



Scottish Bowel Screening Programme

Key Performance Indicators Report: May 2012 data submission

Invitations between 1st November 2009 and 31st October 2011

v1.3

Bowel Screening:
Scottish Bowel Screening Programme

Roll out of NHS Boards in the Scottish Bowel Screening Programme.

| | Jun 07 | Sep 07 | Oct 07 | Dec 07 | May 08 | Jun 08 | Dec 08 | Apr 09 | Aug 09 | Oct 09 | Nov 09 | Dec 09 |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| NHS Tayside | | | | | | | | | | | | |
| NHS Grampian | | | | | | | | | | | | |
| NHS Fife | | | | | | | | | | | | |
| NHS Ayrshire & Arran | | | | | | | | | | | | |
| NHS Orkney | | | | | | | | | | | | |
| NHS Forth Valley | | | | | | | | | | | | |
| NHS Lothian | | | | | | | | | | | | |
| NHS Western Isles | | | | | | | | | | | | |
| NHS Dumfries & Galloway | | | | | | | | | | | | |
| NHS Greater Glasgow & Clyde | | | | | | | | | | | | |
| NHS Lanarkshire | | | | | | | | | | | | |
| NHS Shetland | | | | | | | | | | | | |
| NHS Borders | | | | | | | | | | | | |
| NHS Highland | | | | | | | | | | | | |

Prevalence and Incidence

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. 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.

NHS Tayside, NHS Grampian and NHS Fife Boards participated in the Scottish Bowel Screening Pilot scheme which ran from March 2000 to May 2007. The pilot was successful and these Boards then proceeded to roll out in June 2007. By December 2009 all NHS Boards in Scotland were participating in the programme. This report contains data for NHS Boards in their prevalence and incidence rounds and at different points within the rounds so any direct comparison of figures between NHS Boards must be treated with caution.

Small numbers of positive test results recorded for NHS Orkney, NHS Western Isles and NHS Shetland will again require that any direct comparison of figures be treated with caution.

Data completeness

The data presented come from information systems that have only recently been established. As is often the case with such systems the data are not yet entirely robust.

Key Points

Uptake was higher in women than in men.

Uptake was lowest in the most deprived areas.

Men were more likely than women to have a positive screening test result.

More cancers were detected in men than in women.

It is estimated that once the bowel screening is established mortality from bowel cancer will decrease by 16%, preventing approximately 150 premature deaths per year.

Data submitted to Information Services Division (ISD) May 2012 submission

Notes on the data

Data are submitted to ISD by BoSS (the bowel screening IT system) and by NHS Boards twice per year in May and November. NHS Fife did not submit data in May 2012.

This report contains the Key Performance Indicators for the May 2012 data submission. It includes a record of all eligible people invited to be screened between November 2009 and October 2011 (i.e. cases where the invite was between 1st November 2009 and 31st October 2011).

All data is presented by NHS Board and sex, identified by NHS Board name.

IMPORTANT: These data are based on the pre-2006 Health Board configuration (including former Argyll & Clyde).

Figures for NHS Highland do not include the Argyll & Bute area and figures for NHS Greater Glasgow do not include the Clyde area.

Key Performance Indicator Report November 2011 submission

1. Overall uptake of screening
2. Overall uptake of screening by Scottish Index of Multiple Deprivation (SIMD) 2009
3. Positive screening test result rate

Note: The 31 day and 62 day waiting time targets for screened patients are now reported by the Cancer Waiting Times Team

<http://www.isdscotland.org/Health-Topics/Waiting-Times/Cancer/>

KPI 4 is included here for reference only

4. Time from screening test result date to date colonoscopy performed
5. Percentage of people with a positive screening test result going on to have a colonoscopy performed
6. Colonoscopy completion rate
7. Percentage of colonoscopic complications
8. Crude cancer detection rate
9. Percentage of people with screen detected cancers that are Dukes' Stage A
10. Percentage of people with screen detected cancers that are Dukes' Stage B
11. Percentage of people with screen detected cancers that are Dukes' Stage C1
12. Percentage of people with screen detected cancers that are Dukes' Stage C2
13. Percentage of people with screen detected cancers that are Dukes' Stage D
14. Percentage of people with screen detected cancer that are Dukes' stage Not known
15. Percentage of people with screen detected cancers that are Not staged
16. Percentage of people with screen detected cancers that are staged
17. Polyp cancer detection rate
18. Percentage of polyp cancers
19. Overall adenoma detection rate
20. High risk adenoma detection rate
21. Positive Predictive Value of current screening test to cancer
22. Positive Predictive Value of all adenomas where adenoma is the most serious diagnosis
23. Positive Predictive Value of current screening test to high risk adenoma
24. Positive Predictive Value of current screening test to high risk adenoma or cancer
25. Positive Predictive Value of current screening test to any adenoma or cancer diagnosis
26. Percentage of people with screen detected cancers that are malignant neoplasms of the colon (ICD-10 C18)
27. Percentage of people with screen detected cancers that are malignant neoplasms of the rectosigmoid junction (ICD-10 C19)
28. Percentage of people with screen detected cancers that are malignant neoplasms of the rectum (ICD-10 C20)

1. Overall uptake of screening - percentage of people with screening test result, out of those invited

This relates only to persons successfully completing a screening test, i.e. an outright positive or negative result. Kits still within compliance are not counted and an adjustment is made for kits undelivered.

$$\frac{\text{No. of people in the denominator with a complete screening test result}^{\text{a}} \text{ available}}{\text{No. of people invited}^{\text{b}} \text{ in a specified period}} \times 100$$

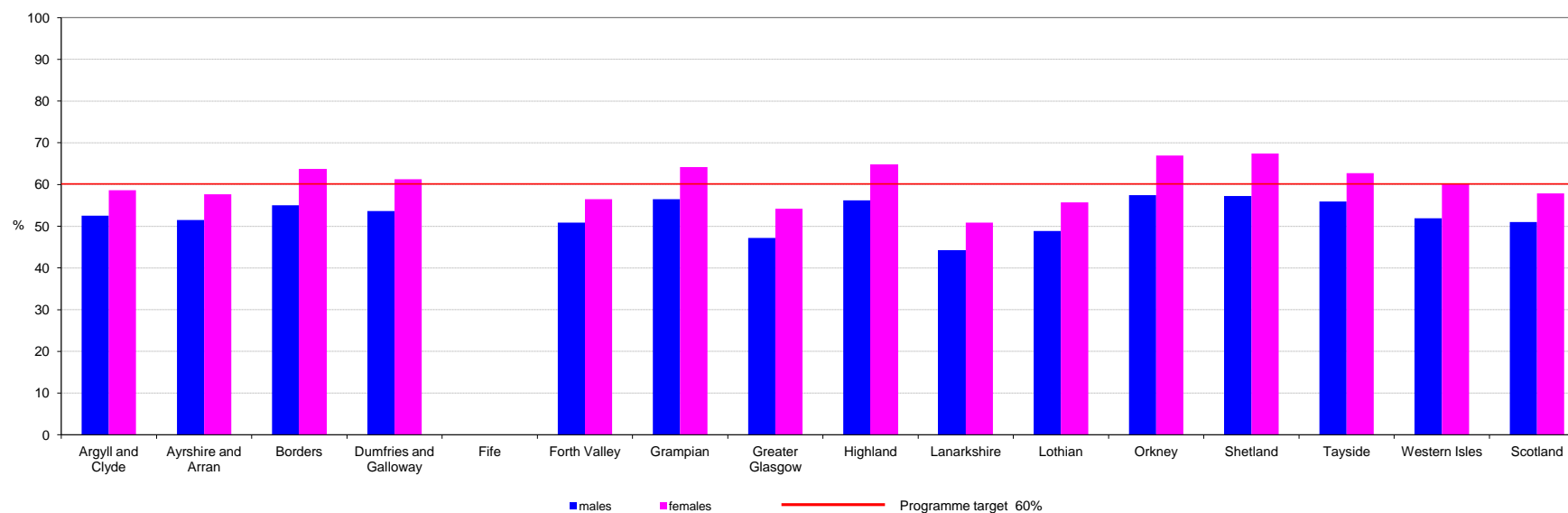
^a FOBT negative, FOBT positive, Wipe negative, Wipe positive, FIT negative and FIT positive.

^b The number of people invited minus those whose last kit is still within the 6 month compliance period or undelivered.

Table 1 Overall uptake of screening, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 52.6 | 51.5 | 55.0 | 53.6 | - | 50.9 | 56.5 | 47.2 | 56.2 | 44.2 | 48.9 | 57.5 | 57.3 | 56.0 | 51.9 | 51.0 |
| females | 58.6 | 57.6 | 63.6 | 61.3 | - | 56.5 | 64.1 | 54.2 | 64.7 | 50.9 | 55.7 | 67.0 | 67.4 | 62.7 | 60.1 | 57.9 |
| All persons | 55.7 | 54.7 | 59.4 | 57.5 | - | 53.8 | 60.3 | 50.7 | 60.5 | 47.7 | 52.4 | 62.2 | 62.2 | 59.4 | 55.9 | 54.5 |

Figure 1 Overall uptake of screening, by NHS Board and sex



2. Overall uptake of screening by Scottish Index of Multiple Deprivation (SIMD) 2009 - percentage of people with a screening test result for which a valid postcode is available, out of those invited

This relates only to persons successfully completing a screening test, i.e. an outright positive or negative result. Kits still within compliance are not counted and an adjustment is made for undelivered kits.

$$\frac{\text{No. of people in the denominator with a complete screening test result}^a \text{ available}}{\text{No. of people invited}^b \text{ in a specified period}} \times 100$$

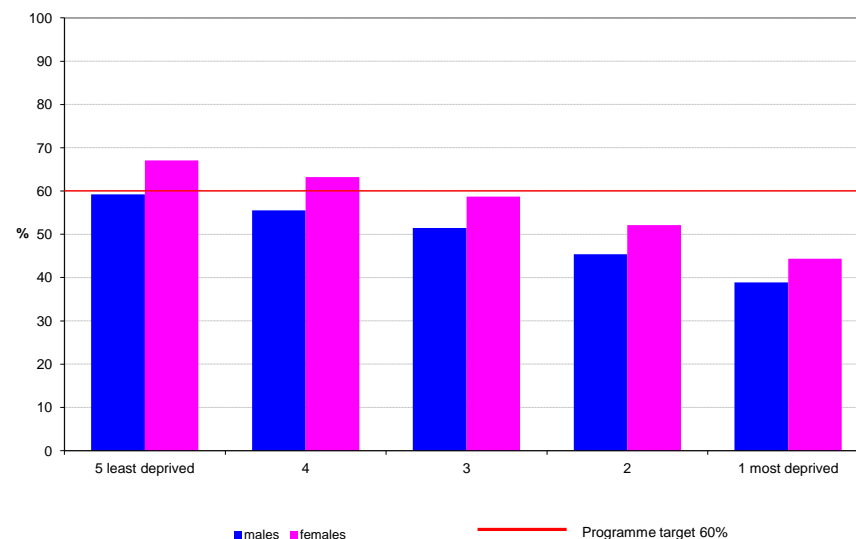
^a FOBT negative, FOBT positive, Wipe negative, Wipe positive, FIT negative and FIT positive.

^b The number of people invited minus those whose last kit is still within the 6 month compliance period or undelivered.

Table 2 Overall uptake of screening, by NHS Board, SIMD and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|--------------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | | | | | | | | | | | | | | | | |
| 5 least deprived | 60.8 | 61.4 | 60.6 | 63.9 | - | 59.7 | 61.2 | 58.2 | 62.1 | 53.6 | 56.8 | 76.3 | 64.8 | 64.6 | 60.0 | 59.2 |
| 4 | 57.3 | 57.3 | 56.2 | 57.4 | - | 54.2 | 58.3 | 53.4 | 58.0 | 50.4 | 50.1 | 58.3 | 60.9 | 58.9 | 66.7 | 55.5 |
| 3 | 54.4 | 53.0 | 53.0 | 53.7 | - | 49.4 | 53.7 | 47.9 | 56.3 | 45.8 | 45.5 | 54.6 | 55.2 | 56.3 | 53.4 | 51.5 |
| 2 | 49.3 | 48.3 | 49.1 | 48.9 | - | 44.9 | 47.7 | 43.8 | 51.3 | 41.3 | 40.7 | 54.3 | 52.8 | 47.8 | 50.5 | 45.4 |
| 1 most deprived | 42.1 | 42.3 | 46.1 | 40.7 | - | 38.1 | 36.5 | 38.4 | 43.0 | 35.5 | 35.1 | 0.0 | 50.0 | 42.2 | 0.0 | 38.9 |
| females | | | | | | | | | | | | | | | | |
| 5 least deprived | 67.9 | 68.6 | 69.6 | 70.7 | - | 66.3 | 69.7 | 66.7 | 69.1 | 61.4 | 65.1 | 79.6 | 75.0 | 71.0 | 66.7 | 67.1 |
| 4 | 63.7 | 64.8 | 65.7 | 64.8 | - | 61.0 | 66.2 | 61.5 | 67.3 | 57.4 | 57.8 | 69.2 | 69.8 | 66.3 | 66.7 | 63.2 |
| 3 | 60.9 | 59.3 | 61.1 | 62.3 | - | 55.8 | 61.3 | 54.5 | 65.2 | 53.2 | 52.5 | 64.7 | 64.6 | 62.9 | 62.3 | 58.7 |
| 2 | 55.4 | 54.4 | 59.3 | 56.8 | - | 49.2 | 54.9 | 51.1 | 59.1 | 48.0 | 47.1 | 61.0 | 70.0 | 55.7 | 58.3 | 52.1 |
| 1 most deprived | 47.5 | 47.3 | 47.8 | 44.8 | - | 42.5 | 43.4 | 44.3 | 52.9 | 41.0 | 39.5 | 100.0 | 0.0 | 47.0 | 100.0 | 44.3 |
| All persons | | | | | | | | | | | | | | | | |
| 5 least deprived | 64.4 | 65.1 | 65.3 | 67.4 | - | 63.1 | 65.5 | 62.6 | 65.8 | 57.6 | 61.1 | 77.9 | 69.8 | 67.9 | 63.6 | 63.3 |
| 4 | 60.6 | 61.2 | 61.0 | 61.2 | - | 57.7 | 62.2 | 57.5 | 62.7 | 54.0 | 54.0 | 63.8 | 65.3 | 62.6 | 66.7 | 59.4 |
| 3 | 57.7 | 56.2 | 57.1 | 58.0 | - | 52.7 | 57.5 | 51.3 | 60.8 | 49.7 | 49.0 | 59.8 | 59.8 | 59.7 | 57.9 | 55.2 |
| 2 | 52.5 | 51.4 | 54.3 | 52.9 | - | 47.1 | 51.3 | 47.5 | 55.3 | 44.8 | 44.0 | 57.6 | 61.2 | 51.8 | 54.3 | 48.9 |
| 1 most deprived | 44.8 | 44.9 | 47.0 | 42.8 | - | 40.4 | 39.8 | 41.3 | 47.9 | 38.3 | 37.3 | 33.3 | 25.0 | 44.6 | 100.0 | 41.6 |

