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Cancer Dashboard for Finland

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iHE THE SWEDISH INSTITUTE FOR HEALTH ECONOMICS
ENABLING INFORMED DECISION MAKING

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Purpose

In 2023, the Swedish Institute for Health Economics (IHE) launched an international initiative with support from MSD, aiming to facilitate the exchange of best practices in cancer care across European countries. This initiative is called "*Cancer Dashboards in Europe*". It has its background in the launch of the Europe's Beating Cancer Plan and the question of how to translate political commitment into action. The objective is to create country-specific dashboard-style reports with a comprehensive and illustrative description of a selected set of key indicators in all areas of cancer care. These indicators benchmark the current status quo in a country against target values specified in national cancer plans, targets set by international organizations, or values of other countries. The reports also provide evidence-based recommendations on how to improve the current situation in a country.

This dashboard report for Finland focuses on cancer in general. It is intended to reinforce the implementation of the National Cancer Strategy 2026-2035 and other ongoing initiatives to improve cancer care in the country. The description seeks to support Finnish policymakers in the decision-making and prioritization of initiatives in cancer care. The dashboard is intended to be a living document, which can be updated when newer data become available. It can also be extended to additional areas and indicators that become relevant based on developments in Finland or the EU.

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Foreword

Cancer remains one of the most significant public health challenges in Finland. Although major advances have been achieved in early detection, treatment outcomes, and survivorship, the overall burden of cancer continues to increase as the population grows and ages. At the same time, disparities in access to timely diagnosis, pressures on specialized services, and the need to expand access to innovative treatments all highlight the importance of sustained, evidence-based action across the cancer pathway.

In this context, the **Cancer Dashboard for Finland**, developed by the Swedish Institute for Health Economics (IHE), offers a comprehensive overview of the state of cancer care in our country. Drawing on real-world data from national, Nordic, and European sources, the report benchmarks Finland's performance across key dimensions of cancer care. By comparing Finland to Nordic peers and examining national trends over time, the Dashboard provides a clear and transparent picture of where Finland is performing well and where further improvement is needed. It is clear that Finland has some catching up to do – our survival rates have been falling behind Denmark, Norway, Sweden. It is also interesting to realize that these countries create and publish national care guidelines and have established standardized care pathways for different cancer types, whereas these things differ across our wellbeing services counties.

The findings of this report are very timely following the publication of the **National Cancer Strategy 2026-2035**. It will reinforce several national priorities: strengthening prevention; ensuring early detection and timely access to diagnostics and specialist evaluations; improving access to innovative therapies; and ensuring that survivorship services keep pace with changing demographics and realities for survivors.

The **Association of Cancer Patients in Finland** has played a central role in improving cancer care by promoting the rights and wellbeing of patients, supporting individuals and families throughout the cancer journey, and ensuring that patient perspectives inform policy and clinical practice. The **Finnish Lung Health Association** has likewise made essential contributions through sustained work in tobacco control, early detection, and lung health research. Its commitment to reducing the burden of lung-related diseases has had a direct impact on cancer prevention and on strengthening health literacy across the population. Together, these organizations have helped build a more patient-centered, prevention-oriented, and research-driven cancer ecosystem in Finland.

We extend our appreciation to the authors for preparing an accessible and rigorous resource that will support policymakers, clinicians, researchers, and patient organizations in their efforts to further improve cancer care. We hope that the insights presented in this Dashboard will help guide meaningful progress toward better outcomes and equitable care for all individuals affected by cancer in Finland.

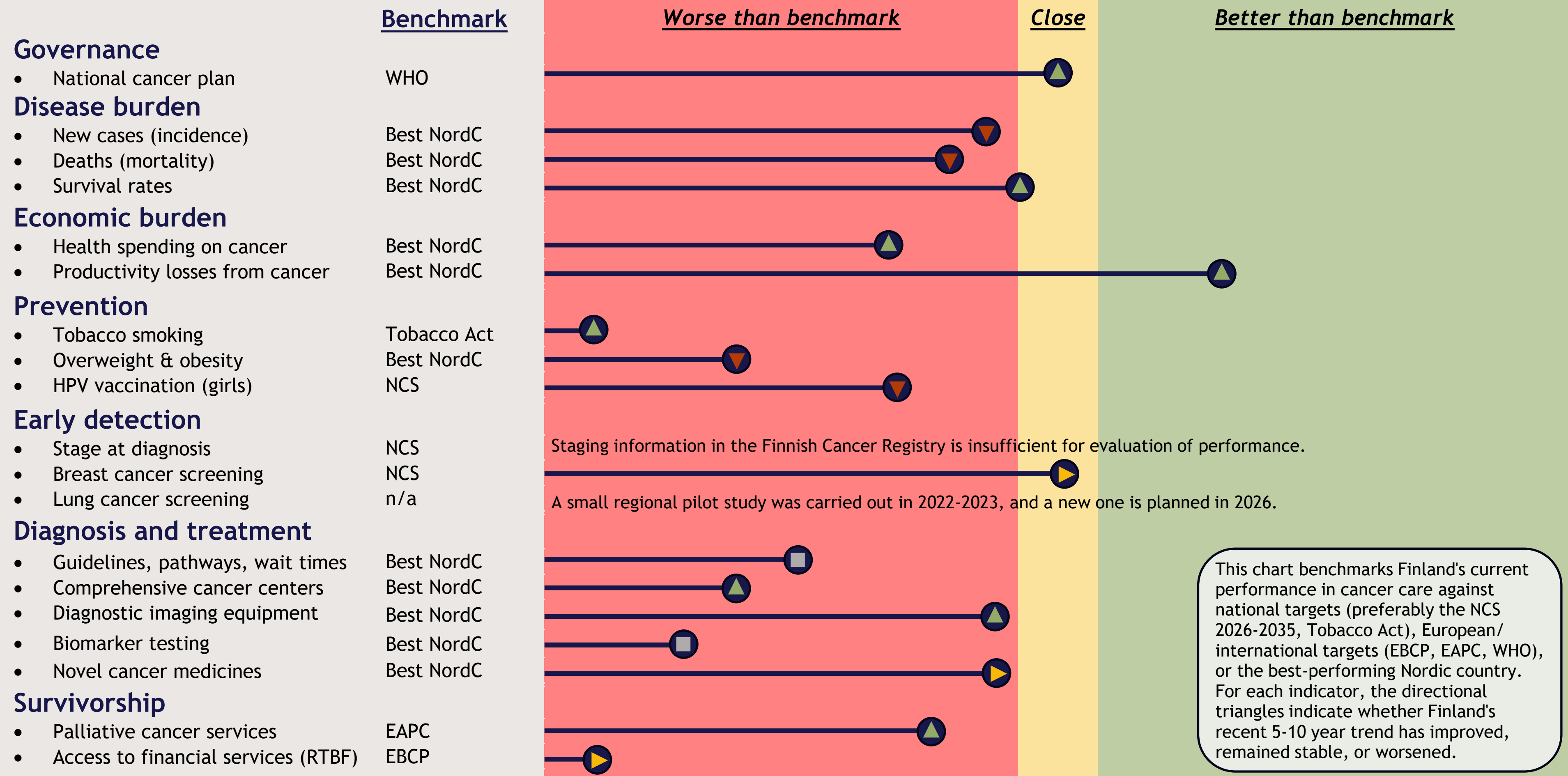
Jenni Tamminen-Sirkiä

Association of Cancer Patients in Finland

Tuula Vasankari

Finnish Lung Health Association

Dashboard overview Finland



Legend: Positive development, Stable development, Negative development, No data or not applicable

Abbreviations: Best NordC = Best-performing Nordic country, EAPC = European Association for Palliative Care, EBCP = Europe's Beating Cancer Plan, n/a = not available, NCS = National Cancer Strategy 2026-2035, RTBF = "Right to be forgotten", Tobacco Act = Finland's Tobacco Act, WHO = World Health Organization.
Benchmark: For indicators where Finland was the best-performing Nordic country, the second best-performing country was used for the benchmark.
Notes: All indicators are defined in % or per capita terms; see the main text for a detailed description and the Appendix for the exact definition used.

High-level recommendations

Governance

- ✓ Ensure full implementation of the National Cancer Strategy 2026-2035 through a collaborative effort by all healthcare stakeholders, adequate funding for planned actions, and monitoring progress in annual reports.

Funding

- ✓ Evaluate cancer care quality to identify and address bottlenecks and invest in underutilized effective technologies to catch up with other Nordic countries.

Prevention

- ✓ Intensify anti-smoking efforts under the WHO framework, focusing on youth and e-cigarette prevention.
- ✓ Promote healthy weight through public campaigns, taxes on sugary drinks, and introducing subsidies for fruits and vegetables.
- ✓ Strengthen HPV vaccination coverage with school-based initiatives for nurses and parents, targeted regional actions, and free gender-neutral catch-up programs up to at least age 26.

Early detection

- ✓ Improve data quality in the Finnish Cancer Registry by mandating complete staging information to evaluate progress in early detection.
- ✓ Expand the breast cancer screening program to women aged 45-74 years and implement targeted outreach to underserved socioeconomic subgroups.
- ✓ Use the findings from the initial pilot study on lung cancer screening to assess the feasibility of a nationwide program, ensuring sufficient infrastructure and awareness.

Diagnosis and treatment

- ✓ Publish and regularly update national cancer care guidelines, including patient-friendly versions, and establish standardized care pathways with waiting time targets.
- ✓ Create a roadmap to upgrade all university hospitals to comprehensive cancer centers and establish clear referral pathways between other hospitals and healthcare facilities.
- ✓ Optimize the use of diagnostic imaging equipment and expand the use of CT scanners in primary care. Expand capacity and use of multi-gene (NGS) testing, while monitoring and improving the uptake of novel cancer medicines in line with clinical guidelines.

Survivorship

- ✓ Continue to expand and integrate palliative care with cancer treatment services to meet the needs of an aging population and the increasing number of cancer patients.
- ✓ Guarantee equal access to financial services for cancer survivors by implementing legal provisions on the “right to be forgotten”.

Background

IHE Cancer Dashboards

Cancer has received growing political attention across the European Union (EU) in recent years. The launch of Europe's Beating Cancer Plan (2021) by the European Commission reflected a strengthened commitment to addressing the burden of cancer in a more systematic and coordinated way (1). Across the EU and in Finland, cancer is the second-leading cause of death, responsible for more than one in five deaths (2). Substantial inequalities in cancer care persist, both between and within EU countries. A key challenge lies in translating international and national initiatives into action: while the policy landscape is rich in ambition, it often lacks funding and clear and practical tools to support implementation, guide prioritization, and monitor progress at national and/or regional level.

To help bridge the gap between policy plans and action, the Swedish Institute for Health Economics (IHE) has developed a series of national Cancer Dashboards since 2023 for countries such as Austria, Denmark, Greece, Italy, Lithuania, Poland, and Portugal. These dashboards provide an intuitive and structured overview of how countries perform in cancer care. By combining data, benchmarking, and evidence-based recommendations, they offer policymakers and stakeholders actionable insights, highlighting where progress is being made, where efforts must accelerate, and where strategic investment is required. Ultimately, each dashboard serves as a navigation tool to support the planning, implementation, and evaluation of effective, equitable, and outcome-oriented cancer control.

While some dashboards cover specific types of cancer, others provide a general overview of cancer care. Building on this work, this dashboard focuses on cancer care in Finland, yet with some more focus on breast and lung cancer to highlight two cancer types where Finland is performing comparatively well and less well, respectively.

Structure of the dashboard and choice of indicators

This report begins with an overview of key Finnish and European governance frameworks relevant to cancer, including Finland's new National Cancer Strategy and Europe's Beating Cancer Plan (EBCP). It then provides an analysis of the disease burden and economic burden of cancer, highlighting the impact of the disease on patients, the healthcare system, and society at large. These contextual elements set the stage for understanding the urgency of national-level action. The report then follows the cancer care pathway, structured around the four pillars – prevention, early detection, diagnosis & treatment, survivorship – of the EBCP. Together, the dashboard presents a comprehensive view of the current status of cancer management in Finland.

The dashboard is structured as follows:

- **Governance** (1 indicator): National cancer plan
- **Disease burden** (3 indicators): New cases (incidence), deaths (mortality), survival rates
- **Economic burden** (2 indicators): Health spending on cancer care, productivity losses from cancer
- **Prevention** (3 indicators): Tobacco smoking, overweight & obesity, human papillomavirus (HPV) infection
- **Early detection** (3 indicators): Stage at diagnosis, screening for breast and lung cancer
- **Diagnosis and treatment** (5 indicators): Clinical guidelines, pathways & waiting times, comprehensive cancer centers, diagnostic imaging equipment, biomarker testing, novel cancer medicines
- **Survivorship** (2 indicators): Palliative care services, access to financial services ("Right to be forgotten")

The starting point for the selection of indicators was the original list of indicators assembled by IHE for the European Cancer Pulse of the European Cancer Organisation (3). The final set of indicators was selected based on 1) discussions with Jenni Tamminen-Sirkiä (Association of Cancer Patients in Finland), Tuula Vasankari (Finnish Lung Health Association), and MSD Finland, 2) priorities in the National Cancer Strategy 2026-2035, and 3) local data availability, using examples for breast cancer and lung cancer where possible.

For each indicator across the cancer care pathway, this report provides:

- A general explanation of its relevance, and how it relates to the National Cancer Strategy and the EBCP
- A description of the current situation in Finland, with regional and/or international comparisons
- Recommendations for improvement and alignment with national and international targets

Data sources for all indicators are summarized in the Appendix. All data were drawn from publicly available sources.

Benchmarking is conducted both intra-nationally (comparison of the Finnish regions, where possible) and internationally against the other big Nordic countries (comparison with Denmark, Norway, Sweden) and the EU average, whenever data are available.

