Scottish Bowel Screening Programme Statistics

For the two-year period of invitations between 1 November 2016 and 31 October 2018

Publication date 06 August 2019
This is a National Statistics Publication

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Once statistics have been designated as National Statistics, it is a statutory requirement that the Code of Practice shall continue to be observed.

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Find out more about National Statistics at:

Main Points

• In the year before and after the introduction of a new, simpler test (known as ‘FIT’), uptake of bowel screening increased from 55.4% to 63.9%. This is the first time that national uptake has been higher than the standard of 60%.

• Uptake of screening using FIT remains lower in men (61.6%) than in women (66.1%).

• Uptake using FIT also remains lower among people from more deprived areas (51.7%) compared to people from less deprived areas (72.5%). However, the increase in uptake after the introduction of FIT was greatest among people from more deprived areas. As a result, the difference between the most and least deprived reduced from 23.7 to 20.8 percentage points.

• The percentage of people testing positive was higher using FIT, with those referred for further investigation increasing from 1.9% using FOBT to 3.1% using FIT.

• A positive result for FIT was a better predictor of finding pre-cancerous growths (adenomas) during colonoscopy than a positive result for FOBT, with 43.5% of people who tested positive for FIT having an adenoma, compared to 40.0% for FOBT.

• A positive result for FIT was a less accurate predictor of having bowel cancer than for FOBT, with 5.2% of people who tested positive for FIT having bowel cancer, compared to 6.8% for FOBT.

• Nevertheless, more cancers were detected using FIT due to the higher uptake and higher percentage of positive tests, leading to more people proceeding on to colonoscopy.

• For the full period 2016/18, most screen-detected cancers (60.3%) were in the earlier two stages of the disease and had not spread elsewhere.
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Introduction

Bowel cancer is the third most commonly-occurring cancer and the second most common cause of death due to cancer in Scotland. It is usually diagnosed after patients develop symptoms. The purpose of bowel screening is to identify bowel cancer at an earlier stage, before symptoms occur, when treatment is likely to be more effective. Bowel screening can also identify pre-cancerous growths (adenomas) that can be removed, preventing cancer occurring in the first place.

The Scottish Bowel Screening Programme commenced a phased roll out in June 2007, and by December 2009 all NHS Boards in Scotland were participating in the Programme. This publication report summarises a subset of the Programme’s Key Performance Indicators (KPIs), which are an array of measures used to monitor and evaluate the Programme’s effectiveness. These KPIs consist of descriptive numbers and rates (typically expressed as percentages) that describe key aspects of the performance of the Programme. An accompanying Key Performance Indicators Report in Excel format provides more detailed information on the measures themselves and on trends in the data.

The test used for bowel screening has historically been the guaiac Faecal Occult Blood Test (FOBT), which required participants to collect two samples from each of three separate bowel movements. However, from 20th November 2017, the Scottish Bowel Screening Programme started using the quantitative Faecal Immunochemical Test (FIT). The kit for this new test requires participants to collect just one sample from one bowel movement, thereby simplifying the sample collection process for those invited to participate.

In terms of policy context, the Scottish Government and NHS Boards together set and agree priorities known as Local Delivery Plan (LDP) Standards, which provide assurance on the performance of NHS Scotland. One of these standards is called “Detect Cancer Early”. In February 2012, the Scottish Government launched the Detect Cancer Early programme (DCE), with the purpose of raising the public’s awareness of the early signs and symptoms of cancer and of its three national cancer screening programmes. The aim of this programme is to improve cancer survival by diagnosing and treating the disease at an earlier stage. Colorectal cancer is one of three cancers that the DCE programme is focussing on initially. The LDP Standard for each of these cancers is to increase the proportion of people diagnosed and treated in the first stage of the disease by 25 per cent. More information about progress towards this standard is available on the DCE section of the ISD website.
Methods

This publication relates to men and women registered with a Community Health Index number and aged between 50-74 years old, who are invited to complete a bowel screening test every two years. Eligible people are posted a screening-test kit, which, unlike other cancer screening programmes, is completed at home and then returned by post to the Scottish Bowel Screening Centre in Tayside. Since 1st April 2013, those aged 75 and over can also self-refer and opt into bowel screening.

