

Protecting and improving the nation's health

Cervical screening standards data report 1 April 2018 to 31 March 2019



About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, research, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

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About PHE Screening

Screening identifies apparently healthy people who may be at increased risk of a disease or condition, enabling earlier treatment or better informed decisions. National population screening programmes are implemented in the NHS on the advice of the UK National Screening Committee (UK NSC), which makes independent, evidence-based recommendations to ministers in the four UK countries. PHE advises the government and the NHS so England has safe, high quality screening programmes that reflect the best available evidence and the UK NSC recommendations. PHE also develops standards and provides specific services that help the local NHS implement and run screening services consistently across the country

www.gov.uk/phe/screening Twitter: <u>@PHE_Screening</u> Blog: <u>phescreening.blog.gov.uk</u> For queries relating to this document, please contact: <u>phe.screeninghelpdesk@nhs.net</u>

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Published January 2020 PHE publications gateway number: GW-968



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Introduction

PHE Screening is delighted to publish its first data report on the main national <u>cervical</u> <u>screening programme standards</u> which were updated and published in September 2018.

This report focusses on performance in England from April 2018 to March 2019 but also includes trend data from previous years where this is available.

These standards contribute to assessing the quality of the cervical screening programme across England. Publishing the data ensures that stakeholders and the public have access to reliable and timely information on the quality and performance of the screening programme.

The standards focus on some of the important targets commissioners and providers have to meet and maintain to make sure local screening services are high quality, safe and effective.

The report provides data for the first time on detailed laboratory and colposcopy clinical standards. This includes cervical cytology laboratory sensitivity (<u>CSP-S04</u>) and the follow up of individuals treated in colposcopy (<u>CSP-S09</u>).

Where the data show that standards are not met or there are data collection issues, providers and commissioners should ensure appropriate action is taken to address the issue. PHEs Screening QA Service works to provide advice and support to this process.

The data in this report are complimentary to those published jointly by NHS Digital and PHE Screening in the annual <u>cervical screening statistical bulletin</u> for 2018 to 2019.

We acknowledge that the report coincides with a time of significant changes to the programme in implementing the HPV Primary Screening pathway and a major transition of laboratory services. We thank all those involved within PHE Screening who have contributed to the development and publication of this report and all the staff in cervical screening services who provide the data.

Further information

For queries relating to this document, please contact: <u>phe.screeninghelpdesk@nhs.net</u>

Index of standards

Standard	CS name
<u>CSP-S01</u>	coverage (under 50 years)
<u>CSP-S02</u>	coverage (50 years and above)
<u>CSP-S03</u>	Test – timely receipt of result letter
<u>CSP-S04</u>	Test – minimise false negative reporting
<u>CSP-S05</u>	Test – inadequate cytology
<u>CSP-S06</u>	Test – cytological positive predictive value (PPV)
<u>CSP-S07</u>	Test – cytological abnormal predictive value (APV)
<u>CSP-S08</u>	Colposcopy – timely biopsy result letter sent
<u>CSP-S09</u>	Colposcopy – intervention/treatment (12-month follow-up after treatment)
<u>CSP-S010</u>	Colposcopy – intervention/treatment (inadequate cytology)
<u>CSP-S011</u>	Colposcopy – intervention/treatment (6-week appointment)
<u>CSP-S012</u>	Colposcopy – intervention/treatment high grade referral (2-week appointment)

Full definitions for each standard can be found at

https://www.gov.uk/government/publications/cervical-screening-programmestandards/cervical-screening-programme-standards-valid-for-data-collected-from-1april-2018

Notes

For Standards 6, 7 & 9

The term "high grade abnormality" covers cytology results of moderate dyskaryosis or worse including severe, invasive and glandular changes

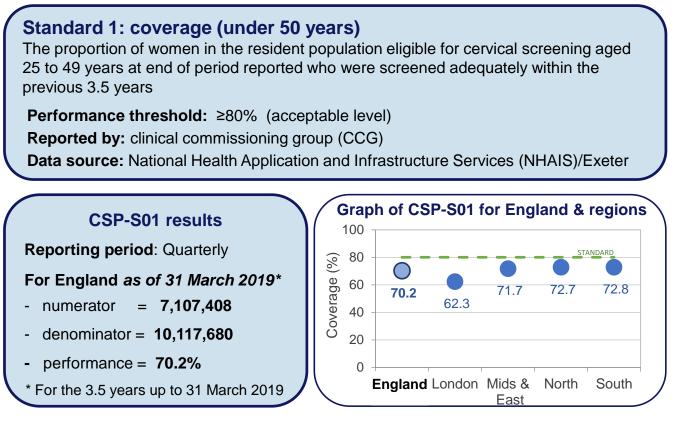
The term "low grade abnormality" covers cytology results of low grade dyskaryosis and borderline changes

Cervical intraepithelial neoplasia (CIN) is the medical term for abnormal cells in the cervix. CIN is not cancer, but it can sometimes go on to develop into cancer CIN is graded CIN 1, 2 or 3, where:

- CIN 1 (low grade) means that the abnormality is unlikely to develop into cancer as the cells will often go back to normal on their own
- CIN 2 or 3 (high grade) means that there is a greater chance the cells could develop into cancer. Women with CIN 2 or 3 are usually offered treatment

Cervical glandular intraepithelial neoplasia (CGIN) is an abnormality of the glandular tissue in the cervix. For any grade of CGIN, a woman will be offered treatment. Adenocarcinoma in situ is another name for CGIN