Governance

In 2017, the World Health Assembly (the decision-making body of the World Health Organization, WHO) adopted resolution WHA70.12 on cancer prevention and control (4). It calls on governments to commit themselves to accelerating action against cancer. Specifically, it urges governments to develop and implement national cancer control plans that are inclusive of all age groups, that have adequate resources, monitoring and accountability, and that seek synergies and cost-efficiencies with other health interventions.

Finland's National Cancer Strategy 2026-2035

In November 2025, the Finnish Ministry of Social Affairs and Health published the National Cancer Strategy "Together against cancer – People-oriented cancer prevention and treatment", which was developed by the Finnish Cancer Center (FICAN) (5). The strategy encompasses focus areas and accompanying recommendations, covering the entire cancer care pathway. The strategy is set out for the time period 2026 to 2035, with a roadmap to be developed in 2026 and implementation starting in 2027. It includes four key strategic goals:

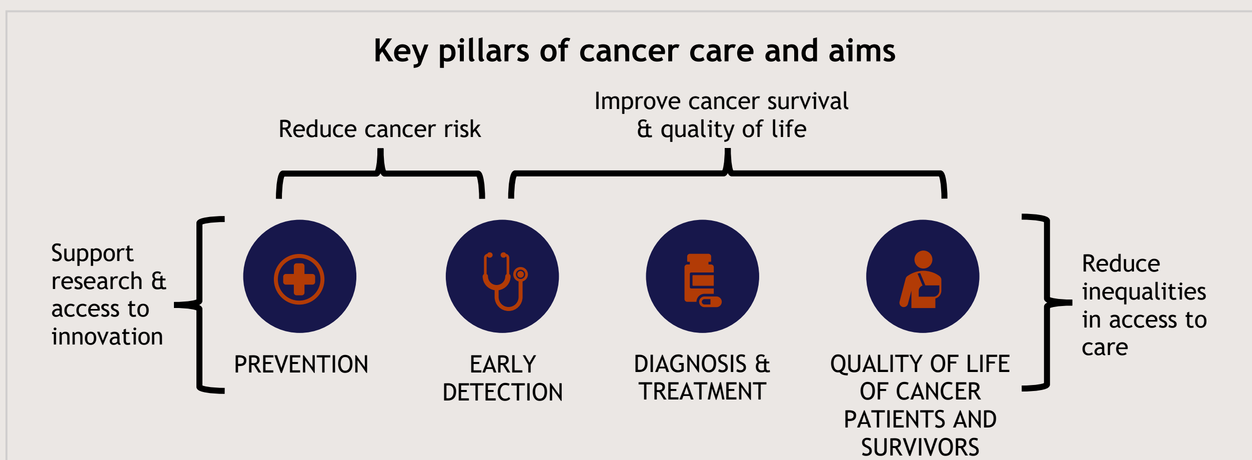
1) Strengthen inclusion and develop people-centered services
2) Reduce the burden of cancer through prevention and early detection
3) Ensure equitable and effective cancer care
4) Be at the cutting edge in a changing operating environment

In addition, equality was established as a cross-cutting theme across all goals, taking into account regional and socio-economic differences, people of different ages, and differences across cancer types. The key values in selecting the goals have been reducing inequality, quality of life, the effectiveness of care, and the importance of research. Each goal is supported by sub-goals, a target state in 2035 which includes indicators to facilitate monitoring the progress of implementing the strategy, a set of proposed measures, and responsible organizations for implementation.

The implementation of the measures in the strategy is estimated to require a total investment of €156 million over a five-year period, or €5.5/person/year. Cost savings are expected to total €305 million over the strategy period. Private sector investments are expected in the order of €121 million.

Europe's Beating Cancer Plan (EBCP)

In 2021, the European Commission unveiled Europe's Beating Cancer Plan (EBCP), a comprehensive policy initiative aimed at tackling cancer through ten flagship initiatives that cut across four main areas of action - prevention, early detection, diagnosis and treatment, and the quality of life of cancer patients and survivors - and follow the entire disease trajectory (see figure below) (1). There are also several simultaneous goals of cancer care. One goal is to prevent what can be prevented. Approximately 30-50% of cancer cases could theoretically be prevented because they are caused by modifiable risk factors (6). Another goal is to improve the survival and quality of life of patients - through early detection (e.g. screening programs), diagnosis and treatment (e.g. through access to modern diagnostic tools and treatments), and follow-up care for survivors. Cross-cutting goals are to reduce inequalities in access to care (e.g. of different socioeconomic groups) and to support research and access to innovations to advance cancer care from the current status quo. Furthermore, the EBCP aligns with the EU Cancer Mission under the Horizon Europe 2021-2027 research funding program, emphasizing a collaborative approach to reducing cancer prevalence and enhancing patient care across Europe.



Disease burden of cancer

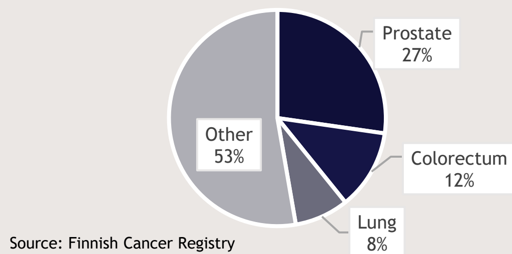
Incidence and mortality

In 2023, the number of new cancer cases (incidence) registered in the Finnish Cancer Registry was 39,199 (20,646 men and 18,553 women) (7). The three most common diagnosed cancer types in men were prostate, colorectal, and lung cancer, and in women they were breast, colorectal, and lung cancer (7). They accounted for almost half of all cancer cases. Around 30% of cancer patients were below 65 years at the time of diagnosis and the other 70% were 65 years or older (7), whereas in the EU 35% of new patients were below 65 years in 2022 (8). Cancer in working-age people has important implications for the economy and the size of the economic burden (see next section). Finland's National Cancer Strategy includes the target to reduce the number of preventable cancers (estimated at around 10,000 cases) by 1,000 cases per year by 2035 (5).

The number of cancer deaths (mortality) in Finland was 13,645 (7,364 men and 6,281 women) in 2023 (7). Lung cancer was the cancer type that caused the most deaths in both men and women, followed by breast cancer in women and prostate cancer in men, whereas colorectal cancer was in third place (7). Overall, cancer caused 22% of all deaths in Finland in 2023, which made cancer the second-leading cause of death after cardiovascular diseases (32%), which is very similar to the EU (cancer caused 22% and cardiovascular diseases 33% of all deaths in 2022) (2). Finland's National Cancer Strategy includes the target to reduce mortality by 10% (~1,330 fewer cancer deaths annually) by 2035 (5).

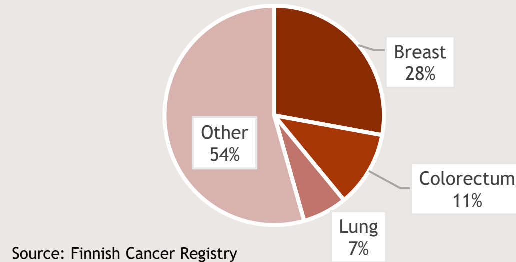
Compared to the other Nordic countries, Finland had the second highest cancer incidence rate (654 cases per 100,000 inhabitants) and mortality rate (243 deaths per 100,000) after Denmark in 2023 (9). Finland's incidence rate was also higher than the EU average, whereas the mortality rate was lower (8), which indicates that cancer survival in Finland is better than the EU average. Projections of future cancer numbers - which are based on the expected demographic development and take into account the effects of further population aging – indicate growing numbers of cancer incidence and mortality in Finland, exhibiting a similar trend as the EU overall. Cancer incidence (per 100,000) in Finland is expected to grow by 12% between 2025 and 2040, and cancer mortality by 21% (10).

Cancer incidence among men in Finland in 2023
Number of new cases: 20,646



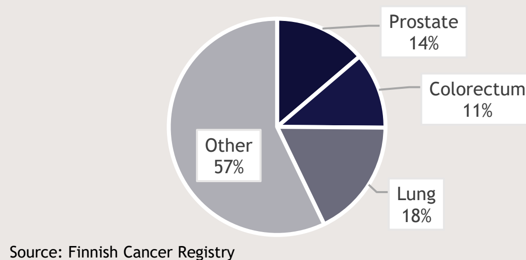
Source: Finnish Cancer Registry

Cancer incidence among women in Finland in 2023
Number of new cases: 18,553



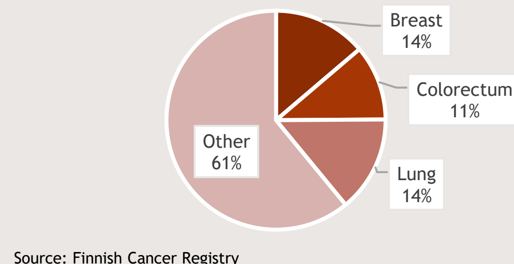
Source: Finnish Cancer Registry

Cancer mortality among men in Finland in 2023
Number of deaths: 7,364



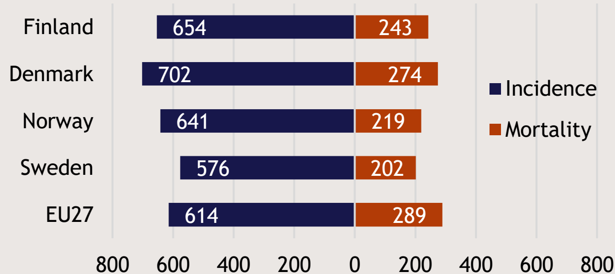
Source: Finnish Cancer Registry

Cancer mortality among women in Finland in 2023
Number of deaths: 6,281



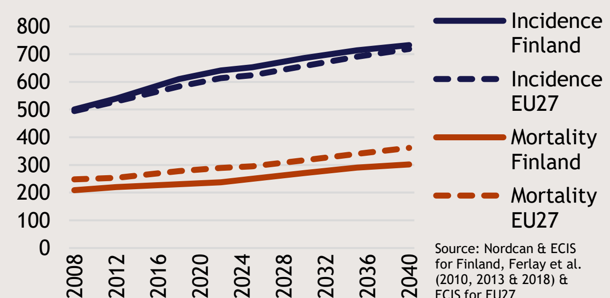
Source: Finnish Cancer Registry

Cancer incidence and mortality per 100,000 inhabitants (crude rates) in 2023, both sexes



Source: Nordcan for countries and ECIS for EU27 with data for 2022

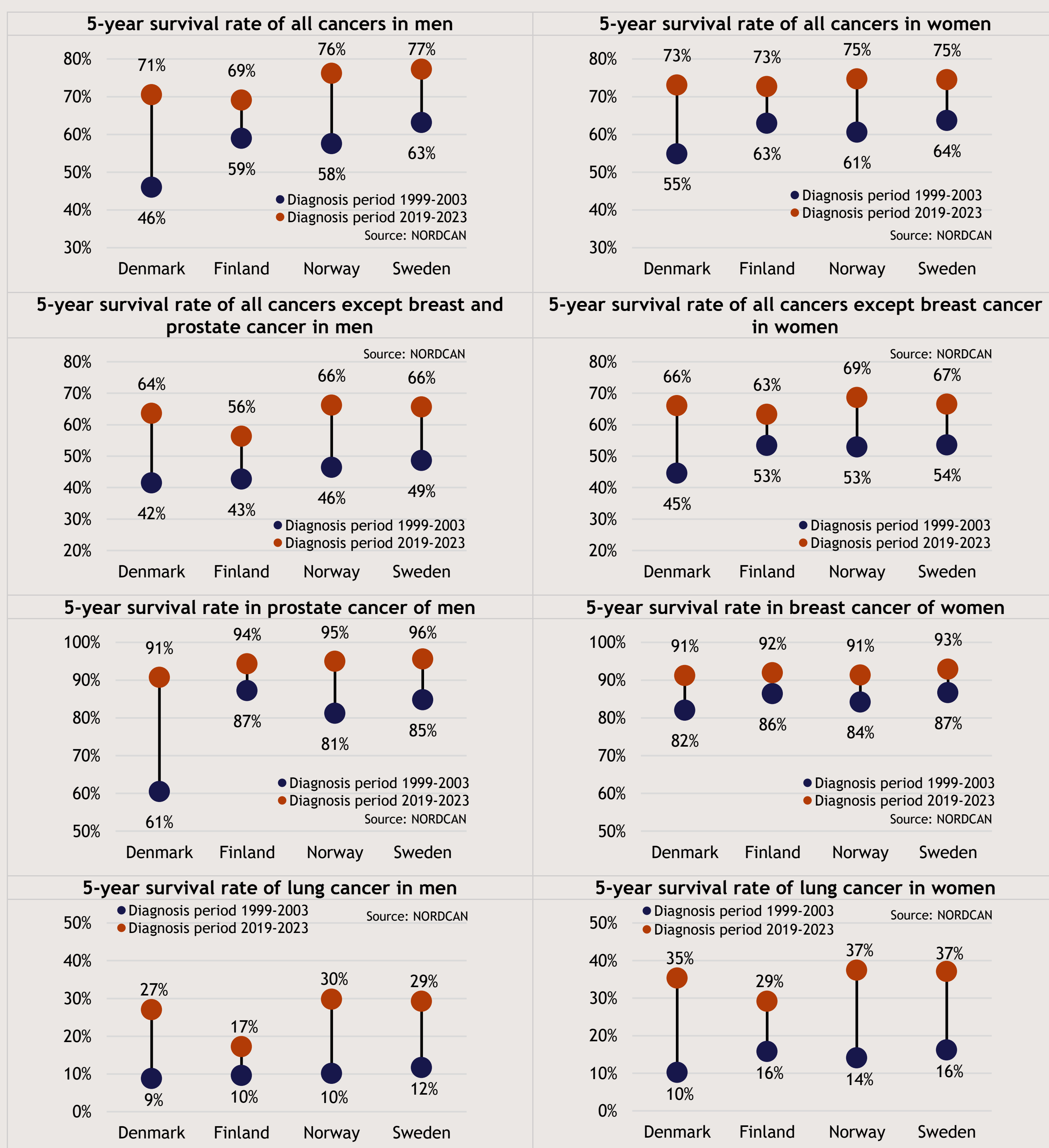
Cancer incidence and mortality per 100,000 inhabitants (crude rates) over time, 2008-2040, both sexes



