 35 allows additional forms of presenting this information, such as symbols or graphics, if they meet specific criteria. If alternative expressions are used, they should rely on harmonised reference intakes or widely accepted scientific advice.[279]

Member States are required to monitor the use of such formats within their territory and report to the European Commission. They may also require food businesses to notify them of the use of these formats and provide evidence of compliance with EU rules.[280] To support the implementation of article 35, the European Commission facilitates regular exchanges of information between Member States and other stakeholders.[281]

The Farm to Fork strategy, adopted in May 2020 as part of the European Green Deal, explicitly committed the European Commission to propose a harmonised mandatory FOPNL scheme to help consumers make healthier and more sustainable food choices.[282,283] This commitment was reinforced in the EBCP, where it indicated to propose harmonised, mandatory front-of-pack nutrition labelling to empower consumers to make informed, healthy, and sustainable food choices.[284,285]

Alongside the strategy, the European Commission reviewed the existing voluntary FOPNL schemes used across Member States and assessed their effectiveness up until 2020. It concluded that while several national schemes had been developed, the lack of harmonisation created barriers to the internal market and confusion among consumers. The report recommended the development of a standardised EU-wide FOPNL system based on scientific evidence and consumer understanding.[286]

Between December 2021 and March 2022, the European Commission conducted a public consultation to gather views from stakeholders on the proposed FOPNL system. A significant majority supported the use of a graded indicator system that would provide an overall assessment of a product's nutritional quality.[287] In addition, the consultation revealed strong support for a harmonised EU-wide scheme to replace the patchwork of national systems. In a broader sense, the European Commission is committed to addressing food reformulation, the impacts of ultra-

279 European Parliament and the Council of the EU, Regulation (EU) 1169/2011 of 25 October 2011 on the provision of food information, p. 18.

280 ibid.

281 European Commission, Nutrition labelling, website.
The Commission organises joint meetings between Member States and EU-level stakeholder organisations, i.e. members of the Advisory Group on the Food Chain, Animal and Plant Health and interested EU-level stakeholder organisations of the EU Platform for Action on Diet, Physical activity and Health.

282 European Commission, A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system, 2020.

283 European Commission, communication on a Farm to Fork Strategy, COM/2020/381, 2020.

284 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.

285 ibid.

286 European Commission, Report from the Commission to the European Parliament and the Council regarding the use of additional forms of expression and presentation of the nutrition declaration, COM(2020) 207, 2020.

287 European Parliament, Mandatory front-of-pack nutrition labelling, website.

processed products, as was announced in the Vision for Agriculture and Food.[288]

To achieve its goals, the EBCP outlines a set of targeted actions to reduce diet-related cancer. This includes action 8.2 Proposal for mandatory front-of-pack nutrition labelling. Despite the strategic commitments and preparatory work, as of mid-2025, the European Commission has not yet tabled a formal legislative proposal for mandatory FOPNL.[289]

FOPNL types

FOPNL can be typically classified into two main categories, based on the extent to which they interpret the nutritional content of food product. Firstly, informative labelling systems, which are non-interpretative, reproduce nutritional information already found on the back of the pack, without offering additional context or guidance. These labels require consumers to interpret the data themselves. Secondly, interpretative labelling systems provide evaluative cues to help consumers assess the nutritional quality of food products.[290]

These systems can be further divided into two main categories: nutrient-specific systems and summary indicator systems. Nutrient-specific systems focus on individual nutrients. These labels are binary and signal a negative judgement, which indicates that the product may be less healthy.[291] Summary indicator systems combine information on multiple nutrients to provide an overall assessment of a product's nutritional quality. Endorsement schemes, such as the Keyhole symbol (used in Nordic countries) are applied only to products that meet specific nutritional standards.[292] These schemes either qualify products for endorsement or they do not. Graded indicators, such as Nutri-Score and the health star rating system, appear on all eligible products and provide a relative assessment of nutritional quality.[293]

Implementation status

Box 7: Progress on mandatory FOPNL (Action 8.2)

Despite the European Commission's commitment to proposing a harmonised mandatory FOPNL scheme by the end of 2022, as of mid-2025, no proposal has been put forward.[294] Therefore, implementation remains voluntary, and national-level progress is highly fragmented.

Across the EU, the implementation of FOPNL schemes reflects diverse national priorities, public health strategies, and regulatory approaches. Broadly, Member States can be grouped into four categories: those with officially adopted and implemented schemes, those with voluntary national schemes, those with partial or retailer-led implementation, and those with no interpretive FOPNL in place.

288 European Commission, Vision for agriculture and food, website.
289 European Parliament, Mandatory front-of-pack nutrition labelling, website.
290 World Health Organization Regional Office for Europe, Manual to develop and implement front-of-pack nutrition labelling, 2020.
291 ibid.
292 Foods labelled with the Keyhole symbol contain less sugars and salt, more fibre and wholegrain and healthier or less fat than food products of the same type that cannot be labelled with the Keyhole. See: Swedish Food Agency, The Keyhole, website.
293 World Health Organization Regional Office for Europe, Manual to develop and implement front-of-pack nutrition labelling, 2020.
294 European Parliament, Mandatory front-of-pack nutrition labelling, website.

Countries with officially endorsed voluntary interpretative schemes

A growing number of EU countries have formally adopted Nutri-Score as their national FOPNL scheme. Since October 2017, Nutri-Score has been the official FOPNL in France, although its use remains voluntary. Despite this, Nutri-Score is widely adopted by major retailers and food producers, and its use is legally required in national cafeterias.[295] The Netherlands joined France by officially endorsing Nutri-Score in 2019. As of 1 January 2024, companies using the label are required to apply it consistently across all branded products. Although the scheme remains voluntary, it becomes binding once adopted by a brand in the Netherlands, which is managed by the Dutch government.[296]

Similarly, Belgium installed voluntary implementation in 2019. Nutri-Score now appears on a significant share of food products, particularly those sold by major retailers.[297] Public support for the scheme is strong, with many Belgians in favour of making it mandatory.[298] Germany also adopted Nutri-Score voluntarily in 2020. In summer 2021, the Nutri-Score Steering Committee initiated consultations on the changes to the Nutri-Score, which were finalised and published in 2023.[299]

Portugal joined this group more recently, officially adopting Nutri-Score in April 2024 in response to high obesity rates and with support from the World Health Organization. However, implementation challenges led to a policy revision in June 2024, rendering the scheme optional under the guidance of the Directorate-General for Food and Veterinary Affairs (DGAV).[300] Luxembourg, while not mandating Nutri-Score, decided in 2020 to support its voluntary use and established a scientific committee in 2021 to guide its implementation, aligning with Belgian and EU data on consumer understanding.[301]

Spain endorsed Nutri-Score in 2018 and passed a decree in 2023 mandating its use by 2025, pending alignment with EU regulations.[302]

In addition, several Nordic countries have developed and maintained their own voluntary FOPNL systems, often rooted in longstanding public health initiatives. Sweden pioneered this approach with the introduction of the Keyhole logo in 1989. The label is now found on over 4,000 products and is associated with modest but positive dietary changes, particularly among women and adolescents. The Swedish Food Agency oversees the scheme, updating nutrient criteria periodically.[303,304]

Denmark, Finland, and Lithuania have adopted similar models. Denmark implemented the Keyhole in 2009, while Lithuania aligned with Nordic standards by adopting the Keyhole in 2013.[305,306] These

---

295 Santé Publique France, Nutri-Score: assessment report after three years of implementation, website.
296 Government of the Netherlands, Invoering Nutri-Score om betere voedingskeuzes te stimuleren, website.
297 Federal Public Service (FPS) Health, Food Chain Safety and Environment, De Nutri-Score, website.
298 S. Vandevijvere, M. Vermote, M. Egnell, P. Galan, Z. Talati, S. Pettigrew, S. Hercberg and C. Julia, 'Consumers' food choices, understanding and perceptions in response to different front-of-pack nutrition labelling systems in Belgium: results from an online experimental study', *Archives of Public Health*, Vol. 78, BioMed Central Limited, 2020, 30.
299 Eurofins Scientific, The Nutri-Score – all important facts and novelties at a glance, website.
300 Food Compliance International, Portugal makes Nutri-Score system optional, website.
301 Government of the Grand Duchy of Luxembourg, Launch of the Nutri-Score information campaign, website.
302 Agroberichten Buitenland, The Nutri-Score controversy in Spain, website.
303 Swedish Food Agency, Regulations LIVSFS 2005:9 (consolidated with LIVSFS 2021:1) on the use of the Keyhole symbol, 2021.
304 Ingredients Network, Sweden updates front-of-pack Keyhole labelling rules, website.
305 Swedish Food Agency, Design manual – The Keyhole, website.
306 European Commission, The Nordic Keyhole scheme – Joint meeting on front-of-pack nutrition labelling, 2018.

schemes are widely recognised and supported by national health authorities within their respective countries. Finland introduced the Heart Symbol as early as 1993, and it has been widely implemented, with around 2000 products using the symbol in 2021. 90% of all Fins recognise the Heart Symbol.[307] In addition, Slovenia's "Little Heart" label, introduced in 1992, is supported by the Heart Foundation.[308]

Italy has its own label, which is the NutrInform Battery label, introduced in 2020. This scheme presents per-portion nutrient percentages and is positioned by Italy as a culturally appropriate alternative to Nutri-Score, particularly in defence of Mediterranean food products.[309]

Countries with nationally developed voluntary schemes

In Central and Eastern Europe, Czechia and Poland have adopted the "Healthy Choice" tick label on a voluntary basis.[310] Croatia operates two schemes: the "Healthy Living" logo and the Heart "Protective Food" label, both recognised by the government.[311]

Countries with partial or retailer-led implementation

A third group of countries has seen partial implementation of FOPNL, often led by retailers or subject to evolving regulatory frameworks.

Austria currently lacks a national FOPNL scheme, though some companies have adopted Nutri-Score on a voluntary basis. A temporary government ban on the label in 2024 was reversed, and new guidelines will permit voluntary use from 2025.[312] Greece also lacks a national scheme but allows the voluntary use of Nutri-Score on imported or retailer-branded products. The Greek government supports Italy's NutrInform Battery and has expressed opposition to an EU-wide Nutri-Score mandate.[313]

Countries without national FOPNL

Several EU Member States have yet to implement any national interpretive FOPNL scheme beyond the EU-mandated back-of-pack nutrition facts. These include Hungary, Slovakia, Ireland, Malta, Cyprus, Estonia, Latvia, Bulgaria, and Romania. Among them, Romania has taken initial steps by notifying the EU of its intention to implement Nutri-Score voluntarily via QR codes and associated standards.[314]

In conclusion, the implementation of FOPNL across EU Member States is often fragmented, with different types of FOPNL being implemented in different categories at different stages. While various FOPNL schemes across EU Member States have been implemented to lead to positive effects on consumer understanding and dietary choices, the current patchwork of national approaches limits their overall impact. A harmonised EU framework can accelerate helping consumers make healthier choices, and therefore reduce the prevalence of NCDs such as obesity,

---

307 Finnish Heart Association, Heart Symbol and front-of-pack nutrition labelling (FOPL) situation in Finland, 2022.
308 T. Laaninen, Nutrition labelling schemes used in Member States, EPRS, European Parliament, July 2020.
309 Nutri-Score Blog, Information on the Italian counter-proposal to Nutri-Score: the Nutrinform Battery system, website.
310 Choices International Foundation, Positive nutrition labelling: a scientific overview, 2019.
311 T. Laaninen, Nutrition labelling schemes used in Member States, EPRS, European Parliament, July 2020.
312 NÖM, Alles, was du über den Nutri-Score wissen solltest, website.
313 Ekdoseis Kerkyra, Greece opposes the new EU Nutri-Score food labelling system, website.
314 Euractiv, Romania flips stance, endorses Nutri-Score labelling system, website.

overweight and diabetes. For the implementation status of FOPNL across EU Member States, please see Table 9.

Table 9 – Implementation of FOPNL across EU Member States

Category	Countries	Details
Officially endorsed voluntary interpretative schemes	France, Belgium, Germany, Netherlands, Spain, Portugal, Luxembourg	Nutri-Score officially endorsed; voluntary use but widely adopted. Spain plans to make it mandatory by 2025 (pending EU alignment). Portugal revised policy in 2024 to keep it optional.
Nationally developed voluntary schemes	Sweden, Denmark, Lithuania, Finland, Slovenia, Italy, Czechia, Poland, Croatia	Nordic Keyhole (Sweden, Denmark, Lithuania); Heart Symbol (Finland); Little Heart (Slovenia); NutrInform Battery (Italy); Healthy Choice Tick (Czechia, Poland); two schemes in Croatia.
Partial or retailer-led implementation	Austria, Greece	No national scheme; Nutri-Score allowed voluntarily (Austria from 2025, Greece for imports/retailer brands). Greece supports NutrInform Battery and opposes EU-wide Nutri-Score mandate.
No national FOPNL scheme	Hungary, Slovakia, Ireland, Malta, Cyprus, Estonia, Latvia, Bulgaria, Romania	Only back-of-pack nutrition facts required by EU law. Romania has notified intention to implement Nutri-Score voluntarily via QR codes.

Source: Authors.

3.3. Specific focus area 2 – Cancer care workforce shortage

Key findings

- EU faces a persistent and widespread shortage of healthcare professionals across the EU, exacerbated by a "double demographic" challenge: an ageing population driving up healthcare demand, and an ageing health workforce nearing retirement. This issue is particularly relevant in oncology, as cancer incidence increases with age, meaning demand will continue to grow in the coming years. Overburdened staff and poor working conditions already contribute to workforce strain, especially in Central and Eastern European countries, where oncological workforce pressures are more acute due to regional disparities.
- To address these gaps, the EU and its Member States are pursuing multi-level strategies focused on improving working conditions and remuneration, expanding education and training opportunities, and fostering innovation in service delivery, particularly through digital technologies, towards more patient-centric and integrated care models.
- The EBCP contributes directly to these efforts through Action 26, which supports the cancer workforce via an 'Inter-speciality training' programme. This initiative promotes skills development in areas such as digital health, artificial intelligence, and personalised medicine, and is exemplified by the INTERACT-EUROPE project, which has been successful in developing and delivering a comprehensive, interdisciplinary cancer training programme that enhances digital, clinical, and collaborative skills among healthcare professionals across Europe. The subsequent INTERACT-EUROPE 100 initiative extends the training to 100 cancer centres across Europe.

3.3.1. Challenges in cancer care – the workforce angle

The health and social care sectors currently employ more people than ever before in most EU countries. As of 2022, an average of 10.1% of all jobs across the EU were in health and social care, up from 8.5% in 2002. Nevertheless, despite this notable growth, many countries, including those with well-funded health systems, continue to face significant challenges in maintaining a sufficient and sustainable health workforce to meet future demands. Across the EU, the cancer care workforce is confronted with mounting challenges that threaten the delivery of effective and equitable care,[315] largely driven by broader healthcare staffing shortages. Despite the healthcare sector adding a net of 3 million jobs between 2013 and 2022, as of 2022, there was an estimated shortage of approximately 1.2 million doctors, nurses, and midwives of different specialities across EU countries.[316,317] A European Employment Services (EURES) report indicates that, in 2024, 22 EU countries reported a shortage of nursing professionals, 21 of specialist medical practitioners, 19 of healthcare assistants, and 18 of general medical practitioners.[318]

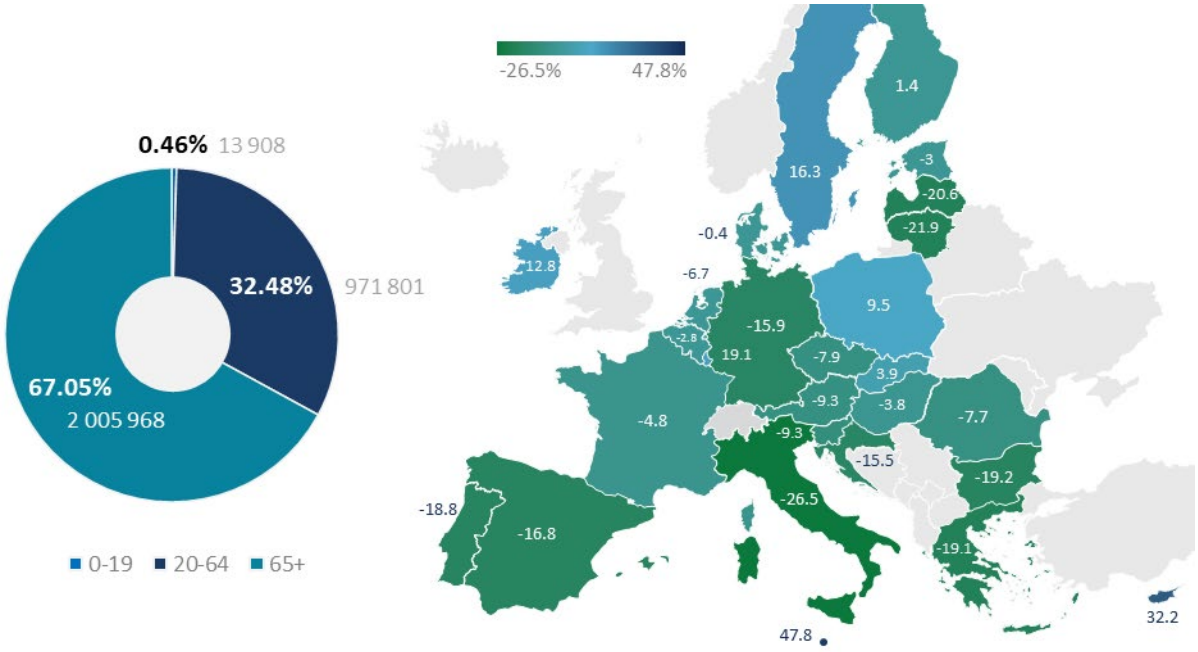
The persistent shortage of healthcare professionals in the EU is driven by a combination of demographic, systemic, and societal factors. At the core lies a "double demographic" challenge: the population aged 65 and over is expected to increase from 21% in 2023 to nearly 30% by 2050,

315 European Cancer Organisation, Under Pressure: Safeguarding the Health of Europe's Oncology Workforce – A Report and Policy Action Plan from the European Cancer Organisation's Workforce Network, 2024.
316 OECD and European Commission, Health at a Glance: Europe 2024: State of Health in the EU Cycle, 2024, p. 21.
317 Based on minimum staffing thresholds needed to achieve universal health coverage.
318 European Labour Authority, EURES Report on labour shortages and surpluses 2024, 2025, pp. 25-26.

substantially raising the demand for healthcare and long-term care services. Simultaneously, the health workforce itself is ageing, with more than one-third of doctors and around a quarter of nurses currently over the age of 55. The growing rate of retirements among health professionals, especially doctors, presents a major challenge.[319]

The burden on the oncology workforce, in particular, is increasing due to rising cancer incidence rates, driven mainly by the above mentioned ageing of the population, but also shifts in risk factors and a rise in diagnoses (Figure 4). The growing number of cancer patients in Europe's ageing population, combined with the rising complexity of modern systemic anticancer treatments, is expected to place increasing workload demands in the coming years.[320] According to current demographic trends, new cancer cases in Europe could rise from roughly 3 million[321] in 2022 to 3.75 million cases by 2050.[322] Overall, the higher incidence of cancer related to the higher age-related incidence and ageing population (change in the number of cancer cases due to population change) is a significant trend, as Figure 4 illustrates.

Figure 4 – Incidence of cancer (percentage and value) in the EU depending on age and cancer incidence age 65+ (Age-Standardised Rate per 100,000 in 2022; all sexes, all cancers)



Source: Authors, based on WHO Global Cancer Observatory.

These demographic trends will inevitably drive structural growth in demand for both healthcare and long-term care services. This challenge is particularly pronounced in remote and rural areas, where service provision often struggles with issues of quality, accessibility, and scale.[323]

---

319 T. Zapata, N. Azzopardi Muscat, M. Falkenbach and M. Wismar, 'From Great Attrition to Great Attraction: Countering the great resignation of health and care workers', Eurohealth, Vol.29(1), WHO, 2023.

320 B. Seruga, R. Sullivan, A. Fundytus et al., 'Medical Oncology Workload in Europe: One Continent, Several Worlds', *Clinical Oncology*, Vol. 32(1), Elsevier Limited, 2020, pp. e19-e26.

321 WHO Global Cancer Observatory, Incidence estimates for 2022, EU27, all ages and sexes (2.99 million).

322 WHO Global Cancer Observatory, Estimated number of new cases from 2022 to 2050, EU27, all ages and sexes (3.75 million).

323 European Commission, Green Paper on Ageing: Fostering solidarity and responsibility between generations. COM(2021), 2021.

Furthermore, difficult working conditions, especially for nurses and early-career professionals, contribute to burnout, reported by around 52% of healthcare workers in the region, and are a major driver of workforce attrition.[324] Those pressures intensified during the COVID-19 pandemic and have yet to fully abate. Health careers are becoming less attractive to younger generations, with nursing programme enrolments falling in over half of EU Member States between 2018 and 2022, and the annual growth of new nursing graduates averaging just 0.5% from 2012 to 2022.[325]

Despite a relatively favourable overall position compared to global trends, Europe faces regional disparities in its oncology workforce. The absence of reliable, comparable and up-to-date workforce data both globally and across Member States hampers effective planning and policy development.[326] Also, different specialities of oncological care face different challenges and gaps, as summarised in Table 10.

Table 10 – Oncological workforce challenges: groups of specialists

Specialisation	Challenges
Clinical oncologists	Excessive workload and poor work–life balance, with many reporting endless tasks, overtime, and little personal time. High administrative burden, with bureaucracy and lack of support making clinical work more difficult. Burnout, anxiety, and poor mental health support, alongside dissatisfaction with occupational health measures. Low job satisfaction, driven by dissatisfaction with pay, job security, and lack of recognition from leadership. Limited career development, education, and mentorship opportunities hinder professional growth. Staff shortages across oncology increase workloads, reduce safety, and slow the adoption of new treatments.[327]
Oncology nurses	Cancer care is increasingly complex, demanding specialist and advanced practice nursing. No consensus across Europe on definitions, education standards, or role recognition for cancer nurses. Wide disparities in specialist training, particularly between Eastern and Western Europe.

[324] European Cancer Organisation, Under Pressure: Safeguarding the Health of Europe's Oncology Workforce – A Report and Policy Action Plan from the European Cancer Organisation's Workforce Network, 2024; T. Zapata, N. Azzopardi Muscat, M. Falkenbach and M. Wismar, 'From Great Attrition to Great Attraction: Countering the great resignation of health and care workers', Eurohealth, Vol.29(1), WHO, 2023.

[325] OECD and European Commission, Health at a Glance: Europe 2024: State of Health in the EU Cycle, 2024.

[326] E.g. A. Srivastava, M. Jalink, F.Y. de Moraes, C.M. Booth et al, 'Tracking the Workforce 2020-2030: Making the Case for a Cancer Workforce Registry', *JCO Global Oncology*, Vol. 7, ASCO Publications, 2021, pp: 925-933; D. Trapani, S.S. Murthy, M. Boniol et al., 'Distribution of the workforce involved in cancer care: a systematic review of the literature', *ESMO Open*, 2021; European Cancer Organisation, Under Pressure: Safeguarding the Health of Europe's Oncology Workforce – A Report and Policy Action Plan from the European Cancer Organisation's Workforce Network, 2024.

[327] European Cancer Organisation, Under Pressure: Safeguarding the Health of Europe's Oncology Workforce – A Report and Policy Action Plan from the European Cancer Organisation's Workforce Network, 2024.

Specialisation	Challenges
	Economic, linguistic, and legal barriers (e.g. unprotected "nurse" title, lack of cross-border recognition) limit access to education, mobility, and career development.[328]
Oncological radiologists	A combination of structural, economic, and organisational factors is driving shortages of radiation oncologists across Europe. Demand for radiation oncologists is rising, but training and employment opportunities are not keeping pace. Radiation therapy lacks visibility during medical school, and limited prospects for private practice make the field less financially attractive. Significant disparities exist between European countries in training structure, teaching methods, and resources. Heavy workloads and stress contribute to high levels of burnout, with trainees frequently reporting feelings of being overworked.[329]
Oncological surgeons	Cancer surgery has advanced, improving cure rates and quality of life, but wide variations remain across Europe while surgical training has stayed static. Surgical regulation occurs only at medical graduation and at the end of general training, with no recognition of subspecialty qualifications, allowing general surgeons to treat cancers without specific expertise.[330]

Nevertheless, with the data that is available, significant differences can be observed in the oncological workforce within Europe, specifically between Western and Eastern European countries. Many Central and Eastern European countries typically have a below-average number of doctors and nurses and are also among those with relatively lower health expenditures.[331] A 2018 comparative survey[332] revealed higher clinical workloads in Eastern European countries (EECs) than in Western European countries (WECs). EEC oncologists reported a median of 225 new cancer patient consultations annually, compared to 175 in WECs, with 35% seeing over 300 patients, nearly twice the rate in WECs. They also saw more patients daily and spent less time per consultation.[333] Furthermore, countries in Central and Eastern Europe experience a significant outflow of medical professionals (doctors and nurses) to countries with more attractive pay and working conditions.[334] The current competition between national health systems for a limited pool of healthcare professionals may be considered to risk undermining the principle of European solidarity.[335]

---

328 E.g. D. Kelly, A. Lankshear, T. Wiseman, P. Jahn, H. Mall-Roosmäe, K. Rannus, W. Oldenmenger and L. Sharp, 'The experiences of cancer nurses working in four European countries: a qualitative study', *European Journal of Oncology Nursing*, Vol. 49, Elsevier Limited, 2020, Article 101844; A. Drury, V. Sulosaari, L. Sharp, H. Ullgren, J. de Munter and W. Oldenmenger, 'The future of cancer nursing in Europe: Addressing professional issues in education, research, policy and practice', *European Journal of Oncology Nursing*, Vol. 63, Elsevier Limited, 2023, Article 102271.

329 F. Gagliardi, E. D'Ippolito, R. Grassi, et al., 'Being a radiation oncologist: times of crisis for European graduates', *BJR Open*, Vol. 7(1), Oxford University Press, 2025, pp. 1–7.

330 European Cancer Organisation, Preparing a Resilient Oncology Workforce for the Present and Future, website.

331 OECD and European Commission, Health at a Glance: Europe 2024: State of Health in the EU Cycle, 2024, p. 25.

332 495 medical oncologists from 16 European countries; Seruga B., Sullivan R., Fundytus A. et al., 'Medical Oncology Workload in Europe: One Continent, Several Worlds', *Clinical Oncology*, Vol. 32(1), Elsevier Limited, 2020, pp. e19–e26.

333 ibid.

334 Eurofound, Measures to tackle labour shortages: Lessons for future policy, 2024.

335 I.A. Glinos, 'Health professional mobility in the European Union: Exploring the equity and efficiency of free movement', *Health Policy*, Vol. 119(12), Elsevier limited, 2015, pp. 1529–1536; M. Vah Jevšnik and S. Cukut Krilić, '*A perfect storm: Demographic ageing, severe*

It is important to further recognise that the sector is undergoing a "significant transformation driven by technological advancements and shifting health priorities".[336] This creates a critical need for skilled professionals who can adeptly navigate this evolving landscape, including new digital health tools and the EHDS. There are concerns that current health systems may be "weak in order to guarantee the effective translation of research into practice".[337] This includes both a scarcity of certain specialised hard skills and significant gaps in soft skills. This is compounded by gaps in training and education, with limited access to standardised, inter-speciality pathways and continuing professional development opportunities.[338]

3.3.2. Answering the challenges

Tackling the health workforce crisis demands a well-developed strategy. As such, to address the challenges related to health workforce shortages, EU countries may consider a combination of complementary strategies. In the immediate term, improving working conditions and remuneration has the potential to enhance the attractiveness of the profession and retain existing health workers. Over the medium to longer term, increasing the number of trained doctors and nurses through expanded education and training opportunities will be important to strengthening workforce capacity, though this approach requires time to yield measurable results.[339] Simultaneously, health systems must innovate in the way services are delivered, allowing professionals to focus more on delivering quality patient care.[340]

There may be a need to shift the paradigm toward a more patient-centric, value-based model of care, one that focuses on individual capabilities and needs rather than system-centred processes. In this context, integrated care emerges as a crucial approach – an ongoing effort to align health and social services around the person. Ultimately, more integrated, people-centred care[341] has the potential to enhance access, outcomes, satisfaction, and efficiency across the system.[342]

The EBCP contributes to addressing these latter challenges in particular, through its focus on developing skills, promoting the use of digital technologies and innovation in healthcare, and creating the guidelines for its use (which will be further discussed in the following chapter). Promoting upskilling initiatives, encouraging the integration of digital tools, but also providing a framework for working the new technology (eHealth, telemedicine) has great potential to enhance the efficiency and flexibility of the health workforce. This approach (upskilling, introduction of technology) is particularly future-oriented and aligns with the broader strategic objectives of the

health staff shortages and globalisation of healthcare labour markets', in Further Discussions on Labour Mobility in the EU, Slovenian Migration Institute, 2023, pp. 59–77.

336 European Investment Fund/EIT Health, Addressing skills needs in the European health sector. Skills gaps, solutions, and strategies for VC-startup cooperation, 2024, p. 6.

337 ibid.

338 European Cancer Organisation, Under Pressure: Safeguarding the Health of Europe's Oncology Workforce – A Report and Policy Action Plan from the European Cancer Organisation's Workforce Network, 2024.

339 OECD and European Commission, Health at a Glance: Europe 2024: State of Health in the EU Cycle, 2024.

340 ibid.

341 OECD Patient Reported Indicators Survey (PaRIS; studying adults 45+ and with chronic conditions experience in healthcare) shows that countries with stronger patient-centred care report higher trust in healthcare systems, and individuals receiving more person-centred care report better physical, mental, and overall well-being; OECD, Does Healthcare Deliver?: Results from the Patient-Reported Indicator Surveys (PaRIS), 2025.

342 E.g. A. Carter, E. Mossialos, P. Candolfi and A. Rappagliosi, Integrating Care in Health Systems. The role of technology in transforming care pathways and achieving the Triple Aim, London School of Economics and Political Science, 2022.

EU, addressing long-term health system sustainability.

The recognition of shortages and gaps has already led to a strategic focus at the EU level, apart from the EBCP, though forming a multi-level, national and international approach. Although healthcare workforce management remains a national responsibility under Article 168 of the Treaty on the Functioning of the EU, the European Commission actively supports Member States to improve workforce planning, support training, and enhance working conditions.[343]

Table 11 – EU strategies to address workforce shortages

Three broad strategies to address workforce shortages[344]	Level of responsibility and time perspective	Initiatives (examples)
Train more health workers	EU and Member States, long-term vision	Erasmus+ programme EU4Health support for education and training National health workforce education reforms
Improving working conditions	Member States, intermediate	National retention strategies
Support innovations	EU, long-term vision	EBCP EU eHealth/digital transformation EU Health Data Space
Migration of healthcare workforce	EU and Member States, short-to-long term	EU Recognition of Professional Qualifications Directive Health Professional Mobility and Health Systems (PROMeTHEUS) Mobility of Health Professionals (MoHPRof)[345]

Source: Authors based on OECD and European Commission sources.

To attract and retain health professionals, the EU has introduced measures to recognise professional qualifications across borders and to attract skilled third-country nationals.[346] The European Commission has launched its first EU-wide initiative to tackle nurse shortages, highlighting the growing impact of the European Health Union. With EUR 1.3 million in funding from the EU4Health programme, this three-year action, developed in partnership with WHO Europe, aims to support Member States in both attracting and retaining nurses.[347]

Additionally, in her 2024 confirmation hearing, the new Executive Vice-President for Social Rights and Skills, Quality Jobs and Preparedness Roxana Mînzatu pledged to develop a coherent framework to address long-term care workforce challenges, with a focus on both skills' recognition and improved working conditions.[348] During the 2022 Conference on the Future of Europe, citizens called for healthcare to become a shared EU–Member State competence and advocated for stronger

[343] Article 168, Treaty on the Functioning of the European Union; L. Amand-Eeckhout, Healthcare in the EU: Addressing urgent labour shortages and ensuring quality jobs, EPRS, European Parliament, February 2005.

[344] OECD and European Commission, Health at a Glance: Europe 2024: State of Health in the EU Cycle, 2024.

[345] European Commission, Promoting reform, website.

[346] European Parliament, Directive 2005/36/EC on the recognition of professional qualifications, 2005.

[347] European Commission, Launch of the first EU action to address nurse shortages shows positive impact of European Health Union, website.

[348] European Parliament, Hearing of Vice-President-designate Roxana Mînzatu, 2024.

labour protections and quality standards in the sector.[349] The European Parliament echoed these concerns in its July 2022 resolution on care.[350] The Council of the EU, most recently in June 2024, urged the European Commission to support workforce stability through knowledge sharing and better regulation.[351]

Moreover, the European Semester process systematically addresses healthcare workforce challenges within its country-specific recommendations (CSRs), urging Member States to strengthen recruitment, retention, digital upskilling, and territorial coverage in their health systems.[352] In parallel, many Member States have embedded workforce-related provisions in their Recovery and Resilience Plans (RRPs).[353] Moreover, the European Parliament's EMPL and SANT committees have initiated the own-initiative report, "An EU health workforce crisis plan," which sets forth comprehensive recommendations to improve employment and working conditions across the sector. The initiative awaits the committee decision.[354]

In parallel, digital innovation is seen as a key tool: the Polish Council Presidency prioritised health system digitalisation, while the 2025 Competitiveness Compass confirmed that the EU's AI strategy will target improvements in public services, including healthcare.[355] The Danish Council Presidency further prioritise boosting research, innovation, and competitiveness, strengthening healthcare resilience to crises, and advancing the European Commission's action plan on hospital and healthcare cybersecurity.[356] More broadly, the development of eHealth and the digital transformation of healthcare have been long-standing priorities for the EU. Digital transformation holds considerable promise for improving the efficiency of health systems. Studies show that digital tools can cut the administrative burden on healthcare professionals by as much as 30%.[357]

---

349 Conference on the Future of Europe, Report on the Final Outcome, May 2022.

350 European Parliament, resolution of 5 July 2022 towards a common European action on care.

351 L. Amand-Eeckhout, Healthcare in the EU: Addressing urgent labour shortages and ensuring quality jobs, EPRS, European Parliament, February 2005; Council of the EU, The Future of the European Health Union: a Europe that cares, prepares and protects – Draft Council Conclusions, 2024.

352 European Commission, 2025 European Semester: Recommendations on the economic, social, employment, structural and budgetary policies, 2025.

353 Lilyanova, V., Health-related measures in the national recovery and resilience plans, EPRS, European Parliament, September 2023.

354 Legislative Observatory, European Parliament, An EU health workforce crisis plan: sustainability of healthcare systems and employment and working conditions in the healthcare sector, 2025.

355 L. Amand-Eeckhout, Healthcare in the EU: Addressing urgent labour shortages and ensuring quality jobs, EPRS, European Parliament, February 2005.

356 Council of the EU, The Programme of the Danish Presidency of the Council of the European Union 2025, website.

357 OECD and European Commission, Health at a Glance: Europe 2024: State of Health in the EU Cycle, 2024.

Box 8: AI potential to alleviate the burden on the healthcare workforce

AI, including generative tools like large language models, is increasingly seen as a way to ease pressure on healthcare systems by reducing fatigue, improving consistency, and supporting data-driven decisions to meet rising demand.[358] While AI cannot fix workforce shortages or underfunding, it can ease strain by improving efficiency, consistency, and accuracy in healthcare processes.[359]

AI is cautiously entering administrative and clinical settings, automating tasks like scheduling, billing, and record management to cut costs and ease workloads. Predictive analytics also helps optimise staff, bed, and equipment allocation by anticipating patient demand.[360] For example, an AI tool deployed at Vestre Viken hospitals in Norway has processed data from over 10,000 patients since mid-2023, cutting waiting times, saving over 100 days, removing about 15 daily doctor consultations, and showing potential to scale to 40,000 patients annually.[361]

In oncology, AI has demonstrated particular promise.[362] Tools are being developed to enhance cancer screening and early detection by integrating imaging, pathology, and genomic data, improving sensitivity and specificity over traditional methods. AI-powered decision support systems are also being trialled to assist oncologists in analysing large datasets and delivering evidence-based treatment recommendations.[363] In diagnostics, AI shows promise in radiology by supporting image interpretation and case triage. However, results remain mixed, with some studies reporting performance on par with human readers, while others indicate limited added value.[364] More broadly, AI has the potential to unlock the vast volumes of underutilised health data. The World Economic Forum estimates that 97% of healthcare data assets remain unused. AI tools could help leverage these datasets to support diagnostics, prognostics, medical education, research, and quality control.[365]

At the same time, AI's actual use remains mostly limited to studies, pilots and trials, and there is a significant disconnect between the volume of research and development in AI medical devices and their integration into clinical practice.[366] Broader adoption of AI faces challenges across data and technology, regulatory and legal frameworks, organisational and business models, as well as social and cultural factors.[367] Importantly, while digital tools can streamline care, they also risk adding stress, burnout, and job dissatisfaction, especially with Electronic Health Records.[368]

The Artificial Intelligence Act [369] is central to the EU's AI regulation, addressing risks in the design, deployment, and use of AI systems. As safety legislation under the New Legislative Framework, it complements sector-specific rules. Most AI/Machine Learning-enabled medical devices are classified as high-risk and must meet strict safety, transparency, and accountability standards, indicating that human oversight ('human-in-the-loop').[370] The Act is part of a broader strategy for trustworthy AI, alongside the AI Innovation Package[371] and Coordinated Plan on AI.[372] To aid compliance, a Code of Practice[373] for general-purpose AI models was published on 10 July 2025, offering guidance on safety, transparency, and copyright, with further clarification provided by Commission guidelines. The EHDS-Regulation also supports AI development by facilitating the secondary use of electronic health data for research and innovation,[374] since AI effectiveness relies on access to large, high-quality datasets and validation across diverse populations.[375]

[358] European Commission, Artificial Intelligence in healthcare, website; European Commission, PwC EU Services EEIG and Open Evidence, Study on the deployment of AI in healthcare, 2025; OECD and European Commission, Health at a Glance: Europe 2024: State of Health in the EU Cycle, 2024.

[359] European Commission, PwC EU Services EEIG and Open Evidence, Study on the deployment of AI in healthcare, 2025.

It is also worth mentioning that the international migration of health workers is playing an increasingly significant role in addressing workforce shortages across Europe. Many EU and OECD countries are turning to the recruitment of foreign-trained health professionals as a short-term strategy to meet rising domestic demands. While this approach can offer immediate relief, it poses significant long-term risks. Overreliance on international recruitment may worsen existing shortages in source countries, particularly those already facing acute deficits in skilled health workers and create systemic vulnerabilities in destination countries that fail to invest in the sustainability of their own health workforce. As demand for healthcare services continues to grow, it is imperative for EU countries to strike a careful balance: maximising the benefits of intra-EU mobility while ensuring that national strategies also include domestic training, retention, and workforce planning measures.[376]

3.3.3. Action 26: Support the 'Cancer Workforce' through the 'Inter-specialty training' programme

Action 26 through the 'Inter-speciality training' programme, is one of the actions within the EU's broader effort under the EBCP pillar of "Ensuring High Standards in Cancer Care". Its primary objective is to deliver a more skilled and mobile cancer workforce through cross-border training and information, specifically the Inter-speciality Cancer Training Programme (2021–2025).[377] A primary driver for Action 26 is the acknowledged shortage of highly skilled, digitally literate healthcare professionals, discussed above, as this scarcity poses not only a significant impediment to the effective functioning of the healthcare systems in Member States, but also the expansion of other EBCP initiatives. The Action was further designed to address existing regional inequalities by fostering a highly skilled, mobile, and multidisciplinary cancer workforce trained to common standards across Europe. Recognising that high-quality cancer care depends on skills of its workforce, this action promotes continuous training, particularly in oncology, surgery, and radiology,

360 ibid.
361 ibid., p. 20.
362 Ibid., pp. 24-29.
363 ibid.
364 ibid., p. 23.
365 ibid., p. 28.
366 ibid., p. 40.
367 ibid., pp. 47-99.
368 A. Würtenberger, D.A. Groneberg and S. Mache, 'Digital stress perception and associations with work- and health-related outcomes among general practitioners in Germany: a quantitative study', *BMC Health Services Research*, Vol. 25, Springer Nature, 2025, 535; T.J. Bahr, S. Ginsburg, J.G. Wright and A. Shachak, 'Technostress as source of physician burnout: An exploration of the associations between technology usage and physician burnout', *International Journal of Medical Informatics*, Vol. 177, Elsevier Limited, 2023.
369 European Parliament and Council of the EU, Regulation (EU) 2024/1689 of 12 July 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act).
370 European Commission, PwC EU Services EEIG and Open Evidence, Study on the deployment of AI in healthcare, 2025, p. 46.
371 European Commission, Commission launches AI innovation package to support Artificial Intelligence startups and SMEs, press release, 2024.
372 European Commission, Coordinated Plan on Artificial Intelligence, website.
373 European Commission, General-Purpose AI Code of Practice, 2025.
374 European Commission, Artificial Intelligence in healthcare, website.
375 A. Manzano, C. Svedman, T. Hofmarcher and N. Wilking, Comparator Report on Cancer in Europe 2025 – Disease Burden, Costs and Access to Medicines and Molecular Diagnostics, IHE Report 2025, p. 9.
376 OECD and European Commission, Health at a Glance: Europe 2024: State of Health in the EU Cycle, 2024.
377 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.

with added emphasis on digital skills, AI, genomics, personalised medicine, and holistic patient support, including mental health and nutrition. The training provided under Action 26 is designed to help EU Member States address skill gaps and equip their health workforce with personnel trained across the entire cancer care continuum, from prevention and early detection to diagnosis, treatment, rehabilitation, and survivorship. It also emphasises the importance of patients' quality of life and well-being, incorporating mental, psychosocial, and nutritional support, as well as patient empowerment, into the curriculum. This action has already led to the successful implementation of the INTERACT-EUROPE project, which created a training curriculum. Building on its success, the ongoing INTERACT-EUROPE 100 initiative extends training to 100 cancer centres across Europe.[378]

Box 9: Progress on the 'Inter-specialty training' programme (Action 26)

The INTERACT-EUROPE project, completed in 2023, successfully developed an EU-wide inter-specialty curriculum and education programme applicable across cancer care systems. It promotes improved interdisciplinary understanding, team collaboration for better patient outcomes.

Its continuation, the INTERACT-EUROPE 100 project is operational, currently implementing the Inter-specialty Cancer Training (ISCT) curriculum, which is expected to be completed by November 2026.

As such, Action 26 is intricately linked with several other actions and broader initiatives within EBCP and the wider EU health agenda. First, and foremost, Action 26 is closely interconnected with Action 23 of the EBCP, which focuses on the creation of National Comprehensive Cancer Centres (CCCs) in all EU Member States and the establishment of an EU-wide network by 2025. JACraNE is the specific Joint Action under Action 23, responsible for conceptualising and preparing the establishment of the network of Centres, pointing to a planned and direct synergy between these two actions. This initiative aims for 90% of eligible patients to have access to the Centres by 2030, supporting equitable access to high-quality, standardised cancer diagnosis, treatment, training, research, and clinical trials across the EU. The success of Action 23/JACraNE is inherently dependent on the objectives of Action 26, which involves developing a skilled, multidisciplinary health workforce. A well-trained workforce is essential for delivering the high standards of care envisioned by Action 23. Action 26 equips healthcare professionals with the competencies and mobility needed to actively engage in the collaborative research and educational activities fostered by the Centres network.

Furthermore, Action 26 is embedded within the broader landscape of EU health-related funding mechanisms. Specifically, INTERACT-EUROPE and INTERACT-EUROPE 100 are financed under the EU4Health Programme, which, along with Horizon Europe and ERASMUS+, underpins numerous cancer-related projects. In particular, the ERASMUS+-supported BeWell action, which promotes a multi-stakeholder strategy for health workforce skills, including digital and green competencies, echoes the core goals of Action 26, albeit in a broader health context.[379] Importantly, the European Commission explicitly links HEROES – also funded under the EU4Health scheme - to efforts addressing workforce shortages and digital skill gaps in cancer care. The Joint Action HEROES

[378] Austria (3), Belgium (1), Bosnia Herzegovina (1), Bulgaria (9), Czech Republic (3), Croatia (2), Cyprus (3), Estonia (1), Finland (1), France (1), Germany (5), Greece (6), Hungary (1), Ireland (4), Italy (13), Lithuania (2), Moldova (1), Norway (1), Poland (1), Portugal (9), Romania (7), Slovakia (2), Slovenia (2), Spain (15), Sweden (2), Ukraine (8).

[379] European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025.

(HEalth woRkfOrce to meet health challEngeS) is closely connected to Action 26, as both aim to address critical shortages and skills gaps within the healthcare workforce, including in cancer care, complementing each other's efforts. HEROES focuses on improving health workforce planning, tackling medical deserts, enhancing retention, supporting task shifting, and building digital competencies. While Action 26 targets specialised training, HEROES provides the broader framework and tools, such as data development, forecasting, and capacity building, that support the sustainable development of a skilled oncology workforce. The digital dimension of Action 26 also links closely with the European Health Data Space. The EHDS aims to enable secure access and sharing of electronic health records across borders for prevention and treatment. A digitally competent and trained cancer workforce, a goal supported by Action 26, is essential to fully leverage the EHDS for improved patient care and research.

3.3.4. INTERACT-EUROPE

Across the EU, the cancer care workforce is confronted with mounting challenges that threaten the delivery of effective and equitable care.[380] One of the most pressing challenges is the persistent and widespread shortage of healthcare professionals, including oncologists, nurses, and allied health workers, accompanied by significant disparities in workforce availability both within and between Member States. Gaps in training and education are also prevalent, with limited access to standardised, inter-speciality pathways and continuing professional development opportunities. Access to high-quality education and training remains uneven, both regionally and across Member States.[381] As a result, mutual understanding between oncology professionals remains limited, hindering the delivery of coordinated care.[382] Therefore, the project brought together partners from across the EU to design and implement an inter-speciality training programme for oncology professionals. In principle, the project was designed to reduce disparities in access to high-quality oncology education across the EU. The core objective was to promote a patient-centric model of cancer care by fostering interdisciplinary teamwork.

INTERACT-EUROPE was an 18-month project, launched in June 2022 and concluded in November 2023,[383] co-funded by the EU under the EU4Health programme, as part of EBCP.[384] It unites 33 partners across 17 countries with the goal of creating a European interspecialty cancer training programme that encompasses all key oncology disciplines and professions, as well as cancer centres and patient organisations, guided by identified training needs. The consortium is led by the European Cancer Organisation (ECO), with European School of Oncology (ESO) delivering training,

---

380 European Cancer Organisation, Under Pressure: Safeguarding the Health of Europe's Oncology Workforce – A Report and Policy Action Plan from the European Cancer Organisation's Workforce Network, 2024.

381 See the beginning of section 3.3.1 *Challenges in cancer care – the workforce angle* as well as the contents of Table 11 and European Commission, INTERACT-EUROPE – Innovative Collaboration for Inter-specialty Cancer Training Across Europe, website; European Cancer Organisation.

382 European Commission, INTERACT-EUROPE – Innovative Collaboration for Inter-specialty Cancer Training Across Europe, 2023; European Cancer Organisation, INTERACT-EUROPE – Blueprint for High Functioning Multidisciplinary Cancer Care in Every Country, 2023; European Commission, INTERACT-EUROPE 100 – Project Details, EU Funding & Tenders Portal, website.

383 European Commission, INTERACT-EUROPE – Innovative Collaboration for Inter-specialty Cancer Training Across Europe, website; European Cancer Organisation, INTERACT-EUROPE – Blueprint for High Functioning Multidisciplinary Cancer Care in Every Country, 2023.

384 With overall budget of EUR 2.663.840, and EU contribution of EUR 2.131.072, the EU4Health covered 80% of the budget. See: European Commission, INTERACT-EUROPE 100 – Implementing Inter-specialty Cancer Training in 100 Centres Across Europe, website.

guided by a steering group and evaluated by an independent Advisory Board.[385]

The training curriculum was collaboratively developed during the project's first phase, which included a pilot workshop in Lisbon with over 40 oncology professionals: medical and clinical oncologists, surgeons, radiologists, and nurses. This led to the creation of an inter-speciality cancer training curriculum.[386] Subsequent communication and dissemination activities were undertaken to raise awareness and promote uptake of the programme's recommendations. The project culminated in the development of the INTERACT-EUROPE Blueprint, a strategic framework outlining recommendations for inter-speciality training, and a hybrid showcase event.[387] The second call for proposals to support the roll-out of the second cohort of the training programme was launched with a slight delay, but successfully.[388] In an interview, the representative of the coordinating organisation commended its substantial EU-level investment and its ability to deliver high-quality, accessible training to cancer professionals across Europe, including those in underserved areas.

As previously stated, the project's success led to its continuation under INTERACT-EUROPE 100 (2023–2026), which will be implemented across 100 cancer centres in Europe. As such, while the initiative has already achieved notable success, it remains a work in progress, with further development and implementation still underway. This next phase includes new modules on paediatric oncology and care for displaced populations, particularly those affected by the war in Ukraine. It involves 44 partners from 17 countries and emphasises the development of a sustainable, harmonised training model to reduce cancer care inequalities and strengthen workforce collaboration.[389] While INTERACT-EUROPE makes considerable efforts towards equipping the cancer workforce through high-quality and cost-free training, sustainable workforce planning and structural reforms remain critical areas for current and future EU-level attention, potentially under the broader framework of the European Health Union.[390]

---

385 European Cancer Organisation, European Inter-specialty Cancer Training Programme Curriculum, 2023.

386 European Cancer Organisation, INTERACT-EUROPE Showcase Event – Pioneering the Future of Inter-Specialty Cancer Education, website.

387 European Cancer Organisation, INTERACT-EUROPE – Blueprint for High Functioning Multidisciplinary Cancer Care in Every Country, 2023; European Cancer Organisation, INTERACT-EUROPE Showcase Event – Pioneering the Future of Inter-Specialty Cancer Education, website.