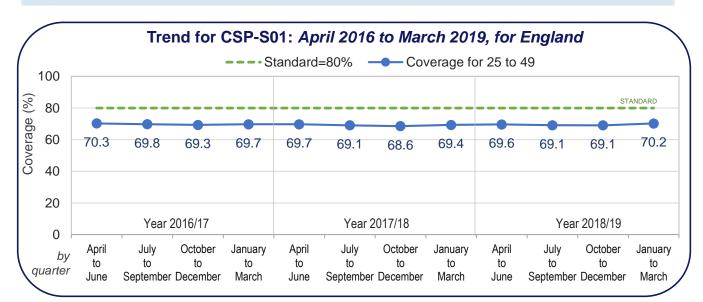
Cervical screening programme S01 part 1



Eligible individuals are those entitled to an offer of screening. For cervical screening, this is individuals aged 24.5 to 64 who have a cervix

Coverage is an important indicator for the programme to achieve it's aims of reducing incidence and mortality

Coverage for the 25 to 49 age group is historically lower than for the 50 to 64 age group – see standard S02



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Cervical screening programme S01 part 2

Standard 1: coverage (under 50 years)

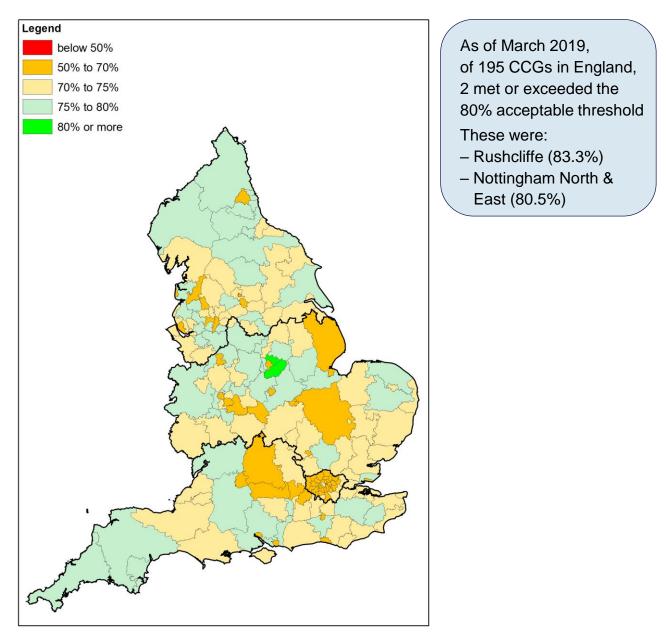
The proportion of women in the resident population eligible for cervical screening aged 25 to 49 years at end of period reported who were screened adequately within the previous 3.5 years

Performance threshold: ≥80% (acceptable level)

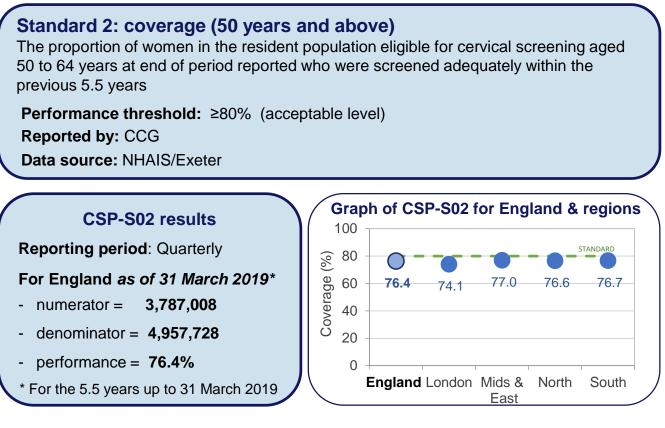
Reported by: CCG

Data source: NHAIS/Exeter

Map of performance by CCG



Cervical screening programme S02 part 1



Eligible individuals are those entitled to an offer of screening. For cervical screening, this is individuals aged 24.5 to 64 who have a cervix

Coverage is an important indicator for the programme to achieve it's aims of reducing incidence and mortality

Coverage for the 50 to 64 age group has historically been higher than for younger women – see standard S01

		Tre	nd for (CSP-SO)2: Ap	ril 2016	to Mar	ch 201	9, for l	England	1	
100				;	Standar	d=80%	Co	overage f	or 50 to	64		
80	•-										ST	ANDARD
00 erage	78.1	77.7	77.4	77.3	77.1	76.7	76.3	76.3	76.4	76.2	76.1	76.4
3 40												
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by quarter	April to June	July to September	October to December	January to March	April to June	July to Septembe	October to r December	January to March	April to June	July to September	October to December	January to March

Cervical screening programme S02 part 2

Standard 2: coverage (50 years and above)

The proportion of women in the resident population eligible for cervical screening aged 50 to 64 years at end of period reported who were screened adequately within the previous 5.5 years

Performance threshold: ≥80% (acceptable level) Reported by: CCG Data source: NHAIS/Exeter

Map of performance by CCG

Legend As of March 2019, below 50% of 195 CCGs in England, 50% to 70% 6 met or exceeded the 80% 70% to 75% acceptable threshold 75% to 80% 80% or more These were - Rushcliffe (84.4%) - Nottingham West (81.5%) - South Lincolnshire (81.4%) - Greater Huddersfield (80.8%)- Nottingham North and East (80.3%) - North Derbyshire (80.2%)

Cervical screening programme S03 part 1

Standard 3: Test – timely receipt of result letter

Proportion of women expected to receive their screening results in writing within 14 days from date of the sample being taken

Performance threshold: ≥98% (acceptable level)

Reported by: CCG

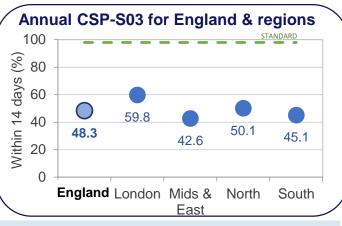
Data source: NHAIS/Exeter - Vital signs report

