## Contents

**This is a National Statistics publication** 3

**Introduction** 4

**Appendices** 5

- Appendix A – Background 5
- Appendix B – Definitions 8
- Appendix C – Types of Invitation 12
- Appendix D – Cytology Test Result Categories 13
- Appendix E – Outcomes of Gynaecological Referral 15
- Appendix F – Uses of Statistics by Known Users 17
- Appendix G – Feedback from Users 20
- Appendix H - Data Validation and Data Quality 21
- Appendix I – Related Publications and Useful Web Links 23

**References** 24
This is a National Statistics publication

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority’s regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is NHS Digital's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.


This report may be of interest to members of the public, policy officials and other stakeholders to make local and national comparisons and to monitor the quality and effectiveness of services.
Introduction

This document is designed to accompany the main publication document which can be found on the following link: http://digital.nhs.uk/pubs/cervical1617

It includes all of the appendices which are referenced throughout the report but is presented separately with the aim of keeping the main publication as succinct as possible. The appendices included are:

- Appendix A - Background
- Appendix B - Definitions
- Appendix C - Types of Invitation
- Appendix D - Cytology Test Result Categories
- Appendix E - Outcomes of Gynaecological Referral
- Appendix F - Uses of Statistics by Known Users
- Appendix G - Feedback from Users
- Appendix H - Data Validation and Data Quality
- Appendix I - Related Publications and Useful Web links

References related to the publication are also listed at the end of the document.
Appendices

Appendix A – Background

Cervical Screening Policy

Women between the ages of 25 and 64 are invited for regular cervical screening under the NHS Cervical Screening Programme. This is intended to detect abnormalities within the cervix that could, if undetected and untreated, develop into cervical cancer. National policy is that women are offered screening every three or five years depending on their age. Women aged 25-49 are invited for routine screening every 3 years, whereas those aged 50-64 are invited for routine screening every 5 years. In this report, the current target group of 25 to 64 years is used to report statistics.

Data Sources

The statistics are derived from information that is routinely collected by the Cancer Screening Programmes within Public Health England (PHE) for the operation of the screening programme, including quality assurance and performance management purposes.

Information on the NHS Cervical Screening Programme is collected on the following NHS Digital Korner Collection (KC) returns:

- KC53 – information from the call and recall system, collected on all 152 Upper Tier Local Authorities operating in 2016-17.
- KC61 – information on screening samples examined by pathology laboratories, collected from all 51 laboratories carrying out cervical cytology in 2016-17.
- KC65 – information on referrals to colposcopy, subsequent treatment and outcome, collected from 195 clinics/trusts providing colposcopy services in 2016-17.

Further information on the underlying sources of information can be found in the separate Quality Statement¹ and in NHS Digital’s List of Administrative Sources².

¹ Available through the following link: http://digital.nhs.uk/pubs/cervical1617
² Available through the following link: https://www.digital.nhs.uk/article/542/Where-our-data-comes-from
Cervical Screening Process

The cervical screening process falls into three main parts

Call and recall programme

Most women invited by the screening programme have their initial screening test at either their GP practice or an NHS Community Clinic. The standard age ranges and frequency of screening are detailed above. Women aged 65 or over are ineligible for routine screening and are removed from the call/recall programme if they have a satisfactory screening history.

It is possible for some women outside the 25 to 64 years age range to be invited for screening. Women aged 65 or over who have never been screened and those whose last three tests were not normal are still eligible for screening. Women over 65 who require follow-up after treatment also continue to be included in the programme. In addition, women are now routinely invited shortly before their twenty-fifth birthday to ensure they can have their first screen at about age 25.

Cervical cytology

Samples from the testing process are passed to pathology laboratories for slide preparation and screening by a cytologist/screener. The results of each test are returned to the call/recall department, the woman’s GP and the sample taker (if not the GP). Women should be notified of their test results in writing within two weeks.

Most women receive a normal result and are recalled for another routine test in three or five years dependent on their age. Where a test result shows borderline change or low-grade dyskaryosis (abnormal cell changes), women are tested for infection with high-risk HPV (Human Papillomavirus). HPV is a common virus which, although harmless in most women, is linked to the development of abnormal cervical cells. If left untreated, these abnormal cells can develop into cervical cancer. Women whose samples test positive for HPV are referred to colposcopy. Where the HPV test is negative women are recalled for screening in three or five years as usual.