388 European Commission, EU4Health Programme, Call for proposals, website.

389 European Commission, INTERACT-EUROPE 100 – Implementing Inter-specialty Cancer Training in 100 Centres Across Europe, website.

390 The European Health Union is a strategic initiative launched by the European Commission in response to the COVID-19 pandemic, aiming to strengthen the EU's capacity to prevent, prepare for, and respond to health crises, while also improving the resilience and sustainability of national health systems across Member States.

3.4. Specific focus area 3 – Quality of life

Key findings

- A growing population of cancer survivors, their families, and carers faces complex, long-term challenges, shifting the focus of cancer care from simply "how long" to "how well and how long" people live. The EBCP recognises this, emphasising not only survival but also the social, emotional, and economic well-being of patients.
- Action 35 addresses fair access to financial services, targeting discriminatory practices such as higher insurance premiums or loan exclusions that can persist even years after recovery. While 12 EU Member States had adopted "right to be forgotten" legislation by April 2024, significant gaps remain, and efforts to establish a voluntary Code of Conduct stalled due to stakeholder disagreements.
- Action 36 focuses on improving labour market access for cancer patients and carers, yet most Member States lack specific legislation for job retention and reintegration, relying instead on broader disability laws. A key achievement under Action 36.2 is the recognition of cancer-related impairments in the Strategy for the Rights of Persons with Disabilities 2021–2030. Action 36.3 promotes implementation of the Work-Life Balance Directive, though progress remains uneven

Thanks to advancements in early detection, effective therapies, and supportive care, survival rates have significantly increased, resulting in a growing number of cancer survivors in Europe, currently estimated at over 12 million,[391] and an estimated 14.85 million cancer survivors who lived at least 5 years post-diagnosis in 2020.[392] At the same time, despite improvements in healthy life expectancy, ageing remains closely associated with an increased risk of illness, frailty, and long-term care dependency, as was discussed in the chapter above.[393]

The rising prevalence of cancer is driving the development of rehabilitation and quality of life programmes. While this is a positive step, cancer survivors and their families often face complex, long-term challenges, ranging from physical and mental health issues to barriers in social and economic participation. These include poorly managed late effects, lack of care coordination, unmet psychosocial needs, and concerns around recurrence, metastasis, and emotional well-being.[394]

Cancer has a major impact on mental health due to its symptoms, treatment side effects, and disruption to daily life, work, and social roles, causing an estimated 85,000 additional cases of depression annually in the EU. In response, many countries are investing in psychological, social, and occupational rehabilitation.[395]

Beyond the physical and psychological impact of cancer, individuals with a history of the disease, including those in long-term remission, often face barriers to full participation in social and economic life. Cancer has a substantial economic impact due to its effects on workforce participation and

391 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, February 2021.

392 R. De Angelis, E. Demuru, P. Baili et al., 'Complete cancer prevalence in Europe in 2020 by disease duration and country (EUROCARE-6): a population-based study', The Lancet Oncology, Vol. 25(3), Elsevier Limited, 2024, pp. 293-307.

393 European Commission, Green Paper on Ageing: Fostering solidarity and responsibility between generations. COM(2021), January 2021.

394 OECD and European Commission, EU Country Cancer Profiles Synthesis Report 2025, 2025.

395 ibid.

productivity. Patients often require time off for treatment and recovery, with ongoing fatigue or mental health challenges further limiting their ability to work. Between 2023 and 2050, cancer is projected to result in the loss of 178 full-time equivalent (FTE) workers per 100,000 people in the EU.[396] The burden also extends to informal caregivers, most often women around age 50, typically spouses or daughters, who frequently live with the patient and provide an average of 10.9 hours of care daily. With 39% lacking formal education, many face difficulties balancing care with employment and daily life, often experiencing reduced work capacity, financial strain, and limited social participation.[397] This is further exacerbated by limited or discriminatory access to financial products such as insurance and credit, which can hinder financial independence and opportunities, including securing a mortgage. Recognising the importance of fair access, this issue is receiving increasing attention across EU Member States as part of wider efforts to promote equal rights and inclusion.[398]

The EBCP emphasises that these challenges could be more effectively addressed through better integration and coordination between health and social care systems, including greater engagement from employers and community services.[399] The focus in this area has shifted from merely "how long" people live after diagnosis to "how well and how long" they live.

All four actions are highly interconnected through their shared focus. Action 36.1's analytical work on return-to-work challenges directly supports the objectives of Action 36.2 by providing evidence to strengthen the case for recognising cancer survivors as persons with a disability under the EU Disability Strategy, a step toward securing their rights to workplace accommodations and protection. Action 36.3, promoting full implementation of the Work-Life Balance Directive (WLBD), complements these efforts by promoting flexible working arrangements and leave entitlements, which are critical for both survivors and their carers to remain in or return to work. Meanwhile, Action 35 connects with Action 36.2 through a shared anti-discrimination approach recognising survivors as persons with a disability would also provide a legal basis for challenging unfair financial practices, such as higher insurance premiums or loan denials, thereby reinforcing the "right to be forgotten" and promoting equitable access to services. Action 35 is also closely connected with the EBCP's Survivorship pillar, directly contributing to the broader goal of enhancing the quality of life; it also addresses cancer inequalities by seeking to standardise fair access across Member States. Furthermore, the EU-CAYAS-NET project, part of the EBCP's focus on childhood cancer, can assist national associations in advocating for "right to be forgotten" legislation.

This complements other already existing, important initiatives on the national and European level. On the EU level, the European Pillar of Social Rights (COM(2021)102) outlines key principles that align closely with the objectives of the EBCP, particularly in supporting cancer survivors, patients, and carers.[400,401] The summary of the connection between the European Pillar of Social Rights and

---

396 OECD and European Commission, EU Country Cancer Profiles Synthesis Report 2025, 2025, p. 36.

397 M.D. Guerra-Martín, M.D.R. Casado-Espinosa, Y. Gavira-López et al., 'Quality of Life in Caregivers of Cancer Patients: A Literature Review.', *International Journal Environmental Research and Public Health*, Vol 20(2), MDPI, 2023, p. 1570.

398 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.

399 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021; European Commission, Open Evidence and PWC EU Services, Study on mapping and evaluating the implementation of the Europe's Beating Cancer Plan, 2024.

400 It is important to mention, that EBCP is included as one of the Commission action, under the principle 16. Health care ("Everyone has the right to timely access to affordable, preventive and curative health care of good quality."), pointing out to the synergies and alignment of goals and actions within the principles of European Pillar of Social Rights.

401 European Commission, European Pillar of Social Rights, website.

the EBCP is included in the Annex III.

As such, actions under the principle "Improving the quality of life for cancer patients, survivors, and carers" reinforce the EBCP's pillar on improving quality of life and are in close connection with the European Pillar on Social Rights, and vice-versa. At the same time, the European Pillar of Social Rights is undergoing a significant revision, which aims to adapt the Pillar to today's societal and digital realities.[402] The Commission has launched a public consultation and a call for evidence to support the preparatory work.[403]

Furthermore, in terms of alignments of this part of the EBCP with other actions and policies on the EU level, Action 35 reflects broader policy principles regarding data use and fairness. Its emphasis on using only "necessary and proportionate information" when assessing eligibility for financial products links conceptually to EU data protection standards such as the GDPR and the emerging EHDS. Moreover, targeting discriminatory practices in financial services contributes to the socio-economic inclusion of cancer survivors, a group often overlooked in traditional health equity discussions. This ties into the objectives of the Cancer Inequalities Registry (Flagship 9, Action 37), which could serve to monitor disparities in financial access and track the long-term impact of Action 35. Actions 36.2 and 36.1 further connect with the Disability Employment Package, a related flagship initiative that reinforces this commitment within the EU Strategy for the Rights of Persons with Disabilities 2021-2030 and is included as related activity under principle 17 of the European Pillar of Social Rights.

3.4.1. Action 35: Address fair access for cancer survivors to financial services

Recently, concerns have grown among individuals and patient advocacy groups regarding the impact of a cancer history on access to financial products. They report facing higher premiums or outright exclusion from various financial products, including life insurance (often required for mortgages), travel insurance, optional health insurance, individual disability insurance, unemployment insurance, and business loans.[404] Even many years after successful recovery, survivors still encounter barriers, e.g. to obtaining a mortgage to buy a home. For example, in Spain, 80% of people aged 13–35 who have recovered from leukaemia report difficulties accessing insurance and other banking services.[405] Young adults who have overcome paediatric cancers are particularly affected, reporting "huge social and economic disparities" and "economic discrimination". Representatives of cancer survivors and healthcare professionals view the situation as a form of discrimination, arguing that individuals declared cured should not have their past diagnosis impact financial access.[406] Reports from across the EU reveal persistent barriers and discrimination against cancer survivors, leading some Member States to adopt national legislation.

---

402 European Commission, European Pillar of Social Rights, website.

403 European Commission, Have your say – Public Consultations and Feedback on the new Action Plan on the implementation, website.

404 European Commission, European Health and Digital Executive Agency, Access to financial products for persons with a history of cancer in EU Member States. An exploratory study, 2022, pp. 7-9.

405 G. Socca and F. Menier, 'Towards an EU legislation on the right to be forgotten to access to financial services for cancer survivors', *European Journal of Cancer*, Vol. 162, Elsevier Limited, 2022, pp. 133-137; A. Poussette and T. Hofmarcher, Tackling inequalities in cancer care in the European Union, 2024.

406 European Commission, European Health and Digital Executive Agency, Access to financial products for persons with a history of cancer in EU Member States. An exploratory study, 2022, pp. 7-9.

The European Parliament's BECA called for EU-wide standards of the "right to be forgotten."[407] This anti-discriminatory policy has been reflected in the Commission proposal,[408] which BECA called for the adoption of. The issue has also been acknowledged by the Council of Europe, which urged for evaluation of patient protection systems such as the "right to be forgotten".[409] Furthermore, several advocacy groups have been active in this area.[410]

At the EU level, several recent measures have advanced equal access to financial services, though not always explicitly linked to the EBCP. Notably, the revised Consumer Credit Directive ((EU) 2023/2225)[411] strengthens consumer protection, particularly for cancer survivors, requiring Member States to prohibit the use of cancer-related personal data in insurance policies tied to credit agreements, provided a defined remission period, no longer than 15 years. The directive also bans the use of health data in creditworthiness assessments and prohibits processing such data from databases or social media, to support compliance with data minimisation principles and promote fair treatment for those with a history of illness.[412] Additionally, the revision of the Mortgage Credit Directive (2014/17/EU) aimed to address broader concerns related to data use, discrimination, and consumer protection in financial services. While it did not specifically target cancer patients and survivors, it was part of a wider effort to ensure fair treatment in the credit market. This initiative has since been suspended.[413]

Action 35 was designed to improve fair access to financial services for cancer survivors. It includes conducting a study on the situation across Member States, engaging stakeholders, and carrying out additional research. Based on these steps, a draft Code of Conduct was to be developed, with the goal of finalising and establishing the Code by 2024.[414]

Box 10: Progress of addressing fair access for cancer survivors to financial services (Action 35)

The action shows mixed results. While most activities under Action 35 were completed, the key final activity is experiencing delays. The study on access to financial products was finalised and revealed disparities, as well as varying levels of policy implementation regarding the right to be forgotten. A draft Code of Conduct on fair access to financial services for patients and survivors was developed with stakeholder engagement. However, it has not yet been agreed upon.

407 Special Committee on Beating Cancer, Report on strengthening Europe in the fight against cancer – towards a comprehensive and coordinated strategy, European Parliament, 2022; European Parliament, resolution of 16 February 2022 on strengthening Europe in the fight against cancer – towards a comprehensive and coordinated strategy.

408 European Commission, Proposal for a Council Directive on implementing the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation, COM(2008), 2008.

409 European Commission, European Health and Digital Executive Agency, Access to financial products for persons with a history of cancer in EU Member States. An exploratory study, 2022; Committee on Social Affairs, Health and Sustainable Development, Discrimination against persons dealing with chronic and long-term illnesses, 2021.

410 E.g. (non-exhaustively) Ending Financial Discrimination against Cancer Survivors through the Right to be Forgotten, European Cancer Organisation, Irish Cancer Society.

411 European Union, Directive (EU) 2023/2225 on credit agreements for consumers.

412 ibid.

413 European Commission, Mortgage credit - review of EI rules, website.

414 European Commission, EBCP Roadmap, 2022.

To launch this action, the European Commission tasked the EUHealthSupport consortium with assessing fairness in financial services for cancer survivors in long-term remission. Concluded in 2022[415] *Access to financial products for persons with a history of cancer in EU Member States* exploratory study was conducted to gain a better understanding of the current situation regarding access to financial products for persons with a history of cancer in EU Member States and to explore the perceptions of Member States and stakeholders concerning national and EU-level action on this topic. The study included a literature review, expert interviews, a government survey (responses from 23 Member States plus Norway and Iceland), and a stakeholder consultation involving 104 participants.[416] It revealed a "variable regulatory landscape across the EU" regarding this issue. Still, a significant challenge in the current regulatory landscape is that the effects of the existing provisions are largely unknown and difficult to evaluate.[417]

As of early 2022, Belgium, France, the Netherlands, Portugal, and Italy had specific laws to improve access to financial products for cancer survivors, while Luxembourg applied a non-legislative agreement. In seven other countries, insurers or financial bodies introduced voluntary or self-regulatory measures, often with input from patient groups: for example, Denmark and Norway limit the relevance of past diagnoses after set periods. Some countries rely on broader anti-discrimination laws, such as Germany's Equal Treatment Act or Malta's New Hope Guarantee scheme. However, many Member States, including Austria, Poland, and Croatia, still lack dedicated national legislation.[418]

Views among Member States and stakeholders were mixed regarding the need for further national governmental action. Some felt no further national policies were needed, citing existing legislation, lack of evidence of inequitable access, or lack of evidence on policy effectiveness. While a majority saw national action as important, a smaller group believed efforts should focus on other cancer-related priorities or be addressed at the EU level instead. Cancer survivors, healthcare organisations, and academia favoured governments taking an active role, such as regularly assessing issues and developing or updating policies. Stakeholders from the (re)insurance and financial sector were more cautious, some arguing that self-regulation or existing legislation was sufficient, or that there was no clear evidence of inequitable access or effective policy impacts.[419]

[415] According the EBCP Roadmap, the intended date of publication was 2021.

[416] European Commission, European Health and Digital Executive Agency, Access to financial products for persons with a history of cancer in EU Member States. An exploratory study, 2022.

[417] ibid. pp. 2, 41.

[418] European Commission, European Health and Digital Executive Agency, Access to financial products for persons with a history of cancer in EU Member States. An exploratory study, 2022.

[419] ibid.

Table 12 – Stakeholder views on the legislation covering access to financial services for cancer patients and survivors

Characteristic	Member States	Stakeholders (Cancer organisations and Healthcare)	Stakeholders (Insurance and Finance)
Need for governmental policy	Mixed views; some see no need due to existing laws or lack of evidence	Generally agree on the need for action to remove hurdles	More reluctant; prefer national steps and evaluation of existing laws
Reasons for reluctance	Existing legislation, lack of evidence of inequitable access, or lack of evidence on policy effectiveness	Emphasis on cured individuals living without past diagnosis impacting access	Risk assessment is fundamental; private insurance has no obligation to contract
Preferred actions	Some favour regular governmental assessment; others prioritise cancer prevention and treatment	Support regular assessment and updated policies by national governments	Evaluate current legislation and its impact on product availability
Evidence needed	Quantitative evidence on unequal access and policy effectiveness	Highlight social and economic disparities faced by young adults	Insight into practical workings and impact on an insurance product availability

Source: Authors, based on the Access to financial products for persons with a history of cancer in EU Member States report, 2022.

A right to be forgotten

Despite its importance, access to financial products for cancer survivors remains variably recognised across EU Member States, with limited patient advocacy driving national attention. Additionally, no studies have explored how survivors from different socio-economic backgrounds are affected by the presence or absence of "right to be forgotten" laws.[420]

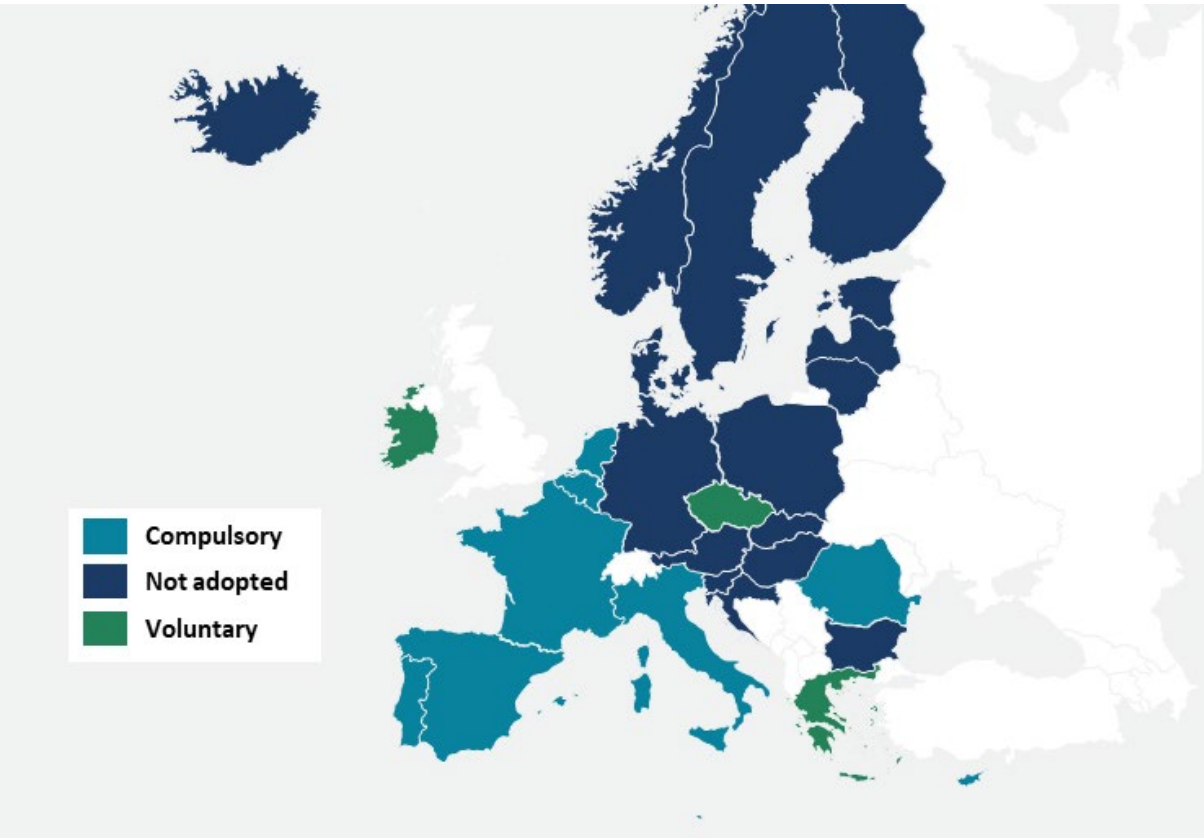
Before the launch of the EBCP, only five EU countries had legislation or voluntary initiatives in place regarding the "right to be forgotten", safeguarding that after a certain period (e.g. 5 or 10 years) following successful cancer treatment without reoccurrence, individuals are not required to disclose their cancer history when applying for certain financial products.[421] While the general period for adults is 10 years, a shorter period for childhood cancers varies between 18 and 21 years of age. As of April 2024, 12 EU Member States have implemented mechanisms related to the "right to be forgotten". These include both legislative and self-regulatory frameworks. Legislative frameworks have been adopted by at least eight countries: France (the first in 2016), Belgium, Cyprus, Italy, the Netherlands, Portugal, Romania, and Spain (between 2020 and 2024). Self-regulatory measures (such as codes or conventions) are in place in Czechia, Ireland, Luxembourg, and Greece. However, 15 out of the 27 EU Member States currently have no mechanism in place at all. There is a significant lack of uniformity across Member States in terms of the rights, obligations, and product coverage

420 A. Poussette and T. Hofmarcher, Tackling inequalities in cancer care in the European Union, 2024.

421 European Commission, European Health and Digital Executive Agency, Access to financial products for persons with a history of cancer in EU Member States. An exploratory study, 2022.

under existing "right to be forgotten" frameworks.[422]

Figure 5 – Implementation of the right to be forgotten in the EU (2024)



Source: Consortium, based on ECIR, Implementation of a right-to-be-forgotten initiative (2024) by country.

Despite progress, harmonising legislation across member states remains challenging, largely due to varying national priorities, levels of political commitment, and the availability of reliable data on cancer care and survivorship. These disparities also complicate addressing ethical considerations of the right to be forgotten for cancer survivors, which requires carefully balancing the protection of medical privacy with the need for transparency in sectors where disclosure may be justified.[423]

Code of Conduct

The Code of Conduct, a part of Action 35, was envisioned as a voluntary framework at the EU level aimed at ensuring fair access to financial services for cancer survivors. Its primary purpose is to bridge the gap between the improving prognosis for cancer patients, thanks to advancements in early detection, therapies, and care, and the persistent obstacles they face when accessing financial services, even years after treatment concludes. The development of the Code was to be grounded in robust empirical and scientific evidence – the above-cited *Access to financial products for persons with a history of cancer in EU Member States. An exploratory study,* and subsequent

[422] European Commission, Directorate-General for Health and Food Safety and Deloitte Consulting and Advisory, Development of a Code of Conduct on fair access of cancer survivors to financial services, 2024.

[423] F. Meunier, G. Scocca and F. Tulkens, 'Towards promoting a legal framework for ending discrimination against cancer survivors: A human rights-centred approach', *Journal of Cancer Policy*, Vol. 43, Elsevier Limited, 2025, Article 100527.

Development of a Code of Conduct on fair access of cancer survivors to financial services".[424,425]

The latter project (*Development of a Code of Conduct on fair access of cancer survivors to financial services)* findings further confirm that cancer survivors, particularly those diagnosed in childhood, face significant and persistent difficulties accessing financial services, mainly insurance linked to credit. They, in particular, report facing financial penalties for a lifetime or long after completing treatment. For instance, becoming a homeowner can be very difficult in some Member States for individuals with a history of cancer.[426]

The development of the Code was designed to emerge through a collaborative process involving stakeholders from the financial sector, consumer advocacy, patient organisations, and the healthcare community. Nine roundtables (Oct 2023–Apr 2024) and a stocktaking event in May 2024 gathered input on a voluntary code's benefits, and were expected to foster consensus and shared ownership of the final Code.[427] However, discussions on the Code faced challenges, particularly around differing views between patient organisations and insurers on the appropriate threshold period following treatment (with the latter group preferring the longer timeframe). At the time of closing the project, these differences had not been fully resolved,[428] and exploring bilateral agreements with individual Member States was identified as a possible way forward.

3.4.2. Action 36: Access to the labour market

Action 36.1: Study addressing issues related to the return to work

Each year, an estimated 2.7-3 million new people are diagnosed with cancer in the EU,[429] and more and more are surviving more than five years after a cancer diagnosis.[430] Within these statistics, more than 30% are of working age.[431] The number of people working with, or surviving from, cancer is expected to increase in the coming years.[432] At the same time, because of the changes in the demographic structure of the EU countries, the number of new cases of cancer is expected to drop (because of the drop in the population of working age).[433] Still, currently, people of working age represent a significant proportion of all cancer cases in Europe.

---

424 European Commission, Directorate-General for Health and Food Safety and Deloitte Consulting and Advisory, Development of a Code of Conduct on fair access of cancer survivors to financial services, 2024.

425 The study employed a multi-faceted methodology (review of literature, targeted interviews with stakeholders, online survey, collection and analysis of cancer survival rates and cure rate statistics, a series of roundtable discussions).

426 European Commission, Directorate-General for Health and Food Safety and Deloitte Consulting and Advisory, Development of a Code of Conduct on fair access of cancer survivors to financial services, 2024.

427 ibid.

428 European Commission, Directorate-General for Health and Food Safety and Deloitte Consulting and Advisory, Development of a Code of Conduct on fair access of cancer survivors to financial services, 2024.

429 See section 3.3.1 *Challenges in cancer care – the workforce angle.*

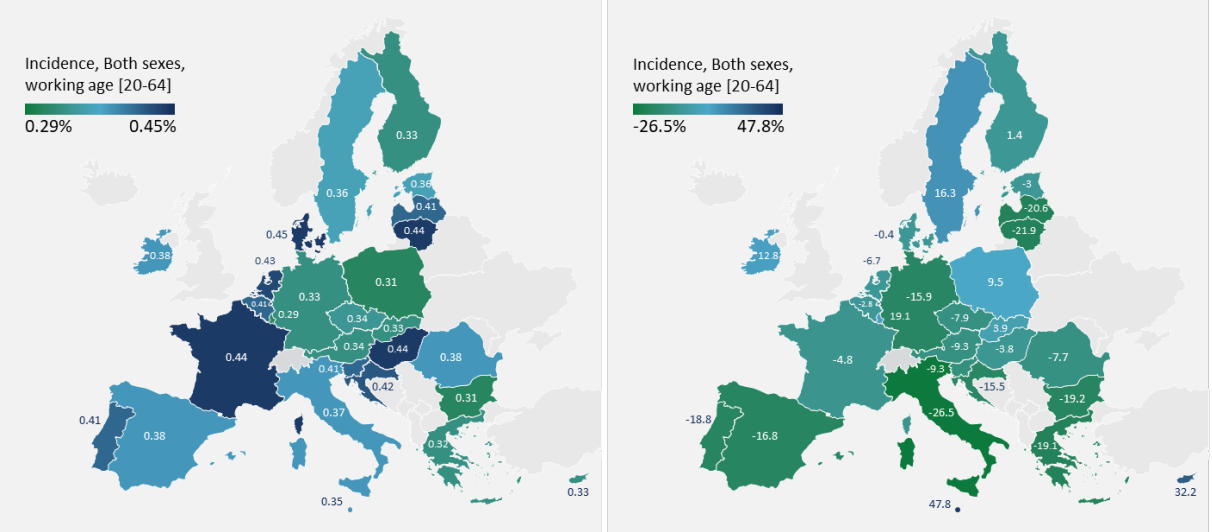
430 EU-OSHA, Rehabilitation and return to work after cancer, instruments and practices, 2018.

431 According to ECIS, the annual incidence in 2022 was estimated at 2,742,447, of which 949,416 are ages 20-65 (34%); WHO data shows that the lower number of approx. 32% (see Figure 4) for the same age group.

432 EU-OSHA, Rehabilitation and return to work after cancer, instruments and practices, 2018.

433 World Health Organization, International Agency for Research on Cancer, Estimated number of new cases from 2022 to 2045, Incidence, Both sexes, age [20-64], website.

Figure 6 – Estimated % of new cases (2022) and the change in them from 2022 to 2045 for people of working age



Source: Consortium, based on WHO data.

Although positive trends exist, cancer and its aftermath still affect patients' well-being, leading to absenteeism and the need for tailored workplace solutions. [434] While health-related challenges, such as pain, fatigue, and mental health issues, often hinder cancer survivors' return to work, the lack of tailored reintegration support worsens the situation. Common barriers include inflexible workplace policies, limited part-time or telework options, few accommodations, and hard-to-access support services. Stigma and fear of discrimination also discourage disclosure, further complicating reintegration.[435] This all results in the overall risk of unemployment among cancer survivors being estimated to be 40% higher (or 1.4 times higher) than among people who have never been diagnosed with cancer.[436]

Under Action 36.1, the European Commission launched a study titled *Study on Job Retention and Return to Work for Cancer Patients and Survivors*[437], completed in line with the EBCP deadline, in September 2024, aimed to map policies in the EU Member States and EEA EFTA States (Iceland, Liechtenstein, and Norway) that help cancer patients and survivors to remain in or return to work (RTW). Its key objectives included mapping implemented and planned legislation/policies, consulting stakeholders, identifying gaps and challenges, and identifying good practices.

Progress on the study on job retention and return to work (Action 36.1)

The study under Action 36.1 was completed and published on time in 2024, marking an "completed" milestone.

The study found that most EU and EEA countries lack specific legislation for job retention or

[434] EU-OSHA, Rehabilitation and return to work after cancer, instruments and practices, 2018; ECO, Free from Cancer: Achieving Quality of Life for All Cancer Patients and Survivors, 2020.

[435] European Commission, Ecorys, Study on job retention and return to work for cancer patients and survivors – Final study report, 2024.

[436] EU-OSHA, Rehabilitation and return to work after cancer, instruments and practices, 2018.

[437] European Commission, Ecorys, Study on job retention and return to work for cancer patients and survivors – Final study report, 2024.

reintegration of cancer patients and survivors. Existing laws usually apply more broadly to people with disabilities or chronic illnesses. Targeted policy measures are more common than legislation and often appear in national cancer plans. Most support is delivered by NGOs, employers, or service providers, with few forward-looking measures in place. Stakeholders widely viewed current support as insufficient.

The most prominently cited obstacles were health issues and illness-related complications, including physical (such as fatigue and chronic pain) and mental health issues (such as depression, anxiety, and stress). Other major challenges include a lack of support for work reintegration and a lack of flexible working arrangements and workplace accommodations. Despite these challenges, the study identified 11 selected good practice measures from various EU MS and EEA EFTA States (Table 13).

Table 13 – Summary of examples of good practices (return to work of cancer patients and survivors)[438]

Practice name	Summary description	Impact
Rentree (Belgium)	Work reintegration support service offering personalised coaching and vocational guidance during or after cancer treatment.	Over 1,700 guided; 90% satisfaction; economically beneficial.
Cancer@Work Charter (France and Luxembourg)	Company-based initiative supporting workplace inclusion and non-discrimination for cancer-affected employees.	Over 160 companies signed; high visibility and replicability.
Action II.13 (France)	10-Year Cancer Strategy action supporting job retention and RTW through awareness and policy reforms.	Comprehensive measures, including employer guides and flexible work promotion.
Madrid SME Protocol (Spain)	Non-binding SME protocol for RTW after long sick leave, promoting communication and monitoring.	Targets SMEs with flexible, awareness-focused practices.
AMELIE Guidebook (Czechia)	Guidebook offering psychosocial and practical RTW support based on counselling and funded projects.	Easily accessible and regularly updated, built on counselling experience.

Source: Consortium, based on Study on Job Retention and Return to Work for Cancer Patients and Survivors.

[438] ibid.

Action 36.2: Address in the Strategy on the Rights of Persons with Disabilities 2021-2030 the rights of cancer patients and survivors are considered as persons with a disability

Cancer and disability are closely linked, with disability resulting from the interaction between health conditions and social or environmental barriers.[439] NCDs, including cancer, are a common underlying cause of disability. Moreover, cancer-related disabilities often persist long after treatment: around one-third of survivors experience fatigue up to six years post-treatment, with most of them also reporting moderate to severe disability. Many also struggle with daily tasks, with over half needing support for instrumental activities.[440] Also, people with disabilities, especially women, continue to face major barriers to cancer screening and treatment access. The European Union has recognised this critical gap, and the EBCP commits to addressing the specific inequalities that persons with disabilities face in accessing cancer prevention, early detection, and care.[441,442]

The previous *European Disability Strategy 2010-2020: A Renewed Commitment to a Barrier-Free Europe* [443] did not explicitly mention cancer or cancer patients. However, individuals with impairments resulting from cancer or its treatment were implicitly covered under its health objectives, which promoted equal access to healthcare and rehabilitation, despite the absence of a direct reference. Therefore, Action 36.1 of the EBCP aimed to ensure that the rights of cancer patients and survivors were explicitly addressed in the new strategy. This was successfully achieved with the timely adoption of the *Union of Equality Strategy for the Rights of Persons with Disabilities 2021–2030.*[444] The Strategy integrates the concerns of cancer patients into its broader disability rights framework by explicitly acknowledging that cancer, especially when resulting in long-term or invisible impairments, can lead to disability and often requires tailored support.[445]

In alignment with this recognition, the strategy reinforces the European Commission's commitment to intensifying its response to cancer through EBCP. It outlines targeted efforts to reduce disparities in access to cancer prevention, early detection, and treatment for persons with disabilities. Notably, it identifies the need to address "specific inequalities" in cancer care, which are to be systematically tracked through the ECIR established under the EBCP. [446]

---

439 World Health Organization, Global report on health equity for persons with disabilities, 2022.

440 E.g. World Health Organization, Global report on health equity for persons with disabilities, 2022.; J. Jones, K. Olson, P. Catton et al., 'Cancer-related fatigue and associated disability in post-treatment cancer survivors', *Journal of Cancer Survivorship*, Vol. 10, 2016, pp. 51-61; J. Neo, L. Fettes, W. Gao, I.J. Higginson and M. Maddocks, 'Disability in activities of daily living among adults with cancer: A systematic review and meta-analysis', *Cancer Treatment Reviews*, Vol. 61, 2017, pp. 94-106; European Commission, Union of equality – Strategy for the rights of persons with disabilities 2021-2030, 2021.

441 European Commission, Union of equality – Strategy for the rights of persons with disabilities 2021-2030, 2021.

442 It is worth noting that the 2021 resolution on Discrimination against Persons Living with Chronic and Long-Term Diseases, adopted by the Parliamentary Assembly of the Council of Europe, marked an advancement in addressing health-related discrimination.

443 European Commission, communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - European Disability Strategy 2010–2020: a Renewed Commitment to a Barrier-free Europe, COM(2010) 636, 2010.

444 European Commission, Union of equality: Strategy for the rights of persons with disabilities 2021-2030, website.

445 ibid.

446 ibid.

Box 11: Progress of inclusion of cancer patients and survivors in the Strategy on the Rights of Persons with Disabilities 2021-2030 (Action 36.2)

Cancer patients and survivors were successfully included as persons with disabilities in the Strategy. Also, the practitioner's toolkit for Public Employment Services was published on time.

This action and the resulting adoption of the strategy also directly support the employment-related goals outlined in the EBCP, as discussed in this chapter. One of the objectives of the Strategy is to promote reasonable accommodation in the workplace for persons with disabilities, including those affected by cancer-related impairments. In recognising cancer patients and survivors as part of the broader disability framework, the Strategy reinforces the importance of adapting work environments and work models to support their reintegration and sustained participation in the workforce.

The Action also included the publication of a *Practitioner toolkit on strengthening PES to improve the labour market outcomes of persons with disabilities,* on how Public Employment Services (PES) can promote the participation of persons with disabilities in the labour market [447] and was published on time in 2022. However, the toolkit does not explicitly mention cancer patients and survivors.

Action 36.3: Ensure full implementation of the Directive on work-life balance for parents and carers

Caregiving for a family member with cancer often results in serious financial and employment challenges. Many caregivers are forced to reduce work hours or leave their jobs entirely, while others struggle to balance caregiving with professional or educational responsibilities. The intense demands can blur roles and create stress, with employment becoming an added burden alongside the emotional and physical toll of caregiving.[448] For parents of children with cancer, caregiving challenges are especially severe. The intense care needs disrupt daily life, leading to work-family conflict and role overload. Parents often experience guilt over divided attention between the ill child, siblings, and work. These pressures frequently result in income loss, career interruptions, and increased out-of-pocket expenses.[449]

The Directive on Work-Life Balance (WLBD, Directive) introduces several key measures expected to positively impact workers with caring responsibilities, including those supporting individuals with serious illnesses such as cancer. Among the most significant provisions is the introduction of carers' leave, defined as the right to take five working days per year to provide personal care or support to a dependent relative or child with a serious illness. This leave, compensated at least at the level of sick pay, was recognised as having a potential impact on reduced stress, supporting well-being, and helping workers maintain their connection to employment during challenging caregiving periods. The Directive also encourages Member States to consider adapting leave arrangements and flexible working hours for carers, particularly in cases of long-term illness. Moreover, it strengthens the right

[447] European Commission, European Network of Public Employment Services, Practitioner toolkit on strengthening PES to improve the labour market outcomes of persons with disabilities, 2022, Brussels.

[448] M. Rezaei, S. Keyvanloo Shahrestanaki, R. Mohammadzadeh et. al., 'Caregiving consequences in cancer family caregivers: a narrative review of qualitative studies', Frontiers in Public Health, Vol. 12, 2024.

[449] S. Hjelmstedt, U.M. Forinder, A.M. Lindahl Norberg and E. Hovén, 'A Balancing Act: Working and Caring for a Child with Cancer', *Journal of Child and Family Studies*, Vol. 30,, 2021, pp. 1881-1894.

to request flexible working arrangements, such as reduced hours, flexible schedules, and remote work, which can be essential for those balancing employment with caregiving for cancer patients. Although the Directive has been welcomed as a major step towards equality and improved work-life balance, some stakeholders have raised concerns about its limitations. These include a perceived emphasis on parents of healthy children over adult carers and the absence of a general legal protection against discrimination based on caring responsibilities, an omission with significant implications for families affected by cancer.[450]

Progress of the implementation of the WLBD (Action 36.3)

Since its adoption in 2019, the implementation of the WLBD has progressed at different rates across EU Member States. By the August 2022 deadline, fewer than half had transposed their provisions, and only Austria and the Netherlands achieved satisfactory implementation, while others still presented gaps in regulations (e.g. parental leave, compensation, flexible working arrangements, and legal protection). Although all countries except Ireland eventually introduced legislation, significant disparities remain in full and satisfactory transposition, largely influenced by national political and institutional contexts.

While there has been progress since the Directive's adoption in 2019, implementation remains uneven across EU countries, particularly regarding parental leave and legal protection. Member States were given three years to transpose most of its provisions into national law, with a deadline of August 2, 2022. By the deadline, almost half of the EU countries were behind on implementation, and as of August 31, 2022, only 15 countries had adopted any new legislation to transpose the WLBD.[451] The later assessments in December 2023 still found that some countries had not fully implemented the Directive.[452] While all countries but one introduced new legislation, the study found that only Austria and the Netherlands had satisfactorily transposed the Directive, meaning they largely met its minimum requirements, while others still showed significant gaps in areas such as parental leave and compensation, flexible working arrangements, carers' leave, legal protection against discrimination or dismissal.[453] Between 31 August 2022 and 30 June 2023, ten Member States adopted new legislation to transpose the Directive. Significant progress was also made in other countries, where earlier implementation gaps were reduced.[454] Overall, the findings from Denmark, Germany, and Poland indicate that differences in implementing the Directive largely reflect national actors' motivations and levels of engagement. While the Directive's flexibility supports broader adoption, it also leads to varied application, making its effectiveness dependent

450 M. Tuominen, Work-life balance for parents and carers, Initial Appraisal of a Commission Impact Assessment, EPRS, European Parliament, 2017; N. Milotay, A new directive on work-life balance, Legislation in Progress Briefing, EPRS, European Parliament, 2019; European Commission, Commission staff working document – Impact assessment accompanying the document: Proposal for a directive of the European Parliament and of the Council on work-life balance for parents and carers and repealing Council Directive 2010/18/EU, SWD/2017/0202, 2017.

451 M. De la Corte-Rodríguez, The transposition of the Work-Life Balance Directive in EU Member States: A long way ahead, European Commission, 2022.

452 I. Zumbyte and D. Szelewa, Assessing Compliance: Implementation of EU's Work-life Balance Directive in European Countries. Working paper, TransEuroWork, 2024; M. De la Corte-Rodríguez, The transposition of the Work-Life Balance Directive in EU Member States (II): Considerable work still to be done, European Commission, 2024.

453 M. De la Corte-Rodríguez, The transposition of the Work-Life Balance Directive in EU Member States (II): Considerable work still to be done, European Commission, 2024.

454 ibid.; additionally, in terms of the number of measures introduced, Belgium leads with 123, followed by Germany (117) and Austria (108). In contrast, Italy has introduced only one measure, which is intended solely to transpose the Directive. However, the number of measures introduced does not necessarily reflect a satisfactory level of transposition, as they may be fragmented and fail to cover all the provisions of the Directive; Directive (EU) 2019/1158 national transposition by the Member States.

on domestic political and institutional contexts.[455]

In regard to issues of cancer patients and their careers, all EU Member States provide some form of carers' leave, with eight countries (Austria, Germany, Spain, France, Italy, Luxembourg, the Netherlands, and Sweden) offering multiple types. However, the specific right to carers' leave as outlined in the Directive – five working days per year – has not yet been implemented in a few Member States. Thirteen countries currently meet the minimum standard, while fourteen go beyond it, offering more generous entitlements (10 calendar days to up to two years). The eligibility conditions for carers' leave vary widely across the EU. In 17 countries, the leave covers illness or medical needs; others restrict it to dependency or disability; and some offer broader or more flexible definitions depending on national systems.[456]

3.4.3. Case study the Netherlands: Best practices

Background

The Dutch healthcare system operates through three main schemes: social health insurance for curative care, a national insurance scheme for long-term care, and a tax-funded social care system managed by municipalities. Municipalities oversee services such as cancer screening, vaccination, and health promotion. National screening programmes for breast, cervical, and colorectal cancers are free, voluntary, and coordinated by the National Institute for Public Health and the Environment (RIVM).[457,458,459]

The Netherlands allocates over EUR 5,000 per capita to healthcare, with EUR 308 dedicated to cancer care, which is well above the EU average of EUR 195.[460] It also leads in prevention spending, as it dedicates 4.6% of total healthcare expenditure to prevention, compared to the EU average of 3.4%.[461]

Despite these investments, cancer incidence in the Netherlands remains slightly above the EU average, with 641.4 cases and 277.8 deaths per 100,000 population.[462] While cancer mortality declined by 11% between 2000 and 2019, which is one of the largest improvements in the EU, the overall cancer burden increased by 14% during the same period.[463] Notably, mortality rates for common cancers are lower than the EU average, suggesting effective early diagnosis and treatment.[464]

---

455 B. Pircher, C. de la Porte and D. Szelewa, 'Actors, costs and values: the implementation of the Work-Life Balance Directive', *West European Politics*, Vol. 47, 2023, pp. 543-568.

456 M. De la Corte-Rodríguez, The transposition of the Work-Life Balance Directive in EU Member States: A long way ahead, European Commission, 2022.

457 Integraal Kankercentrum Nederland, Cancer in the Netherlands, website.

458 OECD and European Observatory on Health Systems and Policies, State of health in the EU: the Netherlands – Country Health Profile 2021, 2021.

459 European Observatory on Health Systems and Policies, The health system summary, 2024.

460 CBS, Gezondheidsuitgaven per inwoner op een na hoogste van EU, website.

461 Eurostat, Health care expenditure by function (ICHA-HC), website.

462 OECD and European Commission, EU Country Cancer Profile: Netherlands 2025, 2025.

463 OECD and European Commission, EU Country Cancer Profile: Netherlands 2023, 2023.

464 Integraal Kankercentrum Nederland, Europese vergelijking: vaker kanker in Nederland, website.

Nearly half of cancer deaths are linked to modifiable risk factors such as smoking and alcohol use, both of which are below EU averages.[465,466] However, the healthcare system faces challenges: policy and institutional barriers hinder data sharing, financial fragmentation risks to limit integrated cancer prevention, and behavioural factors contribute to declining participation in screening and vaccination programmes.[467]

Overall assessment: the implementation of the EBCP in the country

The Netherlands has made notable progress in implementing the EBCP, primarily through the launch of the Dutch Cancer Agenda in 2023. This national framework outlines 20 goals aligned with EBCP pillars, to be achieved by 2032.[468] Unlike many EU countries where cancer plans are centrally coordinated by Ministries of Health, **the Dutch Cancer Agenda** is a bottom-up initiative led by field organisations and patient groups, with central coordination by the Dutch Cancer Collective. The Ministry of Health, Welfare and Sport (VWS) plays a supportive role, contributing through legislation (e.g. tobacco control), participation in EU forums, and coordination via a temporary cancer-specific taskforce under the "Connection and Approach to Cancer" initiative. This taskforce supports action plans on work and cancer, quality of life, and palliative care.

The **Cancer Impact Barometer** tracks the Agenda's progress toward the 2032 goals. While some progress is evident, most targets are not yet on track. Prevention efforts, especially reducing smoking, alcohol use, and UV exposure, are lagging. Early detection and treatment innovation are also progressing slowly. Currently, four of the 20 goals have been developed into action plans by acceleration teams. These focus on smoking behaviour, early detection, rare cancers, and work and cancer. The work and cancer action plan, specifically, has fostered collaboration among national stakeholders on the topic. Other successful examples are the "right to be forgotten" policy, allowing cancer survivors who have been cancer-free for five years to access financial products such as mortgages without penalty. Implementation appears to be complex due to the fragmented landscape, requiring coordination among diverse actors.

The Netherlands participates in **five EU4Health Joint Actions** launched under the EU's cancer agenda. These initiatives support national efforts in screening, data monitoring, radiation safety, and comprehensive cancer care.[469,470,471,472,473,474]

---

465 Eurostat, Daily smokers of cigarettes by sex, age and educational attainment level, website.

466 European Commission, European Cancer Inequalities Registry. Quantity of alcohol consumption (2019) by country, website.

467 European Commission, Open Evidence and PwC EU Services, Study on mapping and evaluating the implementation of the Europe's Beating Cancer Plan. Annex 5, Country factsheets, 2025.

468 Nederlands Kanker Collectief, De Nederlandse Kanker Agenda – 20 doelen om de impact van kanker op de samenleving te verminderen, 2023.

469 These are: the European Joint Action on Cancer Screening (EUCanScreen), Joint Action Networks of Expertise on Cancer (JANE-2), Joint Action on Contribution to the Cancer Inequalities Registry to Monitor National Cancer Control Policies (OriON), Preparatory Activities to Support Implementation of Quality and Safety of Medical Ionising Radiation Applications (PrISMA), and the European Network on Comprehensive Cancer Centres (EUnetCCC JA).

470 RIVM, EUCanScreen, website.

471 JANE-2, Home, website.

472 European Commission, OriON – Joint Action on Contribution to the Cancer Inequalities Registry to Monitor National Cancer Control Policies Across Europe, website.

473 RIVM, SAMIRA-PrISMA, website.

474 ECC-Cert, European Cancer Centre Certification Programme, website.

In addition, the Netherlands is actively involved in **27 Horizon Europe research projects** (2021-2023) aligned with Europe's Cancer Mission. These projects span areas such as cancer screening and early detection, understanding cancer development and progression, and improving quality of life for patients and survivors.[475,476,477]

Description of the initiative

Under the Dutch Cancer Agenda, several initiatives have been launched to improve cancer care and support, particularly in the area of work and survivorship.

Re-turn is a national initiative focused on helping individuals affected by cancer reintegrate into the workforce. It offers personalised coaching to employees, self-employed individuals, and those receiving sickness benefits, and advises employers and HR professionals. The programme addresses the need for support during and after treatment and a diagnostic tool to assess work capacity and guide phased return-to-work plans. Re-turn promotes early intervention and workplace involvement. It has been recognised as one of eleven European best practices in cancer and work.[478]

"We zetten werk in als medicijn" is a national awareness campaign launched by Pfizer Netherlands and partners. It promotes the idea that work contributes positively to recovery and quality of life. Through interviews, expert discussions, and storytelling, the campaign engages healthcare professionals, employers, and patient organisations to shift cultural perceptions and reduce stigma around working during or after cancer treatment. By embedding work-focused care within the clinical setting, patients receive support that addresses both medical and occupational challenges.[479]

Last, **EU NAVIGATE is a Horizon Europe-funded initiative** piloted in Amsterdam. It evaluates the effectiveness of NavCare-EU, a navigation intervention for older adults with cancer and their carers. Trained volunteer navigators support patients in accessing care and improving quality of life. The Dutch model includes community-based navigators and hospice "buddy" programmes, which contribute to a more person-centred care approach.[480,481]

Key outcomes and impact of the initiative

Re-turn urges individuals to seek support soon after treatment, which enables coaches to assist with recovery and reintegration. There have been many successful stories of (ex-)cancer patients that have experienced improved reintegration on the workfloor, as well as more and more practitioners who refer their clients to Re-turn.[482] Even though no long-term results of the initiative have been published, studies of multidisciplinary return-to-work interventions in the Netherlands

---

475 European Health and Digital Executive Agency, 2023 EU Cancer Mission projects, website.

476 European Health and Digital Executive Agency, 20 research projects selected for funding to support the EU Mission on Cancer, website.

477 European Health and Digital Executive Agency, 12 research projects selected for funding to support the EU Mission on Cancer, website.

478 Re-turn, Re-integratiebegeleiding spoor 1 en 2 website.

479 Pfizer Nederland, We zetten werk in als medicijn, website.

480 European Cancer Organisation, EU NAVIGATE project, 2022.

481 T. Smets, L. Pivodic, R. Miranda et al., 'Implementation and evaluation of a navigation program for people with cancer in old age and their family caregivers: study protocol for the EU NAVIGATE International Pragmatic Randomized Controlled Trial', *Trials,* Vol. 25, BMC Publishing Group, 2025, 800.

482 Re-turn, Blog, website.

show that 59% of cancer patients returned to work within six months of starting such a programme, rising to 86% at 12 months and 83% at 18 months. These interventions also led to significant improvements in work ability, self-efficacy, and quality of life, while reducing fatigue. A budget impact analysis found that RTW interventions are cost-saving from a societal perspective, as productivity benefits outweigh intervention costs.[483]

"We zetten werk in als medicijn" has shown that integrating clinical occupational physicians into oncology care teams significantly improves return-to-work outcomes for cancer patients. At University Hospital Radboudumc, this approach has supported over 325 individuals in staying at work, returning to work, or finding meaningful alternatives. The collaboration between healthcare and occupational services enhances the quality of care and helps prevent long-term work absence.[484]

The **EU NAVIGATE trial** is ongoing, and evaluation of the (cost-)effectiveness of the programme will be studied until 2027.[485] However, early evidence from the USA and Canada shows that patient navigation in cancer care is effective in the early stages, improving uptake of and adherence to cancer screenings, timely diagnosis, completion rates for therapy, and attendance at medical appointments.[486,487] Its effectiveness in supportive, palliative, or end-of-life care, especially for older adults, remains less clear.[488] In addition, the Canadian Nav-CARE programme, on which NavCare-EU is based, has demonstrated feasibility and positive feedback, with reported benefits including increased social support, better navigation of healthcare systems, improved knowledge of available services, and enhanced quality of life and wellbeing.[489] Stakeholders of EU NAVIGATE indicated navigators help patients bridge gaps in communication and understanding between patients and the healthcare system, particularly for older adults who may experience isolation.[490]

Key takeaways: success factors and lessons learnt

The success of cancer-related initiatives in the Netherlands follows a decentralised, bottom-up and stakeholder-led model. According to interviewees, this inclusive approach ensures that all stakeholders feel 'heard', which has led to broad engagement across sectors and stakeholders.