CSP-S03 results

Reporting period: Annually

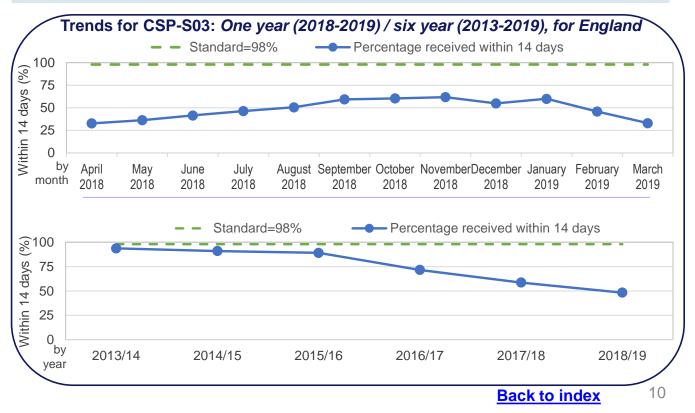
For England 1 April 2018 to 31 March 2019

- numerator = 1,574,061
- denominator = 3,258,927
- performance = **48.3%**



This standard covers the screening pathway from the date the sample is taken to the date the result letter is expected to be received

The time taken to implement human papilloma virus (HPV) primary screening across England has had an unintended impact on laboratory cytology workforce and reduced cytology screening capacity. This led to an increase in the time taken to issue women with their results. HPV primary screening is due to be fully in place by 31 December 2019



Cervical screening programme S03 part 2

Standard 3: Test – timely receipt of result letter

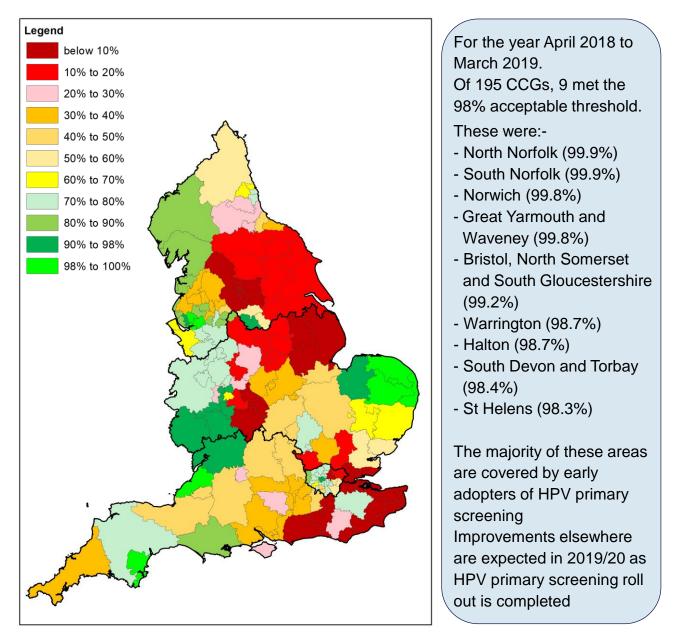
Proportion of women expected to receive their screening results in writing within 14 days from date of the sample being taken

Performance threshold: ≥98% (acceptable level)

Reported by: CCG

Data source: NHAIS/Exeter - Vital signs report

Map of performance by CCG



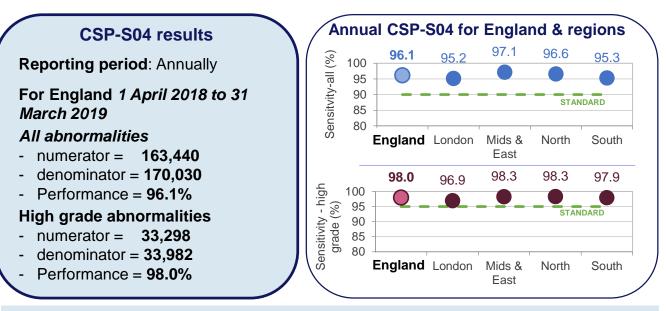
Cervical screening programme S04 part 1

Standard 4: Test – minimise false negative reporting Assessing accuracy of first cytology examination as determined by rapid review

Performance threshold: ≥90% for all abnormalities, ≥95% for high grade abnormalities (moderate abnormalities and above)

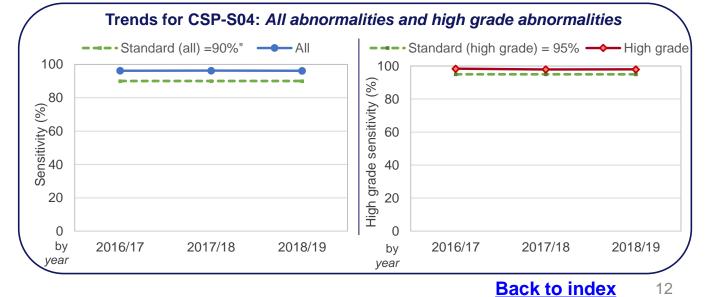
Reported by: cervical screening laboratory

Data source: annual data submission by laboratories



This standard, known as "sensitivity", measures the proportion of all abnormalities or high grade abnormalities that were correctly identified at the initial review when compared with the results of a second, "rapid" review. This standard is important to monitor to reduce the chance of abnormalities not being detected

This data has not been published nationally before and is only available since 2016/17. In 2018/19, 43 of 48 laboratories reported these data. Services and commissioners are responsible for taking action to ensure accurate and complete data are reported