Figure 2 Overall uptake of screening for Scotland



3. Positive screening test result rate - percentage of people with a positive test result, out of those with a completed screening test result available

$$\frac{\text{No. of people with a positive screening test result}}{\text{No. of people with a complete screening test result}} \times 100$$

Table 3 Positive screening test result rate, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 3.6 | 3.1 | 3.0 | 2.5 | - | 3.2 | 2.6 | 4.0 | 3.2 | 4.0 | 2.9 | 2.2 | 3.3 | 2.5 | 3.8 | 3.2 |
| females | 2.1 | 1.9 | 1.7 | 1.6 | - | 2.1 | 1.5 | 2.4 | 1.7 | 2.4 | 1.7 | 1.7 | 1.9 | 1.6 | 2.5 | 1.9 |
| All persons | 2.8 | 2.5 | 2.3 | 2.0 | - | 2.6 | 2.0 | 3.1 | 2.4 | 3.1 | 2.2 | 1.9 | 2.6 | 2.0 | 3.1 | 2.5 |

Figure 3 Positive screening test result rate, by NHS Board and sex

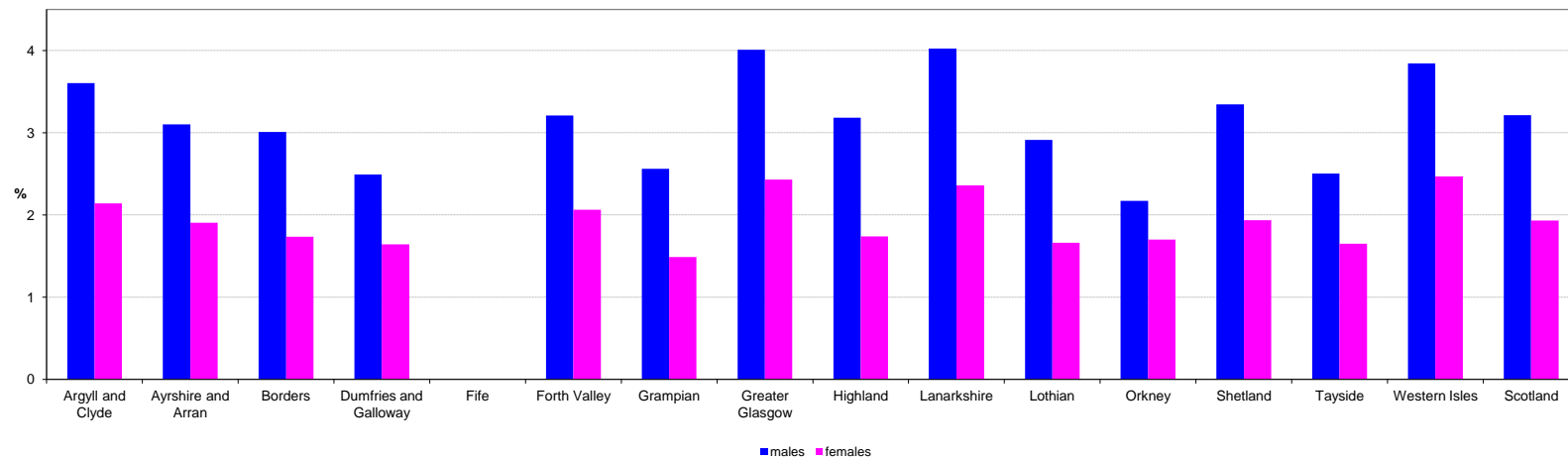
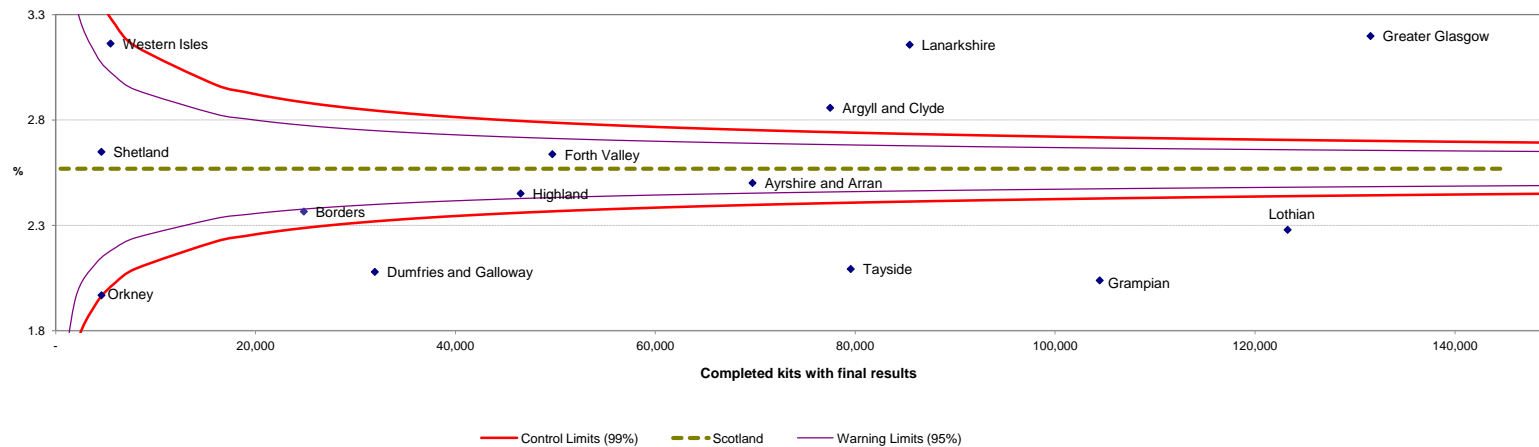


Figure 3.1 Positive screening test result rate, by NHS Board



Note: Lower results would be expected from Fife, Grampian and Tayside as these NHS Boards started screening as part of the pilot.

4. Time from screening test referral date to date colonoscopy performed - percentage of people where the time between the referral date and the date the colonoscopy was performed was within a specified time, out of all of those with a positive screening result date and a colonoscopy performed date

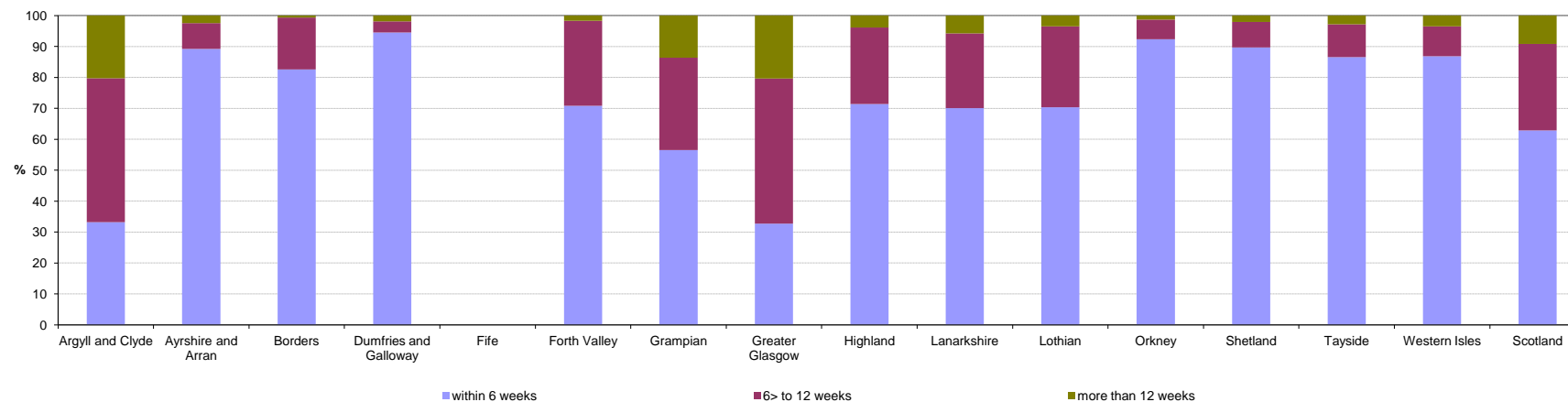
No. of people in the denominator for whom the time interval between the screening test referral date and the date the colonoscopy was performed is within a specified time^a x100
No. of positive referrals

^a within 6 weeks, 6-12 weeks, and more than 12 weeks

Table 4 Time from screening test referral date to date colonoscopy performed, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|--------------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | | | | | | | | | | | | | | | | |
| within 6 weeks | 32.4 | 88.5 | 80.9 | 94.8 | - | 72.1 | 55.9 | 32.9 | 70.2 | 68.6 | 70.5 | 87.8 | 93.2 | 86.4 | 87.7 | 62.3 |
| 6> to 12 weeks | 47.0 | 8.8 | 18.4 | 3.5 | - | 26.5 | 30.8 | 46.5 | 25.5 | 25.5 | 25.7 | 9.8 | 5.1 | 10.9 | 11.1 | 28.4 |
| more than 12 weeks | 20.6 | 2.7 | 0.7 | 1.6 | - | 1.4 | 13.3 | 20.7 | 4.2 | 5.9 | 3.8 | 2.4 | 1.7 | 2.6 | 1.2 | 9.3 |
| females | | | | | | | | | | | | | | | | |
| within 6 weeks | 34.2 | 90.3 | 85.0 | 94.1 | - | 69.2 | 57.5 | 32.6 | 73.1 | 72.1 | 70.2 | 97.3 | 84.2 | 86.7 | 85.9 | 63.6 |
| 6> to 12 weeks | 46.1 | 7.6 | 14.5 | 3.8 | - | 28.6 | 28.4 | 47.4 | 23.5 | 22.3 | 26.8 | 2.7 | 13.2 | 10.1 | 7.8 | 27.4 |
| more than 12 weeks | 19.7 | 2.1 | 0.5 | 2.1 | - | 2.2 | 14.1 | 20.0 | 3.3 | 5.5 | 3.0 | 0.0 | 2.6 | 3.1 | 6.3 | 8.9 |
| All persons | | | | | | | | | | | | | | | | |
| within 6 weeks | 33.2 | 89.3 | 82.6 | 94.5 | - | 70.8 | 56.5 | 32.8 | 71.4 | 70.0 | 70.4 | 92.3 | 89.7 | 86.5 | 86.9 | 62.9 |
| 6> to 12 weeks | 46.6 | 8.3 | 16.8 | 3.7 | - | 27.4 | 29.9 | 46.8 | 24.8 | 24.2 | 26.1 | 6.4 | 8.2 | 10.6 | 9.7 | 28.0 |
| more than 12 weeks | 20.2 | 2.4 | 0.6 | 1.8 | - | 1.7 | 13.6 | 20.4 | 3.9 | 5.8 | 3.5 | 1.3 | 2.1 | 2.9 | 3.4 | 9.2 |

Figure 4 Time from screening test referral date to date colonoscopy performed, by NHS Board