As people are invited to participate every two years, the entire population of eligible individuals should have had the opportunity to be screened in a two-year period. Hence, published statistics cover two-year periods in order to give full coverage of the screening population. This current release includes data for people invited between 1st November 2016 and 31st October 2018. The reported statistics therefore combine data from both the new and old tests, except where statistics for each test are stated separately. Where performance data for the FOBT and FIT tests are reported separately, the time periods used are 20th November 2016 to 31st October 2017 (while FOBT was in use) and 20th November 2017 to 31st October 2018 (while FIT was in use). The periods used for this comparison have the same start and end dates to maximise comparability of the data.

With the exception of Figure 1 (which shows monthly % uptake), trend charts show data by two-year intervals from 1st November to 31st October. Hence, labels in the format ‘2007/09’ refer to the period 1st November 2007 to 31st October 2009.

When making comparisons across NHS Boards, it should be noted that some boards have particularly small populations, meaning that percentage figures for some measures may be exaggerated due to the small numbers involved in the calculations. This can be seen for many measures for the island NHS Boards (NHS Orkney, NHS Shetland, and NHS Western Isles). For this reason, the island NHS Boards may be excluded when quoting ranges for the Health Boards.

Details of all bowel screening statistics included within this publication can be found in the bowel screening Key Performance Indicators Report (Excel format). The KPI numbers associated with each measure in this publication refer to KPI numbers and tab names used within the KPI Report.

Please note that all tables and charts are based on the 2014 Health Board configuration, see Appendix A1 for more information. All statistics are derived from the Scottish Bowel Screening Database.
Results and Commentary

Bowel Screening Uptake (KPI 1)

Overall uptake of bowel screening is the percentage of those invited to participate who returned a ‘correctly completed kit’ (here defined as those people who received a final screening test result, positive or negative; this amounts to 99% of returned kits). The overall uptake by NHS Board for the two-year period from November 2016 to October 2018 is shown in Table 1. During this period over 1.8 million people were invited to participate and more than one million people took up the offer and achieved an outright positive or negative test result.

Table 1: Overall uptake of bowel screening (%) by NHS Board of residence, Nov 2016 to Oct 2018

<table>
<thead>
<tr>
<th>NHS Board</th>
<th>Number of people invited</th>
<th>Number of people screened</th>
<th>Overall uptake (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ayrshire and Arran</td>
<td>141,378</td>
<td>83,040</td>
<td>58.7</td>
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<tr>
<td>Borders</td>
<td>47,389</td>
<td>30,944</td>
<td>65.3</td>
</tr>
<tr>
<td>Dumfries and Galloway</td>
<td>60,677</td>
<td>38,070</td>
<td>62.7</td>
</tr>
<tr>
<td>Fife</td>
<td>130,202</td>
<td>78,284</td>
<td>60.1</td>
</tr>
<tr>
<td>Forth Valley</td>
<td>106,379</td>
<td>64,475</td>
<td>60.6</td>
</tr>
<tr>
<td>Grampian</td>
<td>190,384</td>
<td>123,987</td>
<td>65.1</td>
</tr>
<tr>
<td>Greater Glasgow and Clyde</td>
<td>383,987</td>
<td>211,490</td>
<td>55.1</td>
</tr>
<tr>
<td>Highland</td>
<td>126,633</td>
<td>80,692</td>
<td>63.7</td>
</tr>
<tr>
<td>Lanarkshire</td>
<td>232,048</td>
<td>128,586</td>
<td>55.4</td>
</tr>
<tr>
<td>Lothian</td>
<td>274,763</td>
<td>162,755</td>
<td>59.2</td>
</tr>
<tr>
<td>Orkney</td>
<td>8,475</td>
<td>5,484</td>
<td>64.7</td>
</tr>
<tr>
<td>Shetland</td>
<td>8,108</td>
<td>5,621</td>
<td>69.3</td>
</tr>
<tr>
<td>Tayside</td>
<td>145,342</td>
<td>90,672</td>
<td>62.4</td>
</tr>
<tr>
<td>Western Isles</td>
<td>10,567</td>
<td>6,423</td>
<td>60.8</td>
</tr>
<tr>
<td><strong>Scotland</strong></td>
<td><strong>1,866,332</strong></td>
<td><strong>1,110,523</strong></td>
<td><strong>59.5</strong></td>
</tr>
</tbody>
</table>

