



**United Kingdom and Ireland Association of
Cancer Registries (UKIACR)**

**Performance Indicators Commentaries for
Tumours Diagnosed in 2019.**

England Commentary on 2019 PIs v1.5

Context

Processing of 2019 registrations was affected by COVID-19 due to disruption in data flows and reduced remote access. The bulk of trust data submissions relating to tumour diagnosis had been received pre-lock down. However, subsequent submissions pertaining to staging (4-month window post-diagnosis) and treatment (6-month window post-diagnosis) may have been affected as the volume of COVID cases in hospitals increased.

At the end of March 2020, when staff were asked to work from home, the Registration team were completing the processing January 2019 data. The majority of 2019 registration processing was completed at home without remote access to trust systems as this was deemed an information governance risk.

The Registration team use remote access to trust systems for several reasons:

- Searching for missing staging information.
- Confirming the diagnosis for low quality registrations (PAS/Cancer Waiting Times (CWT)/SACT/RTDS/Death Certificate Only registrations).
- Resolving queries resulting from incomplete or conflicting information in submitted data.
- Looking for missing pathology reports that were not received in routine trust submissions.

A function was quickly added to our cancer registration system (Encore) to enable staff to flag cases that were missing information that was 'critical' to the completion of a registration, and which would normally be looked up on remote access. The hope being that there would be an opportunity to revisit these cases when back in the office. Some staff did return to offices in September 2020, but this was on a voluntary basis and in October 2020 the government recommendation to work at home where possible was reinstated.

It was agreed that new tumours registered from poor quality data (PAS/CWT/SACT/RTDS only (or a registration made from any combination of these data sources)) would be 'referenced off' (with a newly created 'Reference Reason') so that they would not be included in any counts of 'Final' or 'Provisional' tumours but could be easily identified.

Tumours where it was suspected there was missing pathology were dealt with using a Data Liaison Communications tool which enabled Data Liaison to identify trusts for follow-up where pathology was regularly missing.

The lack of remote access has resulted in a reduction in data quality and completeness for the 2019 diagnosis year. Other members of the UKIACR had permission to use remote from home. A fact which should be borne in mind when comparing these indicators.

Based on Executive Summary

Stability of Incidence

Except for NI all countries are reporting improved stability in incidence.

Incidence Year	Country average (population)¹	Country average (country)¹	England	Scotland	Northern Ireland	Wales
2019	3.6%	2.9%	3.9%	2.1%	3.3%	2.2%
2018	4.1%	3.8%	4.1%	4.6%	2.3%	4.1%

For England the dramatic 'Fry/Turnbull' increase in prostate cancer incidence of 19.8% has not been maintained with the increase now falling to 6.4%.

The previously noted decrease in incidence of cervix in situ is stabilising with the decrease this year being 2.3% compared with 11% last year.

Registry Creep

Except for Wales all countries are reporting a reduced registry creep.

Incidence Year	Country average (population)¹	Country average (country)¹	England	Scotland	Northern Ireland	Wales
2019	1.0%	1.1%	0.9%	1.3%	1.4%	0.8%
2018	1.3%	1.6%	1.2%	1.9%	2.8%	0.3%

This could be a genuine reduction in registry creep due to improved ascertainment during the period of active registration for the diagnosis year, or it may be that the late registrations, which tend to be lower quality notifications were referenced off as there was no opportunity to follow them up on remote access.

Staging

Except for England all countries are reporting improved staging.

Incidence Year	Country average (population)¹	Country average (country)¹	England	Scotland	Northern Ireland	Wales
2019	72.3%	75.8%	71.8%	68.5%	82.0%	81.1%
2018	79.9%	77.2%	81.3%	67.6%	80.4%	79.6%

The reduction in the level of England's staging is across the board and due to the temporary loss of remote access; the staging data submitted by trusts is often missing or conflicting. This demonstrates the value that registration staff add to the data.

Data Liaison staff continue to work with trusts to improve the staging data they submit. The figure used to monitor trust submissions on CancerStats is the proportion of staging data received for stageable sites. This should be 100%. The measure here is different. It is the proportion of all sites which have a staging value. It will never reach 100% as not all sites are stageable.