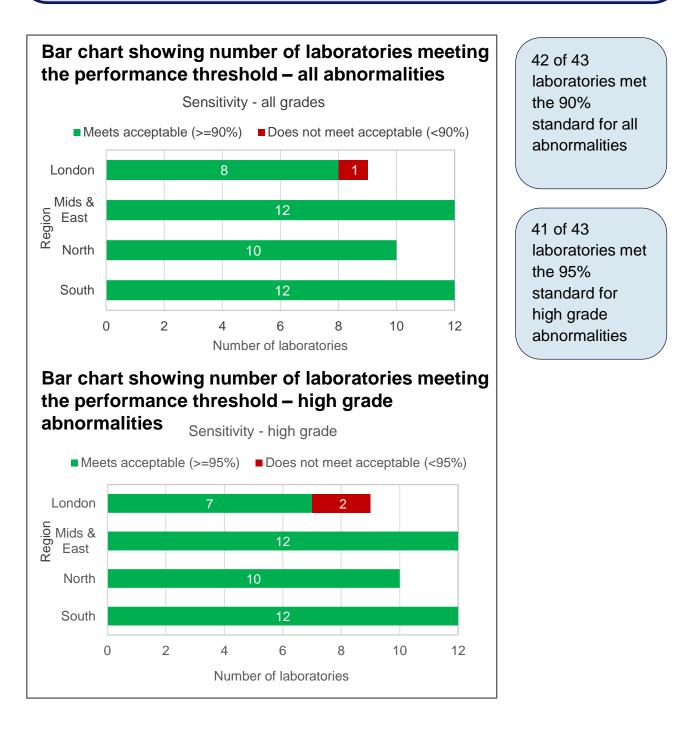
Cervical screening programme S04 part 2

Standard 4: Test – minimise false negative reporting Assessing accuracy of first cytology examination as determined by rapid review

Performance threshold: ≥90% for all abnormalities, ≥95% for high grade abnormalities (moderate abnormalities and above)

Reported by: cervical screening laboratory

Data source: annual data submission by laboratories



Cervical screening programme S05 part 1

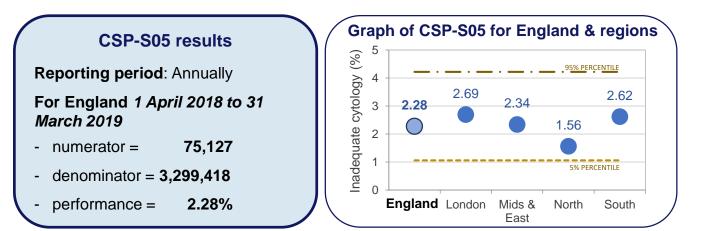
Standard 5: Test – inadequate cytology

The proportion of samples reported as cytology inadequate

Performance thresholds: 5th to 95th percentile across all laboratories

Reported by: cervical screening laboratory

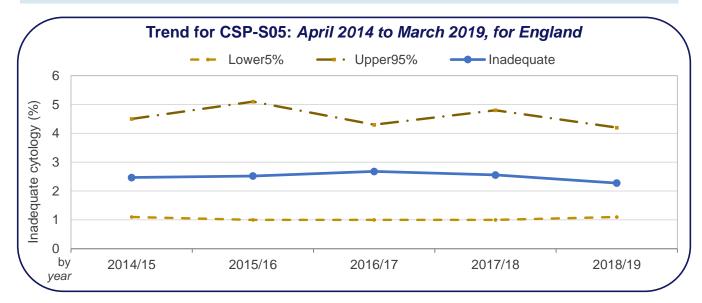
Data source: KC61 Part B (mandatory data return)



Inadequate rate is reported for women aged 25 to 64 who were screened at a GP Practice or NHS community clinic

Rates should be low rates as tests reported as inadequate mean they need to be repeated to get a result for the woman. However some inadequate results are expected due to technical reasons. Calculating a range means that some laboratories will be outside the standard and this would warrant further investigation

The 5%:95% 'acceptable' range is calculated annually from the rates for all laboratories. For 2018/19, this is 1.1% to 4.2%



Cervical screening programme S05 part 2

Standard 5: Test – inadequate cytology The proportion of samples reported as cytology inadequate

Bar chart showing number of laboratories within

Performance thresholds: 5th to 95th percentile across all laboratories

Reported by: cervical screening laboratory

Data source: KC61 Part B (mandatory data return)

the acceptable range for inadequate cytology rate Inadequate cytology Below range Within 5%:95% range Above range London 9 Mids & 10 Region East North 10 South 12 0 5 10 15 Number of laboratories

In 2018/19, 41 of 48 laboratories performed within the 5%:95% range

The minimum rate reported was 0.1%. The maximum rate reported was 5.4%

Cervical screening programme S06 part 1

Standard 6: Test – cytological positive predictive value (PPV)

The proportion of women referred with high grade abnormalities who have a histological outcome of CIN2, CIN3, adenocarcinoma in situ/CGIN or cervical cancer. See notes

Performance thresholds: 5th to 95th percentile derived from previous year's KC61

Reported by: cervical screening laboratory

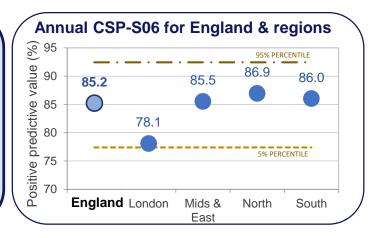
Data source: KC61 Part C2 (mandatory data return)

CSP-S06 results

Reporting period: Annually

For England *1 April 2018 to 31 March 2019*

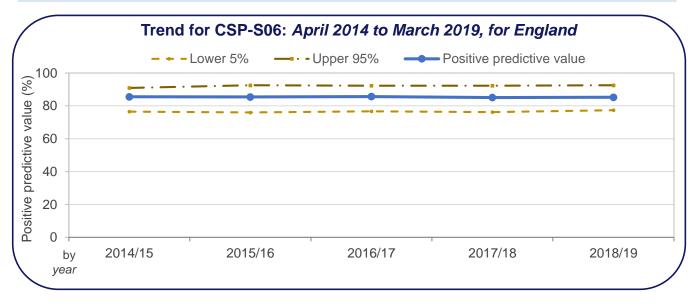
- numerator = 27,592
- denominator = 32,379
- performance = **85.2%**