Source: Nordcan & ECIS for Finland, Ferlay et al. (2010, 2013 & 2018) & ECIS for EU27

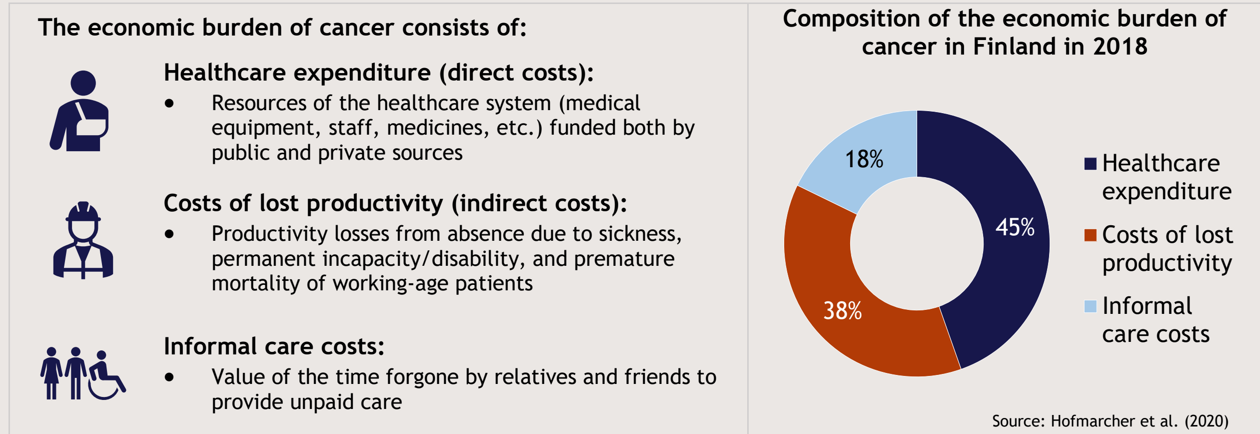
Survival

According to NORDCAN data, the five-year relative survival rate of cancer has improved considerably over the last decades in all Nordic countries (9). However, Finland has seen smaller improvements than other Nordic countries between the periods 1999-2003 and 2019-2023. Finland used to have the second-highest (after Sweden) or even the highest survival rates, but in the latest period, Norway and Denmark have surpassed Finland in most cases. Overall, Finland has now the lowest five-year survival rate in men (69%) and in women (73%) in all cancers and also in all cancers when breast cancer and prostate cancer are excluded (56% in men and 63% in women). In breast cancer, Finland still ranks second behind Sweden, and in prostate cancer it ranks third behind Norway and Sweden in 2019-2023. Lung cancer is an example where Finland has lost a lot of ground. Although the five-year survival improved from 10% to 17% in men and 16% to 29% in women, the other Nordic countries have recorded almost twice as high increases, with Norway now having a survival of 30% in men and 37% in women. Finland's National Cancer Strategy acknowledges that Finnish survival rates lag behind, mentioning specifically lung cancer and multiple myeloma (5), although it applies much more generally (11). For "poor-prognosis" cancers, specifically lung cancer, pancreatic cancer, and liver cancer, the strategy includes the target of five-year survival reaching the Nordic average again (5).



Economic burden of cancer

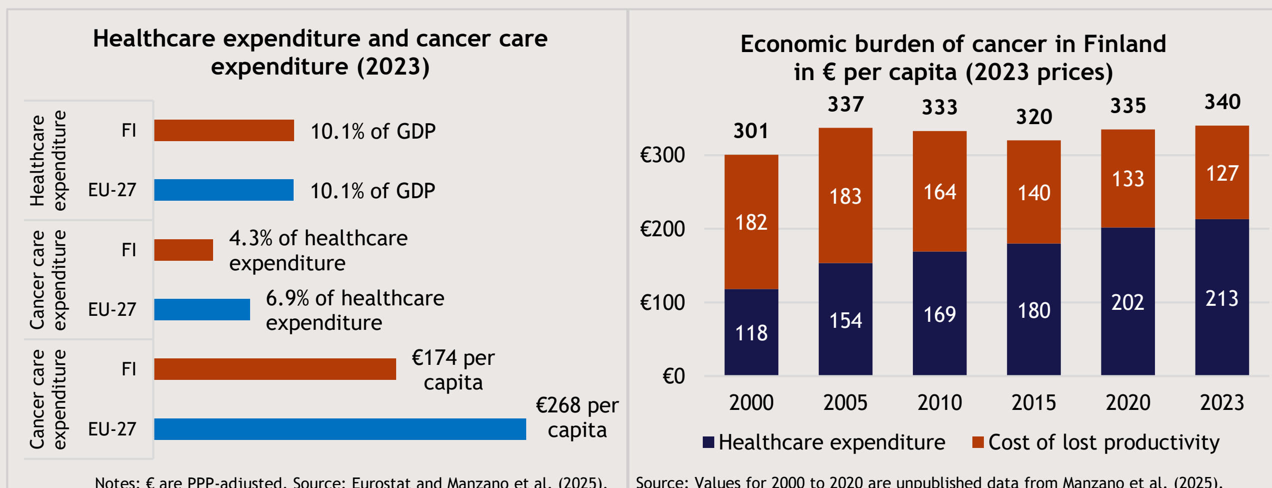
In Finland, the overall economic burden of cancer was estimated to amount to €344 per capita in 2018 (12). Most of the burden was caused by healthcare expenditure (45%), followed by lost productivity among working-age patients (38%), and informal care costs (18%). In comparison, healthcare expenditure accounted for 51% of the burden in the EU, lost productivity for 35%, and informal care for 14%.



Newer estimates of the economic burden of cancer (excluding informal care costs) in Finland indicate that the total burden increased from €301 to €340 per capita from 2000 to 2023 (in 2023 prices) (13). Yet there were opposite trends for healthcare expenditure and productivity losses in Finland, the other Nordic countries, and the EU as a whole (13). The Cancer Foundation Finland and Nordic Healthcare Group also maintain an online tool that tracks the total costs of cancer (direct costs and some indirect costs) annually by broad groups of cancer types and by wellbeing services counties (14). The tool shows that the total costs of cancer increased from €1.3 billion in 2015 to €1.6 billion in 2021 before decreasing to €1.5 billion in 2023 (if considered in 2023 prices). Based on the data in the tool, the Finnish Cancer Strategy notes that the cancer costs are expected to increase by 74% from 2023 to 2035 (5).

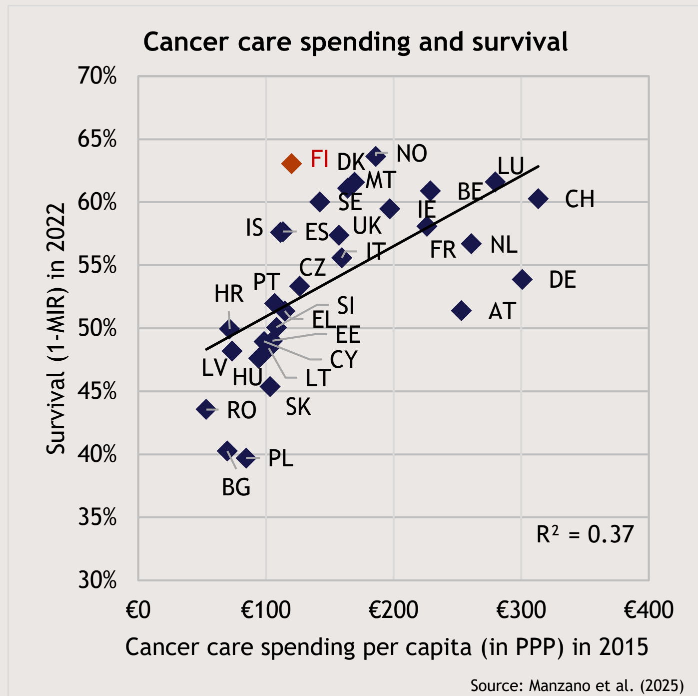
Healthcare spending on cancer in Finland was estimated to have increased by about 81% from 2000 to 2023, reaching €213 per capita (€174 per capita after adjusting for purchasing power parity, PPP) in 2023, which was below the EU average of €268 per capita and also below Denmark (€201 PPP-adjusted), Sweden (€240), and Norway (€259) (13). Estimated spending on cancer in Finland amounts to 4.3% of total health expenditure in 2023, which was below the EU average of 6.9% (13). Compared to the disease burden that cancer causes in terms of death – 22% of all deaths – the relative spending level of 4.3% appears rather low, although the situation is similar across all countries in Europe.

A positive development is that the estimated costs of lost productivity from cancer in Finland declined by 30% from €182 to €127 per capita [€104 PPP-adjusted in 2023] between 2000 and 2023 (in 2023 prices) (13). In the EU, the costs of lost productivity declined by 20% from €186 to €148 between 2000 and 2023, and in the other Nordic countries they declined by 24-37%. This reduction in productivity losses in Finland despite the continued rise in the annual number of new cancer cases reflects the improving survival rates in Finland and underlines the economic value of investments in effective cancer care.



Health spending on cancer care & survival rates

The ultimate aim of health spending on cancer care is to improve patient outcomes, both in terms of survival and quality of life. The figure to the right offers a crude way of exploring the link between cancer care spending and patient outcomes across European countries; see Manzano et al. (2025) for clarification on methodology (13). The upward-sloping trend line suggests that countries with higher cancer care spending tend to achieve higher survival. In contrast, countries with low spending generally report lower survival (mostly in Central and Eastern Europe). Finland achieves comparatively high survival in relation to its spending level. While the positive association shown in the graph does not prove causality, it is consistent with previous evidence showing that European countries investing more in cancer care tend to achieve better survival outcomes (15).



The scattered pattern in the graph also underlines that spending alone is not enough. Patient outcomes are shaped by how resources are allocated and used across the entire care pathway. Strategic prioritization, such as early detection, timely diagnosis, and equitable access to effective treatment, is essential to translating spending into tangible survival benefits. Going forward, further gains in survival will likely depend on the broad adoption and expansion of effective technologies, many of which come at a higher cost. Health systems must therefore ensure that investments in cancer care are used in a cost-effective and outcome-oriented way. This means not only evaluating the value of new interventions but also identifying and addressing inefficiencies along the entire care pathway.

Recommendations

- Evaluate the quality of cancer care services given the recent slower improvements in survival rates compared to other Nordic countries (see previous section "Disease burden"), and invest in areas where bottlenecks exist and effective technologies are not fully used, such as prevention, waiting times, biomarker testing, comprehensive cancer centers (see the remaining areas in the report).
- Apply a societal perspective in evaluating investment in cancer care in order to acknowledge and capture reductions in productivity losses induced by survival gains.
- Strengthen flexible work time arrangements to facilitate the reintegration of cancer patients and cancer survivors during and after treatment in order to reduce productivity losses.

Prevention

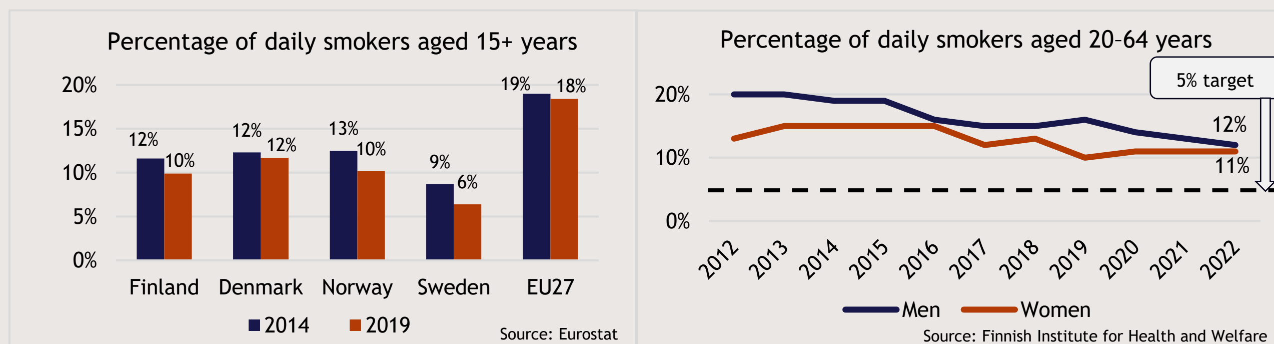
Tobacco smoking

Background

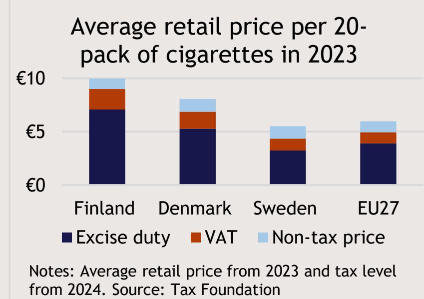
- Tobacco smoking is a major risk factor for developing various cancer types (16), and it has been linked to cancers at 16 different sites (17). Around 80% of all lung cancer cases are linked to cigarette smoking (18).
- The WHO suggests that implementing tobacco control measures can prevent one in five annual cancer cases (19). In 2008, the WHO introduced the MPOWER framework – a package of six evidence-based, cost-effective, high-impact policy measures to help countries reduce the demand for tobacco (20). As part of this framework, best practice for tobacco taxation is defined as a total tax share of at least 75% of the retail price (20, 21). As of 2023, only one EU-country (the Netherlands) has implemented all six MPOWER measures at the best-practice level (22). The EBCP aims to help create a "Tobacco-Free Generation" where less than 5% of the population uses tobacco by 2040, compared to around 25% today (1).
- With the Tobacco Act from 2010, Finland was the first country in the world to set an end goal for the cessation of use of tobacco products by 2040 (23, 24). In 2016, it was revised to no more than 5% daily use prevalence of tobacco or nicotine by 2030 (23, 25). The most recent revisions and additions came into force in 2022, which include among other things taxation, bans on advertising, distance sales, point-of-sale displays, and flavored tobaccos, retail sale license, standardized packaging, age limit, and smoking bans in more public areas intended for children and adolescents (23, 25). The same restrictions apply to electronic cigarettes and e-liquids (23). In addition, the Substance Use and Addition Strategy was introduced in 2021 to provide more comprehensive guidance regarding preventing and treating risks, harms, and problems related to the use of tobacco as well as alcohol, drugs, and gambling (23, 24). Finland's National Cancer Strategy mentions the reduction of tobacco use as part of the strategic goal to reduce the cancer burden (5).