For the full two-years of invitations in 2016/18, overall uptake increased to 59.5%, an increase of 3.6 percentage points on the 55.9% achieved in 2015/17. This was just below the Healthcare Improvement Scotland (HIS) standard and Scottish Bowel Screening Programme target for uptake of 60%. However, approximately half-way through the 2016/18 period, the programme introduced a new test (FIT), which substantially affected outcomes for many KPIs.
Figure 1 shows the trend in monthly % uptake nationally over the last three years, across the transition from the old (FOBT) to new test (FIT). In the year before and after the introduction of FIT, uptake of bowel screening increased from 55.4% to 63.9% (Table C1, KPI Report). This is likely to be partly due to the relative simplicity of FIT, which requires participants to provide just one sample from one bowel movement, rather than two samples from each of three bowel movements when using FOBT. This is the first time that national uptake has been higher than the standard of 60%.

Figure 1: Trend in monthly % uptake of bowel screening over three years (before and after the introduction of FIT)¹

¹ Time periods shown are 1st November 2015 to 31st October 2018. Note that FIT replaced FOBT on 20th November 2017. Where uptake statistics are stated separately for FOBT and FIT, the time periods used are 20th November 2016 to 31st October 2017 (FOBT) and 20th November 2017 to 31st October 2018 (FIT).
Bowel Screening Uptake by Deprivation (KPI 2)

For 2016/18, uptake of bowel screening was lower for people living in the most deprived areas (46.5%) compared to those living in the least deprived areas (68.9%). Uptake was also lower in men (56.8%) than in women (62.2%). Figure 2 shows uptake by socio-economic deprivation and sex. For each deprivation category, uptake was also consistently lower in men compared to women. However, the difference in uptake between the least deprived and most deprived areas was greater for women (23.4% points) than it was for men (21.1% points). That is, deprivation had a greater effect on uptake in women than in men.

Figure 2: Overall % uptake of bowel screening by deprivation category¹ and sex, Nov 2016 to Oct 2018

1. Deprivation category shown is the Scottish Index of Multiple Deprivation (SIMD) population-weighted quintiles for 2016.

Direct comparison of uptake in each deprivation category between FIT versus FOBT data shows that the improvement in uptake after the introduction of FIT was greater among people from more deprived areas. As a result, the introduction of FIT has reduced the difference in uptake between the most and least deprived groups by 2.9 percentage points from 23.7 to 20.8 percentage points (Table C3, KPI Report).

Analysis of trends in the level of inequality in uptake over time, using two standard indices (SII and RII) which incorporate information from all five deprivation categories rather than just the two extremes, suggest that the introduction of the new test may have begun to reduce the socio-economic differential in uptake. However, further years of data under FIT are required to provide conclusive evidence (Figures 2.1 and 2.2, KPI Report).
**Positivity (KPI 3)**

Positivity is the percentage of people that tested positive, out of those people who completed their test-kits. A positive test result is an indicator of a higher risk of bowel cancer, requiring further investigation, typically by colonoscopy. It is worth noting, however, that on further investigation, more than 9 in 10 of these people do not have bowel cancer (see KPI 21 below) – although they may have adenoma (KPI 22) or other bowel conditions. High positive test rates do not directly translate into higher levels of cancer or adenoma detection because faecal haemoglobin (blood in bowel movements) is also associated with deprivation (and sex and age) – perhaps for dietary reasons. Hence, many patients who test positive for blood in their stool will not have cancer or adenoma, although screening may highlight other bowel conditions.

For 2016/18, 2.6% of people in Scotland who completed their kits received a positive result. The positive test rate was higher in men (3.1%) than it was in women (2.1%). Of the mainland Health Boards, the Board with the highest positive test rate (for both males and females) was NHS Lanarkshire, with 3.6% for males and 2.5% for females. Higher positive test rates tend to be associated with areas with large concentrations of deprivation, such as Ayrshire and Arran, Greater Glasgow and Clyde, and Lanarkshire (KPI 3, KPI Report).

The percentage of people testing positive was higher using FIT, with those referred for further investigation increasing from 1.9% using FOBT to 3.1% using FIT (Table C6, KPI Report).

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Percentage of Colonoscopies Performed (KPI 5)

Colonoscopy is the first line examination following a positive screening test. In Scotland 77.3% of people with a positive test went on to have a colonoscopy performed, although this varied across Boards and by sex (Figure 3). The main reasons for individuals not proceeding to colonoscopy were that they declined the offer or that it was clinically inappropriate. For example, individuals already on surveillance programmes may not always proceed to colonoscopy after a positive screening test as they may recently already have had a surveillance colonoscopy.