Those national geographies that were able to use remote access from home have maintained their staging levels.

Patient Information

England are still above the country average despite a small decrease in the completeness of patient information, due entirely to ethnicity data.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2019	98.4%	97.0%	98.9%	98.1%	100.0%	91.2%
2018	98.6%	96.9%	99.2%	96.3%	100.0%	92.0%

Tumour Information

England's performance is on a par with other countries and the country average.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2019	97.0%	96.9%	97.0%	96.6%	96.9%	96.9%
2018	97.3%	96.9%	97.5%	96.4%	96.7%	97.1%

The reduction in completeness for England is due to missing type of growth, known basis and hospital of diagnosis. The former due to the inability to look up missing pathology reports on remote access. The latter to lack of DCO follow up (see below).

Diagnosing Hospital Known

Except for England all countries are reporting improved completeness.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2019	96.6%	96.4%	96.8%	94.2%	-	98.2%
2018	97.9%	96.7%	98.3%	94.1%	-	97.7%

One of the benefits of remote access is the ability to follow-up DCO notifications to establish whether there were any investigations or treatments prior to death that had not been reported in other data sources. If no hospital was mentioned on the death certificate, then the lack of remote access will have prevented the diagnosing hospital being determined.

Death Certificate Only (DCO) Rates

All countries, apart from Wales, reported an increased DCO rate.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2019	1.5%	0.9%	1.7%	0.3%	0.6%	1.0%
2018	0.6%	0.6%	0.6%	0.2%	0.3%	1.2%

There increase in DCO rate was most evident in the 80+ age group; the 'All NMSC' rate increasing from 1.9 to 5.7%. This is the age group where DC notifications are more common. As no further information for these cases had been reported in other data sources, and remote access wasn't available to follow them up, registration teams were unable to establish whether there were any investigations or treatments prior to death.

The technical notes for this indicator state that:

"These cases should exclude GP only (GPO) and Post Mortem only (PMO) registrations. If this is not possible then please specify what is included in the calculation (or see Library of Recommendations, Po/03/03.)."

Zero Day Survivors

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2019	2.1%	1.3%	2.4%	0.5%	0.6%	1.6%
2018	1.2%	1.0%	1.2%	0.5%	0.5%	1.9%

A large proportion of these cases are created from death certificate notifications where there is a post-mortem to confirm diagnosis i.e. not a DCO according to the technical notes. Again, the lack of remote access will have prevented any follow-up to find investigations or treatments prior to death.

Microscopically Verified

England's performance is still above the country average despite a reduction in cases with microscopic verification (MV).

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2019	83.9%	83.7%	84.2%	81.9%	85.8%	83.1%
2018	84.8%	84.3%	85.1%	82.4%	85.7%	84.1%

The most obvious reductions in the proportion of cases with MV was for haematological tumours, cancers of unknown primary and bladder tumours. These tumours are complex to diagnose, especially without access to haematology or pathology reports. Where such reports were not submitted to the registry, the inability to verify these diagnoses via remote access will have resulted in a reduction of the proportion morphologically verified.

Non-Specific Codes

All countries report an increase in the proportion of case with morphological verification where a non-specific code has been provided.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2019	1.5%	1.5%	1.5%	1.0%	2.6%	1.0%
2018	1.2%	1.1%	1.2%	0.9%	1.6%	0.7%

We do review these cases as part of our QA processes. Lack of remote access may have prevented us finding a more specific code on a supplementary report we didn't receive.

Grade

All countries reported a slight reduction

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2019	58.7%	59.1%	58.7%	58.3%	59.7%	59.5%
2018	60.0%	60.9%	59.9%	59.7%	63.0%	60.9%

Treatment

England's performance is better than other countries even with a slight fall

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2019	86.8%	85.0%	87.3%	86.3%	84.5%	81.7%
2018	88.2%	85.6%	88.8%	85.6%	-	82.5%

For England there is a reduction in treatment recorded across all age groups, but it is higher for the 80+ age group. This is probably due to this age group being the one evidencing the biggest increase in DCO registrations and their lack of follow-up due to unavailability of remote access.

