The Scottish Primary Care Cancer Group
and
The Scottish Deep End Project
Supported by Cancer Research UK

Addressing Cancer Inequalities in Primary Care in Scotland
(Deep End Report 44)

On Tuesday the 26th of August 2025, the Scottish Primary Care Cancer Group and The Scottish Deep End Project hosted an online roundtable with national and regional cancer leaders, supported by Cancer Research UK. The discussion explored actions that can be implemented at local, regional, and national levels to reduce cancer inequalities in primary care.

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Scottish Primary Care Cancer Group

The Scottish Primary Care Cancer Group (SPCCG) is an independent group representing primary care from the 14 territorial health boards in Scotland, working to optimise cancer care in Scotland. The group works with the Scottish Government and key stakeholders across Scotland including clinicians, public health, professional bodies, academia and the third sector.

The Scottish Deep End Project

The Scottish Deep End Project comprises GPs working in general practices serving the 100 most deprived populations in Scotland, based on the proportion of patients on the practice list with postcodes in the most deprived 15% of Scottish data zones. As of 2019, learning from the Deep End Project has also been concerned with the needs of 'Deep End patients,' wherever they are registered, including in areas of pocket deprivation.

Cancer Research UK

Cancer Research UK (CRUK) is the world's leading cancer charity, dedicated to saving and improving lives with their research, influence and information. CRUK's Policy, Information and Communications directorate generates and translates research and evidence using this to advocate for measures that can improve cancer outcomes. In the last 50 years, their pioneering work has helped double cancer survival in the UK [1]. Scotland is home to several CRUK research facilities, including the CRUK Scotland Centre, CRUK Scotland Institute, and two Experimental Cancer Medicine Centres.

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EXECUTIVE SUMMARY

Cancer outcomes in Scotland are significantly influenced by socioeconomic deprivation, with incidence, late-stage diagnosis, and mortality rates markedly higher in the most deprived areas [3]. Risk factors for cancer including obesity and smoking are more prevalent in deprived areas where vaccination uptake (e.g. HPV) is also lower [4–6]. This leads to higher numbers of preventable cancers. Disparities in screening uptake, survival rates, and the earlier onset of multimorbidity further compound these inequalities [7–10]. This is illustrated by the projection that cervical cancer will be eliminated decades later in deprived populations compared to those less deprived [11]. General practice plays a pivotal role in addressing these disparities due to its universal reach, potential for continuity of care, and central function in coordinating complex healthcare pathways, making it essential to improving cancer outcomes across the population.

General practice in socioeconomically deprived areas faces a unique and complex set of challenges characterised by high complexity of patient need, limited resources (including smaller workforces), and systemic barriers that undermine effective healthcare delivery. The inverse care law remains a central concern, as those with the greatest health needs often face the most significant obstacles to accessing quality care. Continuity of care is frequently disrupted due to workforce shortages, time constraints, and changing practices, despite its proven benefits for patient outcomes. The concept of missingness, which we define as "the repeated tendency not to take up offers of care such that it has a negative impact on the person and their life chances", further exacerbates health inequalities [12]. This is seen particularly in populations with lower health literacy, social complexity, and mistrust of services. These challenges are compounded by reduced uptake of preventive services, delayed presentations, and difficulties in accessing specialist care, all of which deepen inequalities in health outcomes.

To address these issues, reduce inequalities, reduce incidence of cancer, and improve outcomes for cancer patients in Scotland, members of the SPCCG and Scottish Deep End Project identified four key policy recommendations:

1. Implement a directed enhanced service (DES) for cancer with a focus on reducing inequalities
2. Optimise GP IT system functionality and enhanced compatibility
3. Create a central learning network and repository of resources
4. Enable more optimal use of existing funding, e.g. Screening Inequalities Fund, by making it recurrent or awarding on a multi-year basis