HPV testing as triage (sorting) for women with borderline and low-grade dyskaryosis results became routine from 1 April 2014.

In a small proportion of cases the pathology laboratory is unable to assess the cells on the cytology slide to give a result and the test is considered inadequate. In such cases women are asked to return for a repeat test three months later.

3 Where HPV Primary Screening is being piloted, women are first tested for HPV. If the sample is found to be positive, it is then examined by the cytologist for any abnormal cells.
Colposcopy

Women referred for colposcopy attend a colposcopy clinic where a colposcope (a lighted, low-powered microscope) is used to closely examine the cervix to determine appropriate treatment, if any. A biopsy may be taken from the cervix for diagnosis and/or the cervix may be treated. Women who do not require immediate treatment may be kept under surveillance by repeat cytology tests, with or without repeat colposcopy, at suitable intervals.

Quality Statement

The Quality Statement presents information to aid understanding and presentation of the data. This is also published as a separate document on the publication webpage which can be accessed via the following link:

http://digital.nhs.uk/pubs/cervical1617
Appendix B – Definitions

Coverage

Coverage is defined as the percentage of women in a population who were eligible for screening at a given point in time (31 March 2017 in this instance) and who were screened adequately within a specified period. Women are eligible for screening if they are in the screening age range and are not ineligible because their recall has been ceased for clinical reasons (most commonly due to hysterectomy).

As the frequency with which women are invited for screening is dependent on age, coverage is calculated differently for different age groups, as follows:

**Women aged 25 to 49**

Coverage is calculated as the number of women in this age group who have had an adequate screening test within the last 3.5 years as a percentage of the eligible population aged 25 to 49.

\[
\frac{\text{Total number of eligible women aged 25-49 with an adequate screening test in the last 3½ years}}{\text{Total Eligible Population aged 25-49}} \times 100
\]

**Women aged 50 to 64**

Coverage is calculated as the number of women in this age group who have had an adequate screening test within the last 5.5 years as a percentage of the eligible population aged 50-64.

\[
\frac{\text{Total number of eligible women aged 50-64 with an adequate screening test in the last 5½ years}}{\text{Total eligible population aged 50-64}} \times 100
\]

**Women aged 25 to 64 (the complete target age group)**

For the total target age group (25 to 64 years), two definitions of coverage are presented in this report.

The primary measure is ‘Age-appropriate coverage’, which represents the most up to date definition. It is derived from Open Exeter and used in the Public Health Outcomes Framework (PHOF)\(^4\). This takes into account the frequency with which women of different ages are invited for screening and defines coverage as the percentage of women in the population eligible for cervical screening who were screened adequately within the previous 3.5 years or 5.5 years, according to age (3.5 years for women aged 25-49 and 5.5 years for women aged 50-64) on 31 March 2017.

---

Total number of eligible women aged 25-49 with adequate screening test in the last 3½ years plus total number of eligible women aged 50-64 with adequate screening test in the last 5½ years

\[ \frac{\text{Total eligible Population aged 25-64}}{\times 100} \]

The second is referred to as ‘Five year coverage’ and represents an earlier definition. This measures the percentage of women in the population eligible for cervical screening who have had an adequate test within the last 5 years.

Total number of eligible women aged 25-64 with adequate screening test in the last 5 years

\[ \frac{\text{Total eligible Population aged 25-64}}{\times 100} \]

Five year coverage was the standard coverage measure reported in this publication up until 2013-14. It is derived from the KC53 return data set which includes further information on screening including detailed coverage breakdowns by age. Changes to the KC53 central data return are planned to enable age-appropriate coverage to be reported, but until these changes are made a separate NHS Digital data extract, created to provide data for PHOF coverage reporting, is being used as the source. This is taken from the same data source as the KC53 (Call and recall system via Open Exeter). As age appropriate coverage data is only available from 2010-11, the five year coverage figure continues to be reported for the time being, in order to present a longer time series for comparison.