5. Percentage of people with a positive screening test result going on to have a colonoscopy performed

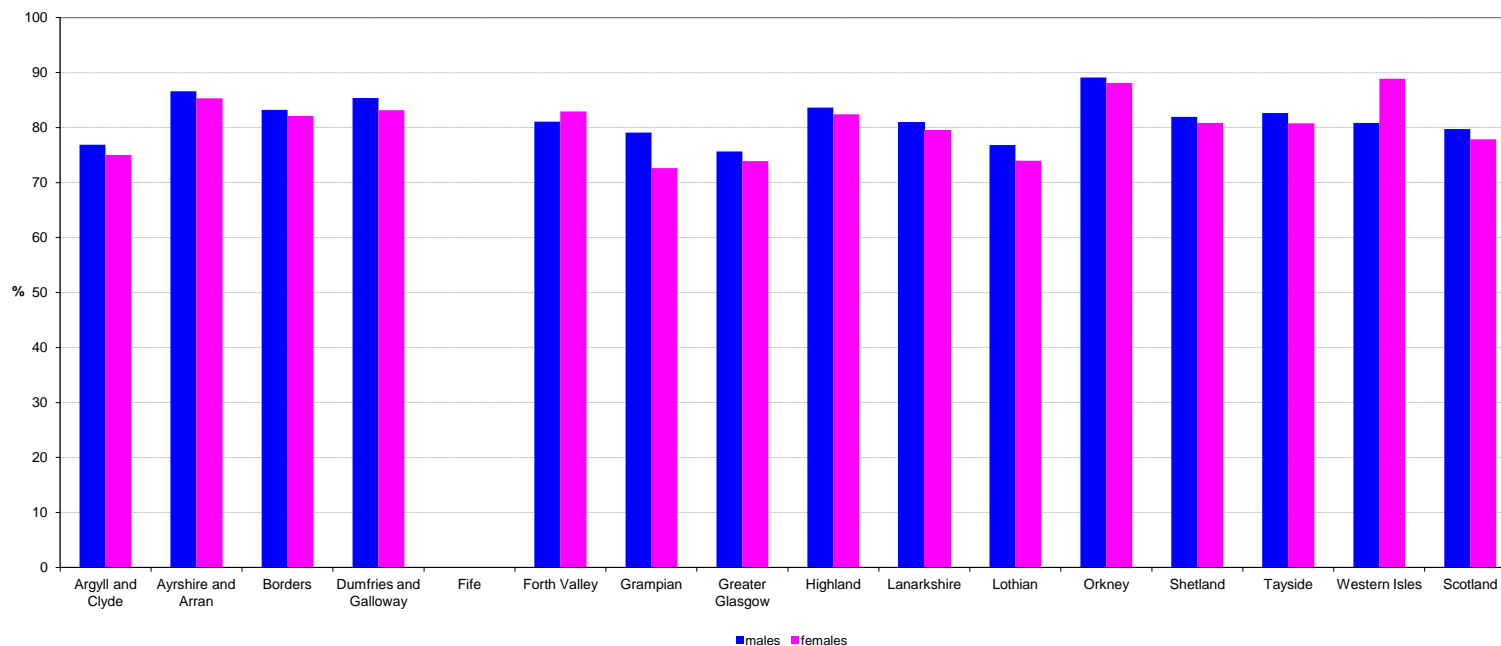
$$\frac{\text{No. of people in denominator who have a colonoscopy performed}}{\text{No. of people with a positive screening test result}} \times 100$$

Comment: The main reasons people do not proceed to colonoscopy are because of a clinical decision or because they declined

Table 5 Percentage of people with a positive screening test result going on to have a colonoscopy performed, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 76.9 | 86.6 | 83.2 | 85.4 | - | 81.1 | 79.1 | 75.7 | 83.7 | 81.0 | 76.8 | 89.1 | 81.9 | 82.7 | 80.8 | 79.7 |
| females | 75.0 | 85.3 | 82.1 | 83.2 | - | 82.9 | 72.7 | 73.9 | 82.4 | 79.6 | 73.9 | 88.1 | 80.9 | 80.8 | 88.9 | 77.9 |
| All persons | 76.1 | 86.1 | 82.8 | 84.4 | - | 81.9 | 76.5 | 74.9 | 83.2 | 80.5 | 75.6 | 88.6 | 81.5 | 81.8 | 84.2 | 79.0 |

Figure 5 Percentage of people with a positive screening test result going on to have a colonoscopy performed, by NHS Board and sex



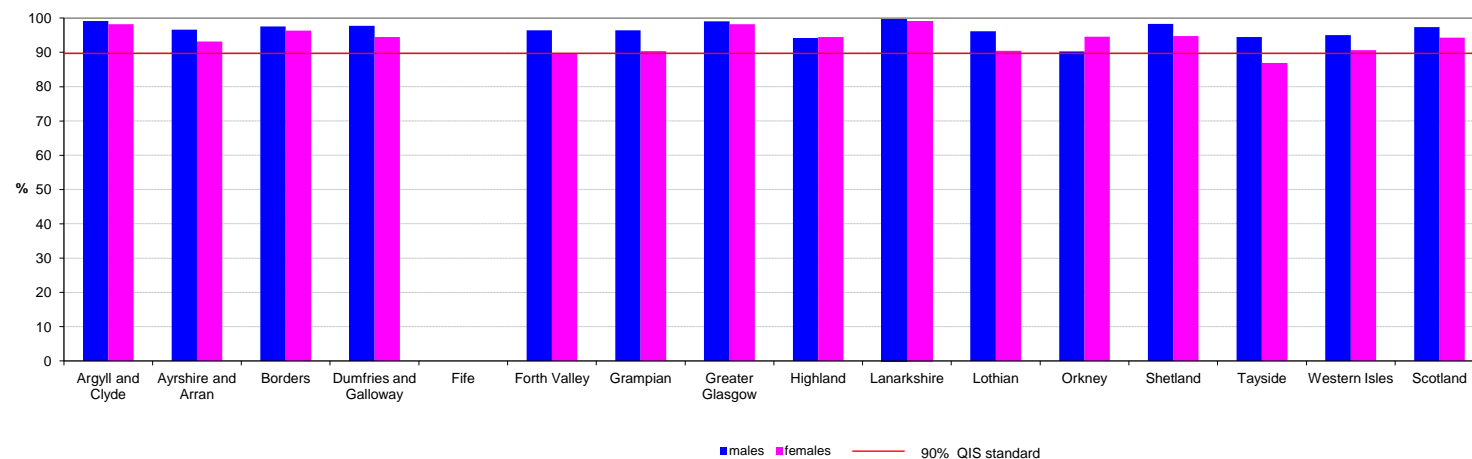
6. Colonoscopy completion rate - percentage of people having a completed colonoscopy, out of those who had a colonoscopy performed

$$\frac{\text{No. of people with a completed colonoscopy}}{\text{No. of people who have had a colonoscopy performed}} \times 100$$

Table 6 Colonoscopy completion rate, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|---------------------|-----------------------|---------|--------------------------|------|--------------|----------|--------------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 99.2 | 96.6 | 97.5 | 97.7 | - | 96.5 | 96.5 | 99.0 | 94.2 | 99.8 | 96.2 | 90.2 | 98.3 | 94.5 | 95.0 | 97.4 |
| females | 98.2 | 93.2 | 96.4 | 94.5 | - | 89.8 | 90.4 | 98.2 | 94.5 | 99.2 | 90.4 | 94.6 | 94.7 | 86.9 | 90.6 | 94.3 |
| All persons | 98.8 | 95.2 | 97.1 | 96.3 | - | 93.5 | 94.1 | 98.7 | 94.3 | 99.5 | 93.9 | 92.3 | 96.9 | 91.2 | 93.1 | 96.1 |

Figure 6 Colonoscopy completion rate, by NHS Board and sex



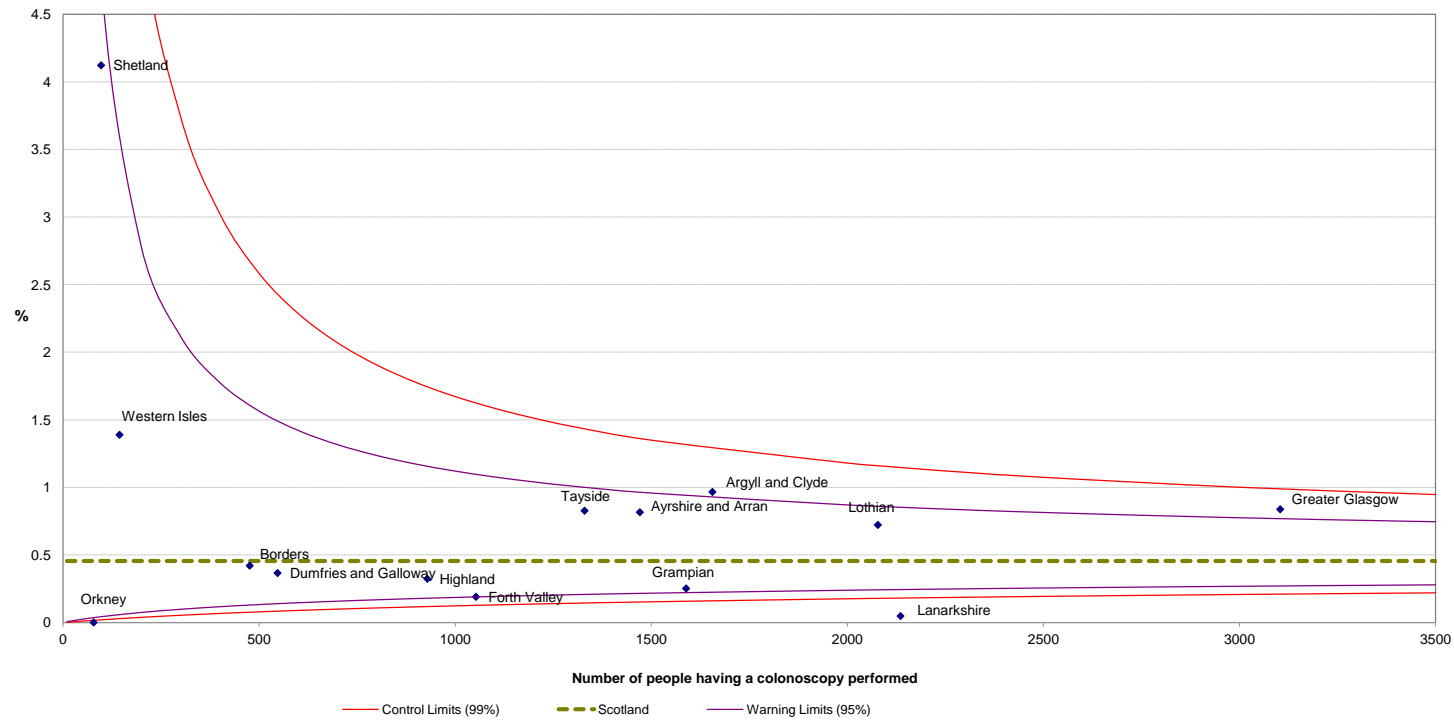
7. Percentage of colonoscopic complications - percentage of people requiring admission for complications arising directly from the colonoscopy, out of those who had a colonoscopy performed

$\frac{\text{No. of people admitted for complications as a result of colonoscopy}}{\text{No. of people who have had a colonoscopy performed}} \times 100$

Table 7 Percentage of colonoscopic complications, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 1.1 | 0.6 | 0.7 | 0.3 | - | 0.2 | 0.1 | 0.7 | 0.4 | 0.1 | 1.0 | 0.0 | 6.8 | 0.8 | 1.3 | 0.6 |
| females | 0.7 | 1.1 | 0.0 | 0.4 | - | 0.2 | 0.5 | 1.1 | 0.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.9 | 1.6 | 0.6 |
| All persons | 1.0 | 0.8 | 0.4 | 0.4 | - | 0.2 | 0.3 | 0.8 | 0.3 | 0.0 | 0.7 | 0.0 | 4.1 | 0.8 | 1.4 | 0.6 |

Figure 7 Percentage of colonoscopic complications, by NHS Board and sex



8. Crude cancer detection rate - percentage of people with cancer, out of those with a completed screening test result available

$$\frac{\text{No. of people in the denominator with screen detected colorectal cancers}^a}{\text{No. of people with a complete screening test result}} \times 100$$

^a includes polyp cancers

Table 8 Crude cancer detection rate, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 0.19 | 0.17 | 0.25 | 0.29 | - | 0.15 | 0.18 | 0.20 | 0.31 | 0.25 | 0.19 | 0.09 | 0.33 | 0.17 | 0.19 | 0.20 |
| females | 0.09 | 0.09 | 0.10 | 0.19 | - | 0.12 | 0.05 | 0.09 | 0.07 | 0.07 | 0.07 | 0.04 | 0.29 | 0.09 | 0.17 | 0.09 |
| All persons | 0.13 | 0.13 | 0.17 | 0.23 | - | 0.13 | 0.11 | 0.14 | 0.18 | 0.15 | 0.12 | 0.07 | 0.31 | 0.13 | 0.18 | 0.14 |

