

NHS Greater Glasgow and Clyde	Paper No. 26/84
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Title:	Public Health Screening Programme Annual Report
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1. Purpose

The purpose of this report is to present Board members with information about NHS Greater Glasgow and Clyde national screening programmes covering adults, pregnant women, newborns and pre-school children, for the period 1 April 2024 to 31 March 2025.

2. Executive Summary

The paper can be summarised as follows:

- National screening programmes follow recommendations of the National Screening Committee, endorsement by Scotland's Chief Medical Officer, and are rolled out across the whole Scottish population. NHSGGC's Public Health Directorate is responsible for the co-ordination, monitoring and governance of these national screening programmes for the population of Greater Glasgow and Clyde.
- The purpose of screening is to detect early disease or risk factors among people who have not yet developed symptoms. Early management should result in better outcomes. Screening programmes therefore contribute to early detection but do not obviate the need for investigating symptomatic patients.
- The report is divided into two papers. Pregnancy, newborn and childhood vision screening programmes; and adult screening programmes.
- The report provides a local analysis of variations in screening uptake across key demographic factors, including age, Scottish Index of Multiple Deprivation (SIMD), ethnicity, and geographic characteristics such as Health and Social Care

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Partnership areas. Analysis of the adult programmes also includes additional populations with protected characteristics including learning disability and mental health status.

- Screening in pregnancy is undertaken in early pregnancy and is for early detection of infectious diseases, and inherited or congenital conditions or risk factors. Early detection supports informed decision making about reproductive choices, treatment options and planning for the birth.
- Newborn screening checks for serious inherited conditions through bloodspot screening, while hearing screening detects permanent congenital hearing loss. Screening shortly after birth provides parents with support and advice as early as possible. Two new inherited conditions have been added to the newborn bloodspot screen in 2026: Human Tyrosinemia 1 (HTI) and Spinal Muscular Atrophy (SMA). SMA has been added for a period of up to two-years to gather evidence to inform a National Screening Committee judgement as to whether to include this permanently.
- Pre-school vision screening identifies vision problems in children in the year before they attend school, ensuring early management to promote learning and prevent long-term impairment.
- Screening for adults includes for bowel, breast and cervical cancers, abdominal aortic aneurism and for development of retinopathy amongst people living with diabetes. There are some data issues with these programmes, with no national data available for the breast cancer screening and diabetic eye screening (DES) programmes, due to national data quality issues. In addition, recent national cervical screening statistics show a marked fall in uptake which is likely influenced by methodological issues resulting in underestimate of true uptake.
- The Screening Inequalities Action Plan report sets out our strategic approach to reducing inequalities in screening uptake and provides an update on progress in delivering agreed actions during the reporting period. Actions include improving access, supporting informed participation and addressing barriers to screening for population groups experiencing the greatest inequalities.

NHSGGC Screening Programmes Activity Summary 2024-25

Screening Programme	Total Eligible Population	Total Number Screened	HIS Target	% Uptake 2024/25
Haemoglobinopathies screening in pregnancy	11,933	11,911	95%	99.8% ^β
Infectious diseases in pregnancy	11,933	11,896	95%	99.7% ^β
Congenital abnormalities screening in pregnancy	11,933	10,788	No Target	90.4% ^β
Newborn bloodspot screening	10,785	10,781	95%	99.7% ^β

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Newborn hearing screening	10,835	10,775	98%	99.4% ^β
Pre-school vision screening	11,182	9,281	No Target	83.0% ^β
Abdominal Aortic Aneurysm Screening (AAA)	7,504	5,891	75%	78.5% ^β
Bowel Screening (2023/24 to 2024/25)	359,320	221,594	60%	61.7% ^α
Breast Screening (2022/23 to 2024/25)	Data not available	Data not available	70%	Data not available
Cervical Screening (2020/21 to 2024/25)	Data not available	Data not available	80%	50.7% ^γ
Diabetic Eye Screening (DES)	74,068	57,620	80%	77.8% ^β

^α Source: PHS Screening Programme Statistics - Accredited official statistics publication

^β Source: Local NHSGGC analysis

^γ Source: PHS Screening Programme Statistics - Official statistics in development publication

Priority Actions for 2025-26

- We will continue to work to maintain quality and reduce avoidable repeats within pregnancy and newborn bloodspot screening programmes through ongoing quality improvement initiatives.
- We will continue to ensure effective failsafe procedures are in place for all programmes following implementation of Child Health System replacement.
- We will work with maternity services and eHealth to identify opportunities for enhancing data quality and implementing technical solutions to streamline processes and improve data completeness.
- Overall uptake masks the inequalities in uptake that are especially marked in the adult screening programmes. Differences include between those who are most and least deprived, and between vulnerable groups including those with protected characteristics. We will continue to work across all programmes to address these inequalities.
- Following a significant reduction in Boards Scottish Government Cancer Screening Inequalities Fund in 2025/26, and its removal from April 2026, local action to address inequalities in uptake of screening will focus on mainstreaming effective approaches, strengthening partnership delivery with HSCPs and the third sector, and maximising use of existing resources.
- We will continue to work with service leads and clinical leads to resolve service issues that impact on screening timelines, performance and patient experience.
- We will develop local actions aligned with recent national Cervical Cancer Elimination Strategic Action Plan, including targeted improvement activity and communications.
- We will continue to work locally and nationally to review and implement HIS standards for all screening programmes, reviewing and developing local systems to improve performance and patient safety.
- We will continue to work quickly to resolve incidents in the screening pathways as they arise.

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- We will continue to work locally and nationally to review and implement HIS standards for all screening programmes, reviewing and developing local systems to improve performance and patient safety.

Summary sections from each screening programme are presented at the end of these cover pages.

3. Recommendations

The Board is asked to consider the following recommendations:

- Note the screening programmes activity report;
- Support the priority actions.

4. Response Required

This paper is presented for **Assurance**.

5. Impact Assessment

The impact of this paper on NHSGGC's corporate aims, approach to equality and diversity and environmental impact are assessed as follows:

• Better Health	<u>Positive</u>
• Better Care	<u>Positive</u>
• Better Value	<u>Positive</u>
• Better Workplace	<u>Neutral</u>
• Equality & Diversity	<u>Positive</u>
• Environment	<u>Neutral</u>

6. Engagement & Communications

The issues addressed in this paper were subject to the following engagement and communications activity:

- The report was shared with all screening steering group members for comment and feedback. The groups are multidisciplinary, drawing membership from Public Health (consultant, programme managers, data analysts), call/recall managers, service managers, clinical leads and laboratory staff.
- The first report on pregnancy, newborn and pre-school vision screening was presented at CMT in January 2026 and the NHSGGC Population Health and Wellbeing Committee in January 2026.
- The second report on adult screening was presented at CMT in April 2026 and the NHSGGC Population Health and Wellbeing Committee in April 2026.

- The full screening report is available publically on the NHSGGC Public Health website: <https://www.nhsggc.scot/your-health/public-health/public-health-screening/>

7. Governance Route

This paper has been previously considered by the following groups as part of its development:

The membership of the screening steering groups have reviewed their respective screening reports and had the chance to comment, add and amend their topic report.

- These were the steering groups for: Pregnancy and Newborn Bloodspot Screening; Newborn Hearing Screening; Child Vision Screening; AAA; Bowel; Breast; Cervical; and Diabetic Eye Screening. These steering groups meet quarterly for monitoring purposes and to address any issues within their programmes.
- This report was considered by the Public Health Directorate Senior Management Team in December 2025 and March 2026
- This report was considered by CMT in January 2026 and April 2026.
- This report was considered by the Population Health and Wellbeing Committee in January 2026 and April 2026.

8. Date Prepared & Issued

Date Prepared: June 2026

Date Issued: 17 June 2026

Report 1: Screening in pregnancy, newborns and pre-school

Chapter 1 - Pregnancy Screening

Haemoglobinopathies screening	
Why?	<p>Early identification of inherited blood disorders</p> <p>Reduces infant morbidity and mortality</p> <p>Provides time for reproductive choices and preparation for birth</p>
Intervention	<p>Screening for haemoglobin variants (abnormal forms of haemoglobin such as sickle cell disease) and thalassaemia (which result in an abnormal amount of haemoglobin)</p> <p>Testing blood sample taken from pregnant woman ideally taken by week 10 of pregnancy, in conjunction with information about ethnic origin collected in the Family Origin Questionnaire</p> <p>Rapid referral into counselling services for discussion about next steps as needed</p>
Activity in 2024/25	<p>99.8% screening uptake</p> <p>11,911 women screened</p>
Outcomes	<p>Screening identified:</p> <p>20 foetus at risk</p> <p>25 pregnancies where partner testing should be offered</p>

Infectious diseases screening	
Why?	<p>Early identification of infectious diseases that can be passed from mother to baby and cause harm</p> <p>Reduces maternal and infant morbidity and mortality</p> <p>Provides time for treatment and birth planning</p>
Intervention	<p>Screening for hepatitis B, syphilis and HIV</p> <p>Testing blood sample taken from pregnant woman ideally taken by week 10 of pregnancy</p> <p>Rapid referral into services for management and birth planning as needed</p>
Activity in 2024/25	<p>Over 99.0% screening uptake for Hepatitis B syphilis and HIV with ≤ 5 pregnant women declining test.</p>
Outcomes	<p>≤5 women diagnosed with HIV, some of whom were previously diagnosed</p> <p>45 women diagnosed with hepatitis B infection (including 21 who had not previously been diagnosed)</p> <p>23 women diagnosed with syphilis (not all of whom required treatment as this includes current and previously treated infections)</p>

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Down's syndrome, Edwards' syndrome and Patau's syndrome screening	
Why?	<p>Early detection of congenital abnormalities</p> <p>Reduces infant morbidity and mortality</p> <p>Provides time for reproductive choices and preparation for birth</p>
Intervention	<p>First-line screening for Down's, Edwards' and Patau's syndromes by blood test and nuchal scan in first trimester or blood test in second trimester</p> <p>If high chance result obtained from first-line screening, second-line screening for Down's, Edwards' and Patau's syndromes by NIPT blood test</p> <p>Scan at 18-21 weeks to check for foetal abnormalities</p> <p>If high chance results obtained from scan or second-line screening, rapid referral into services for diagnostic testing (including amniocentesis and chorionic villus sampling)</p>
Activity in 2024/25	11,328 women screened for first-line screening
Outcomes	463 women with high chance results from first-line screening test

Foetal Anomaly Screening	
Why?	<p>Early detection of congenital abnormalities</p> <p>Reduces infant morbidity and mortality</p> <p>Provides time for reproductive choices and preparation for birth</p>
Intervention	<p>Scan at 18-21 weeks to check for foetal abnormalities, including of brain, spinal cord, heart, bowel, kidneys, arms and legs</p> <p>If high chance results obtained from scan or second-line screening, rapid referral into services for diagnostic testing (including amniocentesis and chorionic villus sampling)</p>
Activity in 2024/25	<p>90.4% screening uptake of 18-21 week scan</p> <p>10,791 women consented to scan</p>
Outcomes	Foetal anomaly suspected in 7.2% (774) of women scanned

Chapter 2 - Newborn Bloodspot Screening

Newborn Bloodspot Screening	
Why?	Early identification of rare inherited conditions Reduce infant morbidity and mortality
Intervention	Blood screening for nine inherited conditions Heel prick blood sample taken at day 4-5 of life by midwives Rapid referral into services for diagnostic testing and treatment as needed
Activity in 2024/25	99.96% screening uptake 10,781 babies screened
Outcomes	14 babies were diagnosed with congenital hypothyroidism (CHT) ≤5 babies were diagnosed with cystic fibrosis 14 babies were diagnosed with haemoglobinopathy variants, and 181 babies were identified as haemoglobinopathy carriers ≤5 babies were diagnosed with isovaleric acidaemia (IVA)

Chapter 3 - Newborn Hearing Screening

Newborn Hearing Screening	
Why?	Early detection of permanent congenital hearing loss Early detection of mild and unilateral hearing loss
Intervention	Non-invasive hearing screening test offered to all newborns by four weeks of corrected age (taking account of premature birth). Majority of screening takes place in hospitals, on maternity wards. Outpatient and community clinic appointments are also offered. For those babies who have no clear response in one or both ears after two attempts at the screening test, rapid referral into Audiology Services for further testing, diagnosis, monitoring and ongoing support.
Activity in 2024/25	99.4% of eligible babies completed screening 10,775 babies screened
Outcomes	193 babies (1.8%) referred to Audiology for diagnostic testing following two failed screening tests. Of these: ≤5 babies had bilateral auditory neuropathy spectrum disorder (ANSO); 13 babies had bilateral conductive loss; 15 babies had bilateral sensorineural loss; ≤5 babies had unilateral ANSO; 17 babies had unilateral conductive loss; 12 babies had unilateral sensorineural loss.

Chapter 4 - Child Vision Screening

Pre-school vision screening	
Why?	<p>Early identification of poor vision.</p> <p>Improves engagement in school and with learning.</p>
Intervention	<p>Vision screening test offered to all 4–5-year-olds in the year before they attend primary school.</p> <p>Vision screening principally undertaken in nurseries, with hospital and community clinics for those who miss this opportunity or who do not attend nursery.</p> <p>Referral as required to shared care orthoptic/optometry clinic within local hospital Ophthalmology department / local community optometrist or to community paediatric clinic.</p>
Activity in 2024/25	<p>83.0% screening uptake (11,182 children screened)</p> <p>27.1% (2,518 children) referred for further investigations</p>
Outcomes	<p>Screening uptake varied by HSCP area, with highest uptake in Renfrewshire HSCP 90.7% and lowest in Glasgow North West Sector 76.0%.</p> <p>Screening uptake varied by SIMD, with highest uptake in least deprived quintile (89.1%) and lowest in most deprived quintile (77.9%).</p> <p>Screening result varied by HSCP area – the proportion of children with a screen abnormality detected was highest in Glasgow South (42.6%) and lowest in East Dunbartonshire (23.0%). Clear variation by SIMD with an abnormality detected in 39.6% in SIMD1 (most deprived) compared to 24.7% in SIMD5 (least deprived).</p>

Report 2: Adult screening programmes

Chapter 1 – Abdominal Aortic Aneurysm (AAA) Screening

Abdominal Aortic Aneurysm (AAA) screening	
Why?	Early identification of aortic aneurysm. Prevention of morbidity and mortality.
Intervention	Screening offered to all eligible men aged 65 years. Screening test is single abdominal ultrasound scan. If aorta >3cm diameter detected, referral into surveillance scans or rapid referral into vascular surgery as needed.
Activity in 2024/25	78.5% screening uptake (5,891 individuals screened)
Outcomes	Uptake met the essential threshold (75%). Uptake varies with SIMD, with 14.9% difference between areas of high deprivation (lowest uptake) and areas of low deprivation (highest uptake) 54 men had a positive screening result: - 49 men had a small aneurysm requiring annual surveillance scans; - ≤5 men had a medium aneurysm requiring 3 monthly surveillance scans; - ≤5 men had a large aneurysm requiring surgical assessment.

Chapter 2 – Bowel Screening

Bowel screening	
Why?	Early identification of bowel cancer. Prevention of morbidity and mortality.
Intervention	Screening offered to all eligible men and women aged 50-74 years, every two years. Screening test is quantitative FIT, poo test. Screening kits sent to home address of all those eligible, participants collect a sample at home and return in the prepaid envelope. Where screening test is positive (high risk), rapid follow up at colonoscopy clinic at hospital sites across the region. Rapid referral into bowel surgery as needed.
Activity in 2024/25	61.7% screening uptake (218,065 individuals screened) in the last screening round 1 st April 2023 to 31 st March 2025
Outcomes	Uptake similar to last year Uptake varies with SIMD, with 21.7% difference between areas of high deprivation (lowest uptake) and areas of low deprivation (highest uptake) Screening positivity rate 3.0% (6,756 individuals) 76.0% of those who tested positive attended for diagnostic investigation Detection rates: - 3,325 people (67.7%) had a polyp detected

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	<ul style="list-style-type: none">- 2,727 people (53.1%) had a confirmed adenoma detected- 233 (4.5%) people had a confirmed colorectal cancer diagnosis- Detection rates of polyps, adenomas and cancer was:<ul style="list-style-type: none">- higher in males than females- similar across all levels of deprivation
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Chapter 3 – Breast Screening

Breast screening	
Why?	Early identification of breast cancer Prevention of morbidity and mortality
Intervention	Screening offered to all eligible women aged 50-70 years, every three years Screening test is mammography of both breasts Screening offered at Nelson Mandela Place in Glasgow, and in mobile units which visit sites across the board area Where abnormality is detected, rapid follow up in assessment clinic for further tests which may include further imaging, clinical examination and biopsy Rapid referral into breast surgery as needed
Activity in 2024/25	No data available
Outcomes	No data available

Chapter 4 – Cervical Screening

Cervical screening	
Why?	Early identification of cervical cancer and cancer pre-cursors. Prevention of morbidity and mortality.
Intervention	Screening offered to all eligible women aged 25-64 years, every five years. Screening sample (smear sample) taken in primary care. Screening test is HPV test and cytology. Where screening test is positive, referral to colposcopy for further investigation. Rapid referral into surgery and oncology as needed.
Activity in 2024/25	50.7% screening uptake
Outcomes	Uptake does not meet the national target of 80% Uptake lower than last year, but has fallen over the last six years

	<p>Due to the challenges in interpreting the national data, only published data from Public Health Scotland is included in this report.</p> <p>Cervical invasive cancer audit reviewed 55 of 70 new cases of cervical cancer in NHSGGC residents – cervical cancer higher in most deprived quintile, those with inadequate screening history, younger age groups</p> <p>Completed review of more than 27,000 clinical records as part of national 'no cervix', on time and within budget.</p>
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Chapter 5 – Diabetic Eye Screening (DES)

Diabetic eye screening	
Why?	<p>Early identification of diabetic retinopathy.</p> <p>Prevention or management of sight loss.</p>
Intervention	<p>At risk population screening - those with diagnosed diabetes aged 12 years and over (part of clinical care).</p> <p>Photograph of the back of each eye with subsequent image grading.</p> <p>Call/recall round length depends on risk factors.</p> <p>Screening offered in hospital outpatient and community clinics.</p>
Activity in 2024/25	77.8% screening uptake (57,620 people screened)
Outcomes	<p>Uptake lower than national standard (80%).</p> <p>Uptake similar between males and females.</p> <p>Higher uptake among young people aged 12-14 years (75.4%) and older adults aged 65-74 years (81.3%); lowest among 25-29 year olds (67.7%).</p> <p>Variation in uptake by deprivation quintile (SIMD), with lowest uptake in most deprived quintile (74.8%) compared with least deprived (83.1%).</p> <p>Variation in uptake among minority ethnic groups.</p> <p>80% uptake target met only in East Dunbartonshire and East Renfrewshire HSCPs.</p>

Screening Inequalities Action Plan Report – 2025/26

Address inequalities in screening	
Why?	<p>Poorer uptake of screening programmes in some population groups, including most deprived, Black Asian and Minority Ethnic groups, those with learning disabilities, those with enduring mental illness</p> <p>Poorer health outcomes for vulnerable groups</p>
Intervention	<p>Local annual action plan aligned with Scottish Equity in Screening Strategy 2023-2026</p> <p>Specific actions across wide range of vulnerable groups</p>

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	<p>Supported by funding from Scottish Government Cancer Screening Inequalities Fund</p> <p>Taken forward through the Public Health Screening Unit and in partnership with colleagues in HSCPs, third sector and screening services</p>
Activity in 2025 and 2026	<p>Delivery of the 2025-26 Action Plan, including:</p> <p>Conclusion of two years of work to support informed participation in screening for individuals with a learning disability, led by a dedicated practice development lead</p> <p>Commencement of pilot intervention addressing cervical screening need for those in long-stay mental health facilities</p> <p>Delivered targeted quality improvement support to GP practices with low cervical screening uptake, informed by data and local intelligence</p> <p>Undertook community engagement and insight-gathering activity (including surveys, focus groups and lived-experience work) to better understand barriers to screening.</p> <p>Development and delivery of Breast and Cervical Screening Campaigns</p>
Outcomes	<p>Strengthened collaboration across Public Health, screening services, HSCPs and the third sector, supporting more coordinated delivery.</p> <p>Embedded enhanced screening conversations and reasonable adjustments within learning disability services and screening pathways.</p> <p>Established system-level improvements through SOP development and data-driven approaches to identifying and addressing inequalities.</p> <p>Maintained delivery momentum and measurable progress despite significant reductions in national inequalities funding.</p>



***Child and Maternal Health Screening
Programme***

Annual Report

1st April 2024 to 31st March 2025

**Health Services
Public Health Directorate
December 2025**

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Chapter 1 - Pregnancy Screening

Summary

There are four screening programmes in pregnancy:

- haemoglobinopathies screening
- infectious diseases screening
- Down's syndrome, Edwards' syndrome and Patau's syndrome screening
- congenital anomalies screening

These programmes allow parents to make reproductive choices, manage illness and infection during and after the pregnancy and manage risk to the baby during pregnancy and after birth.

Pregnancy screening programmes are offered universally to all pregnant women during antenatal visits. In 2024/25, 11,933 NHSGGC resident women booked to attend antenatal clinics and 10,599 (88.8%) of first antenatal booking appointments were offered by 12 weeks and 6 days gestation (first trimester). Timing of screening is crucial to ensure optimum testing and time for parents to consider next steps.

Haemoglobinopathies screening	
Why?	Early identification of inherited blood disorders Reduces infant morbidity and mortality Provides time for reproductive choices and preparation for birth
Intervention	Screening for haemoglobin variants (abnormal forms of haemoglobin such as sickle cell disease) and thalassaemias (which result in an abnormal amount of haemoglobin) Testing blood sample taken from pregnant woman ideally taken by week 10 of pregnancy, in conjunction with information about ethnic origin collected in the Family Origin Questionnaire Rapid referral into counselling services for discussion about next steps as needed
Activity in 2024/25	99.8% screening uptake (11,911 women screened)
Outcomes	Screening identified: 20 foetus at risk 25 pregnancies where partner testing should be offered

Infectious diseases screening	
Why?	<p>Early identification of infectious diseases that can be passed from mother to baby and cause harm</p> <p>Reduces maternal and infant morbidity and mortality</p> <p>Provides time for treatment and birth planning</p>
Intervention	<p>Screening for hepatitis B, syphilis and HIV</p> <p>Testing blood sample taken from pregnant woman ideally taken by week 10 of pregnancy</p> <p>Rapid referral into services for management and birth planning as needed</p>
Activity in 2024/25	Over 99.0% screening uptake for Hepatitis B syphilis and HIV with ≤ 5 pregnant women declining test.
Outcomes	<p>≤ 5 women diagnosed with HIV, some of whom were previously diagnosed</p> <p>45 women diagnosed with hepatitis B infection (including 21 who had not previously been diagnosed)</p> <p>23 women diagnosed with syphilis (not all of whom required treatment as this includes current and previously treated infections)</p>

Down's syndrome, Edwards' syndrome and Patau's syndrome screening	
Why?	<p>Early detection of congenital abnormalities</p> <p>Reduces infant morbidity and mortality</p> <p>Provides time for reproductive choices and preparation for birth</p>
Intervention	<p>First-line screening for Down's, Edwards' and Patau's syndromes by blood test and nuchal scan in first trimester or blood test in second trimester</p> <p>If high chance result obtained from first-line screening, second-line screening for Down's, Edwards' and Patau's syndromes by NIPT blood test</p> <p>Scan at 18-21 weeks to check for foetal abnormalities</p> <p>If high chance results obtained from scan or second-line screening, rapid referral into services for diagnostic testing (including amniocentesis and chorionic villus sampling)</p>
Activity in 2024/25	<p>11,328 women screened) for first-line screening</p> <p>90.4% uptake of 18-21 week scan</p>
Outcomes	463 women with high chance results from first-line screen

Foetal Anomaly Screening	
Why?	<p>Early detection of congenital abnormalities</p> <p>Reduces infant morbidity and mortality</p> <p>Provides time for reproductive choices and preparation for birth</p>
Intervention	<p>Scan at 18-21 weeks to check for foetal abnormalities, including of brain, spinal cord, heart, bowel, kidneys, arms and legs</p> <p>If high chance results obtained from scan or second-line screening, rapid referral into services for diagnostic testing (including amniocentesis and chorionic villus sampling)</p>
Activity in 2024/25	90.4% screening uptake of 18-21 week scan (10,791 women consented to scan)
Outcomes	Foetal anomaly suspected in 7.2% (774) of women scanned

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1.1 Introduction

Pregnancy screening is offered to all women who attend antenatal appointments. The aim of pregnancy screening is to alert women, their partners, their midwives and clinical team, to increased risk of illness in the pregnant woman or her baby. This knowledge allows decision-making about reproductive choices, treatment or planning for the birth. Screening uptake is high.

Within pregnancy screening there are four main screening pathways. Screening tests are offered at certain time windows in pregnancy, to allow for timely decisions about next steps. See Appendix 1.1 for the timelines for testing during pregnancy. The screening pathways are:

- Haemoglobinopathies screening for sickle cell and thalassaemia
- Infectious diseases screening for hepatitis B, syphilis and HIV
- Down's syndrome, Edward's syndrome and Patau's syndrome screening
- and other fetal anomalies screening.

This report is organised into five sections:

- Demographics of pregnant women and timing of attendance at antenatal services
- Haemoglobinopathies screening;
- Infectious diseases screening
- Down's syndrome, Edward's syndrome and Patau's syndrome screening;
- Fetal anomaly screening.

1.2 Information systems and programme performance

Pregnancy screening follows national standards as laid out in the Healthcare Improvement Scotland (HIS) standards. Key Performance Indicators are also developed for pregnancy screening. However, at this time implementation of screening is undertaken by each NHS board separately, using information systems of local choice, and with limited performance data available.

Public Health Scotland is currently undertaking a programme of work to develop national statistics for pregnancy and newborn screening. At this time, the only available statistics are for chromosomal conditions Down's syndrome, Edward's syndrome and Patau's syndrome. In the next two years we expect the first publications of pregnancy infectious diseases screening and pregnancy haemoglobinopathies screening.

Local monitoring data sourced from the maternity services patient management system BadgerNet, is presented in this report to provide uptake and outcome data for period 1st April 2024 to 31st March 2025. As a result of differences in data extract dates, numbers in local data analysis may differ from those presented in published national programme reports.

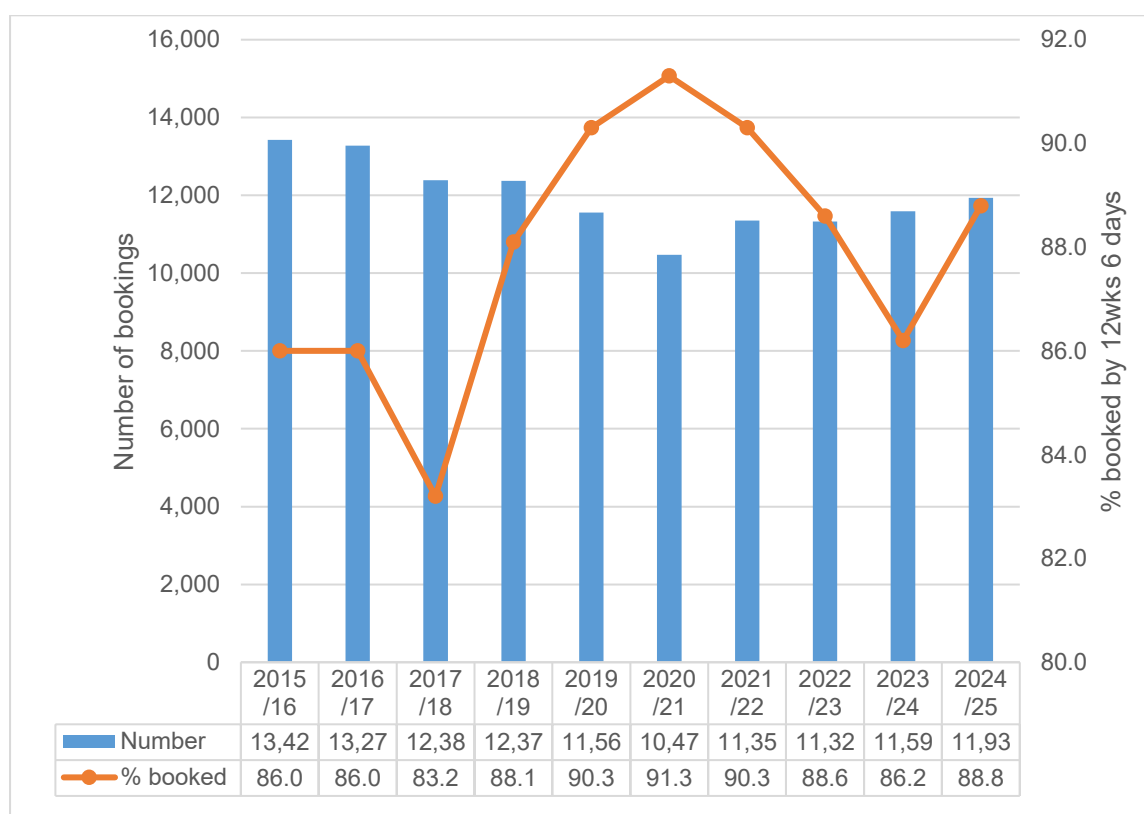
1.3 Pregnant women attending NHSGGC maternity services in 2024/25

Screening in pregnancy is offered universally to all pregnant women during antenatal visits. Data presented in this report reflects individual pregnancy bookings rather than individual women, as some women may experience more than once pregnancy within the 12 month reporting period.

In NHSGGC between April 2024 and March 2025, 11,993 pregnant women booked to attend an antenatal appointment. **Figure 1.1** shows the number of first antenatal appointments, and percentage of women attended by 12 weeks and 6 days

From 2015/16 to 2024/25, there has been an overall decline in the number of antenatal clinic attendances from 13,427 in 2015/16 to 11,933 in 2024/25. However, the number of bookings into maternity services in the current year 2024/25 shows an increase from the previous five years (**Figure 1.1**).

Figure 1.1. Trend in number first antenatal appointment, and percentage of women that attended by 12 weeks and 6 days, NHSGGC residents, 2015/16 to 2024/25



Source: BadgerNet, July 2025

Timing of the first antenatal appointment is important to ensure best care and time to consider options about the pregnancy. In 2024/25, overall 88.8% (10,599) pregnant women attended their first antenatal appointment (often referred to the booking appointment) before 12 weeks 6 days or 3 months gestation. This proportion is higher than the last two years, see Figure 1.1

The proportion of pregnant women who attended their first antenatal appointment before 12 weeks 6 days or 3 months was highest at the Royal Alexandra Hospital maternity unit (91.1%) and lowest at the Princess Royal Maternity Hospital (85.6%). The gestation age at booking for 28 women was unknown (Table 1.1).

Table 1.1. Number of women booked for their first antenatal appointment in NHSGGC April 2024 to March 2025, by maternity unit and by gestation age.

Maternity Unit		≤12Wks 6Days	13Wks 0Days - 16Wks 6Days	17Wks 0Days - 20Wks 6Days	21Wks 0Days - 24Wks 6Days	25Wks 0Days - 30Wks 6Days	≥31Wks 0Days	Unknown	Total
Princess Royal Maternity Hospital (PRM)	Number	3,214	295	75	58	42	64	7	3,755
	%	85.6	7.9	2.0	1.5	1.1	1.7	0.2	
Queen Elizabeth University Hospital (QEUH)	Number	4,617	245	74	51	66	75	13	5,141
	%	89.8	4.8	1.4	1.0	1.3	1.5	0.3	
Royal Alexandra Hospital (RAH)	Number	2,768	158	38	21	22	22	8	3,037
	%	91.1	5.2	1.3	0.7	0.7	0.7	0.3	
Total	Number	10,599	698	187	130	130	161	28	11,933
	%	88.8	5.8	1.6	1.1	1.1	1.3	0.2	

Badgernet, July 2025

Gestational age at first antenatal booking appointment varied by Scottish Index of Multiple Deprivation (SIMD). Among pregnant women residing in the most deprived areas, 84.1% (4,051) women booked into maternity services by 12 weeks and 6 days gestation, compared to 93.3% (1,830) pregnant women residing in the least deprived areas. See **Table 1.2**.

Table 1.2. Gestational age at first antenatal booking appointment by deprivation categories for period 1 April 2024 to 31 March 2025

SIMD Quintile	≤12Wks 6Days	13Wks 0Days - 16Wks 6Days	17Wks 0Days - 20Wks 6Days	21Wks 0Days - 24Wks 6Days	25Wks 0Days - 30Wks 6Days	≥31 Wks 0Days	Unkn	Total	% ≤12 Wks 6Dys
1 (Most Deprived)	4,051	384	129	78	61	100	13	4,816	84.1
2	2,017	109	26	19	19	23	7	2,220	90.9
3	1,300	68	15	15	13	13	*	1,428	91.0
4	1,401	62	6	7	15	14	*	1,507	93.0
5 (Least Deprived)	1,830	75	11	11	22	11	*	1,962	93.3
Total	10,599	698	187	130	130	161	28	11,933	88.8

Source: Badgernet, July 2025

* numbers ≤5, or identifiable as ≤5 redacted as per ISD Statistical Disclosure Control Protocol

The majority of pregnant women 36.5% (4,351) were 20-24 years of age at booking. 3.1% (364) were under 20 years of age and 4.8% (576) were over 35 years of age (Table 1.3).

Table 1.3. Age at first antenatal booking appointment by HSCP areas for period April 2024 to March 2025

Age At Booking		<20	20-24	25-29	30-34	35+	Total
East Dunbartonshire	Number	16	204	368	252	54	894
	%	1.8	22.8	41.2	28.2	6.0	
East Renfrewshire	Number	12	200	351	234	49	846
	%	1.4	23.6	41.5	27.7	5.8	
Glasgow North East	Number	58	857	698	337	92	2,042
	%	2.8	42.0	34.2	16.5	4.5	
Glasgow North West	Number	48	716	685	419	94	1,962
	%	2.4	36.5	34.9	21.4	4.8	
Glasgow South	Number	107	1,069	969	511	144	2,800
	%	3.8	38.2	34.6	18.3	5.1	
Inverclyde	Number	34	284	213	84	25	640
	%	5.3	44.4	33.3	13.1	3.9	
Renfrewshire	Number	45	679	734	377	83	1,918
	%	2.3	35.4	38.3	19.7	4.3	
West Dunbartonshire	Number	44	342	280	130	35	831
	%	5.3	41.2	33.7	15.6	4.2	
Total		364	4,351	4,298	2,344	576	11,933

Source: Badgernet, July 2025

The ethnic origin of pregnant women is shown in **Table 1.4**. The largest population groups were White: Scottish (59.0%); Asian: Pakistani, Pakistani Scottish, Pakistani British (8.0%); and African, African Scottish, African British (8.0%).

Table 1.4. Number of NHSGGC residents booked for their first antenatal appointment by ethnic origin during 1 April 2024 to 31 March 2025

Ethnicity	Number	% of total
African, African Scottish, African British	959	8.0
Asian: Bangladeshi, Bangladeshi Scottish, Bangladeshi British	32	0.3
Asian: Chinese, Chinese Scottish, Chinese British	104	0.9
Asian: Indian, Indian Scottish, Indian British	458	3.8
Asian: Other Asian, Asian Scottish, Asian British	233	2.0
Asian: Pakistani, Pakistani Scottish, Pakistani British	958	8.0
Caribbean or Black	28	0.2
Any mixed or multiple ethnic groups	168	1.4
White: Gypsy / Traveller	*	0.0
White: Irish	89	0.7
White: Other British	504	4.2
White: Other white ethnic group	518	4.3
White: Polish	125	1.0
White: Roma	79	0.7
White: Showman/Showwoman	*	0.0
White: Scottish	7,038	59.0
Other: Arab, Arab Scottish, Arab British	355	3.0
Other: Other ethnic group	166	1.4
Refused/Not Known/ Null	113	0.9
Total	11,927	

Source: BADGERNET, July 2025

* numbers ≤5, or identifiable as ≤5 redacted as per ISD Statistical Disclosure Control Protocol

1.4 Haemoglobinopathies Screening

1.4.1 What are haemoglobinopathies?

The haemoglobinopathies are a large group of inherited blood disorders which affect the haemoglobin (oxygen carrying) component of blood. They fall into two main groups:

- haemoglobin variants (such as sickle cell disorders) which are associated with the production of abnormal forms of haemoglobin; and
- thalassaemias - in which there is an abnormality in the amount of haemoglobin produced.

Haemoglobinopathies are inherited blood disorders and for a baby to be affected, an abnormal copy of the haemoglobin gene needs to be inherited from both parents. If one copy of abnormal haemoglobin and one copy of normal haemoglobin are inherited, the baby will be a carrier and not affected. Carrier status for haemoglobinopathies will not affect the carrier, they will have normal functioning haemoglobin, but becomes important later in life, for example, when they choose to have children. Newborn bloodspot screening also includes a test for haemoglobinopathies and will identify babies who are affected or who are carriers.

Information about haemoglobinopathies screening in pregnancy is available on [NHS Inform](#).

1.4.2 Haemoglobinopathies screening test

Screening for haemoglobinopathies involves a blood test to determine the carrier status of the pregnant woman. Haemoglobinopathy carrier status can affect any population, however it is more common in people with ancestry from Africa, Caribbean, Middle East, South America, Southern European, South and South-East Asia. As part of the screening test, information about ethnic and geographical ancestry is collected in a Family Origin Questionnaire and is used in the screening risk assessment.

If the screening test result for the pregnant woman is high risk (is a carrier or affected by a haemoglobinopathy), a blood test is offered to the father.