Coverage statistics in this report are calculated using data from the NHAIS (Exeter) system and include all women registered with an NHS GP practice and those who are not registered with a GP practice but who are otherwise known to the NHS. The total number of women who are not registered with a GP or otherwise known to the NHS is unknown and it is therefore not possible to estimate how overall coverage rates might be affected by this group.

NHAIS data supports many primary care services including the NHS Cervical Screening Programme’s call and recall system for inviting women for screening. It is the only data source that can identify both the eligible population and those women who have been tested in the last three or five years.

Coverage at LA level is based on the eligible LA resident population. Coverage at Primary Care Organisation (PCO) level, i.e. prior to 2013-14 was based on the eligible PCO responsible population. See ‘Impact of NHS reorganisation’ in section 1.7 on ‘Changes in reporting and classification of cervical cytology’ of the Data Quality Statement which accompanies this publication for more information on the difference between LA resident and PCO responsible populations.
Achievable Standards

Achievable standards for laboratory reporting in cervical screening are set for key indicators as follows:

Positive Predictive Value (PPV) for CIN2 or worse

PPV is a measure of the laboratory’s ability to predict CIN2 or worse from tests with results of high-grade dyskaryosis (moderate) or worse. PPV relating cytology with histology is calculated from outcomes of referral for tests with results of high-grade dyskaryosis (moderate) or worse as follows:

\[
\text{PPV} = \left( \frac{\text{Numerator}}{\text{Denominator}} \right) \times 100
\]

**Numerator:** Number of tests with results of high-grade dyskaryosis (moderate) or worse with outcome of referral: cancer, adenocarcinoma in situ, CIN3 or CIN2.

**Denominator:** Number of tests as per numerator, but also including outcomes of CIN1, HPV only, No CIN/HPV and 'seen in colposcopy - No Abnormality Detected' (where result was high-grade dyskaryosis (moderate) or worse). Following the implementation of ABC3 from April 2013, PPV excludes women referred to gynaecology following a test result of ?glandular neoplasia (non-cervical).

Abnormal Predictive Value (APV) for CIN2 or worse:

APV is a measure of the laboratory’s ability to predict CIN2 or worse from tests with results of low-grade dyskaryosis (borderline or mild). APV relating cytology with histology is calculated from outcomes of referral for tests with results of low-grade dyskaryosis (borderline or mild) or worse as follows:

\[
\text{APV} = \left( \frac{\text{Numerator}}{\text{Denominator}} \right) \times 100
\]

**Numerator:** Number of tests with results of low-grade dyskaryosis with outcome of referral: cancer, adenocarcinoma in situ, CIN3 or CIN2.

**Denominator:** Number of tests as per numerator, but also including outcomes of CIN1, HPV only, No CIN/HPV and 'seen in colposcopy - No Abnormality Detected' where result was low-grade dyskaryosis (borderline or mild). Following the implementation of ABC3 from April 2013, APV excludes women referred to gynaecology following a test result of ?glandular neoplasia (non-cervical).

Referral Value (RV) for CIN2 or worse:

The Referral Value (RV) is defined as the number of women referred to colposcopy (excluding inadequate referrals) per detection of one CIN2 or worse lesion. Following the implementation of ABC3 from April 2013, RV excludes women referred to gynaecology following a test result of ?glandular neoplasia (non-cervical).

---

5 See section 3.4 of the Cervical Screening Programme 2016-17 main report for more information on achievable standards.
Women with negative cytology but who test positive for HPV and are referred to colposcopy are not currently included in the calculation of referral value. See section 1.4 of the Data Quality Statement which accompanies this publication for more information.

**Inadequate samples as a percentage of all samples**

Number of inadequate samples as a percentage of all samples.

**HPV Sentinel Site**

A number of sites began HPV testing as triage for women with mild or borderline test results in early 2007 prior to the roll out to all areas which began towards the end of March 2012. These sites were known as HPV sentinel sites.

**Percentile**

A percentile is the value of a variable below which a certain percent of observations fall. For example, the 10th percentile is the value (or score) below which 10 percent of the observations may be found.

**Other**

For definitions of further medical terminology please visit the NHS Cancer Screening Programmes website at [https://www.gov.uk/topic/population-screening-programmes/cervical](https://www.gov.uk/topic/population-screening-programmes/cervical)
Appendix C – Types of Invitation

The NHS Cervical Screening Programme categorises screening invitations into types as follows:

Call
Women invited for their first screen i.e. those who have never been screened before.