Figure 8 Crude cancer detection rate, by NHS Board and sex

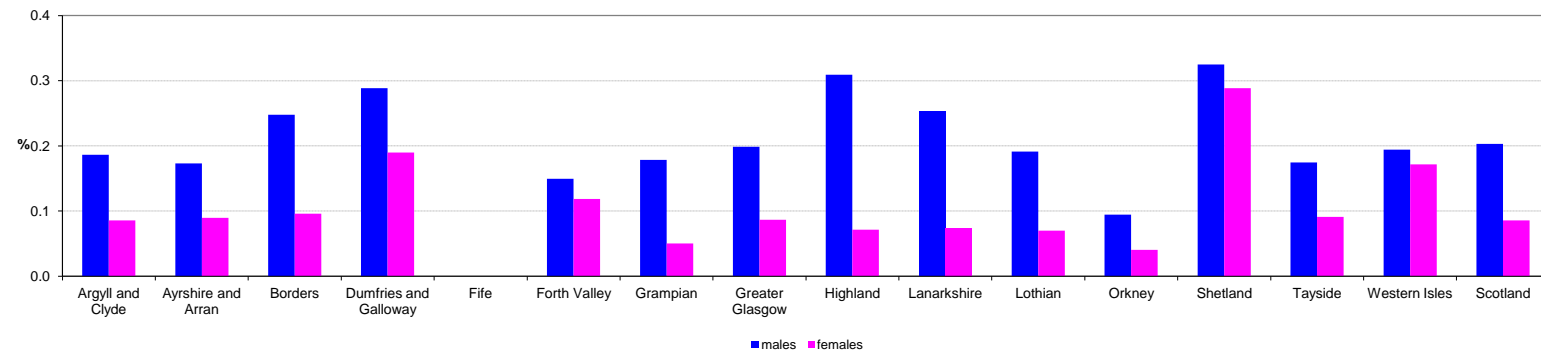
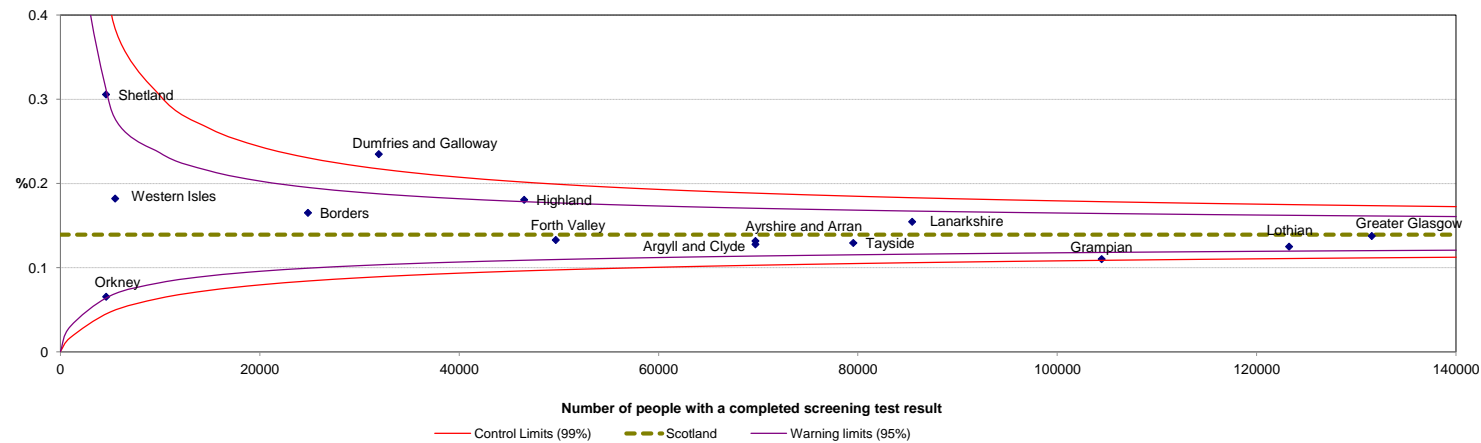


Figure 8.1 Crude cancer detection rate for both sexes, by NHS Board



9. Percentage of people with screen detected cancers that are Dukes' stage A - must have histological confirmation

$$\frac{\text{No. of people in the denominator with Dukes' stage A cancer}}{\text{No. of people with a screen detected colorectal cancer}} \times 100$$

Table 9 Percentage of people with screen detected cancers that are Dukes' stage A, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 31.8 | 43.6 | 21.4 | 28.6 | - | 32.4 | 24.1 | 24.4 | 50.0 | 29.9 | 13.1 | 0.0 | 42.9 | 26.6 | 20.0 | 28.4 |
| females | 38.9 | 41.2 | 46.2 | 33.3 | - | 28.1 | 28.6 | 22.6 | 22.2 | 31.4 | 17.0 | 0.0 | 14.3 | 23.1 | 20.0 | 28.2 |
| All persons | 34.3 | 42.7 | 29.3 | 30.7 | - | 30.3 | 25.2 | 23.8 | 44.0 | 30.3 | 14.3 | 0.0 | 28.6 | 25.2 | 20.0 | 28.3 |

10. Percentage of people with screen detected cancers that are Dukes' stage B - must have histological confirmation

$$\frac{\text{No. of people in the denominator with Dukes' stage B cancer}}{\text{No. of people with a screen detected colorectal cancer}} \times 100$$

Table 10 Percentage of people with screen detected cancers that are Dukes' stage B, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 18.2 | 25.5 | 25.0 | 23.8 | - | 23.5 | 27.6 | 19.3 | 25.8 | 19.6 | 15.0 | 0.0 | 0.0 | 21.9 | 20.0 | 21.2 |
| females | 16.7 | 23.5 | 23.1 | 21.2 | - | 31.3 | 21.4 | 29.0 | 61.1 | 28.6 | 27.7 | 0.0 | 57.1 | 17.9 | 40.0 | 26.9 |
| All persons | 17.6 | 24.7 | 24.4 | 22.7 | - | 27.3 | 26.1 | 22.7 | 33.3 | 22.0 | 18.8 | 0.0 | 28.6 | 20.4 | 30.0 | 23.1 |

11. Percentage of people with screen detected cancers that are Dukes' stage C1 - must have histological confirmation

$$\frac{\text{No. of people in the denominator with Dukes' stage C1 cancer}}{\text{No. of people with a screen detected colorectal cancer}} \times 100$$

Table 11 Percentage of people with screen detected cancers that are Dukes' stage C1, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 19.7 | 21.8 | 28.6 | 19.0 | - | 17.6 | 27.6 | 22.7 | 21.2 | 19.6 | 21.5 | 0.0 | 0.0 | 25.0 | 40.0 | 22.1 |
| females | 19.4 | 26.5 | 15.4 | 12.1 | - | 21.9 | 25.0 | 21.0 | 5.6 | 31.4 | 23.4 | 0.0 | 28.6 | 23.1 | 20.0 | 21.5 |
| All persons | 19.6 | 23.6 | 24.4 | 16.0 | - | 19.7 | 27.0 | 22.1 | 17.9 | 22.7 | 22.1 | 0.0 | 14.3 | 24.3 | 30.0 | 21.9 |

12. Percentage of people with screen detected cancers that are Dukes' stage C2 - must have histological confirmation

$$\frac{\text{No. of people in the denominator with Dukes' stage C2 cancer}}{\text{No. of people with a screen detected colorectal cancer}} \times 100$$

Table 12 Percentage of people with screen detected cancers that are Dukes' stage C2, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 3.0 | 0.0 | 0.0 | 2.4 | - | 2.9 | 2.3 | 1.7 | 1.5 | 3.1 | 3.7 | 0.0 | 0.0 | 0.0 | 20.0 | 2.2 |
| females | 0.0 | 0.0 | 0.0 | 6.1 | - | 0.0 | 0.0 | 0.0 | 11.1 | 2.9 | 8.5 | 0.0 | 0.0 | 2.6 | 0.0 | 2.6 |
| All persons | 2.0 | 0.0 | 0.0 | 4.0 | - | 1.5 | 1.7 | 1.1 | 3.6 | 3.0 | 5.2 | 0.0 | 0.0 | 1.0 | 10.0 | 2.3 |

13. Percentage of people with screen detected cancers that are Dukes' stage D

$$\frac{\text{No. of people in the denominator with Dukes' stage D cancer}}{\text{No. of people with a screen detected colorectal cancer}} \times 100$$

Table 13 Percentage of people with screen detected cancers that are Dukes' stage D, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 0.0 | 3.6 | 0.0 | 0.0 | - | 0.0 | 4.6 | 0.0 | 1.5 | 6.2 | 0.9 | 0.0 | 0.0 | 3.1 | 0.0 | 2.1 |
| females | 0.0 | 5.9 | 0.0 | 0.0 | - | 3.1 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.3 | 0.0 | 2.1 |
| All persons | 0.0 | 4.5 | 0.0 | 0.0 | - | 1.5 | 4.3 | 0.0 | 1.2 | 4.5 | 0.6 | 0.0 | 0.0 | 5.8 | 0.0 | 2.1 |

14. Percentage of people with screen detected cancers that are Dukes' stage Not known

$$\frac{\text{No. of people in the denominator with Dukes' stage Not known}}{\text{No. of people with a screen detected colorectal cancer}} \times 100$$

NB: Dukes' stage **Not known** is where the Dukes' stage has not been pathologically determined.

Table 14 Percentage of people with screen detected cancers that are Dukes' stage Not known, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 21.2 | 1.8 | 3.6 | 0.0 | - | 2.9 | 1.1 | 26.9 | 0.0 | 6.2 | 26.2 | 0.0 | 57.1 | 3.1 | 0.0 | 11.6 |
| females | 25.0 | 2.9 | 0.0 | 3.0 | - | 3.1 | 3.6 | 22.6 | 0.0 | 2.9 | 8.5 | 0.0 | 0.0 | 2.6 | 0.0 | 8.5 |
| All persons | 22.5 | 2.2 | 2.4 | 1.3 | - | 3.0 | 1.7 | 25.4 | 0.0 | 5.3 | 20.8 | 0.0 | 28.6 | 2.9 | 0.0 | 10.5 |

15. Percentage of people with screen detected cancers that are Not stated

$$\frac{\text{No. of people in the denominator with screen detected cancers that are Not stated}}{\text{No. of people with a screen detected colorectal cancer}} \times 100$$

NB: Dukes' stage **Not stated** is where the staging data has not yet been supplied.

Table 15 Percentage of people with screen detected cancers that are Not stated, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 6.1 | 3.6 | 21.4 | 26.2 | - | 20.6 | 12.6 | 5.0 | 0.0 | 15.5 | 19.6 | 100.0 | 0.0 | 20.3 | 0.0 | 12.6 |
| females | 0.0 | 0.0 | 15.4 | 24.2 | - | 12.5 | 17.9 | 4.8 | 0.0 | 2.9 | 14.9 | 100.0 | 0.0 | 20.5 | 20.0 | 10.3 |
| All persons | 3.9 | 2.2 | 19.5 | 25.3 | - | 16.7 | 13.9 | 5.0 | 0.0 | 12.1 | 18.2 | 100.0 | 0.0 | 20.4 | 10.0 | 11.8 |

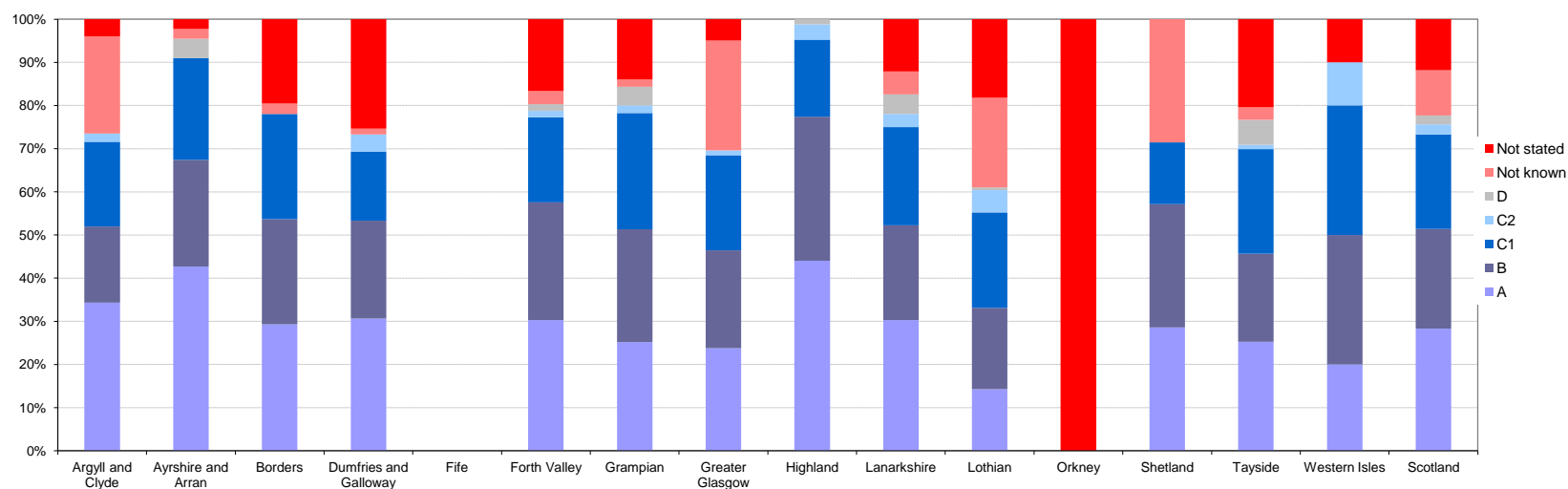
16. Percentage of people with screen detected cancers that are staged - must have histological confirmation

$$\frac{\text{No. of people in the denominator with any staged cancer}}{\text{No. of people with a screen detected colorectal cancer}} \times 100$$

Table 16 Percentage of people with screen detected cancers that are staged, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 93.9 | 96.4 | 78.6 | 73.8 | - | 79.4 | 87.4 | 95.0 | 100.0 | 84.5 | 80.4 | 0.0 | 100.0 | 79.7 | 100.0 | 87.4 |
| females | 100.0 | 100.0 | 84.6 | 75.8 | - | 87.5 | 82.1 | 95.2 | 100.0 | 97.1 | 85.1 | 0.0 | 100.0 | 79.5 | 80.0 | 89.7 |
| All persons | 96.1 | 97.8 | 80.5 | 74.7 | - | 83.3 | 86.1 | 95.0 | 100.0 | 87.9 | 81.8 | 0.0 | 100.0 | 79.6 | 90.0 | 88.2 |

Figure 16.1 Percentages of people with screen detected cancers that are: Dukes' A, Dukes' B, Dukes' C1, Dukes' C2, Dukes' D, Not known or Not stated, by NHS Board



NB: Dukes' stage **Not stated** is where the staging data has not yet been supplied.