Current status in Finland

- Available data show a reduction in the proportion of daily smokers in Finland in recent years. Eurostat data show a reduction of daily smokers (15+ years) in Finland from 12% to 10% from 2014 to 2019. This places Finland below the EU average and similar to other Nordic countries except Sweden with even lower smoking rates (26). National statistics show that daily smoking rates in 20-64-year-olds in Finland have decreased over time, more in men (20% in 2012 to 12% in 2022) than in women (13% in 2012 to 11% in 2022) (27, 28). The decrease of daily smokers was strong in young people aged 14-20 years from 20% in 2008-2009 to 5% in 2023 (28). In this age group, educational level had a significant impact on smoking (27, 28).



- The use of e-cigarettes among adults continues to be low, while daily use of e-cigarettes has doubled in young people aged 14-20 years from 3% in 2021 to 6% in 2023 (27).
- In July 2023, Finland had the highest average retail selling prices of cigarettes in the Nordics (€9.97 per 20-pack) and was well above the EU average of €5.98 (29). Finland's tax share (90%) was the third highest in the EU after the Netherlands (101%) and Belgium (97%). As of November 2024, excise duties on cigarettes, roll-your-own tobacco, pipe and fine-cut tobacco, cigars, and cigarillos are being increased by an average of 27.1% in six phases until 2027 (30). In 2025, the government proposed the tobacco tax on e-cigarette liquids and smokeless nicotine products to be increased by an average of 37% (31).



Recommendations

- Rely on the WHO MPOWER framework to intensify public awareness campaigns, emphasizing the health risks associated with smoking and the benefits of quitting as well as offering smoking cessation services. Focus efforts on preventing young people from using e-cigarettes and other nicotine products.

Prevention

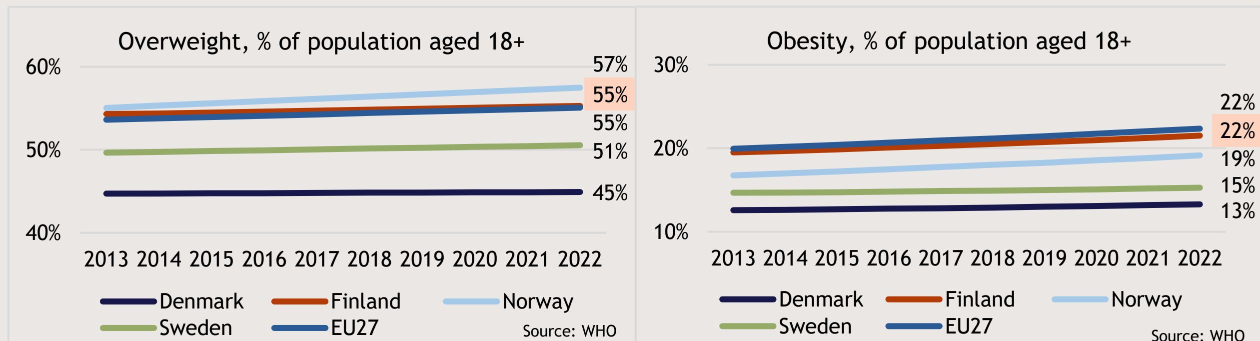
Overweight and obesity

Background

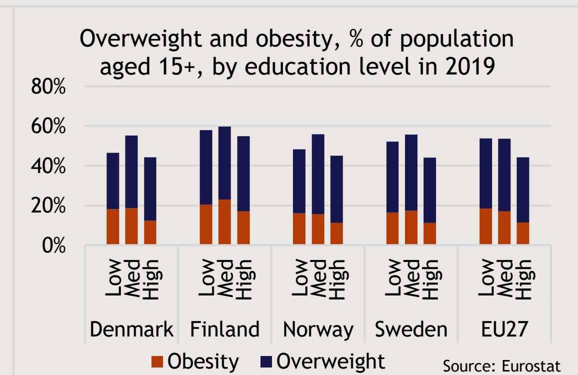
- Overweight (defined as a body mass index, BMI ≥25) and obesity (BMI ≥30) is a medical condition that increases the risk of various health problems, including cardiovascular disease, diabetes, and certain cancers (32). Obesity and overweight have been linked to the development of 13 cancer types, including breast cancer (after menopause) (33). Around 2-7% of all cancer cases are linked to obesity and overweight in Europe (34, 35).
- The EBCP aims to evaluate the current EU action plan on obesity and propose a follow up (1). The European Code Against Cancer recommends to (i) limit food high in calories, sugar, fat, and salt, limit drinks high in sugar and instead drink mostly water and unsweetened drinks, and limit ultra-processed foods, (ii) be physically active in everyday life and limit the time spent sitting, and (iii) have a healthy diet, consuming whole grains, vegetables, legumes, and fruits (36). The WHO "Acceleration plan to stop obesity" endorses approaches relating to prevention, health literacy, and implementation of fiscal policies, including taxes and subsidies to promote healthy diets, to fight obesity (37).
- The National Obesity Program in Finland from 2012-2018 aimed at a downward trend in overweight and obesity and to improve the population's health and welfare (38). Currently, there is no specific national program established for the prevention of obesity (39, 40). Finland's National Cancer Strategy aims to stop the increase in obesity as part of the strategic goal to reduce the cancer burden (5).

Current status in Finland

- The prevalence of overweight and obesity in Finland shows an increasing trend, according to WHO data (41, 42). The proportion of adults (18+ years) with overweight and obesity increased from 54% to 55% and from 20% to 22%, respectively, between 2013 and 2022. The prevalence in Finland is on par with the EU average but higher than in Denmark and Sweden. In children aged 7-9 years, 30% of children were overweight and 13% were obese in 2022-2024, according to the WHO European Childhood Obesity Surveillance Initiative (43). Projections by the World Obesity Federation indicate further increases in prevalence levels among both adults and children in Finland until 2035, with the annual economic impact growing to 2.5% of GDP (44).



- Poor knowledge of the health-related risks of obesity can reduce incentives to live healthier. Differences based on educational level can be observed in Finland, with people with a medium level of education having the highest rates of both obesity and overweight, and high-educated people the lowest rates in 2019 (45).
- Nutrition is an important determinant of overweight and obesity. Based on self-reported data from adults aged 15+ years, daily consumption of fruit and vegetables has improved somewhat from 58% reporting eating at least one fruit & vegetable a day in 2014 to 63% in 2019. This was however still below EU average of 67% in 2019 (46).



Recommendations

- Consider reinforcing nationwide campaigns about the National Nutrition Recommendations 2024 (47), and raise awareness about the risks of overweight/obesity and its link to cancer and other diseases.
- Consider increasing the existing excise tax on sugar-sweetened beverages and introducing subsidies for fruits and vegetables in line with WHO recommendations.

Prevention

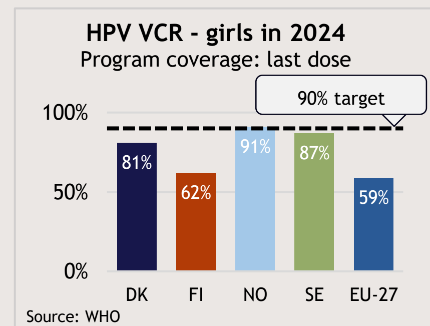
Vaccination against human papillomavirus (HPV)

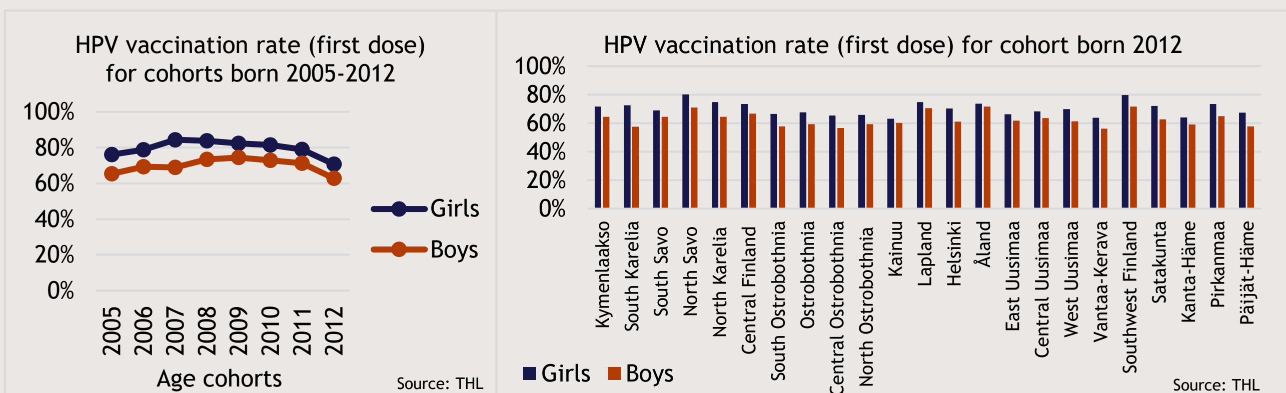
Background

- HPV is a group of sexually transmitted viruses that causes around 2.5% of all cancers in women and men in Europe (48). The first vaccine against HPV was approved in 2006 in the EU. HPV vaccines have been found to be an effective and cost-effective way to prevent cervical cancer, other HPV-related cancers, and genital warts (48). According to the WHO, the best option is to vaccinate girls around age 9-14, just before they become sexually active (49). There is, however, value in vaccinating boys and older teenagers and young adults, at least up to the age of 26 because it can protect against a new infection or re-infection and block transmission to a new partner (48).
- As part of its global strategy to eliminate cervical cancer, the WHO calls on all countries to achieve a 90% HPV vaccination coverage rate (VCR; fully vaccinated) in girls by age 15 by 2030 (50). Reflecting the WHO's global target, the EBCP aims to achieve at least a 90% HPV VCR in girls in the EU by 2030, and to significantly increase the VCR in boys by the same year, although no specific target has been set (1). This goal was reaffirmed in the 2024-recommendation on vaccine-preventable cancers by the Council of the EU (51).
- Finland has previously committed to the WHO's initiative to eliminate cervical cancer (52). The National Cancer Strategy applies a wider aim to eliminate cancers caused by HPV and aims for VCR of 90% among primary school graduates nationwide and in all wellbeing services counties (5). Finland introduced HPV vaccination for girls into the national vaccination program in 2013 and extended it to boys in 2020. The vaccine is offered free of charge to all pupils between the ages 10 to 12 years, with vaccinations administered by school health services in grades 5 and 6. If a child has not had the possibility to be vaccinated at this age, the vaccine can still be given free of charge at a later stage either in school or similar educational facilities (53).

Current status in Finland

- Finland and Norway currently use a 2-valent HPV vaccine that protects against the two most common cancer-causing HPV subtypes (54, 55), whereas Denmark and Sweden use a 9-valent vaccine which offers wider protection against cancer-causing subtypes and also the most common subtypes causing genital warts (56, 57).
- According to data from the WHO, the HPV VCR for girls in Finland was just above the EU average in 2024, with 62% compared to 59%. Among the Nordic countries, Finland had the lowest VCR and is also below the target of 90% (58). For boys, the VCR was 53% in Finland in 2024, above the EU average of 50% but below all other Nordic countries (58).
- Data from the Finnish National Vaccination Registry indicate a negative trend in VCRs in girls and boys in recent years. The cohort with the highest coverage of first dose vaccination is the one born in 2007 for girls (84%) and 2009 for boys (74%). In the youngest cohort born in 2012, vaccination coverage was 71% for girls and 63% for boys (59), although some of them might still receive the vaccine later. There is also regional variation in vaccination coverage. For the 2012 birth cohort, the VCR varies between 63-80% for girls and 56-72% for boys (59).





Recommendations

- Strengthen school-based vaccination delivery by running education webinars with school nurses and improve information given to parents to get their consent in order to break the recent negative trend in the VCR.
- Address regional inequalities in HPV vaccination by implementing targeted measures to improve coverage in wellbeing services counties and reduce the vaccination gap between boys and girls.
- Offer free gender-neutral catchup vaccinations at least up to age 26 in line with the 2024-Council recommendation to cover young adults who did not get vaccinated or fully vaccinated before.