PPV reports the correlation between high grade cytology and histological outcome for women referred to colposcopy in the 12 months prior to the year reported

Cytology is partly subjective and may be overcalled and the PPV can be further influenced by histological diagnosis and colposcopy practice and disease prevalence. Calculating a range means that some laboratories will be outside the standard and this would warrant further investigation

The 5%:95% 'acceptable' range is calculated annually from the rates for all laboratories. For 2018/19, this is 77.4% to 92.4%



Cervical screening programme S06 part 2

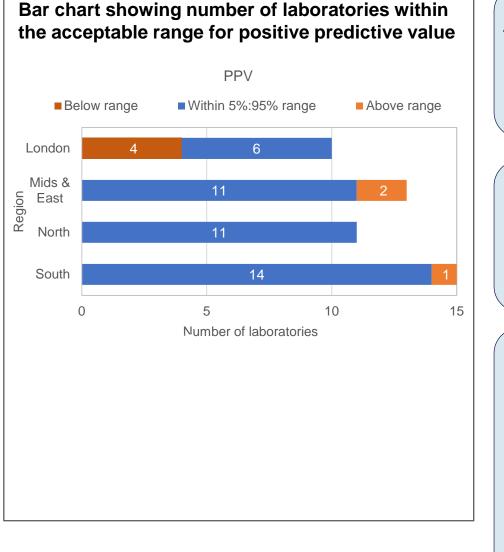
Standard 6: Test – cytological positive predictive value (PPV)

The proportion of women referred with high grade abnormalities who have a histological outcome of CIN2, CIN3, adenocarcinoma in situ/CGIN or cervical cancer

Performance thresholds: 5th to 95th percentile across all laboratories

Reported by: cervical screening laboratory

Data source: KC61 Part C2 (mandatory data return)



In 2018/19, 42 of 49 laboratories performed within the 5%:95% range

The minimum rate reported was 68.6%. The maximum rate reported was 93.1%

PPV above the range may mean not enough high grade abnormalities are detected PPV below the range may mean samples are called a high grade abnormality when they are low grade

Cervical screening programme S07 part 1

Standard 7: Test – cytological abnormal predictive value (APV)

Assesses the percentage of samples reported as borderline endocervical or low grade which lead to a colposcopy referral and where the histological outcome is CIN2, CIN3, adenocarcinoma in situ/CGIN or cervical cancer *See notes*

Performance thresholds: 5th to 95th percentile derived from previous year's KC61

Reported by: cervical screening laboratory

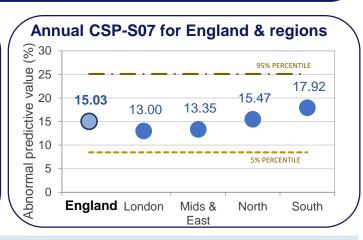
Data source: KC61 Part C2 (mandatory data return)

CSP-S07 results

Reporting period: Annually

For England 1 April 2018 to 31 March 2019

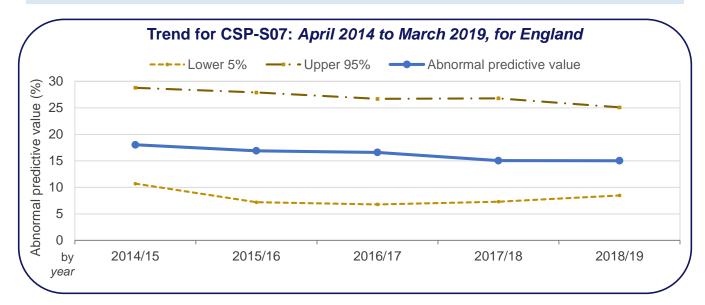
- numerator = **11,300**
- denominator = 75,189
- performance = **15.03%**



APV reports the correlation between low grade cytology and histological outcome for women referred to colposcopy in the 12 months prior to the year reported. A small proportion of low grade screening results are expected to be found to have a high grade histology outcome

Cytology is partly subjective and may be undercalled. APV can also be influenced by histological diagnosis and colposcopy practice. Calculating a range means that some laboratories will be outside the standard and this would warrant further investigation

The 5%:95% 'acceptable' range is calculated annually from the rates for all laboratories. For 2018/19, this is 8.4% to 25.1%



Cervical screening programme S07 part 2

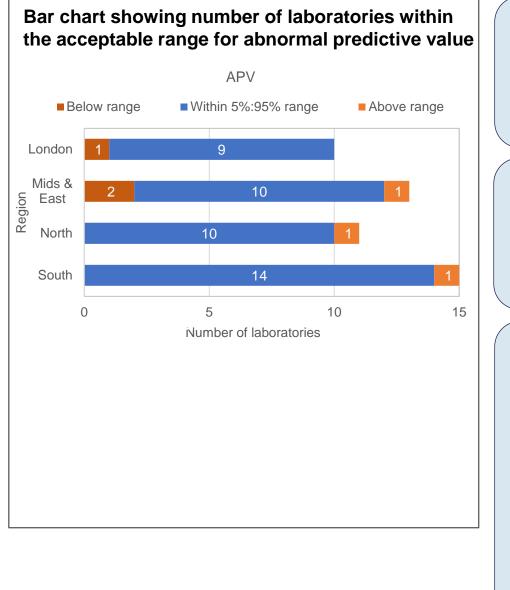
Standard 7: Test – cytological abnormal predictive value (APV)

Assesses the percentage of samples reported as borderline endocervical or low grade which lead to a colposcopy referral and where the histological outcome is CIN2, CIN3, adenocarcinoma in situ/CGIN or cervical cancer