Re-turn has success with its multi-stakeholder, tailored approach to return-to-work support. Its early stage, personalised coaching to employees, including the self-employed, and guidance to

---

483 M.C.J. Leensen, I.F. Groeneveld, I.V.D. Heide, T. Rejda, P.L.J. Van Veldhoven, S.V. Berkel et al., 'Return to work of cancer patients after a multidisciplinary intervention including occupational counselling and physical exercise in cancer patients: A prospective study in the Netherlands', *BMJ Open*, Vol. 7(6), BMJ Publishing Group, 2017, Article e014746.

484 Pfizer Nederland, We zetten werk in als medicijn, website.

485 EU Navigate, Brochure, website.

486 K.B. Roland, E.L. Milliken, E.A. Rohan, A. DeGroff, S. White, S. Melillo et al.,, 'Use of community health workers and patient navigators to improve cancer outcomes among patients served by federally qualified health centers: a systematic literature review', *Health Equity*, Vol. 1(1), Sage Journals, 2017, pp. 61–76.

487 B.M. Bernardo, X. Zhang, C.M. Beverly Hery, R.J. Meadows and E.D. Paskett, 'The efficacy and cost-effectiveness of patient navigation programs across the cancer continuum: A systematic review', *Cancer*, Vol.125(16), John Wiley & Sons, 2019, pp. 2747–2761.

488 ibid.

489 B. Pesut, W. Duggleby, G. Warner et al., 'A mixed-method evaluation of a volunteer navigation intervention for older persons living with chronic illness (Nav-CARE): findings from a knowledge translation study'. *BMC palliative care*, Vol. 19(1), BioMed Central Limited, 2020, p. 159.

490 EU Navigate, Stakeholder forum report, 2024.

employers and medical professionals, is an important success factor. In addition, its social insurance coverage ensures accessibility to its services.[491]

"Werk als medicijn's" success factors include the embedding of clinical occupational physicians in treatment teams, who engage in multi-stakeholder partnerships, where the first also secured structural funding for their work. These efforts have had positive effects on work retention and cancer-related quality of life.[492]

EU NAVIGATE shows that co-design with patients and community partners, robust training for lay navigators, and flexible implementation are key to success. The model effectively addressed gaps in cancer care for older adults, which enhances quality of life and support of cancer patients.[493]

The Dutch approach to cancer control demonstrates how decentralised, stakeholder-led models can drive innovation and inclusivity. Success has been achieved through early, personalised support, integration of occupational health into clinical care, and strong collaboration across sectors.

3.4.4. Case study Denmark: Advancing patient-centred cancer care

Background

Denmark's healthcare system operates on three administrative levels: state, regional, and municipal, within a collaborative rather than hierarchical structure.[494] In 2021, Denmark's healthcare expenditure per capita stood at EUR 4,325, above the EU27 average of EUR 4,029. Healthcare spending as a share of GDP was 10.8%, slightly below the EU27 (11%). Cancer-preventive healthcare spending accounted for 5.1% of total health expenditure in 2022, more than double the pre-pandemic level of 2.2% (2019).[495] The system faces workforce shortages, particularly in general practice, hospital specialities, and nursing.[496]

Denmark has one of the highest cancer incidence rates in Europe, which could be partially attributed to extensive cancer screening programmes.[497] Still, cancer is the leading cause of death in Denmark, accounting for over a quarter of all deaths. Lung cancer remains the most common cause of cancer death, followed by colorectal, prostate, breast, and lung cancers.[498] Although incidence rates are high, cancer survival has improved in recent decades due to advances in treatment and earlier diagnosis.[499] Despite these gains, Denmark continues to report higher cancer mortality rates than Norway or Sweden.[500]

---

491 European Commission, Ecorys, Study on job retention and return to work for cancer patients and survivors – Final study report, 2024.

492 Pfizer Nederland, We zetten werk in als medicijn, website.

493 European Cancer Organisation, Patient navigation: the path towards reduced cancer inequalities in Europe? – EU Navigate Stakeholder Forum report, 2024.

494 H.O. Birk, K. Vrangbæk, A., Rudkjøbing et.al., Denmark: Health System Summary, 2024, 2024.

495 OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Denmark: Country Health Profile 2023, 2023. OECD and European Commission, EU Country Cancer Profile: Denmark 2025, 2025.

496 OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Denmark: Country Health Profile 2023, 2023.

497 ibid.

498 OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Denmark: Country Health Profile 2023, 2023. OECD and European Commission, EU Country Cancer Profile: Denmark 2025, 2025.

499 OECD and European Commission, EU Country Cancer Profile: Denmark 2025, 2025.

500 ibid.

Currently, Denmark is undertaking its most extensive health reform in two decades, focused, inter alia, on technology, with goals to expand home-based care, remote monitoring, and patient empowerment through digital tools.[501] Digital Health Denmark is central to this effort. From 2026, it will lead the development and deployment of new digital infrastructure.[502]

Overall assessment: the implementation of the EBCP in the country

The reform closely aligns with **National Cancer Plan V** (adopted in May 2025), which emphasises the use of technology to enhance treatment quality, patient involvement, and healthcare efficiency.[503] Key initiatives include updating Cancer Patient Pathways,[504] integrating patient-reported outcomes (PRO), and ensuring that digital solutions support personalised, high-quality cancer care while easing the burden on healthcare staff. Altogether, the financial framework for the National Cancer Plan V has been set to DKK 600 million (80,4 million EUR) annually.[505] Partially because of that, Denmark has not given high priority to the EBCP within its national cancer planning, due to its already established Plan and perceived strong performance in the field. The country views itself as largely self-sufficient, relying on public funding and nationally driven initiatives. As a result, Denmark has shown limited interest in EU-level frameworks. However, there remains openness to targeted collaboration, particularly in scientific projects where mutual learning and knowledge exchange can be of value. Denmark has also participated in **one Joint Action** under the first set of initiatives, but expanded its engagement in the second round to **six 6 JAs**. Denmark also **coordinates the PREMIO COLLAB project under Horizon Europe**, which focuses on personalised response monitoring and co-creation of clinical trials in advanced breast cancer.[506] In addition, Denmark is involved in **several EU4Health** projects under EBCP, including EUnetCCC,[507] EUCanScreen,[508] CAN.HEAL,[509] and PCM4EU.[510]

Description of the initiative

The MyPath initiative exemplifies EBCP implementation activities concerning the cancer workforce, as it offers a concrete, domestically developed solution that directly addresses several workforce-related challenges within Denmark's cancer care system. It is an initiative that aims to provide a solution for standardised patient assessment in cancer care, primarily focused on improving the health-related quality of life for patients. It functions as a digital support tool for

501 European Observatory on Health Systems and Policies, Denmark health system summary 2024, 2024.
502 ibid.
503 Ministry of the Interior and Health, A better life with and after cancer, Cancer Plan V, 2025.
504 A Cancer Patient Pathway serves as a roadmap for cancer care, allowing GPs to fast-track patients with alarm symptoms directly to hospital-based care. Denmark has been developing these detailed descriptions for over 20-25 years, covering all major cancer groups, including organ-specific cancers, and even packages for diagnosing cancers of unknown origin or metastases. There are approximately 24 different cancer package courses in Denmark; All.Can, Danish Cancer Patient Pathways: three-legged strategy for faster referral and diagnosis of cancer, website.
505 Ministry of the Interior and Health, A better life with and after cancer, Cancer Plan V, 2025.
506 European Commission, Cancer projects tool, website.
507 EUnetCCC Joint Action, European network of Comprehensive Cancer Centers, website.
508 European Joint Action on Cancer Screening, assuring sustainable implementation of high-quality screening for breast, cervical and colorectal cancer, as well as investigating the implementation of screening programmes for lung, prostate and stomach cancer.
509 CAN.HEAL focuses on building an EU genomics platform for cancer and public health, promoting personalised approaches and data-sharing in cancer care.
510 PCM4EU: Personalised Cancer Medicine for all EU citizens European Commission, aims to improve the survival rates and quality of life of cancer patients in the EU using Personalised cancer medicine based on best practices.; European Commission, EU4Health Projects, Europe's Beating Cancer Plan, Denmark, website.

clinicians that enables them to better understand and address patient needs by incorporating the patient's perspective into treatment decisions and streamlining the whole process.

MyPath is a Horizon Europe-funded research 5-year-long research project launched in 2022 that aims to transform cancer care by implementing digitally supported, patient-centred care pathways (PCCPs) across nine European cancer centres. Its central aim is to implement PCCP into routine cancer practice across Europe by developing digital standardised care pathways (SCPs): structured, evidence-based care plans tailored to the individual needs, driven by PROs, which feed real-time data on symptoms. These SCPs are supported by health information technology (HIT) for efficient, standardised, and cost-effective care delivery. As such, it aims to demonstrate not only that patient-centred care can be systematically integrated into routine cancer care but also to identify how it can be scaled and sustained across different healthcare systems.[511]

In practice, there are three steps to use MyPath:

- After their first clinical visit, patients are invited to join MyPath and, if they consent, receive secure access via a government-issued email and code.
- Patients complete a personalised digital questionnaire, with questions tailored to their symptoms and well-being.
- Clinicians review the responses before the next consultation, allowing for more focused, patient-centred care.

MyPath is a multi-partner initiative involving 14 organisations and 9 cancer centres, including Denmark's Rigshospitalet[512], which contributes across all project phases.[513] Using an agile, co-creation model, the project brings together professionals from oncology, palliative care, IT, and other disciplines, along with patients and caregivers.[514]

Key outcomes and impact of the initiative

While the project is still ongoing (until 2027), several **interim results** offer insights.

The development of the system and tools was initiated in response to a recognised challenge: the lack of systematic and standardised patient assessment in clinical practice, despite widespread recommendations supporting it. The development process was interdisciplinary, involving physicians, nurses, social workers, and psychologists to include a diversity of perspectives and a tool best-suited for clinical practice. As such, clinicians from participating units were key in that process, e.g. shaping the assessment pathways, contributing to the wording of questions and identifying the types of information needed for patient follow-up. The design incorporated focus groups and interviews with both patients and healthcare professionals. This process helped to make sure that the instrument's acceptability and usability, leading to refinements. The goal was to create something that users would "want to use" and find helpful. A major priority was to keep the system simple and intuitive for all users. It was also designed to be flexible and adaptable to specific

511 A. Urrizola, A. Brkic, A. Caraceni et al., 'MyPath: the Roadmap to Implementing Patient-Centred Care', *Academia Oncology,* Vol. 2(1), Academia.edu Journals, 2025; MyPath, Implementation, website.

512 Rigshospitalet is the largest public and teaching hospital in Copenhagen and the most specialised hospital in Denmark.

513 MyPath, Partners, website.

514 MyPath, Implementation, website.

populations, clinical settings, and cultural contexts. For example, clinicians have the option to send tailored modules to patients based on their individual needs for their subsequent visits.[515]

Key takeaways: success factors and lessons learnt

Several factors contribute to the success of the project. First, there is a widespread belief in the importance of everyone involved. The active participation of both clinicians and patients in designing the tool supported its relevance, usability, and acceptability. Its technological approach: allowing patients to complete assessments from home, is seen as potentially "revolutionary," as it optimises consultation time and helps patients better articulate their needs. Furthermore, **MyPath** supports remote monitoring, enabling patients to remain at home longer, which aligns with broader goals of improving quality of life and reducing strain on public health resources. At the same time, the project has provided insights into the complexities of implementing new healthcare technologies and fostering cross-border collaboration. Interdisciplinary teamwork proved essential, with each professional group bringing unique and complementary perspectives. Here, strong relationships with clinical staff were critical to successful implementation. Retaining qualified research staff was a challenge, with turnover risking loss of expertise and funding setbacks; protected time for clinical staff involvement in research would help, but it needs dedicated resources. Collaboration between the centres was particularly valuable, offering practical solutions on ethics protocols and patient recruitment timing, and helping to build a broader network for future joint projects. Administrative and bureaucratic hurdles are substantial, particularly for technological projects, so good working relationships with clinical staff are key for project success and implementation.

[515] ibid.

4. EBCP impact on cancer inequalities

Key findings

- Data updates on European Cancer Inequalities Registry have been progressing in line with the Roadmap;
- eCAN[516] was finished and eCAN+ continues the work on eHealth;
- Established a Resilience Testing and Support Programme and published a handbook on a resilience testing methodology;
- EUCanScreen[517] has been launched in 2024, aiming at assuring sustainable implementation of screening for breast, cervical, colorectal, lung, prostate and gastric cancers.

4.1. Introduction

Cancer inequalities manifest across many dimensions. The most discussed and researched aspect concerns disparities in cancer outcomes between countries. However, inequalities also exist between sexes, age groups, and socio-economic categories. The multifaceted nature of these inequalities, combined with their potentially fatal consequences, makes the topic both urgent and complex. This complexity, in turn, poses significant challenges to producing a comprehensive overview of cancer inequalities. Despite the limitations imposed by data availability, adopting a holistic approach to studying these inequalities is essential. The **structure** of the healthcare system affects the **process** and the **quality** of the care, which then determines the **outcomes** of the healthcare. Socio-economic determinants, environmental, biological and institutional factors could determine cancer incidence and care while cancer inequalities could be measured and studied in terms of differences in incidence, survival, mortality, and aftercare. Moreover, inequalities can be studied vertically and horizontally.[518] For example, men and women may receive equal quality of care (horizontal equality) but among men those who suffer from more severe symptoms may receive treatments earlier (vertical equality). The highly complex landscape of the whole continuum of cancer pathway presents a challenge to a systematic and comprehensive analysis of cancer inequalities but also highlights the importance of a better understanding of cancer inequalities from which the EU can achieve better cancer outcomes.

[516] eCAN, Official Website, website

[517] European Commission, Implementation of cancer screening programmes - EUCanScreen, website.

[518] R. Raine, R. Fitzpatrick, H. Barratt et al., 'Challenges, solutions and future directions in the evaluation of service innovations in health care and public health', *Health Services and Delivery Research*, Vol. 4(16), NIHR Journals Library, 2016.

On cancer inequalities, the EBCP has specified four actions:

- **Action 37**: (1) Establish a Cancer Inequalities Registry to map inequalities between Member States and regions (flagship initiative); (2) Reducing health inequalities through zero pollution: Regularly feed pollution monitoring and outlook data into the European Cancer Inequalities Registry (ECIR);
- **Action 38**: (1) Strengthen e-health, telemedicine and remote monitoring systems; (2) promote the virtual consultation model of the European Reference Networks (ERNs);
- **Action 39**: Improve resilience, accessibility and effectiveness of EU health systems to safeguard provision of cancer care in future health crises through (1) establish a Resilience Testing and Support Programme; (2) establish guidelines on access to healthcare for people with disabilities, including cancer; and (3) Monitoring implementation of health components of Recovery and Resilience Plans (RRPs) including on cancer;
- **Action 40**: Mainstream equality action in areas addressed by the EBCP such as screening and high-quality cancer care.

Despite the emphasis by the European plan, cancer inequalities might have been neglected by national governments in their national cancer plans. Table 14 presents a comparison of national cancer plans by summarising information provided in the OECD EU Cancer Country Profiles 2025.[519] While national plans in general align with the EBCP in a sense that they include the corresponding pillars, they do not always address cancer inequalities (only seven of them dedicate a specific section to cancer inequalities).

[519] OECD and the European Commission, EU Country Cancer Profiles Synthesis Report 2025, 2025.

Table 1414 – Comparison of latest national cancer plans

Latest national cancer plan or action plan began	Country	Alignment with EBCP pillars				Cross-cutting themes in the EBCP		
		Prevention	Early Detection	Diagnosis and treatment	Quality of Life	Cancer Inequalities	Paediatric Cancer	Research and Innovation
Before 2020								
2014	Austria							
2014	Lithuania							
2017	Ireland							
2017	Malta							
2018	Hungary							
2019	Germany							
2019	Cyprus							
After 2020								
2020	Luxembourg							
2020	Poland							
2021	Estonia							
2021	France							
2021	Slovakia							
2021	Spain							
2022	Czech Republic							
2022	Latvia							
2022	Romania							
2022	Slovenia							
2023	Bulgaria							
2023	Italy							
2023	Netherlands							
2023	Portugal							
2024	Croatia							
2025+								
2025	Belgium							
2025	Denmark							
2025	Finland							
2025	Greece							
2025	Sweden							

* Green: includes a specified section; Yellow: the topic is included in a section but not the sole focus; Red: the topic is not included in a section; Grey: not yet defined in the upcoming or updated strategy
** Sweden's alignment is based on the 2009 National Cancer Strategy
Source: OECD Country Cancer Profiles 2025.

This lower prioritisation and allocation of resources in addressing disparities is also reflected at a sub-national level. The Alleanza Contro il cancro (Alliance Against Cancer), a network founded by the Italian Ministry of Health in 2002 consists of various agencies, institutions, organisations and 27 Institutes for comprehensive cancer patient care and research (IRCCS).[520] The Alliance Against Cancer conducted a survey among the 27 IRCCS to understand how they are prioritising the aims in the EBCP to get a sense of whether there is a streamlined interest, actions, and strategies at a hospital level. Survey results showed that digitisation and improved therapeutic treatments were consistently ranked as a high priority for IRCCs. Addressing disparities in cancer was the lowest ranked priorities on average among all institutions. The Joint Action OriON (Joint Action on Contribution to the Cancer Inequalities Registry to Monitor National Cancer Control Policies)

[520] Alleanza Contro il Cancro, Official website – the widest Italian oncology research network, website.

assesses both the implementation of the EBCP at national level, and provides an updated overview of national cancer control plans.[521] This overview, conducted throughout 2024, analysed alignment with the European Guide for Quality National Cancer Control Programmes, developed by the previous EPAAC Joint Action (European Partnership Action Against Cancer). The analysis showed that a vast majority of Member States included the main pillars of the EBCP in their national cancer control plans.

The analysis aims to verify if the EBCP helps to reduce cancer inequalities. To this end, the study analyses the current status of cancer inequalities in the EU and the allocation of EU funding across the Member States. Furthermore, the study assesses the development and use of ECIR, mainly on the basis of the comments by interviewees who have first-hand experience of either developing or using the data and other tools hosted by the ECIR. On the advancement of telemedicine or eHealth (Action 38), the study investigates the relationship of a country's existing digital health development and its involvement in EU-funded telemedicine or eHealth-related cancer projects. Estonia has been chosen as a case study for the development of eHealth. On the consolidation of health systems (Action 39), the study focusses on the investment of the Member States in enhancing their health systems. Under this action, Italy and Poland have been selected as case studies. On the mainstreaming equality action (Action 40), we report the screening rates of different types of cancer and the proportion of the Member States having public awareness campaigns, before introducing two important EU-funded initiatives, EUCanScreen and #GetScreenedEU. Croatia has been chosen as the case study country.

4.2. EU cancer inequalities

The EBCP aims to address cancer inequalities across the entire disease pathway, from prevention, diagnosis, treatment to aftercare. As cancer could be associated with different external factors, it is a multidimensional issue that involve the pathway, the contributing factors, and measures of cancer outcomes. The scope of this study is however limited and it does not aim to provide a comprehensive analysis of how EBCP responds to cancer inequalities manifested in each of these dimensions and their interactions. Rather, the study focuses on the evidence that could be related to EU-funded projects or the general allocation of EU funds across countries.

A recent report published by the Committee of the Regions highlights the fact that mortality inequalities between European regions is only partially explained by income level, air pollution and healthcare support, suggesting a significant part of the inequalities is due to policies and institutional factors.[522] Education has been pointed out as one of the main reasons that lower-education individuals have higher mortality rates for nearly all cancer types.[523] For HPV-related cancer, lack of

[521] European Commission, *OriON: Joint Action on Contribution to the Cancer Inequalities Registry to Monitor National Cancer Control Policies*, website.

[522] C. Lenz, A. Maj, H. Vu, T.Y.-C. Yeung and K. Zubel, Cancer: repository of regional prevention and detection policies, Study at the request of European Committee of the Regions, European Committee of the Regions, 2025.

[523] S. Vaccarella, D. Georges, F. Bray, O. Ginsburg, H. Charvat, P. Martikainen et al., 'Socioeconomic inequalities in cancer mortality between and within countries in Europe: a population-based study', *The Lancet Regional Health – Europe*, Vol. 25, Elsevier, 2023, 100551.

awareness and vaccine hesitancy are mentioned as the major driving factors for inequalities.[524] For colorectal cancer, the main reason discussed in the literature is the lack of screening programmes or poor response to screening programmes.[525]

The criteria for allocating the EU funding supporting the EBCP, vary across funding instruments. For instance, while some instruments incorporate objectives such as reducing inequalities others prioritize goals like scientific advancement and innovation[526] or fostering broader economic and social cohesion across the Union[527]. Our analysis assesses how funds are allocated in relation to cancer burden in EU countries. It is nevertheless important to emphasize that funding distribution does not inherently align with the needs of countries or regions to address these disparities.

To obtain information on how resources are allocated across the EU Member States for cancer-related projects, we collect quantitative data from the EU Cancer Projects Dashboard, which is a harmonised dataset that records all cancer-related projects funded by the European Commission since 2014.[528]

Allocating funds to Member States with heavier cancer burden would likely contribute to reducing cancer inequalities in the future. The following aims to check if the current EU funds towards cancer projects have been allocated to countries with heavier cancer burden. Figure 7 plots cancer project involvement, measured by total approximated funds allocated to cancer projects received by a Member States (only projects started since 2021) per 1 million population,[529] and cancer mortality rates (2021), which is taken as a measure of cancer burden of a country. The data suggest that there is no positive relationship between cancer mortality rates and funding allocation, as countries with greater cancer burdens have not received more financial support. While we acknowledge that not all projects are directly related to the EBCP or aimed at reducing cancer inequalities, this pattern raises questions about whether the funds would narrow between-country cancer inequalities. If countries with higher cancer burdens are less involved in the EBCP in terms of receiving budget for projects, the plan may inadvertently reinforce existing disparities rather than addressing them. Further analysis should examine how funds are allocated. To reduce cancer inequalities, the EU should prioritize targeted funding strategies that align with the severity of national cancer challenges.

---

524 E. Karafillakis, C. Simas, C. Jarrett, P. Verger, P. Peretti-Watel, F. Dib et al., 'HPV vaccination in a context of public mistrust and uncertainty: a systematic literature review of determinants of HPV vaccine hesitancy in Europe', *Human Vaccines & Immunotherapeutics*, Vol. 15(7-8), Taylor & Francis Online, 2019, pp. 1615-1627.

525 A. Pousette and T. Hofmarcher, Tackling inequalities in cancer care in the European Union, 2024.

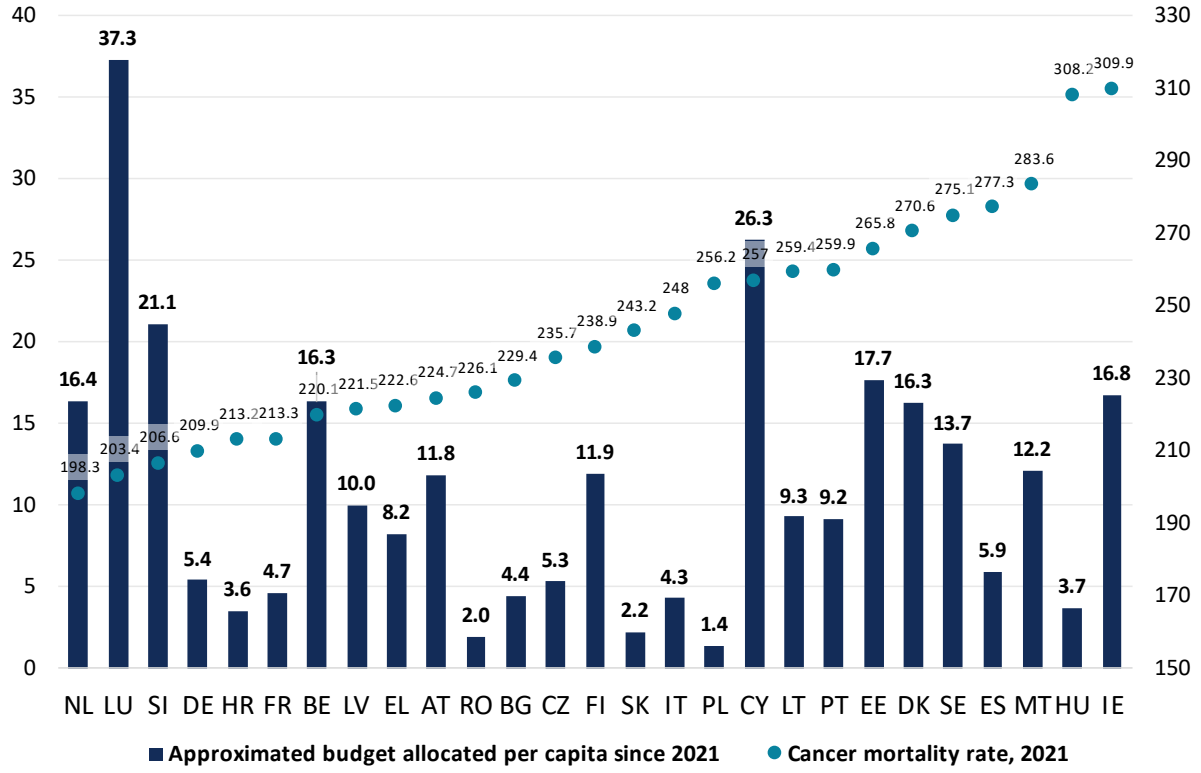
526 Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013, Article 3.

527 European Parliament and Council of the EUCouncil of the European Union, Regulation (EU) 2021/1058 of the European Parliament and of the Council of 24 June 2021 on the European Regional Development Fund and on the Cohesion Fund, PE/48/2021/INIT, 2021, pp. 60–93.

528 The data can be found here: European Commission, Cancer projects dashboard, website. The latest version, updated in January 2025, includes 4 016 projects, representing over EUR 7 billion maximum EU contributions. The spending is increasing in recent years. Since 2021, EUR 3.6 billion maximum EU contributions have been allocated to more than 1 600 projects.

529 We use the data made available by EU Cancer Projects Dashboard. Each project's information contains all the partner institutions and their origin countries together with the total amount of EU contribution. Yet it does provide the breakdown of the total budget among partners. To proceed, we assume that the budget is equally shared between partnering countries (even if more than one institutions are involved in a project). Therefore, the amount of funds directed to a country is only an approximation.

Figure 7 – Relationship between cancer mortality rate and involvement of cancer projects (since 2021)



Source: EU Cancer Projects Dashboard, European Cancer Inequalities Registry.

Note: The biggest programme is Horizon Europe (EUR 2.5 billion), followed by Horizon 2020 (EUR 621 million), EU4Health (EUR 378 million) and Digital Europe (EUR 25 million).

4.3. Action 37: Establish a Cancer Inequalities Registry to map inequalities between Member States and regions

The ECIR was established as one of the flagship initiatives of the EBCP to provide the tools and space to monitor trends and disparities within the European region.[530] The ECIR helps identify disparities in cancer prevention and care, providing valuable data to guide investments and interventions. The central data tool, with a growing number of inequality dimensions and indicators covering the whole cancer continuum, was launched in February 2022, and subsequently two sets of country cancer profiles (2023 and 2025) and one horizontal report (2024) covering cancer prevention and care were released.

Launched as a collaborative effort between the European Commission (DG SANTE), the Joint Research Centre (JRC), the OECD, and the International Agency for Research on Cancer (IARC), the Registry provides a centralised platform to track cancer incidence, prevalence, mortality, and related outcomes. What sets the ECIR apart is its ability to disaggregate data by key socioeconomic

[530] European Commission, ECIR – European Cancer Inequalities Registry – Policy context, website.

variables such as sex, age, education level, employment status, and urbanisation, offering a multidimensional view of inequality across the cancer care continuum.

The Registry presents its data through a suite of user-friendly tools, including interactive dashboards, country profiles, factsheets, and analytical reports. These resources draw on the European Statistical System and Member State inputs, with ongoing plans to expand the data sources.

Stakeholders involved in the collaboration describe it as highly effective, supported by regular meetings and consultations, and shared copyright. Over the past three years, stakeholders expressed that growing trust among partners has fostered stronger collaboration, leading to improved engagement and more effective coordination with countries. The ECIR governance structure consists of four principal meetings per year, which bring together representatives from all Member States.

The ECIR has been widely welcomed by national authorities and experts, particularly for its comparative functionality. Particular value is placed on the ability of the platform to compare across indicators, which is viewed as distinct and innovative for clearly viewing inequities between countries to inform decision making and prioritisation at a national level. The inclusion of socioeconomic disaggregation is also viewed as an important feature that supports deeper understanding of cancer-related disparities across countries. The fact that the Registry provides an integrated source of various cancer-relevant data is inherently valuable to facilitate comprehensive monitoring of inequalities.

Beyond data, the Registry provides national cancer profiles, developed in partnership with OECD, that highlight each country's progress and gaps in addressing cancer as a public health challenge. Interviewed stakeholders highlighted the practical use of these tools. In France, for example, national stakeholders became aware of the low participation in colorectal cancer screening in country and used the data presented in the Country Cancer Profile to support the development of national awareness raising campaigns. According to internal confidential assessments, 80% of the stakeholders claimed that they use the national profiles in their work and advocacy.[531] The information provided by the ECIR helps to identify strengths and weaknesses across countries, thereby supporting the implementation of other EU health initiatives. For example, by revealing gaps in screening uptake, it can guide efforts to advance the implementation of the EU Council Recommendation on cancer screening and its ambitious goal of offering breast, cervical, and colorectal cancer screening to 90% of the eligible EU population by 2025.

However, awareness and use of the ECIR varies based on feedback from interviewed stakeholders. In general, national level authorities and experts interviewed were aware of the platform and described using the ECIR in policy work and advocacy. This includes applying ECIR data to policy adjustments, advocacy, and decision making. Those familiar with the tool underscored the practicality and applicability of the information available on the Registry. Other stakeholders, particularly from civil society or subnational level institutions, indicated lower levels of awareness but expressed high interest in understanding how to integrate and apply the ECIR in their respective work. One suggestion made was to host virtual learning sessions for awareness raising and skill

[531] This is shared by an interviewee. The internal assessment documents are however not shared with the authors.

building on the practical application of the ECIR among national level stakeholders including non-state actors and civil society.

Due to the differences in the national information systems, data collection is not always smooth or consistent across Member States. The data available on the platform are often a few years old. The frequency of updating reflects the difficulties in standardising and collecting data between the EU Member States. To address this, the OECD and the European Commission aim to conduct trainings and guidance for Member States to improve data reporting. For example, the most recent mortality data available date back to 2021, limiting the Registry's relevance for time-sensitive decision-making. Improved timeliness in data availability would enhance the ability to conduct trend analyses, thereby supporting more informed and responsive policymaking.

Box 12: Progress on ECIR (Action 37)

The progress on the ECIR is good, following the schedule of the Roadmap.[532] First of all, the ECIR has already been published with age dimension added. Country Cancer Profiles have been published bi-yearly in 2023 and 2025. The publication 'Beating Cancer Inequalities in the EU: Spotlight on Cancer Prevention and Early Detection' was published in January 2024 as planned. The development of socio-economic indicators has been integrated in the Cancer Performance Tracker. On Action 37.1 – reducing health inequalities through zero pollution. Environmental indicators have been included and the impact of pollution on cancer has been explored in Country Profiles. Together with data, 17 factsheets have been published in several languages.

(Source: ECIR, Authors' interpretation and European Commission[533])

Interviews reveal that while the ECIR provides an easy 'takeaway' for policymakers, researchers commented that, at its current state, it lacks utility for advancing academic research or supporting rigorous, evidence-based policymaking. The successful inclusion of socio-economic factors into one single data repository is considered an important step,[534] but the aggregation level does not allow matching determinants to outcomes at a more micro level or even individual level, which is the gold standard of medical research. In this regard, the planned EHDS could complement the ECIR by enabling more in-depth analysis through access to individual-level data, potentially transforming how cancer inequalities are understood and addressed across the EU.

Most Registry variables are aggregated nationally, useful for cross-country comparisons. However, experts stress the need for more detailed regional data (e.g. NUTS-2 level) to better assess cancer inequalities and service access within countries. Collecting such data is complex and costly, especially in countries with decentralised healthcare systems like Belgium.[535] Some Member States lack the resources or infrastructure for consistent data collection. The OECD provides guidelines and tools to aid standardisation but there is no dedicated funding. Regular data updates are also

532 European Commission, Europe's Beating Cancer Plan: Implementation Roadmap, 2024.

533 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025, p. 28.

534 T. Alberht, 'Europe's beating cancer plan, a new step towards more comprehensive and equitable cancer control in Europe', *European Journal of Public Health*, Vol. 31(3), Oxford University Press, 2021, pp. 456-457.

535 J. De Maeseneer and A. Galle, 'Belgium's Healthcare System: The Way Forward to Address the Challenges of the 21st Century: Comment on" Integration or Fragmentation of Health Care? Examining Policies and Politics in a Belgian Case Study', *International Journal of Health Policy and Management*, Vol. 12, Kerman University of Medical Sciences, 2020, 7070.

needed to enable timely policy responses. Interviews and analysis highlight potential ECIR improvements. Although it pools cancer data, the ECIR lacks high-quality, research-ready datasets and does not allow customised downloads like Eurostat. Data is geared towards graphics and infrequently updated. The interface is not always user-friendly. For example, cancer mortality rates must be downloaded year-by-year. Reports and factsheets are useful but have limited reach; publishing them in multiple languages and creating citizen-focused materials could improve dissemination and public awareness.

Waiting times for diagnosis and treatment, a key accessibility indicator, are not yet routinely collected. Data on cancer care costs is limited and inconsistent, though experts seek clearer insights into the financial burden across Member States. Current incidence data is based on JRC estimates, but stakeholders prefer observed national data, which is not published or not available in some countries, such as Greece and Romania.

Nevertheless, the collaboration between institutions on the ECIR is an innovative approach that could be imitated. According to the European Commission, a governance mechanism has been established to ensure the effective implementation of the ECIR process, coordinate activities among partners, and engage stakeholders. DG SANTE leads the initiative, providing overall policy direction and ensuring close collaboration with core partners: OECD, JRC, and IARC, each responsible for distinct components of ECIR.

- The JRC manages the development and maintenance of the website and data tool, ensuring updates, integration of new indicators, and publication of features, reports, and findings (e.g. Country Profiles and analytical reports).
- The OECD oversees the creation of the Country Cancer Profiles and EU analytical reports.
- IARC contributes via the EUCanIneq study, offering new insights into socioeconomic inequalities in cancer mortality across Member States, Norway, and Iceland.

These three components complement one another, providing a comprehensive approach to monitoring cancer inequalities. The European Commission facilitates regular exchanges among partners to ensure alignment of data, publications, and findings. DG SANTE also engages Member States through the Thematic Working Groups on the Cancer Inequalities Registry (under the Cancer sub-group) and interacts with relevant stakeholders via the Beating Cancer Stakeholders group on the Health Policy Platform.

Regular webinars are organised to share updates and gather stakeholder feedback. Member States have emphasised the initiative's value in identifying national priorities. It is reported that ECIR is actively used by stakeholders and national institutes to assess country performance, evaluate strategies, identify areas for improvement, and engage patient advocacy groups.

4.4. Action 38: (1) Strengthen e-health, telemedicine and remote monitoring systems; (2) promote the virtual consultation model of the European Reference Networks (ERNs)

eHealth refers to healthcare services supported by information and communications technology. In particular, telemedicine is the delivery of healthcare and the exchange of healthcare information across distance.[536] The use of digital tools in healthcare, or e-Health technologies, are often hailed as an effective solution to tackle health inequalities. Digital tools could remove barriers posed by physical distance and help patients more easily access doctors and specialists, which could facilitate quicker diagnoses and more timely treatment. Given the disparities in patient mobility and access to healthcare services, health inequalities become particularly evident, especially among vulnerable groups and those living in remote areas, who often face limited access to quality care. Telemedicine has the potential to reduce these gaps by bridging the virtual distance between healthcare providers and patients, thereby contributing to the reduction of health inequalities. However, some commentators highlight the existence of a so-called 'digital health paradox', the risk that e-Health technologies may inadvertently widen health inequalities by primarily benefiting those who have access to digital tools and possess the skills to use them effectively.[537,538]

Nevertheless, digital and data infrastructure will benefit in general healthcare and medical research through easier and more systematic exchange of data between practitioners and researchers. UNCAN.eu is a large-scale project funded by the EU, aiming to build a European Federated Cancer Research Data Hub.[539] This central hub will connect national cancer data nodes, also aiming to reduce disparities in research capabilities across Member States.[540] More specifically about cancer images, Cancer Image Europe (EUCAIM) has been set up under the EBCP to connect cancer image repositories, aiming to support AI-based research and clinical decision-making. The project began in January 2023, linking 76 partners, and is expected to develop a pan-European digital federated infrastructure by 2026.[541] Another important initiative within this digital realm is the 'EU Mobile App for Cancer Prevention' funded by the EU4Health programme, which involve institutions from 11 EU Member States.[542] The aim is to communicate clear and evidence-based information on the risk factors of cancer, based on the European Code against Cancer. The app is expected to be publicly available in 2025.

Regarding Action 38.1, the major component is eCAN funded under EU4Health, which is a Joint Action for strengthening eHealth including telemedicine and remote monitoring for health care

536 J. Craig and V. Patterson, 'Introduction to the practice of telemedicine', *Journal of Telemedicine and Telecare*, Vol. 11(1), Sage Journals, 2005, pp. 3-9.

537 R. Van Kessel, R. Hrzic, E. O'Nuallain, E. Weir, B.L.H. Wong, M. Anderson, S. Baron-Cohen and E. Mossialos, 'Digital health paradox: international policy perspectives to address increased health inequalities for people living with disabilities', *Journal of Medical Internet Research*, Vol. 24(2), JMIR Publications, 2022, p.e33819.

538 L. Robinson, M. Ragnedda and J. Schulz, 'Digital inequalities: contextualizing problems and solutions', *Journal of Information, Communication and Ethics in Society*, Vol. 18(3), Emerald Publishing, 2020, pp. 323-327.

539 UNCAN.eu, A European Research data hub, website.

540 G. Vassal, 'UNCAN.eu, the European platform to understand cancer, and childhood cancers', *EJC Paediatric Oncology*, Vol. 5, Elsevier Limited, 2025, 100212.

541 European Institute for Biomedical Imaging Research, EUCAIM, website.

542 European Commission, Bumper, website.

systems for cancer prevention and care. The Joint Action seeks to extend the benefits of eHealth to cancer patients across Europe, with a particular focus on those in remote and rural areas. The project will investigate the role and impact of telemedicine and remote monitoring, aiming to enhance their effectiveness and reduce inequalities in cancer care throughout the EU.[543] Besides, the European Commission is aware that the digital divide between Member States may contribute to widening cancer inequalities, particularly in access to telemedicine and eHealth services. This concern is being addressed through initiatives such as the Joint Action eCAN+, which specifically aims to reduce inequalities in cancer care by improving access to digital health solutions across Europe, with a focus on Eastern Europe.

Launched in June 2025 with EUR 20 million budget, eCAN+ aims to help Member States integrate telemedicine into their national cancer care pathways.[544] It also promotes interoperability in line with the EHDS-Regulation. The initiative will identify and tackle disparities in digital infrastructure, skills, and access to technology, ensuring that all patients, regardless of location, can benefit from high-quality remote cancer care. Building on the work of the earlier Joint Action eCAN, which laid out a roadmap for embedding telemedicine in EU health systems, the new initiative strengthens digital collaboration and knowledge sharing across Member States, advancing the Cancer Plan's goal of narrowing the digital divide in healthcare.[545]

One often-neglected benefit of eHealth is the improved connections between practitioners and experts. Interviewees mentioned that virtual consultations between experts are very helpful in providing better cancer care to patients, and the connection is facilitated by networks, such as EURACAN, which is a part of the 24 ERNs funded by the European Commission consisting of 102 cancer centres across 25 EU Member States.[546] In response to Action 38.2, the EU4Health programme launched JARDIN(2024-2027), which is a Joint Action to integrate ERNs into national systems and build a more structured EU network. Guided by the principles of integration, equity, and sustainability, JARDIN will provide a bridge between ERNs and national healthcare structures. Its vision places people living with rare diseases or complex conditions at the centre of care, striving to make care pathways transparent and easily accessible by promoting the work and expertise of ERNs.[547] Meanwhile, DigiCanTrain, another EU4Health project, aims to train cancer healthcare providers to use new eHealth technologies.[548]

543 European Commission, eCAN, website.

544 eCAN, The eCan Plus joint Action kicks off, website.

545 V. Leclercq, R. Saesen, T. Schmitt, K. Habimana, C. Habl, A. Gottlob, M. Van den Bulcke and M. Delnord, 'How to scale up telemedicine for cancer prevention and care? Recommendations for sustainably implementing telemedicine services within EU health systems', *Journal of Cancer Policy*, Vol. 44, Elsevier Limited, 2025, p. 100593.

546 EURACAN, Official Website, website.

547 JARDIN, Official Website, website.

548 DigiCanTrain, Official Website, website.

Box 13: Progress on Action 38: (1) Strengthen e-health, telemedicine and remote monitoring systems; (2) promote the virtual consultation model of the ERNs

Regarding Action 38.1, the implementation of eCAN has been finished. The project was concluded with a proposal of key recommendations to integrate telemedicine in cancer care. It also provides useful resources for patients and healthcare providers. Regarding Action 38.2, in 2023 24 ERNs, comprising 836 members, completed their first evaluation. Overall, the assessment found that the ERN ecosystem is functioning effectively, delivering highly specialised services for patients with rare diseases, including expert consultations for diagnosis and treatment, the development of clinical guidelines, and the provision of specialised training. The Joint Action JARDIN was launched on time in 2024.

(Source: eCAN549, JARDIN550, European Commission[551])

While these EU-wide projects and initiatives are progressively contributing to research outputs and informing national cancer strategies, the development of eHealth at the national level remains uneven across the EU. To track progress, the European Commission has introduced the eHealth Indicator under the Digital Decade Policy Programme 2030.[552] The eHealth Indicator is an EU tool used to monitor the deployment and use of digital health solutions across Member States' health systems. It tracks the adoption and maturity of tools such as electronic health records, telemedicine services, ePrescriptions, and online patient access to health services. The indicator helps assess progress in the digital transformation of healthcare, identify gaps, and inform policy and investment decisions.

To quantitatively assess the EBCP's potential impact on the advancement of eHealth, this study filters all European Commission-funded projects related to eHealth and telemedicine that align with the EBCP's priorities for digital cancer care.[553] While the increase in eHealth funding since 2020 may reflect broader post-pandemic digitalisation efforts, the EBCP's emphasis on equitable cancer care likely contributed to the 2023 peak. Further analysis could disentangle these influences by comparing pre- and post-EBCP funding trends.[554]

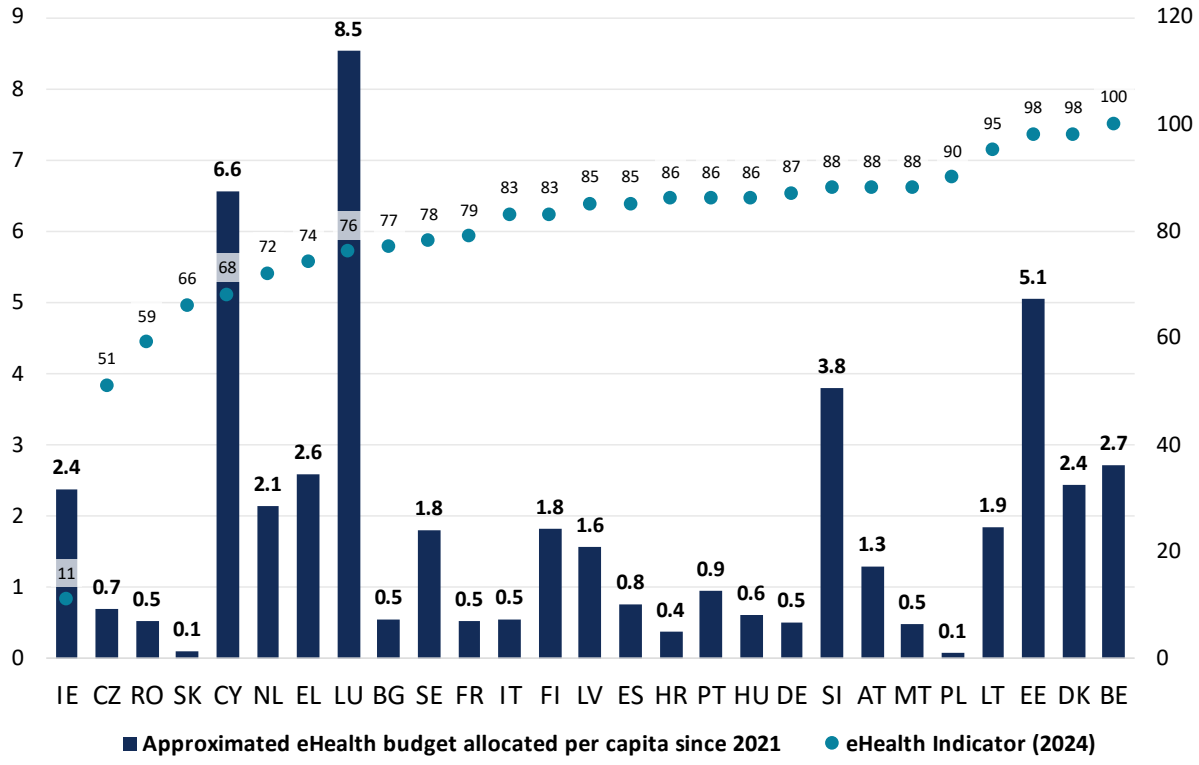
To better understand the distribution of the budget among the Member States and its relationship with the country's eHealth development, Figure 8 illustrates the distribution of EU-funded eHealth budgets and their relationship with national eHealth development.

Interestingly, we find that, on one hand, some lower-performing countries, such as Ireland, Cyprus, Greece and Luxembourg, have received relatively abundant resources in developing their eHealth systems. On the other hand, some high-performing countries, such as Slovenia, Denmark, Estonia and Belgium, have also been heavily involved in eHealth projects funded by the European Union,

549 eCAN, eCAN-Strengthening eHealth for Cancer Patients, website.
550 JARDIN, Official Website, website.
551 European Commission, ERNs Evaluation, website.
552 European Commission, Digital Decade 2024: eHealth Indicator Study, 2024.
553 Based on the abstracts provided by each project, we filter out those projects mentioning 'digital', 'telemedicine', 'eHealth (or e-Health)' and 'cybersecurity', which form the sample for the analysis in this subsection. In total, there are 104 projects in the sample. The allocation of budget is only an approximation based on the assumption that total budget of a project is divided equally between participating countries in the project because the actual allocation of budget is not provided in the Cancer Projects Dashboard. It is a reasonable approximation as, while institutions may receive different amounts of budget, the project results and innovations, both tangible and intangible, should easily be shared among participating institutions equally.
554 Authors' computation based on the data provided by EU Cancer Projects Dashboard.

indicating further advancement built upon their already solid eHealth systems. This pattern suggests a 'mild catch-up' effect in the near future: lower-performing countries are improving, but disparities persist between the top and middle clusters.

Figure 8 - Relationship between eHealth Indicator (2024) and approximate total budget of EU-funded eHealth projects per capita (January 2021 – June 2025)



Source: Cancer Projects Dashboard and the Digital Decade Policy Programme.

4.4.1. Case study Estonia: Addressing cancer inequalities through e-Health

Background

Estonia's health system features a mix of social health insurance and tax-funded financing. Its health governance is fairly centralised. Patients must receive referrals from GPs to be reimbursed for consultations with specialists.[555] The share of total health expenditure allocated to prevention was 6% in 2022, an increased from 4% in 2019, at which time the country's prevention spending per capita was 31% below the EU average.[556] [557] A significant change occurred in 2021 when the screening programme was extended to include uninsured individuals, with the Estonian Health Insurance Fund covering the costs.[558] With its population of around 1.4 million, Estonia faced 7,817 new cancer cases in 2022, of which 52% were among men and 48% among women.[559] Cancer

555 K. Kasekamp, T. Habicht, A. Võrk, K. Köhler, M. Reinap, K. Kahur, H. Laarmann and Y. Litvinova, Estonia: Health System Summary, 2024, European Observatory on Health Systems and Policies, WHO Regional Office for Europe; 2024.

556 ibid.

557 OECD and the European Commission, EU Country Cancer Profile: Estonia 2025, 2025.

558 ibid.

559 ibid.

incidence among Estonian men is 14% higher than the EU average, while incidence among women is 7% lower than the EU average.[560] Cancer accounts for an estimated 20% of mortality in the country, which is 13% higher than the EU average (2021).[561] However, since 2011, the country has observed a decline of 10% in overall cancer mortality.[562] [563]

Estonia faces several challenges in addressing cancer inequalities. *First*, among its twenty hospitals, only two are comprehensive cancer centres, and they are both located in big cities (Tallinn and Tartu). Patients in remote areas, especially those living on islands, experience difficulties in accessing diagnostics and treatment services.[564] S*econd*, the country faces challenges in changing cancer-related health behaviours among its population, particularly regarding alcohol consumption. This pattern is rooted in cultural and historic elements: after having gained its independence, the country observed an increasing tendency toward individualism.[565] This is intertwined with strong political opposition to policies affecting individual choices and behaviours, including alcohol warning labels meant to increase responsible consumption, which was emphasised during our interview with a national expert.[566] *Third*, while e-health is considered an effective instrument to reduce inequalities, the reluctance and lack of capacity to use digital tools, both among healthcare workers and patients, hinder the country's effort to scale up the e-health initiative nationally. For patients, some lack the know how in accessing their health data and utilising the national e-health infrastructure (including e-health portal, ID cards, ID card readers) to make appointments and respond to reminders, including for cancer screenings. In other cases, it is simply because some people do not use or are not familiar with using computers or smart devices, which became clearer during the COVID-19 pandemic.[567] While certain stakeholders highlighted this as a challenge, others emphasized that various solutions are in place to support patient access. These include dedicated telephone support lines, shared platform access with trusted family members or caregivers, and assistance provided through social services, ensuring a more inclusive approach to digital health engagement.