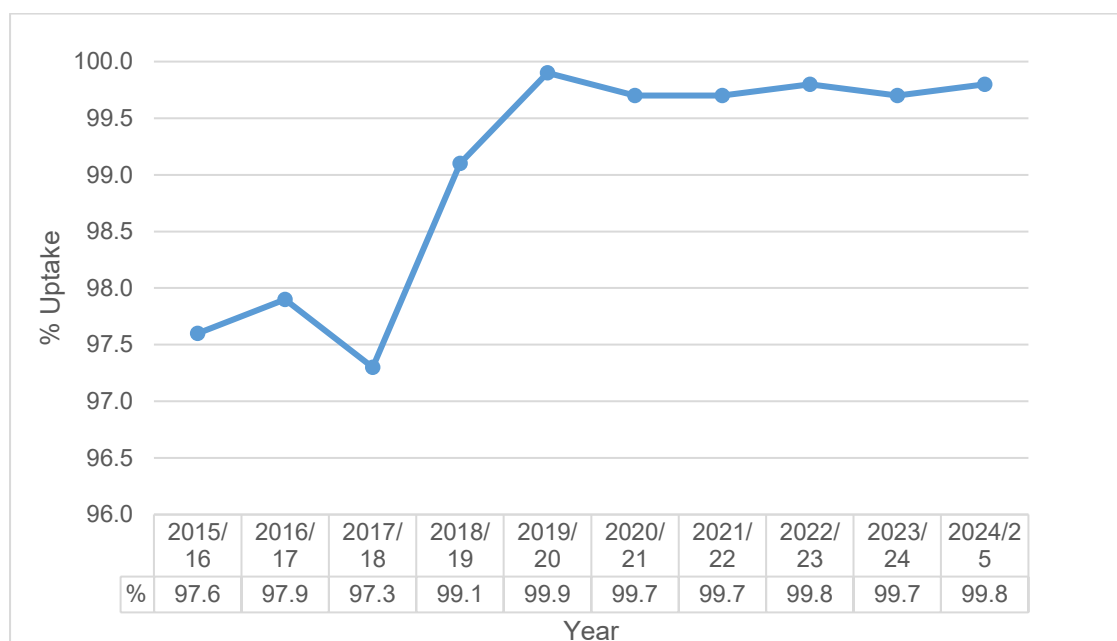
High risk pregnancies are ones where both parents are affected or are carriers for haemoglobinopathies. In this situation, parents are referred for further diagnostic testing and/or to discuss the risks with a genetic counsellor.

Screening is offered to all women as early as possible in pregnancy, and ideally by ten weeks gestation, to give parents time to make an informed decision on whether to continue with the pregnancy.

1.4.3 Haemoglobinopathies screening uptake and outcomes

Haemoglobinopathies screening uptake has been high at >99% in NHSGGC for the last six years, see **Figure 1.2**.

Figure 1.2 Uptake of haemoglobinopathies testing amongst pregnant women, NHSGGC, 2015/16 to 2024/25



Source: BADGERNET, July 2025

In 2024/25, of the 11,933 women booked for their first antenatal appointment, 11,911 (99.8%) women had haemoglobinopathies screening tests (**Table 1.5**). Six women refused consent and for 25, consent was not recorded.

In NHSGGC in 2024/25, 10,483 (87.8%) blood samples for haemoglobinopathies (HBO) testing had a completed Family Origin Questionnaire (FOQ). This varied across sites with the Princess Royal Maternity completing the FOQ for 84.3% of pregnant women and the Royal Alexandra Hospital maternity unit completing FOQ for 90.6% of pregnant women. Blood samples are screened even if the FOQ was missing.

Table 1.5. NHSGGC haemoglobinopathies (HBO) screening in pregnancy from 1 April 2024 to 31 March 2025

Maternity Unit	Total	HBO Test Performed	FOQ Completed	FOQ Not Completed	% FOQ Completed
Princess Royal Maternity Hospital (PRM)	3,755	3,748	3,166	589	84.3
Queen Elizabeth University Hospital (QEUH)	5,141	5,132	4,564	577	88.8
Royal Alexandra Hospital (RAH)	3,037	3,031	2,753	284	90.6
Total	11,933	11,911	10,483	1,450	87.8

Source: BadgerNet, July 2025

Of the 11,911 maternal samples screened for haemoglobinopathies, results identified 20 foetus at risk and 25 cases where partner testing should be offered. (Table 1.6).

Table 1.6 NHSGGC haemoglobinopathies screening outcome, 1 April 2024 to 31 March 2025

Screening Outcome	Maternity Unit			Total
	Glasgow Princess Royal Maternity	Queen Elizabeth University Hospital	Royal Alexandra Maternity Hospital	
Fetal At Risk	11	*	*	20
Fetal Not At Risk	84	87	41	212
Positive	*	*	*	*
Carrier	338	521	166	1025
Possible Carrier	0	0	0	0
Known Carrier	0	0	0	0
Partner Testing Should Be Offered	15	*	*	25
Negative	3,231	4394	2719	10344
Partner Testing Not Required	*	*	*	*
FOQNO	11	54	54	119
Unknown	52	63	43	158
Grand Total	3,748	5,132	3,031	11,911

Source: BADGERNET, July 2025

*numbers ≤5, or identifiable as ≤5 redacted as per PHS Statistical Disclosure Control Protocol

1.4.4 Key Performance Indicators

Haemoglobinopathies screening in pregnancy is monitored through key performance indicators (KPIs) as for every screening programme. These are described in **Table 1.7**. We currently are not able to ascribe data to some of these KPIs. We await development of national data to support reporting against these indicators.

Completion of FOQ has been below the essential level for a number of years in NHSGGC. There is an ongoing improvement project to establish electronic submission of this form to the lab, rather than the current process which is to complete then print out the form for submission with the sample.

Table 1.7 KPIs for Haemoglobinopathies screening in pregnancy, 2024-25

KPI	Performance threshold	NHSGGC 2024-25
1.1 Coverage	Essential: $\geq 95\%$ Desirable: $\geq 99\%$	99.8%
1.2 Timeliness of pregnancy screen (proportion of women tested by 10+0)	Essential: $\geq 50.0\%$ Desirable: $\geq 75.0\%$	Data not available
1.3 Completion of FOQ	Essential: $\geq 95\%$ Desirable: $\geq 99\%$	87.8%
1.4 Turnaround (results reported within 3 working days)	Essential: $\geq 90.0\%$ Desirable: $\geq 95.0\%$	Data not available
1.5 Timely offer of prenatal diagnosis (PND) (proportion of women offered PND by 12+0)	none set	Data not available
1.6 Timely reporting of newborn screen positive results (parents given results by 28 days of age)	Essential: $\geq 90.0\%$ Desirable: $\geq 95.0\%$	Data not available
1.7 Timeliness to information and support (newborn with screen positive by 90 days of age)	Essential: $\geq 90.0\%$ Desirable: $\geq 95.0\%$	Data not available

1.5 Infectious diseases in pregnancy screening

1.5.1 Why screen for infectious diseases in pregnancy?

The infections that are screened for in pregnancy are hepatitis B (HBV), syphilis and Human Immunodeficiency Virus (HIV). All three have the potential to be passed on from mother to baby during or after childbirth, and to harm the health of both the mother and her baby. Effective measures are available to prevent all three from being transmitted and from causing health problems.

- **Hepatitis B** is a virus that affects the liver. Babies can be immunised at birth to prevent them from being infected.
- **Syphilis** is an infection that can be treated with antibiotics.
- **Human Immunodeficiency Virus (HIV)** can be treated effectively in the mother and transmission of HIV from an infected mother to her baby can be prevented.

Screening allows undiagnosed infections to be identified.

Information about infectious diseases screening in pregnancy is available on [NHS Inform](#).

1.5.2 Infectious diseases screening tests

Infectious diseases screening is undertaken on blood samples taken from the pregnant women at their first antenatal appointment.

For women who test positive, there is immediate referral into the appropriate clinical care pathway. Clinical management protocols are also in place for diagnosis late in pregnancy or during birth.

1.5.3 Infectious disease screening uptake and outcomes

Of the 11,933 women who were booked for a first antenatal appointment in 2024-2025, 11,920 (99.9%) were recorded as having been offered testing for Hep B, HIV and Syphilis almost all women who were offered infectious disease screening took up this offer, (see **Table 1.8**)

Antenatal screening identified:

- ≤5 women diagnosed HIV;
- 45 women diagnosed with HBV (including 20 who were newly diagnosed); and
- 23 women diagnosed with syphilis (not all of whom needed treatment as these included both current and previously diagnosed infections).

Table 1.8. Infectious diseases screening and results, NHSGGC, 2024/2025

1 April 2023 - 31 March 2024					Results	
	Total number of women booking	Number of women offered testing	Number of women declining test	Acceptance rate	Positive ^{1,2}	
	(N)	(N)	(N)	%	(N)	%
HIV	11,933	11,920 (99.9%)	*	99.3%	*	0.05
HBV	11,933	11,920 (99.9%)	*	99.8%	45	0.4
Syphilis	11,933	11,920 (99.9%)	*	99.2%	23	0.2

*numbers ≤5, or identifiable as ≤5 redacted as per PHS Statistical Disclosure Control Protocol
Source: BadgerNet and West of Scotland Specialist Virology Centre

1.5.4 Key Performance Indicators

Infectious diseases screening in pregnancy is monitored through key performance indicators (KPIs) as for every screening programme. These are described in **Table 1.9 Hepatitis B, 1.10 Syphilis and 1.11 HIV**. We currently are not able to ascribe data to some of these KPIs. We await development of national data to support reporting against these indicators.

Table 1.9. KPIs for Hepatitis B screening in pregnancy, NHSGGC, 2024-25

KPI	Performance threshold	NHSGGC 2024-25
2.1 Coverage	Essential: ≥ 95.0% Desirable: ≥ 99.0%	99.8 %
2.2 Turnaround (results reported within 8 days)	Essential: ≥ 95.0% Desirable: ≥ 97.0%	100%
2.3 Timeliness to information and support (proportion with appointment within 10 days)	Essential: ≥ 97.0% Desirable: ≥ 99.0%	<p>45 women tested positive for hepatitis B, of whom:</p> <ul style="list-style-type: none"> • 24 were known about previously (previous test in GGC). • 21 were new diagnoses (no previous diagnosis in GGC). <p>A local protocol is in place for the management of women with hepatitis B infection identified in pregnancy. This covers referral for specialist care, checking viral load at 26 weeks, actions required depending on viral load and paediatric services involvement at delivery.</p>

2.4 Timely assessment (proportion seen by a specialist within 6 weeks of positive screening result)	Essential: ≥ 75.0% Desirable: ≥ 90.0%	A per 2.3
2.5 Timely neonatal vaccination and immunoglobulin (administered within 24hours of birth)	Essential: ≥ 97.0% Desirable: ≥ 99.0%	99.7%

Table 1.10. KPIs for syphilis screening in pregnancy, NHSGGC, 2024-25

KPI	Performance threshold	NHSGGC 2024-25
3.1 Coverage	Essential: ≥ 95.0% Desirable: ≥ 99.0%	99.3%
3.2 Turnaround (results reported within 8 days)	Essential: ≥ 95.0% Desirable: ≥ 97.0%	100%
3.3 Timeliness to information and support (proportion with appointment within 10 days)	Essential: ≥ 97.0% Desirable: ≥ 99.0%	23 women had a reactive syphilis test. However not all of these women will have required treatment, since this figure includes women with previously treated syphilis as well as those with current infection. Failsafe in conjunction with sexual health services ensures that all positive women are followed up promptly.

Table 1.11. KPIs for HIV screening in pregnancy, NHSGGC, 2024-2025

KPI	Performance threshold	NHSGGC 2024-25
4.1 Coverage	Essential: ≥ 90.0% Desirable: ≥ 99.0%	99.7%
4.2 Turnaround (results reported within 8 days)	Essential: ≥ 95.0% Desirable: ≥ 97.0%	100%
4.3 Timeliness to information and support (proportion with appointment within 10 days)	Essential: ≥ 97.0% Desirable: ≥ 99.0%	≤5 women tested positive for HIV during antenatal screening. Some of whom were women previously known (previous positive test in GGC) and new diagnoses (no previous positive test in GGC).

		Failsafe in conjunction with sexual health or other services ensures that all HIV positive women are followed up promptly
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1.6 Down's syndrome, Edwards' syndrome and Patau's syndrome (trisomy) screening

1.6.1 Why screen for Down's syndrome, Edwards' syndrome and Patau's syndrome in pregnancy?

Down's syndrome, Edwards' syndrome and Patau's syndrome screening is also known as trisomy screening. These syndromes are caused by a person having a third copy of a chromosome. For Down's syndrome this is chromosome 21; for Edwards' syndrome, chromosome 18; for Patau's syndrome, chromosome 13. Older mothers are more likely to have a baby with a chromosomal condition, although it can occur in women of any age.

The extra copy of a chromosome results in mild to significant changes and effects in a newborn, ranging from mild learning disability to significant mental and physical disability. People with Down's syndrome can lead long, active and fulfilling lives. Edwards syndrome and Patau's syndrome are seen as life-limiting.

Information about Down's syndrome, Edwards' syndrome and Patau's syndrome screening is available on [NHS Inform](#).

The decision to accept screening for chromosomal conditions raises ethical issues for women. Uptake of chromosomal or other congenital anomalies screening depends on whether women wish further investigation or management such as decisions about continuation of pregnancy. However, screening also allows appropriate, management options (such as cardiac surgery or delivery in a specialist unit) to be offered in the antenatal period.

1.6.2 Down's syndrome, Edwards' syndrome and Patau's syndrome screening tests

The trisomy screening pathway is complex.

First line screening test:

- blood test and ultrasound scans together with maternal risk factors are used to derive an overall risk of having a baby with a chromosomal condition.
- different tests are available depending on whether blood and scan are taken in first or second trimester. Screening for samples taken in second trimester is only for Down's syndrome.

Second-line screening test:

- for women with a high chance result from their first-line test, non-invasive prenatal testing (NIPT) blood test is offered, or a diagnostic test.

Diagnostic testing:

- is offered following a high chance screening result (either first or second-line screening test) and is amniocentesis or chorionic villus biopsy (CVS).

1.6.3 Down's syndrome, Edwards' syndrome and Patau's syndrome screening uptake and outcomes

Uptake and outcome data for Down's syndrome, Edwards' syndrome and Patau's syndrome are sourced from national laboratory annual reports^{1,2}, therefore figures may differ from local analysis presented earlier in this report.

First-line screening test - screening uptake

First line screening is undertaken in the national laboratory in NHS Lothian for samples taken in first trimester, and at the UK national laboratory in Bolton for samples taken in second trimester. In 2024/25, 11,328 samples were submitted for screening from NHSGGC. This includes women who were resident outside NHSGGC but attended NHSGGC Maternity Services. See **Table 1.12**.

The proportion of women who were screened in second trimester decreased in 2024/25 compared with previous years (19.7% compared to 23.3% in 2023/24 and 24.7% in 2022/23). First line screening is preferable in first trimester as all three trisomy syndromes are in the first trimester screen (Down's syndrome only in the second trimester screen); and the first trimester screen is more accurate.

Table 1.12. First and second trimester Down's, Edwards' and Patau's syndromes screening for pregnant women in NHSGGC, 2019/20 to 2024/25

	2024/25	2023/24	2022/23	2021/22	2020/21	2019/20
<i>First Trimester</i>						
Singleton	8,948	8,153	7,785	8,037	7,849	7,801
Twin	146	110	130	121		
<i>Second Trimester</i>						
Tests	2,234	2,509	2,596	2,389	2,263	2,115
Total tests	11,328	10,772	10,511	10,547	10,112	9,916
% Second trimester	19.7%	23.3%	24.7%	22.7%	22.4%	21.3%

Source: First Trimester Trisomy Screening, Lothian Laboratory Annual Report 2024/25

¹ NHS Lothian, Antenatal Trisomy Screening Service Annual Report (2024/25)

² Bolton Antenatal Screening Laboratory

First Trimester samples are taken during 11 weeks +2 days to 14 weeks +1 day of pregnancy and are sent to NHS Lothian Laboratory. In 2024/25, of the 9,094 first trimester samples, 27 were late samples (0.3%) and 379 samples (4.2%) had incomplete request details.

Of the samples tested in the first trimester:

- 281 samples had increased chance of Down's syndrome; and
- 50 samples had increased chance for Edwards' syndrome or Patau's syndrome.

Overall, the screen positive rate (SPR) for increased chance results in the first trimester was 3.14% for Down's syndrome, and 0.56% for Edwards' and Patau's syndromes (**Table 1.13**)

Table 1.13. First trimester Down's, Edwards' and Patau's syndromes singleton screening samples, NHSGGC, 2024/25

	Increased chance Down's syndrome	Down's syndrome SPR	Increased chance Edwards' or Patau's syndromes	Edwards' or Patau's syndromes SPR
First trimester	281	3.14%	50	0.56%

Source: First Trimester Trisomy Screening, Lothian Laboratory Annual Report 2024/25

The second trimester samples are taken up to 20 weeks+0 days gestation and are sent to Bolton Laboratory for testing. During 2024/25, 2,234 samples were taken in the second trimester with 132 high chance results were reported (5.9%) (**Table 1.14**).

Table 1.14. Second trimester Down's syndrome screening samples, NHSGGC, 2024/25

2024/25	Number of samples	Number of high chance results	% High chance results
Second Trimester	2,234	132	5.9%

Source: Bolton Labs September 2025

Second-line screening test – NIPT screening

In 2024/25, NHSGGC submitted 363 samples for NIPT testing which is undertaken at the national laboratory in NHS Tayside.

1.6.4 Key Performance Indicators

First-line screening test Key Performance Indicators for Down's syndrome, Edwards' syndrome and Patau's syndrome screening

The Key Performance Indicators (KPIs) for first-line screening for Down's syndrome, Edwards' syndrome and Patau's syndrome are shown in the **Table 1.15**. The data provided are from the NHS Lothian first trimester screening laboratory and reflect national screening activity. This data does not include data from the second trimester screening laboratory in Bolton. First and second trimester testing combine to provide the full picture of first-line screening.

Table 1.15. KPIs for first-line Down's syndrome, Edwards' syndrome and Patau's syndrome screening in pregnancy

KPI	Performance threshold	Scotland 2024/25
5.1 Coverage	No threshold, screening is voluntary	Data not available
5.2 Test turnaround time (reported within 3 working days)	Essential: $\geq 97.0\%$ Desirable: $\geq 99.5\%$	99.9%
5.3 Completion of laboratory request forms	Essential: $\geq 97.0\%$	98%
5.5 Screen positive rates (SPR)		3.06 % for T21 0.62 % for T18/13
5.6 Detection rate		83.6 % for T21 84.4 % for T18/13
5.3 Adequate samples - Proportion of samples that are correct and can be tested	Essential: $\geq 95.0\%$	94.1 %
5.4 Timeliness to information and support (proportion with appointment within 3 days)	Essential: $\geq 97.0\%$ Desirable: $\geq 99.0\%$	Data not available

Source: First Trimester Trisomy Screening, Lothian Laboratory Annual Report 2024/25

Second-line screening test (NIPT screening) Key Performance Indicators

The Key Performance Indicators for second-line or NIPT screening for Down's syndrome, Edwards' syndrome and Patau's syndrome are shown in **Table 1.16**. The data provided are from the NHS Tayside NIPT Laboratory and reflect national screening activity.

Table 1.16. KPIs for second-line Down’s syndrome, Edwards’ syndrome and Patau’s syndrome screening (NIPT) in pregnancy

KPI	Performance threshold	Scotland 2024/25
6.1 Coverage	No threshold, screening is voluntary	Data not available
6.2 Timely receipt of NIPT sample	Essential: ≥ 90.0% Desirable: ≥ 95.0%	96.6%
6.3 Test turnaround time (reported within 7 working days of sample receipt)	Essential: ≥ 85.0% Desirable: ≥ 95.0%	96.7%
6.4 Timeliness to information and support (proportion with appointment within 3 days)	Essential: ≥ 97.0% Desirable: ≥ 99.0%	Data not available

Source: NIPT Screening Laboratory Annual Report 2024/25

1.7 Foetal Anomaly Screening

1.7.1 Why screen for foetal anomalies in pregnancy?

Finding out about health conditions or chromosomal conditions before birth can help parents get support earlier and make decisions for themselves and their baby. This may include planning the birth so that treatment can be accessed quickly when the baby is born.

Foetal anomalies screening assesses the baby’s health and development, including the development of their brain, spinal cord, heart, bowel, kidneys, arms and legs.

Information about foetal anomalies screening is available on [NHS Inform](#).

1.7.2 Foetal anomaly screening test

The foetal anomaly screening test is a mid-pregnancy ultrasound scan between 18- and 21-weeks gestation.

1.7.3 Foetal anomaly screening uptake and outcomes

The number of pregnant women who gave consent for a foetal anomaly scan was 10,791 (90.4%) of all women who attended a booking appointment. Of those who consented to scanning, 10,788 (99.97%) of scans were performed (**Table 1.17**).

Table 1.17. Uptake of screening for congenital anomalies by foetal anomaly scan (FAS) for the period March 2024 to April 2025 in NHSGGC

Maternity Unit	Pregnant women	FAS Consented	% FAS Consented	FAS Performed	% FAS Performed
Princess Royal Maternity Hospital	3,755	3,375	89.9%	3,375	100.0%
Queen Elizabeth University Hospital	5,141	4,610	89.7%	4,608	99.96%
Royal Alexandra Hospital	3,037	2,806	92.4%	2,805	99.96%
Total	11,933	10,791	90.4%	10,788	99.97%

Source: Badger Net, July 2025

Of the 10,788 foetal scans performed, 774 (7.2%) foetal anomalies were suspected. (Table 1.18)

Table 1.18. Outcome of foetal anomaly scans performed for the period 1 April 2024 to 31 March 2025

Maternity Unit	Number of Foetal Scans performed	Anomaly Not Suspected	Anomaly Suspected	% Anomaly Suspected
Princess Royal Maternity Hospital	3,375	3,499	256	7.6%
Queen Elizabeth University Hospital	4,608	4,885	256	5.6%
Royal Alexandra Hospital	2,805	2,775	262	9.3%
Total	10,788	11,159	774	7.2%

Source: Badger Net, July 2025

1.7.4 Diagnostic testing for foetal anomalies including trisomy

Diagnostic testing for foetal anomaly is offered when an issue is identified at a scan or at screening. Two diagnostic tests are available: amniocentesis or chorionic villus biopsy. Both of these tests come with risk, and are only offered if there is a high chance that a baby could have a health condition or chromosomal condition because:

- an earlier antenatal screening test has suggested there may be a health condition or chromosomal condition;
- a previous pregnancy with health condition or chromosomal condition;
- a family history of a health condition, such as cystic fibrosis or muscular dystrophy.

Diagnostic testing - Amniocentesis

In 2024/25, 226 amniocentesis samples from NHSGGC were analysed by the Cytogenetics Laboratory. Of these samples, 19 abnormalities were detected (8.4% of samples) (**Table 1.19**).

Table 1.19. Amniocentesis referrals and outcomes, 1 April 2024 to 31 March 2025 in NHSGGC

	Screening risk	Scan abnormality	NIPT	Other	Total
Number of patients (tests)	45	122	23	36	226
% total referral reasons	19.91%	53.98%	10.18%	15.93%	
Number with normal results	36	101	*	34	193
Number with diagnostic trisomy	*	6	*	*	12
Number abnormal (non-trisomy)	*	6	*	*	7
Failed analysis	*	9	*	*	14
Total Abnormalities	6	12	*	0	

* numbers ≤5, or identifiable as ≤5 redacted as per PHS Statistical Disclosure Control Protocol

Source Cytogenetics Lab – Dec 2025

NIPT – Non-Invasive Prenatal Test

Diagnostic testing - Chorionic Villus Biopsy

In 2024/25, 101 chorionic villus biopsies from NHSGGC were analysed by the Cytogenetics Laboratory. Of these biopsies, 37 abnormalities were detected (36.6%) (**Table 1.20**).

Table 1.20. Chorionic villus biopsy sample (CVS) referrals and outcomes 1 April 2023 to 31 March 2024 in NHSGGC

	Screening risk	Scan abnormality	NIPT	Other	Total
Number of patients (tests)	16	46	*	35	101
% total referral reasons	15.84%	45.54%	3.96%	34.65%	
Number with normal results	8	18	*	34	61
Number with diagnostic trisomy	7	21	*	0	31
Number abnormal (non-trisomy)	*	*	0	0	6
Failed analysis	*	*	0	*	*
Total Abnormalities	7	27	*	0	

* numbers ≤5, or identifiable as ≤5 redacted as per PHS Statistical Disclosure Control Protocol

Source Cytogenetics Lab – Dec 2025

NIPT – Non-Invasive Prenatal Test

1.7.5. Key Performance Indicators

Key Performance Indicators for foetal anomaly screening in pregnancy are shown in Table 1.21. Currently no data is available.

Table 1.21. KPIs for foetal anomaly screening in pregnancy, NHSGGC, 2024-25

KPI	Performance threshold	2024/25
7.1 Coverage	Essential: ≥ 90.0% Desirable: ≥ 95.0%	90.4%
7.2 Test performance (detection rate for cardiac anomalies)	Essential: ≥ 50.0%	Data not available
7.3 Time to information and support (proportion with appointment within 3 days)	Essential: ≥ 97.0%	Data not available

1.8 Challenges and priorities

- Work continues to ensure that there are low numbers of unavoidable repeat samples for screening.
- NHSGGC has a high proportion of second trimester first-line Down's syndrome, Edwards' syndrome and Patau's syndrome screening. In the last year we undertook a short investigative project into the reasons for this. An improvement plan based on the findings of this work is currently being developed.

- We have been investigating making submission of the Family Origin Questionnaire for haemoglobinopathies screening electronic, rather than paper based. We hope to develop this change over the next year.
- We have developed improvements in reporting of infectious diseases screening, including calculating true coverage based on testing in individuals, rather than aggregate laboratory data.


At a glance



Before
10 weeks

Screening for sickle cell and thalassaemia*

page
10



Between
8 and 12 weeks


Blood tests for full blood count, blood group and Rhesus status

page
9

Screening blood test for hepatitis B, syphilis and HIV*

page
19


* It's best if these tests are carried out in the early stages of pregnancy, but they can still be done at any point, up to and including labour.



Between
11 and 14 weeks

Early blood test for Down's syndrome, Edwards' syndrome and Patau's syndrome

page
34



Between
11 and 14 weeks

NT (nuchal translucency) ultrasound scan for Down's syndrome, Edwards' syndrome and Patau's syndrome

page
35



Between
18 and 21 weeks

Mid-pregnancy screening ultrasound scan

page
22

If you think you have missed any scans or tests, or are unsure about your results, speak to your midwife.

4



Screening involving blood test



Screening involving ultrasound scan

[your-pregnant-scans-and-tests-in-english_june-2025.pdf](#)

Chapter 2 – Newborn Bloodspot Screening

Summary

Newborn Bloodspot Screening	
Why?	Early identification of rare inherited conditions Reduce infant morbidity and mortality
Intervention	Blood screening for nine inherited conditions Heel prick blood sample taken at day 4-5 of life by midwives Rapid referral into services for diagnostic testing and treatment as needed
Activity in 2024/25	99.96% screening uptake (10,781 babies screened)
Outcomes	14 babies were diagnosed with congenital hypothyroidism (CHT) ≤5 babies were diagnosed with cystic fibrosis 14 babies were diagnosed with haemoglobinopathy variants, and 181 babies were identified as haemoglobinopathy carriers ≤5 babies were diagnosed with isovaleric acidaemia (IVA)

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2.1. Newborn Bloodspot Screening

Newborn bloodspot screening identifies babies who may have rare but serious inherited conditions. Most babies screened will not have any of the conditions but for the small numbers that do, the benefits of screening are enormous. Early treatment can improve health and prevent severe disability or even death. Every baby born in Scotland is eligible for and routinely offered screening.

Newborn bloodspot screening aims to identify inherited conditions which can lead to problems with growth and development as early as possible after birth. This means that appropriate management for the condition detected can be offered as quickly as possible.

The inherited conditions screened for are:

- sickle cell disease;
- cystic fibrosis;
- congenital hypothyroidism;
- phenylketonuria (PKU);
- medium chain acyl-CoA dehydrogenase deficiency (MCADD);
- maple syrup urine disease (MSUD);
- isovaleric acidaemia (IVA);
- glutaric aciduria type 1 (GA1);
- homocystinuria (HCU).

2.2. Eligible Population

Newborn Bloodspot screening is offered to all newborns in Scotland.

For this reporting period, (April 2024 to March 2025), eligible babies are the total number of babies born during this period, excluding any baby who died before the age of 8 days. This report only includes babies resident in NHS GGC at day 7 after birth.

2.3. The Screening Test

The bloodspot sample is taken on day 4-5 of life (aged 96-120 hours old) whenever possible. There are separate protocols in place for screening babies who are ill, have had a blood transfusion or are born prematurely, and when repeat testing is required.

Newborns with a sibling diagnosed with MCADD and with the same parents, are at high risk of MCADD. In this situation, the newborn will be offered MCADD diagnostic testing at 24–48 hours of age as well as newborn bloodspot screening.

For bloodspot screening, a blood sample is taken by the community midwife from the baby's heel using a bloodletting device and collected on a bloodspot card consisting of special filter paper. This test is also known as the 'heel prick' test or the Guthrie test. The sample card is then sent to the Scottish Newborn Screening Laboratory (SNSL) in Queen Elizabeth University Hospital, Glasgow, for analysis. This is the

national lab for newborn bloodspot testing and all samples from across the whole of Scotland are analysed there.

A detailed screening pathway is provided in **Appendix 2.1**

Where a screening test is positive, the lab will contact local clinicians immediately so this can be communicated to parents and diagnostic testing can be undertaken.

2.4. Information Systems Programme Performance and Delivery

Newborn bloodspot screening results are recorded against the individual child's record held within the national Child Health System. This system is checked daily, weekly and monthly to ensure that newborn bloodspot screening is complete for all newborns in NHSGGC. Mechanisms are in place to rapidly offer screening or rescreening where results are missing or need to be repeated.

Newborn bloodspot screening programme performance and quality is monitored via defined Key Performance Indicators (KPIs) and National Newborn Blood Spot Screening Standards³. KPIs are reported annually by the Scottish Newborn Screening Lab. **Appendix 2.2** summarises the most recent KPIs for 1st April 2024 to 31st March 2025 for all newborns born in NHSGGC, regardless of area of residence.

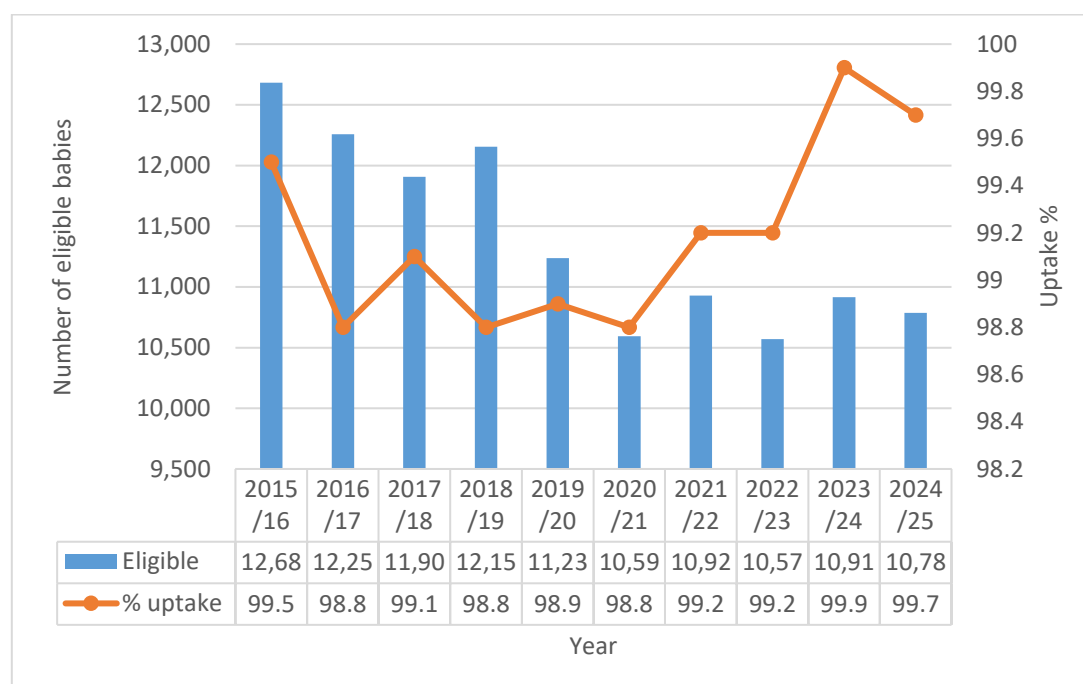
As a result of differences in data extract dates and eligible cohort definitions, numbers in local data analysis may differ from those presented in lab reports.

2.5. Eligibility and uptake of newborn bloodspot screening among babies in NHSGGC

The total number of babies eligible for newborn screening in NHSGGC has fallen over the last ten years, reflecting the fall in birth rate in Scotland over this period (**Figure 2.1**). Uptake of newborn bloodspot screening has been consistently high over the last ten years, with uptake of over 98.8% in all years.

³ [Newborn blood spot screening standards – Healthcare Improvement Scotland](#) (Accessed December 2025)

Figure 2.1 Eligibility and Uptake of Newborn Bloodspot Screening, NHSGGC Ten Year Trend, 1st April 2015 to 31st March 2025



Source: Child Health System; Date extracted: September 2025

Of the 10,785 babies eligible for newborn bloodspot screening in 2024/2025, 10,754 (99.7%) were screened (**figure 2.1**). Fewer than five babies were not screened due to parental refusal of consent for screening.

Table 2.1 details the distribution of eligible babies who participated in newborn bloodspot screening between April 2024 and March 2025, broken down by Health and Social Partnership (HSCP) and Scottish Index of Multiple Deprivation (SIMD) quintile. Overall uptake of newborn bloodspot screening during this period was high at 99.6% in the all HSCP areas, with small variation by SIMD, indicating almost universal participation in newborn bloodspot screening.

Table 2.1 Number of Eligible Babies Participating in Newborn Bloodspot Screening by HSCP & SIMD quintile, April 2024 to March 2025

HSCP (Screened)	SIMD Quintile					Total
	1	2	3	4	5	
East Dunbartonshire HSCP	29	185	33	164	382	793
East Renfrewshire HSCP	55	89	59	250	344	797
Glasgow City HSCP - North East Sector	1,146	264	223	192	28	1,853
Glasgow City HSCP - North West Sector	910	192	165	150	293	1,710
Glasgow City HSCP - South Sector	1,111	622	322	315	170	2,540
Inverclyde Community HSCP	282	87	65	78	66	578
Renfrewshire HSCP	487	330	257	224	421	1,719
West Dunbartonshire HSCP	385	197	122	57	30	791
NHSGGC Total	4,405	1,966	1,246	1,430	1,734	10,781

Source: Child Health System, Date extracted: September 2025

Table 2.2 shows the number of babies eligible for newborn screening by ethnicity, for the period April 2024 to March 2025. Over half of eligible babies screened (58.8%) were recorded as Scottish ethnic origin. The next largest group was Pakistani, Pakistani Scottish, or Pakistani British (12.5%), followed by African, African Scottish, or African British (5.6%). A notable proportion (6.2%) of records had ethnicity recorded as 'Not Known or Null' (not recorded), highlighting an area for potential improvement in data completeness for ethnicity.

Table 2.2 Eligibility of Newborn Bloodspot Screening by Ethnicity, April 2024 to March 2025

Ethnicity	Number eligible	% of newborns screened
African, African Scottish, African British	731	6.8
Asian: Bangladeshi, Bangladeshi Scottish, Bangladeshi British	34	0.3
Asian: Chinese, Chinese Scottish, Chinese British	77	0.7
Asian: Indian, Indian Scottish, Indian British	310	2.9
Asian: Other Asian, Asian Scottish, Asian British	145	1.3
Asian: Pakistani, Pakistani Scottish, Pakistani British	795	7.4
Caribbean or Black	26	0.2
Any mixed or multiple ethnic groups	458	4.2
White: Gypsy / Traveller	12	0.1
White: Irish	46	0.4
White: Other British	311	2.9
White: Other white ethnic group	293	2.7
White: Polish	81	0.8
White: Scottish	6,339	58.8
Other: Arab, Arab Scottish, Arab British	238	2.2
Other: Other ethnic group	215	2.0
Not Known/ Null	674	6.2
Total	10,785	

Source: Child Health System, data extracted: September 2025

2.6. Outcomes of Newborn Bloodspot Screening

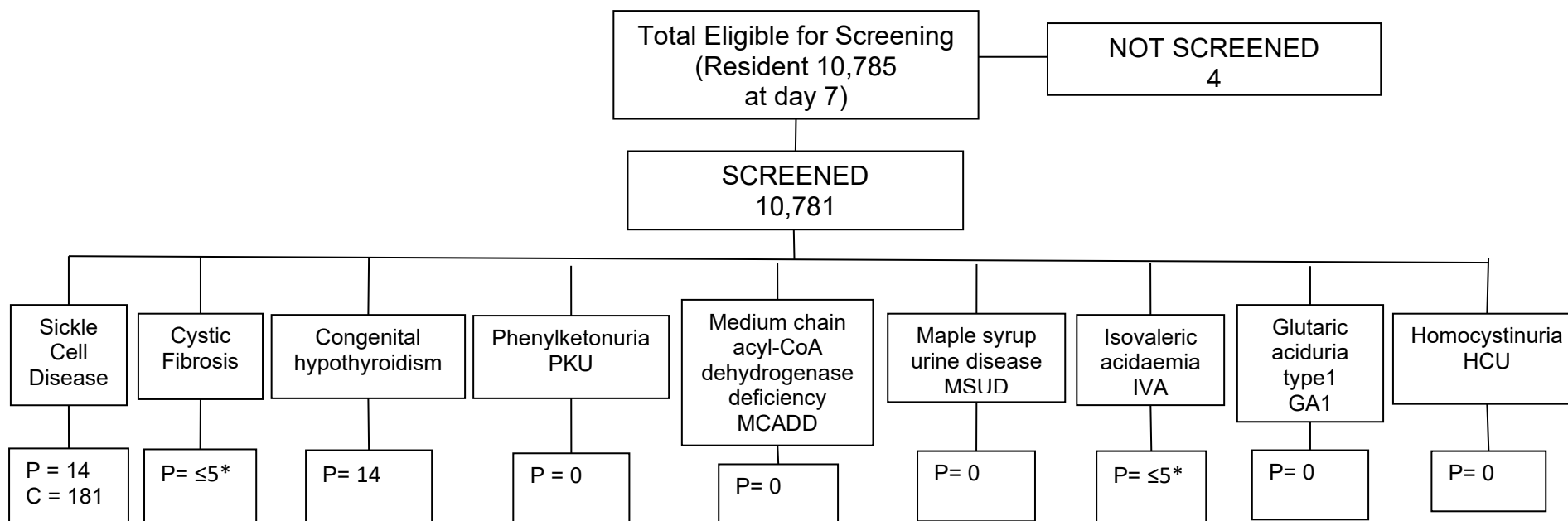
Of the 10,781 Newborn bloodspot screening samples tested, positive results were found for the following conditions (see also **Figure 2.3**):

- 14 babies were diagnosed with congenital hypothyroidism (CHT);
- ≤5* babies were diagnosed with cystic fibrosis (CF);
- 14 babies were diagnosed with haemoglobinopathy variants, and 181 babies were identified as haemoglobinopathy carriers;
- ≤5* babies were diagnosed with isovaleric acidaemia (IVA).