Performance thresholds: 5th to 95th percentile across all laboratories

Reported by: cervical screening laboratory

Data source: KC61 Part C2 (mandatory data return)



In 2018/19, 43 of 49 laboratories performed within the 5%:95% range

The minimum rate reported was 6.78%. The maximum rate reported was 27.79%

APV above the range may mean samples are being called low grade when they are actually high grade APV below the range may mean not enough samples are being called a low grade abnormality

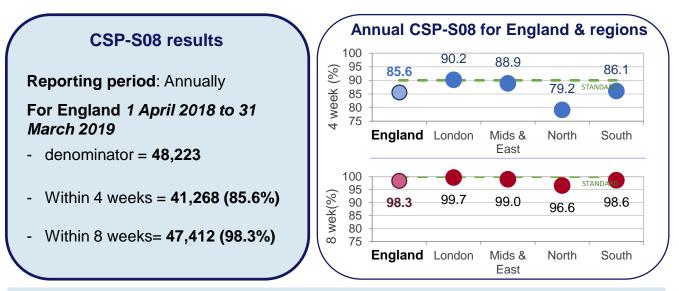
Cervical screening programme S08 part 1

Standard 8: Colposcopy – timely biopsy result letter sent Proportion of women to receive biopsy results within 4 or 8 weeks from date of test

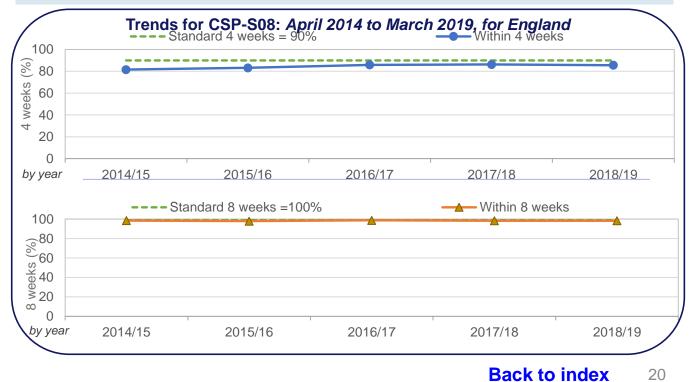
Performance threshold: ≥90% within 4 weeks (acceptable) 100% within 8 weeks (achievable)

Reported by: colposcopy clinic

Data source: KC65 Part D (mandatory return)



This standard is important to ensure that women receive the results of their biopsy (diagnostic or treatment) in a timely manner. This ensures that those who require further treatment and those who do not are informed at the earliest opportunity. Achievement of this standard is influenced by the timeliness of histology reporting and the efficiency of colposcopy clinic administration



Cervical screening programme S08 part 2

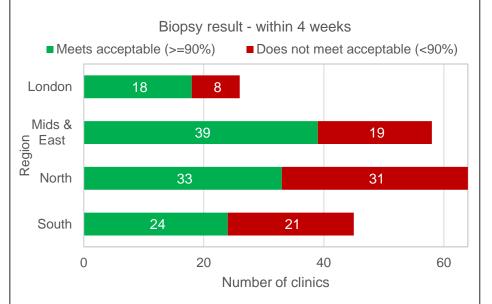
Standard 8: Colposcopy – timely biopsy result letter sent Proportion of women to receive biopsy results within 4 or 8 weeks from date of test

Performance threshold: ≥90% within 4 weeks (acceptable) 100% within 8 weeks (achievable)

Reported by: colposcopy clinic

Data source: KC65 Part D (mandatory return)

Bar charts showing number of clinics meeting the performance thresholds for biopsy results sent within 4 weeks (90%) and 8 weeks (100%)



Biopsy result - within 8 weeks Meets acceptable (100%) Does not meet acceptable (<95%)</p> London 18 8 Mids & 36 22 Lo East North 32 32 South 19 26 20 40 60 0 Number of clinics

114 of 193 clinics met the 90% within 4 weeks threshold (acceptable)

105 of 193 clinics met the 100% within 8 weeks threshold (achievable)

Cervical screening programme S09 part 1

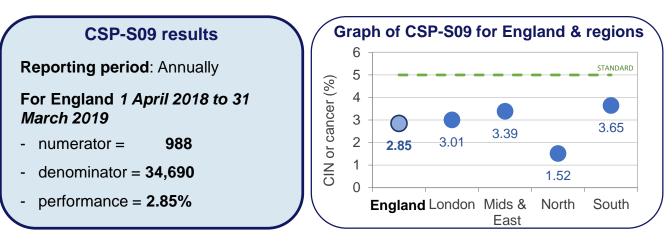
Standard 9: Colposcopy – intervention/treatment (12-month follow-up after treatment)

Proportion of treated women with CIN or cancer within 12 months of previous treatment See notes

Performance threshold: <5% (acceptable level)

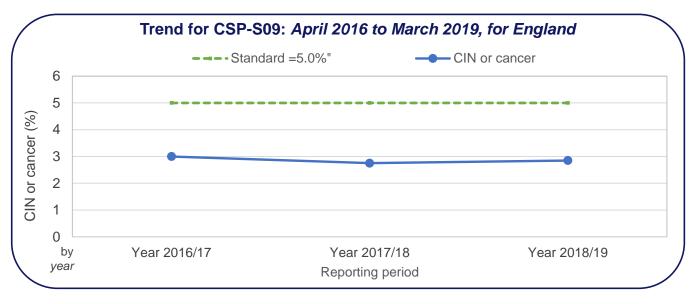
Reported by: colposcopy clinic

Data source: annual submission by clinics



It is important to maximise successful treatment to ensure that the number of women with residual high grade disease or cancer within 12 months of treatment is as low as possible