17. Polyp cancer detection rate - percentage of people with polyp cancer out of those with a completed screening test result available

$$\frac{\text{No. of people in the denominator with polyp cancer}}{\text{No. of people with a complete screening test result}} \times 100$$

Table 17 Polyp cancer detection rate, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 0.02 | 0.03 | 0.05 | 0.08 | - | 0.02 | 0.04 | 0.04 | 0.05 | 0.07 | 0.07 | 0.09 | 0.19 | 0.06 | 0.0 | 0.05 |
| females | 0.01 | 0.01 | 0.04 | 0.04 | - | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.04 | 0.0 | 0.03 | 0.03 | 0.02 |
| All persons | 0.02 | 0.02 | 0.04 | 0.06 | - | 0.02 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.07 | 0.09 | 0.04 | 0.02 | 0.03 |

Figure 17. Polyp cancer detection rate, by NHS Board and sex

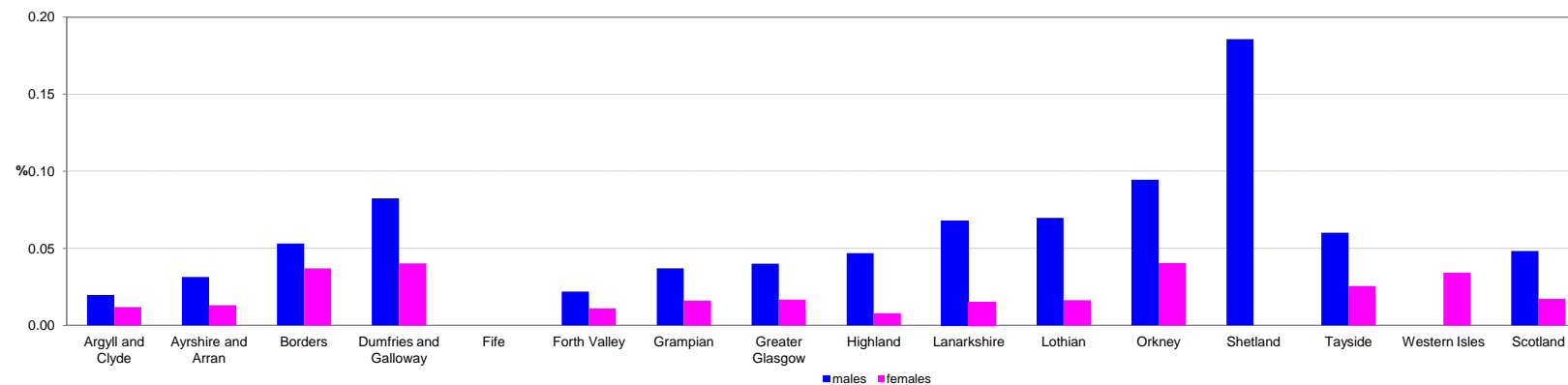
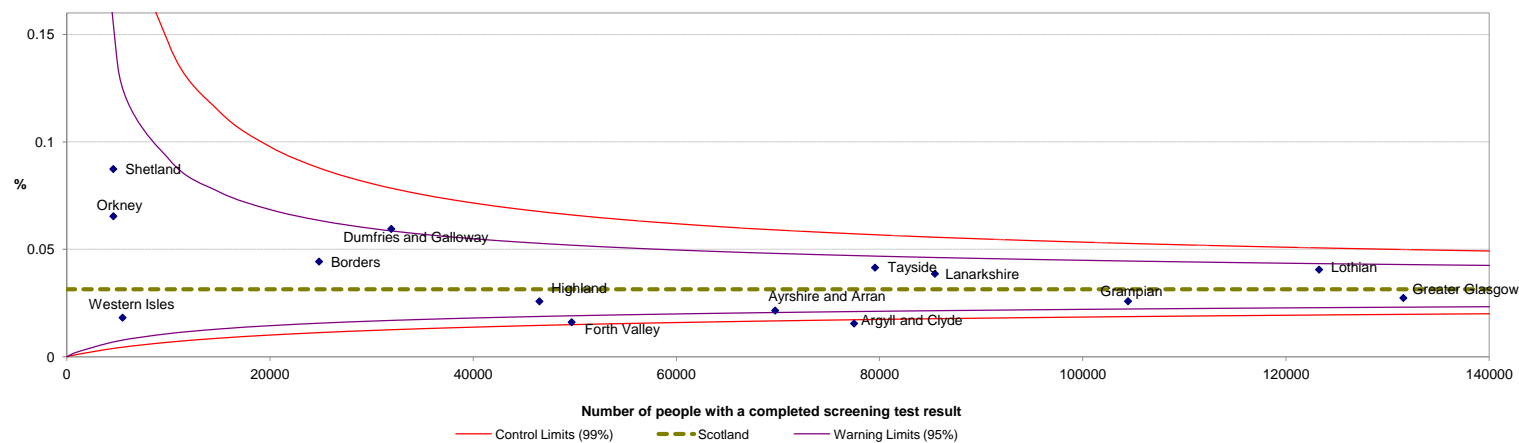


Figure 17.1 Polyp cancer detection rate for both sexes, by NHS Board



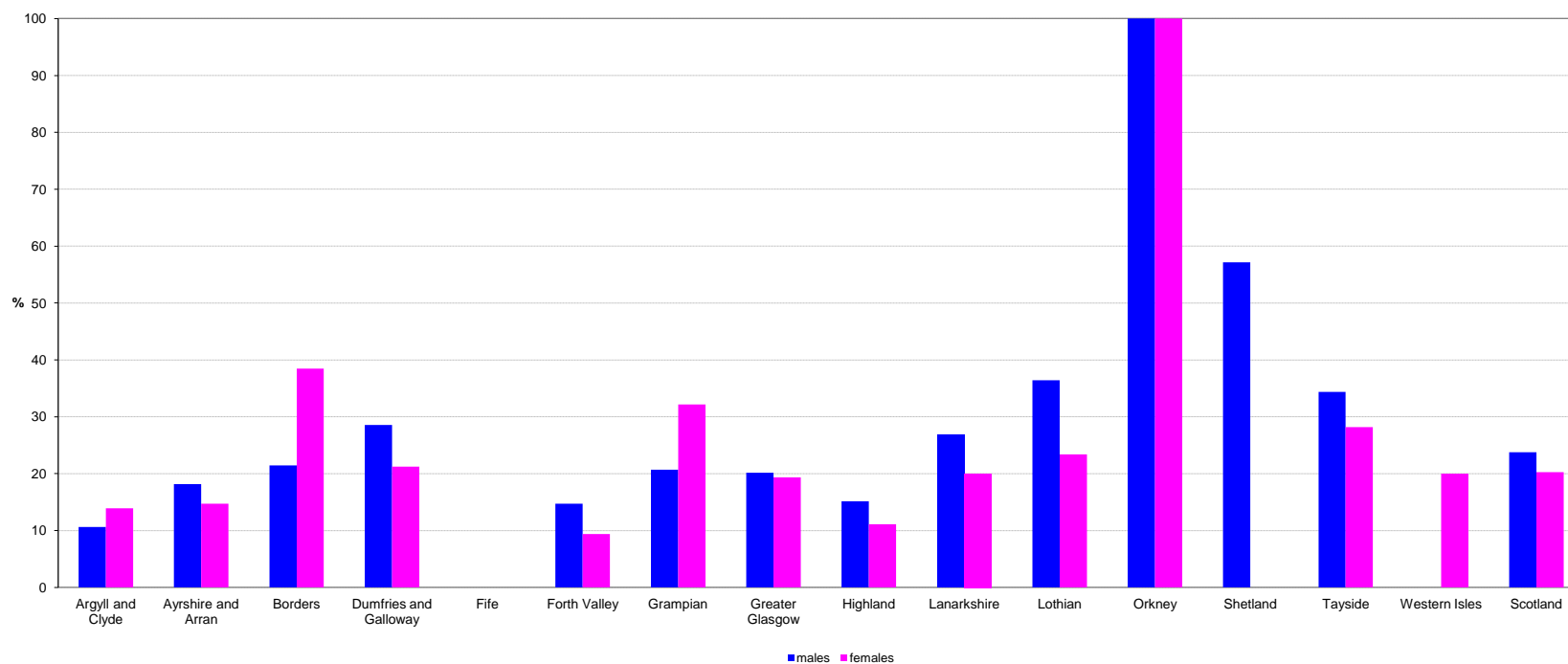
18. Percentage of polyp cancers - percentage of people with polyp cancer, out of those with cancer

$$\frac{\text{No. of people in the denominator with polyp cancer}}{\text{No. of people with screen detected colorectal cancer}} \times 100$$

Table 18 Percentage of polyp cancers, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 10.6 | 18.2 | 21.4 | 28.6 | - | 14.7 | 20.7 | 20.2 | 15.2 | 26.8 | 36.4 | 100.0 | 57.1 | 34.4 | 0.0 | 23.7 |
| females | 13.9 | 14.7 | 38.5 | 21.2 | - | 9.4 | 32.1 | 19.4 | 11.1 | 20.0 | 23.4 | 100.0 | 0.0 | 28.2 | 20.0 | 20.3 |
| All persons | 11.8 | 16.9 | 26.8 | 25.3 | - | 12.1 | 23.5 | 19.9 | 14.3 | 25.0 | 32.5 | 100.0 | 28.6 | 32.0 | 10.0 | 22.6 |

Figure 18 Percentage of polyp cancers both sexes, by NHS Board



19. Overall adenoma detection rate - percentage of people with adenomas detected, out of those with a completed screening test result available

No. of people with screen detected adenomas

No. of people with a complete screening test result

x100

Table 19 Overall adenoma detection rate, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 0.42 | 1.07 | 1.25 | 1.08 | - | 1.23 | 0.78 | 0.54 | 1.39 | 1.46 | 0.99 | 0.94 | 1.44 | 0.88 | 1.44 | 0.94 |
| females | 0.12 | 0.38 | 0.38 | 0.48 | - | 0.52 | 0.31 | 0.16 | 0.52 | 0.53 | 0.34 | 0.28 | 0.49 | 0.36 | 0.62 | 0.34 |
| All persons | 0.26 | 0.70 | 0.78 | 0.75 | - | 0.85 | 0.53 | 0.33 | 0.92 | 0.95 | 0.63 | 0.59 | 0.94 | 0.60 | 1.00 | 0.61 |