* Where fewer than five babies have been identified with an inherited condition, this has been summarised as ≤5, as per PHS Statistical Disclosure Control Protocol.

Figure 2.3

NHS Greater Glasgow & Clyde Residents - Summary of Bloodspot Screening Uptake & Results for eligible babies 1st April 2024 to 31st March 2025



Source: Child Health System, Date extracted: Sept 2025

P = Positive

C = Carrier

* Where fewer than five babies have been identified with an inherited condition, this has been summarised as ≤5, as per PHS Statistical Disclosure Control Protocol.

2.7. Repeat Bloodspot Samples in 2024/25

In 2024/225, a total of 11,718 newborn blood spot samples were received by the Scottish Newborn Screening Laboratory from newborns born in NHS GGC, (regardless of area of residence). The Scottish Newborn Screening Laboratory monitors the percentage of bloodspot that need to be repeated due to avoidable reasons. For examples see Table 2.5. These repeats create additional workload for midwives and laboratory staff and can cause distress to parents, who must consent to another heel prick test.

The avoidable repeat rate in NHS GGS was 3.8%, slightly above the essential threshold of 2.0% and below the Scottish average of 4.08%. This included bloodspot samples from babies resident in other Health Board areas who were born or received care within NHS GGC. The number and reason avoidable repeat tests are provided in **Table 2.5**.

Table 2.5 Number & Reason for Repeat Samples (national KPI 8.3)

Reason	Number	Percentage %
Insufficient sample	233	2.0
Sample taken <96 hours (too early)	25	0.2
Incorrect blood application	68	0.6
Compressed /damaged sample	28	0.2
Blood quality of sample	10	0.1
Missing CHI	81	0.7
Expired card used	1	0.0
>14 days in transit	4	0.0
Total	450	

Source: SNSL Report 2024-25

Bloodspot samples should be taken from babies between 4 – 5 days of life (96 – 120 hours of life). In NHS GGC, 86.4% of samples were taken within this timeframe, which is below the KPI essential threshold of ≥90%.

Samples should arrive in the laboratory as quickly as possible as, ideally no later than 3 working days after the sample is taken. In NHS GGC, 92.3% of bloodspot samples reached the laboratory within this timeframe, which is below the KPI essential threshold of ≥95%.

2.8. Challenges & Service Improvements

- Avoidable repeats – in 2024/25 quality improvement initiatives have included feedback from the lab on samples that are not suitable for testing, including photographs of the bloodspot card identifying the incorrect items. This work has led to improvement in quality of samples and remains ongoing.
- Timely sample collection – this may be affected by timings of home visits, family availability, staffing levels and so on. Work to address this is ongoing.
- Timely receipt of the sample in the lab – quality improvement work has been undertaken to identify reasons for delays, which includes delays in sending the samples and delays in transport. Standard processes are now in place, training has been given and improvement is being monitored.
- Ethnicity coding – continue to improve completeness of ethnicity recording.

Work is being undertaken to review information for parents about babies identified as a sickle cell disease carrier. This work is with NHSGGC genetic counselling services.

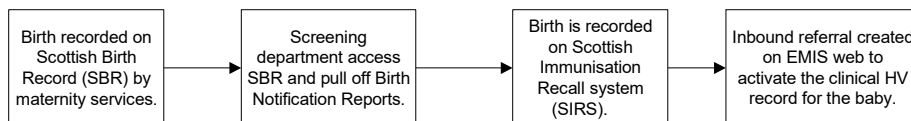
In addition, in 2026 two new inherited conditions will be screened for as part of routine newborn bloodspot screening. These are:

1. Hereditary Tyrosinaemia 1 (HT1) which will be added to the screen in January 2026;
2. Spinal Muscular Atrophy (SMA) will be added to the screen in Spring 2026 as part of a UK-wide trial to gather evidence of the effectiveness of screening for this disease.

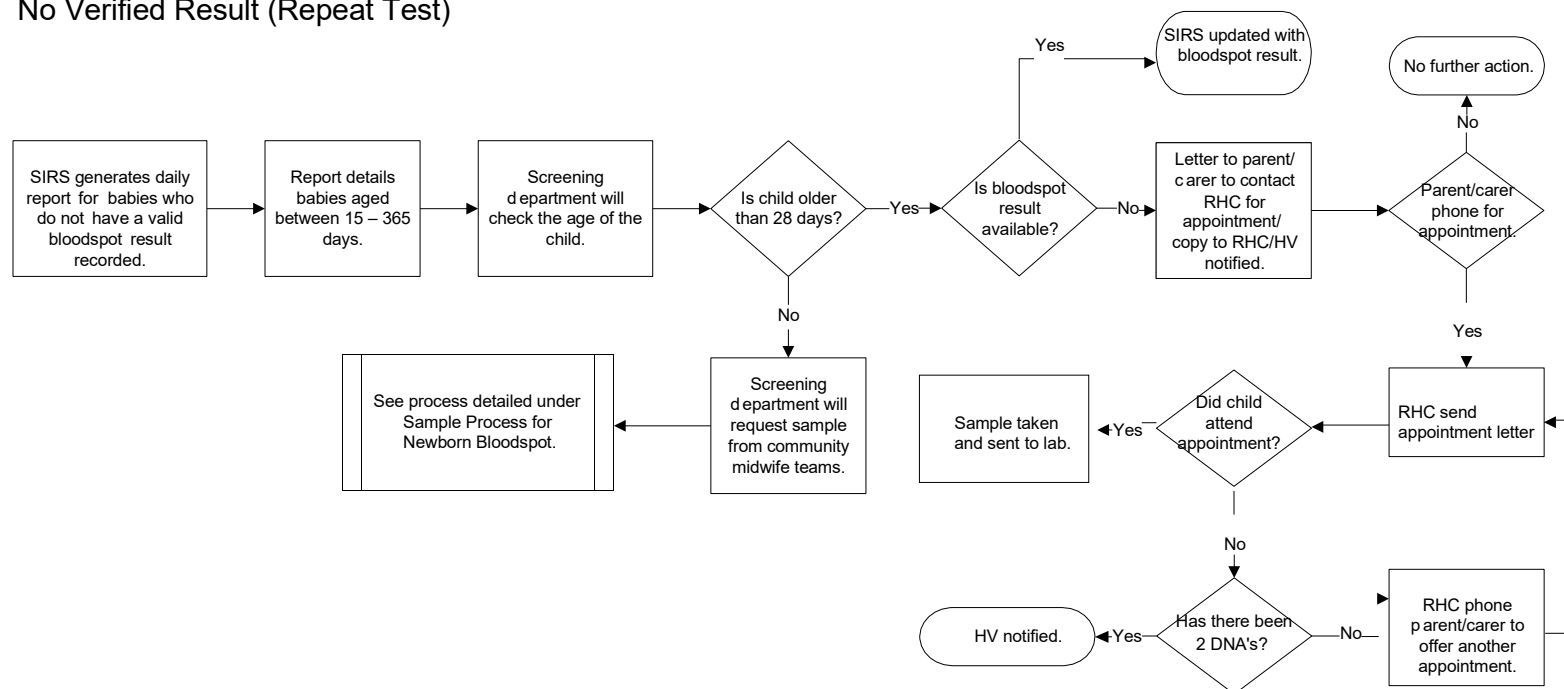
For both hereditary diseases, full information will be provided to parents to inform their consent for screening. The current blood sample taken is sufficient to allow for screening for both these conditions.

Appendix 2.1 - NHSGGC Newborn Bloodspot Screening Pathway

Newborn Bloodspot Screening Process – Screening Department Processes – January 2025



Sample Process for Newborn Bloodspot – Overdue or No Verified Result (Repeat Test)



APPENDIX 2.2 - Newborn Bloodspot Screening KPIs & Performance during 2024-25 for NHSGGC

KPI	Performance threshold	NHSGGC 2024-2025
8.1 Coverage	Essential : $\geq 95\%$ Desirable : $\geq 99\%$	99.7%
8.2 Coverage (movers in)	Essential : $\geq 95\%$ Desirable : $\geq 99\%$	Not available
8.3 Avoidable repeat samples	Essential level $\leq 2.0\%$ Desirable level $\leq 1.0\%$	4.2%
8.4 Timely identification of babies with a null or incomplete result recorded on Child Health System	Essential level: CHRD performs regular checks (ideally daily, minimum weekly) to identify babies ≥ 18 days and ≤ 364 days with a null or incomplete result. Desirable level: CHRD performs regular checks (ideally daily, minimum weekly) to identify babies ≥ 14 days and ≤ 364 days with a null or incomplete result.	Met
8.5 CHI number is included on the bloodspot card	Essential level $\geq 98\%$ Desirable level $\geq 100\%$	99.3%
8.6 Timely sample collection	Essential level $\geq 90\%$ of first blood spot samples are taken between 96 and 120 hours of life Desirable level $\geq 95\%$ of first blood spot samples are taken between 96 and 120 hours of life	86.4%
8.7 Timely receipt of the sample in the laboratory	Essential level $\geq 95\%$ of all samples received less than or equal to 3 working days of sample collection Desirable level $\geq 99\%$ of all samples received less than or equal to 3 working days of sample collection	92.3%
8.11 Timely processing of CHT and IMD (excl HCU) screen positive samples	Essential level $\geq 100\%$ of babies with a positive CHT, PKU, MCADD, MSUD, IVA or GA1 result have a clinical referral initiated within 3 working days of sample receipt by the screening laboratory.	100%

Source: SNSL Report 2024-25

Chapter 3 – Newborn Hearing Screening

Summary

Newborn Hearing Screening	
Why?	Early detection of permanent congenital hearing loss Early detection of mild and unilateral hearing loss
Intervention	Non-invasive hearing screening test offered to all newborns by four weeks of corrected age (taking account of premature birth). Majority of screening takes place in hospitals, on maternity wards. Outpatient and community clinic appointments are also offered. For those babies who have no clear response in one or both ears after two attempts at the screening test, rapid referral into Audiology Services for further testing, diagnosis, monitoring and ongoing support.
Activity in 2024/25	99.4% of eligible babies completed screening 10,756 babies screened
Outcome in 2024/25	193 babies (1.8%) referred to Audiology for diagnostic testing following two failed screening tests. Of these: ≤5 babies had bilateral auditory neuropathy spectrum disorder (ANSD); 13 babies had bilateral conductive loss; 15 babies had bilateral sensorineural loss; ≤5 babies had unilateral ANSD; 17 babies had unilateral conductive loss; 12 babies had unilateral sensorineural loss.

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3.1. Newborn hearing screening

Universal newborn hearing screening aims to detect permanent congenital hearing impairment. In addition, babies with mild and unilateral (one-sided) hearing losses are also identified and receive ongoing review.

3.2. Eligible population

Universal newborn hearing screening programme is offered to all newborns by four weeks of corrected age, except a small number who are excluded due to contraindication to screening. The corrected age is the actual age in weeks minus the number of weeks the baby was pre-term. The babies excluded are those who died before screening was complete, are contraindicated for the screening test or have not reached the corrected age for screening.

3.3. Screening test

Hearing tests are carried out on all eligible babies born using the Automated Auditory Brainstem Response (AABR) protocol. Screening is completed prior to discharge from hospital, or if this is not possible, at an outpatient clinic.

3.4. Repeat screens

A second screening test may be required if the baby does not pass the initial test. This can be because the baby was unsettled during the test, there was fluid or a temporary blockage in the ear or the baby has a hearing loss. Detailed screening pathway is shown in [Appendix 3.1](#).

3.5. Information systems, programme performance and delivery

The newborn hearing screening programme is supported by the Scottish Birth Record system to deliver hearing screening. Results are recorded on the child's record in the national Child Health System, which is used to run failsafe reports to ensure all babies are offered hearing screening.

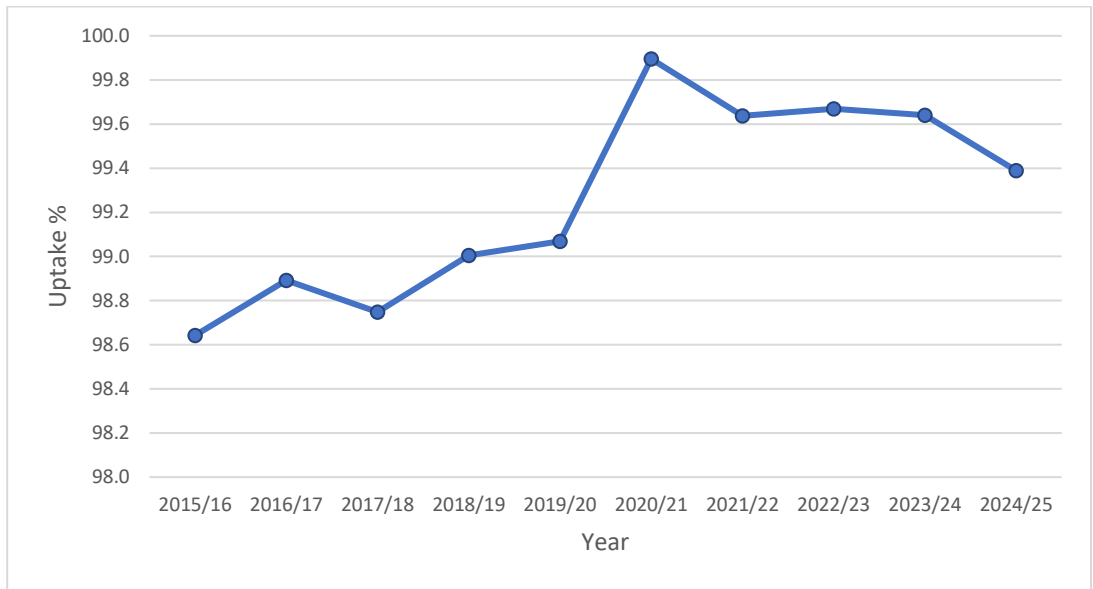
Newborn hearing screening programme performance and quality is monitored via defined Key Performance Indicators (KPIs) and the national Newborn Hearing Screening Standards⁴. A summary of KPI's for 2024/25 is provided in **Appendix 3.2**.

⁴ [PNBS-Newborn-Hearing-finalstandards-Jan19.pdf](#) (Accessed December 2025)

3.6. Uptake of newborn hearing screening in NHSGGC

Uptake of newborn hearing screening is consistently high and has been more than 98% uptake since 2015/16. Uptake has increased in the 10-year period from 2015/16, although uptake in the current year 2024/25 fell slightly, see **Figure 3.1**.

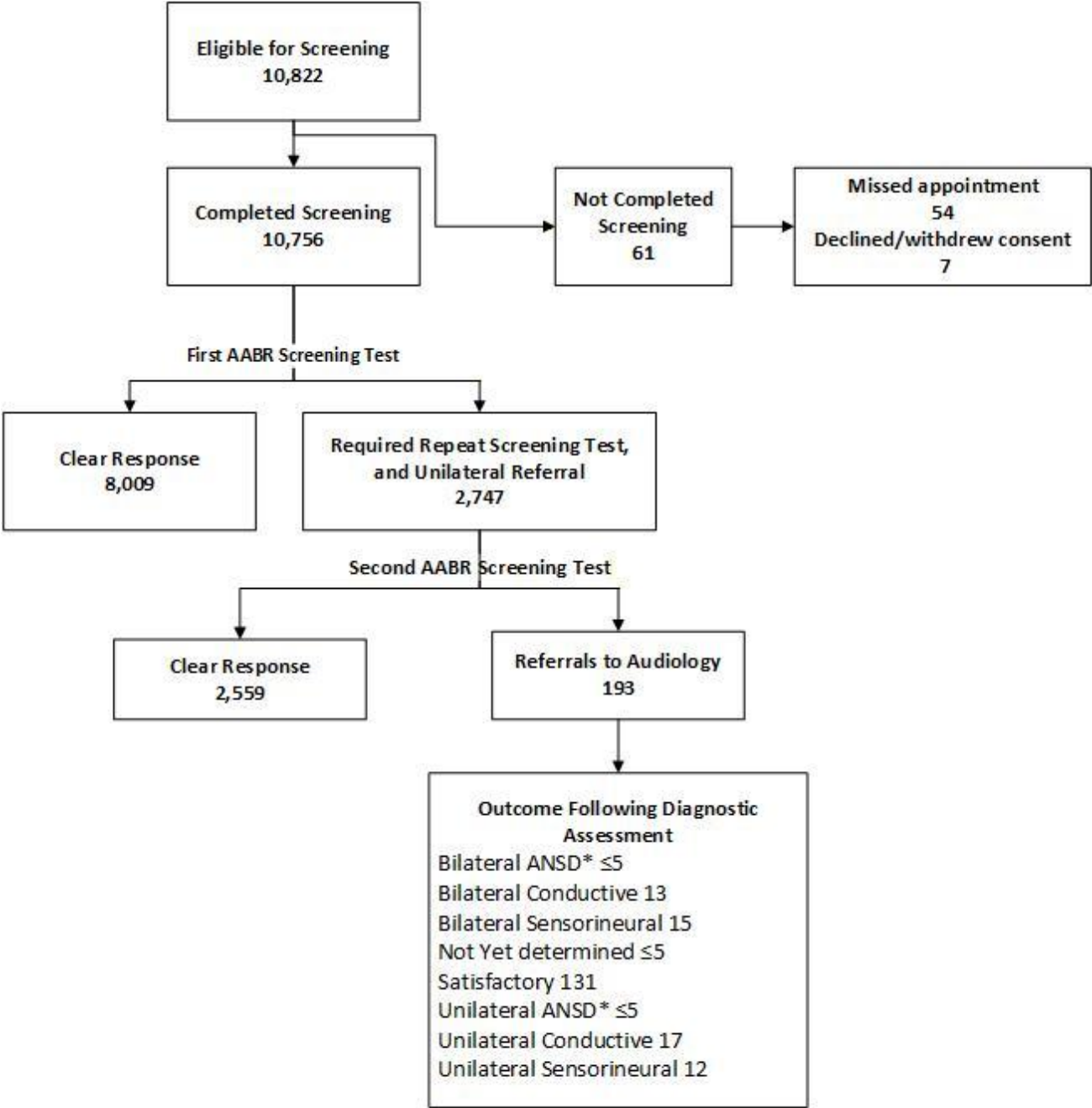
Figure 3.1. Uptake of newborn hearing screening – ten-year trend from 2015/16 to 2024/25, NHSGGC residents



Source: Scottish Birth Record (SBR) Extracted: October 2025

In the reporting period 1st April 2024 to 31st March 2025, 10,822 babies were eligible for newborn hearing screening. Of those who were eligible, 10,756 babies (99.4%) completed the newborn hearing screening pathway. Sixty-six babies did not complete screening, this was due to missed appointments and parents declining to or withdrawing consent for screening. The screening pathway and numbers of babies at each stage is shown in **Figure 3.2**.

Figure 3.2. Summary of newborn hearing screening activity, NHSGGC residents, 1 April 2024 to 31 March 2025



*Auditory Neuropathy Spectrum Disorder

3.7. Audiology referrals following newborn hearing screening

The total, 193 babies were referred on to Audiology following failure of second screening attempt. This included babies with hearing loss and those who were not settled despite two screening attempts.

In Audiology, these babies underwent diagnostic assessment. Following diagnostic assessment:

- 131 babies had satisfactory hearing in both ears;
- ≤5 babies had bilateral auditory neuropathy spectrum disorder (ANSD);
- 13 babies had bilateral conductive loss;
- 15 babies had bilateral sensorineural loss;
- ≤5 babies had unilateral ANSD;
- 17 babies had unilateral conductive loss;
- 12 babies had unilateral sensorineural loss; and
- ≤5 babies outcome was not yet determined.

All the babies with an identified hearing loss were and will be followed up with the appropriate care pathway for ongoing support and management.

3.8. Timeliness of assessment within Audiology

The total number of babies who completed the diagnostic assessment process from was 194. The details of timeliness of assessment are in **Table 3.4**.

Table 3.4. NHSGGC Completion of newborn audiology assessment following referral from newborn hearing screening, 1st April 2024 to 31st March 2025

	Number of babies
Number of babies referred who were offered an initial appointment either within 4 weeks of screen completion or by 44 weeks gestational age. (Corrected age to be used for babies born at <40 weeks gestation).	193
Number of babies referred who attended an initial appointment either within 4 weeks of screen completion or by 44 weeks gestational age. (Corrected age to be used for babies born at <40 weeks gestation).	185
Number of babies referred who did not attend any diagnostic audiology appointments.	0
Total number of babies completing diagnostic assessment process	193

3.9. Challenges and future priorities

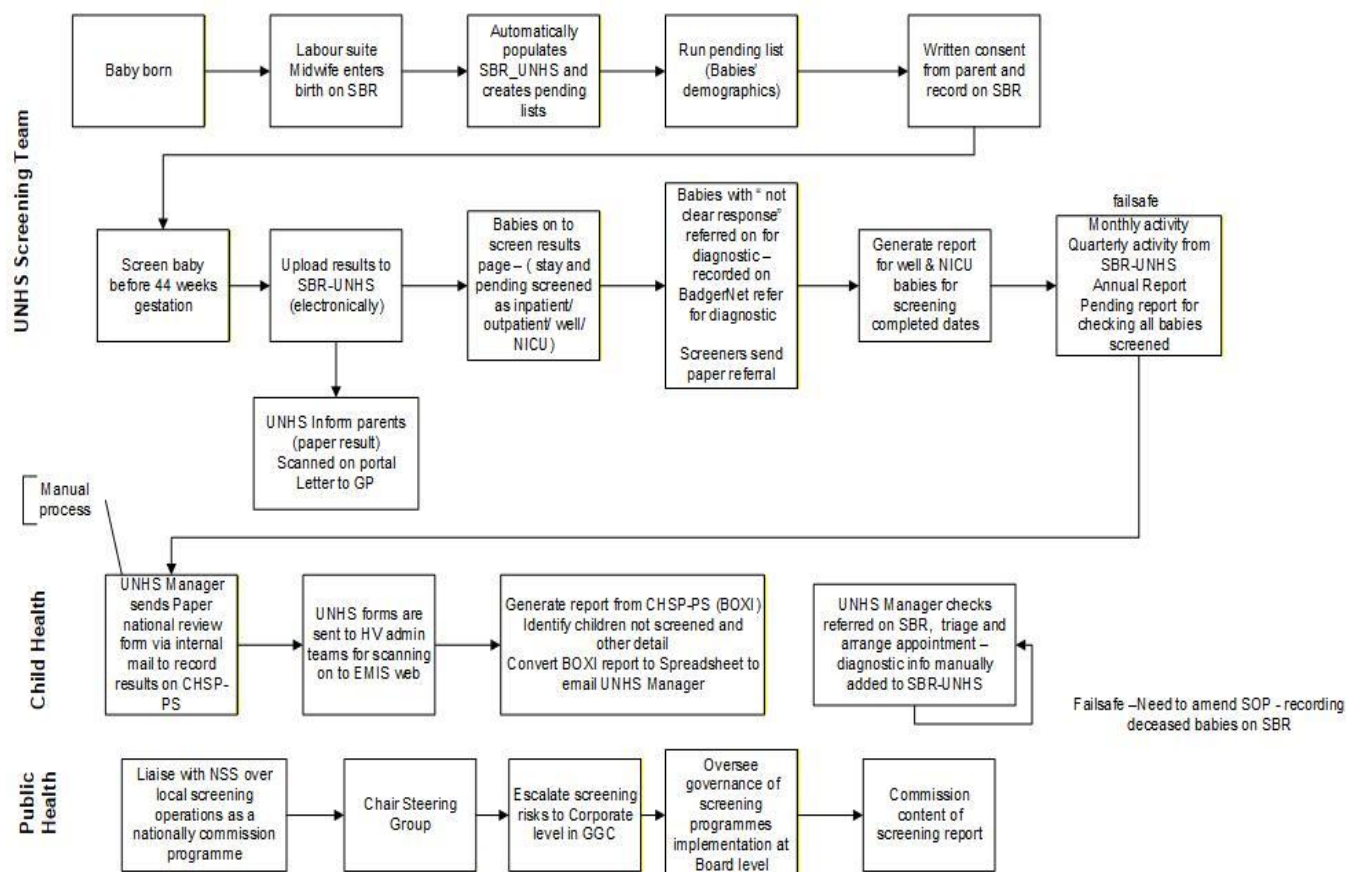
In 2023/24, NHSGGC replaced old newborn hearing screening equipment with new equipment. The new equipment had multiple faults and teething issues which led to significant service issues in 2023/24 and 2024/25. By the end of 2024/25 these were mostly resolved, however they had resulted in an increased proportion of babies needing a second screening test across 2024/25 (25.5%), see KPI 7.4 in Appendix 3.2, above the essential threshold. The proportion of babies that required referral into Audiology following two failed screening tests was within the desirable threshold (1.8%), see KPI 7.5. The number of babies diagnosed with hearing loss was similar to previous years.

There is a national priority to develop national newborn hearing screening quality assurance data, through adoption of a single data system for Scotland. In 2024/25, there have been national discussions about this and potential products were investigated, however there is no recommendation for how to proceed at this time. Currently all boards manage their own data in their own data system and produce their own performance data. Any new national data system will require investment from all NHS boards.

The Child Health System, which collates an electronic health record for every child in Scotland up to age 18 years and includes screening, immunisation and health visiting data, is due to be replaced in 2025/26. This system is used by all NHS boards, and for newborn hearing screening is used to generate failsafe reports to ensure all newborns are offered hearing screening. There are likely to be teething issues when this system is replaced and the screening service will work closely with the screening call/recall office to ensure a smooth changeover.

Appendix 3.1 NHSGGC Universal Newborn Hearing Screening Pathway

Newborn Hearing Screening 2025



January 2025

Appendix 3.2 - Universal Newborn Hearing Screening KPIs 2024-2025

Criteria	Thresholds	% Achieved
7.1 The proportion of babies eligible for newborn hearing screening for whom the screening process is complete by 4 weeks corrected age.	Essential: >98% Desirable: >99.5%	96.3%
7.2 Refers to the OAE protocol not used in NHSGGC		
7.3 Refers to the OAE protocol not used in NHSGGC		
7.4 The proportion of well babies tested using the AABR protocol who do not show a clear response in both ears at AABR1.	Essential: <15% Desirable: <12%	25.5%
7.5 The proportion of babies with a screening outcome who require an immediate onward referral to audiology for a diagnostic assessment.	Essential: <3% Desirable: <2%	1.8%
7.6 The proportion of babies with a no clear response result in in one or both ears or other result that that requires an immediate onward referral for audiological assessment who receive an appointment for audiological assessment within the required timescale (within 4 weeks of screen completion or by 44 weeks gestational age).	Essential: >97% Desirable: >99%	99.5%
7.7 The proportion of babies with a no clear response result in in one or both ears or other result that that requires an immediate onward referral for audiological assessment who attend for audiological assessment within the required timescale (within 4 weeks of screen completion or by 44 weeks gestational age).	Essential: >90% Desirable: >95%	95.4%

Chapter 4 - Child Vision Screening

Summary

Pre-school vision screening	
Why?	Early identification of poor vision. Improves engagement in school and with learning.
Intervention	Vision screening test offered to all 4–5-year-olds in the year before they attend primary school. Vision screening principally undertaken in nurseries, with hospital and community clinics for those who miss this opportunity or who do not attend nursery. Referral as required to shared care orthoptic/optometry clinic within local hospital Ophthalmology department / local community optometrist or to community paediatric clinic.
Activity in 2024/25	83.0% screening uptake (11,182 children screened) 27.1% (2,518 children) referred for further investigations
Outcomes	Screening uptake varied by HSCP area, with highest uptake in Renfrewshire HSCP 90.7% and lowest in Glasgow North West Sector 76.0%. Screening uptake varied by SIMD, with highest uptake in least deprived quintile (89.1%) and lowest in most deprived quintile (77.9%). Screening result varied by HSCP area – the proportion of children with a screen abnormality detected was highest in Glasgow South (42.6%) and lowest in East Dunbartonshire (23.0%). Clear variation by SIMD with an abnormality detected in 39.6% in SIMD1 (most deprived) compared to 24.7% in SIMD5 (least deprived).

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Pre-school Vision Screening Programme

4.1. Background

Vision screening is routinely offered to all pre-school age children resident in NHS Greater Glasgow and Clyde.

Vision problems affect 15-20% of children and although obvious squints are easily detected, refractive error and subtle squints often go undetected and long-term vision loss can be the result in adulthood. Lazy eye or amblyopia can be caused by either a squint (strabismus) or differences in the focusing power of each eye (refractive error) which results in the brain receiving different images from each eye. If these problems are not treated early in childhood, this can lead to reduced vision in one or, in some cases, both eyes. The screening programme can also detect reduced vision due to other more uncommon causes.

Most problems can be treated using spectacle lenses to correct any refractive error; and occlusion therapy to treat amblyopia (reduced vision) – mainly using eye patches. These treatments can be used alone or in combination. Treatment is most effective when the brain is still developing (in young children) and when the child co-operates in wearing the patch and/or glasses. The most common cause of poor vision is refractive error.

4.2. Aim of Vision Screening Programme

The aim of the screening programme is to detect reduced visual acuity, the commonest causes of which are amblyopia and refractive error. There is emerging evidence that good screening and treatment result in lower incidence of significant permanent vision loss.

4.3. Pre-school Vision Test

The basic screen is a visual acuity test where children are asked to match a line of letters or pictures to a key card or to describe a line of pictures.

4.4. Information Systems Programme Performance and Delivery

Results from the vision screening assessment is recorded on paper at the appointment and manually input to the child's record in the national Child Health System.

There are no national key performance indicators for pre-school vision programme, however national and Health Board coverage (uptake) of pre-school vision screening is reported within the national Child Health Pre-School Review Coverage annual statistical reports⁵.

⁵ [Child health pre-school review coverage 2023 to 2024 - Child health pre-school review coverage - Publications - Public Health Scotland](#)

4.5. Eligible Population

All pre-school children resident in NHS Greater Glasgow and Clyde aged between 4 and 5 years are invited to attend for vision screening.

4.6. Pre-school Vision Screening Pathway

Eligible children (the school intake cohort for the following year), with dates of birth between 1st March and the following 28th February are downloaded from CHI and matched against the registration lists received from nurseries.

Pre-school vision screening clinics take place in nurseries. Children that do not attend nursery, or whose nursery is unknown, or who miss their appointment within the nursery, are invited to a hospital orthoptic clinic to have their vision screened.

A proportion of children require further testing in secondary care following the initial screen. These children are referred for further assessment to a paediatric clinic in an ophthalmology department, though a small number may be referred to a community optometrist initially.

The assessment appointment in ophthalmology involves a full eye examination and allows clinicians to identify whether the screening test was a false positive and no further action is required or if the screen test was a true positive to enable the specific disorder to be identified and treated.

4.7. Delivery of Pre-school Vision Screening Programme 2024-2025

Eligible population

Over the last ten years, the number of children eligible for vision screening has fallen, from 12,975 in 2015-16 to 11,182 in the current year 2024-25. This aligns with the fall in birth rate over this period.

Of the 11,182 eligible children, 4,327 (38.7%) resided in deprived (SIMD) quintile. The majority of these children, 5,767 (72.5%), were resident within Glasgow City Health and Social Care Partnership (**Table 4.1**).

Table 4.1. Total number of NHSGGC residents aged 4 to 5 years eligible for pre-school vision screening, by HSCP and SIMD quintiles, 2024-2025

	SIMD Quintile					Total
	Most deprived				Least deprived	
HSCP	1	2	3	4	5	
East Dunbartonshire HSCP	43	161	60	226	631	1,121
East Renfrewshire HSCP	49	103	65	356	528	1,101
Glasgow City HSCP	3,139	969	588	603	468	5,767
<i>Glasgow North East Sector</i>	<i>(1,153)</i>	<i>(222)</i>	<i>(171)</i>	<i>(189)</i>	<i>(40)</i>	<i>(1,775)</i>
<i>Glasgow North West Sector</i>	<i>(879)</i>	<i>(221)</i>	<i>(161)</i>	<i>(130)</i>	<i>(290)</i>	<i>(1,681)</i>
<i>Glasgow South Sector</i>	<i>(1,107)</i>	<i>(526)</i>	<i>(256)</i>	<i>(284)</i>	<i>(138)</i>	<i>(2,311)</i>
Inverclyde HSCP	311	104	74	79	83	651
Renfrewshire HSCP	414	327	261	276	460	1,738
West Dunbartonshire HSCP	371	209	117	67	40	804
Total	4,327	1,873	1,165	1,607	2,210	11,182
% of Total	38.7	16.8	10.4	14.4	19.8	

HSCP – Health and Social Care Partnership

SIMD – Scottish Index of Multiple Deprivation

Source: Child Health System. Date extracted: Sept 2025

Attendance at nursery

Vision screening is principally undertaken in nurseries. However, not all children eligible for vision screening are registered with a nursery. Those that miss screening in nursery (due to not being registered or absent on the day) are sent an appointment during the summer holidays to have their vision tested within a community or hospital clinic.

Registration at nursery for 4-5 year olds varies across the region. Inverclyde has the highest proportion of children registered with a nursery 96.2% (626) and North West Glasgow the lowest, 81.8% (1,375) **Table 4.2.**

Table 4.2. Number of NHSGGC children eligible for screening, number and percentage registered and not registered with a nursery by HSCP 2024-2025

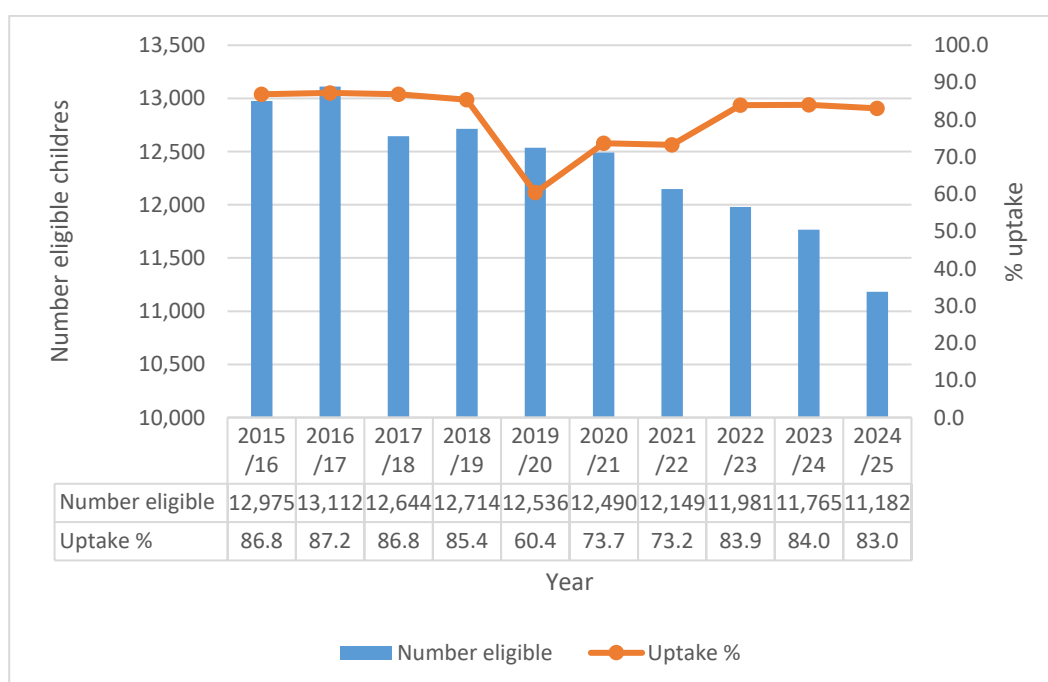
HSCP	Children eligible for screening	Registered with a Nursery	% Registered	Not registered with a nursery	% Not Registered
East Dunbartonshire HSCP	1,121	1,021	91.1	100	8.9
East Renfrewshire HSCP	1,101	1,016	92.3	85	7.7
Glasgow City HSCP	5,767	4,751	82.4	1,016	17.6
<i>Glasgow North East Sector</i>	<i>(1,775)</i>	<i>(1,469)</i>	82.8	<i>(306)</i>	17.2
<i>Glasgow North West Sector</i>	<i>(1,681)</i>	<i>(1,375)</i>	81.8	<i>(306)</i>	18.2
<i>Glasgow South Sector</i>	<i>(2,311)</i>	<i>(1,907)</i>	82.5	<i>(404)</i>	17.5
Inverclyde HSCP	651	626	96.2	25	3.8
Renfrewshire HSCP	1,738	1,598	91.9	140	8.1
West Dunbartonshire HSCP	804	752	93.5	52	6.5
Total	11,182	9,764	87.3	1,418	12.7

Source: Child Health System. Date Extracted: September 2025

Uptake of screening

The uptake of pre-school vision screening has remained above 83% for the last three years. In 2024-25 uptake was 83.0% (9,281 children screened), one percentage point lower than the previous year (**Figure 4.1**).