CANCER INEQUALITIES IN SCOTLAND

In Scotland, Incidence for all cancers combined is almost a third higher in the most deprived areas versus the least [3], with lung cancer rates three times higher than in the least deprived (173 per 100,000 vs 55 per 100,000) [3]. Around 4,300 cancer deaths each year in Scotland are associated with deprivation [13], and cervical cancer almost 4 times more likely to be diagnosed at stage 4 for people from the most deprived areas [14]. Cervical cancer is expected to be eliminated in affluent populations by 2032 but will take a further 30 years in the most deprived areas [11]. Bowel cancer screening is almost a third lower in the most deprived areas [7]. Survival for men with bowel cancer at 5 years after diagnosis in the most deprived areas of Scotland is more than a third lower than the least deprived areas, and more than a quarter lower for women [15]. Multimorbidity, the presence of two or more long term conditions, emerges 10–15 years earlier among people living in the most deprived areas, resulting in a greater burden of chronic disease at the point of cancer diagnosis. This elevated burden can lead to delayed diagnosis (e.g. due to conflation of symptoms, limit treatment options, and worsen survival [16,17].

General practice is central to improving outcomes: with 65% of patients presenting first to primary care [18,19]. General practice is uniquely placed to address health inequalities for many reasons, including their universal coverage of the population, the key role it plays in coordinating care across multiple complex systems, their role as 'point of first contact' and the continuity of care that is provided across the life-course, allowing relationships of trust to be built [20].

SPECIFIC CHALLENGES

General practice in socioeconomically deprived areas faces a unique and complex set of challenges that significantly impact both healthcare delivery and patient outcomes. Access to care is shaped by the inverse care law, the observation that the availability of good medical care tends to vary inversely with the need of the population served, and that this is made worse when healthcare is exposed to market forces [21].

Socioeconomically deprived populations show high levels of early onset of multimorbidity [10]. This is compounded by social complexity, including factors such as poverty, inadequate housing and insecure employment. Additional cultural and language needs, more prevalent in more socio-economically deprived populations can also create inequity of access to healthcare [22].

Initiatives including the Community Links Worker project have been invaluable in trying to address some of the social needs of these populations to allow patients and clinicians more time to focus on health issues.

Practitioners in these settings often deal with higher consultation rates. This is compounded by the smaller levels of workforce and shorter appointment times impacting the ability of health care professionals to address the full scope of patient needs [23]. This time pressure contributes to lower patient enablement and reduced expectations, both from patients and providers. Lower

levels of health literacy further complicate communication and understanding, which can be compounded by additional language needs, requiring interpretation services. All of this contributes to reduced continuity of care, where GPs are able to build up long-term relationships with and knowledge of patients, improving clinical outcomes and patient satisfaction, building up trust, and reducing mortality rates. In many cases this continuity of care becomes impossible under a strained system, and yet relational continuity of care is known to be especially important for addressing health inequalities.

Healthcare professionals working in Deep End practices frequently experience high levels of stress, exacerbated by weak interfaces between primary care and other services, making coordination of care and referrals more difficult.

In terms of prevention, more socioeconomically deprived populations often show consistently lower vaccination uptake, influenced by mistrust, logistical barriers, and communication challenges, amongst other things [4]. There is also a higher prevalence of other risk factors for cancer including obesity and health-harming behaviours such as smoking, alcohol consumption and poor-quality diet [5,6]. Both health and functional literacy are typically lower, necessitating more tailored and accessible health information formats. There are also high levels of 'missingness' to contend with, that is, the repeated tendency not to take up offers of care such that it has a negative impact on the person and their life chances, making it harder to reach and support patients. Screening uptake is lower in more socioeconomically deprived areas [8,9,24]. Cervical screening coverage during the financial year 2023/24 was at 56.5% in the most deprived areas at 56.5%, compared with 67.7% in the least deprived areas [25].

Presenting symptoms can often be more difficult to interpret and detect, especially when occurring earlier in life than would be expected. Presentations are often delayed due to psychological, educational, and logistical barriers. Patients may also experience nihilism, guilt, stigma, and competing life demands, all of which hinder timely engagement with healthcare. Mental health issues are more prevalent and frequently co-exist with physical conditions, further complicating diagnosis and treatment.

Patients living in more socioeconomically deprived areas are also least likely to be able to attend specialist appointments after referral, due to a combination of complex factors including inflexible appointment systems, reliance on mail-based communication, short periods within which to 'opt in' to appointments, logistical challenges with transport, time off work and navigation of the system, previous negative experiences of healthcare and a lack of trust in the system. This can drive unequal experiences of, and access to, state-funded healthcare, despite higher levels of need. To compound this, the rise in the use of private healthcare is also driving a two-tier system of access, and a worsening of the existing inverse care law.

