Scottish Cancer Taskforce
National Cancer Quality Steering Group

Cervical Cancer
Clinical Quality Performance Indicators
Engagement Document

September 2018

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1. National Cancer Quality Programme

Better Cancer: Ambition and Action (2016)[1] details a commitment to delivering the national cancer quality programme across NHSScotland, with a recognised need for national cancer QPIs to support a culture of continuous quality improvement. Addressing variation in the quality of cancer services is pivotal to delivering improvements in quality of care. This is best achieved if there is consensus and clear indicators for what good cancer care looks like.

Small sets of cancer specific outcome focussed, evidence based indicators are in place for 18 different tumour types. These are underpinned by patient experience QPIs that are applicable to all, irrespective of tumour type. These QPIs ensure that activity is focused on those areas that are most important in terms of improving survival and individual care experience whilst reducing variation and supporting the most effective and efficient delivery of care for people with cancer. QPIs are kept under regular review and are responsive to changes in clinical practice and emerging evidence.

A programme to review and update the QPIs in line with evolving evidence is in place as well as a robust mechanism by with additional QPIs will be developed over the coming years.

1.1 Quality Assurance and Continuous Quality Improvement

The ultimate aim of the programme is to develop a framework, and foster a culture of, continuous quality improvement, whereby real time data is reviewed regularly at an individual Multi Disciplinary Team (MDT)/Unit level and findings actioned to deliver continual improvements in the quality of cancer care. This is underpinned and supported by a programme of regional and national comparative reporting and review.

NHS Boards are required to report against QPIs as part of a mandatory, publicly reported, programme at a national level. A rolling programme of reporting is in place, with approximately three national tumour specific reports published annually. National reports include comparative reporting of performance against QPIs at MDT/Unit level across NHSScotland, trend analysis and survival. This approach helps to overcome existing issues relating to the reporting of small volumes in any one year.

In the intervening years tumour specific QPIs are monitored on an annual basis through established Regional Cancer Network and local governance processes, with analysed data submitted to Information Services Division (ISD) for inclusion in subsequent national reports. This approach ensures that timely action is taken in response to any issues that may be identified through comparative reporting and systematic review.

2. Quality Performance Indicator Development Process

The QPI development process was designed to ensure that indicators are developed in an open, transparent and timely way. The development process can be found in appendix 1.

The Cervical and Endometrial Cancer QPI Development Group was convened in September 2013, chaired by Mr Colin McKay (Consultant Surgeon, NHS Greater Glasgow and Clyde). Membership of this group included clinical representatives drawn from the three regional cancer networks, Healthcare Improvement Scotland, ISD and patient/carer representatives. Membership of the development group can be found in appendix 2.

3. QPI Formal Review Process

As part of the National Cancer Quality Programme a systematic national review process has been developed, whereby all tumour specific QPIs published are subject to formal review following 3 years analysis of comparative QPI data.

Formal review of the Cervical Cancer QPIs was undertaken in June 2018.

A Formal Review Group was convened, chaired by Mr James Powell, Consultant HPB Surgeon. Membership of this group included Clinical Leads from the three Regional Cancer Networks. Membership of this group can be found in appendix 3.

The formal review process is clinically driven with comments sought from specialty specific representatives in each of the Regional Cancer Networks for discussion at the initial meeting. This review builds on existing evidence using expert clinical opinion to identify where new evidence is available.

During formal review QPIs may be removed and replaced with new QPIs. Triggers for doing so include significant change to clinical practice, targets being consistently met by all Boards, and publication of new evidence.

Any new QPIs have been developed in line with the following criteria:

- **Overall importance** – does the indicator address an area of clinical importance that would significantly impact on the quality and outcome of care delivered?
- **Evidence based** – is the indicator based on high quality clinical evidence?
- **Measurability** - is the indicator measurable i.e. are there explicit requirements for data measurement and are the required data items accessible and available for collection?

4. Format of the Quality Performance Indicators

QPIs are designed to be clear and measurable, based on sound clinical evidence whilst also taking into account other recognised standards and guidelines.

- Each QPI has a **short title** which will be utilised in reports as well as a fuller **description** which explains exactly what the indicator is measuring.
- This is followed by a brief overview of the **evidence base and rationale** which explains why the development of this indicator was important.
- The measurability **specifications** are then detailed; these highlight how the indicator will actually be measured in practice to allow for comparison across NHSScotland.
- Finally a **target** is indicated, this dictates the level which each unit should be aiming to achieve against each indicator.

In order to ensure that the chosen target levels are the most appropriate and drive continuous quality improvement as intended they are kept under review and revised as necessary, if further evidence or data becomes available.