Figure 4.1. Number of NHSGGC children eligible and percentage uptake of pre-school vision screening in NHSGGC residents aged 4 to 5 years, 2015/16 to 2024-2025.



Source: Child Health System. Date extracted: Sept 2025

By Health and Social Care Partnership (HSCP) area, in 2024/25 uptake of screening ranged from 76% (1,278) in Glasgow North-West to 90.7% (1,576) in Renfrewshire. This is a difference of 14.7 percentage points.

Uptake varied between 77.9% in the most deprived quintile, to 89.1% in the least deprived quintile, a difference of 11.2 percentage points. **(Table 4.3).**

Table 4.3. Percentage uptake of pre-school vision screening in NHSGGC residents aged 4 to 5 years, by HSCP and SIMD quintiles, 2024-2025

	SIMD Quintile					Total
	Most deprived				Least deprived	
HSCP	1	2	3	4	5	
East Dunbartonshire HSCP	83.7	80.7	85.0	88.1	88.6	87.0
East Renfrewshire HSCP	87.8	84.5	83.1	88.5	90.2	88.6
Glasgow City HSCP	74.7	76.8	80.3	86.1	80.8	77.3
<i>Glasgow North East Sector</i>	76.2	74.3	83.6	87.8	95.0	78.4
<i>Glasgow North West Sector</i>	73.4	79.2	80.1	80.8	77.2	76.0
<i>Glasgow South Sector</i>	74.3	76.8	78.1	87.3	84.1	77.5
Inverclyde HSCP	86.2	93.3	94.6	94.9	94.0	90.3
Renfrewshire HSCP	86.7	87.8	89.7	92.8	95.7	90.7
West Dunbartonshire HSCP	86.3	87.6	89.7	91.0	97.5	88.1
Total	77.9	81.6	84.6	88.7	89.1	83.0

SIMD – Scottish Index of Multiple Deprivation

Source: Child Health System. Date extracted: Sept 2025

Ethnicity

Local analysis was undertaken to explore variations in uptake of pre-school vision by ethnicity (**Table 4.4**). Uptake rates varied by ethnic group, however uptakes were between 64% and 87% for most ethnic groups. Lower uptake rates were observed in Other: Arab, Arab Scottish, Arab British (67.2%), Asian: Other Asian, Scottish Asian or British Asian (64.1%) and White: Gypsy/Traveller (41.2%). Uptake rates for groups with a small number of pre-school children eligible for screening should be interpreted with caution.

Table 4.4. Pre-school Vision Screening Uptake by Ethnic Group 2024-2025

Ethnic Group	Not Screened	Screened	Total Eligible	% Screened
African, Scottish African or British African	119	583	702	83.0
Asian: Bangladeshi, Scottish, Bangladeshi or British Bangladeshi	*	*	*	82.4
Asian: Chinese, Scottish Chinese or British Chinese	15	103	118	87.3
Asian: Indian, Scottish Indian or British Indian	62	288	350	82.3
Asian: Pakistani, Scottish Pakistani or British Pakistani	144	576	720	80.0
Asian: Other Asian, Scottish Asian or British Asian	55	98	153	64.1
Caribbean or Black	*	*	*	77.3
Any mixed or multiple ethnic groups	98	344	442	77.8
White: Gypsy / Traveller	10	7	17	41.2
White: Irish	11	29	40	72.5
White: Other British	62	311	373	83.4
White: Polish	43	98	141	69.5
White: Scottish	965	6,130	7,095	86.4
White: Other white ethnic group	75	232	307	75.6
Other: Arab, Arab Scottish, Arab British	75	154	229	67.2
Other: Other ethnic group	79	175	254	68.9
Not Known	80	122	202	60.4
Total	1,901	9,281	11,182	83.0

*numbers ≤5, or identifiable as ≤5 redacted as per PHS Statistical Disclosure Control Protocol

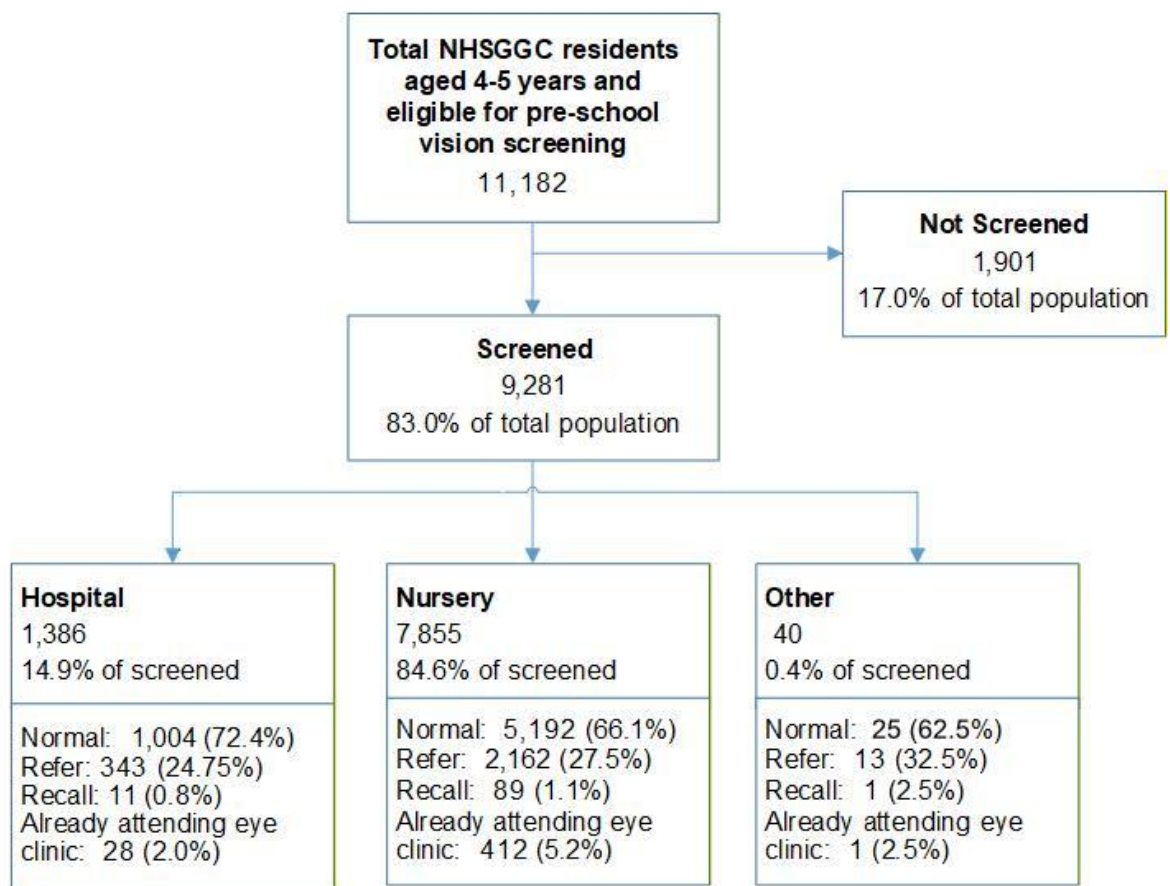
Source: Child Health Surveillance Pre-School System

Date Extracted: September 2025

Outcome of screening

The pre-school vision screening summary of activity for the service in NHSGGC for the school year 2024-25 is in **Figure 4.2**.

Figure 4.2. Summary of NHSGGC Pre-School Vision Screening Activity and Outcomes 2024-2025



Source: Child Health Surveillance Pre School System
Date extracted: September 2025

Overall, 67.0% (6,221) children screened had no abnormality detected, this ranged from 57.4% (1,028 children) in Glasgow South to 77.0% (751 children) in East Dunbartonshire.

Of those screened, 27.1% (2,518) children were referred for further investigations. The referral rates varied from 19.7% (116 children) in Inverclyde to 35.6% (637 children) in Glasgow South Sector. A small number of children were recalled to repeat their screening test as the result of their first screening test were not conclusive, 1.1% (101 children), (**Table 4.5**).

Table 4.5. Pre-school Vision Screening Uptake and Outcomes by HSCP Area, NHSGGC, 2024-2025

HSCP	Total Population	Total number of children screened	Total number of children not screened	% Uptake	No Abnormality Detected (NAD) of those screened	% No Abnormality Detected (NAD) of those screened	Referred of those screened	% Referred of those screened	Recalled of those screened	% Recalled of those screened	Ongoing Follow-up of those screened	% Ongoing Follow-up of those screened
East Dunbartonshire HSCP	1,121	975	146	87.0	751	77.0	202	20.7	*	0.3	19	1.9
East Renfrewshire HSCP	1,101	975	126	88.6	654	67.1	287	29.4	*	0.0	34	3.5
Glasgow City HSCP	5,767	4,459	1,308	77.3	2,776	62.3	1,423	31.9	36	0.8	224	5.0
Glasgow North East Sector	(1,775)	(1,391)	(384)	78.4	(904)	65.0	(408)	29.3	22	1.6	57	4.1
Glasgow North West Sector	(1,681)	(1,278)	(403)	76.0	(844)	66.0	(378)	29.6	9	0.7	47	3.7
Glasgow South Sector	(2,311)	(1,790)	(521)	77.5	(1,028)	57.4	(637)	35.6	*	0.3	120	6.7
Inverclyde HSCP	651	588	63	90.3	426	72.4	116	19.7	10	1.7	36	6.1
Renfrewshire HSCP	1,738	1,576	162	90.7	1,129	71.6	317	20.1	31	2.0	99	6.3
West Dunbartonshire HSCP	804	708	96	88.1	485	68.5	173	24.4	21	3.0	29	4.1
Total	11,182	9,281	1,901	83.0	6,221	67.0	2,518	27.1	101	1.1	441	4.8

*numbers ≤5, or identifiable as ≤5 redacted as per PHS Statistical Disclosure Control Protocol

Source: Child Health System

Date Extracted: September 2025

The proportion of children with normal screening result varied by deprivation category, see **Table 4.6**. For children in the most deprived quintile 60.4% (2,038) had a normal screening result, compared with 75.3% (1,484) in the least deprived quintile.

This meant that a larger proportion of children living in the most deprived areas were referred for further assessment, recalled or were already attending a clinic, compared with areas in other deprivation quintiles. Of the 2,518 (27.1%) children referred for further assessment, 32.3% (1,090) were from the most deprived quintile compared to 20.8% (410) from the least deprived quintile.

A small proportion (1.1%, 101) of children were called back to be re-screened due to difficulties screening their vision during the first screen.

Of the 441 (4.8%) children scheduled for ongoing follow up appointments, 196 (44.4%) were from the most deprived quintile, compared to 66 (15%) from the least deprived quintile (**Table 4.6**).

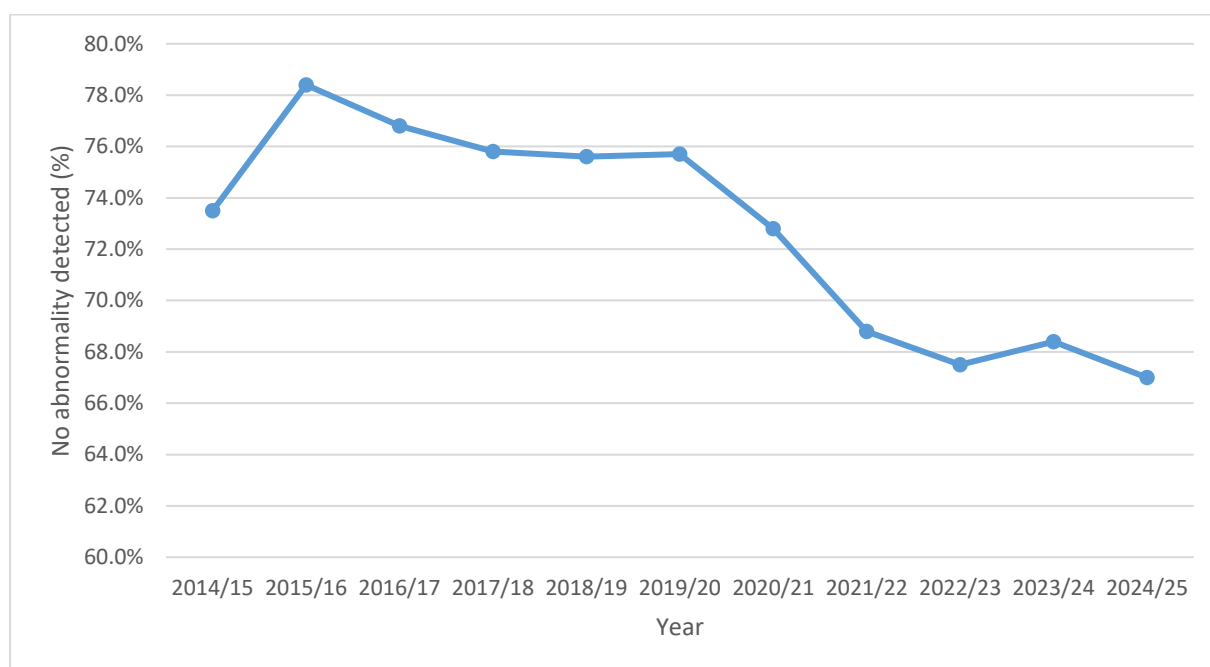
Table 4.6. Pre-school Vision Screening Uptake and Outcomes by SIMD, NHSGGC, 2024-2025

SIMD	Number of Children Screened	No Abnormality Detected (NAD)	% NAD	Referred	% Referred	Recall	% Recall	Ongoing Follow up	% Ongoing Follow up
1 (Most Deprived)	3,372	2,038	60.4	1,090	32.3	48	1.4	196	5.8
2	1,528	1,001	65.5	427	27.9	18	1.2	82	5.4
3	986	679	68.9	256	26.0	7	0.7	44	4.5
4	1,425	1,019	71.5	335	23.5	18	1.3	53	3.7
5 (Least Deprived)	1,970	1,484	75.3	410	20.8	10	0.5	66	3.4
Total	9,281	6,221	67.0	2,518	27.1	101	1.1	441	4.8

Source: Child Health System
Date Extracted: September 2025

In the ten-year period from 2014/15 to 2024/25, the percentage of children with normal vision screening results decreased from 73.5% to 67.0%, an overall reduction of 6.5 percentage points, (**Figure 4.3**).

Figure 4.3. Percentage of screened children who had a normal screening result – 10 year trend from 2014-15 to 2024-25



Source: Child Health System
Date Extracted: September 2025

Vision Screening for Children with Additional Support Needs

NHSGGC Specialist Children's Services provide an annual eye examination for children in schools with additional support needs from Primary 1 to Senior 6. The results are recorded in the medical record for the child and prescriptions for glasses provided by the optometrist.

4.8. Pre-school Vision Screening Challenges and Future Priorities

- Work closely with nurseries to encourage support for screening, both in preparation for a screening visit and on the day. Uptake is higher at nursery compared to screening in hospital or community clinics.

In 2025/26, the Child Health System is due to be replaced in Scotland. This system is used across all health boards to record health outcomes for all children in Scotland. This system is used as a basis for call/recall for pre-school vision screening. The system changeover will need to be managed carefully to not impact the pre-school vision screening programme.



Adult Screening Programme

Annual Report

1st April 2024 to 31st March 2025

**Health Services
Public Health Directorate
March 2026**

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Chapter 1 – Abdominal Aortic Aneurysm (AAA) Screening

Summary

Abdominal Aortic Aneurysm (AAA) screening	
Why?	Early identification of aortic aneurysm. Prevention of morbidity and mortality.
Intervention	Screening offered to all eligible men aged 65 years. Screening test is single abdominal ultrasound scan. If aorta >3cm diameter detected, referral into surveillance scans or rapid referral into vascular surgery as needed.
Activity in 2024/25	78.5% screening uptake (5,891 individuals screened)
Outcomes	Uptake met the essential threshold (75%). Uptake varies with SIMD, with 14.9% difference between areas of high deprivation (lowest uptake) and areas of low deprivation (highest uptake) 54 men had a positive screening result: <ul style="list-style-type: none">- 49 men had a small aneurysm requiring annual surveillance scans;- ≤5 men had a medium aneurysm requiring 3 monthly surveillance scans;- ≤5 men had a large aneurysm requiring surgical assessment.

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1.1. Background

An abdominal aortic aneurysm (AAA) is a dilatation of the aorta within the abdomen where the aortic diameter is 3.0 cm or more. Aneurysms are strongly linked to increasing age, hypertension, smoking, other vascular disease and a family history of AAA.

When an AAA ruptures, less than half of patients will reach hospital alive. When an operation is possible, mortality from ruptured AAA is around 40% despite surgical intervention¹. Screening eligible men for an AAA can reduce the number of deaths associated with the risk of rupture. Where appropriate, surveillance, management and treatment of a screen-detected AAA can significantly reduce the chance of rupture and a life limiting outcome².

AAA screening was implemented across NHS Greater Glasgow and Clyde in February 2013. The performance and quality of the programme is monitored via defined National AAA Screening Standards³ and Key Performance Indicators (KPIs)⁴.

1.2. Aim of the AAA Screening Programme

The aim of AAA screening is the early detection and elective repair of symptomatic AAA in order to prevent spontaneous rupture. Screening is associated with a 40% reduction in aneurysm related mortality.

1.3. Eligible Population

All men aged 65 years who are resident in the NHSGGC area are invited to participate in the AAA screening programme. Men aged over 65 years of age are able to self-refer to the programme.

1.4. Screening Test & Screening Pathway

The screening test involves a single abdominal scan using a portable ultrasound machine. The AAA electronic patient management system is used to appoint and manage the patient through the screening pathway. The application obtains the demographic details of the participants by linking with the Community Health Index (CHI). Screening currently takes place in the New Victoria Hospital, New Stobhill Hospital, West Glasgow Ambulatory Care Hospital, Golden Jubilee Hospital, Renfrew Health Centre, Greenock Health Centre and Vale of Leven Hospital.

¹ Bown MJ, Sutton AJ, Bell PRF, Sayers RD. A meta-analysis of 50 years of ruptured abdominal aortic aneurysm repair. BJS. 2002;89(6):714-30

² [Abdominal aortic aneurysm - UK National Screening Committee \(UK NSC\) - GOV.UK](#) (Accessed March 2026)

³ [Abdominal Aortic Aneurysm \(AAA\) screening standards – Healthcare Improvement Scotland](#) (Accessed March 2026)

⁴ [2023-07-06-aaa-kpi-definitions-v1_6_final.pdf](#) (Accessed March 2026)

Individuals whose aortic diameter is less than 3.0 cm are discharged. Individuals with a positive result from screening (AAA dimensions between 3.0 and 5.4 cm) will be offered appropriate interval surveillance scanning and treatment. Men with clinically significant AAA (over 5.5 cm) will be referred urgently to secondary care for assessment. **Appendix 1.1** summarises the patient pathways.

Individuals with an AAA over 5.5 cm are assessed in vascular surgical outpatient clinics to assess willingness and fitness for either surgery or for referral to interventional radiological services for assessment for endovascular aneurysm repair (EVAR). There is multidisciplinary team decision making for aneurysm patients (both screened and unscreened). Some patients will not go on to have an intervention, mainly due to fitness for surgery or a preference for no intervention after consultation and assessment.

Sometimes an image cannot be achieved if, for example, an individual has a high body mass index, large abdominal girth, bowel gas or has had previous surgery. These can cause issues with visualisation of the aorta and prevent accurate measurements and image capture using ultrasound. If an image cannot be achieved after two appointments the individual will be discharged from the programme and referred to Vascular Services for management locally.

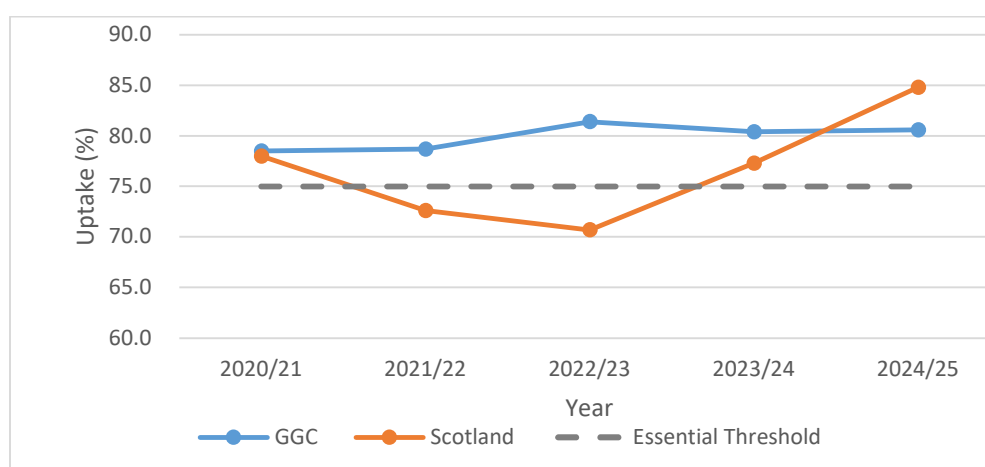
1.5. Programme Performance & Delivery

National AAA programme statistics are published by Public Health Scotland in March each year reflecting the previous year activity. **Appendix 1.2** summarises the most recent published national AAA Key Performance Indicators (KPIs) for NHSGGC for the period 1st April 2024 to 31st March 2025.

Based on the most recent national AAA programme statistics for the period 1st April 2024 to 31st March 2025⁵, the essential threshold of 75% for AAA screening uptake was achieved in NHSGGC, with uptake at 80.6%. This represents a similar uptake compared with the previous year, see **Figure 1.1**.

⁵ [Scottish Abdominal Aortic Aneurysm \(AAA\) screening programme statistics - Year ending 31 March 2025 - Scottish Abdominal Aortic Aneurysm \(AAA\) screening programme statistics - Publications - Public Health Scotland](#) (Accessed March 2026)

Figure 1.1. Uptake of AAA screening among eligible men in NHSGGC and Scotland, 2020/21 to 2024/25

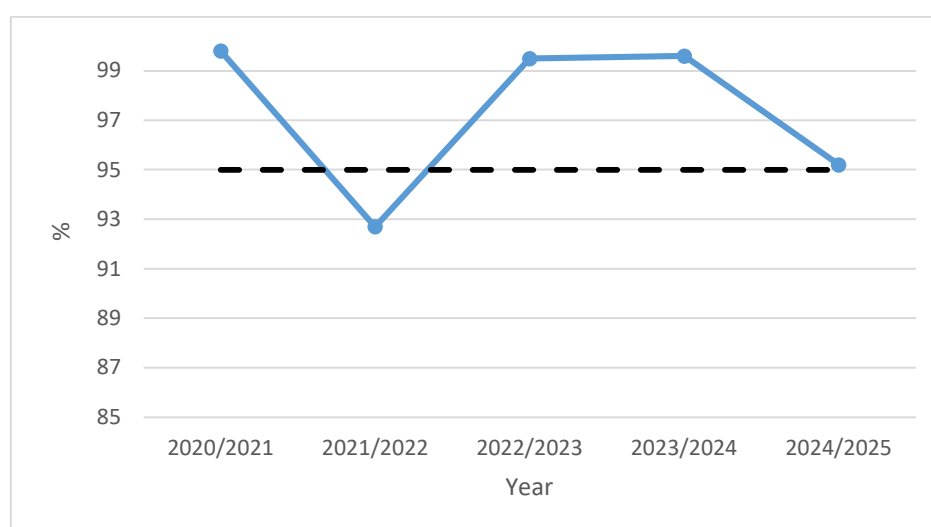


Source: Scottish Abdominal Aortic Aneurysm (AAA) screening programme statistics, March 2026

AAA screening uptake is the number of eligible men who attend for screening aged between 65 years and 66 years plus three months, divided by the number of men who are eligible aged 65 years (0 to 364 days).

This definition does not take account of delays in inviting men to attend for screening. For example, in where there are limitations to the number of appointments at a location, men may not be invited to attend for screening until after they turn 66 years old. As such, they are included in the eligible population, but not counted as having been screened. Where these delays exist, it is harder to interpret percentage uptake in the AAA screening programme, see **Figure 1.2**.

Figure 1.2. Proportion of eligible men sent an invitation to attend AAA screening before age 66 years, NHSGGC, 2020/21 to 2024/25



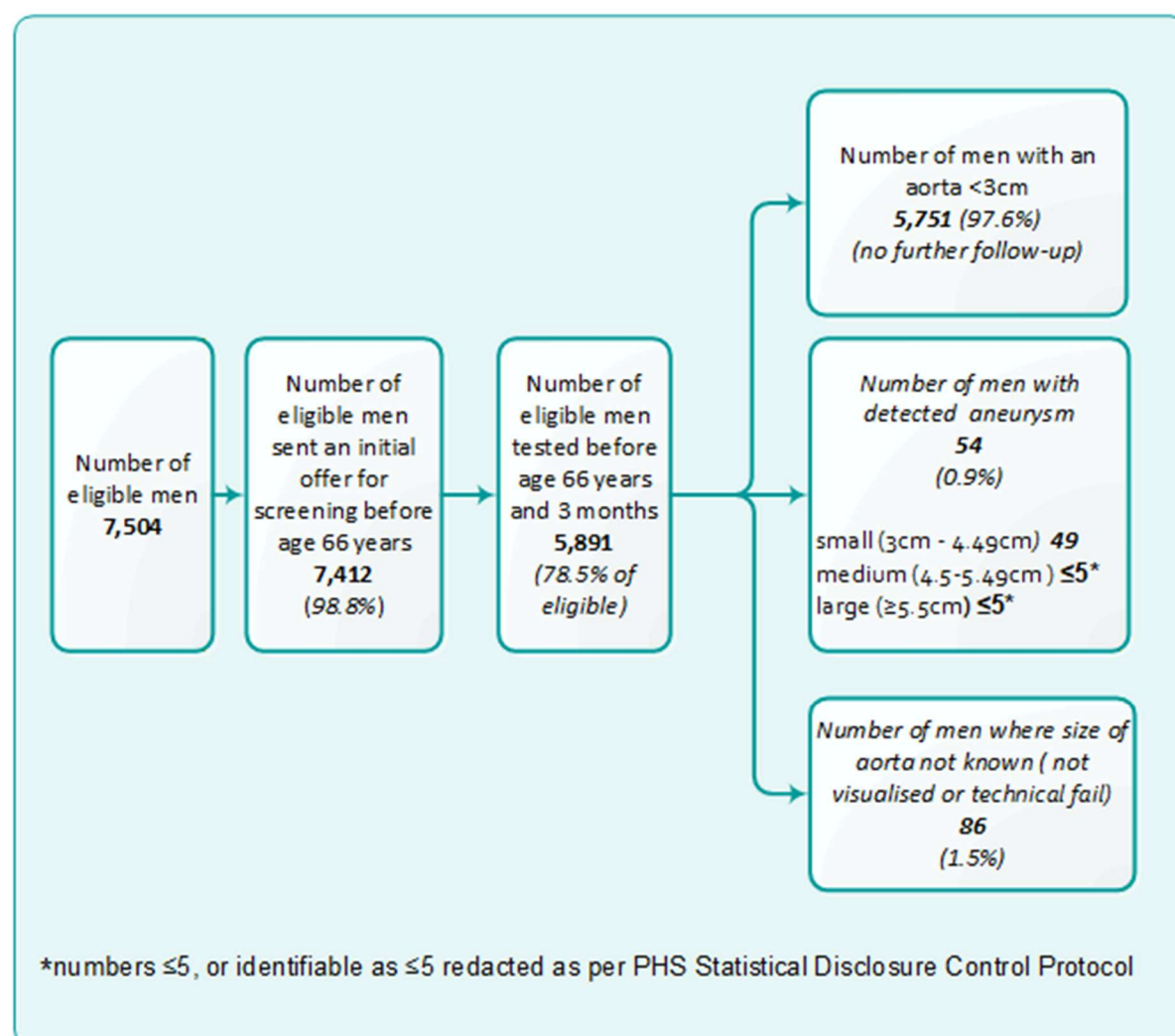
Source: Scottish Abdominal Aortic Aneurysm (AAA) screening programme statistics, March 2026

Local monitoring data sourced from the AAA database is presented in this report to provide more detailed analysis of uptake and outcome data for period 1st April 2024 to 31st March 2025. As a result of differences in data extract dates and age of eligible cohort at time of reporting, local data analysis differ from those presented in recently published national programme reports.

An overview of NHGGC AAA screening programme activity during 2024-2025 is provided in **Figure 1.3**.

During the period 2024-2025, the total number of eligible men resident in NHSGGC was 7,504 and 7,412 (98.8%) were sent an initial offer of screening before their 66th birthday. Of the 7,504 men eligible for screening, 5,891 (78.5%) were screened before age 66 and 3 months.

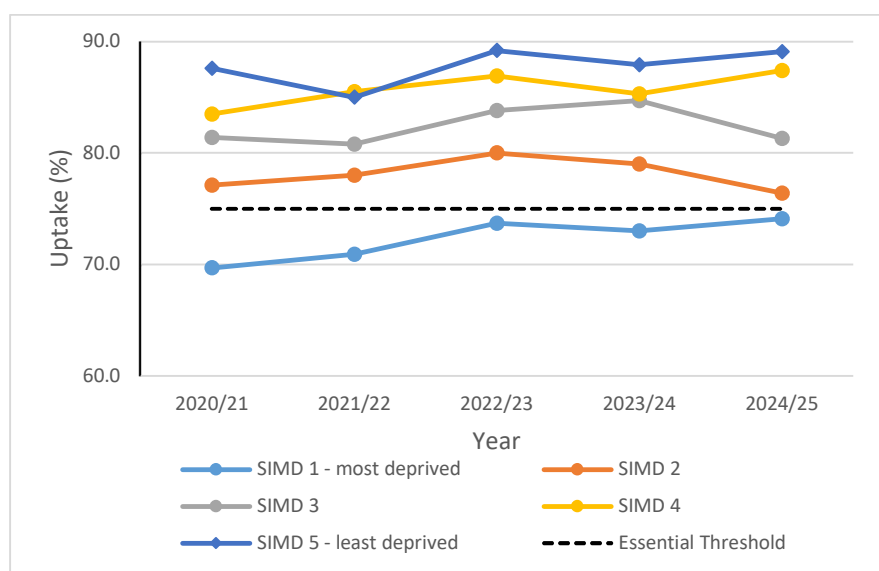
Figure 1.3 AAA screening programme activity, NHSGGC, 2024-25



Source: AAA application, September 2025

Screening uptake was compared by deprivation (SIMD) quintile, see **Figure 1.4**. Uptake continues to be highest among men in the least deprived quintile and lowest among men in the most deprived quintile. A clear gradient was observed, with uptake decreasing as deprivation increased across the quintiles. Compared with 2023/24, uptake varied across all SIMD quintiles in 2024/25.

Figure 1.4. Uptake of AAA screening among eligible men by deprivation quintile (SIMD), NHSGGC, 2020/21 – 2024/25



Source: Scottish Abdominal Aortic Aneurysm (AAA) screening programme statistics, March 2026

From local analysis, during 2024/25 uptake among men residing in the most deprived areas was 14.9 percentage points lower than men residing in the least deprived areas (71.2% vs 86.1% respectively). The essential threshold of 75% uptake was not met among men residing in SIMD 1, (**Table 1.1**).

Table 1.1 Uptake of AAA screening among eligible men by SIMD quintile (deprivation), NHSGGC, 2024-25

SIMD Quintile 2020	Total	Not Screened	Screened	% Screened
1 (Most Deprived)	2,520	725	1,795	71.2
2	1,295	299	996	76.9
3	926	183	744	80.3
4	1,138	181	957	84.1
5 (Least Deprived)	1,625	225	1,399	86.1
Total	7,504	1,613	5,891	78.5

Source: AAA Application, September 2025

Further local analysis was undertaken to explore variations in uptake of the 2024/25 screening round for populations with protected characteristics including ethnicity, learning disability and mental health, and by Health and Social Care Partnership (HSCP) area. However, in some instances, cohort numbers were small therefore caution should be applied when interpreting annual uptake data.

Due to small numbers in some ethnic groups, eligibility and uptake of AAA screening are presented by 2021 census ethnicity category (**Table 1.2**). The majority of eligible men were recorded as White, accounting for 88.2% of the eligible population.

Overall uptake varied across ethnic groups; however, the number of men in several minority ethnic categories was small, and some values are suppressed in line with Public Health Scotland (PHS) Statistical Disclosure Control protocols. Records with missing or unavailable ethnicity information are reported separately and should not be interpreted as an ethnic group. As a result, direct comparison of uptake between individual ethnic categories is not appropriate. Findings are therefore presented descriptively to provide an overview of participation rather than to draw comparative conclusions.

Table 1.2. Uptake of AAA screening among eligible men by ethnicity for NHSGGC, 2024-2025

2021 Census Ethnicity Category	Total	Not Screened	Screened	% Screened
African, Scottish African or British African	28	7	21	75.0
Asian, Scottish Asian or British Asian⁶	236	42	194	82.2
Caribbean or Black	*	*	*	55.6
Mixed or multiple ethnic groups	28	8	20	71.4
Opt out, Not known, Null	539	335	204	37.8
Other ethnic group⁷	50	22	28	56.0
White⁸	6,615	1,195	5,419	81.9
Total	7,504	1,613	5,891	78.5

Source: AAA Application, health systems ethnicity data linkage, September 2025

* numbers ≤5, or identifiable as ≤5 redacted as per PHS Statistical Disclosure Control Protocol

Table 1.3 shows that 49 of the 7,504 individuals eligible for AAA screening in 2024/25 were registered with a learning disability (0.7%). Men who were registered with a learning disability had lower uptake of AAA screening compared to the rest of the screened population, 65.3% compared to 78.6% uptake in the rest of the population.

⁶ Includes: 'Pakistani, Scottish Pakistani or British Pakistani'; 'Indian, Scottish Indian or British Indian'; 'Bangladeshi, Scottish Bangladeshi or British Bangladeshi'; 'Chinese, Scottish Chinese or British Chinese'; and 'Other'.

⁷ Includes: 'Arab', 'Scottish Arab' or 'British Arab'; and 'Other'

⁸ Includes: 'Scottish'; 'Other British'; 'Irish'; 'Polish'; 'Gypsy/Traveller'; 'Roma'; 'Showman / Showwoman'; and 'Other'

Table 1.3. Uptake of AAA screening among eligible men by Learning Disability, NHSGGC, 2024-25

Learning Disability	Total	Invited	% Invited	Not Screened	Screened	% Screened
Rest of population	7,455	7,363	98.8	1,596	5,859	78.6
Registered	49	49	100.0	17	32	65.3
Total	7,504	7,412	98.8	1,613	5,891	78.5

Source: AAA Application; NHSGGC Learning Disability Health Check Register, March 2025

People registered on PsyCIS have had at least one episode of psychosis which is typically seen in patients with a severe or enduring mental illness. **Table 1.4** shows that 94 of the 7,504 men eligible for screening were registered on PsyCIS (1.3%). These individuals had a lower percentage of AAA screening, 69.1% compared to 78.6% in the rest of the population.

Table 1.4. Uptake of AAA screening among eligible men by Severe and Enduring Mental Health, NHSGGC, 2024-25

PYSCIS	Total	Invited	% Invited	Not Screened	Screened	% Screened
Rest of population	7,410	7,319	98.8	1,584	5,826	78.6
Registered	94	93	98.9	29	65	69.1
Total	7,504	7412	98.8	1,613	5,891	78.5

Source: AAA Application, PSYCIS, September 2025

The essential threshold for screening uptake (75%) was met in five of the six HSCPs areas: East Dunbartonshire (87.3%), East Renfrewshire (83.6%), Inverclyde (77.5%), Renfrewshire (81.0%) and West Dunbartonshire (82.0%). The essential threshold was not met in Glasgow City overall (74.7%); however, the threshold was met in Glasgow South Sector (76.4%) See **Table 1.5**.

Table 1.5. Uptake of AAA screening among eligible men by Health & Social Care Partnership area, NHSGGC, 2024-25

HSCP Area	Total	Invited	% Invited	Not Screened	Screened	% Screened
East Dunbartonshire HSCP	746	740	99.2	95	651	87.3
East Renfrewshire HSCP	609	601	98.7	100	509	83.6
Glasgow North East Sector	1,233	1,208	98.0	337	896	72.7
Glasgow North West Sector	1,119	1,109	99.1	281	838	74.9
Glasgow South Sector	1,387	1,376	99.2	328	1,059	76.4
Glasgow City HSCP	3,739	3,693	98.8	946	2,793	74.7
Inverclyde HSCP	592	581	98.1	133	459	77.5
Renfrewshire HSCP	1,179	1,163	98.6	224	955	81.0
West Dunbartonshire HSCP	639	634	99.2	115	524	82.0
Total	7,504	7,412	98.8	1,613	5,891	78.5

Source: AAA Application, September 2025

Mapping of AAA screening uptake rates by Intermediate Data Zones⁹ was undertaken to provide further insight into local variation across NHSGGC. The analysis shows marked variation at small-area level: 53 of the 257 intermediate zones recorded uptake below 60%, and 8 of these had uptake below 40%. These findings illustrate that in certain pockets of NHSGGC, uptake is substantially lower than overall HSCP-level rates. Uptake maps are available on the [PHSU website](#)¹⁰.