Breast Screening Data

Due to the required exchanges with the screening programme these data are reported for a diagnosis year behind the rest of the report i.e. 2018 cases.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2018	50.5%	52.0%	50.1%	52.1%	52.0%	53.9%
2017	49.1%	51.3%	48.7%	50.1%	-	55.1%

These data were not affected by homeworking and COVID. As NCRAS support the SHIM system used by the programme this is our most robust provider of screening data.

Cervical Screening Data

Due to the required exchanges with the screening programme these data are reported for a diagnosis year behind the rest of the report i.e. 2018 cases.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2018	26.4%	44.2%	20.6%	50.4%	61.3%	44.8%
2017	23.6%	23.8%	22.1%	49.3%	-	0.0%

These results reflect the difficulty NCRAS are having in establishing a routine exchange with the cervical screening programme. A new national system is being developed for the programme which we hope will improve data provision.

Bowel Screening Data

Due to the required exchanges with the screening programme these data are reported for a diagnosis year behind the rest of the report i.e. 2018 cases.

Incidence Year	Country average (population)¹	Country average (country)¹	England	Scotland	Northern Ireland	Wales
2018	6.1%	20.4%	0.0%	35.2%	18.8%	27.6%
2017	4.3%	19.0%	0.0%	29.4%	-	27.5%

NCRAS are working with the screening programme to try and obtain an extract to use to pilot a new method of loading screening data files on the Encore 'waterfall'.

For England, 0% reflects the unavailability of screening data to NCRAS. NCRAS continued to work with the screening programme to try and obtain an extract to use to pilot a new method of loading screening data files on the Encore 'waterfall'.

UKIACR QA Measures 2023 (2019 diagnosis): Overview Report for Scotland

This commentary is focused primarily on the Executive Summary table.

Stability

Overall stability for Scotland is 2.1% a reduction of 2.5%. Public Health Scotland continues to receive data from the West of Scotland Cancer Network linking **myelodysplastic syndromes**, myeloproliferative disorders, **lymphoproliferative disorders** and acute leukaemia to the cancer registry.

Registry creep

The figure for Scotland is 1.3%. Registry Creep has again improved, having reduced from 4% to 1.9% this is the lowest for Scotland for many years.

Staging

The proportion of staged cancers in Scotland is 68.5% which is constant with previous year. For the main sites and/or those cancers for which there are screening programmes, staging completeness was as follows:

Cancer site	Scotland	UKIACR Average
Lower GI	73.9%	80.9%
Lung	93.9%	88.8%
Breast	85.6%	83.5%
Cervix	96.1%	70.1%
Prostate	82.4%	80.3%

Average of core patient information complete

The figure for Scotland (98.1%) is similar to the UKIACR average of 98.4

We have managed to slightly improve our ethnicity from 70.4% for 2018 to 86.9% in 2019

Average of core tumour information complete

The figure for Scotland (96.6%) is similar to the UKIACR average of 96.9%.

Diagnosing hospital known

The figure for Scotland is 94.2%. This will not include primary care, breast screening or private hospital locations in Scotland.

DCO rates

Consistent with previous years, Scotland has the lowest proportion of death certificate only (DCO) cases (0.3% compared with the UKIACR average of 1.5%)

Zero day survivors

Scotland has the lowest proportion of zero day survivors (0.5% compared with the UKIACR average of 2.1%).

Microscopically verified

The figure for Scotland is 81.9% compared to the UKIACR average (83.9%). Both Scotland and UKIACR average have reduce slightly from 2018. The proportion of microscopically verified cases depends to a large extent on case-mix – for example, countries with a higher proportion of lung cancer cases might be expected to have a lower proportion of microscopically verified cases.

Non-specific [morphology] codes

Scotland has a low proportion of non-specific morphology codes recorded (1.0% compared with the UKIACR average of 1.5%).

Grade [of differentiation]

The proportion of cancers recorded with a known grade of differentiation is similar in Scotland (58.3%) to the UKIACR average (58.7%).