Routine recall
Women invited for screening in the year as a result of a routine recall for screening. These women will have either had a previous negative cytology result or a previous negative HPV test and been recalled after the usual interval (normally 3 or 5 years).

Repeat Recall
Women invited in the year as a result of an early repeat recall for screening. Repeat recalls can be for the following reasons:

  Surveillance
  Women invited for early screening because of a previous abnormal screening result or following treatment for cervical abnormalities.

  Abnormality
  Women invited for early screening because their last sample showed some abnormality and a repeat was advised.

  Inadequate
  Women invited for screening because their last sample was inadequate.
**Appendix D – Cytology Test Result Categories**

The NHS Cervical Screening Programme categorises the results of a cytology test as follows:

**Negative**

This indicates that no cell abnormalities were found.

**Borderline change (in squamous or endocervical cells)**

These are small changes found in the cells of the cervix which often return to normal by themselves.

The term ‘borderline change in squamous cells’ describes morphological alterations to squamous cells that fall short of low-grade dyskaryosis.

Borderline change in endocervical cells describes atypical endocervical cells where dyskaryosis cannot be excluded.

**Low-grade dyskaryosis**

Dyskaryosis is the name given to small changes that are found in the cells of the cervix (the neck of the womb). Low-grade dyskaryosis is associated with CIN1 (see Appendix E). These changes are not cancer, and in most cases do not lead to cancer in the future.

**High-grade dyskaryosis (moderate) or High-grade dyskaryosis (severe)**

For some women their result will show high-grade dyskaryosis (moderate) or high grade dyskaryosis (severe). These areas of changed cells are associated with CIN grades 2 and 3 respectively (see Appendix E).

**High-grade dyskaryosis/?Invasive squamous carcinoma**

Where a test result is high-grade dyskaryosis/?invasive squamous carcinoma this indicates probable CIN3 with additional features suggesting the possibility of invasive cancer. ?invasive squamous carcinoma is shown as ?invasive carcinoma in the tables and commentary for ease of reporting.

**?Glandular neoplasia of endocervical type**

A sample reported as ?glandular neoplasia of endocervical type shows cytological features suggestive of cervical glandular intra-epithelial neoplasia (CGIN) or endocervical adenocarcinoma.

**?Glandular neoplasia (non-cervical)**

A category of ?glandular neoplasia (non-cervical) is used where no cervical cell abnormalities were found but the sample contained
features suggesting a diagnosis of endometrial, ovarian or metastatic lesions from beyond the genital tract.

The terms “potential cervical cancer”, “abnormal”, “negative” and “inadequate” used in the text to describe the result of a cytology test are defined as follows in terms of the categories used on the cytology report form HMR 101/5:

**Potential cervical cancer:** HMR 101/5 cat. 5 (high-grade dyskaryosis/?invasive squamous carcinoma) or cat. 6 (?glandular neoplasia of endocervical type); women who have such test results should be referred urgently for further investigation.

**Abnormal:** HMR 101/5 cat. 8 (borderline change in squamous cells), cat. 9 (borderline change in endocervical cells), cat. 3 (low-grade dyskaryosis), cat. 7 (high-grade dyskaryosis (moderate)), cat. 4 (high-grade dyskaryosis (severe)), cat. 5 & 6 (see Potential cancer above);

**Negative:** HMR 101/5 cat. 2 (negative); women with a negative test result will usually be returned to the screening programme to be called again at the normal interval (3 or 5 years). Shorter recall intervals may be appropriate for women under surveillance or follow-up after treatment.