1.6. AAA Screening Outcomes

Table 1.6 shows that of the 5,363 men screened, 53 men (0.99 %) had a confirmed positive screening result with an enlarged aorta ≥ 3 cm.

Of these:

- 49 men (81.2%) had an aorta measuring between 3cm to 4.49cm (small aneurysm) requiring annual surveillance scans;
- Fewer than five men had a medium aneurysm (between 4.5 and 5.49cm) requiring three-monthly surveillance scans;

⁹ Intermediate Zones (as opposed to smaller data zones) were used for mapping AAA uptake rates due to small denominator.

¹⁰ [Screening Uptake Data Zone maps](#) (Accessed March 2026)

- Fewer than five men were found to have a large aneurysm (measuring 5.5 cm or more) requiring surgical assessment and intervention where appropriate.

Table 1.6. Abdominal Aneurysm screening results for NHSGGC, 2024-2025

Result Type	Largest Measure (cm)					Total
	<3	3 - 4.49	4.5-5.49	≥5.5	Not Known	
Negative	5,751	-	-	-	-	5,751
Non Visualisation	-	-	-	-	86	86
Positive	-	49	*	*	-	54
Total	5,751	49	*	*	86	5,891

Source: AAA Application, September 2025

* numbers ≤5, or identifiable as ≤5 redacted as per ISD Statistical Disclosure Control Protocol

1.7. AAA Mortality and Incident Audit

The Public Health Screening Unit leads a programme of audit of AAA screening. A multi-disciplinary group reviews all AAA related mortality and incidents in relation to the screening programme in line with national guidance. This is in addition to the already established system of reviewing the cases of patients who have died from a ruptured aorta at regular Morbidity and Mortality meetings.

The standards for the Scottish AAA Screening Programme state that:

- The screening & surveillance history of men, who died of a ruptured aortic aneurysm, is reviewed and discussed by the collaborative screening centre multidisciplinary team; and
- The mortality rate due to ruptured abdominal aortic aneurysm among men who were screened negative and discharged from the programme is recorded and an action plan implemented.

To meet these standards, an annual audit of hospital admissions and deaths due to ruptured AAA is undertaken. The most recent audit, covering the period 1 January 2024 to 31 December 2024, identified seven cases of ruptured AAA. A review of these cases identified no deficiencies in the screening programme, and no further investigation was required.

Mortality rates following is reported through the national AAA Screening Programme key performance indicators (KPIs). These include 30-day mortality following elective open AAA repair and elective endovascular aneurysm repair (EVAR). Due to small numbers, mortality data are published at Scotland level only.

1.8. Experience of men in AAA surveillance

Men with a small or medium aneurysm are offered surveillance scans to monitor the aneurysm and check for it growing. We conducted a survey of men on surveillance to capture their views on key elements including attendance, communication, emotional wellbeing, lifestyle discussion and overall satisfaction. The survey was conducted between September and November 2025, inviting 305 men to participate. Responses were collected using a mixed-method approach, with most men completing a paper questionnaire and a smaller proportion responding online. The survey had a 49% response rate (150 responses received) and provided a robust snapshot of views from men undergoing surveillance within the AAA screening programme.

Survey respondents demonstrated very high engagement with the surveillance pathway, with 99% of respondents attending all scheduled scans and over 40% having been monitored for five years or more, highlighting the long-term nature of follow-up. Although overall satisfaction with the AAA surveillance service was high, the survey identified important gaps:

- approximately one-third of respondents did not recall lifestyle discussions;
- over a third of respondents were unsure how to access further support;
- over a third of respondents reported moderate or severe anxiety following their AAA diagnosis.

Key actions include strengthening the consistency and visibility of health behaviour change support available to men under surveillance, such as access to smoking cessation, weight-management and wider lifestyle support services. Psychological support should also be enhanced within routine appointments following an AAA diagnosis. In addition, continuity of information and follow-up should be improved between diagnosis and GP care to ensure patients receive coordinated, ongoing support throughout the surveillance pathway.

1.9. Challenges & Future Priorities

Challenges

Limited clinic space availability and screening staff capacity in Inverclyde and West Dunbartonshire continued to impact on invitation rates of eligible men residing in Inverclyde, West Dunbartonshire and the North-West Glasgow areas. We will continue to work with the screening service and HSCPs to review and increase clinic capacity in these areas with the aim of increasing invitation rates.

Future priorities

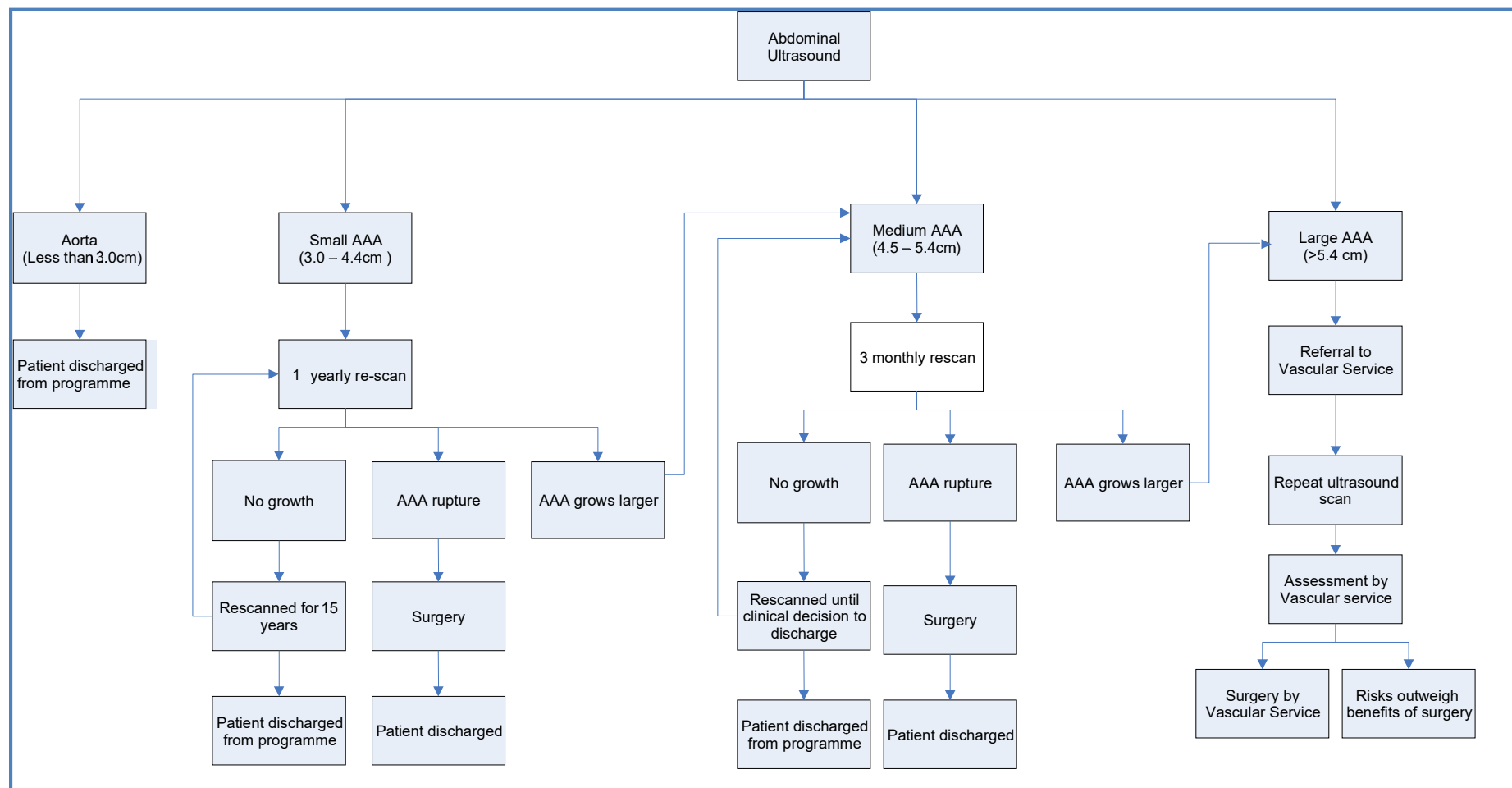
We aim to maintain the screening staffing level and screening site locations to ensure stability in the delivery of AAA Screening Programme. This will include ensuring that sufficient screening staff are appropriately trained through the national training programme/accreditation run by Caledonia University.

We will implement the findings from the 2025 patient experience survey with men under surveillance for small and medium AAAs. This will help us improve the overall patient experience and strengthen signposting to relevant health improvement services for men living with AAA.

Building on learning from engagement with individuals with a learning disability we will implement and monitor impact of good practice guidance to support participation in AAA screening.

We will continue to work in collaboration with Corporate Communications and Health and Social Care Partnerships to identify opportunities to support uptake of AAA in our most deprived communities.

Appendix 1.1. AAA Screening Pathway



Appendix 1.2. Abdominal Aortic Aneurysm Key Performance Indicators, NHSGGC, 2024/25.

Description	Essential Threshold	Desirable Threshold	Year ending March 2025
1.1 Percentage of eligible population who are sent an initial offer to screening before age 66 years	≥ 90%	100%	95.2%
1.2 Percentage of men offered screening who are tested before age 66 years and 3 months	≥ 75%	≥ 85%	80.6%
1.3: Percentage of eligible population who are tested before age 66 and 3 months by Scottish Index of Multiple Deprivation (SIMD) quintile:			
SIMD 1 (most deprived)			74.1%
SIMD 2	≥ 75%	≥ 85%	76.4%
SIMD 3			81.3%
SIMD 4			87.4%
SIMD 5 (least deprived)			89.1%
1.4a Percentage of annual surveillance appointments due where men are tested within 6 weeks of due date	≥ 90%	100%	90.6%
1.4b Percentage of quarterly surveillance appointments due where men are tested within 4 weeks of due date	≥ 90%	100%	96.1%
2.1a Percentage of screening encounters where aorta could not be visualised	< 3%	< 1%	2.5%
2.1b Percentage of men screened where aorta could not be visualised	< 3%	< 1%	2.2%
2.2 Percentage of screened images that failed the quality assurance audit and required immediate recall	< 4%	< 1%	1.8%
3.1 Percentage of men with AAA ≥5.5cm seen by vascular specialist within two weeks of screening	≥ 75%	≥ 95%	100.0%
3. 2 Percentage of men with AAA ≥5.5cm deemed appropriate for intervention/ operated on by vascular specialist within eight weeks of screening	≥ 60%	≥ 80%	72.7%

Source: [Scottish Abdominal Aortic Aneurysm \(AAA\) screening programme statistics - Year ending 31 March 2025 - Scottish Abdominal Aortic Aneurysm \(AAA\) screening programme statistics - Publications - Public Health Scotland](#)

RED = essential threshold not met

AMBER = essential threshold met, desirable threshold not met

GREEN = essential and desirable thresholds met

Chapter 2 – Bowel Screening Programme

Summary

Bowel screening	
Why?	Early identification of bowel cancer. Prevention of morbidity and mortality.
Intervention	Screening offered to all eligible men and women aged 50-74 years, every two years. Screening test is quantitative FIT, poo test. Screening kits sent to home address of all those eligible, participants collect a sample at home and return in the prepaid envelope. Where screening test is positive (high risk), rapid follow up at colonoscopy clinic at hospital sites across the region. Rapid referral into bowel surgery as needed.
Activity in 2024/25	61.7% screening uptake (218,065 individuals screened) in the last screening round 1 st April 2023 to 31 st March 2025
Outcomes	Uptake similar to last year Uptake varies with SIMD, with 21.7% difference between areas of high deprivation (lowest uptake) and areas of low deprivation (highest uptake) Screening positivity rate 3.0% (6,756 individuals) 76.0% of those who tested positive attended for diagnostic investigation Detection rates: <ul style="list-style-type: none">- 3,325 people (67.7%) had a polyp detected- 2,727 people (53.1%) had a confirmed adenoma detected- 233 (4.5%) people had a confirmed colorectal cancer diagnosis- Detection rates of polyps, adenomas and cancer was:<ul style="list-style-type: none">- higher in males than females- similar across all levels of deprivation

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2.1. Background

Colorectal (bowel) cancer is the fourth most common cancer in Scotland for both men and women accounting for 12% of all cancers in 2023 (the most recent year for which incidence data is available). Ninety four percent of bowel cancers detected were among people aged over 50 years of age¹¹.

In 2023, 854 people residing in the NHSGGC area (all ages), were diagnosed with bowel cancer, of these 482 were male and 372 were female. This gives an age-standardised incidence rate of 96.1 per 100,000 population for men in NHSGGC in 2023, higher than the Scotland rate of 88.1 per 100,000. For women the age-standardised incidence rate in NHSGGC in 2023 was 60.9 per 100,000 population, lower than the Scotland rate of 64.9 per 100,000. In 2023, one third of colorectal cancers diagnosed in individual 50-74 years of age were detected by screening¹.

In 2024, the most recent year for mortality data, there were 376 deaths from bowel cancer in NHSGGC (all ages), of which 194 were male and 182 were female. This gives an age standardised mortality rate of 40.7 per 100,000 population for men, higher than the national rate (38.6 per 100,000) and 29.4 per 100,000 population for women, higher than national rate of 27.2 per 100,000 population¹².

Standardised incidence and mortality rates averaged across rolling three year periods for bowel cancer for NHSGGC and Scotland are shown in **Figure 2.1**. Over the ten year period between 2012-2014 to 2021-2023 (most recent year for incidence data), the age-standardised rolling three years incidence rate of bowel cancer in Greater Glasgow & Clyde decreased overall in both men (99.9 to 98.4 per 100,000) and in women (65.4 to 60.1 per 100,000). However there was an increase in incidence rate for both men and women in the most recent period compared to the previous rolling three year average, and for men this rise has brought rates to nearly the same levels observed ten a decade earlier.

Over the ten year period between 2013-2015 and 2022-2024 (most recent year for mortality data) the age-standardised rolling three years mortality rates of bowel cancer in Greater Glasgow & Clyde decreased in men (from 44.0 to 37.4 per 100,000) and in women (27.9 to 24.4 per 100,000).

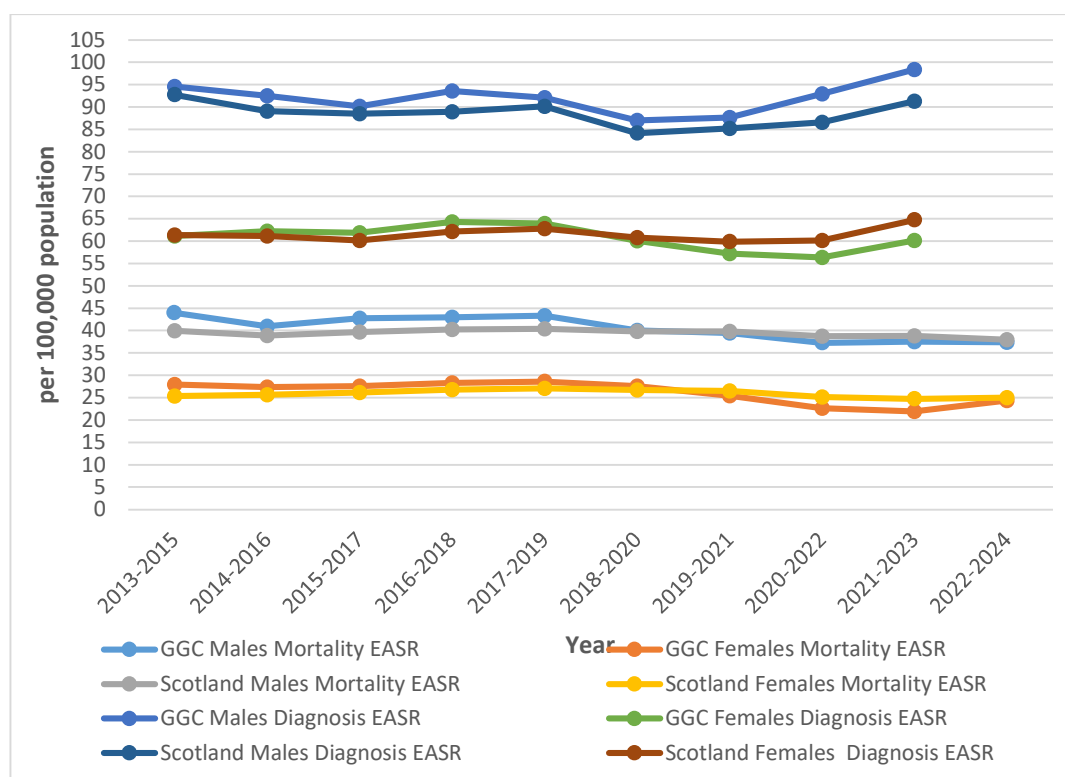
The main preventable risk factors for bowel cancer are consumption of red and processed meats, obesity, alcohol consumption and smoking.

The Scottish Bowel Screening Programme was fully implemented across Scotland in 2009.

¹¹ [Cancer incidence in Scotland - to December 2023 - Cancer incidence in Scotland - Publications - Public Health Scotland](#) (Accessed February 2026)

¹² [Cancer mortality in Scotland - Annual update to 2024 - Cancer mortality - Publications - Public Health Scotland](#) (Accessed February 2026)

Figure 2.1. Colorectal cancer diagnosis and mortality trends 2013-2024 (rolling three year average), European Age Standardised Rate (EASR), per 100,000 population.



Source: Registration Source: PHS September 2025, Mortality Source: PHS January 2026

2.2. Aim of the Bowel Screening Programme

The purpose of bowel screening is to detect colorectal cancers at the earliest possible opportunity so that treatment may be offered promptly. There is evidence that early detection of colorectal cancers can result in more effective treatment, which may be more likely to reduce deaths from colorectal cancer. In addition, the removal of pre-cancerous lesions could lead to a reduction in the incidence of colorectal cancer.

The National Bowel Screening Programme performance and quality is monitored via defined Key Performance Indicators (KPIs)¹³ and National Bowel Screening Standards¹⁴, see **Appendix 2.1**.

¹³ [Scottish bowel screening programme statistics - For the period of invitations from May 2022 to April 2024 - Scottish bowel screening programme statistics - Publications - Public Health Scotland](#) (Accessed February 2026)

¹⁴ [Bowel screening standards – Healthcare Improvement Scotland](#) (Accessed February 2026)

2.3. Eligible Population

The programme invites all men and women between the ages of 50–74 years of age and registered with a General Practice. Other eligible individuals who are not registered with a General Practice such as prisoners, armed forces, homeless and individuals in long-stay institutions are also able to participate following NHS Greater Glasgow and Clyde local arrangements. All eligible individuals will be routinely recalled every two years. Individuals may request screening above the age of 74 years.

2.4. The Screening Test & Pathway

In November 2017 the Quantitative Faecal Immunochemical Test (QFIT) was introduced throughout Scotland. This test is recommended as the first choice for population-wide colorectal cancer screening by the European Guidelines for Quality Assurance in Colorectal Cancer Screening¹⁵. **Appendix 2.1** provides an overview of the bowel screening pathway.

The National Bowel Screening Centre in Dundee issues invitation letters and screening kits to all eligible residents of NHSGGC to their home address. Participants complete the screening test at home and return their completed kit to the National Laboratory by post.

After analysis, the National Centre reports the results to the patient, GP Practice and Health Board. The patient is informed by letter, an electronic notification is sent to the patient's general practitioner and results of all positive tests are sent to the Health Board via SCI Gateway referral.

Patients with positive screening results are invited to contact NHS Greater Glasgow and Clyde administrative staff to arrange a telephone assessment and be offered a colonoscopy. Patients who are unable to undergo colonoscopy will be offered a CT colonography as an alternative where appropriate. If required, patients are then referred for further diagnostic investigations and treatment. Some patients may not be offered a colonoscopy, common reasons being an inability to tolerate any form of bowel preparation, a recent change in health status, a previous failed colonoscopy, or unsuitability due to physical incapability.

If a patient declines to attend colonoscopy, a letter is sent to the patient and their GP, asking them to get in touch within six months if they change their minds. Otherwise they will be removed from the waiting list. These patient will be invited to take part in bowel screening again in the next call/recall round in two years time.

¹⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4482205/> (Accessed February 2026)

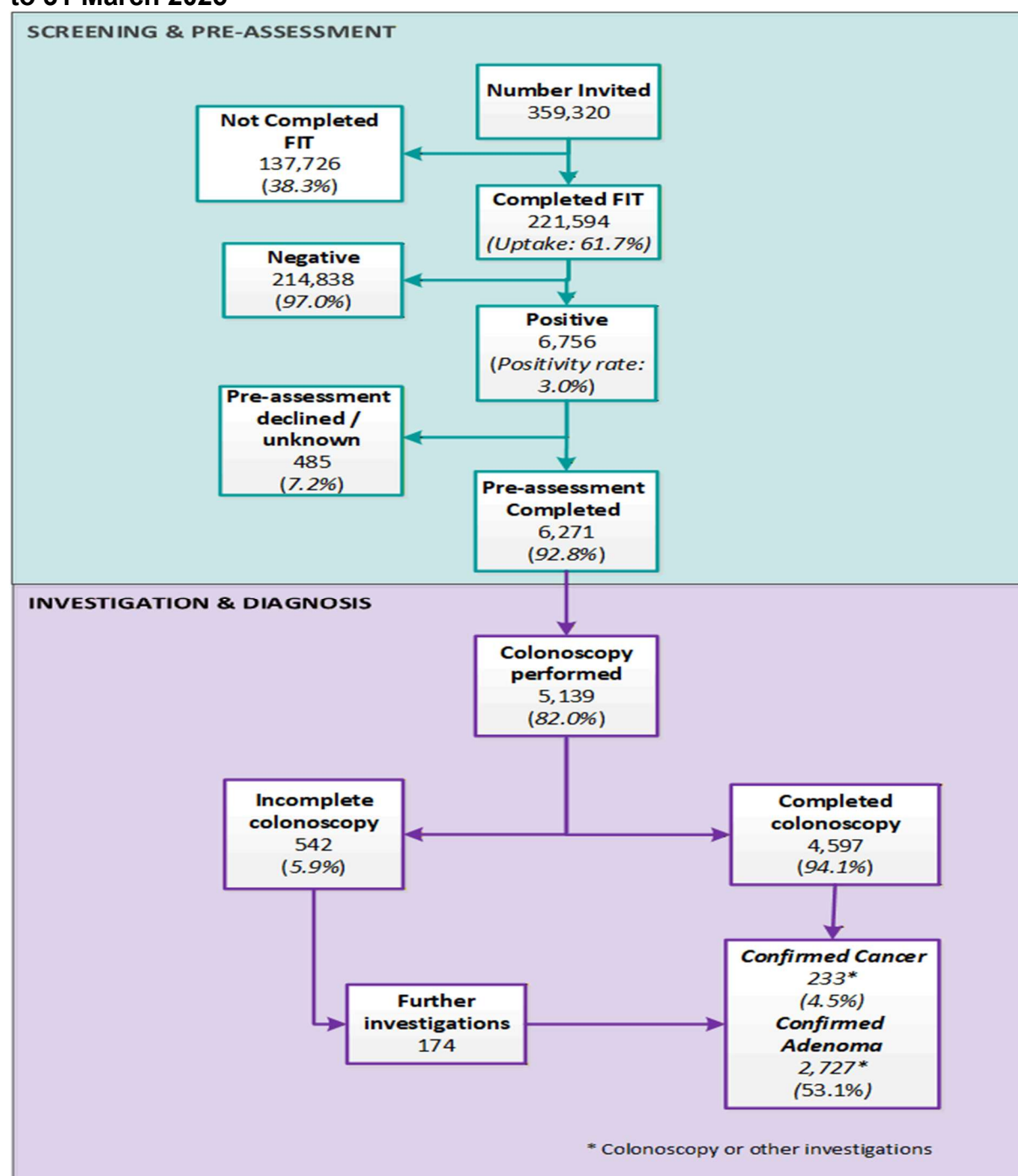
2.5. Programme Performance and Delivery

The bowel screening programme KPIs cover information on uptake of screening (completed kits), results of screening, quality of colonoscopy, and cancer diagnosis and staging. National statistics are published annually by Public Health Scotland in February each year, reflecting the previous two year screening round. **Appendix 2.2** summarises the most recent published KPI's for NHSGGC and Scotland for two year period 1st March 2022 to 30 April 2024.

Local monitoring data is presented in this report to provide uptake and outcome data for two year period 1st April 2023 to 31st March 2025. As a result of differences in data extract dates and data definitions, numbers in local data analysis may differ from those presented in forthcoming published national programme reports.

Figure 2.2 summarises bowel screening uptake for the screening round 1st April 2023 to 31st March 2025 from local analysis, which is based on NHSGGC resident population only. During this time period, 359,320 NHSGGC residents were invited for bowel screening, of which 61.7% returned the screening test. Of the 221,594 completed tests, 6,756 tested positive (3.0%). Of those individuals who had a positive result, 6,271 (92.8%) completed a nurse pre-assessment and over three quarters (5,587), had a colonoscopy performed. Subsequently, 233 cancers and 2,727 adenomas were detected.

Figure 2.2. NHSGGC Eligible Residents Bowel Screening Activity 1 April 2023 to 31 March 2025

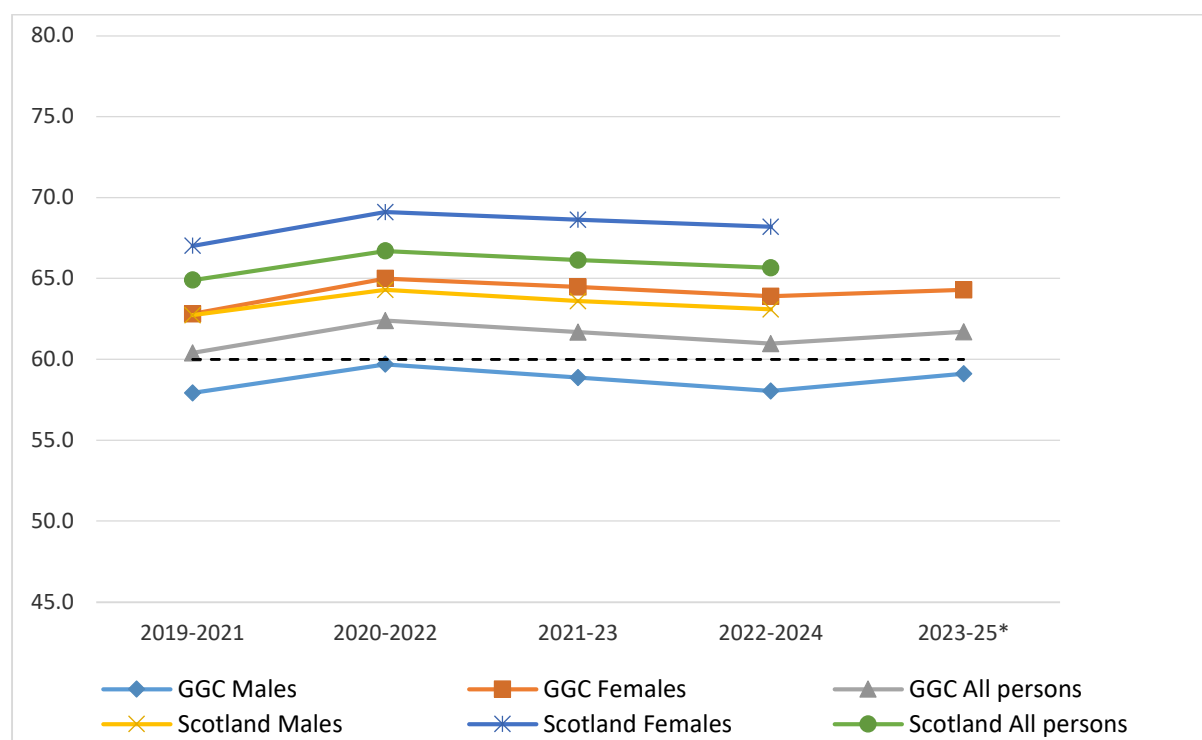


Source: NHS Greater Glasgow and Clyde Bowel Screening IT System, Trakcare, Pathology, Cancer Audit, November 2025

2.6. Uptake of Screening

The overall uptake of bowel screening increased both nationally and within NHSGGC following the implementation of QFIT as the screening test in 2017. In the most recent screening round, 2023/4 to 2024/5, there was a small increase in bowel screening uptake for men and women, see **Figure 2.3**.

Figure 2.3. Uptake of Bowel Screening by sex, in NHSGGC and Scotland, 2019/21 to 2023/25*



Source: PHS Bowel Screening Programme Statistics, 1st April 2019 to 31st March 2024.

* NHSGGC Bowel Screening IT System and Trakcare, November 2025

For the screening round 2023/24 to 2024/25, overall uptake of bowel screening in NHSGGC was 61.7%, above the Health Improvement Scotland (HIS) standard of 60%. Women were more likely to return a bowel screening test than men (64.3% vs. 59.1% respectively). Uptake in males was below the national target of 60%, see **Table 2.1**.

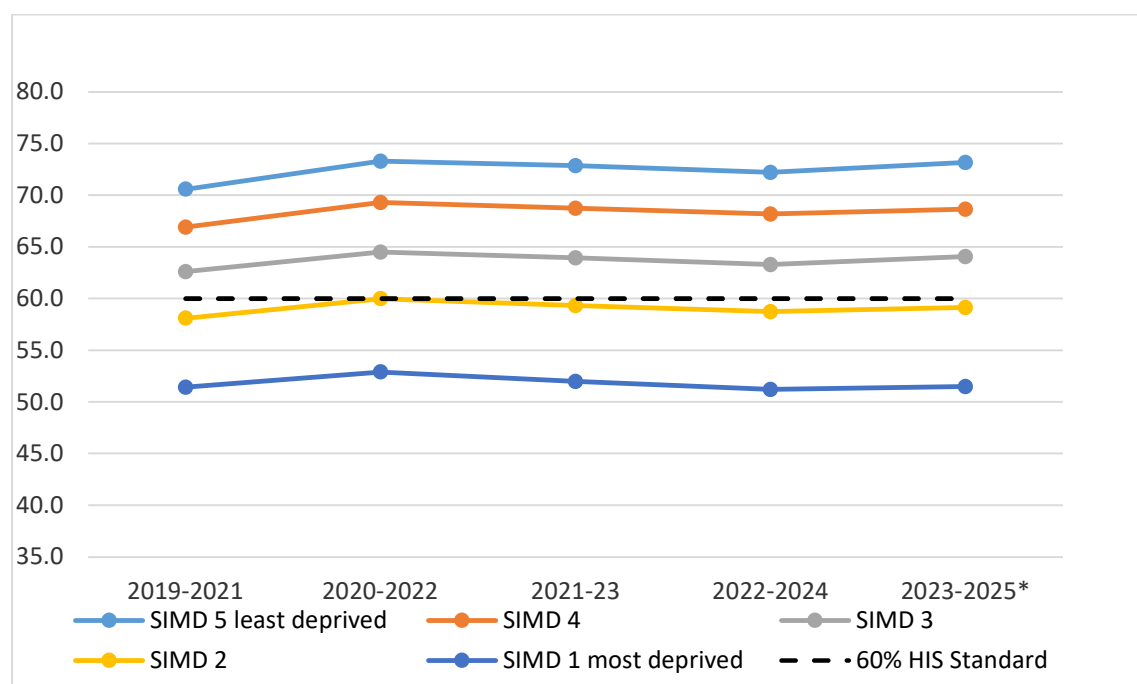
Table 2.1. Uptake of bowel screening by sex, NHSGGC, 1st April 2023 to 31st March 2025

Sex	Not Screened	Screened	Total	% Screened
Female	64,447	115,897	180,344	64.3
Male	73,279	105,697	178,976	59.1
Total	137,726	221,594	359,320	61.7

Source: NHSGGC Bowel Screening IT System and Trakcare, November 2025

During the 2023/4 to 2024/5 screening round, the was an increase in uptake was across all deprivation quintiles, see **Figure 2.4**. Lowest uptake continues to be observed among those residing in the most deprived quintiles.

Figure 2.4. Uptake of bowel screening by deprivation quintile, NHSGGC 2019/21 to 2023/25*



Source: PHS Bowel Screening Programme Statistics, 1st April 2019 to 31st March 2024.

* NHSGGC Bowel Screening IT System and Trakcare, November 2025

For the 2023/4 to 2024/5 screening round, there was a 21.7% percentage point difference in uptake among individuals residing in the most deprived areas compared to individuals residing in the least deprived areas (51.5% vs 73.2% respectively), see **Table 2.2**.

Table 2.2. Uptake of bowel screening by deprivation quintile (SIMD), NHSGGC, 1st April 2023 to 31st March 2025

SIMD Quintile	Not Screened	Screened	Total	% Screened
1 (Most Deprived)	57,659	61,176	118,835	51.5
2	26,121	37,804	63,925	59.1
3	16,336	29,106	45,442	64.1
4	16,822	36,843	53,665	68.7
5 (Least Deprived)	20,788	56665	77,453	73.2
Total	137726	221594	359320	61.7

Source: NHSGGC Bowel Screening IT System and Trakcare, November 2025

Further local analysis was undertaken to explore variations in uptake of the 2023/24 to 2024/25 screening round for populations with protected characteristics (including age, ethnicity, learning disability and mental health), and geography by Health and Social Care Partnership (HSCP) area.

Uptake of screening increased with increasing age, see **Table 2.3**. Uptake was lowest among those aged 50-54 years (53.1%) and increased to 70.2% between those aged 70 to 74 years, a difference of 17.2 percentage points.

Table 2.3. Uptake of bowel screening by age group, NHSGGC, 1st April 2023 to 31st March 2025

Age Group (years)	Not Screened	Screened	Total	% Screened
50-54	37,111	41,983	79,094	53.1
55-59	30,137	42,398	72,535	58.5
60-64	33,719	56,304	90,023	62.5
65-69	24,022	50,856	74,878	67.9
70-74	12,737	30,053	42,790	70.2
Total	137,726	221,594	359,320	61.7

Source: NHSGGC Bowel Screening IT System and Trakcare, November 2025

Analysis by ethnicity was undertaken via data linkage to self-reported ethnicity reference dataset held within West of Scotland Safe Haven. The uptake screening standard of 60% was achieved in the Chinese, Scottish Chinese or British Chinese, Irish, Other British, Roma, Scottish and Showman/Showwoman but was consistently poorer in other ethnic groups (see **Table 2.4**). Some ethnic groups were small and these data are harder to interpret.

Table 2.4. Uptake of bowel screening by ethnicity, NHSGGC, 1st April 2023 to 31st March 2025

2021 Census Ethnicity Category	Not Screened	Screened	Total	% Screened
African, Scottish African or British African	875	1,060	1,935	54.8
Asian: Bangladeshi, Scottish Bangladeshi or British Bangladeshi	93	92	185	49.7
Asian: Chinese, Scottish Chinese or British Chinese	730	1,483	2,213	67.0
Asian: Indian, Scottish Indian or British Indian	1,449	1,521	2,970	51.2
Asian: Pakistani, Scottish Pakistani or British Pakistani	3,472	2,805	6,277	44.7
Caribbean or Black	226	288	514	56.0
Any Mixed or multiple ethnic group	719	741	1,460	50.8
White: Gypsy/Traveller	22	14	36	38.9
Not known, Null, Opt Out	21,179	7,380	28,559	25.8
Other	703	920	1,623	56.7
Other: Arab, Scottish Arab or British Arab	195	253	448	56.5

Other ethnic group	947	911	1,858	49.0
White: Irish	617	1,431	2,048	69.9
White: Other British	9,494	16,522	26,016	63.5
White: Polish	631	705	1,336	52.8
White: Roma	10	33	43	76.7
White: Scottish	94,364	182,722	277,086	65.9
White: Showman/Showwoman	11	37	48	77.1
White: Any other white ethnic group	1,989	2,676	4,665	57.4
Total	137,726	221,594	359,320	61.7

Source: Bowel Screening IT system (November 2025); West of Scotland Safe Haven Assigned Ethnicity

Table 2.5 shows that 2,332 of the 359,320 individuals eligible for screening were registered with a learning disability (0.7%). People who were registered with a learning disability had poorer uptake of bowel screening, 45.1% compared to 61.7% in the rest of the population.

Table 2.5. Uptake of bowel screening by learning disability, NHSGGC, 1st April 2023-31st March 2025

Learning Disability Register	Not Screened	Screened	Total	% Screened
Not Registered	136,397	220,515	356,912	61.8
Registered	1,281	1,051	2,332	45.1
Total	137,726	221,594	359,320	61.7

Source: NHSGGC Bowel Screening IT System and Trakcare (November 2025); NHSGGC Learning Disability Health Check Register, November 2025

People registered on PsyCIS have had at least one episode of psychosis which is typically seen in patients with a severe or enduring mental illness. **Table 2.6** shows that 4,106 of the 359,320 people eligible for screening were registered on PsyCIS (1.1% of the total eligible population). These individuals had poorer uptake of bowel screening, 43.4% compared to 61.9% in the rest of the population.

Table 2.6. Uptake of bowel screening among people with severe and enduring mental illness, NHSGGC, 1st April 2023-31st March 2025

PsyCIS	Not Screened	Screened	Total	% Screened
Not Registered	135,403	219,811	355,214	61.9
Registered	2,323	1,783	4,106	43.4
Total	137,726	221,594	359,320	61.7

Source: NHSGGC Bowel Screening IT System and Trakcare (November 2025); PsyCIS, (November 2025).