Reported annually by clinics – this is the first time these data have been published. Data is only available from 2016/17. Not all clinics could supply data for this standard – 160 of 193 clinics returned figures. Services and commissioners are responsible for taking action to ensure accurate and complete data are reported



Cervical screening programme S09 part 2

Standard 9: Colposcopy – intervention/treatment (12-month follow-up after treatment)

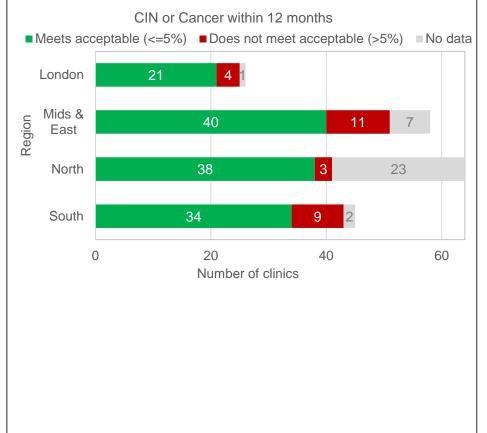
Proportion of treated women with CIN or cancer within 12 months of previous treatment

Performance threshold: <5% (acceptable level)

Reported by: colposcopy clinic

Data source: annual submission by clinics

Bar chart showing number of clinics meeting the performance threshold for rate of CIN or cancer within 12 months of treatment



133 of the 160 clinics met the 5% threshold (acceptable level)

Cervical screening programme S10 part 1

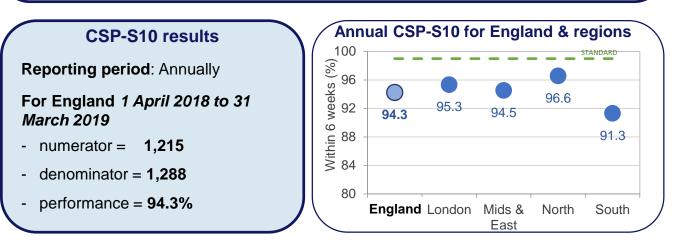
Standard 10: Colposcopy – intervention/treatment (inadequate cytology)

Women should be referred for colposcopy after 3 consecutive inadequate cytology screening tests and offered an appointment within 6 weeks of referral

Performance threshold: >99% (acceptable level)

Reported by: colposcopy clinic

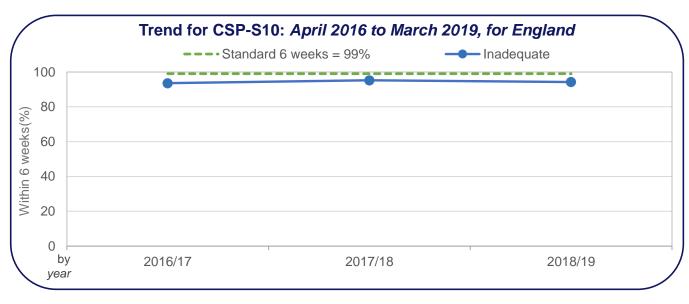
Data source: annual submission by clinics



This standard is important to ensure that women have prompt referral for colposcopy assessment to reduce anxiety, and to make sure that no abnormality is missed and a definitive screening result is achieved

This standard covers women referred to colposcopy following persistent inadequate cytology or unavailable HPV result, with the most recent result being inadequate cytology

Not all clinics reported receiving inadequate referrals – 165 of 193 clinics had referrals in this category. The remaining 28 reported no inadequate referrals during the time period



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Cervical screening programme S10 part 2

Standard 10: Colposcopy – intervention/treatment (inadequate cytology)

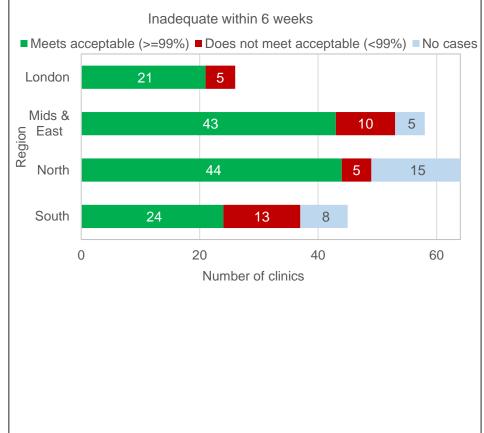
Women should be referred for colposcopy after 3 consecutive inadequate cytology screening tests and offered an appointment within 6 weeks of referral

Performance threshold: >99% (acceptable level)

Reported by: colposcopy clinic

Data source: annual submission by clinics

Bar chart showing number of clinics meeting the performance threshold for appointments offered within 6 weeks of a third inadequate result



132 of the165 clinics met the 99% threshold (acceptable level)

Cervical screening programme S11 part 1

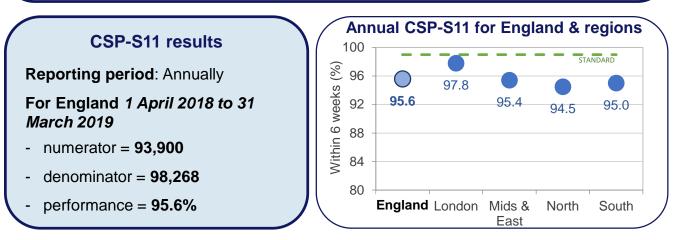
Standard 11: Colposcopy – intervention/treatment (6-week appointment)

Proportion of women who are offered a colposcopy within 6 weeks of referral due to a positive high risk (HR)-HPV test and negative cytology or borderline changes or low-grade dyskaryosis

Performance threshold: >99% (acceptable level)