Rather than utilising multiple exclusions, a tolerance level has been built into the QPIs. It is very difficult to accurately measure patient choice, co-morbidities and patient fitness

therefore target levels have been set to account for these factors. Further detail is noted within QPIs where there are other factors which influenced the target level.

Where 'less than; (<) target levels have been set the rationale has been detailed within the relevant QPI. All other target levels should be interpreted as 'greater than' (>) levels.

5. Supporting Documentation

A national minimum core dataset and a measurability specification document have been developed in parallel with the indicators to support the monitoring and reporting of Cervical Cancer QPIs. The updated document will be implemented for patients diagnosed with Cervical Cancer on, or after, 1st October 2018.

6. Quality Performance Indicators for Cervical Cancer

QPI 1 - Radiological Staging

QPI Title:	Patients with cervical cancer should have their stage of disease assessed by magnetic resonance imaging (MRI) prior to definitive treatment.	
Description:	Proportion of patients with cervical cancer who have an MRI of the pelvis performed prior to definitive treatment.	
Rationale and Evidence:	It is necessary to fully image the pelvis prior to definitive treatment in order to establish the extent of disease and minimise unnecessary or inappropriate treatment.	
Specifications:	**Numerator:**	Number of patients with cervical cancer having MRI of the pelvis carried out prior to definitive treatment.
	Denominator:	All patients with cervical cancer.
	Exclusions:	• Patients with histopathological FIGO* stage IA disease. • Patients treated by LLETZ† only. • Patients unable to undergo MRI due to contraindications. • Patients with histopathological FIGO stage IVB disease. • Patients who refuse MRI investigation.
Target:	95% The tolerance within this target accounts for situations where patients require urgent treatment before imaging has been performed, or where cervical cancer is an incidental finding at surgery.	

Revision(s):	***Exclusion changed from IA1 disease to all IA disease.***

* FIGO – International Federation of Gynecology and Obstetrics
† Large Loop Excision of the Transformation Zone

QPI 2 - Positron Emission Tomography/Computed Tomography (PET/CT)

QPI Title:	Patients with cervical cancer, for whom primary definitive surgery is not appropriate, should undergo positron emission tomography - computed tomography imaging (PET/CT).
Description:	Proportion of patients with cervical cancer, for whom primary definitive treatment is radical radiotherapy, who have PET/CT imaging.
Rationale and Evidence:	Patients not suitable for surgery and being considered for radical radiotherapy (+/- concurrent chemotherapy) are recommended to undergo PET/CT because of the significant risk of extra pelvic disease which if detected will change patient management[2]. The greatest benefit from PET-CT is in women with inoperable disease, considered potentially curable with chemoradiotherapy. This group of women is statistically more likely to have nodal or metastatic disease than those women suitable for surgery[3].
Specifications:	**Numerator:** Number of cervical cancer patients undergoing primary radical radiotherapy who have PET/CT imaging prior to starting treatment. **Denominator:** All patients with cervical cancer undergoing primary radical radiotherapy. **Exclusions:** • Patients who refuse investigation.
Target:	95% The tolerance within this target allows for patients who cannot endure the PET/CT imaging procedure and patients with poorly controlled diabetes.

Revision(s):	***Exclusion added for patients who refuse investigation.***

QPI 3 - Multidisciplinary Team Meeting (MDT)

QPI Title:	Patients with cervical cancer should be discussed by a multidisciplinary team (MDT) prior to definitive treatment.
Description:	Proportion of patients with cervical cancer who are discussed at a MDT meeting before definitive treatment.
Rationale and Evidence:	Evidence suggests that patients with cancer managed by a multi-disciplinary team have a better outcome. There is also evidence that the multidisciplinary management of patients increases their overall satisfaction with their care[3]. Patient selection [for surgery] should be carried out by a multidisciplinary gynaecological oncology team [5].
Specifications:	**Numerator:** Number of patients with cervical cancer discussed at the MDT before definitive treatment. **Denominator:** All patients with cervical cancer. **Exclusions:** • Patients with histopathological FIGO stage IA1 disease. • Patients treated by LLETZ only. • Patients who died before first treatment.
Target:	95% The tolerance within this target accounts for situations where patients require urgent treatment, or where cervical cancer is an incidental finding at surgery.