For the mainland NHS Boards, the percentage of people with a positive bowel screening test result going on to have a colonoscopy performed varied from 72% (NHS Lothian) to 85% (NHS Dumfries and Galloway).

Figure 3: Percentage of people with a positive bowel screening test result going on to have a colonoscopy performed by NHS Board and sex, Nov 2016 to Oct 2018
Bowel Cancer Detection (KPI 8)

The bowel cancer detection rate describes the percentage of people who completed a screening test (i.e. received an outright positive or negative test result) that were found to have a bowel cancer. The bowel cancer detection rate for FIT of 0.12% was similar to that of FOBT at 0.11%. This is consistent with recently published findings from other screening programmes\(^2\). More cancers were detected in men than in women (0.15% of males vs. 0.08% of females), while the detection rate varied across mainland NHS Boards from 0.18% to 0.12% in men and 0.14% to 0.06% in women. Please note detection rates for individuals boards fluctuate over time (e.g. compare with 2015/17 report), and further analysis would be required to statistically test for difference in rates between Health Boards.

Stage at Diagnosis (KPIs 9 to 15)

Most screen-detected bowel cancers are detected at earlier rather than later stages of the disease. Dukes staging is a classification of the extent to which a bowel cancer has developed and spread. For the majority of patients with bowel cancer it is common practice to assign a letter from A to D to a cancer, with A indicating the cancer is confined to the bowel and D indicating that it has spread to other more distant parts of the body. Patients diagnosed with stage A disease tend to have better outcomes and longer survival compared to patients diagnosed with stage D disease, with over 95% of patients with Dukes A disease surviving for at least 5 years compared with only 5-10% of those with Dukes D. Figure 4 shows the percentage of screen detected cancer by stage at diagnosis in Scotland. The percentage of screen detected bowel cancers that were diagnosed at the earliest two stages (Dukes’ stages A or B) was 60.3%, with 38.6% of these Dukes’ A and 21.7% Dukes’ B.

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Adenoma Detection (KPI 19)

While bowel screening is primarily aimed at detecting cancer, it also identifies some adenomas. These are benign growths which may later develop into cancers. Removal of adenoma has been linked to a reduced risk of cancer\(^4\). The adenoma detection rate describes the percentage of people who completed a screening test (i.e. received an outright positive or negative test result) that had an adenoma (but did not have bowel cancer). A patient’s risk of developing cancer in the future can be classed as high, medium, low, or unclassified, depending on the size and number of adenomas found.

For 2016/18, the overall adenoma detection rate in Scotland was 0.8%, although the rate was twice as high in men at 1.2% as it was in women at 0.6%. The rate of adenoma detection varied across mainland NHS Boards from 0.98% to 1.36% in men and 0.45% to 0.63% in women. The adenoma detection rate was higher for FIT, with 1.0% vs. 0.6% of people found to have an adenoma under FIT and FOBT, respectively (Table C9, KPI Report).

Positive Predictive Value for Bowel Cancer (KPI 21)

Positive predictive value (PPV) of the screening test for cancer is the likelihood of a person with a positive screening test actually having cancer. Since not everyone with a positive bowel screening test will be fully investigated afterwards, it is calculated using only those screen-positive individuals who completed a colonoscopy. PPV for cancer is therefore calculated as the percentage of screen-positive people who completed a colonoscopy that were found to have bowel cancer.

For 2016/18, the positive predictive value of screening for bowel cancer in Scotland was 5.7%, although it was higher for men at 6.2% than for women at 5.1%. Comparing the new and old tests, the PPV of FIT for cancer was lower at 5.2% than FOBT at 6.8% (Table C8, KPI Report). Nevertheless, despite a lower PPV for cancer, more cancers were detected using FIT due to the higher uptake and higher percentage of positive tests, leading to more people proceeding on to colonoscopy.

\(^4\) Atkin WS, Saunders BP, Surveillance guidelines after removal of colorectal adenomatous polyps Gut 2002; 51:v6-v9 (https://gut.bmj.com/content/51/suppl_5/v6)
Positive Predictive Value for Adenoma (KPI 22)

Positive predictive value (PPV) of the screening test for adenoma is the likelihood of a person with a positive screening test actually having an adenoma. Since not everyone with a positive bowel screening test will be fully investigated afterwards, it is calculated using only those screen-positive individuals who completed a colonoscopy. PPV for adenoma is therefore calculated as the percentage of screen-positive people who completed a colonoscopy that were found to have an adenoma as the most serious diagnosis (i.e. excluding those with adenoma as well as bowel cancer).