ISSUES TO BE ADDRESSED

The group identified four key issues to be addressed by targeted policy recommendations:

1. Many proven effective interventions in primary care are not resourced through core funding.
2. Practices need access to accurate and reliable data to both understand the demographics and needs of their patient base, and to drive change and improvement. Further, patients with additional language needs are currently inadequately catered for. The data capture around this needs to be improved, with improved access to resources in a variety of languages and formats. This issue is more fully explored in Deep End Report 42: Cultural and Language Health Inequalities (2024).
3. Lack of established networks or systems for sharing learning, resources and audit.
4. Lack of awareness about existing funding that is available to drive equitable change and improvement, at both a national and local level. Additionally, the non-recurrent nature of available funding (e.g. screening inequalities fund) limits the optimal usage of these funds.

POLICY RECOMMENDATIONS

1. A new directed enhanced service for cancer

a. Provide additional funding to general practices to deliver an enhanced service which would be designed to improve cancer outcomes and reduce cancer inequalities across all of Scotland.
b. Funding allocation would be based on the principle of proportionate universalism – the enhanced service would be available to all practices but adequately weighted by deprivation to address inequalities driven by socioeconomic disadvantage.
c. Robust evaluation and ongoing refinement of the service would be embedded in the DES model, including mechanisms to share learning about what is or isn't working and the flexibility to start or stop interventions as the evidence-base grows.
d. Activities to be undertaken under the Cancer enhanced service to be based on learning and evidence from elsewhere (e.g. Network Contract DES - Contract specification 2025/26 – PCN requirements). This could include:
    i. Working with partners to improve screening uptake, inclusive of breast, bowel and cervical cancer, based on current evidence base.
    ii. Reviewing cancer referral practice in collaboration with partners and working to increase earlier diagnosis and reduce presentation via an emergency setting
    iii. Creating cancer leads in practices, with protected time for learning, leadership, and collaboration.
    iv. A focus on improving continuity of care (relational and informational) and proactively addressing those who are serially missing from cancer care, across the pathway.
    v. A focus on understanding practice-level data through an inequalities lens through provision of disaggregated data by deprivation, ethnicity and primary language
    vi. Optimising the management of existing chronic physical and mental health conditions prior to, and during cancer treatment
    vii. High-quality data gathering, coding and reporting
    viii. Exploring innovative roles across the wider MDT

2. Optimise GP IT system functionality and enhanced compatibility

This would help:

a. Build on the ongoing work within Scottish Government Racialised Health Inequalities team to code race and ethnicity data by also including preferred language and communication format in patient records.

b. Effectively link GP IT systems and screening communications, enabling automatic delivery of information in preferred language / accessible formats.

e.g. data about a patient's preferred language stored in a primary care IT system is used by a screening service to send out a screening invitation in the preferred language

c. Standardise coding and data collection around preferred communication format (e.g. written, telephone, text, email, Braille, easy read)
d. Expand and improve practice access to GatewayC[1] and Scottish Referral Guidelines. Centrally install desktop shortcuts on all practice and community pharmacy computers.
e. Application of integrated IT solutions to support safety netting systems in practices.
f. Primary care cancer related data collection and accessibility to support quality improvement activity.

3. Creation of a central learning network and repository of resources

To include:

a. Collating and sharing learning across practices.
b. Reviewing missed opportunities, and learning from significant events
c. Opportunities to feed into quality improvement teams.
d. Tools and products that healthcare teams have created (e.g. practice-based searches, patient letters, templates) to avoid duplication of effort.
e. Creation of a national cancer diagnosis audit programme to enable learning from:
    i. Missed opportunities
    ii. Adverse events
    iii. Positive outcomes

4. Enable more optimal use of existing funding (e.g. Screening Inequalities Fund - SIF) by making it recurrent or awarding on a multi-year basis.

There could also be more proactive consideration of opportunities to use the funding to improve cancer screening outcomes in primary care. One example could be a deeper evaluation of the current local interventions that practices have undertaken that are specific to cancer care, made possible by the existing Inclusion Health Action in General Practice (IHAGP) funding (see Inclusion Health Action in General Practice: Early

[1] GatewayC is Scotland's leading earlier diagnosis education resource. The free resource is supported by the Detect Cancer Earlier (DCE) Programme, delivered through the Centre for Sustainable Delivery (CfSD) and NHS Education for Scotland (NES) GatewayC | The national Centre for Sustainable Delivery

Evaluation Report). This could inform scalable national programmes. Another could be use of the SIF to create new patient navigator roles to support patients at risk of 'missingness' to better access care across the whole of the cancer pathway.