Early detection

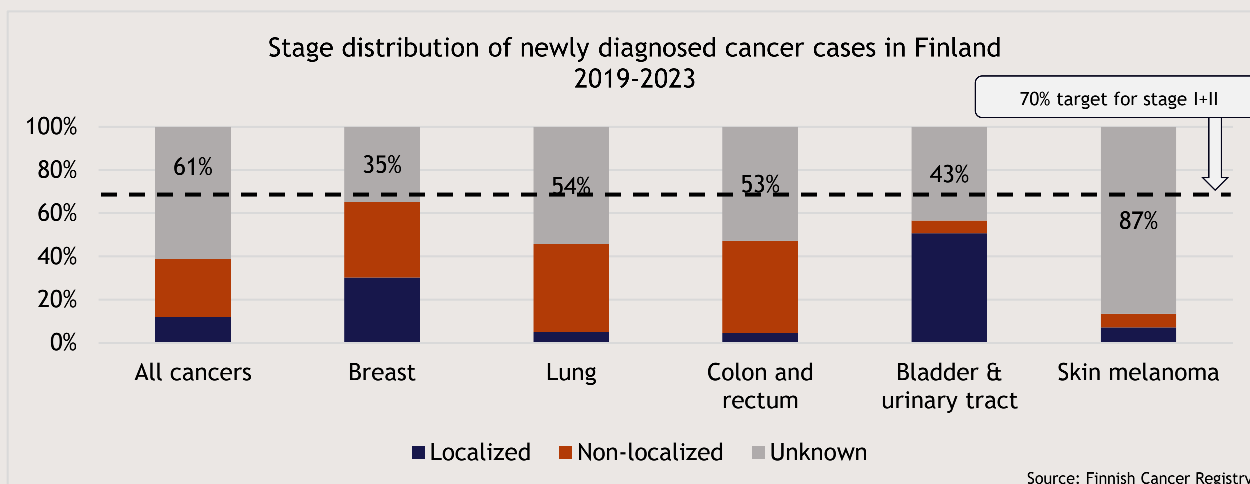
Stage at diagnosis

Background

- The stage at which cancer is diagnosed is critical for determining treatment options and prognosis. Early-stage diagnosis significantly increases the chances of successful treatment and long-term survival. For instance, the five-year relative survival rate in stage I lung cancer was 71% compared to only 9% in stage IV in Norway in 2020-2024 (60), and in breast cancer it was 101% in stage I and 44% in stage IV (61). Similarly, quality of life has been found to be higher in patients with localized disease compared to more advanced stages (62). In addition, early-stage cancer cases are generally associated with lower treatment costs compared to late-stage cases (63).
- General benchmarks for the ideal stage distribution at diagnosis for cancer do not exist, but the general aim is to have a large proportion of cases diagnosed at early, more treatable stages.
- Finland's National Cancer Strategy sets the target of detecting at least 70% of cancers at stages I-II by 2035 (5).

Current status in Finland

- The Finnish Cancer Registry contains crude information on cancer stage (localized vs. non-localized cancer) at diagnosis on a national level and by tumor site (7). Further stratifications are not possible. TNM classification (stage I to IV) is not available.
- Data from the Finnish Cancer Registry show that the proportion of cancer cases with unknown stage reported between 2019 and 2023 is significant (7). Considering all cancer types together, the proportion of incident cases reported as unknown is 61%, but this varies from 35% in breast cancer to 87% in skin melanoma. A contributing factor may be that TNM stage classification is only reported in free text and is mostly derived from pathology reports (64). Furthermore, it can be noted that in most cancer types presented in the graph below, except for bladder & urinary tract cancers and skin melanoma, a majority of cases is detected at a non-localized stage (7). In fact, more than 30% of cases are reported as non-localized for breast, lung, and colorectal cancer which might indicate that the 70% target of cases diagnosed in stage I-II is not met.



- An analysis of adult patients from the Finnish Cancer Registry found that socioeconomic status is associated with cancer stage: the study estimated that patients (both men and women) with a high educational level had a 10-16% higher probability of being diagnosed at an early stage. A similar pattern was observed for different income levels (65).
- Another single-center study of Finnish lung cancer patients in 2007 to 2019 found that the proportion of patients diagnosed with stage IV lung cancer (59%) had not changed over time. This was stated to be one of the main reasons for the lack of improvement in lung cancer mortality in Finland (66).

Recommendations

- Overhaul the process of reporting the cancer stage in the Finnish Cancer Registry to achieve more complete registration and switch to TNM classification. This is needed to measure progress towards the early detection aim in the National Cancer Strategy and to allow for evaluation of early detection measures, including screening programs.
- Increase awareness of common cancer symptoms among the population, specifically targeting lower socioeconomic groups.

Early detection

Breast cancer screening

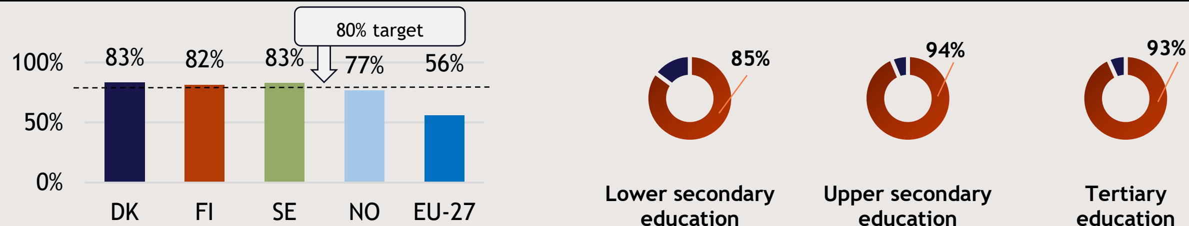
Background

- The goal of breast cancer screening is to detect a tumor as early as possible when it is still small and amenable to curative treatment (67). In early disease stages, survival rates are highest and treatment costs lowest (68).
- The EBCP includes the aim to invite 90% of the target population in each country for breast cancer screening by 2025 (1). Quality guidelines by the European Commission state that a breast screening participation rate above 75% is desirable (69). The updated screening recommendation by the Council of the EU from 2022 suggests that screening with mammography should be conducted in women aged 45–74 years (previously 50–69 years) (70).
- Finland implemented a national screening program for breast cancer in 1987 which expanded in 2007, targeting women aged 50-69 years who are invited by personal letter to take part in the screening program every two years. Since 2023, the wellbeing services counties bear the responsibility for the screening program (71). The National Cancer Strategy has the target of a 80% participation rate in all screenings programs and counties (5).
- In 2023, a modelling study was published, studying the cost-effectiveness of expanding the Finnish breast cancer screening program to the age group of 45-49 and 70-74 years (72). In 2025, the Finnish Cancer Registry found that expanding the target age group “is likely to produce net health benefits to acceptable costs” (73). In Åland, the screening has already been extended to 74 years in 2022 and to 45 years in 2023 (71).

Current status in Finland

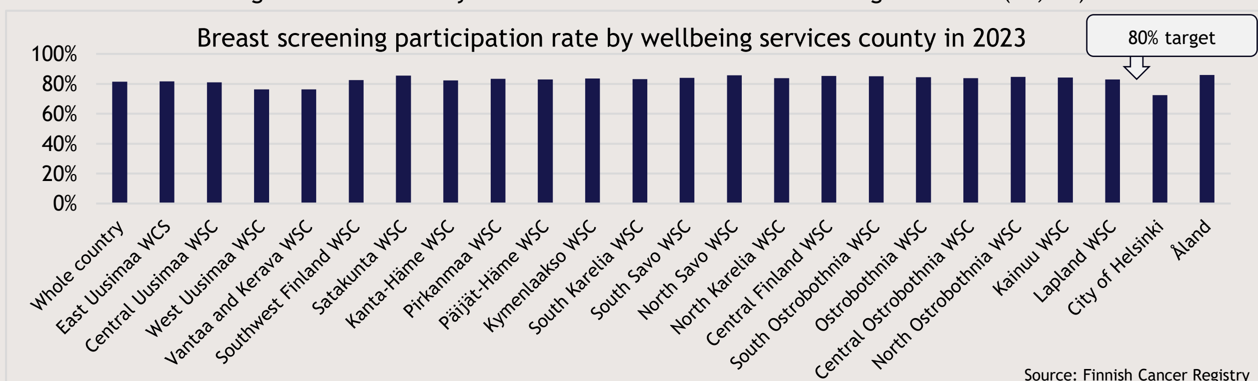
- Finland’s breast cancer screening participation rate in 2023 (82%) was similar to Sweden and Denmark (both 83%) and higher than Norway (77%) and the EU average (56%) (74). The Finnish participation rates have been stable at around 81-83% between 2013 and 2023 (75).

Breast cancer screening rate: 2023 program data & 2019 self-reported data by education (50-69 years)



Source: Eurostat

- In the annual report of the breast cancer screening program, differences in population groups with regard to employment, native language, and education level were reported (71). For example, the participation rate in women with Finnish/Swedish/Sami mother tongue was 82% in 2020-2021, but only 63% in other women. Self-reported Eurostat data from 2019 show that fewer women with a lower secondary education (85%) reported participating in mammography screening compared to upper secondary or tertiary education (94% and 93%, respectively) (76). A similar trend is observed between income levels (77).
- Moreover, there are regional differences in participation rates, varying from 72% in the City of Helsinki to 86% in Åland in 2023 (75). A quality manual was developed and published in 2024, aiming to facilitate consistent and effective screening across the country in order to balance outcomes at a regional level (71, 78).



Recommendations

- Address lower screening participation in underserved socioeconomic groups through targeted outreach.
- Expand the target age group of the screening program from 50-69 to 45-74 years, in line with the latest recommendation by the Council of the EU, the findings of the Finnish Cancer Registry, or to 46-74 years as aimed for in the National Cancer Strategy.

Early detection

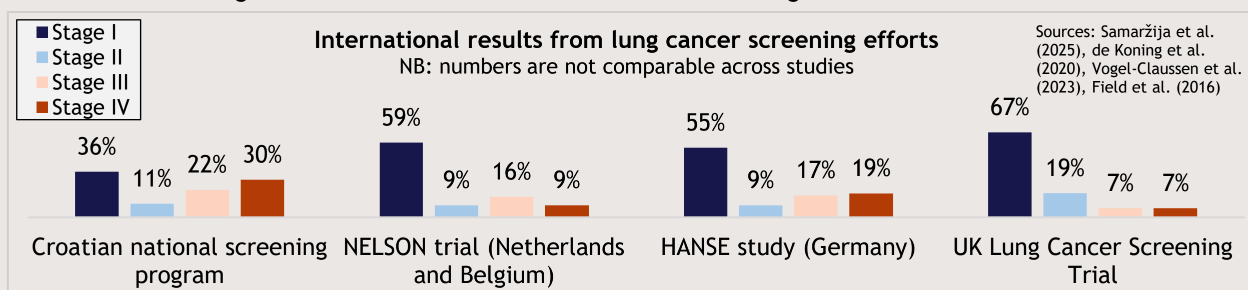
Lung cancer screening

Background

- The detection of lung cancer at earlier stages results in higher survival rates and lower treatment costs (63, 79). Due to the mild and non-specific symptoms of lung cancer in early stages, the disease is diagnosed at a metastatic stage in around 50% or more cases (80). Results from several randomized-controlled trials show that targeted screening of former and current heavy smokers with low-dose computed tomography (LDCT) leads to an extensive shift of patients to an earlier stage at detection and, subsequently, has the potential of reducing lung cancer mortality by at least 20% (81, 82). The number needed to be screened to avoid one cancer death has been estimated to be around 130-220 individuals, which is considerably lower in comparison with breast cancer (645-1724 individuals) (81).
- The updated screening recommendation by the Council of the EU from 2022 states that countries should explore the feasibility and effectiveness of LDCT to screen individuals at high risk for lung cancer, including heavy smokers and ex-smokers, and link screening with primary and secondary prevention approaches (70). Furthermore, EU countries are encouraged to conduct research on how to reach and invite the target group. To support the implementation and optimization of LDCT screening programs, a large EU project called SOLACE, funded under the EU4Health Program, is ongoing in multiple EU countries (82).
- Finland's National Cancer Strategy notes the aim to pilot an expansion of screening programs to lung cancer for long-term smokers in line with EU recommendations (5).

Current status in Finland

- Regional pilot studies have been conducted in all other Nordic countries (Denmark (83), Norway (84), Sweden (85)). Croatia is so far the only EU country with an ongoing national lung screening program since 2020 (86).
- In Finland, a first pilot study of lung cancer screening was carried out at Oulu University Hospital (LDCT-SC-FI) (87). Patients were recruited via newspaper, internet advertisements, and informing relevant healthcare units at hospital district in 2022-2023. Eligibility criteria included age 50-74 years, smoking history, an active smoking status, and access to a smart phone. Patients were randomized to different smoking cessation methods while undergoing lung cancer screening. The screening was performed with LDCT. Of the 200 patients included in the first screening round, two cases of cancer were detected. In the second round, four cancer cases among 196 participants were detected. Five of the detected cases (83%) were detected in stage I, while one case was detected in stage III. Recruitment channels for the LDCT-SC-FI study were considered to have worked well in the context of this study; however, due to the majority of participants joining voluntarily, there is a risk of bias of having included more health-conscious persons.
- A new randomized pilot study as part of the European Joint Action on Cancer Screening (EUCanScreen) project is planned to be implemented in Finland together with Hungary in 2026, covering 600 men and women in each country aged 50-75 who are smokers (88, 89).
- International experiences highlight the value of lung cancer screening in shifting the stage distribution towards earlier stages. The first results of Croatia's national screening program of almost 35,000 screened participants from 2020-2024 indicate that 46.5% of lung cancer cases were diagnosed in stage I or II and only 29.5% in stage IV (90). Similar benefits have been observed in the NELSON trial (91), the German HANSE study (92), and the UK Lung Cancer Screening Trial (93). While methodologies and settings vary, making direct comparisons challenging, there is mounting evidence of substantial benefits of LDCT screening.



Recommendations

- Consider if the evidence gathered in the LDCT-SC-FI study together with international experiences of (cost)effectiveness are enough to establish a nationwide screening program. For successful implementation, ensure adequate resources and infrastructure to handle screenings and follow-up care, launch educational campaigns to raise awareness about LDCT screening, engage primary care physicians to ensure high participation as well as cross-referrals from other screening programs if the person smokes/smoked.

Diagnosis and treatment

Clinical guidelines, pathways & waiting times

Background

- Regularly updated national clinical guidelines are essential to ensure equal access to standard care countrywide and to support healthcare providers in using the latest diagnostic and treatment technologies (80). Such guidelines should be based on systematic reviews of evidence and serve as a quality assurance tool to optimize patient care, reduce practice variation, and promote effective and cost-efficient use of interventions (94). The European Society for Medical Oncology (ESMO) provides clinical practice guidelines for a large number of cancer types that are regularly updated and widely used and adopted in EU countries (95, 96).
- Similar to clinical guidelines, standardized cancer care pathways are a governance tool to support the care process and make it more equitable across a country as well as to reduce waiting times and improve timely diagnosis and access to treatment which helps to improve the quality of cancer care (97, 98). The European Cancer Organisation recommends that clear care pathways should be defined to mitigate delays and improve early detection and treatment outcomes (99).
- Finland's National Cancer Strategy contains the aims to implement a national system for treatment recommendations and to establish national care pathways for cancer types in order to achieve equitable, high-quality, and effective care for patients (5). Regarding waiting times, the strategy defines the goal of patients receiving treatment within target times (timelines as defined by THL – Finnish Institute for Health and Welfare).