Revision(s):	***No changes to QPI.***

QPI 4 - Radical Hysterectomy

QPI Title:	Patients with stage IB1 cervical cancer should undergo radical hysterectomy.
Description:	Proportion of patients with stage IB1 cervical cancer (as defined by radiology and/or histopathology) who undergo radical hysterectomy.
Rationale and Evidence:	Radical surgery is recommended for FIGO stage IB1 disease if there are no contraindications to surgery. Patients with tumours <4 cm in diameter are less likely to have metastatic spread and benefit most from radical hysterectomy. In young women quality of life is less impaired after radical hysterectomy than following chemo-radiation therapy[2].
Specifications:	**Numerator:** Number of patients with FIGO stage IB1 cervical cancer who undergo radical hysterectomy. **Denominator:** All patients with FIGO stage IB1 cervical cancer. **Exclusions:** • Patients who refuse surgery. • Patients who undergo fertility conserving treatment. • Patients having neo adjuvant chemotherapy. • Patient enrolled into surgical trials.‡
Target:	85% The tolerance within this target allows for situations where surgery is not appropriate, for example where patients have significant co-morbidities. It also accounts for those patients where cervical cancer has been an incidental finding at surgery.

Revision(s):	***No changes to QPI.***

‡ Currently, the only active surgical trial in Scotland is SHAPE, a Gynaecologic Cancer Intergroup (GCIG) trial led by the NCIC CTG. This is a randomised trial comparing Radical Hysterectomy and Pelvic Node Dissection with Simple Hysterectomy and Pelvic Node Dissection in patients with low risk early stage cervical cancer.

QPI 5 - Surgical Margins

QPI Title:	Patients with surgically treated cervical cancer should have clear resection margins.
Description:	Proportion of patients with cervical cancer who have surgical margins clear of tumour following hysterectomy[§].
Rationale and Evidence:	The quality of radical surgery for cervical cancer has an important influence on local control of the tumour and ultimately survival. Therefore, it is important to optimise and ensure the quality of surgical care for cervical cancer patients. Positive surgical margins increase the risk of reoccurrence, necessitating adjuvant treatment[5,10,11].
Specifications:	**Numerator:** Number of patients with cervical cancer who undergo surgery where surgical margins are clear of tumour. **Denominator:** All patients with cervical cancer who undergo surgery. **Exclusions:** • No exclusions.
Target:	95% The tolerance within this target allows for cases in which it is not clinically possible to achieve a clear surgical margin despite full radiological staging.

Revision(s):	***No changes to QPI.***

[§] As determined by pathology

QPI 6 - 56 Day Treatment Time for Radical Radiotherapy

QPI Title:	Treatment time for patients with cervical cancer undergoing radical radiotherapy should be no more than 56 days.	
Description:	Proportion of patients with cervical cancer undergoing radical radiotherapy whose overall treatment time, from the start to the end of treatment, is not more than 56 days.	
Rationale and Evidence:	Prolongation of overall treatment has been shown to result in a decrease on local control rate[8]. Overall treatment time for locally advanced cervical cancer should be as short as possible. Radiotherapy for squamous carcinoma should be completed within 56 days[9]. Measures to encourage compliance, to avoid gaps in treatment and also departmental arrangements to adjust where planned treatment schedule coincides with bank holidays or planned machine down time, need to be in place[9].	
Specifications:	**Numerator:**	Number of patients with cervical cancer undergoing radical radiotherapy (external beam or brachytherapy) whose overall treatment time, from start to the end of treatment, is not more than 56 days.
	Denominator:	All patients with cervical cancer undergoing radical radiotherapy (external beam or brachytherapy).
	Exclusions:	• No exclusions.
Target:	90% The tolerance within this target allows for patients who default on their treatment	

Revision(s):	***No changes to QPI.***

QPI 7 - Chemoradiation

QPI Title:	Patients with cervical cancer undergoing radical radiotherapy should receive concurrent platinum-based chemotherapy.	
Description:	Proportion of patients with cervical cancer undergoing radical radiotherapy who receive concurrent chemotherapy.	
Rationale and Evidence:	Addition of chemotherapy to radiotherapy has been shown in several randomised trials and in a meta-analysis to improve overall survival[2, 5, 6, 7] . Any patient with cervical cancer considered suitable for radical radiotherapy treatment should have concurrent chemoradiotherapy with a platinum based chemotherapy, if fit enough[2]. Concurrent chemoradiation is the primary treatment of choice for stages IB2 to IVA disease based on the results of 5 randomised clinical trials[5].	
Specifications:	**Numerator:**	Number of patients with cervical cancer undergoing radical radiotherapy who receive concurrent chemotherapy.
	Denominator:	All patients with cervical cancer who undergo radical radiotherapy.
	Exclusions:	• No exclusions.
Target:	70% The tolerance within this target allows for patients for whom chemotherapy is contraindicated, for example where patients have significant co-morbidities or fitness levels which preclude chemotherapy.	