Overall assessment of the implementation of the EBCP in the country

The focus areas and approach of **Estonia's national cancer strategies are closely aligned with the EBCP**.[568] Stakeholders reaffirmed the national plan was designed to mirror the priorities in the EBCP. The national plan is headed by the Ministry of Social Affairs, with steering committees to support monitoring. A midterm evaluation is planned for year 2025 to assess progress nationally. The one domain stakeholders expressed was missing in the national plan is research; this is now part of ongoing discussions to bolster the country's engagement and foster opportunities to advance research and innovation in the cancer space. There are also other associated cancer specific plans in

560 ibid.
561 ibid.
562 ibid.
563 European Commission, ECIR - Cancer Performance Tracker, European Cancer Inequalities Registry, website.
564 F. Shahrabi Farahani, K. Paapsi and K. Innos, 'The impact of sociodemographic factors on the utilization of radiation therapy in breast cancer patients in Estonia: a register-based study', *International Journal for Equity in Health*, Vol. 20(1), BioMed Central Limited, 2021, 152.
565 World Health Organization Regional Office for Europe, Evaluation of the Estonian Green Paper on Alcohol Policy, 2024.
566 ERR, 'Study: Majority of Estonian residents support laxer alcohol policy', website.
567 M. Paimre, S. Virkus and K. Osula, 'Health information behavior and related factors among Estonians aged ≥ 50 years during the COVID-19 pandemic', *Journal of Documentation*, Vol. 79(5), Emerald Publishing, 2023, pp. 1164–1181.
568 Ministry of Social Affairs and National Institute for Health Development, Estonian Cancer Control Plan 2021–2030, 2021.

development, including an HPV associated cancer strategy that will inform national priorities and actions in cervical, head, neck and other HPV association cancers among men and women.

Stakeholders expressed a limiting factor in the implementation of aligned national and EBCP priorities is the constrained financial resources available. Estonia has successfully received funding from the EU level to support cancer control programming, which stakeholders expressed has been pivotal in implementing cancer control, prevention, and quality of care actions.

Stakeholders also highlighted ongoing efforts to explore how private sector investment can be leveraged to accelerate progress in cancer control, ensuring long-term sustainability and innovation. In parallel, Estonia, through the leadership of the Estonian Cancer Network, is advancing preparations for the launch of a **National Cancer Mission Hub**. This hub is expected to receive formal recognition later this year as part of the ECHoS (Establishing Cancer Mission Hubs) project, further embedding Estonia into the broader European Cancer Mission framework.[569]

In the digital domain, Estonia has an **eHealth Strategic Development Plan** for 2020 setting a vision for 2025.[570] Estonia's e-health strategy's focus used to be on technical solutions, but the eHealth Strategic Development Plan has broadened the scope to using digital tools as a way to reduce inequalities, including in cancer, and actively engage patients in managing their health condition with the support of digital technology. The country is an e-health champion in the EU, being among the top 5 Member States with the highest access to e-health data and infrastructure, and therefore was selected as the country of focus for this case study.[571] The **Estonian Cancer Registry** contains more than 50 years of data: it was established in 1978, although reliable cancer incidence data has already been available since 1968.[572] The Health Information System was established in 2008 and has evolved into a dynamic and effective platform for patients, providers, and broader health decision makers to access and use real time health data for informed decision making, including on cancer.

Description of the initiative

Estonia is developing **a national cancer data dashboard** that links across all hospitals to compile, aggregate, and depict real time trends in cancer progress at a national and sub-national level. The Estonian national cancer control plan indicates both process and result indicators that are used as the framework for designing the dashboard.[573] This national initiative seeks to standardise the collection and reporting of cancer-related data in order to improve both the quality and accessibility of cancer indicators across the health system. Stakeholders noted that planned indicators will include metrics such as time to diagnosis and time to treatment, which are essential for assessing equity in access and outcomes. Timely diagnosis and treatment are key priorities in the EBCP. The overarching goal is to fully digitise the cancer patient pathway, enabling the aggregation of data and trend monitoring across all hospitals, while maintaining linkage with the existing national cancer registry. A key innovation includes the planned integration of an automated alert system, which would trigger notifications based on predefined criteria, such as prolonged wait times for

569 ECHoS Consortium, ECHoS – Establishing Cancer Mission Hubs: Networks and Synergies, 2023.
570 Government of the Republic of Estonia, Estonian eHealth Strategic Development Plan 2020, 2015.
571 European Commission, Capgemini Invent, 2024 Digital Decade eHealth Indicator Study – Final Report, 2024.
572 M.L. Zimmermann, K. Innos, P. Härmaorg, E. Leif, T. Mändla and M. Mägi, Cancer in Estonia: Incidence 2021, Survival 2017–2021 and Cancer Cases Diagnosed in Screening, National Institute for Health Development, 2024.
573 National Institute for Health Development Estonia, Vähitõrje Tegevuskava 2021–2030, 2021.

procedures, to enable real-time, proactive monitoring and support continuous improvements in the quality and timeliness of cancer care across the continuum.

Estonia is also actively advancing **the integration of personalised medicine** into its e-health platforms and national cancer strategies. A key component involves the use of polygenic risk scores to assess individual susceptibility to diseases such as breast cancer, which will guide tailored recommendations on when citizens should initiate mammography screening. This system is currently in development and is expected to be operational by early 2026. Concurrently, stakeholders shared that Estonia is expanding its national gene bank through voluntary genomic mapping. This initiative aims to enable whole-genome sequencing, allowing for early identification of high-risk genetic markers, such as BRCA mutations, to support timely and targeted clinical interventions. In parallel, Estonia's Health Information System is enhancing accessibility through digital solutions, such as enabling individuals to order at-home screening kits including for cervical cancer, thereby increasing privacy, convenience, and participation in preventive care.

Key outcomes and impact of the initiative

As these plans are in development, outcomes are difficult to assess. There are existing reports on Estonia's digital health system which highlight that the **system enables seamless data sharing** among healthcare providers, allowing providers to access comprehensive patient records, including prescriptions, hospital visits, test results, and critical data, which reduces duplicate testing and improves care coordination, especially for conditions like cancer.[574] Patients have also been found to benefit from being able to access their own health information and have control over data sharing and services like second opinions, while anonymised data supports public health planning and scientific research. Stakeholders reinforced the value of individual autonomy over one's own health information but also being able to leverage in sharing with critical parties for interventions, decision making, and research.

Utilising e-health and e-support platforms for cancer patients can also support better access to care for those in rural settings far from centralised centres of excellence. For example, the **"OnKontakt – E-support for Cancer Patients"** applications which was a pilot program funded by the Estonian Health Insurance Fund, allowed cancer patients to report any side-effects or adverse effects they experience because of their cancer treatment.[575] Findings from the assessment study show that the quality of life of the intervention group was maintained, while patients in the control group saw a degradation in their reported well-being following treatment.[576] Among patients in the intervention group, on average, each patient completed 3.5 questionnaires per month, enabling the assessment of 22,436 treatment-related side effects. 77% of patients reported that the platform successfully facilitated the management of their treatment-related effects.[577] Patients living far from the cancer centres particularly benefited from the initiative, thanks to the reduction in travel time and costs to seek post-treatment advice. This highlights the benefits of e-health efforts to address key barriers for patients living remote areas.

574 European Commission, Estonian Central Health Information System and Patient Portal, website.
575 Tervisekassa, Pilot Project Descriptions, 2024.
576 D. Kaljuste and M. Kasulapuu, Onkontakt Projekti Mõju-uuring, 2023.
577 ibid.

Key takeaways: success factors and lessons learnt

Estonia's **digital health infrastructure**, established prior to 2010, is supported by comprehensive policies and strategic frameworks that guide its implementation and use. There is strong system-wide ownership and engagement, including from hospitals, healthcare providers, patients, researchers, and policymakers. The platform is designed to facilitate real-time data sharing and support patient-centred, high-quality care.[578]

Interviewed stakeholders highlighted how, particularly for cancer patients, immediate access to test results and medical **data empowers individuals to take an active role in their health decisions**. The system has continued to evolve, integrating new digital tools and expanding functionalities over time, while maintaining inclusive support mechanisms to assist those less familiar or comfortable with digital tools.

Estonia's e-health system **continues to face various challenges**, notably in the areas of standardisation of digital inputs, interoperability of systems, and routine data sharing across health services.[579] Stakeholders highlighted the persistent inconsistency in how data is entered, particularly at the hospital level. Interviewed stakeholders expressed stark variation in how health professionals insert free text within EHRs. Hospital information systems and the cancer registry also still require alignment to ensure that data can be captured in a standardised format and effectively shared across platforms.

The digital transition also necessitates a cultural and behavioural shift among healthcare providers, nurses, and patients, a process complicated by high workloads and limited capacity for change management. Moreover, stakeholders emphasised the critical need to expand data collection beyond core clinical indicators to include patient-reported and operational outcomes. These include quality of life, impact on daily activities and employment, treatment pathways, healthcare professional workload, medication adherence, and resource implications for the sustainability of digital health initiatives.

Improving the **availability, quality, and interoperability of health data** is key to delivering digital cancer care, advancing research, and supporting evidence-based policy. Digital tools empower patients, especially in rural areas, by providing fast access to medical information and enabling actions like scheduling screenings or ordering at-home tests. They also support personalised care through better risk assessment and early intervention. To ensure lasting impact, robust evaluation frameworks are needed to measure effectiveness and build support for scaling up.

---

578 European Commission, Estonian Central Health Information System and Patient Portal, website.

579 K. Kasekamp, T. Habicht, A. Võrk, K. Köhler, M. Reinap, K. Kahur, H. Laarmann and Y. Litvinova, Estonia: Health System Summary, 2024, European Observatory on Health Systems and Policies, WHO Regional Office for Europe; 2024.

4.5. Action 39: Improve resilience, accessibility and effectiveness of EU health systems to safeguard provision of cancer care in future health crises

Health system strengthening (HSS) is a foundational pillar for building robust, equitable health systems capable of meeting the needs of entire populations. A key component of this is resilience, which is the ability of health systems to absorb, adapt, and respond effectively to shocks and crises, such as the COVID-19 pandemic.[580] While there is no universally accepted definition of a resilient health system, there is broad consensus on core components, including essential service continuity, workforce readiness, and infrastructure flexibility.[581]

Box 15: Progress on Improve resilience, accessibility and effectiveness of EU health systems to safeguard provision of cancer care in future health crises (Action 39)

Regarding sub action 39.1 – Establish a Resilience Testing and Support Programme, EU4Health programme provided a grant to the OECD and the European Observatory on Health Systems and Policies to develop a resilience testing methodology. The handbook was published in March 2024.582

Regarding sub action 39.2 – Guidelines on access to healthcare for people with disabilities, including cancer, a study on "Guidance to increase access to healthcare for people with disabilities, including information and data on cancer prevention and care" under EU4Health was started in September 2023 and will conclude in August 2025. In July 2024, the project launched a survey aimed at gathering insights from persons with disabilities who have undergone cancer screening or treatment, which was concluded in December 2024.583 However, due to lack of public information, we cannot assess the progress of the mapping exercise of gaps in access to healthcare and the guidelines on improving access to healthcare, which were planned to be finished by Q1 2024 and Q1 2025 respectively.

Regarding sub action 39.3 – Monitoring implementation of health components of Recovery and Resilience Plans (RRPs) including on cancer, the roadmap does not specify a task but mentions monitoring milestones and targets of national RRPs.

(Source: OECD, European Disability Forum)

Across the EU, countries have adopted varying strategies to bolster resilience: some focus on ensuring access to essential services and reaching underserved populations, while others emphasize digital transformation, primary care investment, and workforce preparedness.[584] The COVID-19 pandemic exposed critical vulnerabilities, particularly in emergency response capacity and staffing,

580 OECD, Ready for the Next Crisis? Investing in Health System Resilience, 2023.

581 M. Fridell, S. Edwin, J. von Schreeb and D.D. Saulnier, '*Health System Resilience: What Are We Talking About? A Scoping Review Mapping Characteristics and Keywords*', International Journal of Health Policy Management, Vol. 9(1), Kerman University of Medical Sciences, 2020, pp. 6-16. Meanwhile, the Economist Impact, a research arm of The Economist Group, together with Nuclear Threat Initiative and Johns Hopkins Center for Health Security have developed the Global Health Security Index for 195 countries. See https://ghsindex.org/ for more information.

582 J. Zimmermann, C. McKee, M. Karanikolos, J. Cylus and members of the OECD Health Division, 'Strengthening Health Systems: A Practical Handbook for Resilience Testing. Copenhagen', 2024.

583 See https://www.edf-feph.org/projects/health-increasing-access-to-healthcare-for-persons-with-disabilities/

584 M. Vainieri, A. Caputo; and A. Vinci, 'Resilience dimensions in health system performance assessments, European Union', Bulletin of the World Health Organization, 2024, Vo. 102(7), pp. 498–508.

which significantly disrupted cancer care.[585] The European Cancer Organisation reported that an estimated 100 million cancer screening tests were missed, potentially leading to 1 million undetected cancer cases at the height of the pandemic.[586] For cancer care, resilience is key, especially during crisis time. It requires strong, integrated systems with a focus on both primary and secondary prevention to mitigate risk and support early detection. However, a 2022 EU survey revealed that fewer than 20% of EU countries included cancer screening programme performance as a core indicator of health system resilience.[587] Despite increased attention, spending on prevention remains low; it did however rise from 2.7% of total health expenditure in OECD countries in 2019 to 5.1% in the EU27 in 2021.[588,589] Strengthening preventive services and embedding them into broader resilience frameworks have the potential to safeguarding future cancer care outcomes.

In terms of strengthening healthcare systems, the Recovery and Resilience Facility (RRF) and cohesion funds offer complementary funding sources to those dedicated to EBCP. The RRF supports reforms and investments in healthcare systems in Member States though grants and loans whereas cohesion funds offer support to investments to healthcare systems only in Member States eligible for such funding. The RRF is a temporary instrument under the plan of NextGenerationEU that aims to invest in the EU Member States to 'emerge stronger and more resilience' from the COVID-19 pandemic.[590] The RRF addresses the negative impact of the COVID-19 pandemic. One of the six pillars of the RRF is health, and economic, social and institutional resilience.[591]. According to Commission analysis from December 2024, the EU Member States have spent EUR 42 billion on healthcare, corresponding to 6.2% of the total RRF budget and 96 reform measures across the EU.[592] It is however important to note that only part of the investment in the health systems targets cancer care. For example, Malta has invested EUR 9.4 million from the RRF to upgrade the Sir Anthony Mamo Oncology Center with a state-of-the-art Magnetic Resonance Linear Accelerator, enhancing both imaging quality and radiotherapy treatment.[593]

Health sector reforms and efforts to strengthen the resilience of healthcare systems are eligible for funding, provided they are included in a Member State's Recovery and Resilience Plan and approved by the European Commission. However, the available information does not permit a deeper analysis of whether the funds are specifically directed towards cancer-related reforms or projects. Nonetheless, it is reasonable to assume that broader improvements in health system capacity and resilience would strengthen the response to cancer during times of crisis.

---

585 A. Manzano, C. Svedman, T. Hofmarcher, and N. Wilking, 'Comparator Report on Cancer in Europe 2025 – Disease Burden, Costs and Access to Medicines and Molecular Diagnostics', IHE Report, 2025. IHE: Lund, Sweden.

586 European Cancer Organisation. Special Network: Impact of Covid-19 on Cancer, website.

587 EU Expert Group on Health Systems Performance Assessment, Assessing the resilience of health systems in Europe: an overview of the theory, current practice and strategies for improvement, 2020.

588 OECD, Ready for the Next Crisis? Investing in Health System Resilience, 2023.

589 OECD, Beating Cancer Inequalities in the EU: Spotlight on Cancer Prevention and Early Detection, 2024.

590 European Commission, Recovery and Resilience Facility, website.

591 Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility.

592 European Commission, Recovery and Resilience Scoreboard – Thematic analysis: Healthcare, 2024.

593 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025, p. 28.

4.5.1. Case study Italy: Leveraging a network approach to strengthen health system capacity and resilience

Background

In Italy, health is embedded in the constitution as a fundamental right, but the responsibility of health falls to the 20 regions.[594] The regional governments are in charge of the provision of the standardised benefits defined at the national level and implemented at local level by Local Health Units composed of public and private providers.[595] Standardised benefits comprise of essential services and care that is guaranteed for all citizens such as outpatient and hospital care.[596] Healthcare is managed at a regional level with regions maintaining autonomy while also continuing to meet basic national requirements.[597]

The Italian National Health Service largely covers health care costs, including comprehensive cancer care for patients. In 2021, health expenditure was 9.4% of the country's GDP, which is lower than the EU average.[598] The last available estimates approximate cancer expenditure at about 6.7% of health expenditure, with the mean annual cost per patient over EUR 7 000.[599] [600] [601]

Although Italy has made great strides in reducing cancer mortality nationally by cutting the cancer-related mortality rate by 15% between 2011-2021, cancer remained the second highest cause of death in 2021.[602] In 2022, there were over 400 000 new cancer cases reported, with a slightly higher incidence among men (52%) compared to women (48%).[603] There are also significant disparities in incidence and mortality at a subnational level particularly between the northern and southern parts of the country.[604] Differences regionally also present in cancer prevention; for example, HPV vaccination rates vary between 85% to 49% between regions.[605] Reasons for differences include costs required to travel to medical facilities for care, waiting times, and information asymmetries between patients and providers.[606]

---

594 Senato della Repubblica, Constitution of the Italian Republic, Article 32.

595 OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Italy – Country Health Profile 2023, European Commission, 2023.

596 A.G. De Belvis, M. Meregaglia, A. Morsella et al., Italy: Health system summary 2022, 2022.

597 A. Poscia, W. Silenzi and W. Ricciardi, Organization and financing of public health services in Europe: Country reports, *Health Policy Series* No. 49, European Observatory on Health Systems and Policies, 2018.

598 OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Italy – Country Health Profile 2023, OECD and WHO, 2023.

599 S. Francisci, S. Guzzinati, M. Mezzetti et al., 'Cost profiles of colorectal cancer patients in Italy based on individual patterns of care', *BMC Cancer*, Vol. 13, 2013, p. 329.

600 Institute for Health Economics (IHE), *Cancer Dashboard – Italy: Access to Cancer Medicines*, IHE – The Swedish Institute for Health Economics, 2024.

601 M. Altini, L. Solinas, L. Bucchi et al., 'Assessment of Cancer Care Costs in Disease-Specific Cancer Care Pathways', *International Journal of Environmental Research and Public Health*, Vol. 17(13), MDPI, 2020, 4765.

602 OECD and European Commission, EU Country Cancer Profile: Italy 2025, 2025.

603 ibid.

604 R. Cazzolla Gatti, A. Di Paola, A. Monaco, A. Velichevskaya, N. Amoroso and R. Bellotti, 'A ten-year (2009–2018) database of cancer mortality rates in Italy', *Scientific Data*, Vol. 9, Springer Nature, 2022, Article 638.

605 C. Signorelli, F. Pennisi and G. Rezza, 'Vaccinations and regional inequalities in Italy', *The Lancet Public Health*, Vol. 10(7), Elsevier Limited, 2025, e546.

606 G. Ferraris, V. Coppini, M.V. Ferrari, D. Monzan, R. Grasso and G. Pravettoni, 'Understanding Reasons for Cancer Disparities in Italy: A Qualitative Study of Barriers and Needs of Cancer Patients and Healthcare Providers', *Cancer Control,* Vol. 31, Sage Journals, 2024.

Overall assessment: the implementation of the EBCP in the country

Italy adopted its **National Oncology Plan 2023-2027** in early 2023, which stakeholders affirmed aligns with the EBCP objectives. It sets out guidance for regional and local levels and focuses on enhancing prevention efforts and addressing regional disparities.[607] The Ministry of Health contributed EUR 50 million to operationalize the national strategy. Although the plan is comprehensive, in practice, there have been delays in actualising activities. This was echoed by interviewed stakeholders. Stakeholders shared one reason for the delays is the lack of a coordinating body; the Ministry of Health has since launched a National Oncology Plan Steering Committee to support implementation across regions.[608] National experts noted EBCP gaps affect national action, such as the lack of focus on rare adult cancers. Experts raised concerns about the lack of a structured mechanism to monitor national cancer plans and their alignment with EBCP goals. They stressed the value of a platform to enhance transparency, accountability, and coordination, while also serving as a space to share best practices, potentially through National Cancer Mission Hubs and related networks.

The Italian Ministry of Health launched several efforts focused on the priorities of the National Cancer Plan. This includes a pilot programme for lung cancer screening spearheaded by the National Cancer Institute of Milan, utilising 18 diagnostic centres and reaching over 8 000 individuals.[609] Interviewed experts shared how the Ministry of Health is also prioritising primary prevention through building awareness and education campaigns on the benefits of screening, including a focus on the Southern part of the country to address inequities.

Description of the initiative

Networks are a core priority in the EBCP. The EBCP aims to established varying types of networks meant to catalyse progress in addressing cancer as a health threat; these include Networks of CCCs and Networks of Expertise (NoE), which are in addition to the already exiting ERN on rare cancers.[610]

Italy has emerged as a leading example in this domain, actively advancing cancer networks through its **hub-and-spoke model** and strong participation in **EU Joint Actions**, which is the reason for selecting Italy for this case study. The hub-and-spoke model is a network-based approach that organizes healthcare delivery by designating specialized "hub" centres with advanced expertise and capabilities. These hubs are connected to "spoke" facilities that provide local care and handle patient referrals. This structure promotes coordinated, efficient, and high-quality treatment by ensuring that patients can access both specialized and community-based services as needed. To address critical information gaps in rare cancer care, Italy established a National Rare Cancer Network in 2017, which became fully operational in 2023 and is integrated with Centres of Excellence

607 Italian Ministry of Health, Piano Oncologico Nazionale 2023–2027: Documento di pianificazione e indirizzo per la prevenzione e il contrasto del cancro, 2023.

608 OECD and European Commission, EU Country Cancer Profile: Italy 2025, 2025.

609 ibid.

610 JANE (Joint Action on Networks of Expertise on Cancer), Networks of Expertise: An Ambitious Vision for Tackling Healthcare at EU Level, 2024.

participating in the ERNs.[611] Strengthening such patient-centred networks is essential for building a resilient and high-performing health system capable of addressing any health threat.

The EBCP launched two Joint Actions to support the development of new cancer care networks. **The first, JANE, now in its second phase (JANE II)**, aims to establish seven pioneering Networks of Expertise (NoEs) focused on cross-cutting aspects of cancer, unlike existing ERNs, which target specific rare diseases.[612] These NoEs are intended to deliver coordinated, high-quality services across the EU to address critical oncology challenges. In parallel, a second Joint Action is advancing the **creation of a European Network of CCCs**, designed to ensure timely, high-quality care for all cancer patients across Member States. This builds on the experience of the **establishment of the ERNs,** primarily focused on rare diseases and rare cancers that came from the EU Cross-Border Healthcare Directive.[613] Italy plays a leading role in the Joint Actions. The Istituto Nationale dei Tumori in Milan is the coordinator for JANE II.

When interviewed, national level stakeholders strongly emphasised the value of establishing cross-border networks to enhance collaboration and accelerate research and innovation in cancer care. While acknowledging the strategic importance of developing such networks, experts also highlight several limitations in the current design, most notably the absence of sustainable financing, the complex coordination and interplay between EU and national levels, and limitations in the capacity to engage in joint research ventures. Experts stress that these networks should evolve into European networks that are owned by Member States and supported at the EU level. The current funding structure, primarily through Joint Actions, lacks foresight and long-term planning. Additionally, the current partner selection process for participation in the networks is primarily driven by the Joint Actions, which may warrant discussions to ensure inclusivity and representation of expertise in future iterations of the network. There are limited opportunities to pursue concrete joint research efforts in the current structure, for example because of the financial burden of co-financing requirements and complex administration required.

The EBCP supports the development of CCCs which can facilitate increased access to high quality, patient-centred care through multidisciplinary and integrated care pathways. Italy has Organisation of European Cancer Institutes (OECI) recognised CCCs.[614] In Italy, a national-regional agreement led to the creation of the Italian Network of Rare Cancers, an effort stakeholders see as unique among disease areas. The government designated 105 specialised centres, one-third of which serve as hubs with advanced expertise and high patient volumes. Stakeholders noted that CCCs are ideal hub facilities for specialised interventions.

Cancer is a highly complex disease that demands specialist expertise and a coordinated, multidisciplinary approach.[615] The Lombardy region of Italy implemented a hub-and-spoke model

611 State–Regions Conference, Processo normativo e attuativo per la definizione dell'assetto della Rete Nazionale Tumori Rari, 21 September 2023.

612 P.G. Casali, H. Antoine-Poirel, S. Berrocoso et al., 'Health networking on cancer in the European Union: A "green paper" by the EU Joint Action on Networks of Expertise (JANE)', *ESMO Open*, Vol. 10(2), Elsevier Limited, 2025, Article 104126.

613 Joint Action on Networks of Expertise (JANE), Networks of Expertise: An Ambitious Vision for Tackling Healthcare at EU Level, 2024.

614 European Commission, Mapping of Comprehensive Cancer Infrastructures (CCIs), 2023.

615 G. Balzano, M. Reni, M. Di Bartolomeo et al., 'Translating knowledge into policy: Organisational model and minimum requirements for the implementation of a regional pancreas unit network', *Digestive and Liver Disease*, Vol. 57(2), Elsevier Limited, 2025, pp. 370–377.

specifically targeting pancreatic cancer with the goal of improving care quality, patient outcomes, and utilising a multidisciplinary clinical approach.[616] [617] The initiative followed a participatory approach involving stakeholders like the Lombardy Welfare Directorate, clinicians, patient groups, and government bodies. A national expert highlighted that this collaboration fostered strong ownership. Together, they co-designed clinical pathways, hub selection criteria, and referral protocols. According to interviews, specialist staff were recruited for hubs to ensure smooth patient access to specialised care from spoke facilities.

Key outcomes and impact of the initiative

While no formal evaluation has yet been conducted, national experts involved in implementing the **hub-and-spoke model** for pancreatic cancer shared promising anecdotal insights. Leveraging CCCs within the model promotes greater consistency and standardisation in cancer care delivery, which are factors expected to translate into improved patient outcomes. At its core, the hub-and-spoke model formalises care through a structured network that enables standardized referral pathways and supports multidisciplinary treatment approaches. This framework can be further strengthened through integrated teleconsultation systems, as demonstrated by the successful application in managing coeliac disease in Italy's Liguria region.[618]

The hub-and-spoke model has been recognized for its ability to enhance information exchange across established networks and to promote the standardisation of referral processes and patient care pathways.[619] This structured, network-based approach is also seen as a promising strategy to reduce health-related migration in minimising the need for cancer patients to travel long distances which can often include high personal and financial cost to access specialized care at CCCs.[620]By enabling a multidisciplinary approach within regional networks, the model supports the delivery of personalized, optimal care tailored to the comprehensive clinical assessment of each patient's needs.[621]

Key takeaways: successes, barriers, and lessons learned

Main benefit of leveraging the CCCs and the establishment of the network-based approach is the agility of the model to be applied to different cancers and diseases while creating a system that guarantees quality of care for cancer patients. National experts shared how the hub and spoke model has been adapted for breast, lung, pancreatic, ovarian, and rare cancers. The model is intended to be implemented across all 20 regions of Italy, with regional governments providing dedicated

616 ibid.

617 L.G. Zompì, C. Marco, P. Quarto, C. Clark, T. Difonzo, S. Lopez, V. Loizzi and C. Gennaro, 'The landscape of ovarian cancer surgery in Italy: Data from PNE', *European Journal of Obstetrics & Gynecology and Reproductive Biology: X*, Vol. 26, Elsevier Limited, 2025, Article 100383.

618 M. Crocco, F. Malerba, P. Gandullia et al., 'Hub-and-Spoke Regional System Supported by Telehealth for Managing Coeliac Disease in Liguria: A Mixed-Methods Survey Followed by an Observational Pilot Study', *BMC Health Services Research*, Vol. 25(1), BioMed Central Limited, 2025, Article 398.

619 J.K. Elrod and J.L. Fortenberry Jr, The Hub-and-Spoke Organisation Design: An Avenue for Serving Patients Well, *BMC Health Services Research*, Vol. 17(Suppl. 1), BioMed Central Limited, 2017, Article 457.

620 P. Locatelli, F. Cirilli, E. Panno, S. Provenzano, R. Sanfilippo and P.G. Casali, Digital Support for a Hub-and-Spoke Disease Network, in *Proceedings of the IADIS International Conference e-Health,* 2020.

621 D. Amicizia, F. Marchini, P. Pronzato, G. Paoli, C. Genova, S. Allegretti and F. Ansaldi, The Ligurian Experience in the Management of Lung Cancer: Organisational Models and New Perspectives, *Healthcare*, Vol. 12(24), MDPI, 2024, 2556.

funding, which is an essential factor in ensuring sustainability, local ownership, and system-wide alignment.

Challenges remain in implementing the hub-and-spoke model for cancer care. There are no referral-based reimbursement incentives, and stakeholders suggested limiting reimbursement outside hubs to boost network use and ensure high-quality care. The model also increases workload for clinicians, though solutions like extra funding or greater use of telemedicine are being explored. Interoperability of health records remains a barrier, often requiring data to be digitised twice. This issue, also seen in ERNs, may be eased by the EHDS.

Several **key lessons** can be drawn from Italy's implementation of the network-based hub-and-spoke model leveraging CCCs. A crucial factor in its success is strong regional support and government ownership, which underpin the model's sustainability. This network approach enables effective multidisciplinary collaboration, a cornerstone of comprehensive and high-quality cancer care. Importantly, Italy's established CCC infrastructure plays a vital role, an advantage not yet available in many other EU Member States. Interviewed stakeholders highlighted that this model has strengthened the Italian health system by concentrating expertise, ensuring patient-centred care, and improving access through integrated clinical pathways and coordinated multidisciplinary teams.

4.5.2. Case study Poland: Strengthening cancer care equity

Background

The **healthcare system** in Poland is based on universal health insurance, with the Ministry of Health playing a central role in managing the health sector.[622] The National Health Fund (Narodowy Fundusz Zdrowia, NFZ) is the sole purchaser within the universal health insurance system.[623] However, a growing private sector provides supplementary services.[624]

In 2022, Poland's healthcare spending was EUR 1137 per capita, below the EU27 average.[625] When measured as a percentage of GDP, Poland allocated 6.4% to healthcare, in contrast to the EU27 average of 10.4%.[626] Within this context, oncology spending is projected to account for 0.6% of Poland's GDP, supported by the National Strategy for Oncology (see below), which includes a planned investment of PLN 11 billion (approximately EUR 2.5 billion). However, prevention remains an underfunded area within the health system.[627]

While circulatory diseases i.e. cardiovascular diseases remain the leading cause of death in Poland, cancers and respiratory diseases (respectively) also contribute significantly, together accounting for 66% of all deaths. From 1980 to 2001, cancer mortality steadily increased, but this trend has since reversed; in 2022, cancers were responsible for nearly 24% of all deaths (mortality rate of 226 per 100,000 people).[628] The most common new cancer cases were lung, colorectal cancers, breast and

622 OECD and European Observatory on Health Systems and Policies, State of the Health in the EU – Polska, 2021.
623 ibid.
624 ibid.
625 Eurostat, Healthcare expenditure statistics – overview, website.
626 ibid.
627 OECD and European Commission, EU Country Cancer Profile: Poland 2025, 2025.
628 Statistics Poland, Health and health care in 2023, 2024.

prostate cancer.[629] Poland faces a shrinking population due to ageing and low birth rates, straining an already overburdened healthcare system.[630] The ageing medical workforce, especially among nurses,[631,632] is worsening staff shortages as retirements outpace new entries. Healthcare demand is rising, particularly in oncology, with a projected 28% increase in cancer patients by 2029.[633] The oncology care system is reported to face persistent challenges related to efficiency and coordination.[634] Furthermore, the Supreme Audit Office has flagged low participation in screening programmes, weak preventive care, and a fragmented system as key challenges.[635]

Another area requiring attention is the integration of telemedicine, which has been progressing slowly. This is partly due to limited infrastructure, such as access to appropriate hardware and software, as well as the need for staff training to develop the distinct skills required for virtual consultations. Building trust in the effectiveness of telehealth solutions among healthcare professionals also remains important. Additionally, clearer clinical guidelines and protocols are needed to support the appropriate use of remote care. The routine use of PROs, such as quality-of-life questionnaires, is still underdeveloped. There is also a lack of standardised methods for clinical data collection across facilities, as an interviewee indicated, which presents a barrier to more cohesive, technology-driven oncology care and research.

As a result, Poland's **National Oncology Strategy** (2020–2030)[636] and National Recovery and Resilience Plan[637] aim to improve cancer survival, early detection, and care coordination through investments in prevention, diagnostics, and workforce development. However, challenges persist, including regional disparities, fragmented services, low screening uptake, and delays in implementing key reforms.[638] According to the OECD 2025 Country Cancer Profile, Poland's National Strategy for Oncology 2020-30 is in line with the EBCP. Furthermore, new legislation seeks to streamline cancer care and enhance patient outcomes across the care continuum.[639,640]

Overall assessment: the implementation of the EBCP in the country

Still, in recent years Poland has demonstrated **growing commitment to cancer care and prevention**. The EBCP plays a role in keeping cancer high on the public health agenda, albeit indirectly, and the aforementioned national programmes cannot be linked to its influence. Also, unlike the National Oncology Strategy, it is not coordinated or overseen by a single dedicated

629 OECD and European Commission, EU Country Health Profile: Poland 2023, 2023.
630 OECD, OECD Economic Surveys: Poland 2025, 2025.
631 Najwyższa Izba Kontroli, Zasoby kadry medycznej w systemie ochrony zdrowia, 2023.
632 Statistics Poland, Health and health care in 2023, 2024.
633 Rada Ministrów, Uchwała nr 10 Rady Ministrów z dnia 4 lutego 2020 r. w sprawie przyjęcia programu wieloletniego pn. Narodowa Strategia Onkologiczna na lata 2020-2030, 2020.
634 Najwyższa Izba Kontroli, Zasoby kadry medycznej w systemie ochrony zdrowia, 2023.
635 Najwyższa Izba Kontroli, Dostępność i efekty leczenia nowotworów, 2018; Najwyższa Izba Kontroli, Raport: System ochrony zdrowia w Polsce – stan obecny i pożądane kierunki zmian, 2019.
636 Rada Ministrów, Uchwała nr 10 Rady Ministrów z dnia 4 lutego 2020 r. w sprawie przyjęcia programu wieloletniego pn. Narodowa Strategia Onkologiczna na lata 2020-2030, 2020.
637 Ministerstwo Funduszy i Polityki Regionalnej, Krajowy Plan Odbudowy i Zwiększania Odporności, 2022.
638 Najwyższa Izba Kontroli. Dostępność i efekty leczenia nowotworów, 2018.
639 Sejm Rzeczpospolitej Polskiej, Ustawa z dnia 9 marca 2023 r. o Krajowej Sieci Onkologicznej, 2023.
640 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025.

institution.[641] Poland remains highly engaged in the EU4Health programme, participating in both rounds of **cancer-related Joint Actions** and securing procurement contracts. Poland is currently involved in several EBCP-linked projects: in diagnosis and treatment (EUnetCCC,[642] OriON JA,[643] CAN.HEAL,[644] PCM4EU)[645], early detection (EUCanScreen,[646] SOLACE)[647], and quality of life (SmartCARE).[648] Poland' Instyut Biologii Dośiwadczalenj Polskiej Akademii Nauk is also coordinating one of the **Horizon Europe**-funded projects: Targeting tumour-host interactions in paediatric malignant gliomas to reinvigorate immunity and improve radio- and immunotherapy efficacy, under the pillar of Understanding cancer.[649]

Description of the initiative

The eCAN (2022-2024, funded through EU4Health) addressed disparities in cancer care access across Europe, especially in remote regions, and responded to vulnerabilities exposed by the COVID-19 pandemic. It is one of several EBCP-linked projects Poland is involved in, contributing to European goals in diagnosis, treatment, early detection, and quality of life. Coordinated by Belgium's Sciensano[650] and involving 35 partners from 16 countries. Poland as evaluation lead, eCAN aimed to **integrate telemedicine and remote monitoring into cancer care**. Its primary focus was on cancer patients in underserved areas and their healthcare providers. The project included three clinical pilots: post-operative rehabilitation via video consultations (targeting breast, head, and neck cancer patients), psychological support for patients with metastatic cancer, and telemonitoring through wearable devices and mobile applications to track patient-reported outcomes such as pain, distress, and quality of life. Patients were randomly assigned to an intervention group or standard care group, with the intervention period typically lasting eight weeks. As such, eCAN contributes to broader European goals in cancer diagnosis, treatment, early detection, and improving quality of life.

---

641 Some of the initiatives that can be linked with the influence of the EBCP are, for example programme of free HPV vaccinations for children age 9 and above (2024), or the extension of the breast cancer screening for women aged 50-69 years to women aged 45-74 years as of November 1, 2023.

642 EUnetCCC aims to establish a cohesive network of Comprehensive Cancer Centres across Europe, reducing disparities in care by promoting collaboration and resource sharing; Poland participates via its National Institute of Public Health. See EUnetCCC, The European Comprehensive Cancer Center Network, website

643 OriON JA ("Joint Action on Contribution to the Cancer Inequalities Registry") provides a qualitative analysis of national cancer control implementation, helping monitor EBCP uptake and tackle inequalities; it includes Poland among 17 participating Member States.

644 CAN.HEAL focuses on building an EU genomics platform for cancer and public health, promoting personalised approaches and data-sharing in cancer care. See: European Commission, OriON – Joint Action on Contribution to the Cancer Inequalities Registry to Monitor National Cancer Control Policies Across Europe, website.

645 PCM4EU ("Personalised Cancer Medicine for all EU citizens") aims to equalise access to molecular diagnostics and precision oncology, enabling more tailored cancer treatment across Europe. Poland is one of the 15 participating countries in this EUR 3.6million EU4Health-funded project. See: PCM4EU, PCM4EU – Personalised Cancer Medicine for all EU Citizens, website.

646 EUCanScreen is committed to sustainably optimising cancer prevention, especially access to and the implementation of screening programmes. See European Commission, Implementation of cancer screening programmes – EUCanScreen, website.

647 SOLACE ("Strengthening the Screening of Lung Cancer in Europe") supports the implementation of LDCT-based lung cancer screening across diverse populations. Poland participates alongside 14 other countries in developing guidelines, pilot programmes, and outreach initiatives targeting high-risk or underserved groups. See European Commission, SOLACE - Strengthening the screening of Lung Cancer in Europe, website.

648 SmartCARE focuses on improving the quality of life for cancer survivors.

649 European Commission, Cancer projects tool, website.

650 Sciensano is a research institute and the national public health institute of Belgium.

Key outcomes and impact of the initiative

eCAN's integrated, tech-driven approach marked a major innovation in delivering equitable and resilient cancer care.[651] The project successfully demonstrated that teleconsultations can be as effective as standard in-person care for selected cancer-related indications, with some results even showing marginally better outcomes ("light plus"). This validation was supported by strong satisfaction among both patients and clinicians; an interviewee expressed surprise at the effectiveness and user-friendliness of the telemedicine approach.

The project successfully developed a comprehensive system that enabled teleconsultations and the input and monitoring of clinical information and patient-reported data. Hence, the key outcome was the development of a digital system that included a patient-facing mobile app for reporting quality of life, pain, and distress; a clinician dashboard for data tracking; and the integration of these tools into a central teleconsultation platform (EduMEET). The project implemented multi-country clinical pilots involving over 250 patients, focusing on tele-rehabilitation and psychological support for individuals with breast, head and neck, and metastatic cancers.[652]

A significant achievement was the development of a "roadmap," which was considered both useful and well-designed. This document outlines the context of the project, presents the results of the pilot activities, and offers guidance on potential next steps.[653]

The project, although finalised, was prolonged to be further developed as **eCANplus**.[654] The eCAN project is well aligned with efforts to address key challenges in Poland's oncology care system, particularly inefficiency, poor coordination, and regional disparities. Demonstrating that teleconsultations are as effective as standard care (in some instances) gave a clear signal for further development of telemedicine in the country. It directly responded to the identified need for improved digital competencies among healthcare professionals through dedicated training programmes and tackled infrastructure gaps by developing digital tools. The project also addressed data fragmentation by promoting inter-cooperation and interdisciplinary collaboration while creating a roadmap to guide future national implementation. Although it did not resolve all issues, such as interoperability and regulatory barriers, it successfully brought these to light.[655]

Key takeaways: success factors and lessons learnt

A key success factor of the **eCAN project** was the strong collaborative environment established from the outset. The initiative was built on a genuine partnership arrangement among all participating entities, fostering a "good atmosphere" that contributed significantly to the project's successful completion. Despite the inherent challenge of aligning diverse working habits and principles, the project was well-coordinated, thanks to dedicated efforts from the coordination team. This inclusive and cooperative structure not only enabled the delivery of "interesting results" but also laid the foundation for future development in digital cancer care. The project also

651 eCAN, Final Evaluation Report, eCAN Deliverables, 2024.

652 ibid, p. 9.

653 eCAN, Roadmap development for scaling-up eHealth, eCAN Deliverables, 2024.

654 V. Leclercq, R. Saesen, T. Schmitt, K. Habimana, C. Habl, A. Gottlob, M. Van den Bulcke and M. Delnord, 'How to scale up telemedicine for cancer prevention and care? Recommendations for sustainably implementing telemedicine services within EU health systems', *Journal of Cancer Policy,* Vol. 44, Elsevier Limited, 2025, p. 100593.

655 ibid.

successfully built an interdisciplinary group of professionals: from IT, healthcare, analytics, and clinical backgrounds, capable of sustained cooperation on complex topics.[656]

Among the main lessons learned was the critical need for clear, well-developed clinical guidelines that define when telemedicine is appropriate and how it fits into a patient's care pathway. The project also highlighted that working with teleconsultations requires distinct competencies compared to traditional hospital-based care, pointing to the importance of targeted training and educational support. Infrastructure emerged as a non-negotiable prerequisite, with reliable hardware and specialised software essential for successful service delivery and data tracking.[657]

Launching the pilots proved to be the most time-consuming aspect, revealing that many clinical centres, particularly in oncology, were not fully prepared for research involving new technologies. Introducing something new to the system requires paving the way: involving various stakeholders like personal data inspectors, lawyers, cybersecurity experts, and ethics committees to address issues like project insurance and qualification. Time constraints were another challenge, with some project elements underestimated in terms of the time required for implementation.[658]

4.6. Action 40: Mainstream equality action in areas addressed by the EBCP such as screening and high-quality cancer care

Health inequities refer to differences in the health status of individuals and populations, including disparities in access to, use of, and outcomes from health services.[659] Within the EU, these inequities are evident in significant regional variations in cancer-related mortality, with certain population groups experiencing disproportionately high death rates. These disparities are compounded by intersecting factors such as age, sex, and education level; the latter having a particularly notable impact on cancer survivability. [660] For instance, individuals with lower levels of education are 1.7 to 2.6 times more likely to die from lung cancer compared to those with higher educational attainment. [661] Additional sociodemographic risk factors such as homelessness, and the use of alcohol and tobacco are also strongly associated with poorer cancer outcomes, highlighting the urgent need for targeted, equity-focused interventions in cancer prevention and care.[662]Moreover, access to specialised cancer care differ between rural and urban areas. This rural urban divide, also called the 'postcode lottery', is informed by the phenomena where specialised services are often centralised in urban centres, which has implications for waiting times and timely access to critical care for cancer patients. Cancer patients residing in rural settings also have less access to innovative treatment options for example through clinical trials that providers in rural areas don't have access to.

656 A. Gottlob, T. Schmitt, M.S. Frydensberg, M. Rosińska, V. Leclercq and K. Habimana, 'Telemedicine in cancer care: lessons from COVID-19 and solutions for Europe', *European Journal of Public Health*, Vol. 35(1), Oxford University Press, 2025, pp. 35-41.

657 ibid.

658 eCAN, Interim Evaluation Report, eCAN Deliverables, p, 38.

659 WHO, Health inequities and their causes, WHO Newsroom, 22 February 2018.

660 The Lancet Public Health. 'Inequalities in cancer: a major public health concern.' The Lancet Public Health, Vol. 9(3), Elsevier Limited, 2024, e147.

661 ibid.

662 M. Jeleff, S. Haider, T. Schiffler, A. Gil-Salmerón, L. Yang, F. Barreto Schuch and I. Grabovac, 'Cancer risk factors and access to cancer prevention services for people experiencing homelessness', *The Lancet Public Health*, Vol. 9(2), Elsevier Limited, 2024.

Cancer screening plays a critical role in improving outcomes by enabling early detection and timely linkage to care, which reduces the risk of poor prognoses. For example, identifying colorectal cancer at Stage 1 is associated with a five-year survival rate of approximately 90%.[663] Despite the proven benefits of screening, population coverage remains low across Europe; according to the ECIR EU Country Cancer Profile Synthesis Report 2025, the average screening rates of breast, cervical and colorectal cancer are 56%, 55% and 42% respectively.[664] Vulnerable groups including low-income and minority populations are disproportionately affected by low screening rates.[665] For example, the Roma report experiencing barriers in accessing health care, with low documented breast and cervical cancer screening among Roma women, despite reports of high prevalence of cancer among this population.[666] Across the EU, migrant groups often experience barriers in accessing primary and secondary cancer prevention services. In Denmark for example, girls of minority group are less likely to receive the HPV vaccination than girls from non-minority groups. Research shows the impact of integrating tailored education or other activities to make cancer screening more effective. A project in Norway achieved a 5 percentage point increase in screening among Pakistani and Somali communities following the integration of translated education materials into promotion efforts.[667]

Multiple factors influence access to and use of screening services, including gender, socioeconomic status, health system structures, and individual-level factors such as beliefs, knowledge, and prior experiences with care. [668] To address these disparities, cancer screening policies must incorporate tailored strategies that increase awareness, reduce barriers, and create equitable opportunities for engagement with prevention services. [669] There is no universal model for cancer screening; effective programs must be adapted to the behaviours, knowledge, and preferences of target populations, ideally shaped through meaningful community engagement. [670]

Embedding equality actions into cancer programming in the design, implementation, and evaluation is essential for achieving the goals of the EBCP. This approach is reflected in efforts across EU Member States, including enhanced screening strategies and European Council recommendations to strengthen HPV vaccination by addressing health systems and financial barriers.[671]

So far, the progress of cancer screening in the EU Member States is satisfactory as most of the EU countries have implemented screening programmes for breast, colorectal and cervical cancer.[672] [673]

---

663 Digestive Cancers Europe, Interventions to Reduce Cancer Screening Inequities, 2023.

664 OECD, EU Country Cancer Profile Synthesis Report 2025, European Cancer Inequality Registry, 2025.

665 A. Richardson-Parry, C. Baas, S. Donde et al., 'Interventions to reduce cancer screening inequities: the perspective and role of patients, advocacy groups, and empowerment organizations' *International Journal of Equity Health*, Vol. 22(1), BioMed Central Limited, 2023, 19.

666 Matrix, 'Roma Health Report – Health status of the Roma population. Data collection in the Member States of the European Union, Study at the request of the European Union 2014.

667 S.A. Qureshi, J. Igland, K. Møen, A. Gele, B. Kumar and E. Diaz, 'Effect of a community-based intervention to increase participation in cervical cancer screening among Pakistani and Somali women in Norway.' *BMC Public Health*, Vol. 21(1), 2021, 1271.

668 Digestive Cancers Europe, Interventions to Reduce Cancer Screening Inequities, 2023.

669 The Lancet Public Health. 'Inequalities in cancer: a major public health concern', The Lancet Public Health, Vol. 9(3), Elsevier Limited, 2024, e147.

670 A. Richardson-Parry, C. Baas, S. Donde et al., 'Interventions to reduce cancer screening inequities: the perspective and role of patients, advocacy groups, and empowerment organizations', *International Journal of Equity Health,* Vol. 22(1), BioMed Central Limited, 2023, 19.

671 Council of the EU, Council Recommendation of 21 June 2024 on vaccine-preventable cancers (C/2024/4259), 2024.

672 OECD, Beating cancer inequalities in the EU – Spotlight on cancer prevention and early detection, 2024.

673 C. Lenz, A. Maj, H. Vu, T.Y.-C. Yeung and K. Zubel, Cancer: repository of regional prevention and detection policies, Study at the request of European Committee of the Regions, European Committee of the Regions, 2025.

For example, the Basque government of Spain has been sending testing kits for colorectal cancer to all men and women aged 50–69 years and finds that sending test kits to people's homes leads to higher participation rate.[674] In Sicily, Italy, the Frecciarosa 2024 campaign offers breast cancer screening and raises awareness in remote areas using the Italian national railway system.[675] In Hungary, the 'Equal Chances Against Cancer' campaign provides accessible breast cancer screening services and to build trust among Roma communities.[676]

At the Union level, the EU Council Recommendation on Cancer Screening was adopted in December 2022, which covers recommendations for breast, colorectal and cervical cancer screening with the aim to ensure at least 90% of the EU population who qualify for screening are offered the service by 2025.[677] As reported by OECD, 26 of the 29 countries (EU27 plus Iceland and Norway, which are not EU Members) have implemented breast cancer screening, roughly half of the 29 countries offer self-sampling tests for colorectal cancer. For cervical cancer, only 7 of 29 countries offer self-sampling tests. [678] In general, screening has been improving across the EU countries.[679] EU27 average percentages of never having these three screening tests were decreasing even before the launch of the EBCP. Currently, the EU has maintained a central webpage to refer internal users to the cancer screening campaigns of their respective Member States.[680]

On awareness campaigns, 19 EU Member States have public awareness campaigns in place and 16 Member States have initiatives to reach vulnerable or remote populations.[681] Awareness campaigns have long been recognised as an effective measure for prevention and early detection.[682] However, a meta-analysis shows that public awareness is still poor and there is a need to better educate the public. For instance, the awareness of the link between alcohol and breast cancer ranged only between 10% and 20% and liver cancer roughly at 40%.[683] Another research reports that the European Code Against Cancer (ECAC), a set of recommendations aimed at informing the public about reducing their cancer risk last updated in 2014, has not been successfully disseminated.[684] The disparities of cancer among adolescents and young adults in the EU have been linked to variation in public education and awareness of cancer symptoms.[685] Indeed, IHLGiS – Inclusive Healthy Lifestyle Groups in Schools, funded by EU4Health, includes components that address health promotion and

674 I. Portillo, I. Idígoras, E. Ojembarrena et al., 'Main results of the colorectal cancer screening program in the Basque Country (Spain)', *Gaceta Sanitaria*, Vol. 27(4), Elsevier Limited, 2013, pp 358–61.