Treatment

The figure for Scotland 86.3% is similar to the UKIACR average of 86.8%

Breast Screening Data

Scotland's figure of 52.1% of breast cancers detected by screening in the age range 50-64 years in 2019 is similar to the UKIACR average of 50.5%. Scotland's percentage has slightly increased. It is not clear to what extent this measure reflects uptake of screening or quality of Registry data.

Cervical Screening Data

Scotland's percentage of cervical cancers detected by screening in the age range 25-60 years is 50.4%. This is significantly higher than the UKIACR average.

Bowel Screening Data

Scotland's figure of 35.4% of bowel cancers detected by screening in the age range 60-69 years in 2019 has slightly increased, 2018 was reported at 29.4%. England has not submitted figures for this measure, so it is difficult to comment further with regards to UKIACR average. Scotland has the highest bowel screen detected rate compared to Wales and Northern Ireland. It is not clear to what extent this measure reflects uptake of screening or quality of Registry data.

Commentary for Northern Ireland Overview

The N. Ireland Cancer Registry (NICR) is part of Queen's University Belfast and is funded by the Public Health Agency (PHA) of Northern Ireland (NI). Like all Cancer Registries, NICR uses data provided by patients and collected by the Health service as part of their care and support.

Due to the COVID-19 pandemic, staff have been working remotely from the March 2020, often with delayed access to the data. Therefore, the NICR has not been able to provide data for all the performance indicators. The dataset used for 2019 performance indicators in this report was extracted in September 2021, whereas in previous years' datasets were extracted around February.

There has been a steady year-on-year increase in the number of registered invasive cancers (excluding non-melanoma skin cancers (NMSC)) with 9,708 registered in 2016, 9,897 in 2018 and 10,193 in 2020. Within an ageing population this increasing trend is expected to continue. An increase in registrations were recorded in most age-groups with a significant increase in the 60-79-year-old group. The over 80-year-old age group recorded a non-significant decrease of -1.1%.

There was an increase in registrations for all invasive cancers in 2019 except for Upper GI, Trachea, Bronchus & Lung, Breast, Kidney and Cancer of Unknown Primary, which was the only invasive site to record a significant decrease. Head and Neck, Prostate, Bladder and Thyroid & other endocrine glands had significant increases in registrations for the year. Breast in-situ and especially NMSC saw significant increases. The large increase in NMSCs diagnosed in 2019 was found in both males and females This may be due to increased patient awareness and increased diagnosis of patients via private hospitals.

Registry creep: This decreased from 2.82% in 2018 to 1.41% for 2019 and is now lower than the UK average of 1.6%.

DCO rate: NICR continues to achieve a DCO rate well below the 2% target, with a level of 0.59% for invasive cancer excluding NMSC and 0.36% for all registrations.

This is an increase from the 2018 data when 0.26% of invasive cancer excluding NMSC and 0.16% of all registrations were DCO. The DCO rate is low across most tumour groups, except for cancers with an unknown primary where it is 9.03%. Higher DCO rates in CUP are not unexpected as many patients in this group have short survival which often mean that it was not possible to fully investigate to provide an accurate diagnosis prior to death.

Zero day survivors: At 0.6%, the percentage of zero day survivors for NI was below the UKIACR country average of 1.2%. Zero survival was below 0.6% for all cancer sites except for patients over 80 years (2.11%), HPB cancers (1.17%), other female genital cancers (0.72%), bladder (0.72%), cancer with unknown primaries (9.03%) and other invasive cancers (1.75%).

Microscopic verification: The percentage of microscopically verified cancer cases remained high at 85.8% and is slightly higher than 85.7% from the previous year.

Demographics: Collection of data on ethnicity remains poor as this information is not recorded well within NICR's primary data sources.

Diagnosing Hospital Known: The NICR was unable to provide information on the diagnosing hospital this year.