Figure 19 Overall adenoma detection rate, by NHS Board and sex

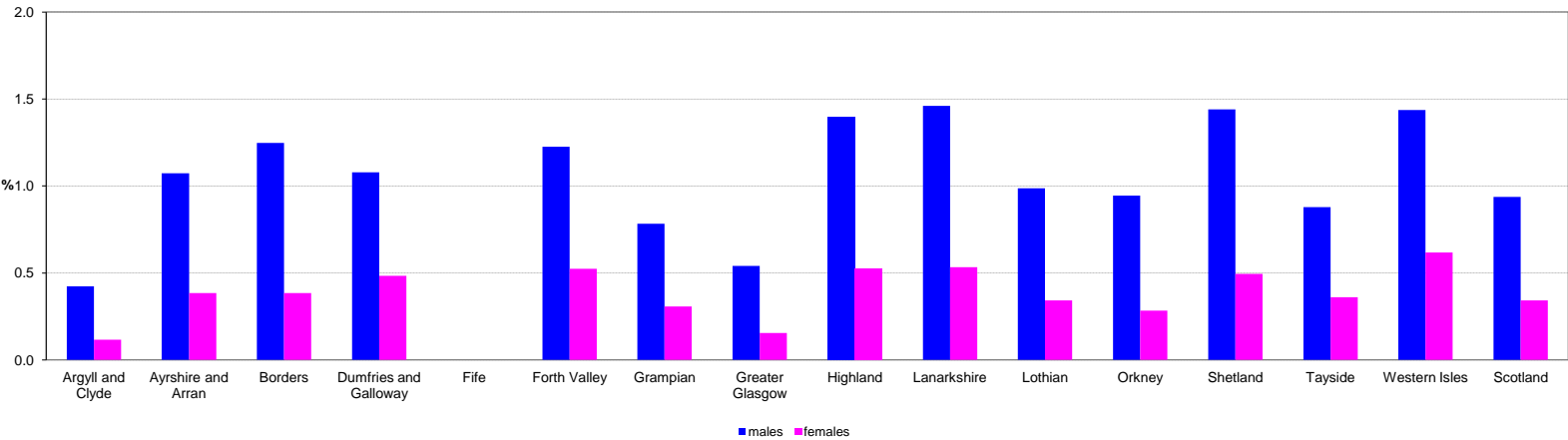
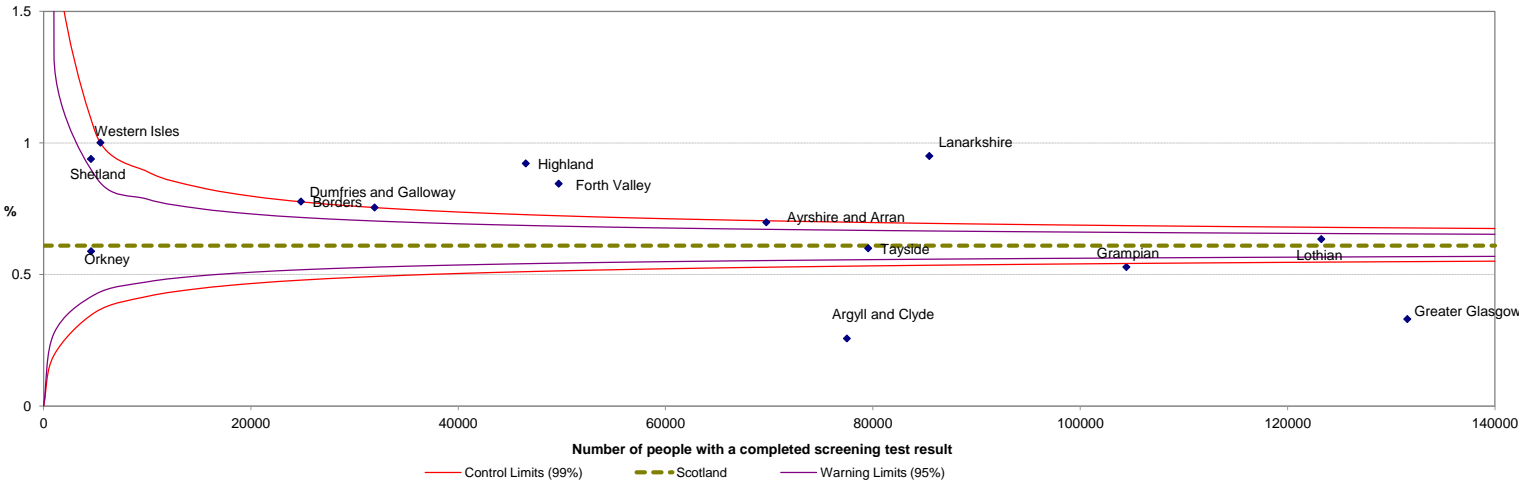


Figure 19.1 Overall adenoma detection rate for both sexes, by NHS Board



20. High risk adenoma detection rate - percentage of people with high risk adenomas detected, out of those with a completed screening test result available

$$\frac{\text{No. of people with screen detected high risk adenomas}^a}{\text{No. of people with a complete screening test result}} \times 100$$

^a either five or more small adenomas or three or more small adenomas with one ≥1 cm

Table 20 High risk adenoma detection rate, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 0.09 | 0.07 | 0.11 | 0.17 | 0.00 | 0.17 | 0.10 | 0.17 | 0.24 | 0.19 | 0.11 | 0.05 | 0.19 | 0.14 | 0.35 | 0.14 |
| females | 0.02 | 0.01 | 0.04 | 0.05 | 0.00 | 0.06 | 0.03 | 0.03 | 0.08 | 0.03 | 0.02 | 0.00 | 0.04 | 0.01 | 0.03 | 0.03 |
| All persons | 0.05 | 0.04 | 0.07 | 0.11 | 0.00 | 0.11 | 0.07 | 0.09 | 0.15 | 0.10 | 0.06 | 0.02 | 0.11 | 0.07 | 0.18 | 0.08 |

Figure 20 High risk adenoma detection rate, by NHS Board and sex

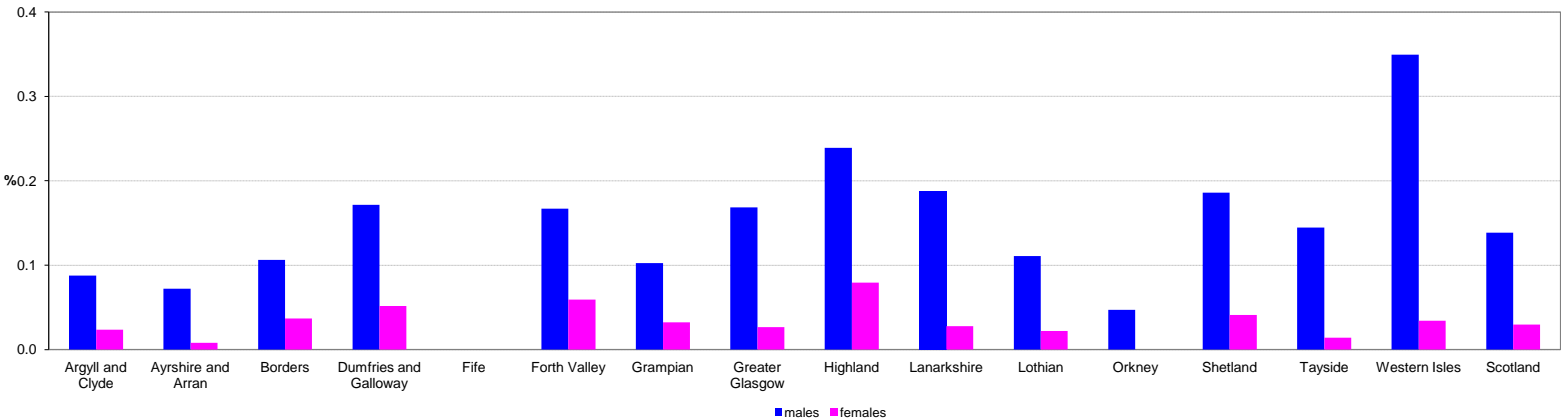
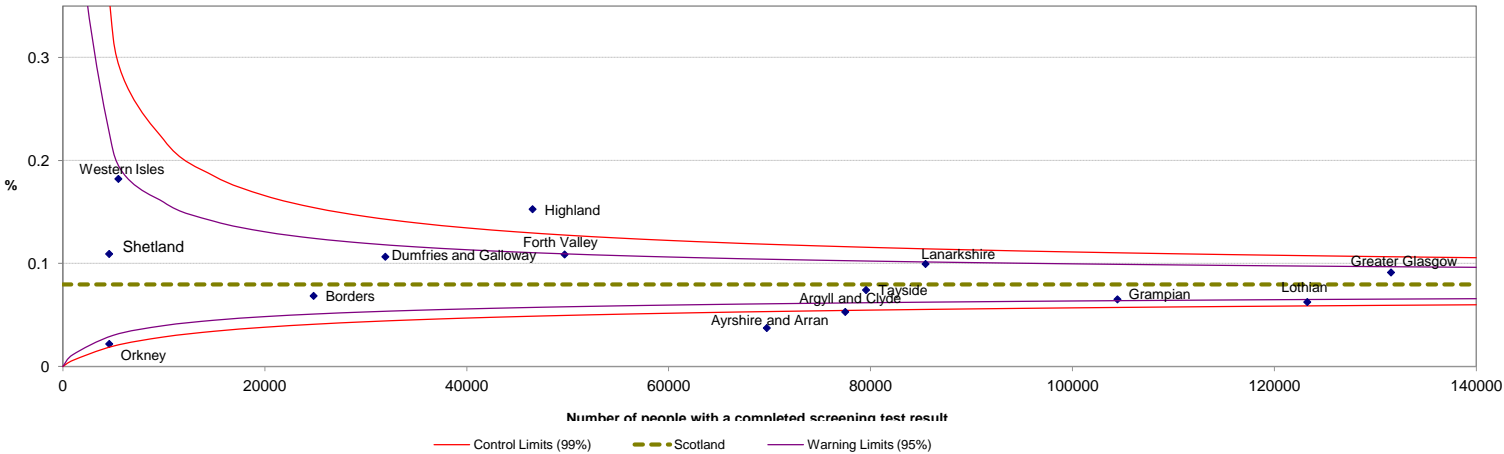


Figure 20 High risk adenoma detection rate for both sexes, by NHS Board



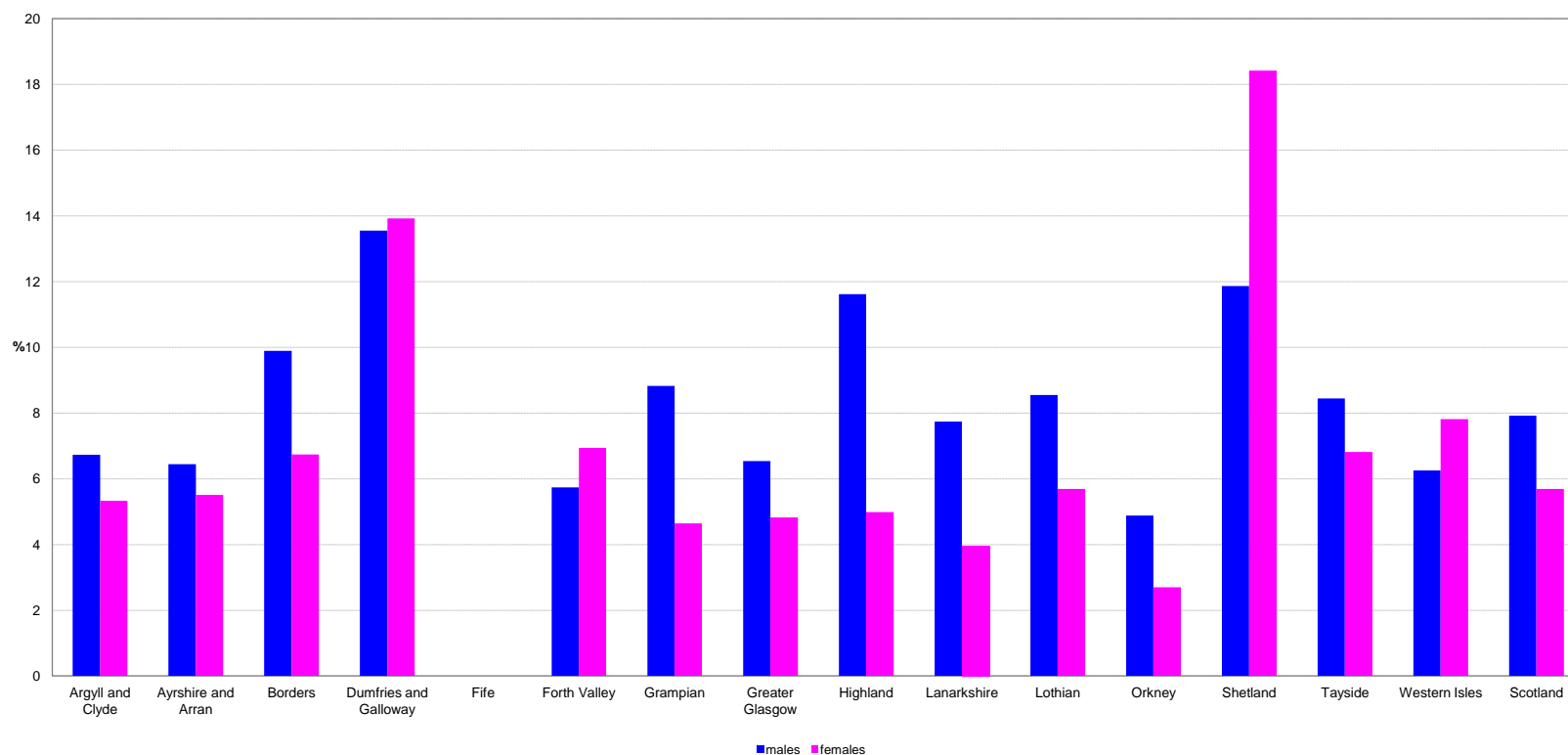
21. Positive Predictive Value of current screening test to cancer (polyp cancers and invasive colorectal cancers) - percentage of people with a malignant outcome, out of those with a positive screening test result and a final outcome

$\frac{\text{No. of people with screen detected colorectal cancer}}{\text{No. of people with a positive screening test result and a final outcome}} \times 100$

Table 21 Positive Predictive Value of current screening test to cancer, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 6.7 | 6.4 | 9.9 | 13.5 | - | 5.7 | 8.8 | 6.5 | 11.6 | 7.7 | 8.5 | 4.9 | 11.9 | 8.4 | 6.3 | 7.9 |
| females | 5.3 | 5.5 | 6.7 | 13.9 | - | 6.9 | 4.6 | 4.8 | 5.0 | 4.0 | 5.7 | 2.7 | 18.4 | 6.8 | 7.8 | 5.7 |
| All persons | 6.2 | 6.1 | 8.6 | 13.7 | - | 6.3 | 7.2 | 5.8 | 9.0 | 6.2 | 7.4 | 3.8 | 14.4 | 7.7 | 6.9 | 7.0 |

Figure 21 Positive Predictive Value of current screening test to cancer, by NHS Board and sex