For 2016/18, the positive predictive value of the current bowel screening test for adenoma was 42.2%, although it was higher for men at 48.2% compared to women at 34.3%. Comparing the new and old tests, the PPV of FIT for adenoma was higher at 43.5% than FOBT at 40.0% (Table C7, KPI Report).
### Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>Adenoma</strong></td>
<td>An adenoma is an overgrowth of harmless (benign) glandular cells. Glandular tissue is made up of cells that make and release liquids, enzymes, hormones or other chemicals. Adenomas can be a precursor to cancer and can be classed as high, medium, low or unclassified risk depending on size and number.</td>
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<tr>
<td><strong>Bowel cancer</strong></td>
<td>Also referred to as colorectal cancer. For the purposes of this publication bowel/colorectal cancer refers to bowel cancers (including polyp cancers, but excluding non-invasive lesions, such as carcinoma in situ).</td>
</tr>
<tr>
<td><strong>Colonoscopy</strong></td>
<td>A colonoscopy is an examination of the lining of the bowel wall. More information can be found at the following web address: <a href="https://www.nhsinform.scot/healthy-living/screening/bowel/bowel-screening">https://www.nhsinform.scot/healthy-living/screening/bowel/bowel-screening</a>.</td>
</tr>
<tr>
<td><strong>Dukes’ stage</strong></td>
<td>The ‘stage’ of a cancer relates to how big it is and where it has spread to. Dukes’ stage A means the cancer is only on the inner lining of the rectum or colon and is also possibly growing slightly into the muscle lining. Dukes’ stage D means the cancer has spread to another part of the body such as the liver or lung. (More information on cancer staging can be found on the Cancer Research UK website.)</td>
</tr>
<tr>
<td><strong>Deprivation gradient</strong></td>
<td>The ratio of percentages between the most and least deprived categories.</td>
</tr>
<tr>
<td><strong>Mainland health boards</strong></td>
<td>Health Boards in Scotland excluding the three Island Health Boards (Orkney, Shetland and Western Isles).</td>
</tr>
<tr>
<td><strong>Percentage points</strong></td>
<td>A percentage point is the unit for the arithmetic difference between two percentages.</td>
</tr>
<tr>
<td><strong>Positive Bowel Screening test result</strong></td>
<td>A positive bowel screening test result means that blood has been found in the samples. Most people will have a ‘negative’ result, which means that no blood was found in the samples. More information can be found at the following web address: <a href="https://www.nhsinform.scot/healthy-living/screening/bowel/bowel-screening">https://www.nhsinform.scot/healthy-living/screening/bowel/bowel-screening</a>.</td>
</tr>
<tr>
<td><strong>Positive Predictive Value</strong></td>
<td>The proportion of those who have a positive test who actually have the disease (bowel cancer).</td>
</tr>
<tr>
<td><strong>Relative Index of Inequality (RII)</strong></td>
<td>A summary measure of relative inequality. It is calculated by dividing the slope index of inequality (SII) by the mean value across all deprivation groups.</td>
</tr>
<tr>
<td><strong>Deprivation Category (SIMD)</strong></td>
<td>Deprivation for individuals is estimated from aggregate data derived from the census and other routine sources. These are used to estimate the deprivation of small geographical areas. The Scottish Index of Multiple Deprivation (SIMD) has seven domains (income, employment, education, housing, health, crime, and geographical access), which have been combined into an overall index to pick out area concentrations of multiple deprivation. ISD use population weighting when using SIMD. More information on SIMD can be found at the following web address: <a href="http://www.isdscotland.org/Products-and-Services/GPD-Support/Deprivation/SIMD/index.asp">http://www.isdscotland.org/Products-and-Services/GPD-Support/Deprivation/SIMD/index.asp</a>.</td>
</tr>
<tr>
<td><strong>Slope Index of Inequality (SII)</strong></td>
<td>A summary measure of absolute inequality. It is calculated by taking the difference between the extremes of a population weighted regression line of best fit.</td>
</tr>
<tr>
<td><strong>Surveillance programme</strong></td>
<td>Usually those with inflammatory bowel disease and those at moderate risk resulting from a family history of bowel cancer are placed in what is termed as a surveillance programme, with a view to diagnosing any cancers at an early stage.</td>
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## List of Tables