Treatment: NICR was unable to provide information on treatment for the previous year (2018) due to the shift to accessing datasets remotely. This year (2019) treatment data was captured and overall, 84.5% of all invasive cancer excluding NMSC received some kind of treatment. Over half of invasive cancers excluding NMSC in 2019 were treated with surgery (52.5%)

Screening: Again, NICR was unable to provide information on screening the previous year (2018) due to the shift to accessing datasets remotely. In 2019 49.7% of breast cancers were screen-detected for patients of screening age, while for cervical cancers this was 63.1% and for bowel cancers this was 26.6%.

Staging: NICR achieved a staging level of 82.0% which was above the UKIACR target of 70% and is higher than the 80.4% achieved in the previous year. NICR have experienced Cancer Intelligence Officers (CIOs) who actively carry out manual staging across all tumour sites.

Grade: The percentage of cancers diagnosed in 2019 with a known grade was 59.7% which is a reduction from 2018 (63.0%). However, like staging, grade is not provided to the registry as a loadable data field and these are manually recorded by CIOs via reading of pathology reports. Despite this minor drop, the NICR is aligned with the UKIACR country average of 60%.

Conclusions

Despite the challenging environment faced by NICR in processing 2019 data these performance indicators continue to highlight the consistently high-quality data produced by the registry. The PIs provide a welcome opportunity to monitor and benchmark our data, and support continued quality improvement within the registry.

Wales commentary on 2019 population-based registry data WCISU

Context

Due to the COVID 19 pandemic the processing of the 2019 registrations has been particularly challenging with the impact on data submissions where diagnosis, staging and treatment data was affected, and the introduction of new ways of working remotely from March 2020.

Since last year's 2018 submission, Wales has made refinements to the data submission extract to reflect the 2019 technical document. In particular, the cancer site groupings for CUP have changed resulting in an overall increase to the Wales figure.

Stability

Overall stability for Wales for the 2019 data is 2.2% and has reduced compared with 2016-2018 data in previous PIs, this is below the UKIACR 2019 country average of 2.9%.

Registry creep

For 2019 data, registry creep has maintained at a low rate of 0.8%. This reflects continued improvements to business processes and some automation. The UKIACR country average is 1.1%.

Staging

The proportion of verified staged cancers (excluding NMSC) in Wales was 81.1% in 2019, which is significantly higher than the UKIACR country average of 75.8%.

For 2018 data, WCISU moved to staging using the TNM 8th edition, 2019 data demonstrates further improvement on its existing high overall staging completeness for the main sites.

Verified staging completeness for main cancer sites

Cancer site	Wales 2019	UKIACR 2019 country average
Lower GI	93.0%	84.1%
Upper GI	82.5%	75.0%
Lung	92.6%	92.3%
Breast	85.7%	87.4%
Cervix	87.6%	86.3%
Prostate	93.7%	86.0%
Bladder	86.9%	72.6%
Kidney	83.5%	81.0%
Head and neck	90.1%	84.4%
Melanoma of skin	90.5%	77.6%

Average of core patient information complete

The completeness for Wales is very high or 100% complete for most variables, except for ethnicity. There is an ongoing problem with poor completion and accuracy of ethnicity in the underlying NHS Wales source datasets.

Further exploration on how we can improve the completeness of ethnicity in the registry database is required, and when analysing the data to produce official statistics.

Average of core tumour information complete

Most variables are almost 100% complete, apart from 'type of growth' that is slightly lower. The overall completion is similar to the UKIACR country average.

Diagnosing hospital known

The completion of this variable is very high (98.2%) and above the UKIACR country average 96.4%.

DCO rates

The death certificate only (DCO) cases in Wales have reduced since 2016 from 1.3% when it was double the UKIACR country average to 1.0% in 2019, which is now more comparable with the UKIACR country average of 0.9%.

Scotland continues to have the lowest DCO cases of 0.3% compared with the UKIACR country average.

The improvement demonstrated in this year's DCO rate reflects the particular focus in this area to address registry enhancements where possible.

Area of note, CUP and over 80+ all NMSC cases demonstrate a higher percentage of DCO cases, this is reflected in the change to the cancer site groupings for CUP and may be representative of an aging population and emergency presentations that are seen in Wales.