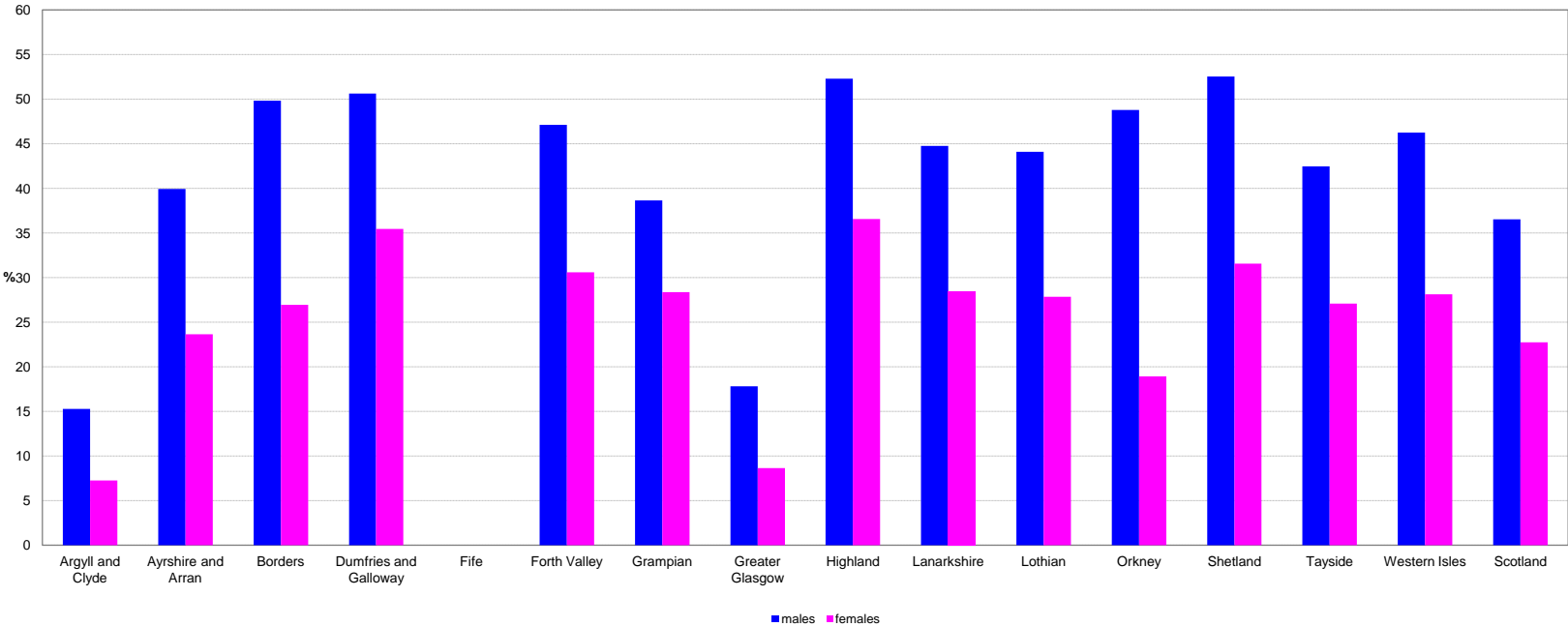
22. Positive Predictive Value of current screening tests to all adenomas where adenoma is the most serious diagnosis - percentage of people with any risk adenoma, out of those with a positive screening test result

$\frac{\text{No. of people in the denominator who have adenoma as the most serious diagnosis}}{\text{No. of people with a positive screening test result and a final outcome}} \times 100$

Table 22 Positive Predictive Value of all adenomas where adenoma is the most serious diagnosis, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|---------------------|-----------------------|---------|--------------------------|------|--------------|----------|--------------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 15.3 | 39.9 | 49.8 | 50.6 | - | 47.1 | 38.6 | 17.8 | 52.3 | 44.8 | 44.1 | 48.8 | 52.5 | 42.5 | 46.3 | 36.5 |
| females | 7.3 | 23.7 | 26.9 | 35.4 | - | 30.6 | 28.4 | 8.6 | 36.6 | 28.4 | 27.8 | 18.9 | 31.6 | 27.1 | 28.1 | 22.8 |
| All persons | 12.0 | 33.1 | 40.5 | 44.1 | - | 39.9 | 34.7 | 14.0 | 46.2 | 38.0 | 37.6 | 34.6 | 44.3 | 35.9 | 38.2 | 30.9 |

Figure 22 Positive Predictive Value of all adenomas where adenoma is the most serious diagnosis, by NHS Board and sex



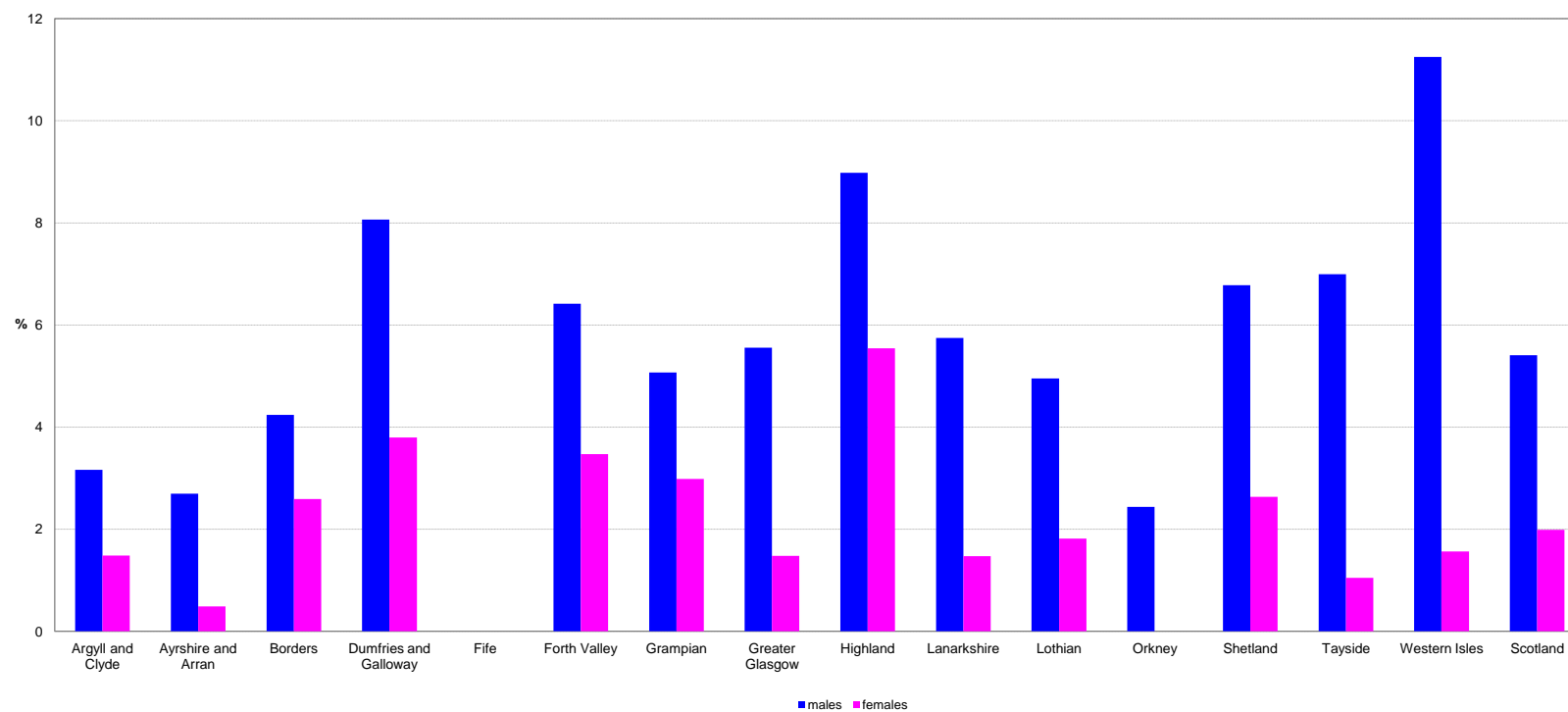
23. Positive Predictive Value of current screening test to high risk adenoma - percentage of people with high risk adenoma, out of those with a positive screening test result

$\frac{\text{No. of people in the denominator with high risk adenoma}}{\text{No. of people with a positive screening test result and a final outcome}} \times 100$

Table 23 Positive Predictive Value of current screening test to high risk adenoma, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 3.2 | 2.7 | 4.2 | 8.1 | - | 6.4 | 5.1 | 5.6 | 9.0 | 5.7 | 5.0 | 2.4 | 6.8 | 7.0 | 11.3 | 5.4 |
| females | 1.5 | 0.5 | 2.6 | 3.8 | - | 3.5 | 3.0 | 1.5 | 5.5 | 1.5 | 1.8 | 0.0 | 2.6 | 1.0 | 1.6 | 2.0 |
| All persons | 2.5 | 1.8 | 3.6 | 6.2 | - | 5.1 | 4.3 | 3.9 | 7.6 | 4.0 | 3.7 | 1.3 | 5.2 | 4.4 | 6.9 | 4.0 |

Figure 23 Positive Predictive Value of current screening test to high risk adenoma, by NHS Board and sex



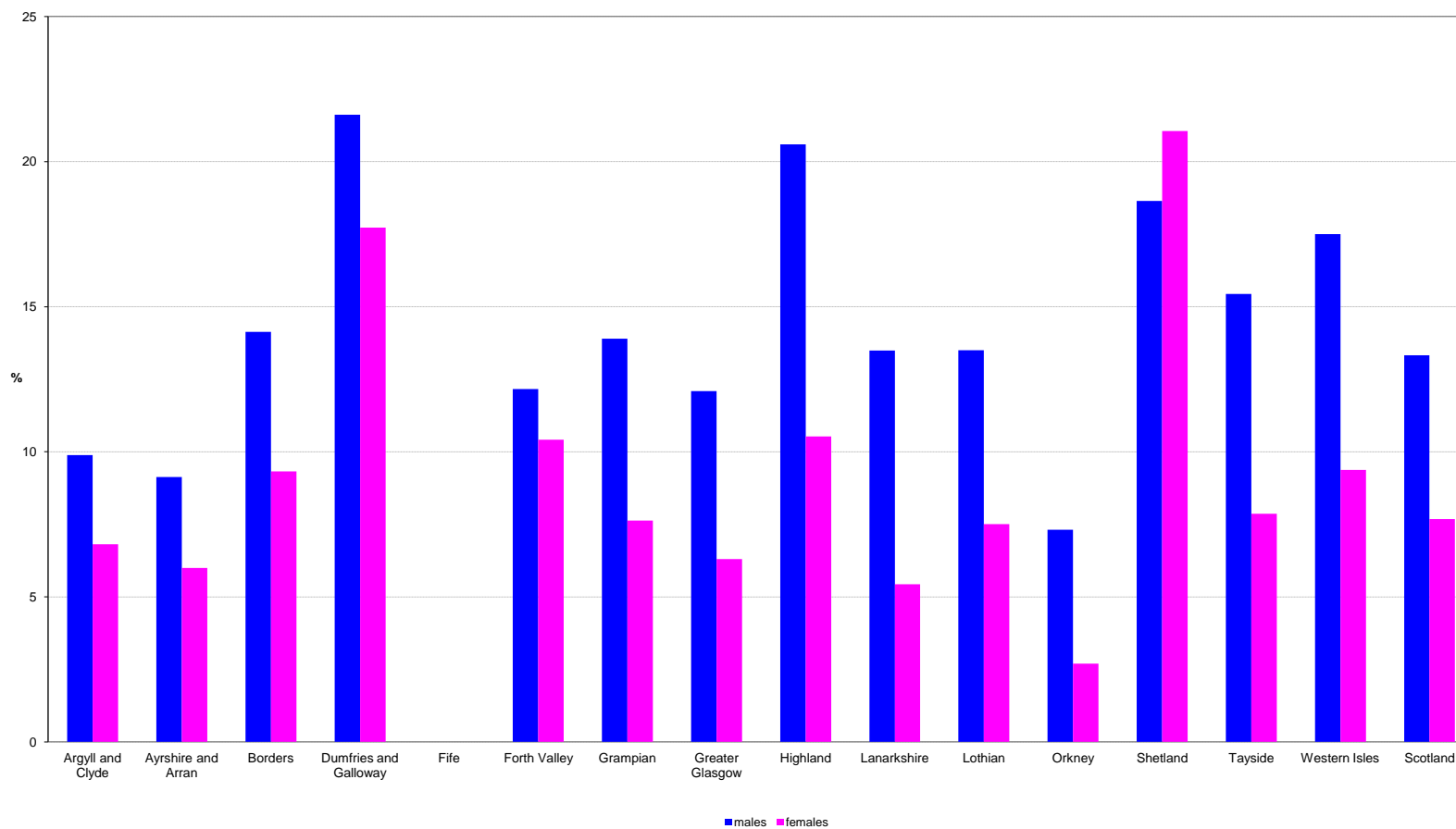
24. Positive Predictive Value of current screening test to high risk adenoma or cancer (polyp cancers and invasive colorectal cancers) - percentage of people with a malignant outcome or high risk adenoma, out of those with a positive screening test result

$\frac{\text{No. of people in the denominator with high risk adenoma or cancer}}{\text{No. of people with a positive screening test result and a final outcome}} \times 100$