675 FS Italiane, Frecciarosa 2024 in Sicily: breast cancer prevention travels by Intercity train between Palermo and Messina, 2024.

676 Open Society Foundations, Campaign Aims to Give Roma Women an Equal Chance Against Cancer, 2011.

677 Council of the EU, Council Recommendation of 9 December 2022 on strengthening prevention through early detection: A new EU approach on cancer screening replacing Council Recommendation 2003/878/EC 2022/C 473/01.

678 OECD, Beating cancer inequalities in the EU – Spotlight on cancer prevention and early detection, 2024.

679 See the data provided by the ECIR.

680 See https://cancer-screening.campaign.europa.eu/index_en

681 OECD, Beating cancer inequalities in the EU – Spotlight on cancer prevention and early detection, 2024, p. 198.

682 E. Baumann, M. Koller, J. Wiltfang, H.J. Wenz, B. Moller and K. Hertrampf, 'Challenges of early detection of oral cancer: raising awareness as a first step to successful campaigning', *Health Education Research*, Volume 31(2), Oxford University Press, 2016, pp. 136–145.

683 D. Kokole, C. Ferreira-Borges, G. Galea, A. Tran, J. Rehm and M. Neufeld, 'Public awareness of the alcohol-cancer link in the EU and UK: a scoping review', *European Journal of Public Health*, Vol. 33(6), Oxford University Press, 2023, pp. 1128–1147.

684 D. Ritchie, M. Mallafre-Larrosa, G. Ferro, J. Schuz and C. Espina, 'Evaluation of the impact of the European Code against Cancer on awareness and attitudes towards cancer prevention at the population and health promoters' levels', *Cancer Epidemiology*, Vol. 71, Part A, Elsevier Limited, 2021, 101898.

685 A. Trama, D. Stark, I. Bozovic-Spasojevic et al., 'Cancer burden in adolescents and young adults in Europe', ESMO Open, Vol. 8(1), Elsevier Limited, 2023, 100744.

screening. The project aims to create inclusive health promotion programs and collaborate with community health services to foster an inclusive, healthy school environment, which indirectly supports accessible health screenings for students with disabilities.[686]

Box 146: Progress on Mainstream equality action in the EBCP including addressing persons with disabilities (Action 40)

The official roadmap of the EBCP does not specify tasks or actions under Action 40, but this action is linked to Action 39.2. Indeed, a wide range of actions could help promote access to healthcare, thereby narrowing cancer inequalities. These actions are distributed across projects and policies.

The most relevant project is the EUCanScreen funded under EU4Health, which focuses on implementing high-quality cancer screening programs for breast, cervical, colorectal, lung, prostate, and gastric cancers. A key aspect of this initiative is ensuring that these screening programs are accessible to individuals with disabilities, thereby promoting equity in cancer prevention across the EU.[687]

(Source: European Commission[688])

The Joint Action EUCanScreen, which is the main tool to implement the 2022 Council Recommendation on cancer screening, serves to share best practices among Member States. Several dedicated tasks relate directly to best-practice sharing, such as the development of a best-practices toolkit for addressing cancer screening barriers using evidence- based solutions, a report with a set of recommendations for implementing best practices in invitation within screening programmes, a compilation of best practices for effective risk communication in risk-based screening, and a series of online workshops on best practices in using AI in breast cancer screening practice.

In spring 2023, the European Commission launched the #GetScreenedEU campaign to raise awareness about the importance and benefits of cancer screening. The campaign is grounded in the Council Recommendation on cancer screening, which emphasises equitable access to screening services. Its goal is to encourage participation in national, population-based screening programmes for breast, cervical, and colorectal cancer, particularly among adults aged 40 to 60 and individuals from disadvantaged backgrounds. Funded by EU4Health, the campaign is EU-wide but includes a targeted approach, with a dedicated budget for paid media in countries where cancer screening uptake remains below the EU average. During its first wave (spring 2023 to end of 2024), the campaign ran in Belgium, Cyprus, Estonia, Malta, and Latvia. The second wave, concluded in July 2025, focused on Greece, Poland, and Romania.

686 IHLGiS - Inclusive Healthy Lifestyle groups in Schools, European Commission website.
687 EUCanScreen, EUCanScreen – European Joint Action on Cancer Screening, website.
688 European Commission, Europe's Beating Cancer Plan: Implementation Roadmap, 2024.

4.6.1. Case study Croatia: Mainstreaming Equality in Breast Cancer Screening

Background

The **Croatian health system** is centrally governed and financed, with national authorities defining policy, regulation, and a standardised benefits package.[689] Administratively, the country is divided into four regions and 21 counties, each with its own county hospital. However, Croatia lacks a designated national-level oncology hospital or an officially certified Comprehensive Cancer Centre (CCC).

The Croatian Health Insurance Fund serves as the primary insurer and purchaser of health services under the country's universal health coverage system. More than half of the population opts to purchase complementary health insurance to cover co-payments and out-of-pocket expenses not included in the basic package.[690] Compared to other EU member states, Croatia allocates relatively limited resources to health. In 2018, health spending amounted to 7.2% of GDP, with 6.8% of the health expenditure spent on cancer care; health expenditure rose to 7.3% of GDP in 2022.[691,692] In 2021, Croatia spent 4% of total current health expenditure on preventive care, lower than the EU average.[693]

Cancer remains a prominent public health challenge in the country. Between 2010-2020, the prevalence of cancer increased by 29%.[694] In 2022, the cancer incidence rate was 12% higher than the EU average at 638 cases per 100,000.[695] The incidence among men is particularly high compared to the EU average at 802 cases per 100,000, with the highest contributor being prostate cancer. Croatia has the second highest cancer mortality rate in the EU (381/100,000), after Hungary and 31% higher than the EU average. Dietary risks and tobacco are major risk factors contributing to the high mortality rates; the adult prevalence of smoking is over 30% nationally. [696,697]

Croatia's healthcare system faces challenges in cancer care access, especially for remote, island, and rural residents. Travel to hospitals can be costly and difficult. Access varies by region, with rural areas having fewer options due to specialised care being city-centred and medical equipment availability about 25% below the EU average. [698] The lack of uniform diagnosis and treatment standards drives inequalities. National stakeholders also highlighted workforce issues, including understaffed provincial hospitals and a drain of staff moving to the expanding private sector.

---

689 A. Džakula, D. Vočanec, M. Banadinović, M. Vajagić, K. Lončarek, I. Lukačević Lovrenčić, D. Radin and B. Rechel, Croatia – Health System Summary 2024, World Health Organization Regional Office for Europe, European Observatory on Health Systems and Policies, 2024, p. 2.

690 OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Croatia – Country Health Profile 2021, European Commission, 2021.

691 OECD and European Commission, EU Country Cancer Profile: Croatia 2025, 2025.

692 Institute for Health Economics (IHE), 'Comparator report on cancer in Europe 2019 – Disease burden, costs and access to medicines', IHE Report 2019:7, 2020.

693 OECD and European Commission, EU Country Cancer Profile: Croatia 2025, 2025.

694 ibid.

695 ibid.

696 OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Croatia – Country Health Profile 2021, 2021.

697 Vital Strategies and Tobacconomics, Tobacco Atlas: Croatia, 2025.

698 European Data Journalism Network, Cancer in Croatia: a cruel system, 2022.

Overall assessment: the implementation of the EBCP in the country

Croatia's commitment on addressing cancer as a public health issue is longstanding. In 2006, the country implemented its national population level breast cancer screening programme, with subsequent cancer screenings implemented for colon, cervical, and lung cancers. Croatia remains the only EU country to have a national level lung cancer screening programme. **Cancer has also been a political priority with initial discussions for a national plan** beginning in 2009 and the first plan published in 2020.

To address challenges of high incidence and mortality, Croatia instituted the National Plan Against Cancer for 2020-30 which aligns with the priorities and pillars of the EBCP.[699] The national plan was developed through a collaborative and participatory approach with over 200 stakeholders contributing to the plan. National stakeholders shared the EBCP provides an important directionality in highlighting important pillars for investment and focus and shared momentum on cancer for Europe as a whole.

The COVID-19 pandemic delayed implementation of the national plan and EBCP due to competing health priorities. In 2024, Croatia launched a national action plan to accelerate progress, focusing on strengthening data infrastructure through an oncology network and database, and renewing radiotherapy services to ensure appropriate cancer treatment.[700] Risk factor prevention is addressed through a long-standing healthy living project, including school-based education.[701] Croatia continues to implement national cancer screening programmes and has achieved high screening rates for breast (60%) and cervical cancers among women surpassing the EU average.[702] Croatia uses an innovative risk-based screening approach by involving GPs to identify patients with specific risk factors, recorded in the central health system for early detection. To reach rural populations, three mobile breast cancer screening units are deployed. Croatia also participates in European Joint Actions like the Innovative Partnership for Action Against Cancer (iPAAC) which joins forces with 24 partners to implement innovations in cancer and EUCanScreen, which focuses on the delivery of high-quality screening for different cancers.[703,704] National stakeholders value the Joint Actions for expert collaboration and sharing best practices in a non-competitive setting.

Description of the initiative

Primary and secondary prevention are key areas of focus in both the EBCP and the Croatian National Cancer plan.[705] and has implemented tailored activities to address inequities to increase uptake and early detection of breast cancer.[706] This activity was selected for the case study because of the success in addressing inequities in breast cancer screening at a national level aligned with EBCP aims to reduce inequities and improve early detection with tangible lessons to apply to other countries and other cancer types.

---

699 Republic of Croatia, National Cancer Control Plan 2020-2030, Zagreb, 2020.
700 OECD and European Commission, EU Country Cancer Profile: Croatia 2025, 2025.
701 European Commission, Youth Wiki – Croatia: 7.2 Administration and Governance, website.
702 OECD and European Commission, EU Country Cancer Profile: Croatia 2025, 2025.
703 Croatian Institute of Public Health, EUCanScreen: European Joint Action on Cancer Screening, HZJZ, 2025.
704 IPAAC Joint Action, Innovative Partnership for Action Against Cancer (iPAAC), IPAAC.
705 Ministry of Health of the Republic of Croatia, National cancer control plan 2020 – 2030, 2019.
706 B. Brkljačić and A. Šupe Parun, 'Croatian success in early breast cancer detection: Favorable news in Breast Cancer Awareness Month', *Croatian Medical Journal*, Vol. 61(5), Medicinska Naklada, 2020, pp. 389–390.

The national level breast cancer screening programme called "Mamma" began in 2006 with the aim to lower breast cancer mortality by at least a quarter and to facilitate earlier identification of cancers for more rapid linkage to care.[707] The national screening program functions by sending an invitation letter in the mail to individuals between 50–74 years to invite them to get screening at their local screening point. This will be changing in 2025 to expand the age range to begin at age 45, in alignment with EU recommendations as part of the EBCP in improving early detection.[708] The EBCP underscores the priority of reaching people in remote and rural areas to increase equal access to timely diagnosis and treatment. [709]

In reaching vulnerable and hard-to-reach underserved groups, different approaches have been taken including mobile breast cancer units.[710] There are some awareness raising activities that accompany the deployment of mobile units, but stakeholders highlight a missed opportunity to leverage a strong civil society network of breast cancer organisations that routinely conduct community-based outreach to increase awareness, education, and link to screening services for women and men, including in harder to reach areas. Interviewed stakeholders shared these activities include a range of awareness building grass roots initiatives including going to door to door, sharing lived experience, utilising social media, radio, and television spots. Grassroots organisations for breast cancer collaborate in reaching all communities, including mobile groups like the Roma communities.[711] [712]

Key outcomes and impact of the initiative

The programme had 150 000 mammograms performed every year, reported in 2020.[713] In 2022, 62% of the eligible population in Croatia was screened for breast cancer.[714] Croatia continues to experience high rates of mortality among most cancers, but among breast cancer it has one of the lowest mortality rates, which is attributed to the efficacy of its **national breast cancer early detection plan.** [715] In reaching vulnerable and hard-to-reach underserved groups, different approaches have been taken including mobile breast cancer units.[716]

Healthcare workers also play an important role in promoting prevention and early detection of cancer. A recent study conducted in Istria County, Croatia, found that 92.5% of female healthcare

[707] I. Šiško and N. Šiško, 'Preventivni programi za rano otkrivanje raka dojke u Republici Hrvatskoj (Prevention programs for early detection of breast cancer in Croatia)',. *Sestrinski glasnik*, Vol. 22(2), Portal of Croatian scientific and professional journals, 2017, pp.107-110.

[708] Council of the EU, Council Recommendation of 9 December 2022 on strengthening prevention through early detection: A new EU approach on cancer screening replacing Council Recommendation 2003/878/EC 2022/C 473/01

[709] European Commission, European Health Union: A new EU approach on cancer detection – screening more and screening better, press release, 2022.

[710] ibid.

[711] C. Lenz, A. Maj, H. Vu, T.Y.-C. Yeung and K. Zubel, Cancer: repository of regional prevention and detection policies, Study at the request of European Committee of the Regions, European Committee of the Regions, 2025.

[712] International Organization for Migration, Implementation of the National Roma Integration Strategy and Other National Commitments in the Field of Health – Croatia, IOM Global Office for the European Union, 2014.

[713] B. Brkljačić and A. Šupe Parun, 'Croatian success in early breast cancer detection: Favorable news in Breast Cancer Awareness Month', *Croatian Medical Journal*, Vol. 61(5), Medicinska Naklada, 2020, pp. 389–390.

[714] OECD and European Commission, EU Country Cancer Profile: Croatia 2025, 2025.

[715] OECD and European Commission, Beating Cancer Inequalities in the EU, OECD Health Policy Studies, 2024.

[716] ibid.

workers who received an invitation for mammography screening participated in the program.[717] This high uptake underscores the strong awareness and commitment to cancer screening which may indirectly influence patient behaviour in prevention practice.

Key takeaways: successes, barriers, and lessons learned

The screening programme is not a standalone project but accompanied by a wide range of activities, such as TV commercials and newspaper advertising. Promotional pamphlets are distributed in pharmacies and healthcare centres, together with social media campaigns and a hotline. These activities have helped raise awareness and acceptance by the public. Several other factors have contributed to **Croatia's success in reducing breast cancer mortality and achieving high participation rates in its national screening program**. A major strength lies in the long-standing, well-integrated implementation of breast cancer screening across the healthcare system. The program proactively reaches out to eligible individuals based on clear criteria aligned with EU standards, ensuring timely invitations for screening. To overcome geographic barriers, mobile mammography units are deployed to serve hard-to-reach and rural areas, reducing the need for patients to travel to centralized facilities.[718]

Additionally, Croatia benefits from a robust and well-coordinated civil society sector that operates at the grassroots level. These organisations play a vital role in education and raising awareness, which fosters community trust and encourages women to participate once invited. Crucially, breast cancer screening costs are fully covered by health insurance for both citizens and residents, minimising financial obstacles to access.[719]

Despite these strengths, several challenges remain in achieving full equality in breast cancer screening. The limited number of mobile mammography units and the absence of a regular, routine deployment schedule to rural and remote communities undermine consistent access. Furthermore, mobile screening services are not systematically coordinated with the outreach efforts of grassroots community organisations, resulting in missed opportunities for combined education and screening drives. Another gap is the lack of financial incentives for healthcare providers to refer patients for breast cancer screening, in contrast to programs like lung cancer screening that include such motivators. It is reported that some healthcare institutions lack the up-to-date equipment to keep up with the latest standard and quality,[720] and the IT infrastructure does not allow documenting information throughout the process from invitation, diagnosis to treatment.[721]

Education remains a cornerstone of effective cancer screening and prevention. Strengthening intentional linkages between community-based outreach and national screening programs can build momentum and broaden the reach of screening services. This need became particularly evident in

---

717 Jovanović, Z. and Rojnić, O. Response of Healthcare Professionals in the County of Istria to the National Prevention Programme for the Early Detection of Breast Cancer, *Public Health and Healthcare*, preprint, 2024.

718 Z. Brnić, K. Kašnik, K. Kašnik, V. Brnić, N. Borojević, L. Ljubešić, S. Schmidt and T. Krpan, 'Patient Satisfaction in Croatian Nationwide Mammography Screening Program', *International Journal of Clinical Medicine*, Vol. 8(3), Scientific Research Publishing 2017, pp. 159-166.

719 OECD and European Commission, EU Country Cancer Profile: Croatia 2025, 2025.

720 A. Šupe Parun, Presentation: Improvement of quality of the national cancer screening programmes implementation (CRO Screening), 2016.

721 A. Šupe Parun, P. Čukelj, V. Tešić, M. Jelavić and B. Brkljačić, 'Results of the National Breast Cancer Screening Program in Croatia (2006-2016)', *Croatian Medical Journal*, Vol. 63(4), Medicinska Naklada, 2022, pp. 326-334.

the aftermath of COVID-19 when disruptions to educational efforts contributed to decreased screening participation. Maintaining continuous education and awareness campaigns during health emergencies is essential, as lapses can lead to delays in diagnosis, higher mortality, and poorer survival outcomes. Besides, acceptance by the public is affected by socio-economic, cultural and also psychological factors. Research could attempt to study the effectiveness of the promotional activities and understand what worked and what did not.[722]

Finally, political commitment is critical for robust screening programmes at a national level. This includes increased funding and the establishment of provider incentive systems, similar to those used in lung cancer screening, to create an enabling environment that supports both healthcare providers and patients in maximising screening uptake. [723] [724]

[722] M.D.J. Peters, B. Kim, R. Clifford, L. Moxham, S.M.S. Islam and R. Parker, 'The effectiveness of mass media campaigns for cancer prevention and early detection: a scoping review', *BMC Public Health*, Vol. 25, BioMed Central Limited, 2025, Article 23179.

[723] L. Junge and B. Durvy, Introduction and use of cancer data registry: lessons from Austria, Belgium, Finland and Slovenia, EuroHealth Observatory, 2025.

[724] A. Mehrotra, M. Chernew, D. Linetsky, H. Hatch and D. Cutler, The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges, Commonwealth Fund, 2020.

5. Lessons learnt and applicability to other non-communicable diseases

Key findings

The EBCP is widely recognised as a pioneering initiative that has enhanced policy coherence and catalysed national alignment across Member States. However, fragmented governance and the absence of a central coordinating body have limited its strategic impact and transparency. Stakeholders consistently highlighted the complexity and short-term nature of EU funding mechanisms, calling for more sustainable, inclusive, and streamlined financial support. While the EBCP's adaptability and focus on quality of life are seen as strengths, persistent equity gaps, particularly in funding distribution, digital access, and survivorship care, underscore the need for targeted reforms and systematic tracking of inequalities.

This section summarises key lessons from the implementation and evaluation of the EBCP, drawing on insights from international organisations, EU institutions, national competent authorities, and experts at the EU and national levels. These lessons are intended to inform the design and governance of future EU-wide initiatives targeting NCDs.

In general, researchers, practitioners, and national authorities welcomed the announcement of the EBCP.[725] The EBCP is a remarkable European political statement to address NCDs, which is not only a bold public commitment by the European Commission to address cancer[726] but also a promise to support actions and continuously channel funds into the complete cancer continuum from prevention to survivorship.

Yet, critics highlight some risks and identify failures. For example, when attempting to introduce legislative measures for cancer prevention or regulating the advertising of tobacco, alcohol and unhealthy food, the EU action is alleged to be too slow, yielding to the lobbying by corporate stakeholders.[727] Another example is that stakeholders have been claimed of using lobbying tactics and instrumentalised evidence against the use of Nutri-Score that may have influenced the European Commission decision to postpone the preparation of the legislation on 'front-of-pack nutrition labelling'.[728]

Some interviewees expressed a similar opinion suggesting that commercial interests might have influenced the process on cancer health warning labels on alcohol. As argued by the WHO, the failure to implement these policies is likely not due to a lack of evidence, but rather a lack of political will, compounded by commercial determinants of health and lobbying practices employed by industry

[725] T. Albreht, 'Europe's beating cancer plan, a new step towards more comprehensive and equitable cancer control in Europe', *European Journal of Public Health*, Vol. 31(3), 2021, pp. 456–457.

[726] E.C. Dee, M.J.K. Magsanoc-Slikpala, F.Y. Moraes, J. Willmann, F.I.L. Ting and E.J.G. Feliciano, 'Political determinants of cancer health', *The Lancet Regional Health – Americas*, Vol. 43, 2025, 101008.

[727] A. Garde, N. Gokani, J.C. Perez-Llantada and J. Souter, 'Lobbying, transparency and trust: power imbalances and the failure to implement Europe's Beating Cancer Plan', *The Lancet – Regional Health*, Vol. 51, 2025, 101238.

[728] C. Julia, N. Gokani, S. Hercberg and A. Garde, 'Ten years of Nutri-Score front-of-pack nutrition labelling in Europe', *Nature Food*, Vol. 6, 2025, pp. 239–243.

actors.[729]

The following lessons are the summarised insights based on the interviews this study has conducted. Each lesson is supported by qualitative evidence from interviews, highlighting both strengths and limitations of the EBCP model. The lessons will then be further developed into our recommendations for establishing a similar plan for other NCDs.

Lesson 1: Fragmented governance undermines strategic impact

Despite the EU-led integrated approach, the governance structure of the EBCP is widely perceived by experts at EU level as fragmented, with unclear accountability and notable coordination gaps. The EBCP is managed by DG SANTE of the European Commission. To ensure coherence between the EBCP and the EU Mission on Cancer, the European Commission has established a joint governance system. This system includes an Interservice Group, which brings together representatives of all relevant Commission DGs involved in implementing both initiatives. The Interservice Group meets at two levels: (i) at technical level, on a regular basis, to exchange updates, monitor implementation, and address operational issues; and (ii) at senior level, to provide strategic steer on overarching priorities.

The joint governance framework also comprises (i) the Beating Cancer Stakeholder Contract Group, which fosters dialogue and collaboration among EU and national stakeholders, and (ii) the cancer sub-group under the Expert Group on Public Health, which brings together national authorities from both health and research domains.[730] This governance model was designed as a unique approach to align cancer priorities across sectors, build synergies between research and health policies, and ensure Member State engagement, an objective that has become even more relevant under the current MFF structure and the need for better alignment of funding streams.

The governance framework is closely intertwined with the funding structure of EBCP and way it is managed. The EU4Health Programme is implemented by the European Health and Digital Executive Agency (HaDEA), which acts on behalf of DG SANTE and other Commission services. HaDEA is responsible for managing calls for proposals, tenders, grants, and contracts. DG SANTE holds regular meetings, typically monthly, with HaDEA to steer the implementation of cancer actions programmed under EU4Health. The Horizon Europe Programme is managed primarily by DG RTD, in close cooperation with other DGs to ensure that research calls align with broader EU policy priorities, including health. The Digital Europe Programme operates under a shared governance model, with DG CNECT as the lead, but involving several other DGs depending on the thematic area. The EU Cohesion Fund, which supports less economically developed Member States, is managed by DG REGIO in partnership with national and regional authorities. As a result, many projects are being implemented simultaneously, often with overlapping objectives and expected outcomes. The "big bang" approach, launching many initiatives in parallel, lacks sufficient coordination, and communication between projects remains limited, according to arguments raised in the interviews. This fragmentation can lead to inefficiencies, duplication of efforts, and higher transaction costs, reducing the overall impact and value for money of the investments.

---

729 World Health Organization, Alcohol health warning labels: a public health perspective for Europe, 2025.

730 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025, p. 12.

While the European Commission has established a formal governance structure for the EBCP, including an interservice group, stakeholder forums, and regular exchanges with agencies, civil society organisations interviewed expressed reservations about how these mechanisms function in practice. They reported that civil society involvement in key decision-making processes remains limited: governance arrangements were described as fragmented and at times functioning as a "black box", with participation in some cases restricted to Member States representatives or select experts. As a result, they often rely on informal networks or ad hoc invitations to stay informed about EBCP-related developments, rather than being systematically included in governance structures. This limited engagement was seen as a barrier to effective implementation. The absence of a central coordinating body, which could provide long-term vision, strategic alignment, and technical coordination across Member States, was also cited as a key limitation by several interviewees.

National authorities echoed these concerns, observing that while the EBCP has contributed to a shared language and fostered collaboration, its governance influence is limited in Member States with independently developed national strategies. While the Cancer Plan offers strategic guidance and outlines key initiatives at the EU level, the implementation of national cancer plans, including decisions on resource allocation, remains primarily the responsibility of the Member States.[731] These observations reflect concerns that, in the absence of stronger vertical coordination mechanisms, the EBCP's influence on national decision-making may be limited. The 'mirror group' of Belgium is a successful example that aims to ensure alignment with the EBCP at national level.[732]

Stakeholders stressed the importance of inclusive governance in future NCD initiatives. Experts at EU level recommended that governance models be designed to include both international and national stakeholders to ensure alignment and accountability. The exclusion of civil society from key structures in the EBCP was cited as a limitation that should be avoided in future efforts. The involvement of healthcare professionals, NGOs, and carers, referred to as "ground-level experts", was also highlighted as essential for effective design and implementation.

Recommendations:

Integrated governance, stakeholder inclusion and monitoring framework

- Establish a dedicated governance body to improve coordination, accountability, and oversight of the EBCP and ensure consistent progress tracking across Member States.
- Ensure inclusive governance by formally involving civil society, healthcare professionals, and other grassroots stakeholders in decision-making processes to enhance transparency, responsiveness, and the effectiveness of implementation.

Lesson 2: Funding mechanisms must be simplified and sustained

The existence of multiple funding instruments could lead to unnecessary complexity and poor coordination. Stakeholders consistently highlighted the complexity of aligning multiple EU funding instruments, such as Horizon Europe, EU4Health, and Digital Europe. EU institutions and agencies noted that each programme operates with distinct application rules and timelines, requiring different set of administrative documents and following different steps of implementation

[731] It is also mentioned in the Review of Europe's Beating Cancer Plan. See European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025, p. 31.

[732] BE – EBCP mirror group, Unlocking Opportunities in EU Cancer Calls and Projects, website.

processes. From the Member States' perspective, too much information or involving too many entities and authorities could be counterintuitive, complicating coordination and reducing overall efficiency. According to them, the problem of multiple funding mechanisms in parallel is that information and opportunities have to be channelled to different national contact points or responsible persons, and therefore the coordination effort to align projects is multiplied, and duplications could have happened. Moreover, there is no systematic overview of how the funds are allocated, making it difficult to assess whether they are directed to where they are most needed. For example, it is argued that cancer survivorship is neglected by research programmes[733] and it is unclear how much funds have been spent on research and innovation in this area.

International organisations added that while the governance of the ECIR is effective, the lack of financial levers to support data collection remains a challenge due to national heterogeneity. Experts at national level reinforced these concerns, particularly in the context of digital health and survivorship care. They noted that EU funding mechanisms are often too rigid to accommodate the complexity of real-world implementation. Evaluation frameworks were described as too narrow to capture innovation, especially in digital tools and community-based care models.

Concerns about the sustainability and equity of funding access were raised across stakeholder groups. EU institutions and agencies noted that the future of National Cancer Mission Hubs is uncertain, as many rely on EU funding that is not guaranteed beyond the current project cycle. Experts at EU level highlighted that the absence of operating grants has forced some organisations to scale back activities, creating a model that risks excluding less-resourced actors. Co-funding requirements were also criticised for disproportionately affecting smaller NGOs and SMEs.

Stakeholders across EU institutions, agencies and experts expressed concern that the current funding structure, characterised by short-term, fragmented, and co-funded mechanisms, is not suited to the long-term objectives of the EBCP. [734] A shift toward more consistent and strategic funding, supported by unified mechanisms with clear indicators and progress tracking, was recommended to ensure continuity and coherence. National authorities and experts at national level reinforced this view. While temporary subsidies were acknowledged as useful for piloting initiatives, they were deemed insufficient for systemic change. Interviewees called for more sustainable, long-term EU funding mechanisms to support initiatives such as quality-of-life and work-related care.

Recommendations:

Funding

- Streamline and harmonise EU funding mechanisms, as much as possible, to reduce fragmentation and administrative burden. Improve coordination across programmes by ensuring consistent timelines, clearer guidance, and centralised funding portals for applicants.
- Establish long-term funding frameworks with reduced co-funding requirements, while requiring that activities begin with sustainable financial planning. This should

[733] M. Lawler, F. De Lorenzo, P. Lagergren, F.S. Mennini, S. Narbutas, G. Scocca, G, ..., and European Academy of Cancer Sciences. 'Challenges and solutions to embed cancer survivorship research and innovation within the EU Cancer Mission', *Molecular Oncology*, Vol. 15(7), 2021, pp. 1750-1758.

[734] European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025, p. 40.

include mapping infrastructure and partnerships from the outset and embedding stakeholder-led initiatives into national frameworks to ensure lasting impact and stronger social return.

Lesson 3: Monitoring and evaluation are critical for impact

The absence of a monitoring and evaluation framework that allows tracking progress and measuring outcomes, beyond the Roadmap, was identified as a critical limitation. Experts at EU level pointed to the lack of baseline data and measurable outcomes, particularly in areas such as public awareness and equity of access, hindering assessments of cost-effectiveness for prevention and personalised medicine. They noted the lack of annual publications or systematic updates as a missed opportunity for accountability and learning. Moreover, short evaluation cycles were reported to limit the sustainability and scalability of promising digital health pilots.[735]

Experts at EU level and international organisations raised concerns about persistent gaps in data infrastructure and monitoring. While new data collection efforts are underway, including at the stage of diagnosis, critical gaps remain in areas such as in collecting standardised data on waiting time and cost metrics.

Recommendations:

Integrated governance, stakeholder inclusion and monitoring framework

- Develop an official framework for monitoring and evaluating the implementation of the EBCP.

Lesson 4: EBCP's adaptive capacity is a model for future resilience

The EBCP has been credited with generating momentum and catalysing broader policy change. Experts at EU level described it as the first comprehensive EU initiative to address cancer in such depth, noting its role in stimulating national reforms (e.g. through EU funding and the adoption of new EU policies), new cancer plans, and the development of registries and screening infrastructure. The EBCP has also contributed to shifting norms, including the recognition of the "right to be forgotten," and encouraging progress in Member States with previously limited engagement in cancer policy.

In supporting the implementation of the EBCP, the Cancer Mission under Horizon Europe has played a complementary role. The Cancer Mission itself has been described by EU institutions and agencies as dynamic and responsive to emerging needs, such as post-COVID-19 pandemic challenges and quality of life for survivors. Its adaptive mechanisms, including the planned coordination and support action for 2025 to strengthen and expand the National Cancer Mission Hubs, ensuring their continued role within Horizon Europe's Cancer Mission while advancing the aims of the EBCP.

[735] ibid., p. 39.

Recommendation:

Integrated governance, stakeholder inclusion and monitoring framework

- Ensure agile and timely support to cancer care and research to facilitate integration and adaptation to the latest scientific and clinical developments of the disease.

Lesson 5: Equality and systematic barriers must be addressed proactively

Equality and systemic barriers were identified as key challenges for the future of the EBCP. Experts at EU level highlighted significant disparities in the allocation of funding to address health inequalities. While the EBCP sets the overarching policy framework, evidence from the Horizon Europe Cancer Mission was cited to illustrate these disparities; for example, a reported "1,000-fold difference" in Cancer Mission research funding between Germany and Romania. Concerns were also raised about the disconnect between screening and follow-up care, particularly in lower-capacity health systems, and the limitations of self-screening for vulnerable populations.[736]

National authorities and experts reinforced these concerns. Quality of life was identified as a growing but underfunded priority in one of the Member States, particularly in light of the increasing number of cancer survivors and the shift toward primary care, digital platforms, and AI-supported systems. However, reliance on volunteer-based services and demographic trends such as extended working lives were seen as threats to sustainability. Digital health equality remains a challenge, especially for vulnerable populations, and there is a need for improved training, community leadership, and cross-country learning. Legislative reform and more flexible governance models were also identified as necessary to support long-term care and innovation.

The EBCP has gathered a budget of EUR 4 billion with up to half of it steming from Horizon Europe. This includes setting up the EU network of comprehensive cancer infrastructures and supporting Member States to implement cancer screening programmes.[737] While research projects are certainly important and will drive the EU forward especially in cancer care, they involve more likely researchers and institutions from Member States with established research ecosystems where research capabilities are more abundant. [738] The analysis also shows that the various funding instruments have distinct purposes. However, it remains unclear whether the distribution of funds consistently targets the areas and Member States with the greatest needs.

Recommendations

Funding

- Design a funding mechanism that targets cancer inequalities and systematically tracks whether funds address equality across various dimensions and regions.
- Establish funding criteria that prioritise Member States with limited research capacity and higher cancer inequalities.
- Provide sustainable planning and financing/co-financing options for long-term implementation of activities focused on addressing inequalities such as Joint Networks and

[736] E.g. Ecorys, Policy evaluation of cancer screening programmes: report for the Dutch Ministry of Health, 2024.
[737] Digestive Cancers Europe, European Commission Spending Plan for 2023 – Adoption of EU4Health Work Programme, 2022.
[738] European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025, p. 40.

mission hub development which can foster continued sharing of experiences, lessons, and best practices across Europe.
- Invest in training, digital literacy, and learning platforms to ensure and promote enhanced and equitable digital cancer services that reach vulnerable populations.

Sharing best practices

- Provide technical support and guidance to Member States to ensure proactive inclusion of equality considerations and prioritisation in national plans such as the application of digital health platforms.[739]

Lesson 6: European networks serve as model for similar national initiatives

Interviewees noted that the ERNs serve as a model for establishing a more integrated European health system that enables cross-border collaboration. ERNs are composed of expert reference centres for rare medical conditions, enabling national specialists to consult peers across the network and fostering collaborative research. It is for example recommended that the clinical practice guidelines of EURACAN, one of 24 ENRs, be adopted at the national level to provide a foundation for integrating the ERNs into national health systems.[740] The European networks serve as a model for national networks, setting standards for connecting regional oncologists with national experts. However, the fact that an ERN is not recognised as a separate legal entity at the EU level creates significant operational and developmental challenges. Without legal personality, the network cannot open bank accounts, enter into contracts, or independently raise funds, and must instead rely on its host institutions or national authorities for administrative, financial, and contractual matters. This limitation can slow decision-making, restrict the network's ability to pursue additional funding opportunities, and complicate collaborations with external partners, potentially hindering its long-term sustainability and capacity to expand its activities across borders.

Recommendation:

Sharing best practices

- Collect best practices for establishing national networks that align with the ERN model.[741]

Lesson 7: Comprehensive design of EBCP ensures an integrated approach

The EBCP is widely regarded by EU institutions and agencies and international organisations as a strategically valuable and comprehensive initiative. Its integration of funding, research, and implementation mechanisms across the cancer care continuum, from prevention to survivorship, was described as unparalleled in scope and integration in the EU health policy landscape. The alignment of the EBCP's 42 actions with Member State priorities and the uptake of tools such as the ECIR were cited as evidence of its practical utility and comparative value.

---

739 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025, p. 37.

740 J.Y. Blay, P. Casali, C. Bouvier, C. et al., 'European Reference Network for rare adult solid cancers, statement and integration to health care systems of member states: a position paper of the ERN EURACAN', *ESMO Open,* Vol. 6(4), 2021, 100174.

741 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025, p. 39.

National authorities and experts at national level echoed this assessment, noting that the EBCP has served as a catalyst for national reflection and alignment.[742] Though not always being the primary driver of national cancer strategies, it has supported the development of integrated frameworks, such as the Dutch Cancer Agenda and Estonia's emphasis on patient-centred care and equity. In Belgium, the establishment of the BE EBCP Mirror Group, bringing together more than 400 stakeholders, illustrates how the EBCP has stimulated increased Member State action in this area.[743] The group has played an important role in fostering alignment between national priorities and European cancer initiatives, while also supporting coordination of participation in over 80 EU-funded cancer projects between 2021 and 2024. Stakeholder-led initiatives, including those focused on cancer and employment or psychosocial support, were identified as cost-effective models with high social return, though often constrained by insufficient structural funding.

The EBCP is widely viewed by EU institutions, agencies, international organisations, and experts at EU level as a transferable model for addressing other high-burden NCDs, including cardiovascular disease, diabetes, and mental health. Its integrated approach, involving policy, research, and stakeholder engagement, was highlighted as a key strength. Indicators used in the ECIR, such as those related to smoking, alcohol, and physical activity, were described as directly applicable to other disease areas. Stakeholders recommended that future NCD strategies adopt a similar structure, beginning with mapping and benchmarking, incorporating dedicated funding and inclusive stakeholder engagement. The focus on quality of life was also cited as a valuable precedent for dynamic adaptation in other domains.

National authorities and experts at national level strongly supported this perspective. They emphasised the importance of targeting shared risk factors, such as tobacco, alcohol, and poor diet, rather than developing siloed, disease-specific plans. Lessons from cancer survivorship care, including early intervention, stakeholder collaboration, and self-management, were seen as transferable to chronic disease management. The "adaptation and replication" model and dynamic agenda-setting approach were also identified as replicable strategies for other NCD domains.[744]

Recommendations:

EBCP as a model for future similar initiatives

- Leverage the EBCP as a model for broader NCD strategies by applying its integrated approach, combining policy, research, and awareness campaigns.
- Maintain a strategic overarching vision that guides decision making, projects, and activities to ensure alignment and cohesion.
- Facilitate collective and cooperative agenda setting in the development of strategies in other NCD domains to ensure meaningful participation from all interested and affected stakeholders for shared buy-in and ownership.

742 ibid., p. 36.

743 European Observatory on Health Systems and Policies, Building a collaborative framework for advancing cancer care in Belgium, OBS-PACE Case Study, website.

744 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, p. 37.

6. Conclusions and recommendations

Europe's Beating Cancer Plan (EBCP) has emerged as a landmark initiative in EU health policy, setting a new standard for coordinated, mission-driven action on non-communicable diseases. Between 2021 and 2024, the EBCP catalysed unprecedented momentum across Member States, mobilising over EUR 4 billion in funding, launching ten flagship initiatives, and establishing new governance and monitoring tools, such as the ECIR. The EBCP has helped to elevate cancer to the top of the EU health agenda, fostered cross-border collaboration, and inspired national reforms in prevention, care, and survivorship. In several Member States, including Estonia, the Netherlands, and Italy, the EBCP has served as a strategic reference point for national cancer plans, supporting the development of digital health infrastructure, integrated care networks, and patient-centred innovations.

6.1. Cancer prevention

The analysis of the implementation status of the EBCP reveals that implementation has advanced most in areas such as regulatory frameworks for screening and treatment and digital infrastructure supporting innovation and data sharing. However, delays and gaps persist in several areas, particularly in cancer prevention, health literacy, childhood obesity, and survivor support tools. In one case, an action has been suspended (i.e. a Commission Recommendation on reducing exposure to UV radiation from sunbeds).

The EBCP's prevention strategies on tobacco, alcohol, and nutrition remain significantly delayed due to legislative inaction and fragmented implementation across Member States, hindering progress toward key objectives such as achieving a "Tobacco-Free Generation" and reducing harmful consumption.

Despite the EBCP's ambition to achieve a **"Tobacco-Free Generation"** by 2040, progress at both EU and Member State levels has been varying. The revision of the Tobacco Products Directive (TPD) remains pending, and the absence of EU rules on cross-border tobacco purchases contributes to price differentials between Member States that incentivise consumers to buy tobacco in lower-tax jurisdictions. Recently, the European Commission launched a proposal to revise the Tobacco Taxation Directive (TTD).

Germany's case study illustrates that national progress is catalysed by EU legislation, as shown by Germany's reliance on transposing directives rather than launching comprehensive national strategies. Furthermore, Partial and varying implementation of EU legislation, such as non-comprehensive smoke-free laws and delayed advertising restrictions, can slow progress and exacerbate inequalities. These challenges underscore the importance of EU legislation to achieve the EBCP's Tobacco-Free Generation goal.

Implementation of alcohol control actions lags behind targets set in EBCP. Despite the European Commission's commitment to addressing alcohol consumption, it has not yet proposed mandatory health warnings or harmonised labelling, and taxation reform remains politically sensitive. The EBCP's commitment to reduce harmful alcohol consumption by 10% by 2025 has not been matched by regulatory action. Finland's experience underscores the risks of policy incoherence: while the

country has strong cancer screening and tobacco control policies, recent liberalisation of alcohol sales, which includes raising the permitted alcohol content in grocery stores from 5.5% to 8% and proposals for home delivery and expanded distance sales, has challenged prevention goals in this case.

On nutrition, the EBCP's commitment to **mandatory FOPNL** has not yet materialised. Despite broad stakeholder support and strong evidence of effectiveness, the European Commission has not tabled a legislative proposal. The Netherlands, Belgium, and Germany have all voluntarily adopted NutriScore as their FOPNL scheme, aiming to help consumers make healthier food choices through a colour-coded A–E rating based on overall nutritional quality. In contrast, Nordic and Baltic countries such as Sweden, Denmark, and Lithuania continue to use the Keyhole symbols, which highlight products that meet specific nutrient criteria, particularly lower fat, sugar, and salt levels, within food categories. Southern and Eastern European countries have also developed regionally tailored schemes. For example, Italy introduced the NutrInform Battery label, which presents nutrient percentages per portion and is positioned as a culturally appropriate alternative to Nutri-Score.

However, the lack of harmonisation creates confusion and limits the impact of these schemes. This fragmented landscape reflects broader challenges in balancing public health objectives with internal market dynamics and industry influence. The continued delay in EU-level legislative action risks undermining goal 8.2 of the EBCP, which explicitly calls for empowering consumers to make healthier and more sustainable food choices through mandatory FOPNL. This seeks to ensure consistency across Member States, enhance consumer understanding, and accelerate progress toward reducing obesity, diabetes, and nutrition-related cancers.

6.2. Cancer care and the health workforce

The EBCP introduced promising workforce initiatives.

While the EBCP contributes to addressing certain challenges related to the healthcare workforce, it does not comprehensively address all underlying issues affecting workforce shortages in national healthcare systems as healthcare systems and workforce planning remain the responsibility of individual Member States. Nevertheless, Europe's Beating Cancer Plan has contributed to notable progress in strengthening cancer care infrastructure and workforce capacity, though challenges remain.

The Inter-specialty Training Programme (Action 26), implemented through INTERACT-EUROPE and INTERACT-EUROPE 100, has successfully developed a curriculum for multidisciplinary cancer training and expanded its reach to 100 cancer centres. This initiative addresses critical gaps in digital, clinical, and collaborative skills and is widely regarded as a model for future EU health workforce strategies.

However, workforce shortages persist across the EU, particularly in oncology. As of 2022, there was an estimated shortage of approximately 1.2 million doctors, nurses, and midwives of different specialities across EU countries. The "double demographic" challenge, the need to care for an ageing population while replacing retiring oncologists, continues to strain health systems. Poland's case study illustrates how EU funding has been leveraged to pilot digital tools for remote cancer care,

including teleconsultation platforms and patient-reported outcome monitoring. These Initiatives launched under the EBCP have improved access in underserved areas and demonstrated the value of interdisciplinary collaboration, but their long-term sustainability remains uncertain.

Denmark's MyPath initiative offers another example of workforce innovation, using digital tools to support patient-centred care and improve communication between patients and clinicians. The project's co-creation model and integration of patient-reported outcomes into clinical workflows have shown promise, but scaling such innovations requires structural support, protected time for clinical staff, and robust evaluation frameworks.

Despite efforts, many Member States lack comprehensive workforce planning, and EU funding mechanisms remain fragmented and short-term. To address the workforce shortages, coordinated long-term planning is essential. Support in training, cross-border cooperation, and the development of technology has the highest potential to bring positive changes.

6.3. Quality of life: financial services and labour market access

The EBCP has successfully elevated the visibility of cancer survivorship and driven progress, yet positive changes across Member States remain inconsistent, with persistent gaps in access to financial services, labour market reintegration, and support for carers.

The EBCP's focus on quality of life has brought long-overdue attention to the social and economic challenges faced by cancer survivors. Actions under this objective address not only how long cancer survivors live, but also the quality of their lives. While the EBCP has spurred progress on survivorship rights and disability recognition, support for fair access to financial services, return-to-work policies, and carers support remains fragmented and underfunded across Member States.

Action 35, which addresses fair access to financial services, has encouraged the adoption of "right to be forgotten" in several Member States. However, the extent of implementation varies, and the voluntary Code of Conduct has stalled due to disagreements between stakeholders. The Netherlands has emerged as a leader in this area, with legislation limiting insurers' ability to request cancer history and strong stakeholder engagement in survivorship care. The Dutch case study highlights how a decentralised, stakeholder-led model can drive innovation and inclusivity in cancer control. Initiatives such as Re-turn and "Werk als medicijn" have demonstrated tangible benefits in return-to-work outcomes, quality of life, and cross-sector collaboration. These programmes integrate occupational health into oncology care and are supported by structural funding and social insurance coverage. Additionally, the EU NAVIGATE pilot shows promise in improving care navigation for older adults, although long-term results are still pending.

Labour market reintegration remains a critical gap. Action 36.1's study on return-to-work policies revealed that most Member States lack cancer-specific legislation or support services. Good practices exist, such as Belgium's Rentree programme and Madrid SME Protocol, but they are often fragmented and underfunded. Denmark's MyPath project, while primarily a workforce initiative, also contributes to quality of life by enabling patients to remain engaged in work and social life during treatment.

The recognition of cancer-related disability under the EU Strategy for the Rights of Persons with Disabilities (Action 36.2) is a significant achievement, but its practical implications remain limited.

Implementation of the Strategy varies; legal protections and tailored support measures are still insufficient, and systemic barriers to healthcare access, workplace accommodation, and social inclusion for cancer survivors continue to exist. The Strategy by itself has limited capacities in addressing the complex challenges faced by cancer patients and survivors, as it is designed to support broad range of initiatives. This, however, has the potential to improve as the Strategy is implemented. Similarly, the implementation of the Wok-Life Balance Directive (WLBD) (Action 36.3) has been slow, with only a few Member States fully transposing its provisions. The lack of legal protection against discrimination based on caregiving responsibilities continues to affect cancer carers, particularly women. Among the EU population, 5.9% of women reported reducing working time or interrupting work for over a month due to care for incapacitated relatives (compared to 2.5% of men; EU-28, year 2018).[745]

The EBCP has raised the profile of cancer survivorship and brought important advances. However, their implementation across Member States remains inconsistent. Equal access to financial services is not guaranteed, labour market reintegration measures are fragmented, and the recognition of cancer-related disability and workplace needs has yet to result in adequate protections and accommodations. Support for carers – allowing them to undertake professional and caring jobs at the same time – also continues to fall short. The main challenges stem from the lack of coherent and timely implementation across Member States.

6.4. Impact on health inequalities

Reducing cancer inequalities is a central objective of the EBCP, and the establishment of the ECIR has been a major step forward. The ECIR provides disaggregated data on cancer outcomes and risk factors, including by sex, education, urbanisation, and employment status, enabling policymakers to identify disparities and target interventions. It also publishes country profiles and analytical reports, which 80% of stakeholders report using them for policy and advocacy purposes. However, the ECIR's utility is constrained by several limitations. Data gaps persist, particularly on waiting times, stage at diagnosis, and cost. Waiting time indicators are not routinely collected. Moreover, most ECIR data is aggregated at national level, which obscures regional and intra-country inequalities and limits its usefulness for subnational policy planning.

The ECIR's interface is also not yet optimised for research or advanced policy analysis. Stakeholders noted that the platform lacks high-quality, research-ready datasets and does not allow for customised downloads. While the visual dashboards are useful for communication, the absence of granular, longitudinal data limits the Registry's potential to support evidence-based policymaking. Integrating the ECIR with the EHDS could help address these limitations by enabling more timely, standardised, and interoperable data collection across Member States.

Several Member States have demonstrated how targeted strategies can help reduce cancer inequalities. Estonia's digital health infrastructure offers a compelling example of how eHealth can improve access to care and enable personalised prevention. The country's cancer dashboard and integration of polygenic risk scores into screening programmes illustrate the potential of data-driven approaches. Estonia has also piloted remote monitoring tools and mobile applications to track

[745] Eurostat, Reconciliation of work and family life – statistics, website.

patient-reported outcomes, which have improved access for rural populations. However, challenges remain in standardising data inputs, ensuring interoperability across systems, and addressing digital literacy gaps among patients and providers.

Croatia's mobile breast cancer screening units and risk-based screening protocols demonstrate how targeted outreach can improve access in rural and underserved areas. The national programme, supported by public awareness campaigns and GP engagement, has achieved screening rates above the EU average. However, infrastructure gaps and fragmented IT systems continue to limit the programme's reach and efficiency.

Italy's network approach to rare cancers and CCCs highlights the importance of coordinated care pathways in addressing regional disparities. The national hub-and-spoke model, supported by regional governments, has improved access to specialised care and reduced health-related migration. The Italian case study underscores the value of national-regional collaboration and the role of CCCs in standardising care quality across regions. However, the sustainability of these networks depends on long-term funding, interoperable data systems, and stronger integration with EU-level initiatives such as the ERNs.

Despite promising examples, successes are not uniformly replicated across the EU. Research funding allocation criteria favour research-intensive Member States. This path-dependence risks reinforcing existing inequalities.

6.5. Lessons learnt and recommendations

Building on the lessons identified through the implementation and evaluation of the EBCP, this section presents a set of actionable, evidence-informed recommendations. These reflect both the strengths and limitations of the EBCP as a policy instrument. The recommendations aim to support EU and national policymakers in strengthening the governance, funding, monitoring, and implementation of the EBCP, and to inform the design of future EU-wide strategies targeting cancer and other NCDs.