Cancer sites DCO % in Wales to UK average for 2019 data

	DCO % comparison 2018-2019			UK average 2019
	Wales 2018	Wales 2019	year on year change	
All invasive xnmisc	1.2%	1.0%	↓	1.5%
Haematology	2.12%	1.9%	↓	1.5%
Lower GI	0.9%	0.5%	↓	1.2%
Upper GI	1.5%	1.1%	↓	1.2%
HPB	1.6%	1.3%	↓	3.2%
Breast	0.7%	0.5%	↓	0.5%

Other female genitals	1.1%	0.6%	↓	1.5%
Prostate	0.9%	0.6%	↓	0.8%
Bladder	2.4%	1.1%	↓	2.8%
Thyroid & other endocrine glands	0.6%	0.6%	↓	0.3%
CUP	7.6%	8.6%	↑	12.7%

Zero day survivors

Wales zero day survivors in 2019 data is 1.6%, compared with 1.9% in 2018 data. The UKIACR country average is 1.3%.

Areas of note: all XNMSC 80+ (4.2%); CUP (11.1%); HPB (2.8%); Other invasive cancer (3.3%). A similar trend is seen highlighting these sites within the data from England.

Microscopically verified

The figure for Wales is 83.1%, compared to 84.1% in 2018 Wales data, and the 2019 UKIACR country average of 83.7%.

Non-specific [morphology] codes

Wales has maintained a low proportion of non-specific morphology codes recorded of 1.0% compared to the UKIACR country average of 1.5%

Grade [of differentiation]

The proportion of cancers recorded with a known grade of differentiation for Wales has slightly reduced from 60.9% in 2018 data, to 59.5% in 2019 and against the UKIACR country average 2019 of 59%.

Treatment

The treatment data was 81.7% complete in Wales for the 2019 data, compared to the UKIACR country average of 85.0%.

To improve the accuracy in the treatment data, refinements have been made in the allocation of treatments to the required treatment categories.

Breast Screening Data

Screening data are reported at a UK level for a diagnosis year behind the rest of the report i.e. 2018 cases.

Wales has an annual data exchange programme with NHS Wales Screening Services to allow Wales to reflect and report the 2019 screening data for completeness.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2018	50.5%	52.0%	50.1%	52.1%	52.0%	53.9%
2017	49.1%	51.3%	48.7%	50.1%	-	55.1%

In Wales, the 2019 cancer registry data included 55.0% of breast cancer cases detected by screening in the age range 50-64 years. This is slightly higher than the UKIACR country average of 51.4%.

It is not clear to what extent this measure reflects uptake of screening or quality of registry data.

Cervical Screening Data

Screening data are reported at a UK level for a diagnosis year behind the rest of the report i.e. 2018 cases.

Wales has an annual data exchange programme with NHS Wales Screening Services to allow Wales to reflect and report the 2019 screening data for completeness.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2018	26.4%	44.2%	20.6%	50.4%	61.3%	44.8%
2017	23.6%	23.8%	22.1%	49.3%	-	0.0%

In Wales, the 2019 cancer registry data included 52.2% of cervical cancer cases detected by screening in the age range 25-60 years compared to 44.8% in 2018 data. This is higher than the UKIACR country average of 45.7%. It is not clear to what extent this measure reflects uptake of screening or quality of registry data.

Bowel Screening Data

Screening data are reported at a UK level for a diagnosis year behind the rest of the report i.e. 2018 cases.

Wales has an annual data exchange programme with NHS Wales Screening Services to allow Wales to reflect and report the 2019 screening data for completeness.

Incidence Year	Country average (population) ¹	Country average (country) ¹	England	Scotland	Northern Ireland	Wales
2018	6.1%	20.4%	0.0%	35.2%	18.8%	27.6%
2017	4.3%	19.0%	0.0%	29.4%	-	27.5%

The Wales registry had 23.2% of bowel cancers detected by screening in the age range 60-69 years in 2019, compared to 27.6% in 2018 data. This is slightly higher than the UKIACR country average of 21.6%. Again, it is not clear to what extent this measure reflects uptake of screening or quality of cancer registration data.