Table 24 Positive Predictive Value of current screening test to high risk adenoma or cancer, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|---------------------|-----------------------|---------|--------------------------|------|--------------|----------|--------------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 9.9 | 9.1 | 14.1 | 21.6 | - | 12.2 | 13.9 | 12.1 | 20.6 | 13.5 | 13.5 | 7.3 | 18.6 | 15.4 | 17.5 | 13.3 |
| females | 6.8 | 6.0 | 9.3 | 17.7 | - | 10.4 | 7.6 | 6.3 | 10.5 | 5.4 | 7.5 | 2.7 | 21.1 | 7.9 | 9.4 | 7.7 |
| All persons | 8.6 | 7.8 | 12.2 | 19.9 | - | 11.4 | 11.5 | 9.7 | 16.7 | 10.2 | 11.1 | 5.1 | 19.6 | 12.2 | 13.9 | 11.0 |

Figure 24 Positive Predictive Value of current screening test to high risk adenoma or cancer, by NHS Board and sex



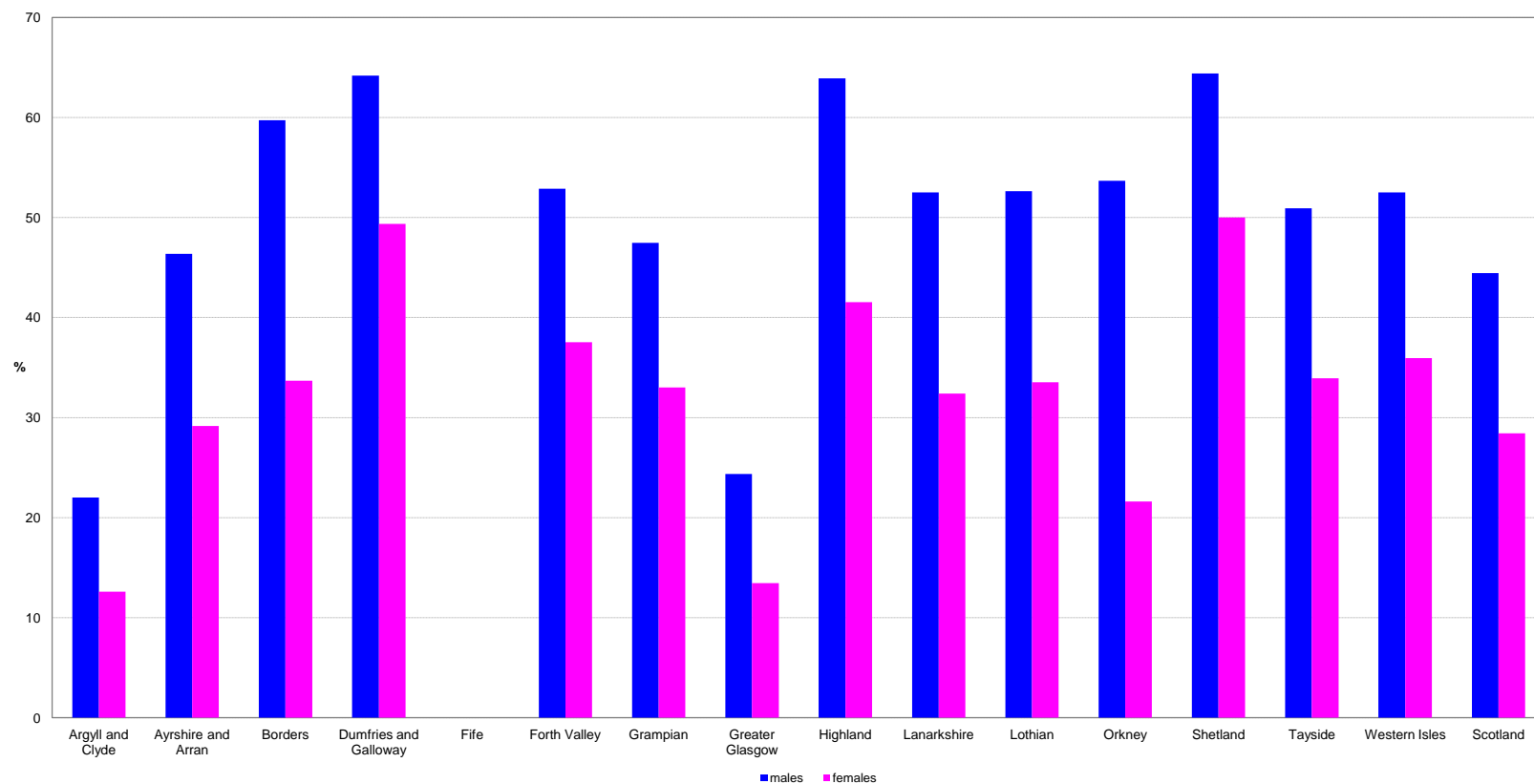
25. Positive Predictive Value of current screening test to any adenoma or cancer diagnosis -
percentage of people with a malignant outcome or any risk adenoma, out of those with a positive screening test result

$\frac{\text{No. of people in the denominator with any adenoma or cancer diagnosis}}{\text{No. of people with a positive screening test result and a final outcome}} \times 100$

Table 25 Positive Predictive Value of current screening test to any adenoma or cancer diagnosis, by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|---------------------|-----------------------|---------|--------------------------|------|--------------|----------|--------------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 22.0 | 46.4 | 59.7 | 64.2 | - | 52.9 | 47.5 | 24.4 | 63.9 | 52.5 | 52.6 | 53.7 | 64.4 | 50.9 | 52.5 | 44.4 |
| females | 12.6 | 29.2 | 33.7 | 49.4 | - | 37.5 | 33.0 | 13.5 | 41.6 | 32.4 | 33.5 | 21.6 | 50.0 | 33.9 | 35.9 | 28.4 |
| All persons | 18.2 | 39.2 | 49.2 | 57.8 | - | 46.2 | 42.0 | 19.8 | 55.2 | 44.2 | 45.0 | 38.5 | 58.8 | 43.6 | 45.1 | 37.9 |

Figure 25 Positive Predictive Value of current screening test to any adenoma or cancer diagnosis, by NHS Board and sex



26. Percentage of people with screen detected cancers that are malignant neoplasms of the colon (ICD-10 C18)

$$\frac{\text{No. of people in the denominator with malignant neoplasm of the colon}}{\text{No. of people with screen detected colorectal cancer}} \times 100$$

Table 26 Percentage of people with screen detected cancers that are malignant neoplasms of the colon (ICD-10 C18), by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 80.3 | 70.9 | 60.7 | 64.3 | - | 67.6 | 70.1 | 78.2 | 62.1 | 53.6 | 55.1 | 0.0 | 57.1 | 48.4 | 80.0 | 64.7 |
| females | 80.6 | 70.6 | 61.5 | 66.7 | - | 81.3 | 67.9 | 88.7 | 83.3 | 62.9 | 63.8 | 0.0 | 71.4 | 61.5 | 60.0 | 72.3 |
| All persons | 80.4 | 70.8 | 61.0 | 65.3 | - | 74.2 | 69.6 | 81.8 | 66.7 | 56.1 | 57.8 | 0.0 | 64.3 | 53.4 | 70.0 | 67.2 |

27. Percentage of people with screen detected cancers that are malignant neoplasms of the rectosigmoid junction (ICD-10 C19)

$$\frac{\text{No. of people in the denominator with malignant neoplasm of the rectosigmoid junction}}{\text{No. of people with screen detected colorectal cancer}} \times 100$$

Table 27. Percentage of people with screen detected cancers that are malignant neoplasms of the rectosigmoid junction (ICD-10 C19), by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 0.0 | 0.0 | 3.6 | 4.8 | - | 0.0 | 5.7 | 3.4 | 1.5 | 8.2 | 1.9 | 0.0 | 0.0 | 9.4 | 0.0 | 3.7 |
| females | 8.3 | 0.0 | 0.0 | 0.0 | - | 0.0 | 3.6 | 0.0 | 0.0 | 11.4 | 2.1 | 0.0 | 0.0 | 2.6 | 20.0 | 2.8 |
| All persons | 2.9 | 0.0 | 2.4 | 2.7 | - | 0.0 | 5.2 | 2.2 | 1.2 | 9.1 | 1.9 | 0.0 | 0.0 | 6.8 | 10.0 | 3.4 |

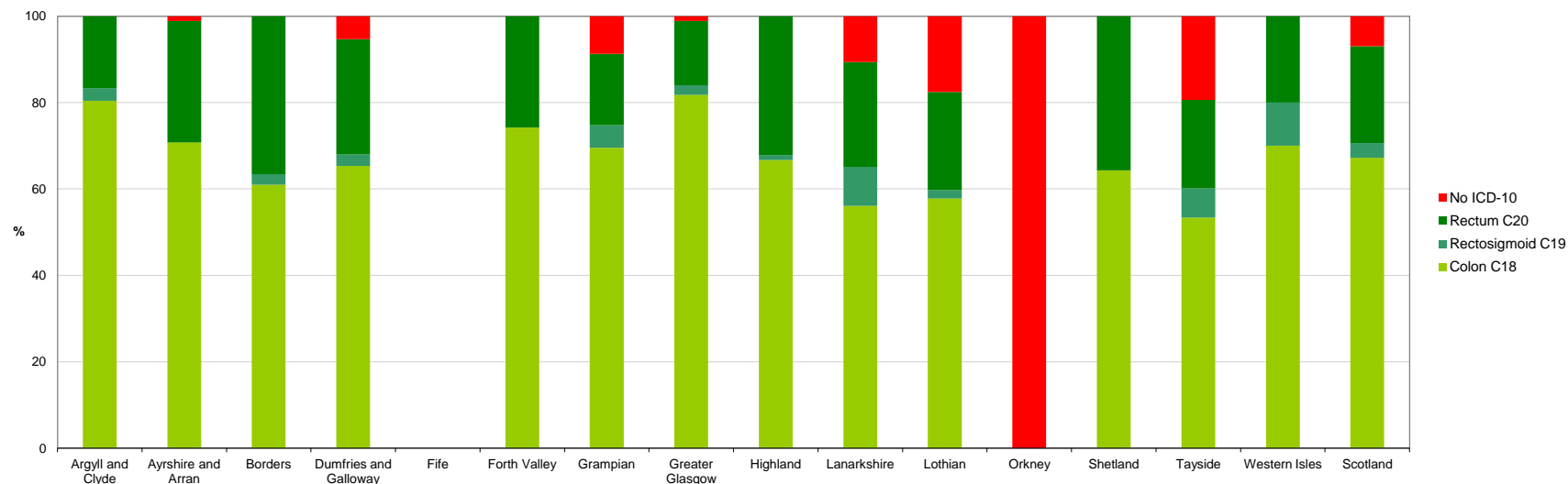
28. Percentage of people with screen detected cancers that are malignant neoplasms of the rectum (ICD-10 C20)

$$\frac{\text{No. of people in the denominator with malignant neoplasm of the rectum}}{\text{No. of people with screen detected colorectal cancer}} \times 100$$

Table 28. Percentage of people with screen detected cancers that are malignant neoplasms of the rectum (ICD-10 C20), by NHS Board and sex

| | Argyll and Clyde | Ayrshire and Arran | Borders | Dumfries and Galloway | Fife | Forth Valley | Grampian | Greater Glasgow | Highland | Lanarkshire | Lothian | Orkney | Shetland | Tayside | Western Isles | Scotland |
|-------------|------------------|--------------------|---------|-----------------------|------|--------------|----------|-----------------|----------|-------------|---------|--------|----------|---------|---------------|----------|
| males | 19.7 | 27.3 | 35.7 | 23.8 | - | 32.4 | 16.1 | 16.8 | 36.4 | 23.7 | 24.3 | 0.0 | 42.9 | 21.9 | 20.0 | 23.6 |
| females | 11.1 | 29.4 | 38.5 | 30.3 | - | 18.8 | 17.9 | 11.3 | 16.7 | 25.7 | 19.1 | 0.0 | 28.6 | 17.9 | 20.0 | 20.0 |
| All persons | 16.7 | 28.1 | 36.6 | 26.7 | - | 25.8 | 16.5 | 14.9 | 32.1 | 24.2 | 22.7 | 0.0 | 35.7 | 20.4 | 20.0 | 22.4 |

Figure 28. Percentage of people with screen detected cancers which are classified as ICD-10 C18, C19 and C20, by NHS Board



Definitions

| | |
|-----------------|--|
| Adenoma | a benign epithelial tumour |
| Colonoscopy | endoscopic examination of the colon |
| Dukes' stage | a system devised by Cuthbert Dukes that describes the spread of the tumour and forms the main component in identifying the 'stage' of bowel cancer |
| FIT test | Faecal Immunochemical Test |
| FOBT | Faecal Occult Blood Test |
| Histology | the study of cells and tissue at a microscopic level |
| Interval cancer | a colorectal cancer diagnosed within 2 years of a overall negative screening result. |
| ISD | Information Services Division (ISD) is NHS Scotland |
| Polyp | a cluster of cells which project as a growth, usually on a stalk, from the mucosal lining of the bowel |
| PPV | Positive Predictive Value - the proportion of those who have a positive test who actually have disease |
| SIMD | Scottish Index of Multiple Deprivation |