Uptake was analysed by HSCP area, and a Standardised Uptake Rate (SUR) was calculated to allow for comparison by adjusting for the known effects of age (higher

uptake in older age groups), deprivation (lower uptake in more deprived groups) and sex (differences in uptake between males and females). Before standardisation, crude screening uptake ranged from 56.0% in Glasgow City South Sector to 72.0% in East Dunbartonshire HSCP, with all HSCPs except the three Glasgow City sectors meeting the HIS 60% target, see **Table 2.7**.

Standardisation shows whether uptake in an HSCP area is higher or lower than would be expected for its population profile. If the SUR is lower than the crude rate, this indicates that part of the higher uptake reflects population characteristics such as lower deprivation; if the SUR is higher, the HSCP is achieving uptake levels above those expected for its demographic profile. In this analysis, standardisation narrows the differences between HSCPs, indicating that East Dunbartonshire and East Renfrewshire HSCPs high uptake is partly related to their population demographics, while the Glasgow sectors perform better than expected once their population profile is taken into account.

Table 2.7. Uptake of bowel screening by HSCP, NHSGGC, 1st April 2023 to 31st March 2025.

HSCP	Not Screened	Screened	Total	% Screened	% Screened LCI	% Screened UCI	% SUR	% SUR LCI	% SUR UCI
East Dunbartonshire HSCP	10,228	26,349	36,577	72.0	71.2	72.9	64.7	63.9	65.4
East Renfrewshire HSCP	8,912	21,284	30,196	70.5	69.5	71.4	63.0	62.1	63.8
Glasgow North-East Sector	23,453	30,034	53,487	56.2	55.5	56.8	60.9	60.2	61.6
Glasgow North-West Sector	23,974	31,826	55,800	57.0	56.4	57.7	58.2	57.6	58.8
Glasgow South Sector	29,663	37,803	67,466	56.0	55.5	56.6	58.4	57.9	59.0
Glasgow City HSCP	77,090	99,663	176,753	56.4	56.0	56.7	59.1	58.7	59.5
Inverclyde HSCP	9,847	17,291	27,138	63.7	62.8	64.7	64.5	63.5	65.5
Renfrewshire HSCP	20,306	38,053	58,359	65.2	64.5	65.9	63.4	62.8	64.0
West Dunbartonshire HSCP	11,343	18,954	30,297	62.6	61.7	63.5	64.8	63.8	65.7
Total	137,726	221,594	359,320	61.7	61.4	61.9			

Source: NHSGGC Bowel Screening IT System and Trakcare, November 2025

SUR – Standardised Uptake Rate

LCI – Lower Confidence Interval

UCI – Upper Confidence Interval

Mapping of bowel screening uptake rates by data zones was undertaken to provide further insight into variation in uptake at local geographical level. This illustrates that uptake rates in some pockets of NHSGGC can be significantly lower than HSCP levels, as 647 of the 1,458 data zones had uptake rates between 40-59% and a further 60 data zones had uptake rates of below 40%. Uptake maps are available on the [PHSU website](#)¹⁶.

2.7. Screening Test Positivity

Overall in the screening round 2023/4 to 2024/5, 3.0% (6,756 of 221,594) of completed screening tests were reported positive. A positive screening test indicates higher risk of bowel cancer and meriting further investigation with colonoscopy or equivalent.

- Women had a lower positivity rate than men (2.6% vs. 3.6 %, respectively).
- Positivity rate increases with increasing age (4.1% aged 70-74 vs. 2.4% aged 50-54).
- Those residing in the most deprived communities had higher positivity than the least deprived (4.2% vs. 2.2% respectively).

See Tables 2.8 and 2.9.

Table 2.8. Uptake for bowel screening and positivity rate of screening test by age and sex, NHSGGC, 1 April 2023 to 31 March 2025

Age Group	% Screened			% Positive		
	Female	Male	Total	Female	Male	Total
50-54	57.4	49.1	53.1	2.2	2.7	2.4
55-59	61.7	55.2	58.5	2.3	3.1	2.7
60-64	64.8	60.2	62.5	2.4	3.2	2.8
65-69	69.0	66.8	67.9	3.0	4.2	3.6
70-74	70.7	69.8	70.2	3.3	4.9	4.1
Total	64.3	59.1	61.7	2.6	3.6	3.0

Source: NHSGGC Bowel Screening IT system (November 2025)

¹⁶ [Screening Uptake Data Zone maps](#)

Table 2.9. Bowel screening positivity rate by SIMD, NHSGGC, 1 April 2023 to 31 March 2025

SIMD Quintile	Negative	Positive	Total	% Positive
1 (Most Deprived)	58,617	2,559	61,176	4.2
2	36,593	1,211	37,804	3.2
3	28,285	821	29,106	2.8
4	35,931	912	36,843	2.5
5 (Least Deprived)	55,412	1,253	56,665	2.2
Total	214,838	6,756	221,594	3.0

Source: NHSGGC Bowel Screening IT system (November 2025)

2.8. Uptake of Colonoscopy

Of the 6,756 individuals with a positive screening result, 5,139 (76.1%) went on to have colonoscopy or another investigation, see **Table 2.10**.

We investigated the demographic characteristics between those who attended for colonoscopy and those who did not.

- The proportion of colonoscopies not performed was similar between males (24.4%) and females (23.3%), see **Table 2.10**.
- The proportion of colonoscopies not performed increased in older age groups, approximately 19% in those aged 50-64, and 30% in those aged 70-74 years, see **Table 2.11**.
- The proportion of colonoscopies not performed increased with increasing deprivation quintile, 28.1% colonoscopies not performed in the most deprived quintile versus 18.2% in the least deprived quintile, see **Table 2.12**.

Table 2.10. Analysis of colonoscopies not performed versus performed by sex, positive bowel screening result, NHSGGC, 1 April 2023 to 31 March 2025

Sex	Colonoscopy not performed		Colonoscopy performed		Total
	Number	% by sex	Number	% by sex	
Female	699	23.3%	2,295	76.7%	2,994
Male	918	24.4%	2,844	75.6%	3,762
Total	1,617	23.9%	5,139	76.1%	6,756

Source: NHSGGC Bowel Screening IT system (November 2025)

Table 2.11. Analysis of colonoscopies not performed versus performed by age group, positive bowel screening result, NHSGGC, 1 April 2023 to 31 March 2025

Age Group	Colonoscopy not performed		Colonoscopy performed		Total
	Number	% by age	Number	% by age	
50-54	193	19.1%	816	80.9%	1,009
55-59	272	24.0%	862	76.0%	1,134
60-64	333	21.1%	1,244	78.9%	1,577
65-69	454	25.0%	1,361	75.0%	1,815
70-74	365	29.9%	856	70.1%	1,221
Total	1,617	23.9%	5,139	76.1%	6,756

Source: NHSGGC Bowel Screening IT system, November 2025

Table 2.12. Analysis of colonoscopies not performed versus performed by deprivation quintile (SIMD), positive bowel screening result, NHSGGC, 1 April 2023 to 31 March 2025

SIMD quintile	Colonoscopy not performed		Colonoscopy performed		Total
	Number	% by SIMD quintile	Number	% by SIMD quintile	
1 most deprived	718	28.1%	1,841	71.9%	2,559
2	324	26.8%	887	73.2%	1,211
3	171	20.8%	650	79.2%	821
4	176	19.3%	736	80.7%	912
5 least deprived	228	18.2%	1,025	81.8%	1,253
Total	1,617	23.9%	5,139	76.1%	6,756

Source: NHSGGC Bowel Screening IT system, November 2025

2.9. Adenoma & Polyp Detection in Those Who Attended Colonoscopy

Tables 2.13, 2.14 and 2.15 provide a summary of adenoma, polyp and cancer detection rates by gender, age and deprivation. Of the 6,756 people who had a positive screening test, 5,139 people underwent a colonoscopy. Of these:

- 3,325 people (64.7%) had a polyp detected;
- 2,727 people (53.1%) had a confirmed adenoma detected; and
- 233 (4.5%) people had a confirmed colorectal cancer diagnosis

Detection of polyps, adenomas and cancer was higher in males than females, see **Table 2.13**. Polyp detection (70.3% vs 57.8%), adenomas (58.8% vs 45.9%) or cancer (5.2% vs 3.7%) detected.

Polyp, adenomas and cancers detection rates increased with increasing age from age group 50-54 years (58.0%, 44.2%, 2.7%), to 70-74 years age group (70.9%, 59.1%, 5.4%). See **Table 2.14**.

Across SIMD deprivation quintiles, detection rates for polyps and adenomas remain broadly similar, with no clear deprivation gradient. Polyp detection ranges from 63% to 66%, and adenoma detection from 52% to 54% across all groups. Cancer detection shows slightly more variation, highest at 5.7% in SIMD 2 but ranging from 4.2% to 4.8% across other deprivation quintiles. Although individuals residing in areas of highest had highest number of investigations, overall detection patterns are similar across all levels of deprivation. See **Table 2.15**.

Figure 2.13. Polyp, adenoma and cancer detection rate by sex for those who had colonoscopy or other investigation, NHSGGC, 2023/4 to 2024/5

	Patients		Polyps detected		Adenomas detected		Cancer detected	
Sex	N	%	N	%	N	%	N	%
Female	2,295	44.7	1,327	57.8	1,047	45.9	86	3.7
Male	2,844	55.3	1,998	70.3	1,673	58.8	147	5.2
Total	5,139	100.0	3,325	64.7	2,727	53.1	233	4.5

Source: NHSGGC Bowel Screening IT system, November 2025

Table 2.14. Polyp, adenoma and cancer detection rate by age group for those who had colonoscopy or other investigation, NHSGGC, 2023-2025

	Patients		Polyps detected		Adenomas detected		Cancer detected	
Age group	N	%	N	%	N	%	N	%
50-54	816	15.9	473	58.0	361	44.2	22	2.7
55-59	862	16.8	498	57.8	412	47.8	32	3.7
60-64	1,244	24.2	827	66.5	665	53.5	65	5.2
65-69	1,361	26.5	920	67.6	783	57.5	68	5.0
70-74	856	16.7	607	70.9	506	59.1	46	5.4
Total	5,139	100.0	3,325	64.7	2,567	53.1	208	4.5

Source: NHSGGC Bowel Screening IT system, November 2025

Table 2.15. Polyp, adenoma and cancer detection rate by deprivation quintile (SIMD) for those who had colonoscopy or other investigation, NHSGGC, 2023-2025

SIMD Quintile	Patients		Polyps detected		Adenomas detected		Cancer detected	
	N	%	N	%	N	%	N	%
1 (Most Deprived)	1,841	35.8	1,192	64.7	979	53.2	77	4.2
2	887	17.3	575	64.8	464	52.3	51	5.7
3	650	12.6	413	63.5	350	53.8	31	4.8
4	736	14.3	473	64.3	385	52.3	31	4.2
5 (Least Deprived)	1,025	19.9	672	65.6	549	53.6	43	4.2
Total	5,139	100.0	3,325	64.7	2,727	53.1	233	4.5

Source: NHSGGC Bowel Screening IT system, November 2025

Data presented in **Table 2.16** shows the cancer staging of the 233 people who had a confirmed colorectal cancer diagnosis.

Table 2.16. Colorectal cancer stage for those with a diagnosis of colorectal cancer from the screening pathway, NHSGGC, 2023-25

Staging	Number	%
1	55	23.63
2	37	15.9
3	36	5.5
4	7	3.0
unknown	97	41.6
Total	233	

Source: Local Cancer Audit, February 2026

2.10. Quality Improvement in Colonoscopy

The Public Health Screening Unit leads a programme of bowel screening audit, focusing on the quality of colonoscopy services. A multi-disciplinary group reviews the performance of all individuals who carry out colonoscopy as part of screening. Three main measures are recorded: adenoma detection rate; completion rate; and complication rate. Post colonoscopy cancer rates are now also being audited.

It is expected that all bowel screening colonoscopists will undertake a minimum of 200 unselected colonoscopies per year and that they will have a minimum completion rate of 90% and a minimum adenoma detection rate of 35% in bowel screening colonoscopies. Any complications identified are flagged to sectoral clinical management teams for consideration through clinical governance process. Any learning from this is shared accordingly across the health board.

2.11. Challenges & Future Priorities

Challenges

Colonoscopy waiting time currently meets national cancer waiting time standards, this reduction in waiting times was made possible by a dedicated specialist facility at Gartnavel Hospital. This facility is now no longer functioning and current waiting lists and times are being maintained with additional funding to provide additional clinics, above the normal funded capacity. This is functioning well at this time, but this model is dependent on this extra funding and is currently not sustainable. We will work with the service to maintain current service provision and short waiting times.

Addressing inequalities

We have worked with Corporate Communications in the last year to raise awareness of bowel screening and bowel cancer through social and print media. During bowel cancer awareness month in April 2025, a patient story was used to illustrate the benefits of screening. We will undertake focussed activity for 2026.

We will continue to implement the actions set out in the NHSGGC Inequalities Plan for Adult Screening Programmes, ensuring a coordinated and data-driven approach to reducing inequalities in participation. Targeted activity will focus on communities experiencing the greatest socioeconomic disadvantage. This work will align with wider public health initiatives and include partnership activity with Bowel Cancer UK to deliver screening awareness campaigns and community engagement in areas with the lowest uptake.

Building on previous analysis of demographic and patient-related factors associated with refusal or non-engagement following a positive screening result, we will undertake more detailed investigation to better understand the drivers of variation in attendance at follow-up colonoscopy. Insight from this work will inform targeted actions to strengthen equity of access and improve uptake across population groups.

For fuller details see the Inequalities Chapter.

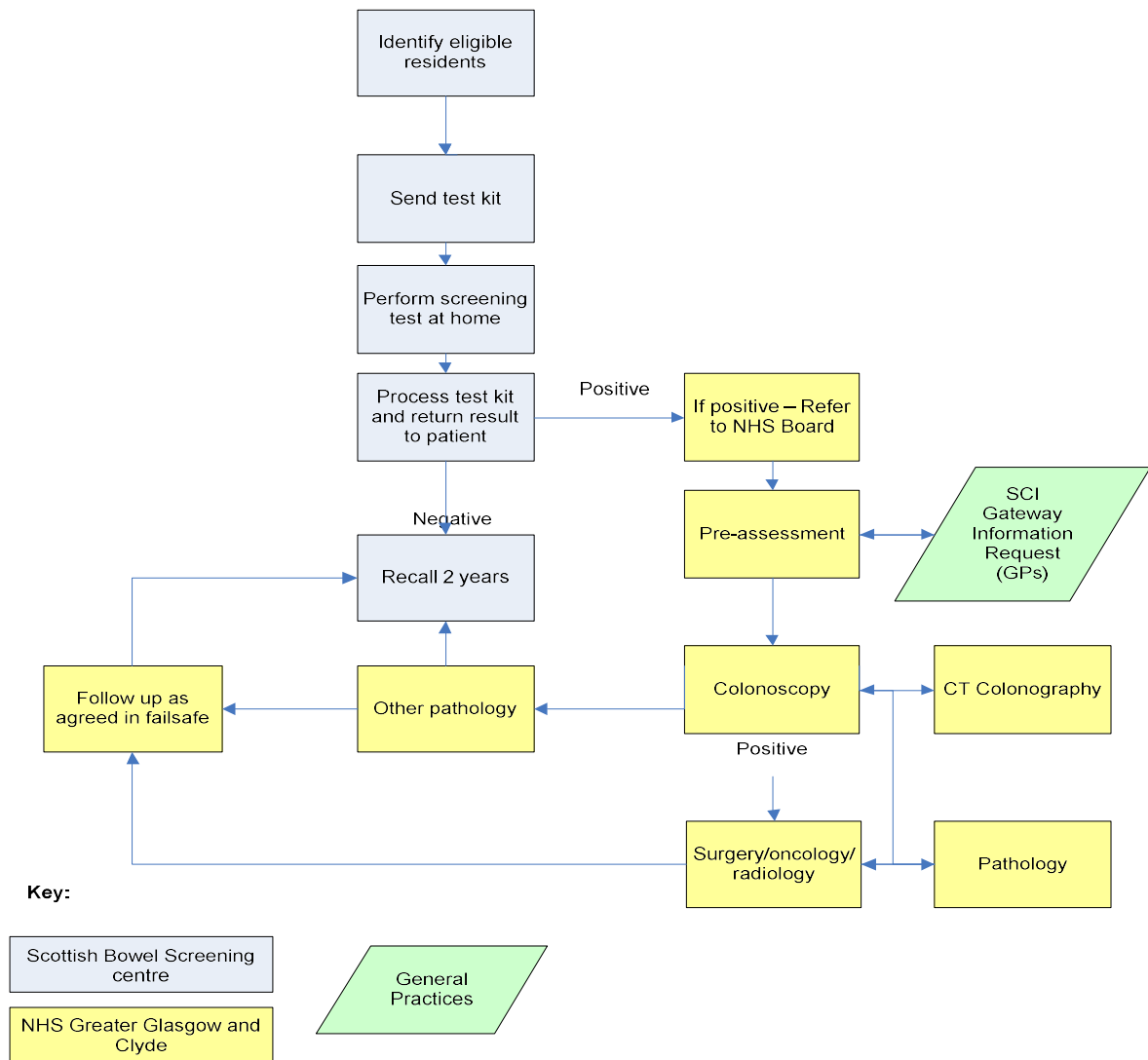
Future priorities

We will embed learning disability awareness and trauma-informed care training for colonoscopy staff and continue to strengthen good practice within the screening colonoscopy pre-assessment process. This will support high-quality, informed-choice conversations and ensure that reasonable adjustments are consistently considered and recorded.

In preparation for the adoption of virtual colonoscopy pre-assessment, we will develop and test delivery models that support safe, flexible care. This will include ensuring patients retain a choice of telephone, virtual, or face-to-face pre-assessment appointments, depending on clinical requirements, additional support needs and personal choice.

The Scottish Bowel Screening Programme has identified the need for a quicker and more consistent national process to review colorectal cancers that may indicate missed opportunities in the screening pathway. Current national post-colonoscopy cancer audit data take several years to become available, limiting timely learning and governance. A new qualitative audit will be piloted in NHSGGC to review cases of incomplete screening, post-colonoscopy cancer and post-CT cancer. This audit will look at the screening history and clinical history of new cancer diagnoses to support structured case review, help identify any system issues earlier and provide clearer feedback to clinical teams. This audit will be undertaken by a multidisciplinary team.

Appendix 2.1. Bowel Screening Pathway



Appendix 2.2. Public Health Scotland, Bowel Screening Key Performance Indicators, NHS Greater Glasgow & Clyde, 2023/24 (most recent report)

Key Performance Indicator Description	Target		May 2022 to April 2024
Screening uptake			
1. Overall uptake of screening - percentage of people with a final outright screening test result, out of those invited.	60%		61.0%
2. Overall uptake of screening by deprivation category* percentage of people with a final outright screening test result for which a valid postcode is available [*by Scottish Index of Multiple Deprivation (SIMD) quintile 1 (Q1 most deprived) to quintile 5 (Q5 least deprived)]	60%	Q1	51.2%
		Q2	58.7%
		Q3	63.3%
		Q4	68.2%
		Q5	72.2%
3. Percentage of people with a positive test result, out of those with a final outright screening test result.	N/A		3.04%
Referral, clinical interventions, outcomes			
4. Percentage of people where the time between the screening test referral date 0 to 4 weeks >4 to 8 weeks > 8 weeks	N/A		20.0% 41.5% 38.4%
5. Percentage of people with a positive screening test result going on to have a colonoscopy performed.	N/A		75.2%
6. Percentage of people having a completed colonoscopy, out of those who had a colonoscopy performed.	90%		94.5%
7. Percentage of people requiring admission for complications arising directly from the colonoscopy, out of those who had a colonoscopy performed.	N/A		0.15%
8. Percentage of people with colorectal cancer, out of those with a final outright screening test result.	N/A		0.097%

Percentage of people with colorectal cancer staged: 9. Dukes' A. 10. Dukes' B. 11*. Dukes' C 13. Dukes' D. 14. Dukes' Not known.	N/A	41.0% 23.5% 28.2% 3.8% 3.4%
Percentage of people with colorectal cancer: 15. Where the stage has not yet been supplied. 16. That has a recorded stage.	N/A	- 100%
17. Percentage of people with polyp cancer out of those with a final outright screening test result.	N/A	-
18. Percentage of people with polyp cancer, out of those with colorectal cancer.	N/A	-
19. Percentage of people with adenoma as the most serious diagnosis, out of those with a final outright screening test result.	N/A	1.146%
20. Percentage of people with high risk adenoma as the most serious diagnosis, out of those with a final outright screening test result.	N/A	0.150%
21. Positive Predictive Value of current screening test for colorectal cancer.	N/A	4.3%
22. Positive Predictive Value of current screening test for adenoma as the most serious diagnosis.	N/A	50.0%
23. Positive Predictive Value of current screening test for high risk adenoma as the most serious diagnosis.	N/A	6.5%
24. Positive Predictive Value of current screening test for high risk adenoma as the most serious diagnosis or colorectal cancer.	N/A	10.8%
25. Positive Predictive Value of current screening test for adenoma as the most serious diagnosis or colorectal cancer.	N/A	54.3%
Percentage of people with a colorectal cancer that is a malignant neoplasm of the: 26. colon (ICD-10 C18) 27. rectosigmoid junction (ICD-10 C19) 28. rectum (ICD-10 C20)	N/A	70.1% - 29.9%

Source: Public Health Scotland, Bowel Screening Programme Statistics

Green = target met

Red = target not met

Chapter 3 – Breast Screening Programme

Summary

Breast screening	
Why?	Early identification of breast cancer Prevention of morbidity and mortality
Intervention	Screening offered to all eligible women aged 50-70 years, every three years Screening test is mammography of both breasts Screening offered at Nelson Mandela Place in Glasgow, and in mobile units which visit sites across the board area Where abnormality is detected, rapid follow up in assessment clinic for further tests which may include further imaging, clinical examination and biopsy Rapid referral into breast surgery as needed
Activity in 2024/25	No data available
Outcomes	No data available

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3.1. Background

Breast cancer was the most common cancer in women in Scotland in 2023, accounting for 30.0% of all new cancer diagnosis in women¹⁷. In 2023 for all-Scotland, there were 5,502 new breast cancers identified in women, 7% higher than in 2022. This gives an age-standardised incidence rate for Scotland of 183 breast cancers diagnosed per 100,000 population, an increase of 6% from 2022.

In Scotland, breast screening is offered to women aged 50-70 years, every three years. In 2023, more than half (57%) of breast cancers in the age group eligible for breast screening were detected by screening. The age-standardised rate of cancers detected by screening in 2023 increased from 2022, 209 breast cancers detected per 100,000 women in 2023 versus 184 detected per 100,000 women in 2022.

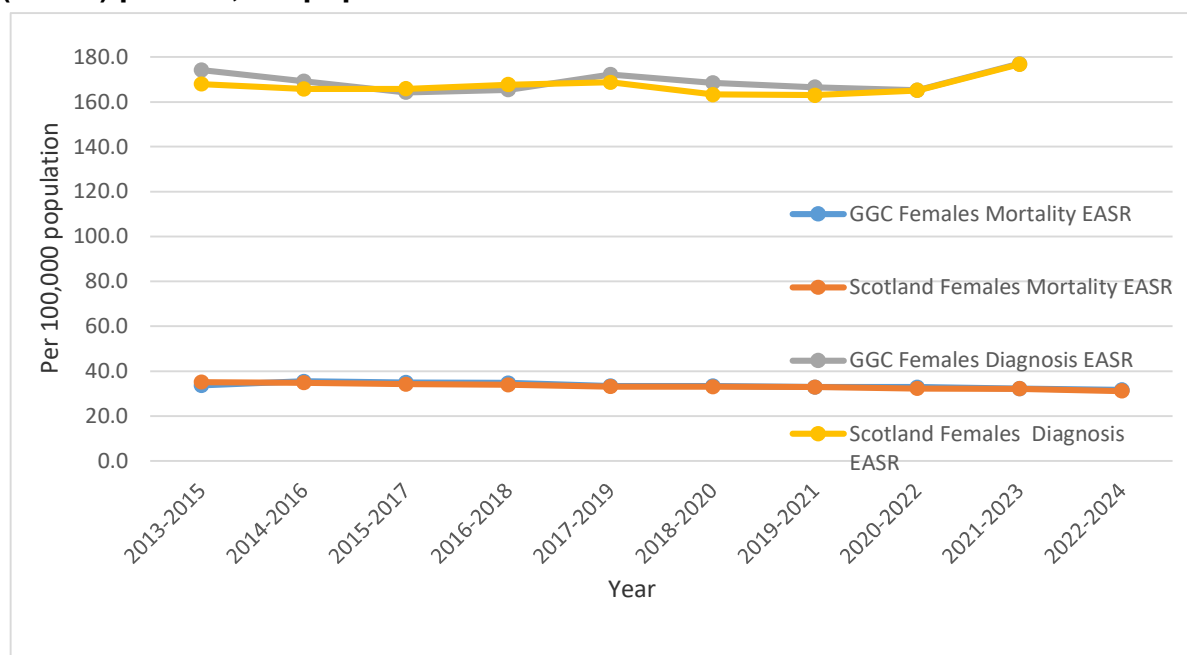
Breast cancer is the second most common cause of death from cancer in women in Scotland after lung cancer. In 2024¹⁸, with 953 deaths (12.2%) a standardised mortality rate of 30.4 per 100,000 population.

Standardised incidence and mortality rates over rolling 3 year periods for breast cancer for NHSGGC and Scotland are illustrated in **Figure 3.1**. In the 10 year period between 2012/14 and 2021/23, the age-standardised rolling three years incidence rate of breast cancer in GGC increased in women from 171.6 to 176.9 per 100,000. During the period 2013/15 to 2022/24, age standardised mortality rates of breast cancer in women in GGC decreased, from 33.7 to 31.7 per 100,000. There was a fall in breast cancer incidence during 2019/20, which has been attributed to under-diagnoses due to the COVID-19 pandemic.

¹⁷ [Cancer incidence in Scotland - to December 2023 - Cancer incidence in Scotland - Publications - Public Health Scotland](#) (Accessed March 2026)

² [Cancer mortality in Scotland - Annual update to 2024 - Cancer mortality - Publications - Public Health Scotland](#) (Accessed March 2026)

Figure 3.1. Breast cancer diagnosis 2012/14 to 2020/22 and mortality 2013/15 to 2022/24 (rolling three years) European Age Standardised Rate (EASR) per 100,000 population



Source: Registration Source: PHS September 2025, Mortality Source: PHS January 2026

3.2. Aim of Breast Screening Programme

The Scottish Breast Screening Programme was introduced in February 1987 following the publication of the Forrest Report (1986)¹⁹. Breast screening was implemented in 1988 in North Glasgow, 1991 in South Glasgow and in October 1990 in Argyll & Clyde.

The purpose of breast screening by mammography is to detect breast cancers early. Early detection of breast cancers in this way can result in more effective treatment, which may reduce deaths from breast cancer.

Programme performance and quality is monitored via defined Key Performance Indicators (KPI's)²⁰ and National Breast Screening Standards²¹.

The Scottish Government published the report of Major Review of the Scottish Breast Screening in May 2022²², recommending ways to make the breast screening programme more accessible, resilient and sustainable, to drive improvements and build upon successful delivery of services. To take forward these recommendations a Breast Screening Modernisation Board was formed

¹⁹ Forrest, P, Breast cancer screening: report to health ministers of England, Wales, Scotland and Northern Ireland, H.M.S.O., 1986.

²⁰ [Scottish breast screening programme statistics - Annual update to 31 March 2023 - Scottish breast screening programme statistics - Publications - Public Health Scotland](#) (Accessed March 2026)

²¹ [Breast screening services standards – Healthcare Improvement Scotland](#) (Accessed March 2026)

²² [Scottish Breast Screening Programme: major review - gov.scot \(www.gov.scot\)](#) (Accessed March 2026)

which deliberated on how best to modernise and improve the service. This Board published its findings in November 2025²³. This report had widespread recommendations for a more efficient, sustainable, equitable and participant-focussed service. The Scottish Government's Population Health Framework²⁴ includes commitment to implementing these recommendations.

3.3. Eligible Population

Women aged 50 until age 70 years +364 days who are registered with a GP, and those women not registered with a GP e.g. women in long-stay institutions, are eligible for a routine screen once every three years.

Some women are excluded from routine invitation, for example those who have had bilateral mastectomy or who have signed a disclaimer form to remove themselves from the Scottish Breast Screening Programme call-recall system.

In addition, women older than 70 years can self-refer into the screening programme. From August 2020, this part of the service was temporarily paused to concentrate on reducing waiting times for women within normal programme age. Self-referrals were reinstated in 2023 for women 71-74 years old, or those have previously had breast cancer and have been discharged from yearly follow up mammograms.

3.4. The Screening Test & Pathway

The screening method used consists of two mammographic views of each breast. The test is a straightforward procedure involving two digital images (also known as a mammogram), being taken of each breast using an X-ray machine. Adaptations and/or extra views are captured for augmented breasts including breast implants and implantable devices.

The West of Scotland Breast Screening Service (WoSBSS) screens NHS GGC residents in the static facility in Nelson Mandela Place in central Glasgow, or, for the majority of residents, in mobile units that visit sites across the NHS GGC area to ensure ease of access for women locally. Eligible women registered with a GP practice within range of Glasgow city centre are invited to attend appointments for screening in the static facility. During 2024/25, the service has been active in NHS GGC areas detailed in **Table 3.1**.

²³ [Breast screening modernisation programme: final report - gov.scot](#) (Accessed March 2026)

²⁴ [Scotland's Population Health Framework - gov.scot](#) (Accessed March 2026)

Table 3.1. 2024/2025 screening locations for NHSGGC residents

HSCP	Mobile Unit	Nelson Mandela Place (static)
East Dunbartonshire	Bishopbriggs, Kirkintilloch	-
East Renfrewshire	Barrhead	-
Glasgow City	Drumchapel Pollok, Shettleston,	Maryhill, Govan, Anniesland, Knightswood, Partick, Scotstoun, Yoker, Kinning Park
Inverclyde	-	-
Renfrewshire	Erskine, Paisley, Renfrew	-
West Dunbartonshire	Alexandria	-

In 2024/25 invitations for breast screening were organised by GP practice, with all eligible women in a GP practice being invited for screening at the same time and at the time when the screening mobile unit was in the local area. Every woman registered with a GP receives her first invitation to attend for a mammogram at her local breast screening location sometime between her 50th and 53rd birthdays, and then three yearly until age 70 years +364 days, when all the eligible women in her GP practice are screened.

A woman can request a screening appointment from the age of 50 years. However, if her GP practice is being screened in the next six months, she will be advised to attend at that time instead. The WoSBSS also contacts all long-stay institutions (care homes, prisons, and mental health inpatient units) to offer screening to eligible residents.

The Breast Screening Community Liaison Officer works in partnership with Public Health, Primary Care, HSCP Health Improvement and third sector organisations to support participation in screening, including staff training, health road shows and community talks.

The mammograms taken during the screening visit are reviewed and the results sent to the woman. If the woman is recalled to assessment this result is sent to her GP. Women will be recalled if the mammogram was technically inadequate or will be asked to go to an assessment clinic for further tests if a potential abnormality has been detected. Tests may include further imaging, clinical examination and possibly ultrasound and biopsy if required. This is the end of the screening part of this pathway.

Following investigation of an abnormality detected by screening, if a woman is found to have cancer, she is referred to secondary care consultant surgeon to discuss the options available to her, which usually involve surgery. The exact course of treatment will depend on the type of cancer found and the woman's

personal preferences. **Appendix 3.1** provides an overview of the breast screening pathway.

Assessment clinics are undertaken at the WoSBSS situated in central Glasgow. The surgical treatment is undertaken by designated teams in Gartnavel, New Victoria Hospital, New Stobhill Hospital and Royal Alexandra Hospital. A small proportion of women with palpable tumours are referred for treatment to local breast teams.

3.5. Programme Performance & Delivery

Public Health Scotland publishes national breast screening programme statistics annually. However, since the last publication in May 2024²⁵, data quality issues have been identified and there has been no updated data released.

In our annual screening report we often report on local management data. However, the data quality issues identified in the national datasets may also affect the data we can run locally, so we have been asked not to publish any local data either. We will provide an update report when we have access to data.

3.6. Breast Screening Outcomes

The most recent national statistics published in May 2024 (latest available data) noted the number of screen-detected breast cancers in women of all ages in Scotland in 2022/23 was 1,894 (rate of 8.7 per 1,000 women screened)²⁶.

In 2022/23, 84.6% (1,603) of the tumours detected were invasive breast cancers. Just under half (44.4%) of these were less than 15mm in size. Such small tumours are unlikely to be detected by physical examination, highlighting the importance of screening in the early detection of breast cancer. Picking up small (<15 mm) cancers is one of the key methods to achieve the aim of reducing deaths due to breast cancer.

NHSGGC specific outcome data was not available.

3.7. Challenges & Future Priorities

Challenges

In 2024/25 the West of Scotland Breast Screening Service struggled with capacity and did not achieve the three-year screening round length. This was partly due to workforce issues and partly due to mobile unit reliability issues –

²⁵ [Scottish breast screening programme statistics - Annual update to 31 March 2023 - Scottish breast screening programme statistics - Publications - Public Health Scotland](#) (Accessed March 2026)

²⁶ [Scottish breast screening programme statistics - Annual update to 31 March 2023 - Scottish breast screening programme statistics - Publications - Public Health Scotland](#) (Accessed March 2026)

there were frequent breakdowns of mobile units across the year. As a result, mobile units were delayed leaving sites and late arriving at the next site, resulting in slippage of the three-year screening round length.

These issues were raised with Screening Oversight and Assurance Scotland, who led national incident management meetings to understand, review and improve the situation. Recommendation from that work were needing to increase staff capacity with increased funding and needing to increase mobile unit reliability. Both were part of the recommendations of the recently concluded breast screening programme national review – Breast Screening Modernisation²⁷.

In 2025 WoSBSS suffered a further set-back when the static site in Nelson Mandela Place in central Glasgow was flooded following torrential rain during roof replacement works. The flooding closed some clinical areas and left the service with reduced capacity for months. Repairs are now complete and all clinical areas are working to capacity again.

The pressures on the service remain to the current time. Short-term funding was available in 2026 Q1 which was used to fund extra hours for staff and has resulted in recovery of some slippage and currently achieving KPI's for reading and assessment. However, a long-term solution is required for full recovery and sustainability of that recovery. This is now tied in with modernisation of the breast screening service across Scotland, not just West of Scotland. This has been set as a goal within the Scottish Government Population Health Framework²⁸.

Improving uptake and addressing inequalities

During 2024 WoSBSS ran a pilot programme to encourage women who had defaulted on a previous screening appointment to attend for screening in the next screening round. This was the Previous Non-Attender or PNA pilot. This was co-funded by all the NHS boards served by WoSBSS. The intervention included sending out an open invitation to women asking them to ring in and make an appointment at a time and date that suited them. This was followed up with a reminder text asking the client to contact the screening centre. This pilot was successful at increasing uptake in this cohort and has been piloted in other breast screening centres after this.

In the last year the public health screening team has been working closely with colleagues in HSCPs to ensure that mobile units are advertised within local communities, to raise awareness.

We worked with NHSGGC Corporate Communications to release breast screening stories in Breast Cancer Awareness Month in October 2025. Over four weeks, four patient stories were released through NHSGGC social media accounts and were picked up by local media.

²⁷ [Breast screening modernisation programme: final report - gov.scot](#) (Accessed March 2026)

²⁸ [Scotland's Population Health Framework - gov.scot](#) (Accessed March 2026)

For further details, please see the Inequalities chapter at the end of this report, including plans for future work.

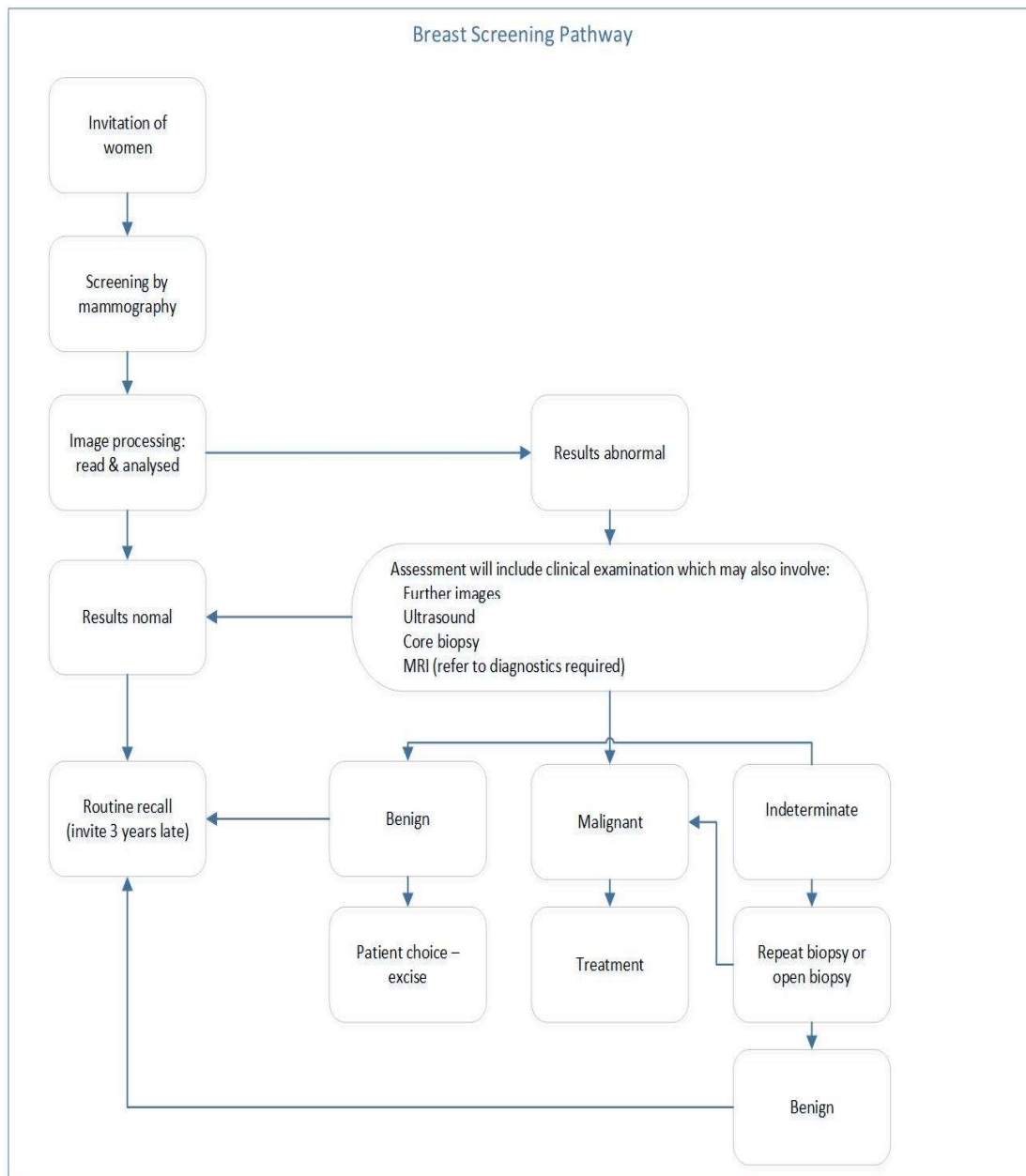
Future priorities

A main priority is supporting WoSBSS to reduce slippage in screening round-length, recover equilibrium and sustain this recovery. This is likely to take several years and require modernisation of the whole screening programme, not just activity in the West of Scotland. We will continue to work with Screening Oversight and Assurance Scotland and Scottish Government to achieve this goal.