The success of these new recommendations would be reliant on the sustainability of other key policy areas:

- Commitment to ensure the workforce capacity of generalist nurses (practice and district nursing) alongside creating the conditions required for closer team working.
- Sustainable funding for, and expansion of, the Inclusion Health Action in General Practice (IHAGP) programme beyond Greater Glasgow and Clyde Health Board area.
- Sustainable funding for, and expansion of, the Community Links Worker Programme and the Welfare Advice in Health Partnership (WAHP) programme.
- Funding for interface work between primary and secondary care, to include a focus on health equity across the whole of the cancer referral pathway.

REFERENCES

1 Coleman MP, Matz M, Minicozzi P, et al. Trends over 48 years in a one-number index of survival for all cancers combined, England and Wales (1971–2018): a population-based registry study. Lancet Reg Health – Eur. 2025;56. https://doi.org/10.1016/j.lanepe.2025.101385.

2 Cancer Research UK. Scotland | Cancer Research UK. 2025. https://www.cancerresearchuk.org/about-us/we-develop-policy/we-work-with-government/cancer-research-uk-in-scotland.

3 Public Health Scotland. Cancer incidence in Scotland - to December 2021 - Cancer incidence in Scotland - Publications - Public Health Scotland. 2023. https://publichealthscotland.scot/publications/cancer-incidence-in-scotland/cancer-incidence-in-scotland-to-december-2021.

4 Public Health Scotland. PHS publishes Annual Vaccination and Immunisation report for 2024 - News - Public Health Scotland. 2025. https://publichealthscotland.scot/news/2025/june/phs-publishes-annual-vaccination-and-immunisation-report-for-2024/?utm_source=copilot.com.

5 Scottish Public Health Observatory. Risk Factors: Obesity: Deprivation. 2023. https://plotly.com/chart-studio-updates.

6 Action on Smoking and Health Scotland. Smoking and health inequalities in Scotland. 2024. https://ashscotland.org.uk/wp-content/uploads/2024/07/Smoking-and-Health-Inequalities_April-2024.pdf?utm_source=copilot.com.

7 Public Health Scotland. Scottish bowel screening programme statistics - For the period of invitations from May 2021 to April 2023 - Scottish bowel screening programme statistics - Publications - Public Health Scotland. 2024. https://publichealthscotland.scot/publications/scottish-bowel-screening-programme-statistics/scottish-bowel-screening-programme-statistics-for-the-period-of-invitations-from-may-2021-to-april-2023/.

8 Public Health Scotland. Scottish breast screening programme statistics - Annual update to 31 March 2023 - Scottish breast screening programme statistics - Publications - Public Health Scotland. 2023. https://publichealthscotland.scot/publications/scottish-breast-screening-programme-statistics/scottish-breast-screening-programme-statistics-annual-update-to-31-march-2023/.

9 Public Health Scotland. Scottish cervical screening programme statistics - Annual update to 31 March 2022 - Scottish cervical screening programme statistics - Publications - Public Health Scotland. 2022. https://publichealthscotland.scot/publications/scottish-cervical-screening-programme-statistics/scottish-cervical-screening-programme-statistics-annual-update-to-31-march-2022/.

10 McLean G, Gunn J, Wyke S, et al. The influence of socioeconomic deprivation on multimorbidity at different ages: a cross-sectional study. Br J Gen Pract. 2014;64:e440–e447. https://doi.org/10.3399/bjgp14X680545.

11 Modelling provided to the Scottish Government Cervical Cancer Elimination Expert Group.

12 Williamson AE. Developing Interventions to Address Missingness in Healthcare. University of Glasgow; 2025. https://eprints.gla.ac.uk/366491/. https://doi.org/10.36399/gla.pubs.366491.