**Inadequate:** HMR 101/5 cat. 1 (inadequate); inadequate means it was not possible to obtain a valid result from the sample. Women with inadequate samples will be recalled for a repeat test. Women with three consecutive inadequate results should be referred to colposcopy for further investigation.
Appendix E – Outcomes of Gynaecological Referral

The NHS Cervical Screening Programme uses the following categories to record the results for women who are referred for gynaecological investigation:

**Cervical cancer**
The outcome of investigation shows cervical cancer.

**CIN (cervical intra-epithelial neoplasia)**
CIN is an indicator of the depth of abnormal cells within the surface layer of the cervix, and is divided into 3 grades. The higher the number/grade the more severe the condition:

- **CIN1** – one third of the thickness of the surface layer of the cervix is affected.
- **CIN2** – two thirds of the thickness of the surface layer of the cervix is affected.
- **CIN3** – full thickness of the surface layer of the cervix is affected (also known as carcinoma in situ)

**Adenocarcinoma in Situ**
A localised growth of abnormal glandular tissue that may become malignant\(^6\).

**HPV only**
This category includes those biopsies which were diagnosed as showing features consistent with HPV infection only. See Glossary section in the Cervical Screening Programme 2016-17 main report for more information on HPV.

**No CIN/No HPV**
This includes biopsies where no evidence of cervical disease or HPV infection can be identified and is be used for specimens of normal tissue only.

**Seen in colposcopy - result n/k**
This category includes women who have had a biopsy taken but the result is not yet known or available.

**Inadequate Biopsy**
This category is used for biopsies which are known to be inadequate or unrepresentative due to deficiencies in the sampling process.

Colposcopy – no abnormality detected
This category is used for women attending for adequate colposcopy which gives a normal result for cervical neoplasia or HPV infection without a biopsy being required.
Appendix F – Uses of Statistics by Known Users

This section details known users of the report and the purposes for which they use the statistics. All these users have found the information in the report useful for the purposes set out.

Department of Health (DH)
The Department of Health (DH) use the statistics from this publication to inform policy and to monitor the quality of screening services through regional quality assurance teams. The statistics used in the report are also used by DH to respond to public and Parliamentary business.

Public Health England (PHE)
Screening and immunisation managers in PHE use the statistics for performance management purposes, comparing local statistics with regional and national figures.

NHS Cancer Screening Programmes (NHSCSP), Public Health England
The NHS Cancer Screening Programme (NHSCSP) uses the bulletin as a reference document to monitor the quality and effectiveness of the NHS Cancer Screening Programmes and progress against their key targets for screening the eligible population in England.

NHS England
NHS England use the statistics from this publication to monitor the quality of screening services commissioned against key performance indicators set out in the Section 7a agreement with the Department of Health.

Regional Screening Quality Assurance Services (SQAS), NHSCSP
The Regional SQAS co-ordinators utilise the report as part of their role in ensuring the screening process is achieving its primary targets across England.

Pathology Laboratories
The Pathology QA Committee use the statistics to compare local statistics against national figures and national achievable standards and guidelines.

Colposcopy Clinics
The Colposcopy QA Committee uses the cervical screening statistical bulletin to assess the overall performance of the colposcopy services in England with reference to the screened population. The statistics are also used to identify regional and hospital variations. This gives insight into future national audits.
Local Authorities

Local authorities and NHS Clinical Commissioning Groups (CCGs) are required to prepare Joint Strategic Needs Assessments of Health and Wellbeing (JSNAs), which inform local commissioning of health and wellbeing services. Indicators from the publication form part of the Local Government Association’s Joint Strategic Needs Assessment: Data Inventory (via the Compendium of Population Health Indicators).

Academics

The Cancer Epidemiology Unit, University of Oxford use the raw data supplied by NHS Digital and supplement it with additional data to provide a more evaluative analysis to improve the performance of the national screening programmes through peer reviewed research papers and the dissemination of such information through appropriate channels.

Compendium of Population Health Indicators

Indicators from the publication are included in the Compendium of Population Health Indicators which is widely used within the NHS as well as outside it. See: https://indicators.hscic.gov.uk/webview/

Annual Report of the Chief Medical Officer

Coverage data from the publication, together with supplementary information provided by NHS Digital, was used to inform the Annual Report of the Chief Medical Officer's on the State of the Public's Health.

The report draws attention to major health challenges requiring immediate action and details progress made in key areas identified in previous annual reports. Data from the KC53 on coverage by PCT for women aged 25-64 is used in Chapter 5 of this report. See: https://www.gov.uk/government/publications/cmo-annual-report-2011-volume-one-on-the-state-of-the-public-s-health

Jo’s Cervical Cancer Trust

Jo’s Cervical Cancer Trust is a UK charity dedicated to supporting those affected by cervical cancer and cervical abnormalities. The charity regularly runs awareness campaigns to improve screening uptake both at a national and local level. Cervical screening data are used by the charity to help identify how it can best focus its work towards improving screening uptake.