The lease for the static site premises in Nelson Mandela Place in central Glasgow has been renewed, and the service will remain there for up to another five years. Planning will start in 2026 to explore options for the end of the new lease.

Appendix 3.1.

Breast Screening Pathway



Appendix 3.2

Performance Data in relation to NHSBSP Standards: Scotland, 1st April 2020 to 31st March 2023, routine appointments²⁹, females aged 50-70 years (latest available data, data is all-Scotland and not available by NHS board)

Standard	Appointment type ²	Age group	Acceptable Standard	Achievable Standard	Results 2020/23
Attendance rate (percentage of women invited)	All routine appointments	50-70 years	>= 70%	>=80%	72.8%
Invasive cancer detection rate (per 1000 women screened)	Routine- Initial screen (Prevalent) in response to first invitation	50-52 years	>= 2.7	>= 3.6	6.3
	Routine- Subsequent screen (Incident) (previous screen within 5 years)	53-70 years	>= 3.1	>= 4.2	7.3*
Small (<15mm) invasive cancer detection rate (per 1000 women screened)	Routine- Initial screen (Prevalent) in response to first invitation	50-52 years	>= 1.5	>= 2.0	2.4
	Routine- Subsequent screen (Incident) (previous screen within 5 years)	53-70 years	>= 1.7	>= 2.3	3.5*
Non-invasive cancer detection rate (per 1000 women screened)	Routine- Initial screen (Prevalent) in response to first invitation	50-52 years	>= 0.5	-	1.4
	Routine- Subsequent screen (Incident) (previous screen within 5 years)	53-70 years	>= 0.6	-	1.3*
Standardised Detection Ratio (SDR) (observed invasive cancers detected divided by the number expected given the age distribution of the population)	Routine-All initial screens (Prevalent) and Subsequent screen (Incident) (previous screen within 5 years)	50-70 years	>= 1.0	>= 1.4	1.50
Recalled for assessment rate (percentage of women screened)	Routine- Initial screen (Prevalent) in response to first invitation	50-52 years	<10%	<7%	6.4%
	Routine- Subsequent screen (Incident) (previous screen within 5 years)	53-70 years	<7%	<5%	3.0%*
Benign biopsy rate (per 1000 women screened)	Routine- Initial screen (Prevalent) in response to first invitation	50-52 years	< 1.5	< 1.0	1.6

²⁹ Routine appointments exclude self/GP referral appointments.

	Routine- Subsequent screen (Incident) (previous screen within 5 years)	53-70 years	< 1.0	< 0.75	0.5*
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Source: Public Health Scotland Breast Screening Programme Statistics, Annual update May 2024

GREEN = acceptable and achievable standards met; AMBER = acceptable standard met, achievable standard not met; RED = acceptable and achievable standards not met

Chapter 4 – Cervical Screening

Summary

Cervical screening	
Why?	Early identification of cervical cancer and cancer pre-cursors. Prevention of morbidity and mortality.
Intervention	Screening offered to all eligible women aged 25-64 years, every five years. Screening sample (smear sample) taken in primary care. Screening test is HPV test and cytology. Where screening test is positive, referral to colposcopy for further investigation. Rapid referral into surgery and oncology as needed.
Activity in 2024/25	50.7% screening uptake
Outcomes	Uptake does not meet the national target of 80% Uptake lower than last year, but has fallen over the last six years Due to the challenges in interpreting the national data, only published data from Public Health Scotland is included in this report. Cervical invasive cancer audit reviewed 55 of 70 new cases of cervical cancer in NHSGGC residents – cervical cancer higher in most deprived quintile, those with inadequate screening history, younger age groups Completed review of more than 27,000 clinical records as part of national 'no cervix', on time and within budget.

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4.1. Background

Cervical cancer was the nineteenth most common cancer in females in Scotland in 2023 (the most recent year for which cancer incidence data is available)³⁰, with almost 30 percent of women were between 25 and 39 years of age at the time of diagnosis.

In 2023, 61 women residing in the NHSGGC area were diagnosed with cervical cancer, which gives an age-standardised incidence rate of 10.2 per 100,000 of the female population, lower than the national rate of 11.3 per 100,000. In 2024, (the most recent year for which cancer mortality data is available) there were 27 deaths from cervical cancer in women residing in NHSGGC, this gives an age standardised mortality rate of 4.5 per 100,000 female population, higher than the national rate of 3.5 per 100,000³¹.

Standardised incidence and mortality rates across rolling three year periods for cervical cancer for NHSGGC and Scotland are illustrated in **Figure 4.1**. In the ten year period between 2012/2014 to 2021/2023, the age-standardised rolling three years incidence rate of cervical cancer in women in Greater Glasgow & Clyde decreased from 13.3 to 10.4 per 100,000 population. Rolling three years mortality rates of cervical cancer in women in Greater Glasgow & Clyde was comparable at 3.4 to 3.8 per 100,000 during the ten year period from 2013/2015 to 2022/2024. There was a larger than expected fall in cervical cancer incidence during 2019/20, which has been attributed to under-diagnoses due to COVID-19 pandemic.

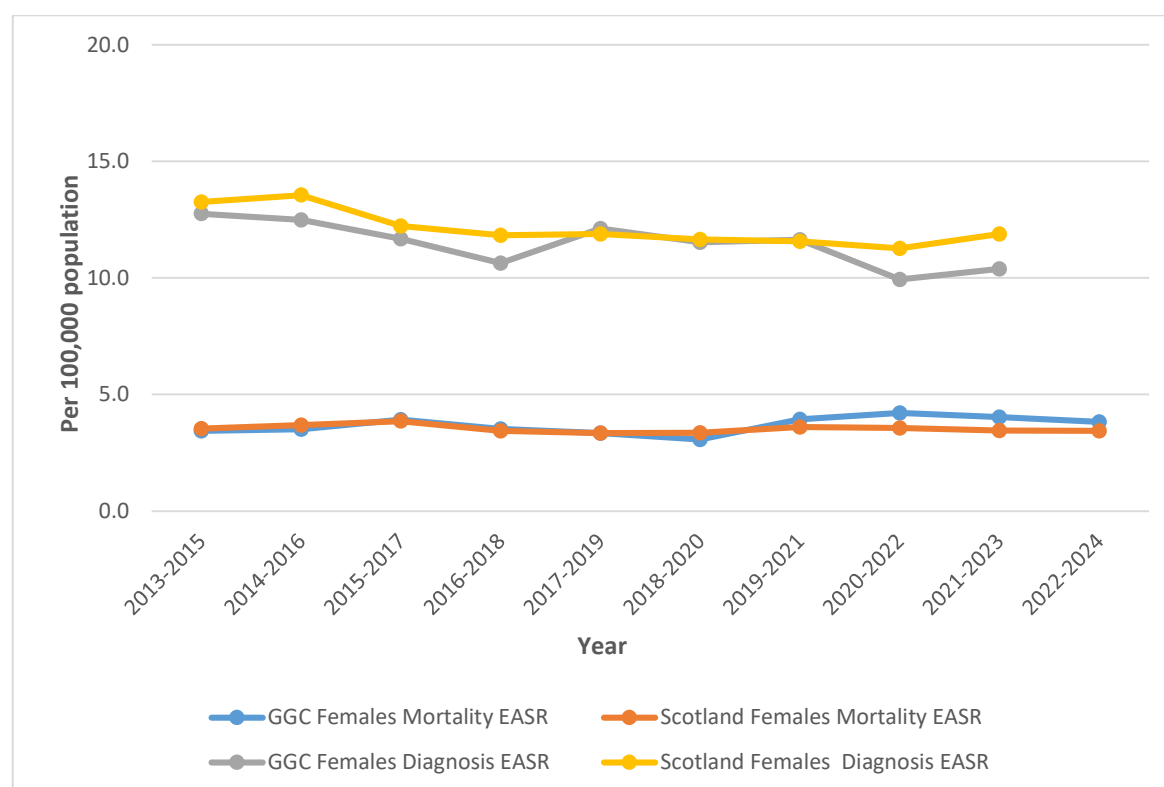
Risk factors for cervical cancer include:

- Exposure to oncogenic types of Human Papilloma Virus (HPV) through all kinds of sexual contact, including touching. The body clears most HPV infections, however a minority become persistent HPV infection which can transform normal cervical cells into abnormal ones, which can develop to precancerous lesions and then invasive cancer. These changes usually occur over a period of 10 to 20 years.
- Increased exposure to HPV, such as a multiple number of sexual partners.
- Immunosuppressive diseases or infections, that make the body more vulnerable to infection.
- Smoking.
- Increased exposure to HPV, such as a multiple number of sexual partners.
- Immunosuppressive diseases or infections, that make the body more vulnerable to infection.
- Smoking.

³⁰[Cancer incidence in Scotland - to December 2023 - Cancer incidence in Scotland - Publications - Public Health Scotland](#) September 2025 (Accessed March 2026)

³¹[Cancer mortality in Scotland - Annual update to 2024 - Cancer mortality - Publications - Public Health Scotland](#) January 2026 (Accessed March 2026)

Figure 4.1. Cervical cancer diagnosis and mortality by rolling three year European Age Standardised Rate (EASR) per 100,000 population, NHS GGC and Scotland, 2012/14 to 2023/24



Diagnosis Source: PHS September 2025, Mortality Source: PHS January 2026

Scotland continues to make progress toward the World Health Organisation³² goal of cervical cancer elimination, supported by high HPV vaccination rates, a robust cervical screening programme and timely treatment. National evidence shows no cervical cancer cases in women fully vaccinated with HPV vaccine at ages 12 /13 years of age since the HPV vaccination programme began, highlighting the effectiveness of the vaccine.

However, persistent inequalities remain the biggest barrier to cervical cancer elimination, with screening uptake and HPV vaccination rates lower among women in deprived communities, minority ethnic groups and those with additional support needs. This challenge is reflected in NHS GGC, where there is significant deprivation-related variation in screening participation. Continued focus on equity driven action across vaccination, screening, and timely treatment will be essential for NHS GGC to meet Scotland's national cervical cancer elimination ambition³³.

³² [Cervical Cancer Elimination Initiative](#) (Accessed March 2026)

³³ [Cervical Cancer Elimination in Scotland Expert Group Final Report - gov.scot](#) December 2025 (Accessed March 2026)

4.2. Aim of Cervical Screening Programme

Cervical screening is a national screening programme which aims to reduce morbidity and mortality caused by cervical cancer, by preventing cervical cancer developing or detecting it early so it can be treated promptly.

The National Cervical Screening Programme performance and quality is monitored via defined Key Performance Indicators (KPI's)³⁴ and National Cervical Screening Standards³⁵.

4.3. Eligible Population

Cervical screening is routinely offered to women and anyone with a cervix registered with a GP practice between the ages of 25-64 years every 5 years. Participants on non-routine screening (where screening results have shown changes that need further investigation or follow up) will be recalled more frequently and invited up to 70 years of age.

4.4. The Cervical Screening Pathway

Women are called for cervical screening test once every five years. Call/recall for screening is managed through a national database, the Scottish Cervical Call Recall System (SCCRS). Invitations to attend for screening are sent by post to all eligible women, with up to three reminders being sent if they do not attend for screening. Women who miss a screening test are automatically called again five years later. Call/recall for the next screening test is automatic depending on the outcome of the current screening test. Screening tests are usually undertaken at GP practices, by practice nurses.

The cervical screening sample is tested for high-risk HPV which causes cervical cancer. If the high-risk HPV test is positive, cells in the sample are visualised by cytology. If cytology identifies cell changes (the test is positive), a woman is invited to attend for colposcopy. If a screening test is negative, recall for screening will be the routine interval of five years.

Colposcopy clinics are located in hospital out-patient settings and are available at Stobhill Hospital, Queen Elizabeth University Hospital, Royal Alexandra Hospital and Vale of Leven Hospital. Colposcopy involves visualising the cervix to identify if there are any changes. If changes are identified, cells and biopsied tissue may be removed for pathological investigation or further tests may be undertaken.

A summary of the high-risk HPV primary pathway is provided in **Appendix 4.1**.

³⁴ [Scottish cervical screening programme statistics - Annual update to 31 March 2022 - Scottish cervical screening programme statistics - Publications - Public Health Scotland](#) (Accessed December 2024)

³⁵ [Cervical screening standards – Healthcare Improvement Scotland](#) (Accessed December 2024)

4.5. Preventing HPV infection

HPV infection can cause cervical cancer and HPV immunisation is offered to teenagers in Scotland as part of the national immunisation programme, to prevent cervical cancer. HPV vaccination has been offered to all girls aged 11-13 years since 2008, and all boys since 2019. There are however, many cancer-causing types of HPV and the vaccine may not protect against all these types. As a result, women and people with a cervix are still invited to participate in the cervical screening programme.

Vaccine uptake data is available for all ages from Public Health Scotland, the latest available data is for the school year 2023/2024³⁶.

The HPV vaccine was first offered in Scotland in 2008 to girls aged 11-18 years. Girls vaccinated in 2008 are now screening age and there is a national programme to monitor cervical screening uptake in this age group to understand barriers to screening. Recent evidence published in 2024 concluded that no cervical cancer cases have been detected in fully vaccinated women following HPV immunisation at age 12-13 since the HPV immunisation programme commenced in Scotland in 2008³⁷.

4.6. Eligible Cohort in NHS GGC

Over a five-year period (a single call/recall cycle) in NHS GGC, 357,503 women were eligible to attend cervical screening.

However, women can be excluded from call/recall for cervical screening for many reasons including medical reasons (including total hysterectomy, treatment for previous cervical cancer, anatomical reasons that mean taking a sample is impossible), if they are pregnant, or if they opt-out. Most exclusions are for women who do not attend for screening following invitation and reminder letters (they have defaulted) and are given an exclusion status until their next call/recall round.

4.7. Programme Performance and Delivery

Screening is offered to women once every five years unless they are on a treatment or a high-risk pathway. Prompts and reminders are sent to remind women to contact their GP practice to make an appointment for screening. Uptake is reported over a five and a half years period, the time when every eligible women will have been called for screening.

National Cervical Screening Programme Statistics are published annually by Public Health Scotland. The most recent data was published in February 2026

³⁶ [HPV immunisation statistics Scotland - School year 2023/2024 - HPV immunisation statistics Scotland - Publications - Public Health Scotland](#)

³⁷ [Invasive cervical cancer incidence following bivalent human papillomavirus vaccination: a population-based observational study of age at immunization, dose, and deprivation | JNCI: Journal of the National Cancer Institute | Oxford Academic](#)

and covers the period up to March 2025³⁸. This data shows a substantial fall in cervical screening uptake in Scotland and NHS GGC. This fall may in part be explained by the methodology used to determine uptake.

In March 2020, the call/recall period for women aged under 50 years was changed to once every five years. Women aged 50 years and over were already on five-year call/recall at this time. This change was implemented as women passed their three-year call/recall date and attended for screening. The analysis undertaken by Public Health Scotland for the statistics published in February 2026, uses a three-year call/recall round for women under 50 years of age, to calculate uptake in this cohort. This does not accurately match the call/recall status of these women in the programme, as many of them are now on five-year call/recall and may be up to date with screening and not yet reached their next recall date, but have no screening in the time period being analysed. This is likely to have contributed to the significant drop in uptake.

Due to the challenges in interpreting the national data and that local analysis of management data does not match this uptake, only published data from Public Health Scotland is included in this report. This is done to avoid confusion.

The latest programme KPIs for NHS GGC and Scotland are taken from the published Public Health Scotland data for April 2024 to March 2025, are shown in Appendix 8.2.

Public Health Scotland will revise their analysis in 2026 to align better with the established five-year call/recall cycle for all eligible women in the cervical screening programme.

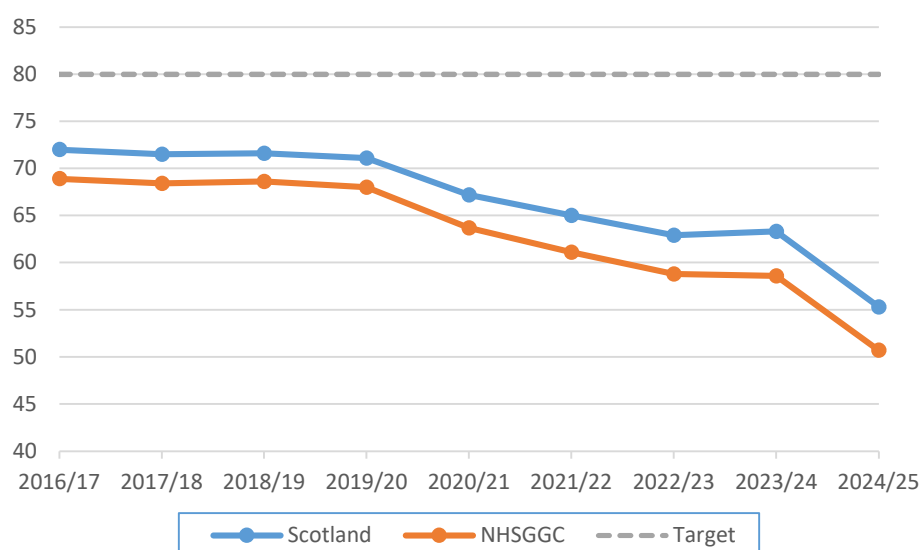
4.8. Uptake of Cervical Screening

Uptake of cervical screening has been falling since 2019/2020 and has fallen substantially in the last year. In the last ten years, all-Scotland uptake has never met the national 80% target.

Uptake in NHS GGC has mirrored all-Scotland uptake over the last ten years, but has always been 3-5% lower, see **Figure 4.2**. Uptake in NHS GGC in 2024/25, for the three-year call/recall round cohort ending in March 2025 was 50.7% (uptake in Scotland was 55.3%)⁹. As explained in the section above, this published uptake to March 2025 is likely to be an under-estimate.

³⁸ [Scottish cervical screening programme statistics - Annual update to 31 March 2025 - Scottish cervical screening programme statistics - Publications - Public Health Scotland](#) (accessed March 2026)

Figure 4.2. Uptake of cervical screening in Scotland and NHS GGC, 2016/17 to 2024/25

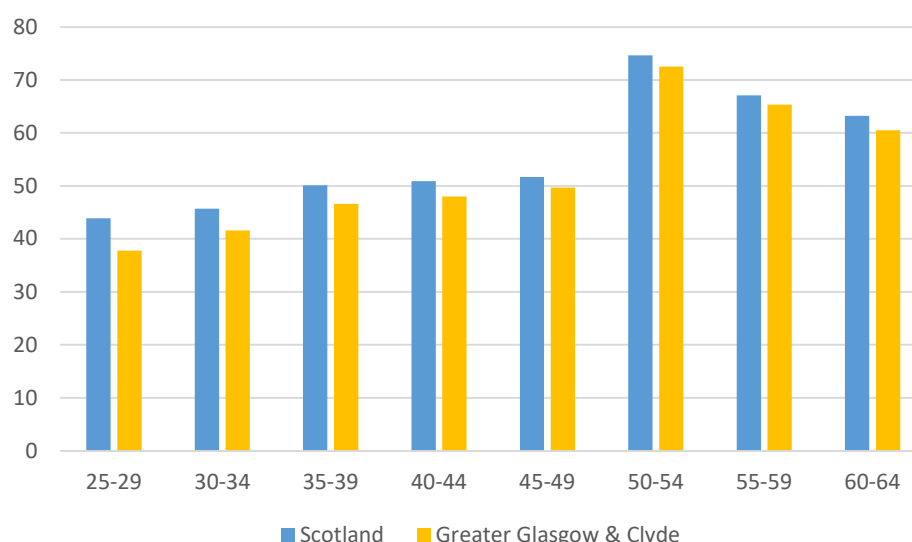


Source: Public Health Scotland Cervical Screening Programme Statistics 2024/25, published February 2026 (accessed March 2026)

Screening uptake by age

Uptake by five-year age groups is detailed in **Figure 4.3**. Overall, younger women have a poorer uptake of cervical screening than older women, however this may be exaggerated due to the analysis method for those under 50 years of age. Again, NHSGGC has lower uptake of cervical screening in all age groups compared to All-Scotland.

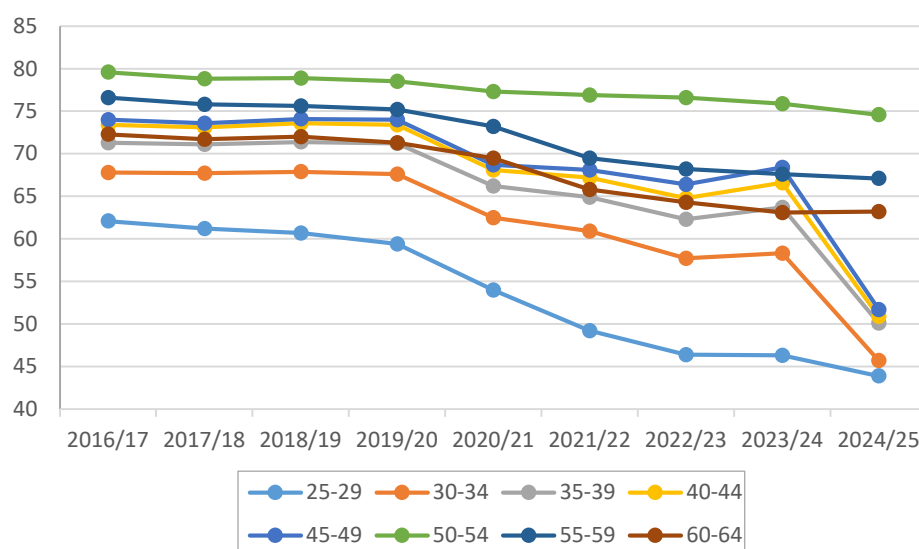
Figure 4.3. Uptake of cervical screening in the previous call/recall round (5.5 years) by five-year age groups, All-Scotland and NHSGGC, 2024/26



Source: Public Health Scotland Cervical Screening Programme Statistics 2024/25, published February 2026 (accessed March 2026)

Women who are new to the programme and aged 25-29 years consistently have the lowest uptake. Highest uptake is seen in women aged 50-54 years. From 2016/17 to 2024/25 uptake has consistently fallen across all age groups, see **Figure 4.4** for all-Scotland data.

Figure 4.4. Uptake of cervical screening for the call/recall round ending with the year given, by age group, All-Scotland, 2016/17 to 2024/25

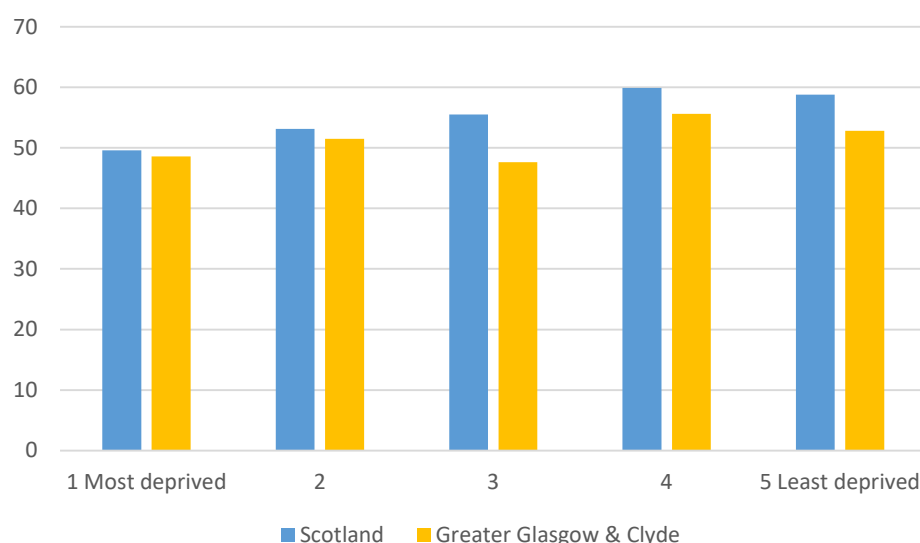


Source: Public Health Scotland Cervical Screening Programme Statistics 2024/25, published February 2026 (accessed March 2026)

Screening uptake by deprivation quintile

Uptake across deprivation quintiles was less varied in NHSGGC compared to Scotland. In NHSGGC the highest uptake was seen in quintile 4 (less deprived) and the lowest uptake in quintile 3. The maximum variation between quintiles was 8%. Across Scotland lowest uptake was seen in quintile 1 (most deprived, 49.6%) and the highest uptake in quintile 4 (less deprived, 59.9%). The variation between quintiles across Scotland was 10.3%. See **Figure 4.5**.

Figure 4.5. Uptake of cervical screening among eligible population by SIMD quintile for All-Scotland and NHSGGC, 2024-25 in previous 5.5 years



Source: Public Health Scotland Cervical Screening Programme Statistics 2024/25, published February 2026 (accessed March 2026)

Screening uptake by ethnicity, learning disability, mental health status and small geography

We cannot publish this data this year as these data are not included in the national dataset. We have previously published this using local management information, but this is not available this year.

4.9. Cytopathology Laboratory

All screening samples are processed by two nationally commissioned Cytopathology Laboratories, located in NHS Lanarkshire and NHS Greater Glasgow & Clyde. The Public Health Scotland annual cervical screening report includes KPIs for laboratory activity, including time to report results and the proportion of samples rejected before testing³⁹. These are detailed in **Appendix 4.2**.

³⁹ [Scottish cervical screening programme statistics - Annual update to 31 March 2025 - Scottish cervical screening programme statistics - Publications - Public Health Scotland](#) (accessed March 2026)

4.10. Colposcopy

When a screening sample tests positive for HPV and positive for cell changes at cytology, a colposcopy appointment is offered. Colposcopy enables further investigation by visualising the cervix. Screening test results (HPV positivity and type and extent of abnormality seen at cytology) inform whether colposcopy should be routine, or high risk – where individuals are seen more quickly.

Colposcopy is undertaken in out-patient clinics across NHS GGC, principally Stobhill, Royal Alexandra, Vale of Leven and Inverclyde Royal Hospitals. Outcomes of colposcopy include return to routine screening call/recall for those with no cause for concern; higher frequency screening call/recall for those who need closer monitoring; and biopsy and pathology to identify if any detected changes are cancer.

In 2024-25, there were 4,029 new appointment attendances and 2,268 return appointments attendances for colposcopy. These figures include appointments for women who tested positive at screening test and women who were symptomatic.

Colposcopy service performance benchmarking

There are national performance targets for colposcopy services in Scotland, these are shown in **Table 4.11** with details of performance of colposcopy services across NHS GGC.

In Scotland, the Colposcopy Quality Assurance is monitored through NCCIAS⁴⁰ and its Benchmarking standards. The Benchmarking report is discussed in the colposcopy user meetings twice per year to ensure practices within all units in NHS GGC meet the Scottish targets and in line with the average practices in Scotland within the same duration.

All main colposcopy units in NHS GGC, with the exception of Vale of Leven Hospital, did not meet the Scottish target for cyto-reversion, adequacy of biopsy and see and treat rate. This was discussed in colposcopy user meetings with further recommendations to review the local data and practices. In general, performance against the other standards was either met or was close to the Scottish targets and comparable to the average practice in Scotland.

⁴⁰ National Colposcopy Clinical Information Audit System

Table 4.11 Performance of colposcopy services across NHSGGC against benchmarking standards, April 2024-March 2025

	Total New Outpatient Attendances	New Outpatient Attendances Abnormal Screening Smear	Cyto-reversion rates at 4 - 12 months after treatment if a smear is taken	Confirmed histological treatment failures at 12 months	Adequacy of cervix biopsy for histology	Proportion of women, referred with abnormal cytology, where SCJ is visualised, treated at 1st visit with CIN on histology	New referral for high grade dyskaryosis having biopsy	% Recommended for treatment as Inpatient
TARGET	None	>= 50 (per annum)	> 90%	≤ 5%	> 97%	≥ 90%	> 90%	< 20%
SCOTLAND	14,860	12,227	86.6	4.6	96.8	78.4	90.4	9.7
NHSGGC	3911	3528	85.3	2.6	94.8	80.1	90.3	9.0
Royal Alexandra Hospital	1435	1299	86.5	2.6	93.8	81.1	90.5	6.8
Inverclyde Royal Hospital	570	514	89.2	3.4	95.7	85.7	85.2	6.4
Vale of Leven Hospital	85	81	92.3	0	97.2	100	50	0.0
Stobhill Hospital	1820	1634	83.6	2.6	95.2	79.2	91.2	11.0

Source: National Colposcopy Clinical Information & Audit System (Extracted March 2026)

4.11. National Invasive Cervical Cancer Audit

This audit reviews all cases of invasive cervical cancer diagnosis in order to identify variations in practice, the reasons for these variations and ultimately how to improve the quality of the screening and clinical services. Findings from invasive cervical cancer audit are collated nationally and published annually in Public Health Scotland Cervical Cancer Quality Performance Indicators Report⁴¹.

The NHSGGC Invasive Cancer Audit Group is comprised of specialists from screening call/recall, public health, pathology and gynaecology, and meets quarterly to review all cases of invasive cervical cancer diagnosed within the Board area. During this reporting period (1st April 2024 to 31st March 2025), 70 women resident in NHSGGC were diagnosed with invasive cervical cancer in NHSGGC laboratories. These cases include cancers detected through routine cervical screening, symptomatic presentation or incidental findings. At the time of reporting, the Audit Group had completed detailed reviews for 55 of these 70 cases.

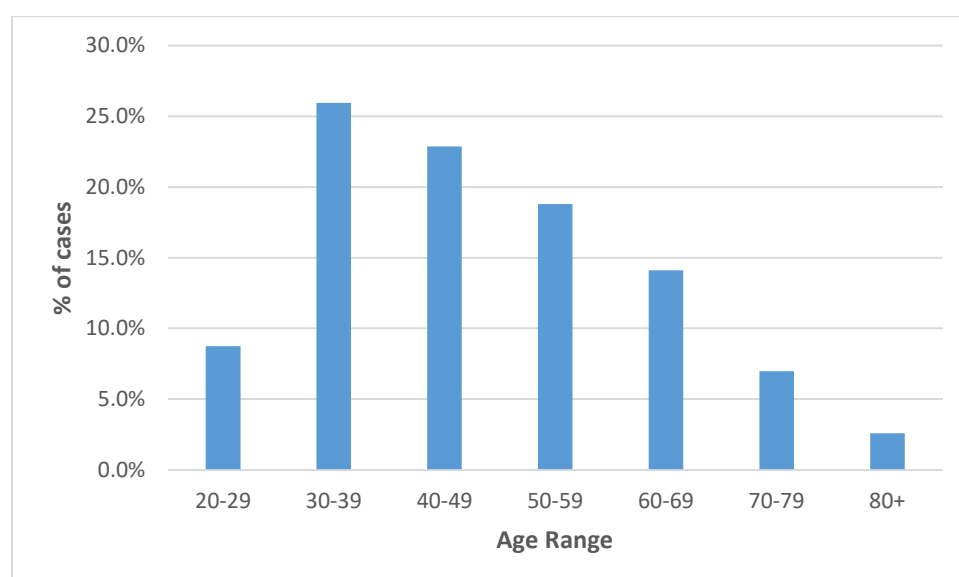
In the ten year period from 1st April 2015 to 31st March 2025, a total of 617 NHSGGC residents who developed invasive cervical cancer had a pathology diagnosis made in NHSGGC laboratories.

Age distribution of invasive cervical cancer cases

The age distribution of NHSGGC residents diagnosed cervical cancer cases is shown in **Figure 4.6**. More than half (57.5%, 355 women) of cases are in women under the age of 50 years, with 8.8% in women under 30 years, 25.9% in women aged 30-39 years and 22.9% in women aged 40-49 years.

⁴¹ Cervical cancer Quality Performance Indicators - Patients diagnosed between October 2017 and September 2020 - Cervical cancer - Publications - Public Health Scotland (Accessed November 2023)

Figure 4.6. Age distribution of invasive cervical cancer cases audited in women resident in NHSGGC, diagnosis date 1st April 2015 to 31st March 2025, 10 year age bands

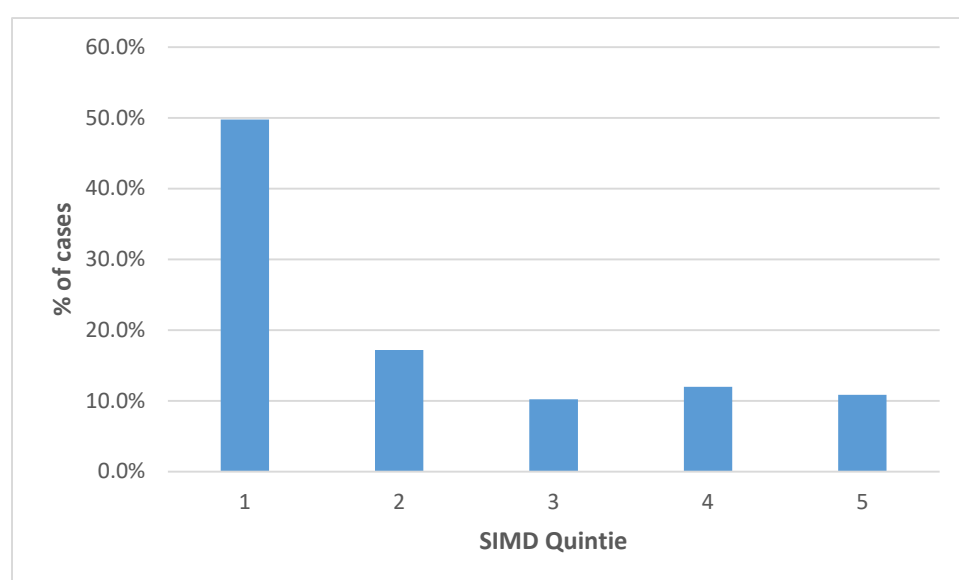


Source: NHSGGC Invasive Cancer Audit (March 2026)

SIMD distribution of invasive cervical cancer cases

The SIMD distribution of cases of NHSGGC residents from the last ten years is shown in **Figure 4.7**. Almost half (49.8%) of women diagnosed with invasive cervical cancer over the last 10 years resided in the most deprived SIMD quintile.

Figure 4.7. SIMD distribution of invasive cervical cancer cases audited in women resident in NHSGGC, diagnosis date 1st April 2015 to 31st March 2025, SIMD quintiles.



Source: NHSGGC Invasive Cancer Audit (March 2026)

How invasive cervical cancers were detected

Over the last ten years of invasive cervical cancer audit, 602 of the 617 confirmed cases among women resident in NHS Greater Glasgow and Clyde were reviewed at time of this report. Of these cases, 38.7% were detected through the cervical screening programme. The majority (58.3%) were diagnosed following presentation to medical services with symptoms, while a small proportion (1.5%) were identified incidentally during investigations for other conditions.

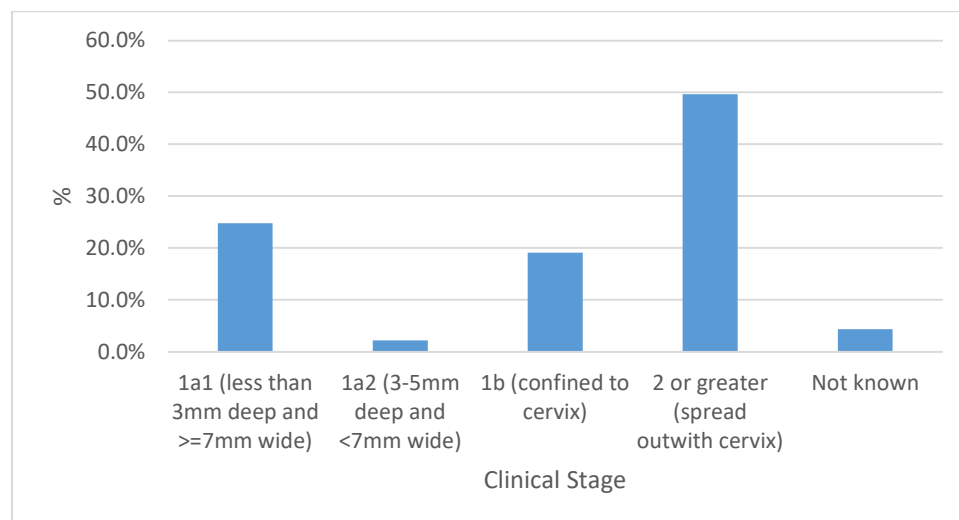
Screening history of women with invasive cervical cancer

Among the 602 women with confirmed invasive cervical cancer included in the audit, 29.6% had an adequate screening history, defined as regular attendance at cervical screening. In contrast, 58.8% had an incomplete screening history, where women had not attended for cervical screening in response to some or all screening invitations.