Recommendations:

Integrated governance, stakeholder inclusion and monitoring framework

- Establish a dedicated governance body to improve coordination, accountability, and oversight of the EBCP and ensure consistent progress tracking across Member States.
- Ensure inclusive governance by formally involving civil society, healthcare professionals, and other grassroots stakeholders in decision-making processes to enhance transparency, responsiveness, and the effectiveness of implementation.
- Develop an official framework for monitoring and evaluating the implementation of the EBCP.
- Document centrally the information and results of EU-funded projects beyond CORDIS and EU Cancer Projects Dashboard.
- Ensure agile and timely support to cancer care and research to facilitate integration and adaptation to the latest scientific and clinical developments of the disease.

Funding

- Streamline and align EU funding mechanisms to reduce fragmentation and administrative burden by improving coordination across programmes, ensuring consistent timelines, clearer guidance, and centralised access points for applicants.
- Establish sustainable, long-term funding frameworks with reduced co-funding requirements for Member States and dedicated support for under-resourced actors.
- Initiate sustainable financial planning at the start of activities, including identifying infrastructure and partnerships to secure long-term sustainability, while embedding stakeholder-led initiatives in national frameworks to maximise social return and impact.
- Design a funding mechanism that targets cancer inequalities and systematically tracks if funds pursue equality across various dimensions and regions.
- Establish funding criteria that prioritises Member States with limited research capacity and higher cancer inequalities.
- Provide sustainable planning and financing/co-financing options for long-term implementation of activities focused on addressing inequalities such as Joint Networks and mission hub development which can foster continued sharing of experiences, lessons, and best practices across Europe.
- Invest in training, digital literacy, and learning platforms to ensure and promote enhanced and equitable digital cancer services that reach vulnerable populations.

Sharing best practices

- Provide technical support and guidance to Member States to ensure proactive inclusion of equity considerations and prioritisation in national action plans such as the application of digital health platforms.
- Collect best practices of setting up national networks for creating similar European networks that serve as the model for Member States.

EBCP as a model for future similar initiatives

- Leverage the EBCP as a model for broader NCD strategies by applying its integrated approach, combining policy, research, and awareness campaigns.
- Maintain a strategic overarching vision that guides decision making, projects, and activities to ensure alignment and cohesion.
- Facilitate collective and cooperative agenda setting in the development of strategies in other NCD domains to ensure meaningful participation from all interested and effected stakeholders for shared buy-in and ownership.

The EBCP is a comprehensive EU initiative designed to tackle one of the most deadly and costly diseases. As the EBCP rightly points out, defeating cancer requires targeted interventions across every stage of the cancer care pathway. This long and complex process demands sustained commitment, supported by long-term funding and coherent action. The initial phase of the EBCP has been promising, marked by the launch of various EU-wide initiatives and cutting-edge research projects. However, its "big bang" approach, launching multiple initiatives simultaneously, has drawn criticism, particularly concerning the coordination of efforts and the exchange of best practices and

research outcomes. While some more advanced Member States have leveraged the EBCP to strengthen their health systems and invest in research, others have struggled to keep pace, often due to resource constraints or structural challenges such as healthcare system inefficiencies. The EBCP's structure and governance provide an important precedent for future EU-wide health initiatives. The integration of funding mechanisms, ERNs, and flagship initiatives, such as the ECIR, offers a robust foundation for improving cancer care and informing policymaking across the Union. Ultimately, like a patient battling cancer, the success of the EBCP depends on persistence, sustained effort, adaptation, and long-term vision.

Bibliography

EU publications and legislation

Amand-Eeckhout, L., Members' Research Service, Healthcare in the EU: Addressing urgent labour shortages and ensuring quality jobs, EPRS, European Parliament, February 2025.

Baert, P., Briefing: Shaping choices: Behavioural taxation in the EU, EPRS, European Parliament, October 2024.

Committee on Social Affairs, Health and Sustainable Development, Discrimination against persons dealing with chronic and long-term illnesses, 2021.

Conference on the Future of Europe, Report on the Final Outcome, 2022.

Council of the EU, Council Directive (EU) 2020/262 of 19 December 2019 laying down the general arrangements for excise duty (recast), December 2019.

Council of the EU, Council Directive 2008/118/EC of 16 December 2008 concerning the general arrangements for excise duty and repealing Directive 92/12/EEC, No longer in force.

Council of the EU, Council Directive 92/83/EEC of 19 October 1992 on the harmonization of the structures of excise duties on alcohol and alcoholic beverages.

Council of the EU, Council Directive 92/84/EEC of 19 October 1992 on the approximation of the rates of excise duty on alcohol and alcoholic beverages.

Council of the EU, Council Recommendation of 21 June 2024 on vaccine-preventable cancers.

Council of the EU, Council Recommendation of 3 December 2024 on smoke- and aerosol-free environments replacing Council Recommendation 2009/C 296/02.

Council of the EU, Council Recommendation of 9 December 2022 on strengthening prevention through early detection: A new EU approach on cancer screening replacing Council Recommendation 2003/878/EC 2022/C 473/01.

Council of the EU, Directive 2011/64/EU of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco (codification).

Council of the EU, Draft Council conclusions on the Future of the European Health Union: a Europe that cares, prepares and protects – Draft Council Conclusions, 2024.

De la Corte-Rodríguez, M., European Commission, Directorate-General for Justice and Consumers, The transposition of the Work-Life Balance Directive in EU Member States (II): Considerable work still to be done, 2024.

De la Corte-Rodríguez, M., European Commission, Directorate-General for Justice and Consumers, The transposition of the Work-Life Balance Directive in EU Member States: A long way ahead, 2022.

EU-OSHA, Rehabilitation and return to work after cancer, instruments and practices, 2018.

European Commission, 2025 European Semester: Recommendations on the economic, social, employment, structural and budgetary policies, 2025.

European Commission, Attitudes of Europeans towards tobacco and related products, 2024.

European Commission, Commission launches AI innovation package to support Artificial Intelligence startups and SMEs, press release, 2024.

European Commission, Commission staff working document – Impact assessment accompanying the document: Proposal for a directive of the European Parliament and of the Council on work-life balance for parents and carers and repealing Council Directive 2010/18/EU, SWD/2017/0202, 2017.

European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive", for the period 2014-2019, SWD(2020) 228, 2020.

European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive" as amended by Directive (EU) 2018/1808, for the period 2019-2022, SWD(2024) 4, 2024.

European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025.

European Commission, Commission Staff Working Document – Stakeholder consultation – synopsis report accompanying the Communication from the Commission to the European Parliament and the Council – Europe's Beating Cancer Plan, SWD(2021) 13, 2021.

European Commission, communication from the Commission Guidelines on the practical application of the essential functionality criterion of the definition of a 'video-sharing platform service' under the Audiovisual Media Services Directive, 2020/C 223/02, 2020.

European Commission, communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - European Disability Strategy 2010–2020: a Renewed Commitment to a Barrier-free Europe, COM(2010) 636, 2010.

European Commission, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions Fostering a European approach to Artificial Intelligence, COM(2021) 205, 2021.

European Commission, communication on a Farm to Fork Strategy, COM/2020/381, 20 May 2020.

European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.

European Commission, Digital Decade 2024: eHealth Indicator Study, 2024.

European Commission, Directive (EU) 2022/2100 of 29 June 2022 amending Directive 2014/40/EU of the European Parliament and of the Council as regards the withdrawal of certain exemptions in respect of heated tobacco products.

European Commission, Capgemini Invent, 2024 Digital Decade eHealth Indicator Study – Final Report, 2024.

European Commission, Union of equality – Strategy for the rights of persons with disabilities 2021-2030, 2021.

European Commission, Development of a Code of Conduct on fair access of cancer survivors to financial services, 2024.

European Commission, PwC EU Services EEIG and Open Evidence, Study on the deployment of AI in healthcare, 2025.

European Commission, Ecorys, Study on Job Retention and Return to Work for Cancer Patients and Survivors, 2024.

European Commission, European Health and Digital Executive Agency, Access to financial products for persons with a history of cancer in EU Member States. An exploratory study, 2022.

European Commission, European Network of Public Employment Services, Practitioner toolkit on strengthening PES to improve the labour market outcomes of persons with disabilities, 2022.

European Commission, Europe's Beating Cancer Plan - Communication from the commission to the European Parliament and the Council, 2020.

European Commission, Europe's Beating Cancer Plan: Implementation Roadmap, 2024.

European Commission, General-Purpose AI Code of Practice, 2025.

European Commission, Green Paper on Ageing: Fostering solidarity and responsibility between generations. COM(2021), 2021.

European Commission, Management Plan 2024 DG Health and Food Safety (SANTE), 2024.

European Commission, Mapping of Comprehensive Cancer Infrastructures (CCIs), Directorate-General for Health and Food Safety, Publications Office of the European Union, 2023.

European Commission, Open Evidence and PWC EU Services, Study on mapping and evaluating the implementation of the Europe's Beating Cancer Plan, 2024.

European Commission, proposal for a Council Directive (EU) 2011/64 of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco and tobacco related products (recast).

European Commission, proposal for a Council Directive on implementing the principle of equal treatment between persons irrespective of religion or belief, disability, age or sexual orientation, COM(2008), 2008.

European Commission, proposal for a council Directive on the structure and rates of excise duty on tobacco, July 2025.

European Commission, proposal for a Regulation 2025/0071(COD) amending Regulations (EU) No 1308/2013, (EU) 2021/2115 and (EU) No 251/2014 as regards certain market rules and sectoral support measures in the wine sector and for aromatised wine products, 2025.

European Commission, Tobacco Taxation – Stakeholder event, 2022.

European Commission, A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system, 2020.

European Commission, Report from the Commission to the European Parliament and the Council regarding the use of additional forms of expression and presentation of the nutrition declaration, COM(2020) 207, 2020.

European Commission, The Nordic Keyhole scheme – Joint meeting on front-of-pack nutrition labelling, 2018.

European Commission, Study on the effectiveness of health information on alcoholic beverages – Final report, 2024.

European Commission: European Health and Digital Executive Agency, Directorate-General for Health and Food Safety, Open Evidence and PwC EU Services, Open Evidence and PwC EU Services, Study on mapping and evaluating the implementation of the Europe's Beating Cancer Plan. Annex 5, Country factsheets, 2025.

Regulation (EU) 2024/1689 of European Parliament and Council of the European Union of 12 July 2024, laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 (Artificial Intelligence Act).

Regulation (EU) 2021/1058 of the European Parliament and of the Council of 24 June 2021 on the European Regional Development Fund and on the Cohesion Fund, PE/48/2021/INIT, 2021.

Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013, OJ L 170 12.5.2021, pp. 1-68.

Directive (EU) 2018/1808 of the European Parliament and of the Council of 14 November 2018 amending Directive 2010/13/EU on the coordination of certain provisions laid down by law, regulation or

administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) in view of changing market realities

Regulation (EU) 2021/2117 of the European Parliament and of the Council of 2 December 2021 amending Regulations (EU) No 1308/2013 establishing a common organisation of the markets in agricultural products, (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs, (EU) No 251/2014 on the definition, description, presentation, labelling and the protection of geographical indications of aromatised wine products and (EU) No 228/2013 laying down specific measures for agriculture in the outermost regions of the Union.

Proposal for a regulation of the European Parliament and of the Council amending Regulations (EU) No 1308/2013, (EU) 2021/2115 and (EU) No 251/2014 as regards certain market rules and sectoral support measures in the wine sector and for aromatised wine products

Regulation (EU) 1169/2011 of European Parliament and Council of the European Union, 25 October 2011 on the provision of food information.

European Parliament, A new plan for Europe's sustainable prosperity and competitiveness | Revision of the tobacco taxation directive, Legislative Train Schedule.

Directive 2005/36/EC of European Parliament and Council of the European Union on the recognition of professional qualifications, 2005.

European Parliament, resolution of 13 December 2023 on non-communicable diseases (NCDs).

European Parliament, resolution of 13 December 2023 on non-communicable diseases (NCDs).

European Parliament, resolution of 16 February 2022 on strengthening Europe in the fight against cancer – towards a comprehensive and coordinated strategy.

European Parliament, resolution of 5 July 2022 towards a common European action on care (2021/2253(INI)).

European Parliament, revision of the Tobacco Taxation Directive, July 2025.

European Parliament, The impact of influencers on advertising and consumer protection in the Single Market, February 2022.

Directive (EU) 2023/2225 of the European Parliament and of the Council of 18 October 2023 on credit agreements for consumers.

Katsarova, I., Alcohol labelling: State of play, EPRS, European Parliament, May 2025.

Laaninen, T., Nutrition labelling schemes used in Member States, EPRS, European Parliament, July 2020.

European Parliament, An EU health workforce crisis plan: sustainability of healthcare systems and employment and working conditions in the healthcare sector, 2025, 2025/2062(INI).

Lilyanova, V., Health-related measures in the national recovery and resilience plans, EPRS, European Parliament, September 2023.

Milotay, N., A new directive on work-life balance, Legislation in Progress Briefing, EPRS, European Parliament, European Parliament, July 2019.

OECD and European Commission, EU Country Cancer Profile: Netherlands 2025, 2025.

OECD and European Commission, EU Country Cancer Profile: Netherlands 2023, 2023.

Šajn, N., The wine package, EPRS, European Parliament, June 2025.

Special Committee on Beating Cancer, Report on strengthening Europe in the fight against cancer – towards a comprehensive and coordinated strategy, European Parliament, 2022, 2020/2267(INI), 7 January 2022.

U-M. Tuominen, M., Work-life balance for parents and carers, Initial Appraisal of a Commission Impact Assessment, EPRS, European Parliament, September 2017.

Articles, books, policy documents and reports

Albreht, T., 'Europe's beating cancer plan, a new step towards more comprehensive and equitable cancer control in Europe', *European Journal of Public Health*, Vol. 31(3), Oxford University Press, 2021, pp. 456–457.

Altini, M., Solinas, L., Bucchi, L., Gentili, N., Gallegati, D., Balzi, W., Falcini, F. and Massa, I., 'Assessment of Cancer Care Costs in Disease-Specific Cancer Care Pathways', *International Journal of Environmental Research and Public Health*, Vol. 17(13), MDPI, 2020, Article 4765.

Amicizia, D., Marchini, F., Pronzato, P., Paoli, G., Genova, C., Allegretti, S. and Ansaldi, F., 'The Ligurian Experience in the Management of Lung Cancer: Organisational Models and New Perspectives', *Healthcare*, Vol. 12(24), MDPI, 2024, Article 2556.

Amnesty International, Finland: Inequality of healthcare in Finland, June 2023.

Anderson, B. O., et al., 'Health and cancer risks associated with low levels of alcohol consumption', *The Lancet Public Health*, Vol. 8(1), Elsevier Limited, 2023, pp. e6–e7.

Bahr T.J., Ginsburg S., Wright J.G., Shachak A., 'Technostress as source of physician burnout: An exploration of the associations between technology usage and physician burnout', *International Journal of Medical Informatics*, Vol. 177, Elsevier Limited, 2023.

Balzano, G., Reni, M., Di Bartolomeo, M., Scorsetti, M., Caraceni, A., Rivizzigno, P., Amorosi, A., Scardoni, A., Abu Hilal, M., Ferrari, G., Labianca, R., Venturini, M., Doglioni, C., Riva, L., Caccialanza, R. and..., and Carrara, S., 'Translating knowledge into policy: Organisational model and minimum requirements for the implementation of a regional pancreas unit network', *Digestive and Liver Disease*, Vol. 57(2), Elsevier Limited, 2025, pp. 370–377.

Baumann, E., Koller M., Wiltfang, J., Wenz, H.-J., Moller, B.,, and Hertrampf, K., 'Challenges of early detection of oral cancer: raising awareness as a first step to successful campaigning', *Health Education Research*, Volume 31(2), Oxford University Press, 2016, pp. 136–145.

Bernardo, B. M., Zhang, X., Beverly Hery, C. M., Meadows, R. J.,, and& Paskett, E. D., 'The efficacy and cost-effectiveness of patient navigation programs across the cancer continuum: A systematic review', *Cancer*, Vol.125(16), John Wiley & Sons, 2019, pp. 2747–2761.

Blay, J.Y., Casali, P., Bouvier, C. et al. 'European Reference Network for rare adult solid cancers, statement and integration to health care systems of member states: a position paper of the ERN EURACAN', *ESMO Open,* Vol. 6(4), Elsevier Limited, 2021, 100174.

Brigitte Pircher B., de la Porte, C., and Szelewa, D., et al. 'Actors, costs and values: the implementation of the Work-Life Balance Directive', *West European Politics*, Vol. 47, Taylor & Francis Online, 2023, pp. 543-568.

Brkljačić, B., and Šupe Parun, A. A., 'Croatian success in early breast cancer detection: Favorable news in Breast Cancer Awareness Month', *Croatian Medical Journal*, Vvol. 61(, no. 5), Medicinska Naklada, 2020, pp. 389–390.

Brnić, Z., Kašnik, Kr., Kašnik, Ka., Brnić, V., Borojević, N., Ljubešić, L., Schmidt, S. and Krpan, T., 'Patient Satisfaction in Croatian Nationwide Mammography Screening Program', *International Jjournal of Cclinical Mmedicine*, Vol. 8(3), Scientific Research Publishing, 2017, pp. 159-166.

Bundesgesundheitsministerium, Gemeinsame Erklärung Nationaler Krebsplan (NKP) – Fortsetzung und Neuausrichtung, 2024.

Bundesgesundheitsministerium, Ziele des Nationalen Krebsplan – NKP, 2008.

Bundeszentrale für gesundheitliche Aufklärung (BZgA), Infoblatt: Die Drogenaffinität Jugendlicher in der Bundesrepublik Deutschland 2023 – Ergebnisse zum Rauchen, 2024.

Cancer Prevention Europe and IARC, Cancers caused by smoking in Europe: Country summaries, 2020.

Carter, A., Mossialos, E., Candolfi, P., and Rappagliosi, A., Integrating Care in Health Systems. The role of technology in transforming care pathways and achieving the Triple Aim, London School of Economics and Political Science, 2022.

Casali, P.G., Antoine-Poirel, H., Berrocoso, S. et al., 'Health networking on cancer in the European Union: A "green paper" by the EU Joint Action on Networks of Expertise (JANE)', *ESMO Open*, Vol. 10(2), Elsevier Limited, 2025, Article 104126.

Cazzolla Gatti, R., Di Paola, A., Monaco, A., Velichevskaya, A., Amoroso, N. and Bellotti, R., 'A ten-year (2009–2018) database of cancer mortality rates in Italy', *Scientific Data*, Springer Nature, Vol. 9, 2022, Article 638.

Choices International Foundation, Positive nutrition labelling: a scientific overview, 2019.

Codex Alimentarius Commission - Codex Committee on Food Labelling. Comments from International Association of Consumer Food Organisations on proposal for new work concerning a global standard for front of pack interpretive nutrition labelling. Agenda item 9 FL/43 CRD/17, 2016.

Conference on the Future of Europe, Report on the Final Outcome, May 2022

Correia, D., Kokole, D., Rehm, J., et al., 'Effect of alcohol health warning labels on knowledge related to the ill effects of alcohol on cancer risk and their public perceptions in 14 European countries: an online survey experiment', *The Lancet Public Health*, Vol. 9(7), Elsevier Limited, 2024, pp. e470–e480.

Craig, J. and Patterson, V., 'Introduction to the practice of telemedicine', *Journal of Telemedicine and Telecare*, Vol. 11(1), Sage Journals, 2005, pp. 3-9. Craig, J. and Patterson, V., 'Introduction to the practice of telemedicine",The Royal Society of Medicine Press, 2017.

Crocco, M., Malerba, F., Gandullia P., Calevo, MG., Olcese, R., Maggi, E., Milito, S., Fiocca, S., Floriani, I., Rossi, A., Tomà, S., Martini, A., Torre, R., Schenone, E., Calvi, M., Perasso, G., Caviglia, I., Mancardi, M., Bignamini, E.et al., and Sacco, O., 'Hub-and-Spoke Regional System Supported by Telehealth for Managing Coeliac Disease in Liguria: A Mixed-Methods Survey Followed by an Observational Pilot Study', *BMC Health Services Research*, Vol. 25(1), 2025, BioMed Central Limited, Article 398.

De Angelis R., Demuru E., Baili P., et al., on behalf of et al., EUROCARE-6 Working Group, 'Complete cancer prevalence in Europe in 2020 by disease duration and country (EUROCARE-6): a population-based study', *The Lancet Oncology*, Vol. 25(3), Elsevier Limited, 2024

De Belvis, A. G., Meregaglia, M., Morsella, A., Adduci, A., Perilli, A., Cascini, F., et al., Italy: Health system summary 2022, 2022.

De Maeseneer, J., and Galle, A., 'Belgium's Healthcare System: The Way Forward to Address the Challenges of the 21st Century: Comment on" Integration or Fragmentation of Health Care? Examining Policies and Politics in a Belgian Case Study', *International Journal of Health Policy and Management*, Vol. 12, Kerman University of Medical Sciences, 2020, 7070.

Dee, E.C., Magsanoc-Slikpala, M.J.K., Moraes, F. Y., Willmann, J., Ting, F.I.L. and Feliciano, E.J.G. 'Political determinants of cancer health', *The Lancet Regional Health – Americas*, Vol. 43, Elsevier Limited, 2025, 101008.

Digestive Cancers Europe, European Commission Spending Plan for 2023 – Adoption of EU4Health Work Programme, 2022.

Digestive Cancers Europe, Interventions to Reduce Cancer Screening Inequities, 13 February 2023.

DKFZ, Tobacco Industry Interference Index Germany 2023, 2023.

Drury A., Sulosaari V., Sharp L., Ullgren H., de Munter J., Oldenmenger W., 'The future of cancer nursing in Europe: Addressing professional issues in education, research, policy and practice', *European Journal of Oncology Nursing*,*Eur J Oncol Nurs*, 2023, Vol. 63, Elsevier Limited, 2023, Article 102271.

Džakula, A., Vočanec, D., Banadinović, M., Vajagić, M., Lončarek, K., Lukačević Lovrenčić, I., Radin, D. and Rechel, B., Croatia – Health System Summary 2024, World Health Organization Regional Office for Europe, European Observatory on Health Systems and Policies, 2024, p. 2.

eCAN, Final Evaluation Report, 2024.

eCAN, Interim Evaluation Report, eCAN Deliverables, p, 38.

eCAN, Roadmap development for scaling-up eHealth, eCAN Deliverables, 2024.

ECHoS Consortium, ECHoS – Establishing Cancer Mission Hubs: Networks and Synergies, 2023.

ECO, Free from Cancer: Achieving Quality of Life for All Cancer Patients and Survivors, 2020.

Ecorys, Policy evaluation of cancer screening programmes: report for the Dutch Ministry of Health, 2024.

Elrod, J.K. and Fortenberry Jr., J.L., 'The Hub-and-Spoke Organization Design: An Avenue for Serving Patients Well', *BMC Health Services Research*, Vol. 17(Suppl. 1), BioMed Central Limited, 2017, Article 457.

EU Navigate, Stakeholder forum report, 2024.

Eurofound, Measures to tackle labour shortages: Lessons for future policy, Publications Office of the European Union, 2024.

European Cancer Organisation, European Inter-specialty Cancer Training Programme Curriculum, 2023.

European Cancer Organisation, Patient navigation: the path towards reduced cancer inequalities in Europe? – EU Navigate Stakeholder Forum report, 2024

European Cancer Organisation, Preparing a Resilient Oncology Workforce for the Present and Future, website.

European Cancer Organisation, EU NAVIGATE project, 2022.

European Cancer Organisation, INTERACT-EUROPE – Blueprint for High Functioning Multidisciplinary Cancer Care in Every Country, 2023.

European Cancer Organisation, Under Pressure: Safeguarding the Health of Europe's Oncology Workforce – A Report and Policy Action Plan from the European Cancer Organisation's Workforce Network, 2024.

European Data Journalism Network, Cancer in Croatia: a cruel system, 27 October 2022.

European Investment Fund/EIT Health, Addressing skills needs in the European health sector. Skills gaps, solutions, and strategies for VC-startup cooperation, 2024.

European Labour Authority, EURES Report on labour shortages and surpluses 2024, Publications Office of the European Union, Luxembourg, 2025.

European Observatory on Health Systems and Policies, Building a collaborative framework for advancing cancer care in Belgium, OBS-PACE Case Study, 2025.

European Observatory on Health Systems and Policies, Denmark health system summary 2024, 2024.

European Observatory on Health Systems and Policies, Estonia: Health System Summary 2024, 2024.

European Observatory on Health Systems and Policies, The Netherlands health system summary 2024, 2024.

European Parliament: European Parliamentary Research Service, Nutrition labelling schemes used in Member States, 2020.

Eurostat, Reconciliation of work and family life – statistics, 2018.

Federal Ministry of Education and Research, The National Decade against Cancer, 2019.

Ferraris, G., Coppini, V., Ferrari, M.V., Monzan,i D., Grasso R. and Pravettoni G., 'Understanding Reasons for Cancer Disparities in Italy: A Qualitative Study of Barriers and Needs of Cancer Patients and Healthcare Providers', *Cancer Control: Journal of the Moffitt Cancer Center*, Vol. 31, Sage Journals, 2024, Article 10732748241258589.

Ferreira-Borges C, Kokole D, Galea G, Neufeld M, and Rehm J., 'Labels warning about alcohol-attributable cancer risks should be mandated urgently', *Lancet Public Health*, Vol. 10, Elsevier Limited, 2025, e358–e359.

Finnish Heart Association, Heart Symbol and front-of-pack nutrition labelling (FOPL) situation in Finland, 2022.

Francisci, S., Guzzinati, S., Mezzetti, M., Crocetti, E., Giusti, F., Miccinesi, G., Paci, E., Angiolini, C, and Gigli, A., ' Cost profiles of colorectal cancer patients in Italy based on individual patterns of care', *BMC Cancer*, Vol. 13, BioMed Central Limited, 2013.

Fridell, M.; Edwin, S.; von Schreeb, J. and Saulnier, D.D., 'Health System Resilience: What Are We Talking About? A Scoping Review Mapping Characteristics and Keywords', International Journal of Health Policy Management, Vol. 9(1), Kerman University of Medical Sciences, 2020.

FS Italiane, Frecciarosa 2024 in Sicily: breast cancer prevention travels by Intercity train between Palermo and Messina, October 2024.

Gagliardi F., D'Ippolito E., Grassi R., Sangiovanni A., et al.,et al., 'Being a radiation oncologist: times of crisis for European graduates', *BJR Open*, Vol. 7(1), Oxford University Press, 2025, pp. 1–7.

Gallagher, A. W. A., Gilmore, A. B. and Eads, M., 'Tracking and tracing the tobacco industry: potential tobacco industry influence over the EU's system for tobacco traceability and security features', *Tobacco Control,* Vol. 29(e1), BMJ Publishing Group, 2020, pp. e56–e62.

Gallagher, A. W. A., Gilmore, A. B., and Eads, M., 'Assessment of the European Union's illicit trade agreements with the four major Transnational Tobacco Companies', *Tobacco Control,* Vol. 29(e1), 2020.

Garde, A., Gokani, N., Perez-Llantada, J.C. and Souter, J. 'Lobbying, transparency and trust: power imbalances and the failure to implement Europe's Beating Cancer Plan', *The Lancet – Regional Health*, Vol. 51, Elsevier Limited, 2025, 101238.

Glinos I.A., 'Health professional mobility in the European Union: Exploring the equity and efficiency of free movement', *Health Policy*, December 2015, Vol. 119(12), Elsevier Limited, 2015, pp. : 1529–1536.

Gottlob, A., Schmitt, T., Frydensberg, M. S., Rosińska, M., Leclercq, V., and Habimana, K., 'Telemedicine in cancer care: lessons from COVID-19 and solutions for Europe', *European Journal of Public Health*, Vol. 35(1), Oxford University Press, 2025, pp. 35–41.

Government of the Republic of Estonia, Estonian eHealth Strategic Development Plan 2020, 2015.

Grunert, K.G., Fernández-Celemín, L., Wills, J.M., Storcksdieck genannt Bonsmann, S. and Nureeva, L., 'Use and understanding of nutrition information on food labels in six European countries', *Journal of Public Health*, Vol. 18, Springer Nature, 2010, pp. 261–277.

Guerra-Martín, M.D., Casado-Espinosa, M.D.R., Gavira-López, Y., et al. 'Quality of Life in Caregivers of Cancer Patients: A Literature Review.', *International . Journal. Environmental. Research and. Public Health*, Vol 20(2(1570), MDPI, 2023, p. 1570.

Hawley, K.L., Roberto, C.A., Bragg, M.A., Liu, P.J., Schwartz, M.B., and Brownell, K.D., 'The science on front-of-package food labels', *Public Health Nutrition*, Vol. 16(, Issue. 3), Cambridge University Press, 2013, pp. 430–439.

Hersey, J.C., Wohlgenant, K.C., Arsenault, J.E., Kosa, K.M., and Muth, M.K., 'Effects of front-of-package and shelf nutrition labeling systems on consumers', *Nutrition Reviews*, Vol. 71(1), Oxford University Press, 2013, pp. 1–14.

Herttua, K., 'The effects of the 2004 reduction in the price of alcohol on alcohol-related harm in Finland – a natural experiment based on register data', *Finnish Yearbook of Population Research*, Vol. XLV, Supplement, 2010, pp. 7–30.

Hjelmstedt, S., Forinder, U. M., Lindahl Norberg, A. M. andE. Hovén et al, E.,. 'A Balancing Act: Working and Caring for a Child with Cancer', *Journal of Child and Family Studies*, Vol. 30, Springer Nature, 2021, pp. 1881-1894.

Institute for Health Economics (IHE), Cancer Dashboard – Italy: Access to Cancer Medicines, November 2024.

Institute for Health Economics (IHE), Comparator report on cancer in Europe 2019 – Disease burden, costs and access to medicines, 2020.

International Agency for Research on Cancer World Health Organization, Evaluating the Effectiveness of Smoke-free Policies, 2009.

International Organization for Migration, Croatia – National Roma Integration Strategy: Progress Report, IOM Global Office for the European Union, Brussels, 2014.

International Organization for Migration, Implementation of the National Roma Integration Strategy and Other National Commitments in the Field of Health – Croatia, IOM Global Office for the European Union, 2014.

Italian Ministry of Health, Piano Oncologico Nazionale 2023–2027: Documento di pianificazione e indirizzo per la prevenzione e il contrasto del cancro, 2023.

Jané-Llopis, E., Kokole, D., Neufeld, M., Hasan, O. S. M. and Rehm, J., 'What is the current alcohol labelling practice in the WHO European Region and what are barriers and facilitators to development and implementation of alcohol labelling policy?', *Health Evidence Network (HEN) synthesis report 68*, 2020.

Jeleff, M;, Haider, S; Schiffler, T., Gil-Salmerón, A.; Yang, L.; Barreto Schuch, F. and Grabovac, I., 'Cancer risk factors and access to cancer prevention services for people experiencing homelessness', *The Lancet . Public Health*, 2024, Vol. 9(2), Elsevier Limited, 2024.

Joint Action on Networks of Expertise (JANE), Networks of Expertise: An Ambitious Vision for Tackling Healthcare at EU Level, September 2024.

Jones, J., Olson, K., Catton, P., et al., 'Cancer-related fatigue and associated disability in post-treatment cancer survivors', *Journal of Cancer Survivorship*, Vol. 10, Springer Nature, 2016, pp. 51-61.

Joossens, L., Lugo, A., La Vecchia, C., et al., 'Illicit cigarettes and hand-rolled tobacco in 18 European countries: a cross-sectional survey', *Tobacco Control,* Vol. 23, BMJ Publishing Group, 2014, e17-e23.

Jovanović, Z. and Rojnić, O. Response of Healthcare Professionals in the County of Istria to the National Prevention Programme for the Early Detection of Breast Cancer, *Public Health and Healthcare*, preprint, 2024.

Julia, C., Gokani, N., Hercberg, S. and Garde, A., 'Ten years of Nutri-Score front-of-pack nutrition labelling in Europe', *Nature Food*, Vol. 6, Springer Nature, 2025, pp. 239-243.

Junge, L., and Durvy, B., Introduction and use of cancer data registry: lessons from Austria, Belgium, Finland and Slovenia, EuroHealth Observatory, May 2025.

Kaljuste, D. and Kasulapuu, M., Onkontakt Projekti Mõju-uuring, 2023.

Kansallinen syöpäkeskus (FICAN), Kansallinen syöpästrategia 2025–2035 – Luonnos, 2025.

Karafillakis, E., Simas, C., Jarrett, C., Verger, P., Peretti-Watel, P., Dib, F., ... and Larson, H., 'HPV vaccination in a context of public mistrust and uncertainty: a systematic literature review of determinants of HPV vaccine hesitancy in Europe', *Human Vaccines & Immunotherapeutics*, Vol. 15(7-8), Taylor & Francis Online, 2019, pp. 1615-1627.

Kasekamp, K., Habicht, T., Võrk A., Köhler, K., Reinap, M., Kahur, K., Laarmann, H. and Litvinova, Y., Estonia: Health System Summary (updated), 2025.

Kelly D., Lankshear A., Wiseman T., Jahn P., Mall-Roosmäe H., Rannus K., Oldenmenger W., Sharp L., 'The experiences of cancer nurses working in four European countries: a qualitative study', *European Journal of Oncology Nursing*, 2020, Vol. 49, Elsevier Limited, 2020, Article 101844.

Key, T. J., Bradbury, K. E., Perez-Cornago, A., Sinha, R., Tsilidis, K. K. and Tsugane, S., 'Diet, nutrition, and cancer risk: what do we know and what is the way forward?', *BMJ (Clinical research ed.)*, Vol. 368, BMJ Publishing Group, 2020, m511.

Kluge, H. P., Galea, G., Ferreira-Borges, C. and Paradis, C., 'Confronting alcohol's costly toll: why the European region needs clearer, evidence-based policy', *The Lancet Regional Health – Europe*, Vol. 48, Elsevier Limited, 2025.

Kokole, D., Ferreira-Borges, C., Galea, G., Tran, A., Rehm, J. and Neufeld, M., 'Public awareness of the alcohol-cancer link in the EU and UK: a scoping review', *European Journal of Public Health*, Vol.ume 33(6), Oxford University Press, 2023, pp. 1128–1147.

Lauber, K. and Brooks, E., 'A missed opportunity for public health: How impact assessment shaped EU rules on the marketing of unhealthy commodities to children', *SSM – Qualitative Research in Health*, Vol. 5, Elsevier Limited, 2024, 100369.

Lawler, M., De Lorenzo, F., Lagergren, P., Mennini, F. S., Narbutas, S., Scocca, G., ... & European Academy of Cancer Sciences. 'Challenges and solutions to embed cancer survivorship research and innovation within the EU Cancer Mission', *Molecular Oncology*, Vol. 15(7), John Wiley & Sons, 2021, pp. 1750-1758.

Leclercq, V., Saesen, R., Schmitt, T., Habimana, K., Habl, C., Gottlob, A., Van den Bulcke, M. and Delnord, M. 'How to scale up telemedicine for cancer prevention and care? Recommendations for sustainably implementing telemedicine services within EU health systems', *Journal of Cancer Policy*, Vol. 44, 2025.

Leensen, M. C. J., Groeneveld, I. F., Heide, I. V. D., Rejda, T., Van Veldhoven, P. L. J., Berkel, S. V., Snoek, A., van Harten, W. H., Frings-Dresen, M. H. W., & Boer, A. G. E. M.et al., 'Return to work of cancer patients after a multidisciplinary intervention including occupational counselling and physical exercise in cancer patients: A prospective study in the Netherlands', *BMJ Oopen*, Vol. 7(6), BMJ Publishing Group, 2017, Article e014746.

Leifman, H., Dramstad, K. and Juslin, E., 'Alcohol consumption and closed borders – how COVID-19 restrictions have impacted alcohol sales and consumption in Europe', *BMC Public Health*, Vol. 22(692), BMJ Publishing Group, 2022, 692.

Lenz, C., Maj, A., Vu, H., Yeung, T.Y.C. and Zubel, K., Cancer: repository of regional prevention and detection policies, Study at the request of European Committee of the Regions, 2025.

Lesch, M., and& McCambridge, J., 'Understanding the political organization and tactics of the alcohol industry in Ireland 2009-2018', *Journal of Studies on Alcohol and Drugs*, Vol. 83(4), Alcohol Research Documentation, Inc., 2022, pp. 574-581.

Lintonen, T., Ahtinen, S. and Konu, A., 'Alcoholic beverage preferences among teenagers in Finland before and after the 2018 alcohol law change', *Nordisk Alkohol- & NarkotikatidskriftNordic Studies on Alcohol and Drugs*, Vol. 37(2), Sage Journals, 2020, pp. 141–152.

Locatelli, P., Cirilli, F., Panno, E., Provenzano, S., Sanfilippo, R. and Casali, P.G. Digital Support for a Hub-and-Spoke Disease Network, in *Proceedings of the IADIS International Conference e-Health,* 2020.

Luengo-Fernandez, R., Leal, J., Gray, A. and Sullivan, R., 'Economic burden of cancer across the European Union: a population-based cost analysis', *European Journal of CancerThe Lancet Oncology*, Vol. 14(12)29, Elsevier Limited, 2020, pp. 174–183.

Mansour, M., Petit, P. and Sawadogo, F., IMF, How to design excise taxes on alcoholic beverages, 2023.

Manthey, J., Gobina, I., Isajeva, L., et al., Gobiņa, I., Isajeva, L., Neneman, J., Reile, R., Štelemėkas, M. and Rehm, J., 'The impact of raising alcohol taxes on government tax revenue: insights from five European countries', *Applied Health Economics and Health Policy*, Vol. 22(3), Springer Nature, 2024, pp. 363–374.

Manzano A, Svedman C, Hofmarcher T, Wilking N., Comparator Report on Cancer in Europe 2025 – Disease Burden, Costs and Access to Medicines and Molecular Diagnostics, IHE Report 2025, p. 9.

Matrix, 'Roma Health Report – Health status of the Roma population. Data collection in the Member States of the European Union', Study at the request of the European Union 2014.

McCreanor, T., Moewaka Barnes, A., Goodwin, I., et al., 'Alcohol marketing on social media: young people's exposure, engagement and alcohol-related behaviors', *Addiction Research & Theory*, Vol. 33(3), Taylor & Francis Online, 2025, pp. 161–171.

Mehrotra, A., Chernew, M., Linetsky, D., Hatch, H. and Cutler, D., *The Impact of the COVID-19 Pandemic on Outpatient Visits: A Rebound Emerges*, Commonwealth Fund, May 2020.

Meunier, F., Scocca, G., and Tulkens, F., 'Towards promoting a legal framework for ending discrimination against cancer survivors: A human rights-centred approach', *Journal of Cancer Policy*, Vol. 43, Elsevier Limited, Elsevier Limited, 2025, Article 100527.

Ministerstwo Funduszy i Polityki Regionalnej, Krajowy Plan Odbudowy i Zwiększania Odporności, 2022.

Ministry of Social Affairs and National Institute for Health Development, Estonian Cancer Control Plan 2021–2030, 2021.

Najwyższa Izba Kontroli, Dostępność i efekty leczenia nowotworów, 2018.

Najwyższa Izba Kontroli, Dostępność i efekty leczenia nowotworów, Informacje o wynikach kontroli, 2018.

Najwyższa Izba Kontroli, Raport: System ochrony zdrowia w Polsce – stan obecny i pożądane kierunki zmian, 2019.

Najwyższa Izba Kontroli, Zasoby kadry medycznej w systemie ochrony zdrowia, informacja o wynikach kontroli, 2023.

National Institute for Health Development Estonia, Vähitõrje Tegevuskava 2021–2030, 2021.

Nederlands Kanker Collectief, De Nederlandse Kanker Agenda – 20 doelen om de impact van kanker op de samenleving te verminderen, 2023.

Neo, J., Fettes, L., Gao, W., Higginson, I.J., and Maddocks, M., 'Disability in activities of daily living among adults with cancer: A systematic review and meta-analysis', *Cancer Treatment Reviews*, Vol. 61, Elsevier Limited, 2017, pp. 94-106.

OECD and European Commission, Beating Cancer Inequalities in the EU, 2024.

OECD and European Commission, EU Country Cancer Profile: Croatia 2025, 2025.

OECD and European Commission, EU Country Cancer Profile: Denmark 2025, 2025.

OECD and European Commission, EU Country Cancer Profile: Finland 2023, 2023.

OECD and European Commission, EU Country Cancer Profile: Finland 2025, 2025.

OECD and European Commission, EU Country Cancer Profile: Germany 2025, 2025.

OECD and European Commission, EU Country Cancer Profile: Italy 2025, 2025.

OECD and European Commission, EU Country Cancer Profile: Netherlands 2023, 2023.

OECD and European Commission, EU Country Cancer Profile: Netherlands 2025, 2025.

OECD and European Commission, EU Country Cancer Profiles Synthesis Report 2025, 2025.

OECD and European Commission, EU Country Health Profile: Poland 2023, 2023.

OECD and European Commission, Health at a Glance: Europe 2024: State of Health in the EU Cycle, 2024.

OECD and European Commission, Country Cancer Profile: Croatia, 2025.

OECD and European Observatory on Health Systems and Policies, Denmark: Country Health Profile 2023, 2024

OECD and European Observatory on Health Systems and Policies, EU Country Cancer Profile - Poland 2025, 2025.

OECD and European Observatory on Health Systems and Policies, Poland: Country Health Profile 2023, 2023.

OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Italy – Country Health Profile 2023, 2023.

OECD and European Observatory on Health Systems and Policies, State of the Health in the EU – Polska, 2021.

OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Croatia – Country Health Profile 2021, 2021.

OECD and European Observatory on Health Systems and Policies, State of Health in the EU: Poland – Country Health Profile 2021, 2021.

OECD and European Observatory on Health Systems and Policies, State of health in the EU: the Netherlands – Country Health Profile 2021, 2021.

OECD and the European Commission, EU Country Cancer Profile - Estonia 2025, 2025.

OECD and the European Commission, EU Country Cancer Profiles 2025, 2025.

OECD, Beating cancer inequalities in the EU – Spotlight on cancer prevention and early, 2024.

OECD, Does Healthcare Deliver?: Results from the Patient-Reported Indicator Surveys (PaRIS), 2025.

OECD, EU Country Cancer Profile Synthesis Report 2025, 2025.

OECD, OECD Economic Surveys: Poland 2025, Vol. 2025/2, 2025.

Open Evidence, Schlesinger Group and LSE, Study supporting the Evaluation of the Tobacco Control Acquis, 2022.

Open Society Foundations, Campaign Aims to Give Roma Women an Equal Chance Against Cancer, 2011.

Paimre, M., Virkus, S. and Osula K., 'Health information behavior and related factors among Estonians aged ≥ 50 years during the COVID-19 pandemic', *Journal of Documentation*, Vol. 79(5), Emerald Publishing, 2023, pp. 1164–1181.

Pesut, B., Duggleby, W., Warner, G. et al. 'A mixed-method evaluation of a volunteer navigation intervention for older persons living with chronic illness (Nav-CARE): findings from a knowledge translation study'. *BMC Palliative Care*, Vol. 19(1), BioMed Central Limited, 2020, p. 159.

Peters, M. D. J., Kim, B., Clifford, R., Moxham, L., Islam, S. M. S., and Parker, R., 'The effectiveness of mass media campaigns for cancer prevention and early detection: a scoping review', *BMC Public Health*, Vol. 25, BioMed Central Limited, 2025, Article 23179.

Portillo I., Idígoras I., Ojembarrena E., Arana-Arri E., Zubero M.B., Pijoán J.L., et al., 'Main results of the colorectal cancer screening program in the Basque Country (Spain)', *Gaceta Sanitaria*, Vol. 27(4), Elsevier Limited, 2013, pp 358–61.

Poscia, A., Silenzi, W. And Ricciardi, W., Organization and financing of public health services in Europe: Country reports, *Health Policy Series* No. 49, European Observatory on Health Systems and Policies, Copenhagen, 2018.

Pousette, A. and Hofmarcher, T., Tackling inequalities in cancer care in the European Union, 2024.

Qureshi, S. A., Igland, J., Møen, K., Gele, A., Kumar, B., and Diaz, E., 'Effect of a community-based intervention to increase participation in cervical cancer screening among Pakistani and Somali women in Norway', *BMC Public Health*, Vol. 21, BMC Publishing Group, 2021, 1271.

Rada Ministrów, Uchwała nr 10 Rady Ministrów z dnia 4 lutego 2020 r. w sprawie przyjęcia programu wieloletniego pn. Narodowa Strategia Onkologiczna na lata 2020-2030, 2020.

Radin M., Health System Review: Croatia, *Health Systems in Transition*, Vol. 18, No. 3, European Observatory on Health Systems and Policies, World Health Organization, 2016.

Raine, R., Fitzpatrick, R., Barratt, H., Bevan, G., Black, N., Boaden, R., et al., Bower, P., Campbell, M., Denis, J.L., Devers, K. and Dixon-Woods, M., 'Challenges, solutions and future directions in the evaluation of service innovations in health care and public health', *Health Services and Delivery Research*, Vol. 4(16), NIHR Journals Library, 2016.

Redeker, C., Wardle, J., Wilder, D., Hiom, S., and Miles, A., 'The launch of the "Be Clear on Cancer" campaign: a nationwide campaign to promote earlier diagnosis of cancer', *British Journal of Cancer*, Vol. 113, 2015, pp. 1001–1007.

Republic of Croatia, National Cancer Control Plan 2020-2030, Zagreb, January 2020.

Rezaei, M, Keyvanloo, Shahrestanaki, S, Mohammadzadeh, R, et. al., 'Caregiving consequences in cancer family caregivers: a narrative review of qualitative studies', *Frontiers in Public Health*, Vol. 12Mar 22(12), Frontiers Media, 2024.

Richardson-Parry, A.,; Baas, C.,; Donde, S., et al., 'Interventions to reduce cancer screening inequities: the perspective and role of patients, advocacy groups, and empowerment organizations', *International Journal of Equity Health*, 2023, VVol. 22(1), BioMed Central Limited, 2023, 19.

Ritchie, D., Mallafre-Larrosa, M., Ferro, G., Schuz, J. and Espina, C., 'Evaluation of the impact of the European Code against Cancer on awareness and attitudes towards cancer prevention at the population and health promoters' levels', *Cancer Epidemiology*, Vol. 71, Part A, Elsevier Limited, 2021, 101898.

RIVM, Gedragseffecten van de accijnsverhoging op tabak in 2024: Voorgenomen versus daadwerkelijke gedragsverandering, 2024.

Robinson, L., Ragnedda, M. and Schulz, J., 'Digital inequalities: contextualizing problems and solutions', *Journal of Information, Communication and Ethics in Society*, Vol. 18(3), Emerald Publishing, 2020, pp. 323-327.

Roland, K. B., Milliken, E. L., Rohan, E. A., DeGroff, A., White, S., Melillo, S., et al. ... & Young, P. A., 'Use of community health workers and patient navigators to improve cancer outcomes among patients served by federally qualified health centers: a systematic literature review', *Health Equity*, Vol. 1(1), Sage Journals, 2017, pp. 61–76.

Rumgay, H., Murphy, N., Ferrari, P., and Soerjomataram, I., 'Alcohol and cancer: epidemiology and biological mechanisms', *Nutrients*, Vol. 13(9), MDPI, 2021, p. 3173.

Scobie, G., Patterson, C., Rendall, G., et al., 'Review of alcohol marketing restrictions in seven European countries', Public Health Scotland, 2022.

Sejm Rzeczpospolitej Polskiej, Ustawa z dnia 9 marca 2023 r. o Krajowej Sieci Onkologicznej, 2023.

Senato della Repubblica, Constitution of the Italian Republic, Article 32.

Seruga B., Sullivan R., Fundytus A. et al, 'Medical Oncology Workload in Europe: One Continent, Several Worlds', *Clinical Oncology*, Vol. 32(1), Issue 1, Elsevier Limited, 2020, pp. e19-e26.

Shahrabi Farahani, F., Paapsi K. and Innos K., 'The impact of sociodemographic factors on the utilization of radiation therapy in breast cancer patients in Estonia: a register-based study', *International Journal for Equity in Health*, Vvol. 20(, no. 1), BioMed Central Limited, 2021, p. 152.

Sherk, A., Stockwell, T., Sorge, J., Churchill, S., Angus, C., Chikritzhs, T., Holmes, J., Meier, P., Naimi, T. S., Norström, T., Ramstedt, M. and Simpura, J.,et al., 'The public-private decision for alcohol retail systems: Examining the economic, health, and social impacts of alternative systems in Finland', *Nordisk alkohol- & narkotikatidskrift (NAT),Nordic Studies on Alcohol and Drugs,* Vol. 40(3), 2023, pp. 218–232.

Signorelli, C., Pennisi, F. and Rezza, G., 'Vaccinations and regional inequalities in Italy,', *The Lancet Public Health*, Vol. 10(7), Elsevier Limited, July 2025, e546.

Šiško, I. and Šiško, N., 'Preventivni programi za rano otkrivanje raka dojke u Republici Hrvatskoj (Prevention programs for early detection of breast cancer in Croatia)',. *Sestrinski glasnik*, Vol. 22(2), Portal of Croatian scientific and professional journals, 2017, pp.107-110.

Smets, T., Pivodic, L., Miranda, R., et al., 'Implementation and evaluation of a navigation program for people with cancer in old age and their family caregivers: study protocol for the EU NAVIGATE International Pragmatic Randomized Controlled Trial', *Trials,* Vol. 25, BMC Publishing Group, 2025, pp. 800.

Socca G. and Menier F., 'Towards an EU legislation on the right to be forgotten to access to financial services for cancer survivors', *European Journal of Cancer*, Vol. 162, Elsevier Limited, 2022, pp. 133-137.

Srivastava A., Jalink M., de Moraes F.Y., Booth C.M., et al, 'Tracking the Workforce 2020-2030: Making the Case for a Cancer Workforce Registry', *JCO Global Oncology*, Vol. 7, ASCO Publications, . June 2021, pp.: 925-933.