Cancer Research UK

Cancer Research UK use the report for planning and evaluating their work. The statistics are used to inform a wide range of work including the charity’s policy positions and public communications about screening. For example, they are able to inform people potentially taking part in screening about the
frequency of abnormal results and all the possible outcomes of screening.

Media

The data are used to underpin articles in newspapers, journals, etc. on matters of public interest.

Unknown Users

The cervical screening publication is free to access via NHS Digital website and therefore the majority of users will access the report without being known to NHS Digital. It is important to put mechanisms in place to try to understand how these additional users are using the statistics and also to gain feedback on how we can make the data more useful to them. On the webpage where the report is published users are asked to contact us if they would like to give any feedback, specifically we would like to know:

- How useful did you find the content in this publication?
- How did you find out about this publication?
- What type of organisation do you work for?
- What did you use the report for?
- What information was the most useful?
- Were you happy with the data quality?
- To help us improve our publications, what changes would you like to see (for instance content or timing)?
- Would you like to take part in future consultations on our publications?

Any responses via this web form are passed to the team responsible for the report to consider.
Appendix G – Feedback from Users

NHS Digital publishes around 90 series of Official Statistics and National Statistics each year. Use of health and care statistics helps those involved to manage the system more effectively, commission better services, understand public health trends in more detail, develop new treatments and monitor the safety and effectiveness of care providers.

Our Strategy for 2015-2020 sets out that over the next few years we are committed to analysing and making openly available data, statistical information and insights about the health and social care sector in ways which better meet our users’ needs. However, these changes come at a time when spending on central services is being squeezed, and we must better prioritise our current services.

In our 2016 consultation on changes to statistics produced by NHS Digital, we proposed a series of changes over the next three years which will help us to better prioritise resources from our stretched budget while developing our statistical products to better meet the needs of our users. We are making the changes necessary to enable us to produce high quality statistics suited to support a modern health and care system and help Britain make better decisions. The consultation results are available on the NHS Digital web site here.

In terms of the NHS Cervical Screening Programme, England publication we proposed to reduce commentary and increase use of infographic type presentation.

The responses received showed very good support for the proposal. In particular, the majority of respondents were in favour of moving towards an increased use of infographic type presentation as long as the underlying methodologies that are used in the data analysis are made available as a technical annex. The responses also highlighted the need to retain the annual data tables as these are regarded as crucial for performance monitoring, benchmarking and trend analysis, as well as contributing to JSNA updates. Some responses also highlighted the need to publish timely data at a more granular level, i.e. CCG/GP Practice level, in addition to LA level, as this will support the needs of commissioners.

As a result of the consultation we will explore ways of reducing the commentary and increasing the use of infographic type presentation. This is likely to be achieved via a phased approach and will require close partnership working with colleagues within the Cervical Screening programme at PHE and other key stakeholders. We will also continue to work with colleagues from the Screening Programme to explore ways of making more frequent, timely and contemporaneous screening data at CCG/GP Practice level available in the public domain. In doing so, regular timely data releases will provide users with a more immediate source for local oversight and commissioning of screening services, and will also help those involved in managing the Cervical Screening programme make better informed and considered decisions.
Appendix H - Data Validation and Data Quality

Information on the NHS Cervical Screening Programme is collected on the following returns:

- KC53 – information collected from the call and recall system, and reported by Upper Tier Local Authorities.
- KC61 – information on screening samples examined by pathology laboratories, collected from laboratories carrying out cervical cytology.
- KC65 – information on referrals to colposcopy, subsequent treatment and outcome, collected from clinics/trusts providing colposcopy services.

In addition to the above returns, data on time from screening to receipt of results is obtained from monthly reports produced by the Open Exeter system7.

For 2016-17, submissions have been made for all LAs. All pathology laboratories submitted data for 2016-17.