Clinical stage of invasive cervical cancers at diagnosis

Invasive cervical cancers are graded or 'staged' based on their size and whether they are confined to the cervix or have grown into surrounding tissues. The proportion of invasive cervical cancer cases at each stage is shown for 602 cases audited over the last ten years, **Figure 4.8**,

Figure 4.8. Clinical stage of invasive cervical cancer cases audited in women resident in NHSGGC, 1st April 2015 to 31st March 2025



Source: NHSGGC Invasive Cancer Audit (March 2026)

4.12. Training

NHSGGC offers training to smear-takers working in primary care and other dedicated smear-taking clinics. To become a smear-taker an initial training day followed by a period of supervised working must be undertaken. Those who become qualified at the end of must attend update training at least once every three years. NHSGGC offers initial training and update training in line with NHS Education for Scotland Cervical Screening Standards Sessions were offered throughout the year in 2024-25.

The initial day of training and the update day are given by clinical staff and staff within the screening programme. Aspects of the screening programme that are incorporated into the training day and update day include:

- how to use SCCRS and any changes or updates;
- changes and updates for call/recall;
- lab results, what they mean and any changes to testing or process;
- any delays in the screening programme;
- programmes of work to improve inequalities in uptake and attendance.

In 2024-25, two initial training days were delivered, with 41 people attending including GPs, practice nurses, sexual health nurses, specialist registrars and other healthcare professionals. Four half-day update training sessions were delivered, attended by 109 people.

NHS Education for Scotland (NES) launched the TURAS Cervical Screening training module in July 2022 for General Practice Nurses, providing a national route for core and three-yearly update training. Access to the module was expanded in September 2025 to include all NHS smear takers. While this expansion supports consistent national training provision, the NHSGGC Cervical Skills Training programme has continued to offer important added value through locally delivered training. In light of changes to national training provision, the NHSGGC Cervical Skills Training Group will review the local training delivery model to ensure that mechanisms remain in place to support local updates and networking.

4.13. Challenges and Future Priorities

Challenges

Uptake of cervical screening remains a challenge, as we continue to see year on year fall in uptake.

Nationally there is increased scrutiny of cervical screening uptake, brought about by recent work on cervical cancer elimination instigated by the World Health Organization's Cervical Cancer Elimination Initiative⁴². Cervical cancer elimination is included as a goal in the Scottish Government's Women's

⁴² [Cervical Cancer Elimination Initiative](#) (accessed March 2026)

Health Plan Phase Two⁴³, with an action plan in development. Cervical cancer elimination has three pillars – HPV vaccination, cervical screening uptake and rapid treatment. Currently cervical screening uptake has the biggest improvement to make.

Colposcopy waiting times have improved markedly in recent years, reducing from waits of over 50 weeks for routine appointments three years ago to approximately 18 weeks for routine referrals, 2–3 weeks for urgent referrals, and 2 weeks for urgent suspicion of cancer at the time of this report. However, routine waiting times remain substantially above the national standard of 6 weeks and continue to represent a significant service challenge.

National ‘no cervix’ audit

This national audit involved clinical review of all the women excluded from the cervical screening programme with a ‘no cervix’ code, usually applied after hysterectomy. In NHSGGC this involved the review of more than 27,000 clinical records. Scottish Government provided funding for a clinical review team, administrative support and additional clinics to assess those referred. This review was completed in 2024-25, on time and within budget.

Improving uptake and reducing inequalities

We have undertaken several activities to identify barriers to screening uptake and improve uptake.

We have undertaken analysis to understand coding of pregnancy within SCCRS and the effect of this on call/recall for women. If screening is due whilst a woman is pregnant, she will be called and receive reminder letters but likely default on attending. If a pregnancy code is added to her SCCRS record, these invites and reminder letters can be scheduled for post-birth where are more likely to be effective. Our analysis has shown very poor use of pregnancy coding and many women who have given birth missing screening. We will include this in our training sessions and take opportunities to work with the sample-taker workforce to increase awareness if this.

We have developed best practice guidance for cervical screening for people with learning disability. This will be shared with sample-takers.

We are in the process of piloting an in-reach cervical screening service for long-stay mental health patients. Long-stay patients will be removed from general practice lists and likely be missed by cervical screening call/recall. This service will ensure this offer is made in a sensitive way to this group of vulnerable patients.

We are working with practices with the lowest cervical screening uptake to develop bespoke quality improvement initiatives that should improve uptake. An experienced practice nurse is working directly with colleagues to do this.

⁴³ [Women's Health Plan: Phase Two \(2026 - 2029\) - gov.scot](#) (accessed March 2026)

We are working with NHSGGC Corporate Communications Team to disseminate messages about cervical screening to improve awareness and uptake. In January 2026, for cervical cancer prevention week, we filmed short segments with Glasgow City Women's Football Club, which were released on social media and picked up by print media. A short piece was delivered on BBC Radio Scotland drive-time.

Future priorities

In June 2025, the National Screening Committee recommended use of self-sampling to improve uptake in women who have never attended screening or have defaulted on screening. Cervical screening self-sampling is starting to be developed in Scotland, with three initiatives currently in progress.

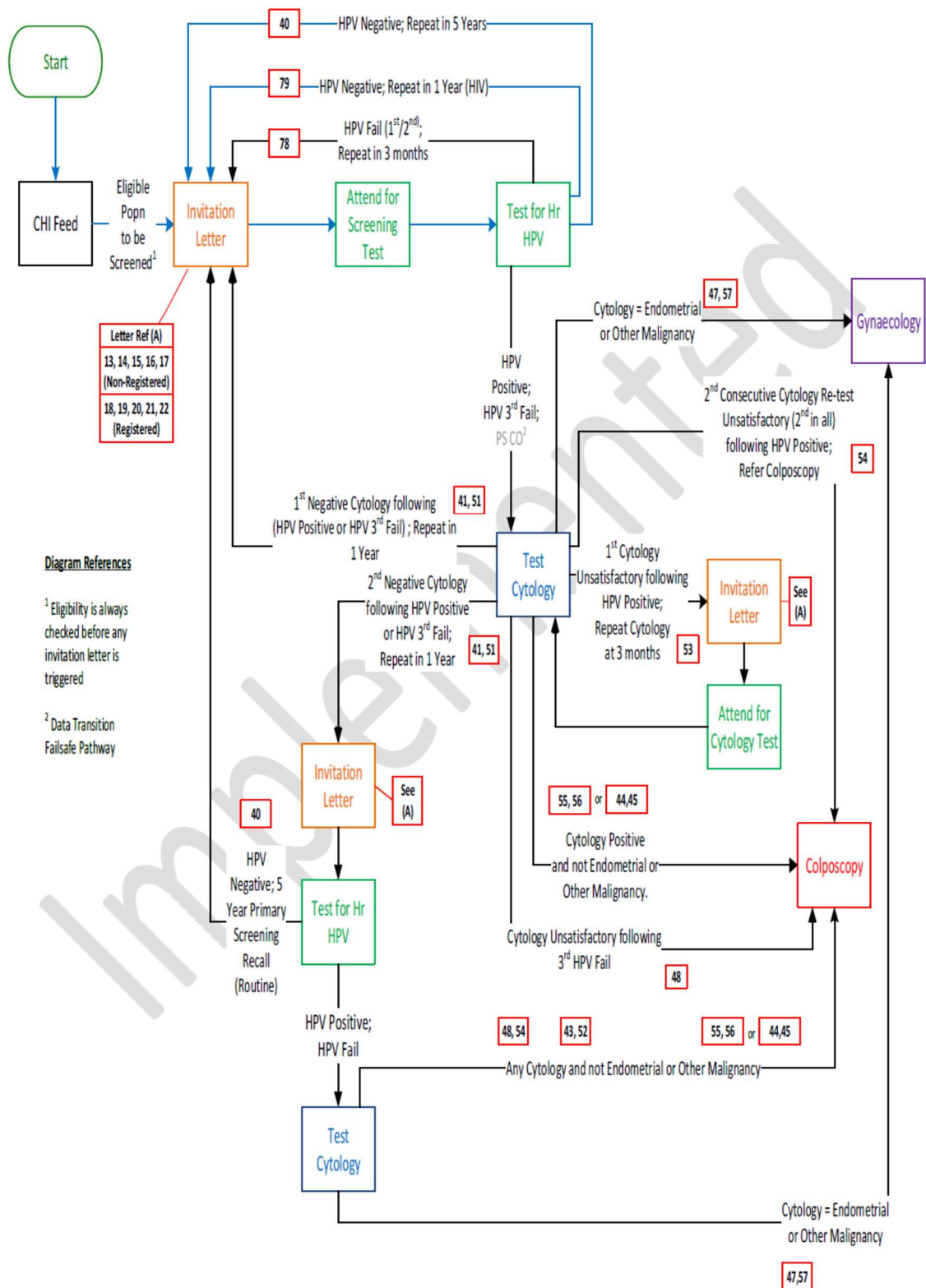
Firstly, Scottish Government is starting to pilot self-sampling in practices with low uptake and high numbers of women who are defaulters. This is due to launch in a small number of practices in four NHS boards in April 2026. Four practices in NHSGGC have currently signed up for this pilot. This part of the pilot will likely run for about a year before bringing in more practices in more board areas.

Secondly, Sandyford outreach team is working to offer self-sampling to homeless and vulnerable women as part of a UK-wide pilot. This pilot is ongoing.

Finally, there is a Scotland-wide Cancer Research UK funded randomised controlled trial for self-sampling, currently in development. This is being run by academics in Aberdeen University. This is the *AYEscreen study*⁴⁴. This will target deep-end practices, which will likely include practices across the NHSGGC area.






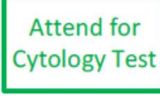
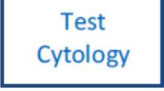
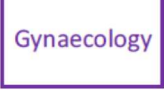


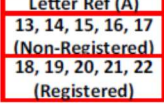
⁴⁴ [£1.3m self-screening trial aims to close inequity gap in Scotland's cervical cancer deaths | News | The University of Aberdeen](#) (accessed March 2026)

Appendix 4.1 High-risk HPV primary screening recommended management pathway and key



Pathway Diagram Key:

Colour use on the pathway diagrams is intended to help differentiate different stages.

Symbol	Meaning	Comment
	Start of screening process.	
	Daily CHI Feed of eligible participants.	
	Participant Invitation letter sent from SCCRS.	A process or event (a rectangle signifies a process, sub-process, task or event).
	Activity at sample taking location, e.g. GP Practice, Community setting.	Participant attends for screening.
	Laboratory Process – testing sample for hrHPV (using automatic system).	
	Physical attendance by participant for sample taking for subsequent consideration of cytology only result component.	
	Laboratory undertakes cytology testing of sample when pertinent (following virology testing).	
	Participant is referred to Gynecology.	
	Participant is referred to Colposcopy.	
	Letter number associated with event.	
	Different letter types associated with invitation letters.	

Appendix 4.2

Key performance indicators for screening. Taken from the 2024-25 Public Health Scotland report⁴⁵ [green = standard met, red = standard not met]

KPI 1: Screening uptake	Standard %	Scotland 2024-25 %	NHSGGC 2024-25 %	
KPI 1.1 Overall uptake				
The percentage of eligible women (aged 25 to 64) who were recorded as screened adequately	80	68.7	64.4	
KPI 1.2 Percentage uptake by deprivation quintile				
SIMD 1 (most deprived)	80	62.4	61.7	
SIMD 2		66.3	64.8	
SIMD 3		68.9	62.3	
SIMD 4		73.2	68.8	
SIMD 5 (least deprived)		73.1	67.2	
KPI 1.3 Uptake by Age Group				
25-49 years	80	65.7	60.4	
50-64 years		73.7	72.3	
25-64 years		68.7	64.4	
KPI 2: Laboratory performance	Standard %	Scotland 2024-25 %	Scotland 2023-24 %	Scotland 2022-23 %
KPI 2.1 Annual percentage of samples reported within two weeks (14 calendar days) from the date of sample being taken.	<1%	0.19	0/14	0.10
KPI 2.2 Percentage of tests rejected by the laboratory prior to processing.	>80%	74.81	81.09	84.44

⁴⁵ [Scottish cervical screening programme statistics - Annual update to 31 March 2025 - Scottish cervical screening programme statistics - Publications - Public Health Scotland](#) (accessed March 2026)

Chapter 5 - Diabetic Eye Screening (DES)

Summary

Diabetic eye screening	
Why?	Early identification of diabetic retinopathy. Prevention or management of sight loss.
Intervention	At risk population screening - those with diagnosed diabetes aged 12 years and over (part of clinical care). Photograph of the back of each eye with subsequent image grading. Call/recall round length depends on risk factors. Screening offered in hospital outpatient and community clinics.
Activity in 2024/25	77.8% screening uptake (57,620 people screened)
Outcomes	Uptake lower than standard (80%). Uptake similar between males and females. Higher uptake among young people aged 12-14 years (75.4%) and older adults aged 65-74 years (81.3%); lowest among 25-29 year olds (67.7%). Variation in uptake by deprivation quintile (SIMD), with lowest uptake in most deprived quintile (74.8%) compared with least deprived (83.1%). Variation in uptake among minority ethnic groups. 80% uptake target met only in East Dunbartonshire and East Renfrewshire HSCPs.

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5.1. Background

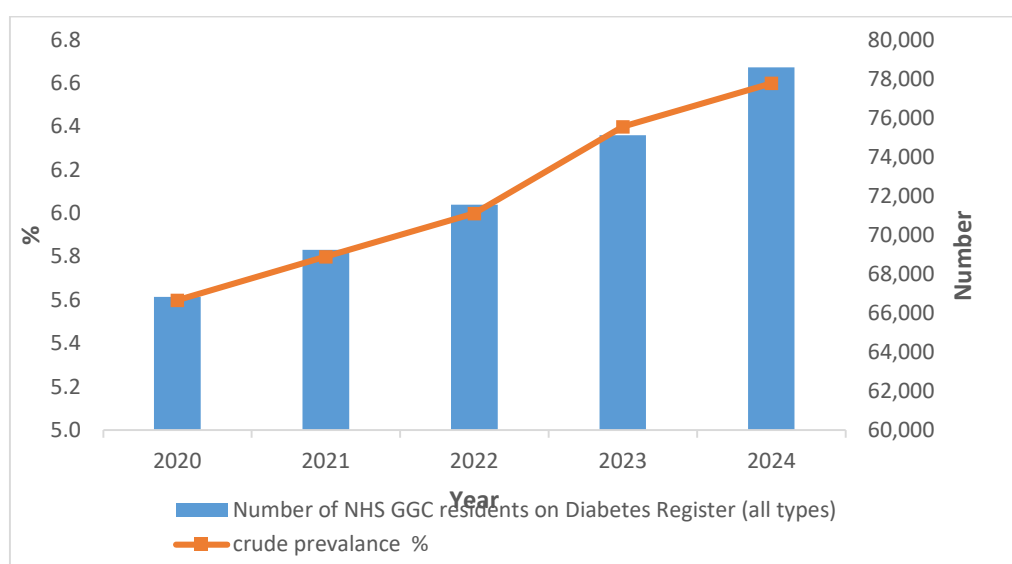
Diabetes mellitus is a long-term condition in which the level of glucose in the blood is raised, leading to abnormal fat metabolism and other complications. There are two main types of diabetes: Type 1 and Type 2.

- Type 1 often develops before the age of 40 and usually during teenage years.
- Type 2 is far more common than Type 1 and typically affects people over the age of 40, although increasingly younger people are affected as well. It is often associated with being overweight or obese; and people of South Asian, African-Caribbean or Middle Eastern origins are more frequently affected.

The most recent Scottish Diabetes Survey, 2024⁴⁶ reports that there were 367,358 people living with diabetes in Scotland at the end of 2024, representing a crude prevalence of 6.7% across all ages. Over the past decade, crude prevalence has risen steadily from 5.2% in 2014⁴⁷ (276,460 people) to 6.7% in 2024. Of those living with diabetes in Scotland in 2024, 10.0% (36,781) had Type 1 diabetes, 88.2% (323,911) had Type 2 diabetes, and 1.8% (6,666) were recorded as having other forms of diabetes.

Over the five-year period 2020 to 2024, the number of people with diabetes in NHS GGC increased from 65,824 (5.6% of the population) to 75,590 (6.6% of the population) respectively, see **Figure 5.1**. The relatively high number of new cases diagnosed between 2021 and 2022 may be related to effects of the pandemic and the relatively low number of new cases diagnosed in 2020.

Figure 5.1. Number and crude prevalence (%) of people with Diabetes (all types) in NHSGGC 2020-2024



Source: Diabetes Scottish Diabetes Survey, 2020 – 2024

⁴⁶ [Scottish-Diabetes-Survey-2024.pdf](#) Accessed February 2026

⁴⁷ [Diabetes-in-Scotland-website-Scottish-Diabetes-Survey-2014.pdf](#) Accessed February 2026

Diabetic retinopathy is a complication of diabetes affecting the blood vessels of the retina. It is the biggest single cause of blindness and visual impairment amongst working age people in Scotland. Retinopathy is symptom-free until its late stages, and programmes of retinal screening can reduce the risk of blindness in the diabetic population by detecting retinopathy at a stage at which it may be effectively treated. If it is detected early enough, treatment can prevent the progression of the disease and save sight for many years in most patients.

The national Diabetic Eye Screening (DES) programme was implemented across NHS GGC in 2004-2005 and is an integral part of diabetes care.

The programme performance and quality of national DES screening is monitored via defined National DES Screening Standards⁴⁸ and Key Performance Indicators.

At the time of this report, nationally validated KPI's and clinical outcome data was not available. Therefore, it was not possible to compare local and national uptake data or clinical outcomes.

5.2. Aim of the Diabetic Eye Screening Programme

The primary aim of the programme is the detection of referable (sight-threatening) retinopathy.

A secondary aim is the detection of lesser degrees of diabetic retinopathy. This can have implications for the medical management of people with diabetes.

5.3. Eligible population

The DES programme differs from other screening programmes in that it is an important part of the patient's care pathway rather than screening for a particular condition. All people with diabetes aged 12 and over are eligible for Diabetic Eye Screening.

5.4. The screening test

The screening test is a photograph of the individual's retinas. This is taken in clinics held in hospital out-patient departments and community settings across NHS GGC. If the photograph cannot be graded, then a further slit lamp examination will be performed.

There are two main information systems used in the provision of DES programme.

1. OptoMize provides the call/recall, image capture, grading, quality assurance, and result delivery for the screening programme.
2. SCI-Diabetes is the national data system for all people with diabetes and provides the diabetes population register for screening call/recall. Screening

⁴⁸[Diabetic retinopathy screening standards – Healthcare Improvement Scotland](#) (Accessed December 2024)

results can be viewed here by clinical staff involved in the care of patients with diabetes.

The OptoMize data system has been used nationally for a few years now. Delays in reporting from OptoMize system have now been resolved, however nationally validated KPIs have not yet been published.

5.5. Screening pathway

Appendix 9.1 illustrates the pathway to reduce diabetes related blindness in the diabetic population by identifying and treating sight threatening diabetic retinopathy. The UK National Screening Committee recommendation of revised screening intervals was fully implemented in Scotland by April 2023. This means that individuals who have been regularly screened and the last two outcomes were clear (i.e. no signs of any retinopathy or changes in both eyes and on both occasions), would be recalled for screening every 24 months, rather than every 12 months.

Patients are initially called for screening by digital photography (fundus photography). However, sometimes clear photographs cannot be obtained due to a range of reasons, e.g. opacities like cataract, or difficulty positioning the patient at the camera. In these cases, patients are transferred to slit lamp screening where the eyes are dilated and are examined by either a static or portable slit lamp to examine the retina.

The DES service has incorporated a new pathway in the screening process. If a patient is found to have maculopathy and good visual acuity, they will be scheduled for an Optical Coherence Tomography (OCT) scan to check for macular oedema. If oedema is found, the patient is referred to the Ophthalmology Clinic. If not, the patient continues in the OCT surveillance clinics within the DES programme.

5.6. Screening setting

DES is delivered at five hospital locations and a range of community and mobile clinics, see **Table 5.1**.

Table 5.1. NHSGGC Diabetic Eye Screening locations status 2024-2025

Screening Location	Status 2024/25		
	Fundus Photography	Slit Lamp Clinic	OCT Clinic
Hospital Locations			
Gartnavel General Hospital	✓	✓	✓
Glasgow Royal Infirmary	✓	✓	✓
New Victoria Ambulatory Care Hospital	✓	✓	✓
Queen Elizabeth University Hospital	✓	✓	✓
Vale of Leven Hospital	N/A	✓	✓
Health Centre/HSCP Locations			
East Dunbartonshire HSCP			
Milngavie Health Centre	✓	N/A	N/A
Kirkintilloch Health Centre	✓	N/A	N/A
East Renfrewshire HSCP			
Barrhead Health Centre	✓	N/A	N/A
Eastwood Health Centre	✓	N/A	N/A
Glasgow City HSCP			
Castlemilk Health Centre	✓	N/A	N/A
Drumchapel Health Centre	✓	N/A	N/A
Easterhouse Health Centre	✓	N/A	N/A
Pollok Health Centre	✓	N/A	N/A
Inverclyde HSCP			
Greenock Health Centre	✓	✓	✓
Renfrewshire HSCP			
Johnston Health Centre	✓	N/A	N/A
New Sneddon Street Clinic	✓	✓	N/A
Renfrew Health Centre	✓	N/A	N/A
West Dunbartonshire HSCP			
Dumbarton Health Centre	✓	N/A	N/A
Clydebank Health & Care Centre	✓	N/A	N/A
Vale of Leven Care and treatment centre	✓	N/A	N/A
Additional Locations			
HMP Barlinnie Mobile Clinic	✓	N/A	N/A
HMP Lowmoss	Patients called to GRI	N/A	N/A
HMP Greenock	Patients called to Greenock HC	N/A	N/A
Rowanbank Mobile Clinic	✓	N/A	N/A
Leverndale Mobile Clinic	✓	N/A	N/A
Surehaven Mobile Clinic	✓	N/A	N/A

✓ Screening available

N/A Screening not available

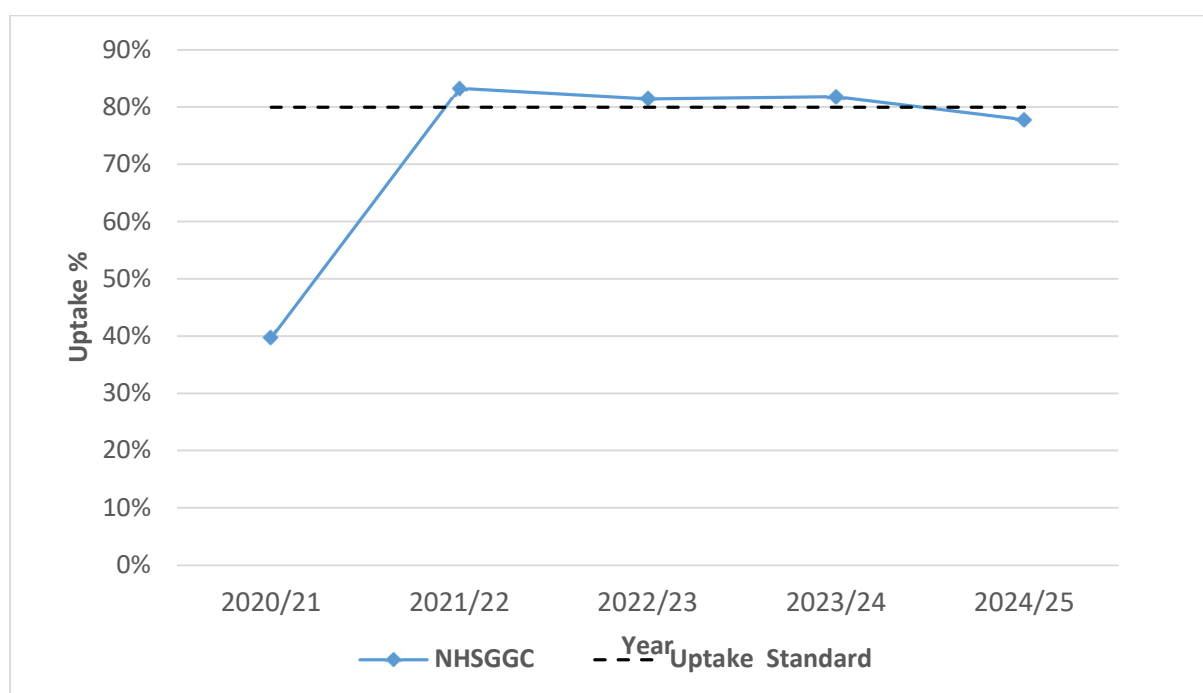
5.7. Uptake of diabetic eye screening

Five-year trends have been sourced from previous annual screening reports, with data from period for period 1st April 2024 to 31st March 2025 obtained from the OptiMize system. As a result of differences in data extract dates and data definitions, numbers in local data analysis will differ from those presented in forthcoming national programme publications.

Overall uptake of diabetic eye screening fluctuated over the five-year period from 2020/21 to 2024/25. The drop in screening uptake during 2020/21 was due to a pause in screening from March to September 2020, due to the COVID-19 pandemic. The service then had to catch up the backlog of patients who could not be invited during this period. It took the service 18 months to complete this catch up and return to a normal (pre-pandemic) service.

Based on local analysis from OptiMize, uptake in 2024/25 was 77.8%, below the national 80% standard. (**Figure 5.2**).

Figure 5.2. Uptake of Diabetic Eye Screening in NHSGGC, 2020/21 to 2024/25



Source: NHSGGC Annual Screening Reports 2019/20 to 2021/22.

2021/22 SCI Diabetes, November 2022 ⁴⁹

2022/23 to 2024/25 OptoMize, October 2025

⁴⁹ 2020/21 cohort obtained from SCI-Diabetes included all persons, only those over 12 years of age are eligible for screening.

Of the 74,068 individuals with a confirmed diagnosis of diabetes and eligible for diabetic eye screening, 57,620 (77.8%) were adequately screened (up to date with screening independent of screening round length) at 31st March 2025.

Table 5.2 shows that more than half (54.2%) of the eligible resident population of people with diabetes were male. Uptake was slightly higher amongst males (78.2%) than females (77.3%), however the 80% uptake target was not met by both sexes.

Table 5.2. Uptake of Diabetic Eye Screening by sex, NHSGGC residents, 2024-2025

Sex	Not Screened	Screened	Total	% Screened
Female	7,540	25,636	33,176	77.3
Male	8,908	31,984	40,892	78.2
Total	16,448	57,620	74,068	77.8

Source: OptoMize, October 2025

Table 5.3 shows that uptake of DES screening is high in young people aged 12-14 years (75.4%), then falls to lowest uptake in people aged 25-34 years group at 67.7%) and increases with age up to 74 years of age (highest uptake in the 65-74 years age group, 81.23%). Uptake decreases after 75 years of age, 79.3% of individuals aged 75-84 were screened, further decreasing to 73.2% among individuals aged 85 years and older.

Table 5.3. Uptake of Diabetic Eye Screening by age, NHSGGC residents, 2024-2025

Age Group (years)	Not Screened	Screened	Total	% Screened
12-14	52	159	211	75.4
15-24	257	770	1,027	75.0
25-34	727	1,526	2,253	67.7
35-44	1,560	3,829	5,389	71.1
45-54	2,462	7,424	9,886	75.1
55-64	4,034	14,964	18,998	78.8
65-74	3,715	16,169	19,884	81.3
75-84	2,571	9,853	12,424	79.3
85+	1,070	2,926	3,996	73.2
Total	16,448	57,620	74,068	77.8

Source: OptoMize, October 2025

Uptake also increased with decreasing levels of deprivation, with 74.8% uptake among individuals residing in the most deprived areas compared to 83.1% residing in the most affluent areas. The uptake target of 80% was met only in the least deprived deprivation quintiles, SIMD 4 and SIMD 5. See **Table 9.4**.

Table 5.4. Uptake of Diabetic Eye Screening by deprivation quintile, NHSGGC residents, 2024-2025

SIMD Quintile	Not Screened	Screened	Total	% Screened
1 (most deprived)	7,605	22,522	30,127	74.8
2	3,292	11,383	14,675	77.6
3	1,881	7,008	8,889	78.8
4	1,837	7,687	9,524	80.7
5 (least deprived)	1,833	9,020	10,853	83.1
Total	16,448	57,620	74,068	77.8

Source: OptoMize, October 2025

Further local analysis was undertaken to explore variations in uptake of screening for populations with protected characteristics (including, ethnicity, learning disability and mental health), and geographically by Health and Social Care Partnership (HSCP) area.

Analysis by ethnicity was undertaken via self-reported ethnicity recorded on SCI-Diabetes. The uptake screening standard of 80% was achieved within Chinese and Pakistani minority ethnic groups. Uptake was below the screening standard among all other ethnic groups Bangladeshi, Black Caribbean, Other Black and Other White ethnic subgroups (**Table 5.5**). Ethnicity was unknown for approximately 10% of the eligible screening population.

Table 5.5. Uptake of Diabetic Eye Screening by ethnicity, NHSGGC residents, 2024-2025

2001 Census Ethnic Group	Not Screened	Screened	Total	% Screened
Bangladeshi	73	231	304	76.0
Black African	221	853	1,074	79.4
Other Black	42	153	195	78.5
Black Caribbean	11	37	48	77.1
Chinese	109	458	567	80.8
Indian	368	1,379	1,747	78.9
Pakistani	747	2,982	3,729	80.0
Other Asian	201	775	976	79.4
White Irish	89	271	360	75.3
White Scottish	8,405	30,110	38,515	78.2
Other White British	2,952	10,779	13,731	78.5
Other White	598	1,678	2,276	73.7
Other Mixed Origin	231	837	1,068	78.4
Other	246	736	982	74.9
Unknown/not recorded	2,155	6,341	8,496	74.6
Total	16,448	57,620	74,068	77.8

Source: OptoMize, October 2025

Table 5.6 shows that 740 of the 70,897 individuals eligible for screening were registered with a learning disability (1.0%). The uptake among individuals registered with a learning disability was lower than the rest of the population (73.5% vs 77.8% respectively).

Table 5.6. Uptake of Diabetic Eye Screening by Learning Disability, NHSGGC residents, 2024-2025

Learning Difficulties Register	Not Screened	Screened	Total	% Screened
Not Registered	16,254	57,082	73,336	77.8
Registered	194	538	732	73.5
Total	16,448	57,620	74,068	77.8

Source: OptoMize, October 2025; NHSGGC Learning Disability Health Check Register, March 2026⁵⁰

⁵⁰ LD register used for screening CHI linkage comprises legacy LD Local Enhanced Service register and snapshot of 2024 NHSGGC LD health check register.

People registered on PsyCIS have had at least one episode of psychosis which is typically seen in patients with a severe or enduring mental illness. **Table 5.7** shows that 1,286 of the 74,068 people eligible for screening were registered on PsyCIS (1.7% of the total eligible population). These individuals had a lower uptake of DES screening, 69.1% compared to 77.9% in the rest of the population.

Table 5.7. Uptake of Diabetic Eye Screening by Severe and Enduring Mental Health, NHSGGC residents, 2024-2025

PSYCIS	Not Screened	Screened	Total	% Screened
Not Registered	16,051	56,731	72,782	77.9
Registered	397	889	1,286	69.1
Total	16,448	57,620	74,068	77.8

Source: OptoMize, October 2025; PSYCIS, November 2025

Uptake was analysed by HSCP area, and a Standardised Uptake Rate (SUR) was calculated to allow for comparison by adjusting for the known effects of age (higher uptake in older age groups), deprivation (lower uptake in more deprived groups) and sex (differences in uptake between males and females). Before standardisation, crude screening uptake ranged from 69.6% in Inverclyde to 85.3% in East Dunbartonshire HSCP. The 80% target for screening was met in East Dunbartonshire and East Renfrewshire HSCTs, see **Table 5.7**.

Standardisation shows whether uptake in an HSCP area is higher or lower than would be expected for its population profile. If the SUR is lower than the crude rate, this indicates that part of the higher uptake reflects population characteristics such as lower deprivation; if the SUR is higher, the HSCP is achieving uptake levels above those expected for its demographic profile. In this analysis, standardisation narrows the differences between HSCTs, indicating that East Dunbartonshire and East Renfrewshire HSCTs high uptake is partly related to their population demographics, while the Glasgow sectors perform slightly better than expected once their population profile is taken into account.

Mapping of diabetic eye screening uptake by data zones was undertaken to provide further insight into variation in uptake at local geographical level. This illustrates that the 80% target uptake was achieved in almost half (646) of the 1,458 data zones, with uptake lower than 80% in 812 data zones. Some pockets of NHSGGC can have significantly lower screening uptake than HSCTs average levels. For example, 190 of the 1,455 data zones had uptake rates between 60-69% and a further 35 data zones had uptake rates of below 60%. Uptake maps are available on the [PHSU website](#)⁵¹.

⁵¹ Diabetes Eye Screening Uptake Map, 2024/25 (Accessed March 2026)

Table 5.8. Uptake of Diabetic Eye Screening by HSCP, NHSGGC residents, 2024-2025

HSCP	Not Screened	Screened	Total	% Screened	% Screened LCI	% Screened UCI	SUR %	SUR % LCI	SUR % UCI
East Dunbartonshire HSCP	881	5,129	6,010	85.3	83.0	87.7	82.2	80.0	84.5
East Renfrewshire HSCP	986	4,379	5,365	81.6	79.2	84.0	78.6	76.2	80.9
Glasgow North East Sector	2,620	9,415	12,035	78.2	76.6	79.8	79.7	78.1	81.4
Glasgow North West Sector	2,439	8,871	11,310	78.4	76.8	80.1	79.1	77.4	80.7
Glasgow South Sector	3,645	12,241	15,886	77.1	75.7	78.4	77.9	76.5	79.3
Glasgow City	8,704	30,527	39,231	77.8	76.9	78.7	78.8	77.9	79.7
Inverclyde HSCP	1,579	3,597	5,176	69.5	67.2	71.8	69.7	67.4	72.0
Renfrewshire HSCP	2,895	8,986	11,881	75.6	74.1	77.2	75.0	73.4	76.5
West Dunbartonshire HSCP	1,403	5,002	6,405	78.1	75.9	80.3	78.5	76.3	80.7
Total	16,448	57,620	74,068	77.8	77.2	78.4			

Source: OptoMize, October 2025
 SUR – Standardised Uptake Rate
 LCI – Lower Confidence Interval
 UCI – Upper Confidence Interval

5.8. Challenges and Future Developments

Challenges

Ensuring patients can attend screening at accessible locations continues to be a priority. Several community clinics remain unavailable due to refurbishment. We are working closely with HSCPs to support the return of clinics to these sites or to identify suitable alternative venues. This work is ongoing.

Capacity for Level 3 imaging sign-off remains a challenge, this is consultant-level review of images. While additional grading sessions delivered by an NHSGGC Consultant Ophthalmologist have significantly reduced previous backlogs, ongoing capacity for these reviews continues to be limited locally and nationally. Monitoring of grading queues is now routine, and interventions are implemented when required. This has led to a considerable reduction in delays, although continued vigilance is necessary.

The introduction of GLP-1 Receptor Agonist medicines for treatment of diabetes has required enhanced oversight in the screening programme. We need to ensure that patients have up to date eye screening prior to starting treatment and repeat screening within one year. At present, this patient cohort is being managed manually, as the electronic call/recall system cannot accommodate bespoke scheduling. We continue to work with clinicians to ensure patients requiring accelerated review are identified promptly and urgent screening requests are accommodated.

Screening uptake and inequalities in uptake

Training in learning disabilities awareness has been delivered to DES screeners, and good practice guidance on the use of reasonable adjustments has been developed. Strong links have now been established with acute and community Learning Disability teams to help identify patients and ensure appropriate support. Building on this, the good practice guidance for supporting people with a learning disability to participate in eye screening has been finalised and shared nationally.

For further information see the Inequalities chapter.

Future priorities

We expect there to be national development of a patient portal for DES in 2026, that will include online booking and access to all screening letters. This will be through the 'My Scot' platform. DES will be the first health topic linked to this site.

We expect publication of national DES Key Performance Indicators in 2026. This will provide the first accredited programme data for DES for many years, and we will be able to benchmark our local data against this. NHSGGC will continue to work with

Public Health Scotland to enable reporting of validated DES clinical outcomes once national data becomes available.

Improving screening uptake remains an important focus. NHSGGC will continue to work with general practice teams, particularly in areas with persistently low uptake and higher levels of deprivation, to strengthen engagement and reduce inequalities.

A rolling programme to replace ageing retinal screening equipment is underway and expected to conclude by March 2027.

Future pathway developments will continue to align with national protocols, including the expansion of OCT surveillance pathways. NHSGGC will maintain close engagement in national workstreams to ensure readiness for implementation.

The number of people with diabetes in NHSGGC is projected to increase further in the coming years. The diabetic eye screening service will need to secure additional screening capacity and resource to accommodate this extra demand for DES.

Appendix 5.2.

Diabetic retinopathy screening pathway

Scottish Diabetic Eye Screening Programme



Screening services delivered by NHS Boards

Delivered by host NHS Board(s) on behalf of other territorial boards

Supported by national delivery partners

Diagnostic / treatment services

Nationally commissioned by NSS (DaS/NSD)