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<thead>
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<th>File name</th>
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<tr>
<td>Scottish Bowel Screening KPI Report</td>
<td>Excel 637 Kb</td>
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</tbody>
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Further Information
Further Information can be found on the ISD website.
For more information on Bowel Screening see the Bowel screening section of our website.
You can find more information on Detect Cancer Early (DCE) on the ISD website DCE pages. For related topics, please see the Cancer pages on the ISD website. The next release of this publication will be February 2020 (KPI Report and Summary only).

Rate This Publication
We welcome and encourage feedback from users on the content, format and relevance of our statistics. Please provide feedback on this publication to help us improve our services.

Acknowledgments
This work is a collaborative effort involving staff from across the NHS and partner organisations who collect, administer, quality assure, analyse and interpret patients’ data in order to improve Scotland’s health.
Appendices

Appendix 1: Background Information

In screening programmes, when the screening test is first applied to the population, this is known as the ‘prevalence round’ since it is to be expected that a number of prevalent cases will be detected. Potentially, some of these tumours may have been present for a number of years without causing symptoms or signs. In subsequent rounds of screening the cases detected will be known to have arisen in a fixed time period and these are known as ‘incidence rounds’. In the case of bowel screening the interval between rounds is two years.

Tayside, Grampian and Fife NHS Boards participated in the Scottish Bowel Screening Pilot which ran from March 2000 to May 2007. The pilot was successful and these Boards proceeded with the roll-out in June 2007, and by December 2009 all NHS Boards in Scotland were participating in the Programme. All NHS Boards have now completed their prevalence round and are established in their incidence rounds. The publication in August 2014 was the first report with all NHS Boards in their incidence rounds.

Due to small numbers of positive test results recorded for NHS Orkney, NHS Shetland and NHS Western Isles any comparison of figures of or with these NHS Boards should also be treated with caution.

Health Board Boundary Changes

On 1st April 2014, Scottish NHS Board boundaries were changed to align with those of local authorities. The purpose of this change was to help NHS Boards and local authorities to work closer together in the provision of care in the community. More information on the background to this change can be found on the Scottish Government website. The Boards most affected were NHS Greater Glasgow and Clyde and NHS Lanarkshire. Over 72,000 people were transferred from NHS Greater Glasgow and Clyde to NHS Lanarkshire. There were also over 16,000 people transferred from NHS Lanarkshire to NHS Greater Glasgow and Clyde.
## Appendix 2: Publication Metadata