The NHS Cervical Screening Programme includes regional Screening Quality Assurance Service (SQASs) which quality assure the data collections. Validation undertaken by SQASs varies between regions but some examples of the types of quality assurance checks that SQASs undertake are:

- checks on data completeness
- identification of any unusual figures which are then followed up individually
- comparisons with previous years’ data to ensure that any unusual trends are identified and explained
- consistency checks between different parts of the returns
- checks that totals equal the sums of parts
- checks on the calculations of statistics

Data validation and quality assurance checks are also carried out by NHS Digital as part of the publication process. Validation undertaken by NHS Digital includes:

- comparisons with previous years’ data to ensure that any unusual trends are identified and explained
- consistency checks between different parts of the returns
- checks that totals equal the sums of parts
- checks on the calculation of statistics
- checking for outliers (figures that are particularly low or high compared to other areas)

Part of NHS Digital’s quality assurance procedure includes returning data tables to the SQASs for verification prior to publication.

7 ‘Exeter’ system (NHAIS), Cancer Screening Statistics VSA15 Report.
The sections below describe the issues/areas identified for further investigation through NHS Digital's validation processes and the outcomes of follow-ups with the SQASs.

**KC53**

Some queries were raised with SQASs where no results had been received where the recall status ceased because of age reasons. All of these were resolved following contact with the SQAS with resubmissions necessary.

A number of queries were raised where there were notable differences to previous year’s submissions (year on year sense checks). All of these were signed off following contact with the SQAS with no resubmissions necessary.

**KC61**

Consistency checks between different parts of the return identified a small number of mismatches. These were raised with the SQASs and corrected through resubmissions.

Resubmissions were made by a small number of pathology laboratories after queries raised by NHS Digital relating to year on year change in some figures. Most queries raised with SQASs following validation checks were resolved satisfactorily, some requiring a resubmission and others gave reasons as to why there were variances.

No other data quality issues were identified by the SQASs for any laboratory submissions in 2016-17. Where data quality issues have been highlighted for a pathology laboratory (in previous years), some caution should be exercised when comparing figures over time as apparent changes could reflect changes in data quality/completeness rather than real changes.

**KC65**

Consistency checks between different parts of the return identified issues in the submissions made by a number of colposcopy clinics. These were raised with the SQASs and, in most cases, corrected through resubmissions.

There were a number of queries raised in relation to differences from the previous reporting year’s figures. Most of these were cleared with re-submissions of data.

**Time from screening to receipt of result**

No data quality issues were highlighted through the quality assurance and validation procedures.

**Conclusion**

Almost all issues that were highlighted through NHS Digital's validation processes for follow-up with SQASs were resolved satisfactorily. Where data issues were outstanding, footnotes have been placed against the relevant tables as described above.
Appendix I – Related Publications and Useful Web Links

This bulletin and copies of the Korner returns KC53, KC61 and KC65 can be found on NHS Digital’s website at:
http://digital.nhs.uk/pubs/cervical1617

Since 2004-05 this bulletin has been published by NHS Digital. Previous editions published by the Department of Health, can be found at:

Audit of invasive cervical cancer - national reports:

Further information about cervical screening is available from the NHS Cancer Screening Programmes website:
https://www.gov.uk/topic/population-screening-programmes/cervical

Cervical Screening quarterly coverage statistics (Management Information) can be found on the following links:

GP level data

LA level Data

CCG level data
References


See also http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2394236/


See also http://msc.sagepub.com/content/19/2/89.long


See also http://webarchive.nationalarchives.gov.uk/20150506150512/http://www.cancerscreening.nhs.uk/cervical/hpv-sentinel-sites.html


See also http://www.ncin.org.uk/view?rid=1669

Information and technology for better health and care

www.digital.nhs.uk
0300 303 5678
enquiries@nhsdigital.nhs.uk

This publication may be requested in large print or other formats.

Published by NHS Digital, part of the Government Statistical Service

Copyright © 2017 Health and Social Care Information Centre.
The Health and Social Care Information Centre is a non-departmental body created by statute, also known as NHS Digital.

OGL

You may re-use this document/publication (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0.

To view this licence visit www.nationalarchives.gov.uk/doc/open-government-licence or write to the Information Policy Team, The National Archives, Kew, Richmond, Surrey, TW9 4DU; or email: psi@nationalarchives.gsi.gov.uk