Revision(s):	***No changes to QPI.***

QPI 8: Clinical Trial and Research Study Access

Revision(s):	***The revised Clinical Trial Access QPI which is applicable to all tumour sites will be included with the final Cervical Cancer QPI document.***

7. Survival

Improving survival forms an integral part of the national cancer quality improvement programme. Cervical cancer survival analysis will be reported and analysed on a 3 yearly basis by Information Services Division (ISD). The specific issues which will be addressed, for example 1 year or 5 year survival rates, will be identified by an expert group ahead of any analysis being undertaken, as per the agreed national cancer quality governance and improvement framework.

To ensure consistent application of survival analysis, it has been agreed that a single analyst on behalf of all three regional cancer networks undertakes this work. Survival analysis will be scheduled as per the national survival analysis and reporting timetable, agreed with the National Cancer Quality Steering Group and Scottish Cancer Taskforce. This reflects the requirement for record linkage and the more technical requirements of survival analyses which would make it difficult for individual Boards to undertake routinely and in a nationally consistent manner.

8. Governance and Scrutiny

A national and regional governance framework to assure the quality of cancer services in NHSScotland has been developed; key roles and responsibilities within this are set out below. Appendices 4 and 5 provide an overview of these governance arrangements diagrammatically. The importance of ensuring robust local governance processes are in place is recognised and it is essential that NHS Boards ensure that cancer clinical audit is fully embedded within established processes.

8.1 National

- Scottish Cancer Taskforce
    - Accountable for overall national cancer quality programme and overseeing the quality of cancer care across NHSScotland.
    - Advising Scottish Government Health and Social Care Directorate (SGHSCD) if escalation required.

- Healthcare Improvement Scotland
    - Proportionate scrutiny of performance.
    - Support performance improvement.
    - Quality assurance: ensure robust action plans are in place and being progressed via regions/Boards to address any issues identified.

- Information Services Division (ISD)
    - Publish national comparative report on tumour specific QPIs and survival for three tumour types per annum and specified generic QPIs as part of the rolling programme of reporting.

8.2 Regional – Regional Cancer Networks

- Annual regional comparative analysis and reporting against tumour specific QPIs.
- Support national comparative reporting of specified generic QPIs.
- Identify and share good practice. In conjunction with constituent NHS Boards identify regional and local actions required to develop an action plan to address regional issues identified.
- Review and monitoring of progress against agreed actions.
- Provide assurance to NHS Board Chief Executive Officers and Scottish Cancer Taskforce that any issues identified have been adequately and timeously progressed.

8.3 Local – NHS Boards

- Collect and submit data for regional comparative analysis and reporting in line with agreed measurability and reporting schedule (generic and tumour specific QPIs).
- Utilise local governance structures to review performance, develop local action plans and monitor delivery.
- Demonstrate continual improvements in quality of care through on-going review, analysis and feedback of clinical audit data at an individual multidisciplinary team (MDT) or unit level.

9. How to participate in the engagement process

In order to ensure wide inclusiveness of clinical and management colleagues from across NHSScotland, patients affected by cervical cancer and the wider public, several different methods of engagement are being pursued:

Professional groups, health service staff, voluntary organisations and individuals:

- Wide circulation of the draft documentation for comment and feedback.

Patient representative groups:

- Organised patient focus group sessions to be held.

9.1 Submitting your comments

You can submit your comments on the revised Cervical Cancer QPIs via the Scottish Government Consultation Hub (website link below):

https://consult.scotland.gov.uk/west-of-scotland-cancer-network/cervical-cancer-qpi

All responses should be submitted by **Friday 16th November 2018**.

If you require any further information regarding the engagement process please use the email address below.

Email: CervicalQPIPublicEngagement@gov.scot

9.2 Engagement feedback

At the end of the engagement period, all comments and responses will be collated for review by the Cervical and Endometrial QPI Formal Review Group. Those who have participated in the engagement process will receive an overview of the changes made and a copy of the final Cervical Cancer QPI document.

10. References

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11. Appendices

Appendix 1: QPI Development Process

Preparatory Work and Scoping

The preparatory work involved the development of a structured briefing paper by Healthcare Improvement Scotland. This paper took account of existing, high quality, clinical guidance and provided a basis for the development of QPIs.

The scope for development of Cervical Cancer QPIs and a search narrative were defined and agreed by the Cervical and Endometrial Cancer QPI Development Group. The table below shows the final search criteria used in the literature search.