State–Regions Conference, Processo normativo e attuativo per la definizione dell'assetto della Rete Nazionale Tumori Rari, 21 September 2023.

Statistics Poland, Health and health care in 2023, Statistical Office in Kraków, 2024.

Stoklosa M., 'Prices and cross-border cigarette purchases in the EU: evidence from demand modelling', *Tobacco Control,* Vol. 29(1), BMJ Publishing, 2020, pp. 55-60.

Šupe Parun, A. Presentation: Improvement of quality of the national cancer screening programmes implementation (CRO Screening), 2016.

Šupe Parun, A., Čukelj, P., Tešić, V., Jelavić, M., and Brkljačić, B., 'Results of the National Breast Cancer Screening Program in Croatia (2006-2016)', *Croatian Medical Journal*, Vol. 63(4), Medicinska Naklada, 2022, pp. 326-334.

Swedish Food Agency, Regulations LIVSFS 2005:9 (consolidated with LIVSFS 2021:1) on the use of the Keyhole symbol, 2021.

Tervisekassa, Pilot Project Descriptions, 2024.

The Lancet Public Health. 'Inequalities in cancer: a major public health concern.' The Lancet Public Health. 2024, Vol. 9(3), Elsevier Limited, 2024, e147.

Trama, A., Stark, D., Bozovic-Spasojevic, I. et al., 'Cancer burden in adolescents and young adults in Europe', *ESMO Open*, Vol. 8(1), Elsevier Limited, 2023, 100744.

Trapani D., Murthy S.S., Boniol M., et al, 'Distribution of the workforce involved in cancer care: a systematic review of the literature', *ESMO Open*, December 6, 2021.

Tribunal Judiciaire de Paris, Jugement Rendu selon la procedure acceleree au fond, 5 January 2023.

United Nations Treaty Collection, Protocol to eliminate illicit trade in tobacco products, 2012.

University of Helsinki, Too young to drink, old enough to see the ads? Understanding youth exposure to alcohol marketing, 2023.

Urrizola, A., Brkic, A., Caraceni, A., et al., 'MyPath: the Roadmap to Implementing Patient-Centred Care.' *Academia Oncology,* Vol. 2(1), Academia.edu Journals, 2025.

Uusitalo, L., Nevalainen, J., Rahkonen, O., Erkkola, M., Saarijärvi, H., Fogelholm, M. and Lintonen, T., et al., 'Changes in alcohol purchases from grocery stores after authorising the sale of stronger beverages: The case of the Finnish alcohol legislation reform in 2018', *Nordisk Alkohol- & NarkotikatidskriftNordic Studies on Alcohol and Drugs*, Vol. 39(6), Sage Journals, 2022, pp. 589–604.

Vaccarella, S., Georges, D., Bray, F., Ginsburg, O., Charvat, H., Martikainen, et al., 'Socioeconomic inequalities in cancer mortality between and within countries in Europe: a population-based study', *The Lancet Regional Health – Europe,* Vol. 25, Elsevier Limited, 2023, 100551.Vaccarella, S., Georges, D., Bray et al., 'Socioeconomic inequalities in cancer mortality between and within countries in Europe: a population-based study', *The Lancet Regional Health – Europe*, Vol. 25, 2023, 100551.

Vah Jevšnik, M., and Cukut Krilić, S., 'A perfect storm: Demographic ageing, severe health staff shortages and globalisation of healthcare labour markets', Further Discussions on Labour Mobility in the EU, Slovenian Migration Institute, 2023, pp. 59–77.

Vainieri, M., Caputo, A. and Vinci, A., 'Resilience dimensions in health system performance assessments, European Union', Bulletin of the World Health Organization, 2024, Vo. 102(7), pp. 498–508.

Van Kessel, R., Hrzic, R., O'Nuallain, E., Weir, E., Wong, B.L.H., Anderson, M., Baron-Cohen, S. and Mossialos, E., 'Digital health paradox: international policy perspectives to address increased health inequalities for people living with disabilities', *Journal of Medical Internet Research*, Vol. 24(2), JMIR Publications, 2022, p.e33819.

Vandevijvere, S., Vermote, M., Egnell, M., Galan, P., Talati, Z., Pettigrew, S., Hercberg, S. and Julia, C., 'Consumers' food choices, understanding and perceptions in response to different front-of-pack nutrition labelling systems in Belgium: results from an online experimental study', *Archives of Public Health*, Vol. 78, BioMed Central Limited, 2020, 30.

Vassal, G. 'UNCAN.eu, the European platform to understand cancer, and childhood cancers', *EJC Paediatric Oncology*, Vol. 5, Elsevier Limited, 2025, p. 100212.

Webber, L., Divajeva, D., Marsh, T., et al., 'The future burden of obesity-related diseases in the 53 WHO European-Region countries and the impact of effective interventions: a modelling study', *BMJ Open*, Vol. 4(7), BMJ Publishing Group, 2014, 4:e004787.

WHO Framework Convention on Tobacco Control, 2023 Global Progress Report on Implementation of the WHO Framework Convention on Tobacco Control, 2024.

WHO Regional Office for Europe, Evaluation of the Estonian Green Paper on Alcohol Policy, 2024.

WHO Regional Office for Europe, Alcohol health warning labels – A public health perspective for Europe, WHO Regional Office for Europe, 2025, pp. 10–13.

WHO Regional Office for Europe, Alcohol taxes, prices and affordability in the WHO European Region in 2022, WHO Regional Office for Europe, Copenhagen, 2025.

WHO Regional Office for Europe, European Food and Nutrition Action Plan 2015–2020, 2015.

WHO Regional Office for Europe, Health warnings on labels of alcoholic beverages in the WHO European Region in 2024, World Health Organization, 2024.

WHO Regional Office for Europe, Laws and regulations addressing the acceptability, availability and affordability of alcoholic beverages, 2025.

WHO Regional Office for Europe, Manual to develop and implement front-of-pack nutrition labelling, 2020.

World Health Organization, Alcohol health warning labels: a public health perspective for Europe, 2025.

World Health Organization, Alcohol marketing in the WHO Europe region, 2020.

World Health Organization, Alcohol, health and policy response in the European Union, 2024.

World Health Organization, Illegal Trade of Tobacco Products: What You Should Know to Stop It, 2019.

World Health Organization, WHO Report on the Global Tobacco Epidemic 2023: Protect People from Tobacco Smoke, 2023.

World Health Organization, Alcohol and cancer in the European Union – A call to action, 2023.

World Health Organization, Health warnings on labels of alcoholic beverages in the WHO European Region in 2024, 2024.

World Health Organization, Global report on health equity for persons with disabilities, 2022.

World Health Organization, Health inequities and their causes, 22 February 2018.

World Health Organization, Tobacco Control Playbook: Smoke-free environments protect health and benefit the hospitality sector, April 2025.

World Health Organization, WHO European Regional Obesity Report 2022, 2022.

World Health Organization, WHO technical manual on tobacco tax policy and administration, 2021.

World Health Organization, Best buys' and other recommended interventions for the prevention and control of noncommunicable diseases, 2017.

World Health Organization Regional Office for Europe, Alcohol taxes, prices and affordability in the WHO European Region in 2022, 2025.

Würtenberger, A.,, Groneberg, D. A., and Mache, S., 'Digital stress perception and associations with work- and health-related outcomes among general practitioners in Germany: a quantitative study', *BMC Health Services Research*,. Vol. 25(1), Springer Nature, 2025, 535.

Zapata T., Azzopardi Muscat N., Falkenbach M. and Wismar, M.,et al. 'From Great Attrition to Great Attraction: Countering the great resignation of health and care workers', *Eurohealth,* Vol. 29(1), WHO, 2023.

Zentrum für Krebsregisterdaten and Gesellschaft der epidemiologischen Krebsregister in Deutschland, Krebs in Deutschland für 2019/2020, 14th edition, Robert Koch-Institut, Berlin, 2023.

Zimmermann, J., C. McKee, M. Karanikolos, J. Cylus and members of the OECD Health Division. Strengthening Health Systems: A Practical Handbook for Resilience Testing. Copenhagen, 2024.

Zimmermann, M.L., Innos, K., Härmaorg, P., Leif, E., Mändla, T. and Mägi, M., Cancer in Estonia: Incidence 2021, Survival 2017–2021 and Cancer Cases Diagnosed in Screening, National Institute for Health Development, 2024.

Zompì, L.G., Marco, C., Quarto, P., Clark C., Difonzo T., Lopez S., Loizzi V. and Gennaro, C., 'The landscape of ovarian cancer surgery in Italy: Data from PNE', *European Journal of Obstetrics & Gynecology and Reproductive Biology: X*, Vol. 26, Elsevier Limited, 2025, Article 100383.

Zuckermann, A. M. E., Morissette, K. and, Boland, L., et al., 'The effects of alcohol container labels on consumption behaviour, knowledge, and support for labelling: a systematic review', *The Lancet Public Health*, Vol. 9(7), Elsevier Limited, 2024, pp. e481–e494.

Zumbyte, I., Szelewa D., Assessing Compliance: Implementation of EU's Work-life Balance Directive in European Countries. Working paper, TransEuroWork, 2024.

Websites and databases

Agroberichten Buitenland, The Nutri-Score controversy in Spain, website (accessed 1 September 2025).

All.Can, Danish Cancer Patient Pathways: three-legged strategy for faster referral and diagnosis of cancer, website (accessed 1 September 2025).

Alleanza Contro il Cancro, Official Website, website (accessed 1 September 2025).

BE – EBCP mirror group, Unlocking Opportunities in EU Cancer Calls and Projects, website (accessed 1 September 2025).

Bundesministerium der Finanzen (BMF), Gesetz zur Modernisierung des Tabaksteuerrechts, website (accessed 1 September 2025).

CBS, Gezondheidsuitgaven per inwoner op een na hoogste van EU, website (accessed 1 September 2025).

Centers for Disease Control and Prevention, Obesity and cancer, website (accessed 1 September 2025).

Citizens Information, Excise duties, website (accessed 1 September 2025).

Council of the European UnionEU, Danish Presidency, The Programme of the Danish Presidency of the Council of the European Union 2025, website (accessed 1 September 2025).

Croatian Institute of Public Health, EUCanScreen: European Joint Action on Cancer Screening, website (accessed 1 September 2025).

DigiCanTrain, Official Website, website (accessed 1 September 2025).

eCAN, Official Website, website (accessed 1 September 2025).

eCAN, The eCan Plus joint Action kicks off, website (accessed 1 September 2025).

ECC-Cert, European Cancer Centre Certification Programme, website (accessed 1 September 2025).

ECIR – European Cancer Inequalities Registry – Policy context, Policy context, website (accessed 1 September 2025).

EHYT Finnish Association for Substance Abuse Prevention, Alcohol-related cancers: preventable, unknown, unacceptable, website (accessed 1 September 2025).

Ekdoseis Kerkyra, Greece opposes the new EU Nutri-Score food labelling system, website (accessed 1 September 2025).

ERR, 'Study: Majority of Estonian residents support laxer alcohol policy', website (accessed 1 September 2025).

EU Navigate, Brochure, website (accessed 1 September 2025).

EUCAM, AVMSD, website (accessed 1 September 2025).

EUCanScreen, Official Website, website (accessed 1 September 2025).

EUnetCCC Joint Action, European network of Comprehensive Cancer Centers, website (accessed 1 September 2025).

EURACAN, Official Website, website (accessed 1 September 2025).

Euractiv, Romania flips stance, endorses Nutri-Score labelling system, website (accessed 1 September 2025).

Eurofins Scientific, The Nutri-Score – all important facts and novelties at a glance, website (accessed 1 September 2025).

Euronews, Health ministers urge the European Commission to boost anti-tobacco action, website (accessed 1 September 2025).

European Alcohol Policy Alliance (Eurocare), A landmark victory against online alcohol influence, website (accessed 1 September 2025).

European Anti-Fraud Office (OLAF), OLAF and International Partners Track Down Massive Cigarette Smuggling Network, Uncovering EUR 550 Million Tax Fraud, website (accessed 1 September 2025).

European Anti-Fraud Office (OLAF), OLAF and partners strengthen efforts against tobacco smuggling, website (accessed 1 September 2025).

European Cancer Organisation, INTERACT-EUROPE Showcase Event – Pioneering the Future of Inter-Specialty Cancer Education, website (accessed 1 September 2025).

European Commission, Artificial Intelligence in healthcare, website (accessed 1 September 2025).

European Commission, Bumper, website (accessed 1 September 2025).

European Commission, Cancer projects dashboard, website (accessed 1 September 2025).

European Commission, Cancer projects tool, website (accessed 1 September 2025).

European Commission, Coordinated Plan on Artificial Intelligence, website (accessed 1 September 2025).

European Commission, eCAN, website (accessed 1 September 2025).

European Commission, ECIR - Cancer Performance Tracker, website (accessed 1 September 2025).

European Commission, ERNs Evaluation, website (accessed 1 September 2025).

European Commission, Estonian Central Health Information System and Patient Portal, website (accessed 1 September 2025).

European Commission, EU Mission – Cancer, website (accessed 1 September 2025).

European Commission, EU4Health Programme, Call for proposals, website (accessed 1 September 2025).

European Commission, EU4Health Projects, Europe's Beating Cancer Plan, Denmark, website (accessed 1 September 2025).

European Commission, EUCanScreen, website (accessed 1 September 2025).

European Commission, EUnetCCC, website (accessed 1 September 2025).

European Commission, European Cancer Inequalities Registry. Quantity of alcohol consumption (2019) by country, website (accessed 1 September 2025).

European Commission, European Health Union: A new EU approach on cancer detection – screening more and screening better, European Commission press release, website (accessed 1 September 2025).

European Commission, European Pillar of Social Rights, website (accessed 1 September 2025).

European Commission, Extension of EU tobacco traceability system to tobacco products other than cigarettes and roll-your-own tobacco on 20 May 2024, website (accessed 1 September 2025).

European Commission, Have your say - Excise duty on alcohol and alcohol beverages – evaluation of excise duty rates and tax structures, website (accessed 1 September 2025).

European Commission, Have your say - Public Consultations and Feedback on the new Action Plan on the implementation, website (accessed 1 September 2025).

European Commission, Health Promotion and Disease Prevention Knowledge Gateway – Tobacco and Smoking, website (accessed 1 September 2025).

European Commission, IHLGiS - Inclusive Healthy Lifestyle groups in Schools, website (accessed 1 September 2025).

European Commission, Implementation of cancer screening programmes - EUCanScreen, website (accessed 1 September 2025).

European Commission, JA PreventNCD, website (accessed 1 September 2025).

European Commission, JANE-2, website (accessed 1 September 2025).

European Commission, Launch of the first EU action to address nurse shortages shows positive impact of European Health Union, website (accessed 1 September 2025).

European Commission, Mortgage credit - review of EI rules, website (accessed 1 September 2025).

European Commission, OriON – Joint Action on Contribution to the Cancer Inequalities Registry to Monitor National Cancer Control Policies Across Europe, website (accessed 1 September 2025).

European Commission, Promoting reform, website (accessed 1 September 2025).

European Commission, Union of equality: Strategy for the rights of persons with disabilities 2021-2030, website (accessed 1 September 2025).

European Commission, Vision for agriculture and food, website (accessed 1 September 2025).

European Commission, Youth Wiki – Croatia: 7.2 Administration and Governance, website (accessed 1 September 2025).

European Commission, Eurobarometer survey No 2995, website (accessed 1 September 2025).

European Commission, INTERACT-EUROPE – Innovative Collaboration for Inter-specialty Cancer Training Across Europe, website (accessed 1 September 2025).

European Commission, INTERACT-EUROPE 100 – Implementing Inter-specialty Cancer Training in 100 Centres Across Europe, website (accessed 1 September 2025).

European Commission, Nutrition labelling, website (accessed 1 September 2025).

European Health and Digital Executive Agency, 12 research projects selected for funding to support the EU Mission on Cancer, website (accessed 1 September 2025).

European Health and Digital Executive Agency, 20 research projects selected for funding to support the EU Mission on Cancer, website (accessed 1 September 2025).

European Health and Digital Executive Agency, 2023 EU Cancer Mission projects, website (accessed 1 September 2025).

European Institute for Biomedical Imaging Research, EUCAIM, website (accessed 1 September 2025).

European Observatory on Health Systems and Policies, Building a collaborative framework for advancing cancer care in Belgium, OBS-PACE Case Study, website (accessed 1 September 2025).

European Parliament, Committee on Public Health ordinary meeting, website (accessed 1 September 2025).

European Parliament, Hearing of Vice-President-designate Roxana Mînzatu, website (accessed 1 September 2025).

European Parliament, Mandatory front-of-pack nutrition labelling, website (accessed 1 September 2025).

Eurostat, Reconciliation of work and family life – statistics, website (accessed 1 September 2025).

Eurostat, Current health expenditure by provider (hlth_sha11_hc), website (accessed 1 September 2025).

Eurostat, Daily smokers of cigarettes by sex, age and educational attainment level, website (accessed 1 September 2025).

Eurostat, Health care expenditure by function (ICHA-HC), website (accessed 1 September 2025).

Eurostat, Healthcare expenditure statistics – overview, Current healthcare expenditure 2022, website (accessed 1 September 2025).

Federal Public Service (FPS) Health, Food Chain Safety and Environment, De Nutri-Score, website (accessed 1 September 2025).

Finlex, Laki työsopimuslain muuttamisesta 1102/2017, 2 luku 16 §, website (accessed 1 September 2025).

Finnish Cancer Center (FICAN), National Cancer Strategy, website (accessed 1 September 2025).

Finnish Cancer Center (FICAN), What we do, website (accessed 1 September 2025).

Finnish Ministry of Social Affairs and Health, Administrative branch, website (accessed 1 September 2025).

Food Compliance International, Portugal makes Nutri-Score system optional, website (accessed 1 September 2025).

Government of the Grand Duchy of Luxembourg, Launch of the Nutri-Score information campaign, website (accessed 1 September 2025).

Government of the Netherlands, Invoering Nutri-Score om betere voedingskeuzes te stimuleren, website (accessed 1 September 2025).

IHME, results from the 2021 Global Burden of Disease (GBD) study, website (accessed 1 September 2025).

Ingredients Network, Sweden updates front-of-pack Keyhole labelling rules, website (accessed 1 September 2025).

Integraal Kankercentrum Nederland, Cancer in the Netherlands, website (accessed 1 September 2025).

Integraal Kankercentrum Nederland, Europese vergelijking: vaker kanker in Nederland, website (accessed 1 September 2025).

IPAAC Joint Action, Innovative Partnership for Action Against Cancer (iPAAC), website (accessed 1 September 2025).

JANE-2, Home, website (accessed 1 September 2025).

JARDIN, Official Website, website (accessed 1 September 2025).

Joint Action on Tobacco Control, European Public Health, website (accessed 1 September 2025).

London School of Hygiene & Tropical Medicine, CONCORD programme, website (accessed 1 September 2025).

Ministry of Health of the Republic of Croatia, National cancer control plan 2020 – 2030, website (accessed 1 September 2025).

Ministry of Social Affairs and Health (Finland), Substance harm prevention, website (accessed 1 September 2025).

MyPath, Implementation, website (accessed 1 September 2025).

MyPath, Partners, website (accessed 1 September 2025).

NÖM, Alles, was du über den Nutri-Score wissen solltest, website (accessed 1 September 2025).

Nutri-Score Blog, Information on the Italian counter-proposal to Nutri-Score: the Nutrinform Battery system, website (accessed 1 September 2025).

Parliament of Estionia, The Rigiikou increased excise duties and established security tax, website (accessed 1 September 2025).

Pfizer Nederland, We zetten werk in als medicijn, website (accessed 1 September 2025).

Pieces, Home, website (accessed 1 September 2025).

Re-turn, Blog, website (accessed 1 September 2025).

Re-turn, Re-integratiebegeleiding spoor 1 en 2 website (accessed 1 September 2025).

RIVM, EUCanScreen, website (accessed 1 September 2025).

RIVM, SAMIRA-PrISMA, website (accessed 1 September 2025).

Santé Publique France, Nutri-Score: assessment report after three years of implementation, website (accessed 1 September 2025).

Statistische Ämter des Bundes und der Länder, Raucherquote – Ziel 3: Gesundheit und Wohlergehen, website (accessed 1 September 2025).

Swedish Food Agency, Design manual – The Keyhole, website (accessed 1 September 2025).

Swedish Food Agency, The Keyhole, website (accessed 1 September 2025).

The Tobacco Atlas, Country Factsheets – Germany, website (accessed 1 September 2025).

UNCAN.eu, A European Research data hub, website (accessed 1 September 2025).

UNICEF, Age-standardized prevalence of current tobacco smoking in persons aged 15 years and over, comparable estimates, 2014, website (accessed 1 September 2025).

Vital Strategies and Tobacconomics, Tobacco Atlas: Croatia, website (accessed 1 September 2025).

WHO Global Cancer Observatory, Estimated number of new cases from 2022 to 2050, website (accessed 1 September 2025).

WHO Global Cancer Observatory, Incidence estimates for 2022, EU27, all ages and sexes, website (accessed 1 September 2025).

World Health Organization, International Agency for Research on Cancer, Estimated number of new cases from 2022 to 2045, Incidence, Both sexes, age [20-64], website (accessed 1 September 2025).

World Health Organization, Secondhand smoke: the invisible killer that continues to cause death and disease, website (accessed 1 September 2025).

Yle, Alcohol consumption continues to decline in Finland, website (accessed 1 September 2025).

Annex I List of interviewed stakeholders

Table 15 – List of interviewed stakeholders

	Organisation	Interview date
1	Organisation for Economic Co-operation and Development (OECD)	6 June
2	Directorate-General for Health and Food Safety (DG SANTE), Unit B1	12 August (written response)
3	Directorate-General for Research and Innovation (DG RTD), Unit D1	13 June
4	European Observatory on Health Systems and Policies	5 June
5	European Cancer Organisation (ECO)	26 May
6	Association of European Cancer Leagues (ECL)	6 June
7	European Patients' Forum (EPF)	1 July
8	Cancer Patients Europe	3 July
9	Croatian Institute of Public Health	4 June
10	EuropaDonna Croatia	3 July
11	Danish Health Authority	26 June
12	Region Hovedstaden – Rigshospitalet (Copenhagen University Hospital)	17 June
13	Ministry of Health Affairs, Estonia	28 May
14	Tallinn University of Technology	28 May
15	Estonian Cancer Network	26 June
16	Federal Ministry of Health, Germany	22 August (written response)
17	German Cancer Research Centre (Deutsches Krebsforschungszentrum – DKFZ)	13 June
18	Istituto Nazionale dei Tumori, Italy	17 June
19	Catholic University of the Sacred Heart, Rome	10 June
20	Ministry of Health, Welfare and Sport (VWS), Netherlands	4 June
21	Netherlands Comprehensive Cancer Organisation (Integraal Kankercentrum Nederland – IKNL)	12 June
22	Nederlands Kankercollectief, Netherlands	13 June
23	Maria Skłodowska-Curie National Research Institute of Oncology, Poland	11 June
24	Finnish Institute for Health and Welfare (THL)	8 August
25	Finnish Cancer Society	21 August

Annex II Detailed implementation status of EBCP actions

Annex II.1 Detailed implementation under Pillar 1

The following sections present the implementation status of actions under Pillar 1.

Action 4: Eliminate cancers caused by HPV (flagship initiative)

Action 4 aims to eliminate cervical cancer and other cancers caused by HPV by supporting Member States in extending routine vaccination to girls and boys, with the objective of vaccinating at least 90% of the EU target population of girls and significantly increasing vaccination of boys by 2030. Dedicated funds have supported a coordinated approach through three projects: JA PERCH, PROTECT-EUROPE, and ReThinkHPVaccination.

The Joint Action Partnership to Contrast HPV (JA PERCH) focused on strengthening Member State capacities to plan and implement vaccination campaigns, improving data and monitoring systems, raising awareness among adolescents, and enhancing healthcare professionals' communication skills.[746] Deliverables included national toolboxes of communication and engagement materials, mapping of countries' capacity to collect and link HPV vaccination records, and reports on determinants of vaccine hesitancy. The project targeted adolescents, parents, and teachers, with schools as a principal setting for health education.

PROTECT-EUROPE aimed to improve HPV vaccination uptake for children to eliminate all cancers caused by HPV.[747] The project developed 26 recommendations for healthcare professionals, produced online training programmes and masterclasses, and launched a permanent online Hub for resources and best practices. PROTECT-EUROPE prioritised gender-neutral vaccination, effective communication, and school-based delivery, and addressed barriers such as misinformation and vaccine hesitancy. The project's outputs included accredited training courses, a train-the-trainers programme, digital toolkits, and a suite of communication materials. The Hub and resources are designed for long-term sustainability and continued dissemination.

ReThinkHPVaccination focused on reducing inequalities in HPV vaccination through personalised communication and training, social innovation, and behavioural insights.[748] The project trained over 400 individuals, established partnerships with NGOs and public institutions, and reached more than 11.5 million people through media campaigns. A Knowledge Centre on HPV vaccination was launched, and training programmes and materials were integrated into national and regional health policies. The project's multi-level approach and digital dissemination have laid the foundation for sustained impact and policy integration.

746 PartnERship to Contrast HPV, Repository, website.
747 PROTECT-EUROPE, Protecting Europe – Eliminating the cancers caused by HPV through vaccination, 2024.
748 ReThinkHPVaccination, D7.3 final evaluation report, 2025.

Improving health literacy on cancer risks and determinants

Action 5: Update and boost implementation of the ECAC

The ECAC provides evidence-based recommendations to help individuals reduce their cancer risk. Action 5 under the EBCP aims to update the ECAC and strengthen its dissemination through digital tools and health literacy initiatives, specifically by developing and launching the **EU Mobile App for Cancer Prevention** (Action 5.1) and supporting the project **Health Literacy for Cancer Prevention and Care** (Action 5.2).

The **revision of the ECAC** officially started in July 2022 and is being implemented through a four-year project coordinated by the International Agency for Research on Cancer (IARC).[749] The work involves reviewing scientific evidence and updating recommendations. As of now, the project is ongoing, and the new edition has **not yet been published**, meaning the previous version (ECAC4) remains in use. This indicates that the updated recommendations and communication improvements foreseen under the EBCP have not yet reached the public, although the project timeline suggests completion in 2026.

To support dissemination, the European Commission funded the **BUMPER project** (2022–2025) under EU4Health.[750] BUMPER's purpose was to prepare the launch of the EU Mobile App for Cancer Prevention (Action 5.1), which will integrate ECAC content and provide prevention advice. While BUMPER delivered supporting materials such as multilingual factsheets[751] and a report on lessons for promoting digital health literacy[752], the **app has not yet been launched**, as it depends on the completion of ECAC5.[753] In addition, a second project, **CHOICE**, started in **2025** to improve health literacy and develop digital tools for informed decision-making, including a virtual library (Action 5.2). As the project has only recently started, its main outputs are still pending.[754]

According to input from the European Commission, in 2025, an additional five EU4Health-funded health literacy projects will be launched to improve awareness in cancer prevention and care. With over EUR 5 million in EU funding, these initiatives aim to address general cancer health literacy as well as specific cancers, including breast, prostate, and bladder cancer.

Achieving a Tobacco-Free Generation

Action 6: Tobacco control

The review of the Tobacco Products Directive (TPD) (Directive 2014/40/EU) **(Action 6.1)** was announced in the EBCP. It has been under evaluation by the European Commission since 2022,.[755] In the roadmap, the evaluation was scheduled to be completed run from 2022 to 2024.[756] To support this process, the European Commission authorised a study to assess the EU tobacco control acquis,

749 European Commission, ECAC5, website.
750 European Commission, Bumper, website.
751 Bumper, Bumper project launces new factsheet, website.
752 Bumper, Promoting digital health literacy on cancer prevention through the European Code Against Cancer, 2025.
753 Bumper, The app, website.
754 Novalms, CHOICE project beings at NOVA IMS, website.
755 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.
756 European Commission, Europe's Beating Cancer Plan: Implementation Roadmap, 2024.

including the TPD and the Tobacco Advertising Directive (TAD)[757,758]; although the study was finalised in December 2023, its results remain unpublished as of mid-2025. The Directorate-General for Health and Food Safety (DG SANTE) has indicated in its 2024 Management Plan that further studies may be launched to address remaining evidence gaps.[759]

The Tobacco Taxation Directive (TTD) (Council Directive 2011/64/EU) **(Action 6.2)**, last revised in 2011, remains a cornerstone of EU tobacco control policy. It sets minimum excise duty levels for tobacco products, aiming to reduce consumption through price increases.[760] In line with Article 6 of the WHO FCTC, taxation is recognised as one of the most effective tools to reduce tobacco use.[761] EBCP announced a review of TTD with stakeholder consultation and impact assessment scheduled to be s completed by the end of 2023.[762,763] On 16 July 2025, the European Commission announced a proposal to update the TTD,[764] modernising the framework in response to evolving public health challenges and significant market shifts. The revised Directive is set to apply from 2028, with a four-year transitional period to ease the introduction of new excise duty rates for certain products, allowing Member States to adapt.

The EBCP announced a review of the legal framework on cross border purchases of tobacco by private individuals **(Action 6.3)**. On 16 July 2025, the European Commission brought forward a proposal to update the Excise Duty Directive, aligned with the proposed revisions to the TTD.

The European Commission adopted a proposal for a new Council Recommendation on Smoke- and Aerosol-free Environments **(Action 6.4)** on 17 September 2024, and the Council adopted it on 3 December 2024.

The EU supported FCTC implementation **(Action 6.5)** through the Joint Action on Tobacco Control 2 (2021–2024), which strengthened cooperation on TPD and TAD enforcement and improved market surveillance tools such as the EU Common Entry Gate. Under EU4Health, tobacco control continues via project-based funding, though no new Joint Action has been launched. Compliance checks on heated tobacco products led to Delegated Directive (EU) 2022/2100, removing exemptions and aligning these products with TPD rules. The EU track-and-trace system was expanded in May 2024 to cover all tobacco products, enhancing supply-chain monitoring. OLAF operations and the FCTC Protocol on Illicit Trade underpin ongoing efforts against smuggling and tax evasion.

757 Open Evidence, Study supporting the Evaluation of the Tobacco Control Acquis, website.
758 European Commission, communication on Europe's Beating Cancer Plan, COM(2021) 44, 2021.
759 European Commission, Management Plan 2024 DG Health and Food Safety (SANTE), 2024.
760 European Commission, proposal for a Council Directive (EU) 2011/64 of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco and tobacco related products (recast).
761 World Health Organization, WHO technical manual on tobacco tax policy and administration, 2021, p. 3.
762 European Parliament, A new plan for Europe's sustainable prosperity and competitiveness | Revision of the tobacco taxation directive, Legislative Train Schedule.
763 European Commission, Tobacco Taxation – Stakeholder event, 2022.
764 European Commission, proposal for a Council Directive (EU) 2011/64 of 21 June 2011 on the structure and rates of excise duty applied to manufactured tobacco and tobacco related products (recast).

Reducing harmful alcohol consumption

Action 7: Alcohol control

The review of EU legislation on alcohol taxation and cross-border purchases of alcohol products **(Action 7.1)** has not advanced as initially planned. The Commission evaluation on existing legislation covering alcohol taxation was expected in Q2 2023 but remains pending despite the closure of the public consultation in July 2022.[765] Similarly, preparatory work on revising rules for cross-border purchases of alcohol by private individuals is still ongoing as of early 2025. However, the Commission has supported Member States addressing health determinants and common risks for NCDs, including alcohol consumption, through the joint action PreventNCD under EU4Health.[766]

The Commission committed in the EBCP to propose a mandatory list of ingredients and nutrition declaration on alcoholic beverage labels as well as health warnings on labels **(Action 7.2)**. As of 2024, only three Member States, France, Lithuania, and Ireland, have adopted legislation requiring health warnings, with Ireland's law (effective May 2026) being the most comprehensive. [767,768] Ireland is also the only country mandating on-label nutritional information, while nine Member States require ingredient listings.[769]

Despite evidence supporting the effectiveness of cancer-specific warnings, no EU-wide regulation mandates health warnings or full on-label ingredient and nutrition information.[770] In March 2025, the European Commission proposed a "wine package" that introduces harmonised definitions for 'alcohol-free' (up to 0.5% ABV) and 'alcohol-light' wine (at least 30% less alcohol than the usual content), and allows the Commission to specify how electronic ingredient and nutrition information should be indicated on the label, such as with a pictogram. However, the proposal does not require new health warnings or on-label ingredient/nutrition information for wine. Its main aim is to address sectoral challenges in the EU wine market, not to advance public health labelling or cancer prevention goals.[771]

Action 7.3 seeks to launch alcohol consumption screening and evidence-based brief interventions, and to sustain on-going support for their implementation across relevant settings. Implementation has commenced and is being actively supported. The EVID-ACTION initiative, in collaboration with WHO Europe, is providing support to Member States on health literacy (including health warnings), screening, and brief interventions related to alcohol use in various settings.[772] The GENIAL project, started in 2023, is exploring the determinants of alcohol-related hepatocellular carcinoma.[773] While

---

765 European Commission, Have your say - Excise duty on alcohol and alcohol beverages – evaluation of excise duty rates and tax structures, website.

766 European Commission, JA PreventNCD, website.

767 European Commission, Study on the effectiveness of health information on alcoholic beverages – Final report, 2024, p. 5.

768 World Health Organization Regional Office for Europe, Health warnings on labels of alcoholic beverages in the WHO European Region in 2024, 2024.

769 I. Katsarova, Alcohol labelling: State of play, EPRS, European Parliament, May 2025, p. 6.

770 European Parliament and the Council of the EU, amending Regulation (EU) 1308/2013 of 28 March 2025, on certain market rules in the wine sector.

771 N. Šajn, The wine package, EPRS, European Parliament, June 2025.

772 World Health Organization, Youth voices in alcohol policy: launch of the WHO-EU Evidence into EVID-ACTION Youth Alcohol Network, website.

773 Genial, Genial Project, website.

research-oriented, its outputs are relevant to shaping evidence-based prevention messages and to informing targeting and design of brief interventions linked to alcohol-attributable cancer risk.

The 2018 revision of the Audiovisual Media Services Directive (AVMSD) extended EU rules to digital platforms, introducing minimum restrictions on alcohol advertising targeting minors **(Action 7.4)**. The Directive does not cover sponsorship, retail promotions, or set limits on advertising volume, leaving key gaps.[774] The AVMSD contains a specific monitoring and evaluation clause (Article 33) that requires the European Commission to submit regular reports to the European Parliament and the Council on the application of the Directive. These reports are to be published every three years, providing an ongoing assessment of how Member States have transposed and implemented the AVMSD, including provisions related to online alcohol marketing and the protection of minors. Currently, two application reports have been released: the first in 2020 (SWD(2020)228 final) and the second in 2024 (SWD(2024)4 final).[775,776] Some Member States, such as Finland, Lithuania, and Sweden, have adopted stricter national rules, including bans on alcohol advertising on social media.[777]

Improving health promotion through access to healthy diets and physical activity

Action 8: Improving access to healthy diets and physical activity

Action 8 under the EBCP aims to strengthen health promotion by improving access to healthy diets and physical activity, including measures on the EU school food scheme, marketing restrictions, and fiscal policies.

The **evaluation of the 2014–2020 EU Action Plan on Childhood Obesity** has not been published yet, neither have follow-up actions been adopted. The lack of follow-up on childhood obesity may contribute to missed opportunities for coordinated EU action to address rising rates, which are a major risk factor for several cancers.[778]

On 18July2025, the European Commission proposed a Council Regulation which would implement the **EU school fruit, vegetables and milk scheme (Action 8.1)** as a performance-based intervention financed via the National and Regional Partnership Fund (NRPF) and delivered through National and Regional Partnership Plans (NRP) Plans.[779] Application is foreseen from 1Jan2028. While the original review was discontinued—after a public consultation in 2022, the initiative to review had been "abandoned" as of 23 July 2025[780]—the new legislative route could meet similar objectives. The continuation of the review means that opportunities to better align the scheme with the Farm to

774 European Parliament and the Council of the EU, amending Directive (EU) 2018/1808 of 14 November 2018 on the provision of AVSDM.

775 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive", for the period 2014-2019, SWD(2020) 228, 2020.

776 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive" as amended by Directive (EU) 2018/1808, for the period 2019-2022, SWD(2024) 4, 2024.

777 G. Scobie, C. Patterson, G. Rendall et al., 'Review of alcohol marketing restrictions in seven European countries', *Public Health Scotland*, 2022.

778 S. Weihrauch-Blüher, P. Schwarz, and J.H. Klusmann, 'Childhood obesity: increased risk for cardiometabolic disease and cancer in adulthood', *Metabolism: Clinical and Experimental*, Vol. 92, 2018, pp. 147–152.

779 European Commission, Proposal for a Council Regulation amending Regulation (EU) No 1370/2013 as regards the aid scheme for the supply of fruit and vegetables, bananas and milk in educational establishments ('EU school scheme'), 2025.

780 European Commission, Review of the EU school fruit, vegetables and milk scheme, website.

Fork Strategy and the EBCP, strengthen local food systems, and reduce administrative barriers may be realised.[781]

Despite the European Commission's commitment to **proposing a harmonised mandatory FOPNL scheme (Action 8.2)** by the end of 2022, as of mid-2025, no proposal has been put forward.[782] Therefore, implementation remains voluntary, and national-level progress is highly fragmented.

The **Commission report on the implementation of the Audiovisual Media Services Directive (AVMSD) (Action 8.3)**, which includes provisions to limit children's exposure to marketing of unhealthy food and drinks, was published in 2024, two years later than planned.[783]

The **guidance for Codes of Practice on reducing unhealthy food marketing to children (Action 8.4)** was delivered in 2022.[784] Developed under the Best-ReMaP Joint Action, this guidance supports Member States in reducing children's exposure to unhealthy food marketing.

Finally, the **study mapping fiscal measures and pricing policies on sugars, soft drinks, and alcoholic beverages (Action 8.5)** was published in 2022 as planned.[785] It provides Member States with an overview of existing instruments and implementation experiences.

Action 8.6 aimed to **review the EU promotion policy for agricultural products** through a roadmap, public consultation, impact assessment, and adoption of a Commission proposal. So far, the public consultation has been completed, but no legislative proposal or regulatory revision has been identified.[786] Meanwhile, the promotion policy remains active and evolving through annual work programmes and funding calls. In 2024, the Commission allocated EUR 185.9 million to co-fund promotion activities for sustainable and high-quality EU agri-food products in the internal market and globally,[787] and EUR 132 million is earmarked for 2025.[788] These programmes support campaigns run by trade organisations and EU-led initiatives, including participation in international trade fairs and high-level missions. Priorities align with sustainability objectives, the Green Deal, and the Farm to Fork strategy, with significant funding for organic products, quality schemes (PDO, PGI, TSG), and fresh fruit and vegetables. Over the past decade, more than 600 campaigns have been co-financed under the common signature "Enjoy, it's from Europe," promoting EU agri-food products worldwide.[789]

Action 9: Reduction of the presence of carcinogenic contaminants in food

Action 9 aims to reduce consumers' exposure to carcinogenic substances in food by setting maximum levels for additional contaminants. The EU has made significant progress

781 Based on findings of: European Committee of the regions and the Commission for Natural Resources, The EU school scheme, 2023.
782 European Parliament, Mandatory front-of-pack nutrition labelling, Legislative Train Schedule.
783 European Commission, Commission Staff Working Document – Reporting on the application of Directive 2010/13/EU "Audiovisual Media Services Directive" as amended by Directive (EU) 2018/1808, for the period 2019-2022, SWD(2024) 4, 2024.
784 Best-ReMaP, Technical guidance for codes of practice to reduce unhealthy food marketing to children in EU Member States, 2022.
785 European Commission and ICF, Mapping of pricing policies and fiscal measures applied to food, non-alcoholic and alcoholic beverages – Final implementation report, 2022.
786 European Commission, EU farm and food products – review of policy on promotion inside and outside the EU, website.
787 European Commission, EU Commission to spend €186 million promoting agri-food products in and outside EU in 2024, press release, 2023.
788 European Commission, Commission allocates €132 million to promote sustainable and high-quality agri-food products in the EU and worldwide, press release, 2024.
789 European Commission, Promotion of EU farm products, website.

through **Regulation (EU) 2023/915**[790], which consolidates and updates maximum levels for a wide range of contaminants in food, including metals (lead, cadmium, arsenic), mycotoxins, dioxins and PCBs, perfluoroalkyl substances, and processing contaminants such as 3-MCPD and glycidyl esters. These measures address significantly reduce dietary exposure to substances linked to cancer risk.

Work is ongoing to expand these protections further. In 2025, the European Commission shared the seventh revision of a draft regulation to set maximum levels for mineral oil aromatic hydrocabons (MOAH), with adoption planned for the end of 2025 and application from 2027.[791] Discussions are also underway on stricter limits for acrylamide[792] and on introducing maximum levels for 3-MCPD and glycidyl fatty acid esters in composite foods.[793]

Action 10: HealthyLifestyle4All initiative

Action 10 under the EBCP aims to promote healthy lifestyles and physical activity through awareness campaigns and by integrating health considerations into urban mobility planning.

The **HealthyLifestyle4All initiative (Action 10.1)** mobilised stakeholders across Europe to raise awareness and improve access to sport and healthy diets.[794] It resulted in **103 pledges** from organisations and launched follow-up activities through the **SHARE 2.0 platform**, which continues to support knowledge exchange on sport, health, and sustainability.[795] Several EU-funded projects, such as **RYHEALTH**[796], **Schools4Health**[797], and **IHLGiS**[798], were also launched to promote healthy behaviours in schools and among vulnerable groups.

To link mobility and health, the European Commission adopted a **European Declaration on Cycling** and published the **Sustainable Urban Mobility Planning (SUMP) Guide (Action 10.2)**,[799] reinforcing the role of active mobility. In addition, the **new Urban Mobility Framework (Action 10.3)**, adopted in December 2021, provides guidance for cities to develop Sustainable Urban Mobility Plans and prioritises public transport, walking, and cycling as part of the transition to cleaner and healthier transport systems.[800]

Action 10.4 aims to launch calls for **volunteering projects**, including Volunteering Teams in High-Priority Areas and Solidarity Projects, with a focus on health prevention, healthy lifestyles, and recovery from major health challenges such as cancer. Annual calls have been consistently published, including the 2025 call for proposals (EAC/A13/2024)[801], accompanied by the European Solidarity Corps Programme Guide 2025. Deadlines in 2025 cover volunteering projects, solidarity projects, and volunteer teams in high-priority areas, managed by National Agencies or the European Education and Culture Executive Agency. Since 2023, volunteering activities under the European

790 European Commission, Regulation (EU) 2023/915 of 25 April 2023 on maximum levels for certain contaminants in food and repealing Regulation (EC) No 1881/2006, 2023.
791 Eurofins, EU measures for dealing with MOSH/MOAh findings, website.
792 Euractiv, Commission and member states consider new restrictions on acrylamide, website.
793 Agrolab group, Introduction of maximum levels for 3-MCPD and glycidyl fatty acid esters in composite foods planned, website.
794 European Commission, HealthyLifestyle4All initiative (2021-2023), website.
795 European Commission, Share 2.0 initiative, website.
796 Rock Your Health, Homepage, website.
797 Schools4Health, Homepage, website.
798 European Commission, IHLGiS, website.
799 European Commission, Annex to the communication Proposing a European Declaration on Cycling, COM(2023) 566, 2023.
800 European Commission, communication on The New EU Urban Mobility Framework, COM(2021) 811, 2021.
801 Official Journal of the European Union, Call for Proposals 2025 – EAC/A13/2024, 2024.

Solidarity Corps have received financial support from Horizon Europe Missions, enabling more opportunities for young Europeans to engage in projects addressing Mission priorities, including cancer. This synergy mobilises young people across the EU and associated countries to contribute to health-related initiatives, alongside climate and environmental projects, reinforcing systemic change through volunteering.[802]

Reducing environmental pollution

Actions 11 and 12 under the EBCP aim to reduce environmental pollution and related cancer risks by tightening air quality standards (Action 11) and promoting zero-emission mobility (Action 12).

Action 11: Align the EU's air quality standards more closely with the WHO guidelines

Significant progress has been made on air quality. The **revised Ambient Air Quality Directive (Action 11.1)** was adopted in 2024, introducing stricter limits for key pollutants harmful to health, including fine particulate matter ($PM_{2.5}$), nitrogen dioxide, and ozone.[803] Member States must transpose the Directive by 2026 and meet the new standards by 2030. This revision brings EU standards closer to WHO guidelines and is expected to reduce the burden of air pollution, which currently contributes to around 357,000 premature deaths annually in Europe.[804] In addition, the **Urban Wastewater Treatment Directive (Action 11.3)** was revised to address micropollutants and other contaminants, further reducing environmental exposure to harmful substances.[805]

Furthermore, the European Commission proposed **updates to pollutant lists under the Water Framework and Environmental Quality Standards Directives** in 2022 (Action 11.2), but these have **not yet been adopted**. Without these updates, current standards do not reflect the latest scientific knowledge on substances such as PFAS, pharmaceuticals, and certain pesticides.[806]

Action 12: The Sustainable and Smart Mobility Strategy

In parallel, the EU has advanced measures to cut emissions from transport under the **Sustainable and Smart Mobility Strategy (Action 12)**.[807] Key legislative steps include the adoption of CO_2 emission performance standards requiring all new cars and vans to be zero-emission by 2035, with intermediate targets of 55% CO_2 reduction for cars and 50% for vans by 2030. In April 2025, the European Commission introduced a temporary flexibility allowing manufacturers to comply with these targets over a combined three-year period (2025–2027) instead of annually, without changing the overall level of ambition.[808] For heavy-duty vehicles, revised standards adopted in 2024 require a 90% CO_2 reduction by 2040, with intermediate targets for 2030 and 2035, and mandate zero-

802 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025.

803 European Parliament and the Council of the EU, Directive (EU) 2024/2881 of 23 October 2024 on ambient air quality and cleaner air for Europe (recast).

804 European Environment Agency, Harm to human health from air pollution in Europe: burden of disease status, 2024, website.

805 European Parliament and the Council of the EU, Directive (EU) 2024/3019 of the European Parliament and of the Council of 27 November 2024 concerning urban wastewater treatment.

806 Based on: European Parliament, briefing on Pollutants in EU waters Update of chemical substances listed for control, 2024.

807 European Commission, Sustainable & Smart Mobility Strategy: Putting European transport on track for the future, 2021.

808 European Parliament and the Council of the EU, Proposal for a Regulation amending Regulation (EU) 2019/631 to include an additional flexibility as regards the calculation of manufacturers' compliance with CO_2 emission performance standards for new passenger cars and new light commercial vehicles for the calendar years 2025 to 2027, COM(2025) 136, 2025.

emission city buses by 2035.[809] The "Euro 7 Regulation" introduces stricter pollutant limits for vehicles, including brakes and tyres,[810] while the Alternative Fuels Infrastructure Regulation supports the roll-out of charging and refuelling networks.[811] Additional measures include **exempt zero-emission heavy-duty vehicles** from road tolling and user charges[812] and the adoption of **Directive 2024/3101 on ship-source pollution** in 2024, which aims to strengthen enforcement against illegal discharges at sea.[813]

Reducing exposure to hazardous substances and radiation

Actions 13–19 aim to reduce occupational and environmental exposure to carcinogens and other hazardous agents.

Action 13: Adopt a new Occupational Safety and Health Strategic Framework 2021–2027

The **EU Strategic Framework on Occupational Safety and Health 2021–2027 (Action 13)** was adopted in 2021, setting priorities for reducing work-related cancer risks and updating exposure limits.[814]

Action 14: Reduce workers' exposure to carcinogenic substances through the amendments of the Carcinogens and Mutagens Directive

Under **Action 14**, the Carcinogens and Mutagens Directive was amended in 2022 to introduce new or stricter occupational exposure limits for acrylonitrile, nickel compounds, and benzene, and to extend its scope to reprotoxic substances.[815] More recently, in July 2025, the European Commission has put forward a proposal to amend Directive 2004/37/EC, updating its Annexes I, III, and IIIa by adding new substances and adjusting existing limit values. This proposal aims to further strengthen action against occupational exposure, as cancer is still the leading cause of work-related deaths in the EU.[816]

---

809 European Parliament and the Council of the EU, Regulation (EU) 2024/1610 of 14 May 2024 amending Regulation (EU) 2019/1242 as regards strengthening the CO2 emission performance standards for new heavy-duty vehicles and integrating reporting obligations, amending Regulation (EU) 2018/858 and repealing Regulation (EU) 2018/956.

810 European Parliament and the Council of the EU, Regulation (EU) 2024/1257 of 24 April 2024 on type-approval of motor vehicles and engines and of systems, components and separate technical units intended for such vehicles, with respect to their emissions and battery durability (Euro 7), amending Regulation (EU) 2018/858 of the European Parliament and of the Council and repealing Regulations (EC) No 715/2007 and (EC) No 595/2009 of the European Parliament and of the Council, Commission Regulation (EU) No 582/2011, Commission Regulation (EU) 2017/1151, Commission Regulation (EU) 2017/2400 and Commission Implementing Regulation (EU) 2022/136.

811 European Parliament and the Council of the EU, Regulation (EU) 2023/1804 of 13 September 2023 on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU.

812 European Commission, Commission proposes toll exemptions to boost demand for zero-emission lorries and buses, website.

813 European Parliament and the Council of the EU, Directive (EU) 2024/3101 of 27 November 2024 amending Directive 2005/35/EC as regards ship-source pollution and on the introduction of administrative penalties for infringements

814 European Commission, communication on EU strategic framework on health and safety at work 2021-2027; Occupational safety and health in a changing world of work, COM(2021) 323, 2021.

815 European Parliament and the Council of the EU, Directive (EU) 2022/431 of 9 March 2022 amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work.

816 European Parliament and the Council of the EU, Proposal for amending Directive 2004/37/EC as regards the addition of substances and setting limit values in its Annexes I, III and IIIa, 2025.