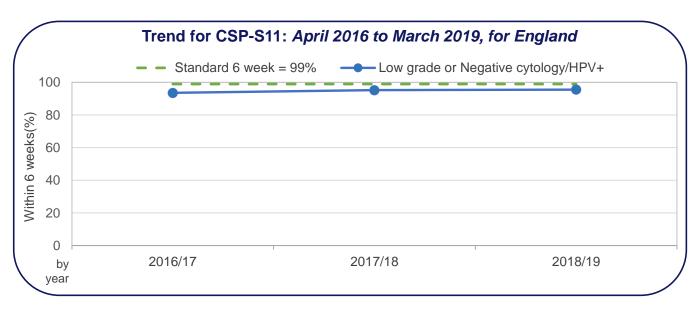
Reported by: colposcopy clinic

Data source: annual submission by clinics



This standard is important to ensure women are seen within 6 weeks of their abnormal screening result for further assessment. This ensures timely management and reduces anxiety

In 2018/19, referrals due to positive HR-HPV / negative cytology are recorded in the 'other' referral indication category alongside the small number of referrals not due to a screening abnormality or clinical indication. Clinics were only able to report the 'other' category as a whole and this was taken a proxy for HPV positive/cytology negative. It is therefore possible that actual practice is better than the performance reported here



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Cervical screening programme S11 part 2

Standard 11: Colposcopy – intervention/treatment (6-week appointment)

Proportion of women who are offered a colposcopy within 6 weeks of referral due to a positive HR-HPV test and negative cytology or borderline changes or low-grade dyskaryosis

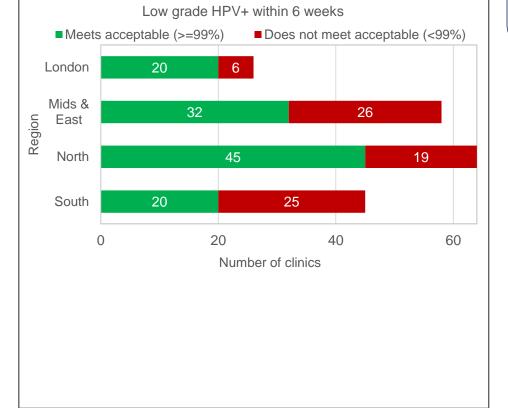
Performance threshold: >99% (acceptable level)

Reported by: colposcopy clinic

Data source: annual submission by clinics

Bar chart showing number of clinics meeting the performance threshold for appointments offered within 6 weeks of an HPV positive and negative or low grade cytology result

117 of 193 clinics met the 99% threshold (acceptable level)



Cervical screening programme S12 part 1

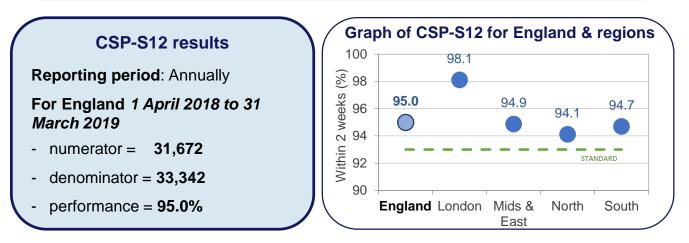
Standard 12: Colposcopy – intervention/treatment high grade referral (2-week appointment)

Proportion of women who are offered a colposcopy appointment within 2 weeks of referral due to a cytological report of high grade dyskaryosis (moderate) or worse

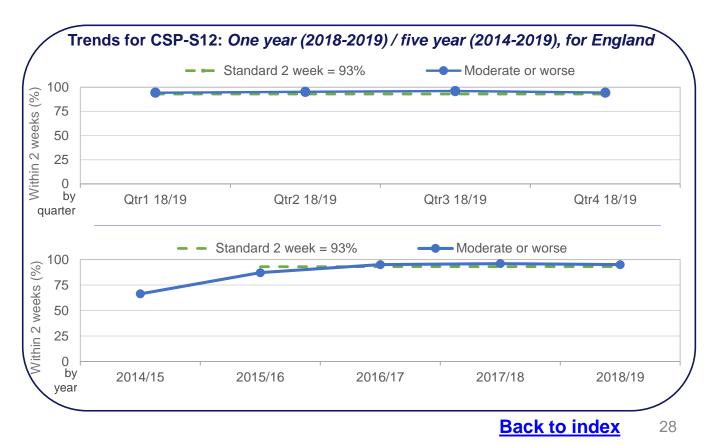
Performance threshold: >93% (acceptable level)

Reported by: colposcopy clinic

Data source: annual submission by clinics



This standard is important to ensure that women are seen within 2 weeks of their high grade abnormal result for further assessment to ensure timely management and to reduce anxiety



Cervical screening programme S12 part 2

Standard 12: Colposcopy – intervention/treatment high grade referral (2-week appointment)

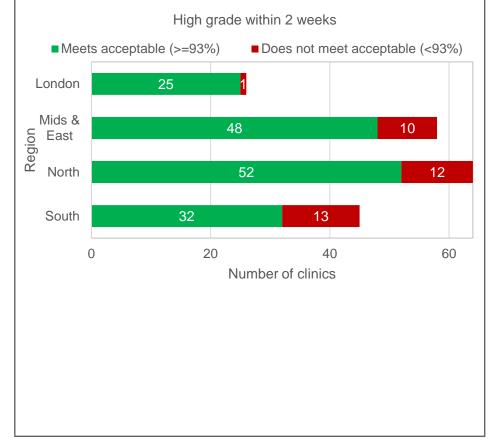
Proportion of women who are offered a colposcopy appointment within 2 weeks of referral due to a cytological report of high grade dyskaryosis (moderate) or worse

Performance threshold: >93% (acceptable level)

Reported by: colposcopy clinic

Data source: annual submission by clinics

Bar chart showing number of clinics meeting the performance threshold for appointments offered within 2 weeks of a high grade cytology result



157 of 193 clinics met the 93% threshold (acceptable level)