13 Evidence & Implementation department, Cancer Research UK. Cancer Research UK. Cancer in the UK 2025: Socioeconomic deprivation. 2025. https://www.cancerresearchuk.org/sites/default/files/cancer_in_the_uk_2025_socioeconomic_deprivation.pdf?_gl=1*1onrbi*_gcl_au*MTg2ODY5MzY1Ni4xNzYxNTg0MTEx*_ga*NjQ5MzUyNzAuMTc0NTg0MTk2OA..*_ga_58736Z2GNN*czE3NjIwMzUzODMkbzg4JGcxJHQxNzYyMDM1NDE5JGoyNCRsMCRoMA..

14 Public Health Scotland. Cancer incidence in Scotland - Cancer incidence and prevalence in Scotland to December 2019 - Cancer incidence in Scotland - Publications - Public Health Scotland. 2021. https://publichealthscotland.scot/publications/cancer-incidence-in-scotland/cancer-incidence-in-scotland-cancer-incidence-and-prevalence-in-scotland-to-december-2019/.

15 Public Health Scotland. Cancer survival statistics - People diagnosed with cancer between 2013 and 2017 - Cancer survival statistics - Publications - Public Health Scotland. 2021.

https://www.publichealthscotland.scot/publications/cancer-survival-statistics/cancer-survival-statistics-people-diagnosed-with-cancer-between-2013-and-2017/.
16 Sarfati D, Koczwara B, Jackson C. The impact of comorbidity on cancer and its treatment. CA Cancer J Clin. 2016;66:337–350. https://doi.org/10.3322/caac.21342.
17 Koo MM, Swann R, McPhail S, et al. The prevalence of chronic conditions in patients diagnosed with one of 29 common and rarer cancers: A cross-sectional study using primary care data. Cancer Epidemiol. 2020;69:101845. https://doi.org/10.1016/j.canep.2020.101845.
18 Public Health Scotland. National Cancer Diagnosis Audit Summary Information from an audit of patients diagnosed between 1 October 2018 and 30 september 2019. 2021. https://publichealthscotland.scot/media/8583/2021-08-03_ncda-2019-20_report.pdf.
19 Barnett K, Mercer SW, Norbury M, et al. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. The Lancet. 2012;380:37–43. https://doi.org/10.1016/S0140-6736(12)60240-2.
20 GPs at the Deep End. Deep End Report 42 What can General Practice do to Strengthen Continuity of GP Care for those who Need it Most? 2024. https://www.gla.ac.uk/media/Media_1130245_smxx.pdf.
21 Hart JT. THE INVERSE CARE LAW. The Lancet. 1971;297:405–412. https://doi.org/10.1016/S0140-6736(71)92410-X.
22 GPs at the Deep End. Deep End Report 43 Language and Cultural Health Inequalities at the Deep End: Understanding the Context, and What Can Be Done. 2025. https://www.gla.ac.uk/media/Media_1162602_smxx.pdf.
23 David Blane, Carey Lunan, James Bogie, Alessio Albanese,, David Henderson and Stewart Mercer. Tackling the Inverse Care Law in Scottish General Practice. Policies, interventions and the Scottish Deep End Project. 2024.
24 Public Health Scotland. Scottish bowel screening programme statistics - For the period of invitations from May 2021 to April 2023 - Scottish bowel screening programme statistics - Publications - Public Health Scotland. 2023. https://publichealthscotland.scot/publications/scottish-bowel-screening-programme-statistics/scottish-bowel-screening-programme-statistics-for-the-period-of-invitations-from-may-2021-to-april-2023/.
25 Public Health Scotland. Scottish cervical screening programme statistics - Annual update to 31 March 2024 - Scottish cervical screening programme statistics - Publications - Public Health Scotland. https://publichealthscotland.scot/publications/scottish-cervical-screening-programme-statistics/scottish-cervical-screening-programme-statistics-annual-update-to-31-march-2024/.

ATTENDEES

Chairs / Speakers

Douglas Rigg, Joint Clinical Lead, SPCCG and Deep End GP
Carey Lunan, Chair, The Scottish Deep End Project and Deep End GP
David Blane, Academic GP, The Scottish Deep End Project and Deep End GP
Samantha Harrison, Head of Strategic Evidence, CRUK

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Invited, but unable to attend:

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Debbie King, Senior Public Affairs Manager Devolved Nations, CRUK
Lucy Wordsworth Russell, Health Systems Engagement Officer, CRUK

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