Action 15: Revise EU limits for asbestos to further reduce workers' exposure

Action 15 further strengthened worker protection by revising the Asbestos at Work Directive in 2023, significantly lowering the occupational exposure limit and providing a framework of principles to Member States to ensure the consistent application of minimum requirements.[817]

Action 16: Survey on exposure of workers to risk factors for cancer

To improve evidence for prevention, **Action 16** delivered the first EU-wide Workers' Exposure Survey on cancer risk factors, providing data on exposure to 24 agents across six Member States.[818]

Action 17: Support Member States in the implementation of the requirements of Council Directive on protection from ionising radiation, particularly from Radon

Under **Action 17**, the European Commission reviewed national radon action plans in 2023, confirming that all Member States have plans in place, though implementation varies.[819]

Action 18: Explore measures to prevent exposure to ultraviolet radiation including from sunbeds

Action 18, which aimed to explore measures to reduce exposure to ultraviolet radiation, including from sunbeds, has not been implemented. The planned Commission Recommendation has been abandoned as of 4 February 2025 after a call for evidence in 2023.[820] In the absence of common guidance or minimum standards, regulatory approaches remain fragmented across Member States. From a public health perspective, this is significant because ultraviolet radiation, including from sunbeds, is classified as carcinogenic to humans (IARC Group 1) and is the main cause of skin cancer, including melanoma, which is the most serious and potentially fatal form.[821] Sunbed use is associated with an increased risk of melanoma and other skin cancers, particularly when use begins at a young age, and this risk is entirely avoidable.

Action 19: Launch Horizon Europe Partnership on Assessment of Risks from Chemicals to strengthen EU capacities for chemical risk assessment

Finally, **Action 19** was completed with the launch of the Horizon Europe Partnership for the Assessment of Risks from Chemicals (PARC), a seven-year initiative with EUR 400 million in funding to strengthen EU capacity for chemical risk assessment and innovation in regulatory science.[822]

Preventing cancers caused by infections

Action 20: Preventing liver cancer and addressing vaccine preventable cancers

Action 20 focuses on reducing cancers linked to infections through vaccination, screening, and treatment, and by strengthening EU-level policy coordination.

---

817 European Parliament and the Council of the EU, Directive (EU) 2023/2668 of 22 November 2023 amending Directive 2009/148/EC on the protection of workers from the risks related to exposure to asbestos at work.

818 European Agency for Safety and Health at Work (OSHA), Workers' exposure survey on cancer risk factors in Europe, website.

819 European Commission, Merience, Sck Cen and Suro, Review and evaluation of national radon action plans in EU Member States according to the requirements of Council Directive 2013/59/Euratom, 2023.

820 European Commission, Cancer prevention- reducing the health risks associated with using sunbeds, website.

821 R. Greinert, E. de Vries, F. Erdmann, C. Espina, A. Auvinen, A. Kesminiene, & J. Schüz, 'European Code against Cancer 4th Edition: Ultraviolet radiation and cancer', *Cancer Epidemiology*, Vol. 39, suppl. 1, 2015, pp. S75–S83.

822 EU-parc, Homepage, website.

Under **Action 20.1**, several EU-funded projects have been launched to address hepatitis and Helicobacter pylori infections. The **VH-COMSAVAC project** operates in Greece, Italy, and Spain to increase testing, vaccination, and linkage to care for hepatitis B and C among migrant and refugee populations, using community-based services and simplified diagnostics.[823] This supports WHO and EU targets for eliminating viral hepatitis as a public health threat by 2030. In parallel, the **EUROHELICAN project** is piloting a population-based "test-and-treat" strategy for *Helicobacter pylori* in Slovenia and evaluating long-term outcomes in Latvia, with the aim of developing guidelines for gastric cancer prevention.[824,825]

Under **Action 20.2**, the Council adopted a **Recommendation on vaccine-preventable cancers** in January 2024.[826,827] It calls on Member States to achieve at least **90% HPV vaccination coverage for girls by 2030**, significantly increase vaccination of boys, and reach **95% Hepatitis B Virus (HBV) vaccination coverage for children and newborns**, alongside improved screening for pregnant persons. The Recommendation also urges Member States to ensure free and accessible vaccination, combat mis- and disinformation, and increase health literacy. Continued low HBV vaccination coverage may result in preventable cases of liver cancer,[828] while improved prevention and awareness can support earlier diagnosis and treatment of hepatitis B.[829]

Annex II.2 Detailed implementation under Pillar 2

The following sections present the implementation status of actions under Pillar 2.

Action 21: New 'EU Cancer Screening Scheme' (flagship initiative)

Action 21 aims to strengthen cancer screening across the EU by revising the Council Recommendation, expanding screening to additional cancer types, supporting the development of innovative tools, and updating guidelines and quality assurance schemes.

The **Council Recommendation on cancer screening**[830] **(Action 21.1)** was revised and adopted on 9 December 2022, broadening the focus beyond breast, cervical, and colorectal cancer to include lung, prostate, and gastric cancers. Member States are encouraged to explore the feasibility and effectiveness of screening for lung cancer using low-dose computed tomography, evaluate organised programmes for prostate cancer, and consider screening strategies for gastric cancer in high-incidence regions. The Recommendation also updates guidance for breast and cervical cancer

823 ISGlobal Instituto de SaludGlobal Barcelone, VH-Comsavac, website.
824 NIJZ, Eurohelican, website.
825 European Commission, ECAC-5, website.
826 Council of the EU, Council Recommendation of 21 June 2024 on vaccine-preventable cancers (C/2024/4259), 2024.
827 European Commission, ECAC-5, website.
828 Flores, J. E., Thompson, A. J., Ryan, M. and Howell, J., 'The global impact of hepatitis B vaccination on hepatocellular carcinoma', *Vaccines*, Vol. 10(5), 2022.
829 Papatheodoridis, G., Thomas, H. C., Golna, C., Bernardi, M., Carballo, M., Cornberg, M., Dalekos, G., Degertekin, B., Dourakis, S., Flisiak, R., Goldberg, D., Gore, C., Goulis, I., Hadziyannis, S. et al., 'Addressing barriers to the prevention, diagnosis and treatment of hepatitis B and C in the face of persisting fiscal constraints in Europe: report from a high level conference', *Journal of Viral Hepatitis*, Vol. 23(1), 2016.
830 Council of the EU, Council Recommendation of 9 December 2022 on strengthening prevention through early detection: A new EU approach on cancer screening replacing Council Recommendation 2003/878/EC 2022/C 473/01.

screening, including age ranges and intervals, and recommends HPV testing as the preferred tool for cervical cancer screening.

According to input from the European Commission, the implementation of the Council Recommendation on cancer screening will be assessed through regular reporting, with the first report on its implementation currently being under preparation.

To support implementation, **projects have been launched to monitor and strengthen innovative approaches to prostate, lung, and gastric cancer screening** at Union level, including PRAISE-U (prostate),[831] SOLACE (lung),[832] and TOGAS (gastric)[833]. These projects aim to align screening protocols, improve early detection, and assess cost-effectiveness and sustainability of new screening methods.

A European Joint Action on Cancer Screening (EUCanScreen) was launched in April 2024 to assure sustainable implementation of high-quality screening for breast, cervical, and colorectal cancers, as well as the newly recommended programmes for lung, prostate, and gastric cancers.[834] EUCanScreen will facilitate reduction of cancer burden and promote equity across the EU, with objectives including programme governance, data collection, capacity building, and collaboration with related projects. As the project started in June 2024, results are not yet publicly available.

The **Cancer Imaging Initiative (Action 21.2)** to support the development of new computer-aided tools for personalised medicine and innovative solutions is addressed under Action 2.

Guidelines and quality assurance schemes (Action 21.3) for cancer screening, diagnosis, treatment, rehabilitation, follow-up, and palliative care for breast, cervical and colorectal cancer are being updated. For breast cancer, recommendations in guidelines are updated as new evidence arises. The last update stems from November 2017.[835] International guidelines on breast cancer care have been collected.[836] In September 2024, the European Quality Assurance Scheme for Breast Cancer Services was published; this voluntary certification scheme is developed to support quality improvement through the entire care pathway.[837] Similarly for cervical cancer, the guidelines are regularly monitored and updated to incorporate new scientific evidence.[838] For example, a recommendation was issued in February 2025, recommending HPV detection as the preferred screening method and outlining implementation and equity considerations.[839] A European Quality Assurance Scheme for cervical cancer is under development.[840] For colorectal cancer, guidelines are being updated and a quality assurance scheme for services is being developed.[841] A collection of guidelines is on its way. In September 2023, the recommendation to minimise alcohol consumption for all individuals was issued.[842] According to input from the European Commission, work on

831 European Commission, Praise-U, website.
832 European Commission, Solace, website.
833 European Commission, TOGAS, website.
834 European Commission, Implementation of cancer screening programmes, website.
835 European Commission, European guidelines on breast cancer screening and diagnosis, website.
836 European Commission, International guidelines on breast cancer care, website.
837 European Commission, European quality assurance scheme for breast cancer services, 2024.
838 European Commission, EC-CVC at a glance, 2025.
839 European Commission, European guidelines on cervical cancer screening and diagnosis, website.
840 European Commission, European Commission initiative on cervical cancer, website.
841 European Commission, European Commission initiative on colorectal cancer, website.
842 European Commission, European guidelines on colorectal cancer screening and diagnosis, website.

guidelines and QA schemes for lung, prostate and gastric cancer, will start soon, going beyond the scope of Action 21.3.

Action 22: Updating the ECIS for cancer screening data

The purpose of Action 22 is to strengthen EU-level monitoring of cancer screening by incorporating performance and impact indicators into the European Cancer Information System (ECIS). This supports the implementation of the 2022 Council Recommendation on cancer screening, which aims for 90% of eligible EU populations to be invited to breast, cervical, and colorectal screening by 2025.[843]

Implementation has advanced through the **CanScreen-ECIS project** (2022–2024), which developed a new set of evidence-based indicators for breast, cervical, colorectal, and lung cancer screening, created a secure data submission portal, and pilot-tested a data warehouse and web application with 18 EU Member States.[844] The project also delivered capacity-building activities and learning programmes to support systematic data collection and quality improvement.[845] These developments lay the technical foundation for integrating screening data into ECIS.

Available information does not confirm that the new module has been fully integrated into ECIS or that routine data collection from all Member States is operational. While pilot testing was successful and integration is planned, the extent to which Member States are now submitting data systematically remains unclear. This may limit the ability to provide comprehensive, comparable EU-level reporting on screening performance and impact, which is essential for tracking progress towards the Council Recommendation targets and identifying inequalities.

Annex II.3 Detailed implementation under Pillar 3

The following sections present the implementation status of actions under Pillar 3.

Action 23: National CCCs and EU Network (flagship initiative)

Action 23 aims to establish comprehensive cancer centres and networks in all Member States, create new reference networks for cancer and cancer conditions, and deliver a digital mapping project for cancer treatment capacity and capability across the EU.

The Joint Action CraNE has supported the creation of National Comprehensive Cancer Centres (CCCs) and the development of an EU network **(Action 23.1)**.[846] Building on CraNE, the new Joint Action EUnetCCC was launched in November 2024.[847] EUnetCCC brings together 163 partners across 31 countries to lay the foundation for a future EU-wide network of comprehensive cancer centres, with the aim that at least one centre is established in every Member State by 2028. The initiative seeks to ensure that all patients, regardless of location, have access to high-quality cancer care, research, and innovation. EUnetCCC will also serve as a platform for collaboration, sharing best

843 Council of the EU, Council Recommendation of 9 December 2022 on strengthening prevention through early detection: A new EU approach on cancer screening replacing Council Recommendation 2003/878/EC 2022/C 473/01.
844 World Health Organization International Agency for Research on Cancer, CanScreen-ECIS, website.
845 CanScreen-ECIS, CanScreen-ECIS: Project Results and Outcomes, 2024.
846 CraNE, Final evaluation report, 2024.
847 European Cancer Centres, New Joint Action EUnetCCC, website.

practices, resources, and knowledge. Currently, a European conference is scheduled for November 2025.[848]

The Joint Action JANE prepared the foundation for seven new cancer reference networks **(Action 23.2)**, covering complex and poor prognosis cancers, palliative care, survivorship, prevention, omics technologies, hi-tech medical resources, and adolescents and young adults. JANE defined the scope, governance, sustainability strategies, and endorsement criteria for each network, produced a Green Paper on EU health networking, and coordinated with related EU initiatives.[849] JANE-2 is now building on these outcomes to formally establish and operate the networks, with activities funded through dedicated work packages. The networks will provide guidelines, awareness, education, research promotion, quality criteria, and patient engagement, and will collaborate with other European Union networks.[850]

The Cancer Care BEACON project has started mapping cancer centres' capacities and compiling oncology datasets **(Action 23.3)**, presenting resources in an interactive application and collaborative platform for all stakeholders.[851] The Beacon website currently includes information such as the distribution of hospitals per Member State, disparity maps for cancer mortality by country, sex, and age group, as well as dynamic reports and visualisations on hospital characteristics and regional variations.

Action 24: Cancer Diagnostic and Treatment for All (flagship initiative)

Action 24 aims to improve access to innovative cancer diagnosis and treatments across the EU by supporting the use of next-generation sequencing (NGS) and sharing of cancer profiles, with the goal of reducing inequalities in access to personalised medicine and optimising cancer care.

The 'Cancer Diagnostic and Treatment for All' initiative was launched to facilitate the use of next-generation sequencing technology for rapid and efficient genetic profiling of tumour cells. This enables cancer centres to share cancer profiles and apply similar diagnostic and therapeutic approaches to patients with comparable profiles, supporting more equitable access to personalised medicine.

Under this initiative, several EU-funded projects have been launched and are ongoing:

- **Personalised Cancer Medicine for all EU citizens (PCM4EU):** This project (ended June 2025) aimed to improve survival and quality of life for cancer patients by broadening access to molecular diagnostics and personalised cancer medicine trials across borders.[852] The consortium developed best practice guidelines for genomics diagnostics, implementation, and interpretation, and facilitated mechanisms for data interpretation and sharing. Outputs include guidance on personalised diagnostics, a white paper on high-throughput molecular assays, data sharing protocols, and educational podcasts for stakeholders. Implementation of results into healthcare systems and education for all stakeholders are ongoing priorities.

848 EUnetCCC, About, website.
849 EU Joint Action JANE, Work Package 3: Evaluation, website.
850 JANE-2, Home, website.
851 Cancer Care BEACON Project, Cancer Beacon, website.
852 European Commission, Personalised cancer medicine for all EU citizens, website.

- **Building the EU Cancer and Public Health Genomics platform (CAN.HEAL):** This project (ended April 2025) focused on integrating genomics into clinical and public health research. [853] In the clinical arm, the project applied NGS technology and identified implementation paths to extend genetic profiling and harmonised data interpretation, aiming to enable similar diagnostic and therapeutic approaches for patients with comparable cancer profiles across the EU. The project also addressed public health genomics, including polygenic risk score analysis and remote genetic counselling. Outputs include the development of guidelines, training tools, and capacity building exercises, as well as a comprehensive evaluation framework for equity, impact, and readiness for adoption and scale-up. The final assessment found that most innovative interventions reached early adoption or multi-provider adoption maturity, with progress in equity and readiness, but highlighted the need for further work on feasibility, viability, and reimbursement strategies for broader implementation.[854]
- **Improved diagnostics and survival for all children with Acute Myeloid Leukemia (CHIP-AML22):** This ongoing project aims to implement advanced genetic diagnostics and targeted treatment for children with acute myeloid leukaemia across a cross-European consortium.[855] The project is consolidating risk-adapted treatment based on cytogenetic and molecular profiling, with the goal of equal access to optimal care for all children with AML. Deliverables include protocols, standard operating procedures, and mapping of diagnostic and treatment capabilities across participating countries.

Overall, the initiative has enabled the launch and implementation of multiple projects supporting the use of NGS and molecular profiling in cancer care, the development of guidelines and educational resources, and the piloting of cross-border access to personalised medicine. However, full and systematic implementation of harmonised molecular diagnostics, data sharing, and equitable access to personalised cancer medicine across all Member States is still in progress.

Action 25: European Initiative to Understand Cancer (flagship initiative)

Action 25 aims to advance understanding of cancer development and progression by establishing a European federated cancer research data hub. The initiative supports personalised prevention and care, including the use of polygenic risk scores to identify individuals at high risk for common cancers.

The **UNCAN.eu Cancer Data Dashboard** has been launched, providing a central platform for accessing cancer research data infrastructures across Europe.[856] The dashboard enables researchers and clinicians to discover, access, and utilise diverse data sources, supporting collaboration and accelerating research. Currently, 38 cancer research data infrastructures have been identified, offering a strong foundation for data integration and future research collaboration.

UNCAN.eu operates as a federated network, connecting National Nodes to a Central Node, with data harmonisation and metadata cataloguing in compliance with GDPR and future EHDS policies. Serial calls for research use cases are underway, driving network expansion and capacity building.

---

853 European Commission, Building the EU Cancer and Public Health Genomics Platform, website.
854 ibid.
855 CAN.HEAl, Building the EU Cancer and Health Genomics Platform evaluation report, 2025.
856 Uncan Dashboard, European Cancer Research Data Infrastructures, website.

The digital platform is operational, and the strategic roadmap is published. Full network maturity and systematic data integration will continue to develop in the coming years.[857]

Action 26: 'Inter-specialty training' programme

The INTERACT-EUROPE project, completed in 2023, successfully developed an EU-wide inter-specialty curriculum and education programme applicable across cancer care systems. It promotes improved interdisciplinary understanding, team collaboration for better patient outcomes.

Its continuation, the INTERACT-EUROPE 100 project is operational, currently implementing the Inter-specialty Cancer Training (ISCT) curriculum, which is expected to be completed by November 2026.

Action 27: An 'EU platform to improve access to cancer medicines'

Action 27 aims to accelerate access to innovative treatments by creating an EU platform to support drug repurposing, enabling new therapeutic uses for existing medicines at lower cost and shorter timelines than traditional drug development.

The EU has funded two major initiatives under Horizon Europe: **REMEDi4ALL** and **NEWROAD**. REMEDi4ALL is developing a patient-centric platform to facilitate drug repurposing across the full development pathway.[858] Progress includes the creation of operational tools, a catalogue of services, a funders' network, and resources such as AI-based tools and training materials. Demonstrator projects in cancer and rare diseases are underway, and the first international conference on drug repurposing was held in 2024. However, the platform is not yet fully operational for external users.

In parallel, NEWROAD focuses on oncology-specific drug repurposing, building an open platform using augmented intelligence and high-performance computing. While key components and demonstrator projects are in place, the EU-wide platform is not yet fully operational for external users.[859]

Action 28: Implementation of the legal framework for clinical trials

Action 28 under the EBCP aims to improve the clinical trial environment in the EU by implementing the Clinical Trials Regulation (Regulation (EU) No 536/2014[860]) and launching the Clinical Trials Information System (CTIS) as a single-entry point for trial applications and public information.

The Clinical Trials Regulation became applicable on **31 January 2022**, introducing a harmonised process for authorising clinical trials across Member States. CTIS went live on the same date with a searchable public portal, and since **31 January 2023**, all new clinical trial applications must be submitted through CTIS.[861] This system enables sponsors to submit a single application for

---

857 UNCAN.eu network, A unique cancer research data collection worldwide co-created with cancer researchers: Strategic action plan for UNCAN.eu network implementation, 2024.

858 REMEDi4ALL, Deliverables, website.

859 Biovista, NewRoad Visual Explorer, website.

860 European Parliament and the Council of the EU, Regulation (EU) No 536/2014 of 16 April 2014 on clinical trials on medicinal products for human use, and repealing Directive 2001/20/EC.

861 European Medicines Agency (EMA), Clinical trials regulation, progress on implementation, website.

multinational trials and provides public access to trial information, making it more efficient to carry out multinational trials.

Implementation has continued under the **Accelerating Clinical Trials in the EU (ACT EU)** initiative.[862] Enhancements to CTIS include the launch of a **clinical trial map in March 2025**, which allows patients and healthcare professionals to locate trials by location and medical condition, supporting greater accessibility and engagement.

Action 29: Adoption of the Regulation on 'Health Technology Assessment'

Action 29 under the EBCP aims to strengthen evidence-based decision-making for health technologies by adopting and implementing the EU Regulation on Health Technology Assessment (HTAR). The Regulation (EU) 2021/2282 is applicable from **12 January 2025**.[863]

Implementation is progressing according to a rolling plan, with key preparatory activities completed or underway: [864]

- The **Member State Coordination Group on Health Technology Assessment (HTA)** and its subgroups have been established and are meeting regularly to develop methodological and procedural guidance, conduct joint clinical assessments, and provide joint scientific consultations.
- Several **implementing acts** have been adopted, including rules for joint scientific consultations and management of conflicts of interest, and procedural rules for joint clinical assessments.
- Guidance documents and templates for joint work have been developed and adopted, covering methodological standards, reporting requirements, and assessor appointments.
- The **HTA Stakeholder Network** has been set up, with regular meetings and published lists of participating organisations.
- An **IT platform** for secure information exchange and public access is operational, with further releases planned to support joint work on medical devices and in vitro diagnostics.
- Capacity-building activities, training programmes for patients and national assessors, and information events for stakeholders have been launched and are ongoing.

Action 30: SAMIRA Action plan

Action 30 under the EBCP called for the adoption and implementation of the **SAMIRA Action Plan:** the EU's first comprehensive strategy to support the safe, high-quality, and reliable use of radiological and nuclear technology in healthcare. The plan, adopted in February 2021, set out three priority areas: securing the supply of medical radioisotopes, improving radiation quality and safety in medicine, and facilitating innovation and technological development.[865]

The European Commission has taken steps to address **supply chain vulnerabilities**, including stakeholder consultations and feasibility studies for the European Radioisotope Valley Initiative

862 European Medicines Agency (EMA), Clinical trials information system, website.
863 European Parliament and the Council of the EU, Regulation (EU) 2021/2282 of 15 December 2021 on health technology assessment and amending Directive 2011/24/EU.
864 European Commission, Implementation rolling plan of Regulation (EU) 2021/2282 on Health Technology Assessment, 2025.
865 European Commission, SAMIRA Action plan, website.

(ERVI) **(Action 30.1)**.[866] However, ERVI has not yet been formally launched, and feasibility assessments for proposed projects are ongoing. The Euratom Supply Agency continues to monitor supply chains,[867] and several studies and projects (e.g. PRISMAP[868], SECURE[869], EU-QUALIFY[870]) have been completed or are underway to support sustainable supply and research reactor safety.

The European Commission also launched **the European Initiative on Quality and Safety of medical applications of ionising radiation (Action 30.2)** and established **the Steering Group on Quality and Safety**. A Recommendation on clinical audits of medical radiological practices was adopted in April 2024, and several EU-funded projects (e.g. QuADRANT[871] and EU-JUST-CT[872]) have delivered clinical guidelines and audit tools.

Workforce strengthening **(Action 30.3)** is underway, including the EU-REST[873] study, which has examined staffing levels and current curricula across the EU and provided recommendations on workforce availability, education and training to ensure quality and safety in ionising-radiation applications.

A study published in April2025 examined how the EU pharmaceutical legislation and Euratom radiation-protection requirements intersect for therapeutic radiopharmaceuticals, identifying barriers to coherent implementation and proposing practical guidance and recommendations **(Action 30.4)**.[874]

The European Commission has developed a **strategic research roadmap for medical applications of nuclear and radiation technology**, with research actions and partnerships supported by Horizon Europe and Euratom **(Action 30.5)**. Projects such as EURAMED Rocc-n-Roll[875], PIANOFORTE[876], and SINFONIA[877] are advancing new therapies, imaging technologies, and safety standards.

Action 31: Personalised medicine

Action 31 aims to accelerate the development and uptake of personalised medicine and prevention approaches in the EU, improving health outcomes and supporting sustainable healthcare systems.

The European Partnership for Personalised Medicine (EP PerMed) has been established under Horizon Europe, bringing together ministries, funding organisations, agencies, and authorities from across Europe and internationally **(Action 31.1)**.[878] EP PerMed coordinates research, innovation, and

866 ibid.
867 Euratom Supply Agency, Supply Agency of the European Atomic Energy Community, website.
868 Prismap EU, Prismap – building a European network for medical radionuclides, website.
869 Enen, SECURE project, website.
870 European Commission, EUropean QUalification Approach for Low EnrIched Fuel sYstems for secure production supply of medical isotopes, website.
871 European Commission, Current status and recommendations for improving uptake and implementation of clinical audit of medical radiological procedures – QuADRANT, a European study on clinical audit of medical radiological procedures, 2022.
872 European Commission, European co-ordinated action on improving justification of computed tomography – Results and recommendations from a first-time multi-national study on CT justification in the EU, 2024.
873 EuroSafe Imaging, EU-rest, website.
874 European Commission, SAMIRA study on the implementation of the Euratom and EU legal bases with respect to the therapeutic uses of radiopharmaceuticals, 2025.
875 EURAMED Rocc-n-roll, European Medical Application and Radiation Protection Concept, website.
876 ASNR, Partneraiat PIANOFORTE, website.
877 Sinfonia appraisal, Sinfonia, website.
878 European Partnership for Personalised Medicine, Mission & objectives, website.

implementation activities, supports joint research funding, and fosters stakeholder engagement, policy alignment, and knowledge exchange. The partnership is guided by the Strategic Research and Innovation Agenda for Personalised Medicine (SRIA for PM), which includes 57 actions in personalised medicine.[879]

Action 32: 'Genomic for Public Health' and 1+ Million Genomes Initiative

Action 32 aims to ensure access to large amounts of genomic data for research, prevention, and personalised medicine by launching the 'Genomic for Public Health' project and advancing the 1+ Million Genomes Initiative. The 'Genomic for Public Health' project was delivered through CAN.HEAL. See Action 24 for more detail about this project.

The 1+ Million Genomes Initiative (1+MG) has moved from technical proof-of-concept to the scale-up and sustainability phase.[880] Key achievements include the launch of the Genomic Data Infrastructure (GDI) deployment project under Digital Europe,[881] publication of calls for data infrastructure deployment, and the release of a starter kit for the first versions of the 1+MG infrastructure in June 2023.[882] Further work is ongoing to focus on sustainability, scale-up, and interoperability with other European health data initiatives.

Action 33: High-performance computing, AI and digital platforms

Action 33 aims to harness high-performance computing (HPC), artificial intelligence (AI), and digital platforms to accelerate cancer research, diagnostics, and personalised treatment in the EU.

The **project on drug repurposing using HPC (Action 33.1)** is covered under Action 27, as it is linked to the European innovation platform for the repurposing of medicinal products (REMEDi4ALL and NEWROAD). These platforms have been launched and are developing operational tools and demonstrator projects but are not yet fully operational for external users.

For collaborative **projects on cancer diagnostics and treatment using HPC and AI (Action 33.2)**, the LIGATE project has started and is ongoing.[883] LIGATE is developing an AI-assisted virtual drug screening tool that can run on leading European supercomputers. The tool integrates open-source and proprietary components, supports portability across computing platforms, and has been used to identify promising drug candidates in previous health emergencies. However, the project is still in progress and has not yet delivered final results or products for broad use.

To **assist researchers working on personalised cancer treatments through tailored support and new digital platforms (Action 33.3)**, the EOSC4Cancer and canSERV projects have been launched and are operational. EOSC4Cancer has made diverse types of cancer data, genomics, imaging, clinical, environmental, and socio-economic, accessible and interoperable across borders, using federated systems and FAIR data principles.[884] The project has delivered representative data sets, interoperable research environments, and training workshops, and is supporting robust analytics,

879 EP PerMed, The Strategic Research & Innovation Agenda (SRIA) for Personalised Medicine (PM), 2023.

880 The European 1+ Million Genomes Initiative, Roadmap 2023-2027, 2023.

881 European Genomic Data Infrastructure, Providing access to genomic data to improve research, policy making and healthcare across Europe, website.

882 Github, Genomic Data Infrastructure, website.

883 LIGATE, Publication, website.

884 EOSC, A European-wide foundation to accelerate data-driven cancer research, website.

machine learning, and AI. CanSERV has established a pan-European network of oncology research infrastructures, providing a portfolio of research services and fostering collaboration to accelerate precision medicine solutions for cancer patients.[885] Furthermore, the European Open Science Cloud (EOSC) is now operational and expanding, providing researchers with trusted, federated environments for sharing and analysing research data and digital resources.[886] The EOSC EU Node, launched in 2024, is the first node, providing a set of data, tools and services to researchers across Europe.[887]

The EBCP also supports education and training of the health workforce **(Action 33.4)**. EIT Health supports health professional training through education, research, and innovation activities, including the WorkInHealth initiative[888] and the EIT Health Academy digital platform, with over EUR 20 million allocated for education and training from 2023–2025[889]. The Transforming Health and Care Partnership (THCS) invests in education and training to support innovative models and digital solutions in health care, including cancer-focused projects.[890] To ensure quality and safety in medical radiological applications, the EU REST study has assessed staffing levels and curricula across the EU and provided recommendations on workforce availability, education, and training needs for ionising radiation applications.[891] Other activities related to this action have been considered under the inter-specialty programme, amongst others.

Annex II.4 Detailed implementation under Pillar 4

The following sections present the implementation status of actions under Pillar 4.

Action 34: 'Better life for cancer patients' (flagship initiative)

Action 34 aims to improve the quality of life for cancer patients and survivors through digital innovation, as part of the 'Better life for cancer patients' flagship initiative.

For the **Cancer Survivor Smart Card (Action 34.1)**, the smartCARE project developed a prototype mobile app designed to empower cancer survivors by providing secure access to their medical data, telehealth services, personalised resources, and a supportive community platform.[892] The prototype was co-created with survivors and healthcare professionals, tested and validated, and presented at a public event in November 2024. Recommendations for further development and broader implementation have been included in the project's blueprint,[893] but the app has not yet been piloted or rolled out at scale.

---

885 CanSERV, Services, website.
886 European Commission, European Open Science Cloud (EOSC), website.
887 European Commission, European Open Science Cloud – EU node, website.
888 EIT Health, WorkInHealth Foundation, website.
889 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025.
890 Transforming Health and Care Systems (THCS), official website, website.
891 European Commission: European Health and Digital Executive Agency, Analysis on workforce availability, education and training needs for the quality and safety of medical applications involving ionising radiation in the EU – Status and recommendations – Final report, 2025.
892 European Cancer Organisation, Press release - Transforming Cancer Care: Unveiling the smartCARE App Prototype for Survivors, website.
893 As of August 2025, the final blueprint is not publicly available yet. Source: European Cancer Organisation, Lessons Learnt and Next Steps for smartCARE, website.

For the **ECPDC (Action 34.2)**, a study on the operational concept was completed and published in 2024.[894] The study developed a blueprint for the Centre, outlining three complementary concepts: standardised presentation of cancer information for citizens and patients; personalised access to and sharing of cancer-related data across Member States; and a one-stop portal for patients and citizens to support co-decision in treatment and participation in research. The concept has been discussed with Member State experts, but there is no evidence of further steps or implementation beyond the preparatory phase.

Action 35: Address fair access for cancer survivors to financial services

While most activities under Action 35 were completed, the key final activity is experiencing delays. The study on access to financial products was finalised and revealed disparities, as well as varying levels of policy implementation regarding the right to be forgotten. A draft Code of Conduct on fair access to financial services for patients and survivors was developed with stakeholder engagement. However, it has not yet been agreed upon.

Action 36: Access to the labour market

The study under **Action 36.1** was completed and published on time in 2024, marking an "completed" milestone. Cancer patients and survivors were successfully included as persons with disabilities in the Strategy **(Action 36.2)**. Also, the practitioner's toolkit for Public Employment Services was published on time.

Since its adoption in 2019, the implementation of the Work-Life Balance Directive **(Action 36.3)** has progressed at different rates across EU Member States. By the August 2022 deadline, fewer than half had transposed their provisions, and only Austria and the Netherlands achieved satisfactory implementation, while others still presented gaps in regulations (e.g. parental leave, compensation, flexible working arrangements, and legal protection). Although all countries except Ireland eventually introduced legislation, significant disparities remain in full and satisfactory transposition, largely influenced by national political and institutional contexts.

Annex II.5 Detailed implementation under cross-cutting theme 1

The following sections present the implementation status of actions under cross-cutting theme 1.

Action 1: 'Knowledge Centre on Cancer' (flagship initiative)

Action 1 aims to facilitate the coordination of scientific and technical cancer-related initiatives at EU level through the creation of the Knowledge Centre on Cancer (KCC). **The KCC has been launched and is operational**, providing a centralised platform for independent scientific alignment, coordination, and support to EC cancer-related policies and activities.[895] It integrates key pillars including the European Cancer Information System (ECIS) to regularly release updated data on cancer trends, with the latest update in 2025, the European Cancer Inequalities Registry (ECIR) for monitoring disparities, the Health Promotion and Disease Prevention Knowledge Gateway,

[894] European Commission, An operational concept for a European Cancer Patient Digital Centre – EU missions – Cancer, 2024.
[895] European Commission, Knowledge Centre on Cancer, website.

European guidelines and quality assurance schemes for screening, diagnosis and care,[896] and the EU Platform on Rare Disease Registration for rare cancers.

The KCC offers a searchable knowledge base, interactive tools, dashboards, and resources to support evidence-based policy, research, and practice. It enables users to explore cancer data, trends, inequalities, and EC-funded projects, and provides access to guidelines and best practices across the cancer care pathway. The KCC also supports synergies between the EBCP, the Mission on Cancer, and other EU initiatives.

Action 2: 'European Cancer Imaging Initiative' (flagship initiative)

Action 2 aims to foster innovation and the deployment of digital technologies in cancer treatment and care through the European Cancer Imaging Initiative (ECII), a flagship of the EBCP. The initiative's objective is to enable more precise and faster clinical decision-making, diagnostics, treatments, and predictive medicine for cancer patients by making the most of data and digital technologies such as AI and HPC.

The **ECII was launched in January 2023**,[897] accompanied by the establishment of a network of European Digital Innovation Hubs (EDIHs) and the start of the TEF-Health project, which provides real-world testing facilities for AI and robotics solutions in health, including cancer. The **EDIHs network is operational** and supports digital innovation in cancer imaging,[898] while **TEF-Health is implementing** evaluation activities and regulatory sandboxes for trustworthy AI in medical devices.[899]

A cornerstone of the initiative is the EUropean Federation for CAncer IMages (EUCAIM) project, which is developing a federated European infrastructure for cancer imaging data.[900] The first version of the Cancer Image Europe platform was delivered in September 2023, featuring a public catalogue of cancer imaging datasets, a search tool, and published rules for data providers and users. Access to data is available in line with ethics and data protection rules. The project began with 21 clinical sites from 12 countries and aims to expand to at least 30 data providers from 15 countries. However, the platform is still in its early phase: it is not yet fully validated or fully populated with data, and the final release with all planned tools and services, such as the implementation of clinical use cases, is planned for the period 2025–2027 and therefore pending.

The TEF-Health project, launched in January 2023, is operational and provides a network of testing facilities for AI and robotics solutions in health. To date, four Testing and Experimentation Facilities (TEFs) are in place, including TEF-Health on facilitating and accelerating the validation and certification of AI and robotics in medical devices.[901]

---

896 Such as: European Commission, European guidelines on breast cancer screening and diagnosis, website.
897 European Commission, European Cancer Imaging Initiative, website.
898 European Commission, European Digital Innovation Hubs, website.
899 European Commission, Sectorial AI testing and experimentation facilities under the Digital Europe Programme, website.
900 European Commission, European Cancer Imaging Initiative, website.
901 TEF-Health, Health AI providers and notified bodies, website.

Action 3: Cancer research and an innovative ecosystem

Action 3 aims to strengthen cancer research and foster an innovative ecosystem through improved data access, digital tools, and collaborative partnerships.

For enabling cancer patients to securely access and share electronic health records across borders **(Action 3.1)**, the **EHDS-Regulation** entered into force on 26 March 2025.[902] This marks the start of a transition period, with key implementing acts due by March 2027. By March 2029, the exchange of priority health data categories (such as patient summaries and ePrescriptions) will be operational in all Member States, with further categories (including medical images and genomic data) phased in by 2031.[903] The MyHealth@EU infrastructure is operational and enables cross-border exchanges of health data, but full EHDS rights for cancer patients, including secure access, sharing, and management of electronic health records, will only apply from March 2029.[904] For secondary use of health data, the TEHDAS2 Joint Action began in May 2024 and is developing guidelines and technical specifications for harmonised implementation.[905] Capacity-building activities and calls for tenders are ongoing.[906]

For **developing a repository of digital twins in healthcare (Action 3.2)**, the EDITH-CSA project was launched and has drafted a roadmap for Virtual Human Twins (VHT), which is currently under review by the European Commission.[907] Several Horizon Europe research projects on integrated, multi-scale computational models for personalised disease management have started, including projects focused on cancer and other diseases.[908] A call for tenders for a platform for advanced VHT models was published in April 2024, but results of the action are not yet available.[909] The repository and platform are therefore in development, with key deliverables pending.

For **expanding the European Cancer Information System (ECIS) (Action 3.3)**, data on paediatric cancer has been integrated,[910] long-term cancer burden estimates up to 2040 are available,[911] and factsheets on cancer burden in 2022 released[912]. Also, the European Commission published a common data quality check procedure for European cancer registries, including guidance on the consistency between stage/treatment variables.[913] However, reporting of cancer burden indicators at sub-national level are not yet available in the ECIS.

For **launching Horizon Europe partnerships (Action 3.4)**, both the **Innovative Health Initiative (IHI) and the Partnership on Transforming Health and Care Systems (THCS) have been launched**. IHI has issued calls on next-generation imaging, image-guided diagnosis and therapy for cancer, and

---

902 European Parliament and the Council of the EU, Regulation (EU) 2025/327 of 11 February 2025 on the European Health Data Space and amending Directive 2011/24/EU and Regulation (EU) 2024/2847.
903 European Commission, European Health Data Space Regulation (EHDS), website.
904 European Commission, My rights over my health data, website.
905 Tehdas2, Second Joint Action Towards the European Health Data Space – TEHDAS2, website.
906 European Commission, Capacity building for secondary uses of health data for the European Health Data Space, website.
907 EDITH, Roadmap, website.
908 Information about these projects is available via: European Commission, CORDIS – EU research results, website.
909 European Commission, Platform for Advanced Virtual Human Twin (VHT) Models, website.
910 European Commission, ECIS – European Information System – Childhood for all diagnostic groups, website.
911 European Commission, ECIS – European Information System –Long term estimates of cancer incidence and mortality, for all countries, website.
912 European Commission, Cancer Factsheets in EU-27 countries – 2022, website.
913 European Commission, JRC Technical report - A common data quality check procedure for European cancer registries, 2024.

personalised oncology, resulting in projects such as IMAGIO[914] and GUIDE.MRD[915]. Calls on theranostics have funded projects including Thera4Care[916], ILLUMINATE[917], and Accelerate.EU[918]. THCS has launched annual calls, with the latest focusing on enhancing primary and community care.[919] Both partnerships continue to launch further calls and fund collaborative research.

[914] European Commission, Imaging and advances guidance for workflow optimization in interventional oncology, website.
[915] European Commission, GUIding multi-moDal thErapies against MRD by liquid biopsies - GUIDE.MRD, website.
[916] European Commission, THERANOSTICS ECOSYSTEM FOR PERSONALISED CARE, website.
[917] European Commission, INCREASING LUTETIUM PRODUCTION, WHILE LEVERAGING METABOLIC IMAGING TO ENHANCE THERANOSTICS EFFECTIVENESS, website.
[918] European Commission, Elevating the Future of Cancer care with Alpha Theranostics, website.
[919] THCS, JTC 2025 - Better care closer to home: Enhancing primary and community care, website.

Annex II.6 Detailed implementation under cross-cutting theme 2

The following sections present the implementation of actions 37–40 under cross-cutting theme 2.

Action 37: Establish a Cancer Inequalities Registry to map inequalities between Member States and regions (flagship initiative)

The progress on the ECIR is good, following the schedule of the Roadmap.[920] First of all, the ECIR has already been published with age dimension added. Country Cancer Profiles have been published bi-yearly in 2023 and 2025. The publication 'Beating Cancer Inequalities in the EU: Spotlight on Cancer Prevention and Early Detection' was published in January 2024 as planned. The development of socio-economic indicators has been integrated in the Cancer Performance Tracker. On Action 37.1 – reducing health inequalities through zero pollution. Environmental indicators have been included and the impact of pollution on cancer has been explored in Country Profiles. Together with data, 17 factsheets have been published in several languages.

Action 38: eHealth

Regarding **Action 38.1**, the implementation of eCAN has been finished.[921] The project was concluded with a proposal of key recommendations to integrate telemedicine in cancer care. It also provides useful resources for patients and healthcare providers.

Regarding **Action 38.2**, in 2023 24 ERNs, comprising 836 members, completed their first evaluation. Overall, the assessment found that the ERN ecosystem is functioning effectively, delivering highly specialised services for patients with rare diseases, including expert consultations for diagnosis and treatment, the development of clinical guidelines, and the provision of specialised training.[922] The Joint Action JARDIN was launched on time in 2024.[923]

Action 39: Improve resilience, accessibility and effectiveness of EU health systems to safeguard provision of cancer care in future health crises

Regarding **Action 39.1**, EU4Health programme provided a grant to the OECD and the European Observatory on Health Systems and Policies to develop a resilience testing methodology. The handbook was published in March 2024.[924]

Regarding **Action 39.2**, a study on "Guidance to increase access to healthcare for people with disabilities, including information and data on cancer prevention and care" under EU4Health was started in September 2023 and will conclude in August 2025. In July 2024, the project launched a survey aimed at gathering insights from persons with disabilities who have undergone cancer screening or treatment, which was concluded in December 2024.[925] However, due to lack of public information, we cannot assess the progress of the gap-mapping exercise in access to healthcare and

---

920 European Commission, Commission Staff Working Document – Review of Europe's Beating Cancer Plan, SWD(2025) 39, 2025, p. 28.

921 eCAN, eCAN-Strengthening eHealth for Cancer Patients, website.

922 European Commission, ERNs Evaluation, website.

923 JARDIN, Official Website, website.

924 J. Zimmermann, C. McKee, M. Karanikolos, J. Cylus and members of the OECD Health Division, 'Strengthening Health Systems: A Practical Handbook for Resilience Testing. Copenhagen', 2024.

925 European Disability Forum, HEALTH: increasing access to healthcare for persons with disabilities, website.

the guidelines on improving access to healthcare, which were scheduled for completion in Q1 2024 and Q1 2025 respectively.

Regarding **Action 39.3** – Monitoring implementation of health components of Recovery and Resilience Plans (RRPs) including on cancer, the roadmap does not specify concrete tasks but mentions monitoring milestones and targets of national RRPs.

Action 40: Mainstream equality action in areas addressed by the EBCP such as screening and high-quality cancer care

The official roadmap of the EBCP does not specify tasks or actions under Action 40, but this action is linked to Action 39.2. Indeed, a wide range of actions could help promote access to healthcare, thereby narrowing cancer inequalities. These actions are distributed across projects and policies.

The most relevant project is the EUCanScreen funded under EU4Health, which focuses on implementing high-quality cancer screening programs for breast, cervical, colorectal, lung, prostate, and gastric cancers. A key aspect of this initiative is ensuring that these screening programs are accessible to individuals with disabilities, thereby promoting equity in cancer prevention across the EU.[926]

Annex II.7 Detailed implementation under cross-cutting theme 3

The following sections present the implementation status of actions under cross-cutting theme 3.

Action 41: 'Helping Children with Cancer Initiative': Create an 'EU Network of Youth Cancer Survivors' (flagship initiative)

Action 41 aims to improve the quality of life and long-term outcomes for young people affected by cancer by establishing a European Network of Youth Cancer Survivors and providing dedicated support, resources, and advocacy. Two EU-funded projects have been launched to deliver on this aim: EU-CAYAS-NET and OACCUs.

EU-CAYAS-NET has established the **European Network of Youth Cancer Survivors** and created a knowledge centre and interactive platform (www.beatcancer.eu) for social networking, advocacy, and support. The project focuses on improving quality of life, adolescent and young adult care, and equality, diversity, and inclusion. Achievements include a living digital brochure on life after cancer, a network of European ambassadors, resources for education and career support, and a comprehensive roadmap for advancing standards of care for young cancer survivors.[927] The platform is open to patients, survivors, caregivers, and stakeholders from healthcare, research, and policy. The YARN project, that started in July 2025, will further support the European Network of Youth Cancer Survivors.[928]

OACCUs (Outdoor Against Cancer Connects us) addresses **the recovery and quality of life of young cancer survivors through a proactive approach to survivorship**. The project promotes healthy living based on four pillars: physical activity and outdoor sport, balanced nutrition, mental

[926] EUCanScreen, Official Website, website.
[927] European Network of Youth Cancer & Survivors, EU-CAYAS-Net Project Outcomes, website.
[928] Youth Cancer Europe, YARN, website.

and physical well-being, and sustainable lifestyles. OACCUs provides accessible information, training, and resources for young survivors and their social environment, including curated content, fitness guides, psychoeducation, and recommendations for family systems conversations. The project aims to empower survivors and their communities to adopt healthy lifestyles and improve long-term outcomes.[929]

According to input from the European Commission, several other actions contributing to achieving this flagship initiative will be kicked off soon, including a Joint Action on paediatric palliative care and two initiatives on psychosocial support and rehabilitation for children and their families in paediatric oncology clinics.

Action 42: Boost the transformation of paediatric cancer care

Action 42 aims to accelerate progress in paediatric, adolescent, and young adult cancer care by supporting research, innovation, and improved quality of life for survivors. The **Cancer Mission Work Programmes** for 2021, 2022, and 2023 have addressed children, adolescents, and young adults,[930] resulting in the launch of multiple projects such as MELCAYA, MONALISA, SUNRISE, e-QuoL, HIT-GLIO, PREVENT, and INTReALL. A dedicated conference, "Addressing the needs of Young Cancer Survivors," was held on 7 February 2023, bringing together stakeholders to discuss challenges and opportunities for improving outcomes for young cancer survivors.[931]

929 OAC CUs, Welcome to the OACCUs Network Toolbox, website.

930 E.g. the 2025 Cancer Mission Work Programme includes a topic on understanding the effects of environmental exposure on the risk of paediatric, adolescent, and young adult cancers (HORIZON-MISS-2025-02-CANCER-02). Source: European Commission, Decision on Horizon Europe Work Programme 2025, C(2025) 2779, 2025.

931 ERRIN, Mission Cancer : Young Cancer Survivors Conference, website.

Annex III European Pillar of Social Rights and the EBCP

Table 16 – Connection between the European Pillar of Social Rights and the EBCP

European Pillar of Social Rights Principles	Definition	Connection with the EBCP
3. Equal opportunities	Everyone has the right to equal treatment and opportunities in employment, education, and access to public services, regardless of background. Special support should be given to under-represented groups. EU Action Plan on Integration and Inclusion (2021-2027)	Actions 35, 36.1 and 36.2 promote the secure equal treatment of persons with the experience of cancer (patients and survivors).
5. Secure and adaptable employment	All workers, regardless of contract type, should receive fair treatment, social protection, and training. Stable employment and quality work should be promoted, while precarious work must be prevented. Social Economy Action Plan	Action 36.1 addresses the issues of working conditions and good practices for those patients and survivors who return to work.
9. Work-life balance	People with caregiving responsibilities have the right to flexible working arrangements, leave, and care services. Both women and men should be supported equally in balancing work and care duties. Work-Life Balance Directive (WLBD)	Action 36.3 focuses solely on the implementation of the WLBD
10. Healthy, safe and well-adapted work environment and data protection	Workers are entitled to a safe, health-protective work environment suited to their needs, and to the protection of their personal data in the workplace.	Action 36.1 discusses the available support mechanisms to provide a safe work environment to persons with needs related to their cancer experience.
16. Health care	Everyone has the right to timely access to affordable, preventive and curative health care of good quality.	Action 34 supports this by enabling cross-border and digital access to cancer care and follow-up.
17. Inclusion of people with disabilities	People with disabilities have the right to income support that ensures living in dignity, services that enable them to participate in the labour market and in society, and a work environment adapted to their needs. Strategy for the Rights of Persons with Disabilities 2021-2030	Action 36.2 focuses on introducing the cancer as a disability into the Strategy on the Rights of Persons with Disabilities 2021-2030
18. Long-term care	Everyone has the right to affordable long-term care services of good quality,	The principle of "Improving the quality of life for cancer patients, survivors, and

European Pillar of Social Rights Principles	Definition	Connection with the EBCP
	in particular homecare and community-based services. European Care Strategy	carers" is inherently aligned with improving care for patients and their careers. Actions 34.1 and 34.2 improve care coordination and continuity for survivors and carers
20. Access to essential services	Everyone has the right to access high-quality essential services (water, sanitation, energy, transport, financial services, and digital communications). Support should be provided to those who need help accessing them. Report on access to essential services in the EU	Action 35 specifically addresses equal access to financial services. Action 34.1 promotes digital access to personalised health services for cancer survivors.

Source: Authors.

QA-01-25-203-EN-N

This European implementation assessment (EIA) aims to inform the ongoing work of the European Parliament's Committee on Public Health (SANT) on its own-initiative implementation report (2025/2139(INI)) on Europe's Beating Cancer Plan (EBCP). The assessment is composed of two parts. The first part is an introduction by the European Parliamentary Research Service that focuses on Parliament's role in cancer control action plans and cancer policies. It also describes the structure, governance framework and funding mechanisms of the EBCP. The second part of this EIA is a study undertaken by a team of external experts that assesses the implementation of the EBCP across all EU Member States between 2021 and 2024. The analysis focuses on three core areas: (i) gaps and delays in implementation of the EBCP, particularly in prevention, cancer care, and quality of life; (ii) the EBCP's impact on cancer inequalities across the EU; and (iii) lessons learned and their applicability to future EU initiatives on non-communicable diseases. Drawing on desk research, stakeholder interviews, and eight country case studies, the study identifies key challenges and opportunities for strengthening EU health governance. It concludes with a set of recommendations to improve coordination, embed equity, and ensure sustainable progress in cancer prevention and control.

This is a publication of the Ex-Post Evaluation Unit
EPRS | European Parliamentary Research Service

ISBN: 978-92-848-3035-0 | doi: 10.2861/8280591 | QA-01-25-203-EN-N