Current status in Finland

- In Finland, care guidelines are usually developed and maintained by multidisciplinary expert groups (100). The Finnish Cancer Center (FICAN) provides a list of available cancer treatment guidelines (100). There is however some inconsistency regarding the publication of guidelines – while some guidelines are publicly accessible, others, such as for lung cancer (101), are not. In contrast, in Denmark (102), Norway (103), and Sweden (104-106), treatment guidelines are issued by cancer type, published online, and updated regularly.
- Standardized care pathways have not been implemented consistently throughout Finland, with variations across wellbeing services counties in general availability (usually publicly available) and for which cancer types. In contrast, other Nordic countries have established standardized care pathways on a national level. In Denmark (102), Norway (103, 107), and Sweden (105, 106), these are also publicly available.
- THL oversees access to care services and sets general waiting time targets that are relevant also to cancer care. For an appointment in primary/outpatient care, the target is 14 days (108), while for cancer, the assessment of the need for treatment must begin within 21 days of the referral arriving at the hospital or other unit providing specialized medical care in the hospital district, and the necessary treatment must begin within 180 days of the assessment of the need for treatment (109, 110). Around 600-700 cancer patients corresponding to fewer than 2% of cancer patients exceeded the 180-day limit during 2024 (111). Some wellbeing services counties publish their own statistics online, but they group all cancers together with no split by cancer type (112, 113).
- Taking the example of lung cancer, Finland was found to have the longest waiting times in the Nordic countries in a study published in 2025, with 14 days to schedule an appointment at a primary care unit, two to four weeks for a specialist consultation after an initial GP visit, and another four weeks until diagnosis (114). The median time from diagnosis to start of treatment for patients treated during the first six months was 36-38 days in 2018-2022 in Finland according to registry data (115).

Waiting times in lung cancer care Source: Khalife et al. (2025) (114)	Denmark	Finland	Norway	Sweden
Secure an appointment at the health center for patients with symptoms (in days)	2 to 7	14	2 to 7	2 to 7
Specialist consultation after initial visit to a GP (in weeks)	1 to 2	2 to 4	1 to 2	1 to 2
Diagnosis after specialist consultation (in weeks)	2 to 4	4	2 to 4	4

Recommendations

- Ensure that care guidelines are updated on a regular basis – going hand in hand with the availability of new diagnostic tests and treatments – and made publicly available for all cancer types as in other Nordic countries. Consider also publishing easier patient-friendly versions of the guidelines.
- Establish national standardized cancer care pathways to reduce regional differences in cancer care and integrate waiting time targets in the pathways as in other Nordic countries.
- Reduce delays in cancer care by systematically following up waiting time statistics on a national level and by identifying and addressing root causes of prolonged waiting times by wellbeing services county.

Diagnosis and treatment

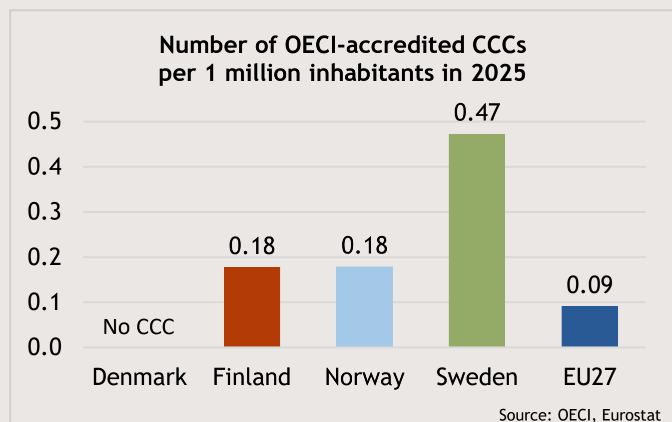
Comprehensive cancer centers

Background

- A comprehensive cancer center (CCC) is often characterized by its organizational quality, multidisciplinarity, and integration of research into clinical care (translational research) (116). Patients diagnosed and treated in specialized cancer centers (including, but not limited to CCCs) generally have better access to advanced diagnostics, therapies and clinical trials, seeing better outcomes than those treated in general hospitals (117).
- There is currently no "universal definition" of a CCC. The Organisation of European Cancer Institutes (OECI) facilitates the accreditation of CCCs by means of quality standards which represent the European consensus for evaluating the performance of cancer centers (116). At the EU policy level, the OECI Accreditation and Designation (A&D) system is the most widely acknowledged and is therefore used here for benchmarking. Nevertheless, it should be noted that ESMO also offers an accreditation program that recognizes centers providing highly integrated oncology and palliative care services (118), and some countries might solely rely on national accreditation systems, complicating international comparisons.
- The EBCP sets a target that by 2030, 90% of eligible patients should have access to national CCCs linked through a new EU-wide network, aimed at facilitating the uptake of quality-assured diagnosis and treatment (1). To support this goal, the EUnetCCC Joint Action was launched in October 2024 and is expected to run until September 2028, with the objective of establishing a network of certified CCCs across member states, including the development of a common EU certification scheme (119).
- Finland's National Cancer Strategy refers to the 90% target of the EBCP, but it only specifies that access to cancer centers (CCs) or CCCs (both defined according to OECI classification) are part of the sub-goal focusing on nation treatment recommendations and care pathways (5).

Current status in Finland

- Finland had one hospital – Helsinki University Hospital Comprehensive Cancer Center – that has been accredited as a CCC through the OECI A&D program as of October 2025 (120). This places Finland on an equal level with Norway, which also had one CCC, corresponding to 0.18 CCCs per 1 million inhabitants (120, 121). Sweden had 5 CCCs and one more in the accreditation process, with the aim to have one CCC in each of the six specialized healthcare regions to ensure geographic accessibility.
- There are also three OECI-accredited CCs in Finland – Turku University Hospital Cancer Centre, Tampere University Hospital Cancer Centre, and Kuopio University Hospital Cancer Centre. In addition, Oulu University Hospital is currently in the accreditation process (120).



OECI-affiliated cancer centers by country (October 2025)				
	Number of CCCs	**Number of CCs**	**In accreditation**	**Source**
Denmark	0	1	3	OECI (120)
Finland	1	3	1	
Norway	1	0	2	
Sweden	5	0	1	

Recommendations

- Establish a roadmap of actions required to upgrade the remaining four university hospitals from "cancer centers" to "comprehensive cancer centers" until 2030.
- Ensure that new CCCs or CCs reflect geographic aspects and equitably meet the needs of cancer patients in all parts of Finland. This will also require establishing referral pathways between CCs/CCCs and other hospitals or healthcare facilities that are linked to them (see previous indicator).

Diagnosis and treatment

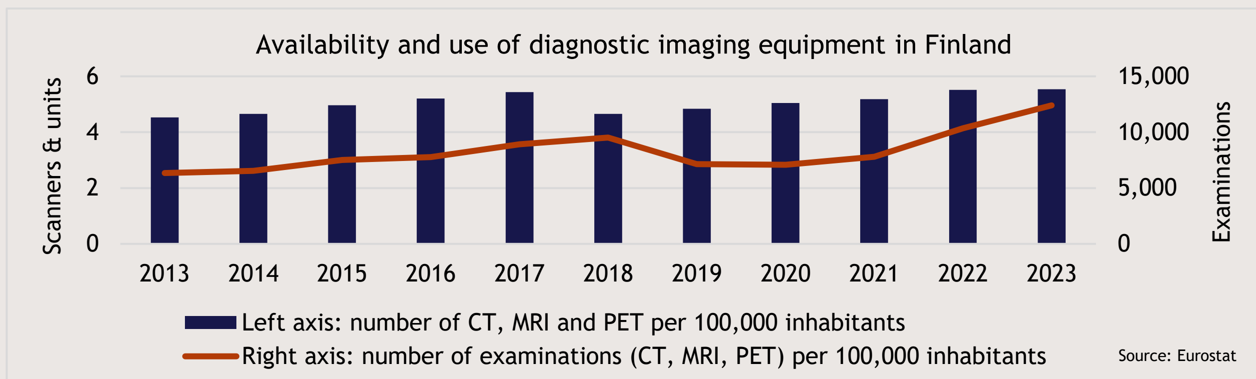
Diagnostic imaging equipment

Background

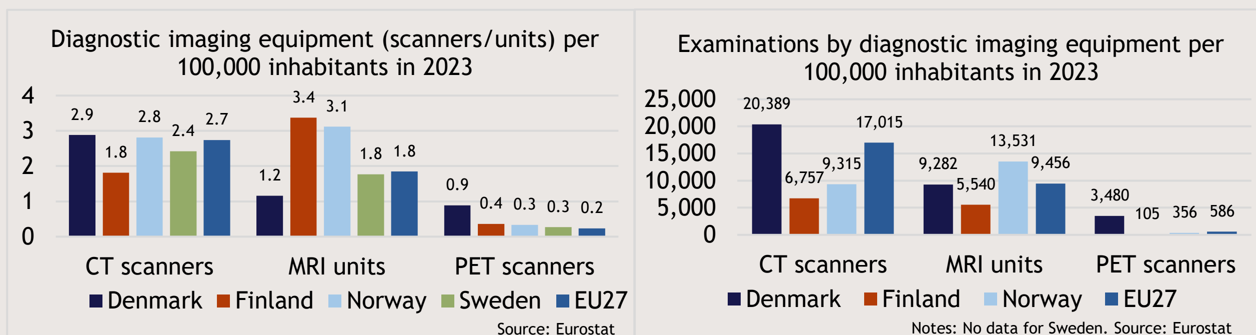
- Imaging equipment such as computed tomography scanners (CT), magnetic resonance imaging units (MRI), and positron emission tomography scanners (PET) are required throughout the cancer care journey including diagnosis, treatment, and follow-up to ensure accurate management decisions and optimal outcomes (122). The investment costs for scanners are high, and they require specialized medical personnel to operate them, which naturally restricts their availability. General guidelines or benchmarks regarding the ideal number of scanners per inhabitant or cancer patient do not exist (123). An undersupply of scanning units may lead to access problems in terms of geographic proximity and/or waiting times.
- Finland's National Cancer Strategy mentions "new imaging technologies" and an aim to strengthen national cooperation in significant equipment procurement, but there are no quantitative targets relating to the availability or use of diagnostic imaging equipment (5).

Current status in Finland

- The availability of diagnostic imaging equipment in Finland increased up until 2017 after which the numbers decreased but then rebounded and peaked at 5.5 CT, MRI, PET scanners or units per 100,000 inhabitants in 2023 (124). The number of annual examinations followed a similar trend, increasing until 2018 but then dropping and rebounding and reaching a highest high of 12,400 examinations per 100,000 inhabitants in 2023 (125).



- Looking at the composition of equipment, the number of CT scanners per 100,000 inhabitants in Finland was lowest in the Nordic countries and 34% below the EU average in 2023 (124). However, Finland had 83% more MRI units and 57% more PET scanners per 100,000 than the EU-average. The examinations performed with the available equipment in Finland appear to be relatively low compared to Denmark, Norway, and the EU average (125). Specifically, Finland recorded 60% fewer CT scans, 41% fewer MRIs, and 82% fewer PET scans per 100,000 inhabitants than the EU-average in 2023.
- In a comparative study of lung cancer care in the Nordic countries, Finland distinguished itself from the other countries through the lack of CT scanners in primary care (114). While in Finland fewer than 10% of primary care units could perform CT scanning, the equivalent numbers were about 90-100% in the other countries. The study suggested that the lack of availability was due to the relatively lower healthcare funding in Finland.



Recommendations

- Increase the number of CT scanners, particularly in primary care, while ensuring sufficient personnel to operate equipment and interpret results. This should reduce waiting times and strengthen early diagnosis capabilities.
- Review current use patterns to understand why equipment availability does not translate into examination volumes comparable to other Nordic countries. Optimize workflows, staffing models, and integration of imaging into care pathways, including the use of AI-assisted analysis, to enhance efficiency and reduce diagnostic delays.

Diagnosis and treatment

Biomarker testing

Background

- Biomarker testing is part of the diagnostic process of cancer care. It identifies the molecular characteristics of a tumor and helps select appropriate treatments. Nearly half (47%) of new medicines for solid tumors approved by the European Medicines Agency (EMA) in 2015-2020 were linked to a biomarker (126). While single-biomarker tests (e.g., immunohistochemistry for hormone receptors in breast cancer) have been standard for decades, they have become impractical in cancers with multiple actionable targets (e.g., lung cancer). Multi-biomarker testing, specifically with next-generation sequencing (NGS) technology, analyzes several biomarkers in parallel rather than sequentially and is increasingly becoming standard of care (127).
- The EBCP's flagship initiative "Cancer Diagnostic and Treatment for All" includes several action plans and advocates the use of NGS (1). The overall intention is to improve cancer diagnosis and treatment through personalized medicine and the use of the latest innovations in cancer care. The European Society for Medical Oncology (ESMO) issued its first recommendation for routine use of NGS in 2020 for advanced-stage tumors in non-squamous non-small cell lung cancer and cancers of the prostate, ovaries, bile duct, and colon (128). In 2024, ESMO extended this recommendation to advanced-stage breast cancer and several rare cancers (129).
- The National Cancer Strategy wants Finland to become a leader in personalized medicine and aims to create national recommendations on the scope and methods of molecular diagnostic testing to ensure that testing is equitable for all patients and based on uniform criteria. These recommendations will be part of regularly updated national treatment guidelines (5).