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<th>Metadata Indicator</th>
<th>Description</th>
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<tr>
<td><strong>Publication title</strong></td>
<td>Scottish Bowel Screening Programme Statistics</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>This publication and the KPI Report present the Scottish Bowel Screening Programme Key Performance Indicators, which comprise measures of uptake, laboratory workload and clinical outcomes of screened individuals.</td>
</tr>
<tr>
<td><strong>Theme</strong></td>
<td>Health and Social Care</td>
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<tr>
<td><strong>Topic</strong></td>
<td>Conditions and Diseases</td>
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<td><strong>Format(s)</strong></td>
<td>PDF, Excel</td>
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<tr>
<td><strong>Data source(s)</strong></td>
<td>Scottish Bowel Screening Programme (SBoSP) Database</td>
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<tr>
<td><strong>Date that data are acquired</strong></td>
<td>May 2019</td>
</tr>
<tr>
<td><strong>Release date</strong></td>
<td>06 August 2019</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
<td>Bi-annual</td>
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<tr>
<td><strong>Timeframe of data and timeliness</strong></td>
<td>Data from 1 November 2016 to 31 October 2018. To increase completeness data published are at least six months after a positive test result.</td>
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<tr>
<td><strong>Continuity of data</strong></td>
<td>The roll-out of the Scottish Bowel Screening Programme was completed in December 2009 and the Programme has operated continuously from that time.</td>
</tr>
<tr>
<td><strong>Revisions statement</strong></td>
<td>Figures contained within each publication may be subject to change in future publications. See the ISD Revisions Policy</td>
</tr>
<tr>
<td><strong>Concepts and definitions</strong></td>
<td>Please see Cancer FAQs <a href="http://www.isdscotland.org/Health-Topics/Cancer/FAQ/">http://www.isdscotland.org/Health-Topics/Cancer/FAQ/</a></td>
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</tbody>
</table>
| **Relevance and key uses of the statistics** | ISD’s Scottish Bowel Screening Programme Statistics are designed for monitoring and evaluating the effectiveness of the Scottish Bowel Screening Programme, including monitoring progress against the specific national uptake standard and other performance targets. The statistics are used for a variety of other purposes, including:  
  • informing Scottish Government planning, including NHS spending and the development of the Scottish cancer care action plan;  
  • informing planning and commissioning of cancer services by NHS Health Boards;  
  • health services research and clinical audit;  
  • promoting changes in societal behaviour, such as increasing screening uptake;  
  • targeting common strategies to areas of low uptake; and  
  • providing information to compare with UK and international health data. |
<p>| <strong>Accuracy</strong>            | Bowel screening data are subject to validation and quality assurance procedures when submitted to ISD.                                                                                                      |</p>
<table>
<thead>
<tr>
<th><strong>Completeness</strong></th>
<th>See note on 'Timeframe of data and timeliness'. Currently, we are accepting data from NHS Boards after 6 months in the anticipation that the data will be complete. Assessments of this completeness will be done after data are available from all NHS Boards.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparability</strong></td>
<td>Bowel Screening data, both in Scotland and the UK as a whole, are fairly new data and once firmly established will be compared. It should be noted, however, that the four UK bowel screening programmes do not currently invite individuals of the same age range or use the same screening test.</td>
</tr>
<tr>
<td><strong>Accessibility</strong></td>
<td>It is the policy of ISD Scotland to make its websites and products accessible according to published guidelines.</td>
</tr>
<tr>
<td><strong>Coherence and clarity</strong></td>
<td>The Bowel Screening report is accessible via the ISD website at <a href="http://www.isdscotland.org/Health-Topics/Cancer/Bowel-Screening/">www.isdscotland.org/Health-Topics/Cancer/Bowel-Screening/</a></td>
</tr>
<tr>
<td><strong>Value type and unit of measurement</strong></td>
<td>Counts and percentages.</td>
</tr>
<tr>
<td><strong>Disclosure</strong></td>
<td>The ISD protocol on Statistical Disclosure Protocol is followed. For this publication, at the levels of aggregation presented, the risk of disclosure was assessed as being low risk and so no further statistical disclosure control methods were employed.</td>
</tr>
<tr>
<td><strong>Official Statistics designation</strong></td>
<td>National Statistics</td>
</tr>
<tr>
<td><strong>UK Statistics Authority Assessment</strong></td>
<td>Assessment by UK Statistics Authority for National Statistics designation completed.</td>
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<tr>
<td><strong>Last published</strong></td>
<td>05 February 2019</td>
</tr>
<tr>
<td><strong>Next published</strong></td>
<td>06 February 2020</td>
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<tr>
<td><strong>Date of first publication</strong></td>
<td>25 August 2009</td>
</tr>
<tr>
<td><strong>Help email</strong></td>
<td><a href="mailto:nss.isdCANCERSTATS@nhs.net">nss.isdCANCERSTATS@nhs.net</a></td>
</tr>
<tr>
<td><strong>Date form completed</strong></td>
<td>10 July 2019</td>
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</table>
Appendix 3: Early Access Details

Pre-Release Access
Under terms of the “Pre-Release Access to Official Statistics (Scotland) Order 2008”, ISD is obliged to publish information on those receiving Pre-Release Access (“Pre-Release Access” refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

Standard Pre-Release Access:
Scottish Government Health Department
NHS Board Chief Executives
NHS Board Communication Leads

Early Access for Management Information
These statistics will also have been made available to those who needed access to ‘management information’, i.e. as part of the delivery of health and care:

The Monitoring and Evaluation Group for the Scottish Bowel Screening Programme
The Scottish Screening Committee
Appendix 4: ISD and Official Statistics

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHS Scotland and the Scottish Government and others, responsive to the needs of NHS Scotland as the delivery of health and social care evolves.

Purpose: To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.


Vision: To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of ‘Official Statistics’. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD’s statistical publications are currently classified as one of the following:

- National Statistics (i.e. assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (i.e. legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (i.e. still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD’s statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the ISD website.