Current status in Finland

- In an international survey conducted by ESMO in 2021, medical oncologists and pathologists in different countries informed about the availability of various testing methods for different cancer types in their respective countries (130). The study found that in lung cancer care in Finland, single-biomarker testing with immunohistochemistry (IHC) was "usually" available, while polymerase-chain reaction (PCR) was "never" available. Access to smaller panels with small NGS (i.e. <50 genes) was "usually" conducted while large NGS panels (i.e. >50 genes) were "occasionally" conducted. Compared to other Nordic countries, advanced technologies had the same availability, while single-biomarker tests had more limited availability in Finland.

Availability of testing methods in lung cancer (end of 2021)

	IHC	PCR (single gene)	Small NGS (<50 genes)	Large NGS (>50 genes)
Denmark				
Finland				
Norway				
Sweden				

Source: Bayle et al. (2023). Color code: Green=Always; Blue=Usually; Orange=Occasionally; Red=Research; Black=Never.

- The same ESMO-led study also examined testing availability in breast cancer care (130). While IHC was "always" available, there was varying availability for PCR testing (in Finland it was "never" available). The availability of NGS testing methods was "occasional" in all countries except Denmark which used larges NGS panels more often.

Availability of testing methods in breast cancer (end of 2021)

	IHC	PCR (single gene)	Small NGS (<50 genes)	Large NGS (>50 genes)
Denmark				
Finland				
Norway				
Sweden				

Source: Bayle et al. (2023). Color code: Green=Always; Blue=Usually; Orange=Occasionally; Red=Research; Black=Never.

- Another international study found that the percentage of biopsies analyzed using NGS technology varied widely in Europe in 2020, with a rather low use reported for Finland (17% of biopsies) compared to Sweden (33%) and Denmark (50-75%) (131).

Recommendations

- Expand the diagnostic infrastructure in hospitals or improve external partnerships with private laboratories to perform NGS tests, with the aim to accelerate biomarker testing and pathological assessment and consequently clinical decision on treatment.
- Ensure the wider use of NGS testing in cancer types with a clear ESMO recommendation by adding them to clinical guidelines.

Diagnosis and treatment

Novel cancer medicines

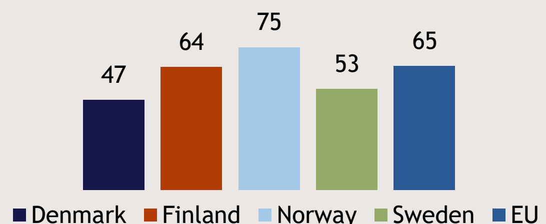
Background

- Novel cancer medicines introduced over the past decade have transformed treatment standards across many cancer types. Between 2015 and 2024, the EMA approved 116 new cancer medicines, reflecting a rapid pace of innovation in oncology (13). These medicines primarily include targeted therapies, which focus on specific mutations that drive tumor growth, and immunotherapies, which enhance the immune system's ability to attack cancer cells.
- The regulatory approval by EMA or the local reimbursement by the Pharmaceuticals Pricing Board (Hila) for outpatient medicines and the national use recommendation by the Council for Choices in Health Care in Finland (PALKO) for hospital medicines does not guarantee that patients are prescribed these medicines. Previous research indicates that, e.g., many lung cancer patients across Europe continue to receive outdated treatment regimens despite the availability of newer and guideline-recommended therapies (80). The real-world use of novel medicines depends on downstream factors such as diagnostic capacity, infrastructure, clinical guidelines, and prescribing culture. Measuring uptake is therefore essential to understanding whether new treatments reach patients, enhance care, and improve patient outcomes. However, cross-country comparisons remain challenging, as few countries systematically collect and report real-world treatment data (132).
- Finland's National Cancer Strategy aims to create a single-channel process for timely and high-quality evaluation of new cancer medicines and extensions of indications (5). A national price negotiation mechanism, conditional introduction, and collection of effectiveness data and risk-sharing models are also aimed for.

Current status in Finland

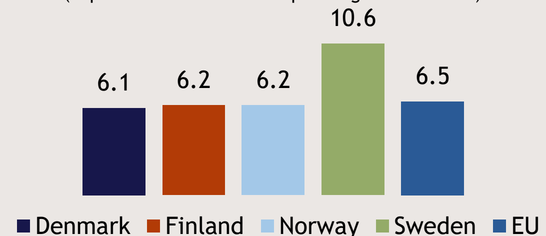
- According to the latest IHE Comparator Report on Cancer in Europe, the uptake of novel cancer medicines – measured in standard weekly doses (SWD; sold volumes in milligrams standardized by the recommended dosage) – differed widely across European countries in 2023 (13). Of 27 countries, Finland ranked in 13th place (at a 51% uptake level compared to the theoretical maximum of 100%), behind Sweden (6th place; 57%) and the European average uptake level of 54%, but before Norway (14th place; 49%) and Denmark (16th place; 45%).
    - For targeted medicines in breast cancer, the uptake in Finland was 64 SWD per breast cancer death. This was higher than Denmark (47 SWD) and Sweden (53 SWD), but lower than Norway (75 SWD) and on par with the European average (65 SWD).
    - For targeted medicines in lung cancer, Finland's uptake was 6.2 SWD per lung cancer death. This was below the European average (6.5 SWD) and well behind Sweden (10.6 SWD), but similar to Denmark (6.1 SWD) and Norway (6.2 SWD).
    - For immune checkpoint inhibitors, which are used in many cancer types including breast and lung cancer, the uptake in Finland was 1.2 SWD per cancer case. This was only a third of the average uptake in Europe (3.6 SWD). Even compared to other Nordic countries, Finland had only around half their use of these medicines and ranked overall in third last place of the 27 countries included.
- The Finnish uptake pattern in 2023 largely mirrors the situation in 2018 that was assessed in a previous report (133). The uptake of targeted medicines in breast and lung cancer in Finland was at a comparatively high level and similar as in the other Nordic countries, whereas the use of immune checkpoint inhibitors was one of the lowest in Europe.

Uptake of targeted medicines in breast cancer in 2023
(expressed as sales in SWD per breast cancer death)



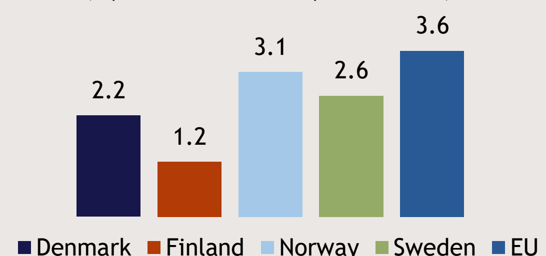
Notes: SWD = standard weekly doses. Source: Manzano et al. (2025)

Uptake of targeted medicines in lung cancer in 2023
(expressed as sales in SWD per lung cancer death)



Notes: SWD = standard weekly doses. Source: Manzano et al. (2025)

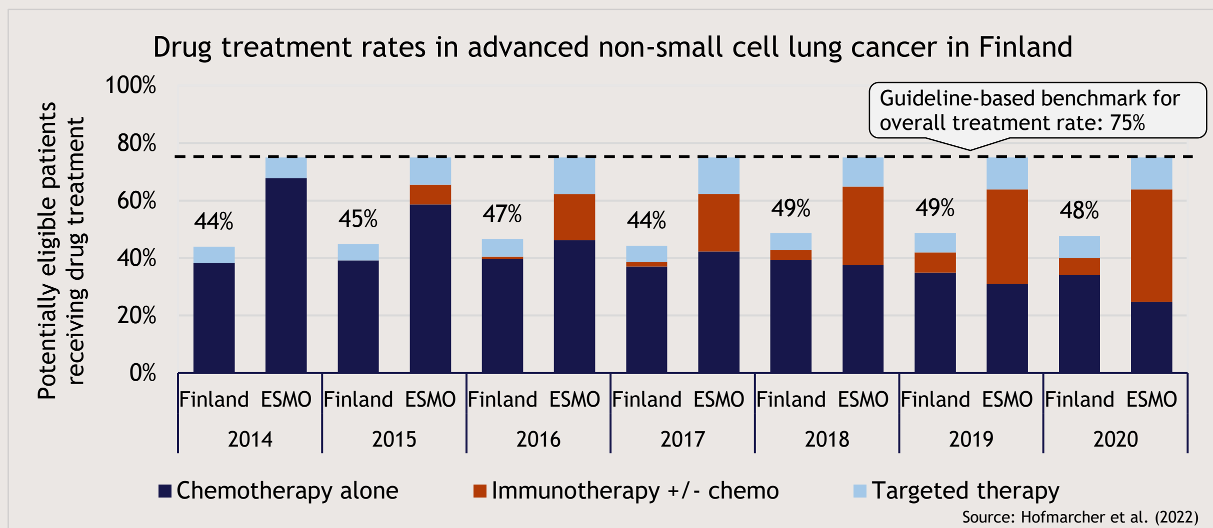
Uptake of immune checkpoint inhibitors in 2023
(expressed as sales in SWD per cancer case)



Notes: SWD = standard weekly doses. Source: Manzano et al. (2025)

Example: Treatment patterns in lung cancer

- Lung cancer, and specifically advanced-stage non-small cell lung cancer, has over the last 15 years seen the introduction of dozens new cancer medicines – immunotherapies and targeted therapies – which have largely replaced the sole use of chemotherapy (80).
- In Finland, the drug treatment rate – defined as the proportion of potentially eligible patients receiving systemic anti-cancer therapy – in advanced non-small cell lung cancer (aNSCLC) was estimated to be 44% in 2014 and have increased to 48% in 2020 (80, 134). This treatment rate fell considerably short of the ESMO-guidelines-derived benchmark of 75% for patients (those with ECOG performance status 0-2). In 2020, the estimated treatment distribution was 34% chemotherapy, 6% immunotherapy (with or without chemotherapy), and 8% targeted therapy, which was greatly diverging from ESMO recommendations of around 25%, 39%, and 11%, respectively.
- The results of the aforementioned treatment-rate study align with results from a cohort study conducted among Finnish NSCLC patients that examined treatment practices between 2014 and 2018 (135). The authors found that although the use of chemotherapy and immunotherapy had increased (from 29% to 41% and from 0.8% to 8%, respectively), the rate of use of newer immunotherapies was low. The authors of the Finnish study ascribed the increase of use in immunotherapy treatments to an increased clinical trial activity as well as a more widely adopted used of new medicines in routine practices.
- The challenges in adopting immunotherapy on a broader basis in Finland, and specifically in lung cancer, means that patients have to rely on older, less effective treatment options that are no longer recommended in international guidelines, such as by ESMO. Since the use of immunotherapy is especially important in lung cancer for the vast majority of patients – previously only in the metastatic setting but nowadays also in the early-stage setting – the lack of use in Finland might partly explain why Finnish survival rates in lung cancer have fallen so much behind the other Nordic countries (see "Survival" in the section "Disease burden of cancer").



Recommendations

- Accelerate the adoption of immunotherapy and targeted therapies in line with international clinical guidelines.
- Systematically monitor and publish real-world treatment patterns across all cancer types and treatment settings to ensure standard-of-care therapies reach all eligible patients and help close the gap between clinical guidelines and clinical practice.

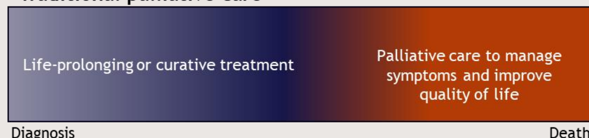
Survivorship

Palliative care services

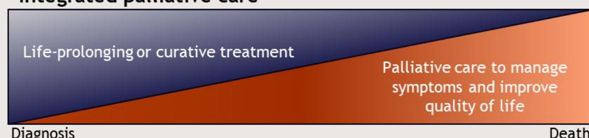
Background

- In 2024, almost a quarter (24%) of Finland's population was aged 65 or older (136). This share has increased every year since 2004 (16%), reflecting a sustained trend of population aging and pointing to a growing demand for palliative care (PC) services.
- Cancer is the most frequent cause of need for PC among life threatening or life-limiting health conditions (137). Within oncology, PC has traditionally had a strong focus at the end of life, but more recently there is a shift of integrating it earlier in the disease pathway (138).

Traditional palliative care



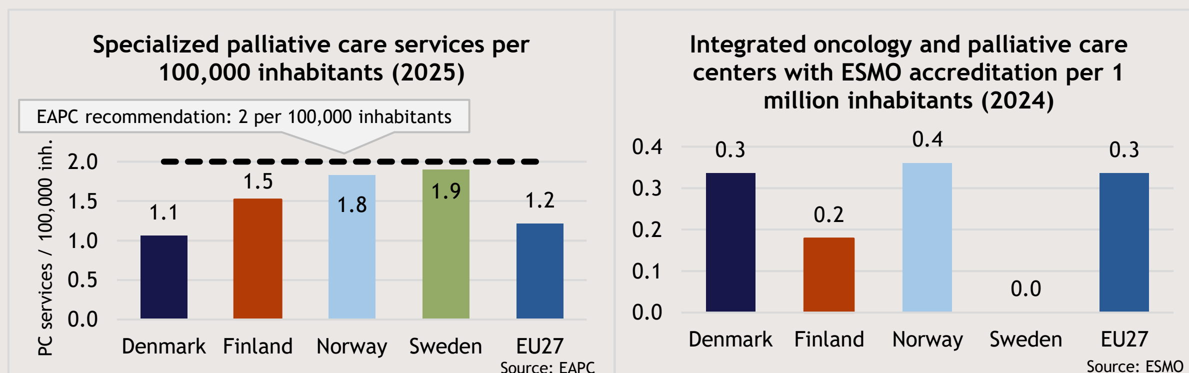
Integrated palliative care



- The availability of PC services in a country is one metric to assess the capacity and potential access to PC. Another metric is the degree to which PC is integrated with the overall healthcare system (139). The European Association for Palliative Care (EAPC) recommends two specialized PC services per 100,000 inhabitants (140).
- In Finland's National Cancer Strategy, one of the main themes is the improvement of the quality of life of cancer patients and survivors. Rehabilitation, psychosocial support, health-related social work, and palliative care are supposed to be established parts of the cancer patient's care pathway and equitably available (5).

Current status in Finland

- In 2017, the Ministry of Social Affairs and Health issued recommendations on the organization of palliative and end-of-life care (141). According to these recommendations, PC is to be organized in three levels: hospice care units at the basic level, special level, and demanding special level (141, 142). It is expected that the majority of patients will receive care at the basic level, with only one third requiring specialized PC (142).
- The Ministry has further issued a development program for 2021-2024 for PC with the aim of securing and supporting end-of-life care. The program's final report describes the great progress made in increasing PC capacity, but it also notes that PC centers are only established in three quarters of the wellbeing services counties. Other highlighted challenges are the lack of resources in the hospital at home service (*kotisairaala*), particularly in sparsely populated areas, as well as competence development within PC services (143).
- According to the EAPC, Finland has approximately 1.5 specialized (non-cancer-specific) PC services per 100,000 inhabitants in 2025, more than a doubling from 0.7 in 2019 (137, 140). This puts Finland above the EU average (1.2) but below the EAPC recommendation of 2 per 100,000. Among comparator countries, Sweden comes closest to meeting the EAPC recommendation (1.9), followed by Norway (1.8).
- Based on a voluntary ESMO accreditation system of cancer centers, a comparison of the integration of PC with oncology care can be made. At present, Finland has one Integrated Oncology and Palliative Care Center in Joensuu, corresponding to 0.2 centers per one million inhabitants in 2024 (118). This is below the EU average of 0.3 as well as Norway (0.4) and Denmark (0.3), while Sweden does not have any accredited centers.



Recommendations

- Ensure the integration of palliative services into cancer care and their equitable availability countrywide, as laid out in the National Cancer Strategy, and align national efforts with the EAPC recommendation of two specialized PC services per 100,000 inhabitants.
- Ensure an adequate and well distributed PC workforce to meet the growing demand from an aging population and to support person-centered delivery of PC across all settings.

Survivorship

Access to financial services ("Right to be forgotten")

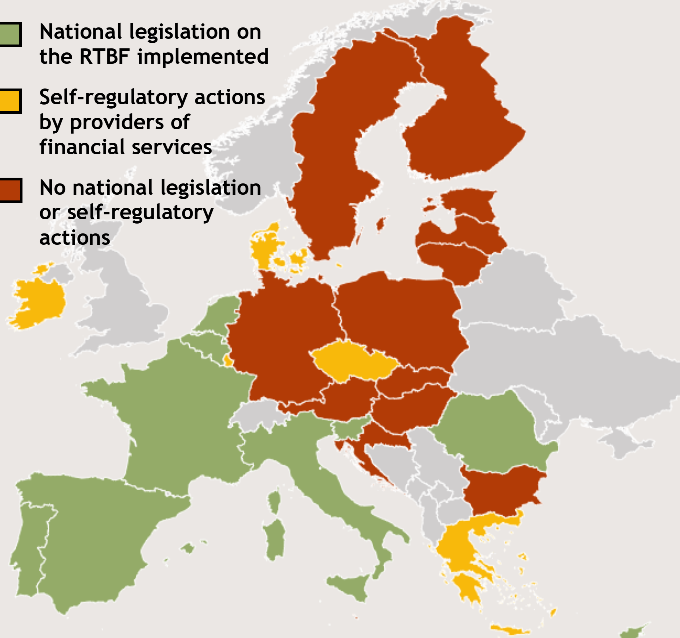
Background

- There are considerable challenges for cancer survivors to return to a normal lifestyle after defeating the disease. One obstacle is access to financial services such as health insurance, loans, and mortgages on equal terms with people who never had cancer, if cancer survivors are forced to disclose their previous cancer diagnosis (144). The challenge is especially pressing for childhood cancer survivors and adolescents and young adults (AYAs) survivors. To improve access to financial products for cancer survivors, the concept of the "right to be forgotten" (RTBF) was introduced. The concept implies that cancer survivors – after a certain number of years after treatment completion – do not have to report their cancer history when applying for financial products (145).
- The EBCP acknowledges that because of their medical history, cancer survivors may experience unfair treatment in accessing financial products (1). It states that the European Commission would work with relevant stakeholders to address access to financial products for cancer survivors and engage in dialogue with businesses to develop a code of conduct for business practices of financial service providers (1).
- Finland's National Cancer Strategy aims to identify and meet financial support for cancer patients through social security and health-related social work, and it also aims to clarify the need for regulatory changes related to cancer patients' access to loans and insurances (i.e., legislation on the RTBF) (5).

Current status in Finland

- As of December 2024, nine EU countries have adopted national legislation granting cancer survivors the RTBF under clear legal terms (146). The required period after treatment completion varies by country, from 5 years in Belgium, France, and Spain, to 7 years in Romania and Slovenia, and up to 10 years in Cyprus, Italy, the Netherlands, and Portugal. Most countries also apply shorter timeframes for childhood or adolescent cancer survivors. An additional five EU countries have adopted non-legislative frameworks, either in the form of self-regulatory codes of conduct or formal conventions between governments and insurers (146).
- Finland, like Norway and Sweden, has not taken any initiative for policies of access to financial products for cancer survivors as of December 2024 (146, 147). In contrast, Denmark has adopted a self-regulatory approach. This includes an implementation of self-regulatory policies that provide options for individuals with a history of cancer to access financial products under certain circumstances (146).
- EU legislation on the RTBF has progressed somewhat since the publication of the EBCP. A revision of the Consumer Credit Directive came into force on November 19, 2023 (Directive (EU) 2023/2225) (148). It introduces the RTBF for consumer credits that applies for cancer survivors who completed their medical treatment more than 15 years ago. All EU countries need to apply these rules at the latest by November 20, 2026.

Policies of access to financial products for cancer survivors in the EU (in December 2024)



Recommendations

- Ensure implementation of the RTBF provisions outlined in Directive (EU) 2023/2225, ensuring equal access to consumer credits for cancer survivors and compliance with EU obligations.
- Consider introducing a legal bill for a more wide-ranging application of the RTBF to financial services for cancer survivors and at the same time establish a national oversight mechanism to monitor and ensure compliance with RTBF legislation by financial service providers.

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Appendix: Methodology and sources for indicators

Indicator	Methodology and sources
Governance	
National cancer plan	Analysis of the National Cancer Strategy 2026-2035 (5). **For dashboard overview:** Presence of a national cancer plan in 2025 (yes = at benchmark).
Disease burden	
New cases (incidence) Deaths (mortality)	1st, 2nd, 3rd, 4th graph: Finnish Cancer Registry (7). 5th graph: Nordcan for countries and ECIS for EU27 with data for 2022 (8, 9). 6th graph: Nordcan for Finland for 2008-2022 (9), Ferlay et al. (2010, 2013, 2018) for EU in 2008-2018 (149-151) and ECIS for 2022 (8), and ECIS for all in 2025-2040 (10). **For dashboard overview:** • Incidence crude rate per 100,000 inhabitants in 2023, All sites but non-melanoma skin, All ages, Both sexes (8, 9). • Mortality crude rate per 100,000 inhabitants in 2023, All sites but non-melanoma skin, All ages, Both sexes (8, 9).
Survival rates	1st-8th graph: Nordcan (9). Five-year age-standardized relative survival rates. 1st and 2nd graph show “All sites but non-melanoma skin cancer”. **For dashboard overview:** Mean of the five-year age-standardized relative survival rates of “All sites but non-melanoma skin cancer” in men and women in 2019-2023 (9).
Economic burden	
Health spending on cancer Productivity losses from cancer	Data on the economic burden of cancer in Finland in 2018 were sourced from Hofmarcher et al. (2020) (12). Data on the healthcare and cancer care expenditure as well as the cost of lost productivity among working-age patients in 2023 were sourced from Manzano et al. (2025) (13); values for 2000 to 2020 are unpublished data from Manzano et al. (2025) (13). **For dashboard overview:** • Healthcare spending on cancer per capita in EUR in 2023 (PPP-adjusted) (13). • Productivity losses from cancer per capita in EUR in 2023 (PPP-adjusted) (13).
Prevention	
Tobacco smoking	1st graph: Eurostat (26). Daily smokers of cigarettes by sex, age and educational attainment level. Specifications: Daily smokers total, all education levels, all sexes, 2014 and 2019. 2nd graph: THL (28). Percentage of daily smokers 20–64-year-olds by sex and age. 3rd graph: Tax Foundation (29). Excise Duties on Cigarettes in EU Member States as of July 1, 2024. Specifications: 2024 tax, 2023 retail prices. Total tax includes excise duty and VAT. All numbers are for a 20-pack of cigarettes. **For dashboard overview:** Prevalence of daily smokers among adults in 2019 (26).
Overweight and obesity	1st & 2nd graph: WHO (41, 42). Prevalence of overweight among adults aged 18+, BMI ≥ 25 (age-standardized estimate) (%) and Prevalence of obesity among adults aged 18+, BMI ≥ 30 (age-standardized estimate) (%). Specifications: Both sexes, 2013-2022, %. Unweighted EU average. 3rd graph: Eurostat (45). Body mass index (BMI) by sex, age and educational attainment level. Specification: % obese & overweight, all sexes, 2019. **For dashboard overview:** Prevalence of obesity in adults in 2022 (42).
HPV vaccination	1st graph: WHO (58). Human Papillomavirus (HPV) vaccination coverage. Specification: HPV vaccination program coverage, last dose, females. Unweighted EU average. 2nd & 3rd graph: THL (59). Vaccination coverage rate by birth cohort. Specifications: 1st dose for girls and boys. **For dashboard overview:** HPV vaccination program coverage, last dose, girls in 2024 (58).
Early detection	
Stage at diagnosis	1st graph: Finnish Cancer Registry (7). Diagnosed cancer cases by cancer stage in 2019-2023. **For dashboard overview:** Not evaluable due to the large proportion of “unknown” stage (7).
Breast cancer screening	1st graph: Eurostat (74). Specification: Preventive cancer screenings - programme data; Malignant neoplasm of breast; Females. Numbers show the share of women who have been screened for breast cancer within the past two years (or per national screening interval), presented as a proportion of those eligible for an organized programme in the given country. Data unavailable for BG, PT, and RO. Unweighted EU average. 2nd graph: Eurostat (76). Specification: Self-reported last breast examination by X-ray among women by age and educational attainment level; Finland; age 50-69 years; within "less than 2 years"; All ISCED 2011 levels; percentage; 2019. 3rd graph: Finnish Cancer Registry (75). Screening statistics - Breast cancer screening. 2025. **For dashboard overview:** Breast cancer screening rate in 2023 (74).
Lung cancer screening	1st graph: Data from Croatia's national lung cancer screening program do not show 2.5% of cases with unknown stage information (90); Data from the NELSON trial (91); the HANSE study (92); and the UK Lung Cancer Screening Trial (93).

	For dashboard overview: No comparable data due to the small sample of the regional pilot program.
Diagnosis and treatment	
Clinical guidelines, pathways & waiting times	Table: Waiting times as reported by Khalife et al. (2025) (114). **For dashboard overview:** Waiting times – set to 50% below the benchmark of the best-performing Nordic country considering the variation across various waiting times and roughly double waiting times in Finland (114).
Comprehensive cancer centers	1st graph: Number of centers based on OECI membership status (120). For calculations of numbers per 1 million inhabitants, Eurostat population data were used (121). Table: OECI (120). Number of OECI-affiliated centers as of October 2025. **For dashboard overview:** Number of OECI A&D CCCs per 1 million inhabitants in 2025 (120).
Diagnostic imaging equipment	1st graph: Data from 2nd and 3rd graphs. See below. 2nd graph: Eurostat (124). Devices for medical imaging. Specification: Hospitals and providers of ambulatory health care; Computed Tomography Scanners, Magnetic Resonance Imaging Units, and PET scanners; per 100,000 inhabitants. For countries missing data for "Hospitals and providers of ambulatory health care", either data for "Hospitals" or "Providers of ambulatory health care" were used. Unweighted EU average. 3rd graph: Eurostat (125). Medical technologies - examinations by medical imaging techniques (CT, MRI and PET). Specification: Hospitals and providers of ambulatory health care; per 100,000 inhabitants. For countries missing data for "Hospitals and providers of ambulatory health care", either data for "Hospitals" or "Providers of ambulatory health care" were used. Unweighted EU average with missing data for Ireland and Sweden. **For dashboard overview:** Sum of the number of CT, MRI, PET scanners per 100,000 inhabitants in 2023 (124).
Biomarker testing	1st & 2nd table: Bayle et al. (2023) - supplemental material (section 2.2) (130). **For dashboard overview:** Percentage of biopsies analyzed using NGS technology in 2020, using 62.5% as the benchmark given the interval data for Denmark (131).
Novel cancer medicines	1st, 2nd, 3rd graph: Manzano et al. (2025) (13). Uptake is measured as standard weekly doses (SWD), defined as sold milligrams of medicines standardized by the recommended dosage. SWD were divided by the number of "cancer cases" per country, where "cancer cases" refer to breast cancer deaths (1st graph), lung cancer deaths (2nd graph), and incidence of all cancers excl. non-melanoma skin cancer (3rd graph). For a detailed explanation of methodology, see section 4.6 in the source report (13). 4th graph: Data were sourced from Hofmarcher et al. (2022) (80, 134). **For dashboard overview:** Overall uptake level of novel cancer medicines in % of the theoretical maximum in 2023 (13).
Survivorship	
Palliative care services	1st graph: EAPC Atlas of Palliative Care (137). Palliative care specialised services per 100,000 inhabitants, p.71. Unweighted EU average. 2nd graph: ESMO website (118). ESMO Accredited Designated Centers. Population data were sourced from Eurostat (121). **For dashboard overview:** Number of specialized palliative care services per 100,000 inhabitants in 2025 (137).
Access to financial services ("Right to be forgotten")	1st graph: based on Meunier et al. (146) and European Cancer Inequalities Registry (147). **For dashboard overview:** No legislation is at 10% of benchmark, 50% for code of conduct, 100% for national legislation on the RTBF (146, 147).

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