Inclusion	Exclusion
Cervical cancer types: • Primary cervical cancer (including: squamous, adenocarcinoma and adenosquamous carcinoma) *Interventions*: • Diagnosis • Staging • Surgical management of disease • Non-surgical management of disease (chemotherapy, radiotherapy, brachytherapy) *Age range:* Adults only *Date:* *Language:* *Document type:* Clinical guidelines	• Pre-cancerous conditions including: cervical intra-epithelial neoplasia (CIN) and glandular intra-epithelial neoplasia (GIN) *Related cancers:* • Secondary/malignant cervical • Neuroendocrine carcinomas • Lymphomas • Cervical sarcomas *Interventions*: • Clinical trials recruitment and protocols • Communication, information sharing and support • Follow-up • Palliative/end-of-life care (pain management, end-of-life counselling, hospice management) • Prevention • Primary care/referral • Recurrent disease/relapsed disease management • Screening • Symptom management (e.g. nausea and vomiting, neutropenic sepsis)

Table 1 – Cervical Cancer Search Criteria

A systematic search was carried out by Healthcare Improvement Scotland using selected websites and two primary medical databases to identify national and international guidelines.

Thirty two guidelines were appraised for quality using the AGREE II instrument[12]. This instrument assesses the methodological rigour used when developing a guideline. Eleven of the guidelines were recommended for use. A further 4 NHS accredited guidelines where included without appraisal. Overall, 7 guidelines for the management of cervical cancer were recommended for use.

Indicator Development

The Cervical and Endometrial Development Group defined evidence based measurable indicators with a clear focus on improving the quality and outcome of care provided.

The Group developed QPIs using the clinical recommendations set out in the briefing paper as a base, ensuring all indicators met the following criteria:

- **Overall importance** – does the indicator address an area of clinical importance that would significantly impact on the quality and outcome of care delivered?
- **Evidence based** – is the indicator based on high quality clinical evidence?
- **Measurability** – is the indicator measurable i.e. are there explicit requirements for data measurement and are the required data items accessible and available for collection?

Engagement Process

A wide clinical and public engagement exercise was undertaken as part of development in April 2014 where the Cervical Cancer QPIs, along with accompanying draft minimum core dataset and measurability specifications, were made available on the Scottish Government website. During the engagement period clinical and management colleagues from across NHSScotland, patients affected by cervical cancer and the wider public were given the opportunity to influence the development of Cervical Cancer QPIs.

Draft documentation was circulated widely to professional groups, health service staff, voluntary organisations and individuals for comment and feedback.

Following the engagement period all comments and responses received were reviewed by the Cervical and Endometrial QPI Development Group and used to produce and refine the final indicators.

Appendix 2: Cervical and Endometrial Cancer QPI Development Group Membership (2014)

Name	Designation	Cancer Network/Base
Lorna Bruce	Audit/IT Facilitator	SCAN
Kevin Burton	Consultant Gynaecological Oncologist	WoSCAN / NHS Greater Glasgow and Clyde
Kevin Campbell	Project Manager	WoSCAN
Moira Campbell	Patient Representative	
Mary Cairns (liaising with David Parkin)	Consultant Gynaecological Oncologist	NOSCAN / NHS Grampian
Richard Casasola	Consultant Clinical Oncologist	NOSCAN / NHS Tayside
Scott Fegan	Consultant Gynaecological Oncologist	SCAN / NHS Lothian and NHS Fife
Janet Galloway	Patient Representative	
Maria-Lena Gregoriades	Consultant Radiologist	SCAN / NHS Fife
Morton Hair	Consultant Gynaecological Oncologist	WoSCAN / NHS Greater Glasgow and Clyde
Rosie Harrand	Consultant Clinical Oncologist	WoSCAN / NHS Greater Glasgow and Clyde
Sophie Hepple	Consultant Radiologist	WoSCAN / NHS Greater Glasgow and Clyde
Simon Herrington	Consultant Pathologist	NOSCAN / NHS Tayside
Michelle Hilton-Boon	Programme Manager	Healthcare Improvement Scotland
Natasha Inglis	Consultant Pathologist	NOSCAN/ NHS Highland
Annie Kennedy	Consultant Clinical Oncologist	NOSCAN/ NHS Grampian
Cameron Martin	Consultant Gynaecologist and Subspecialist in Gynaecological Oncology	SCAN/ NHS Lothian
Erica McGaughay	Clinical Nurse Specialist	NOSCAN / NHS Tayside
Colin McKay	Group Chair	WoSCAN / NHS Greater Glasgow and Clyde
Maureen McKay	Patient Representative	
Ethel Mclean	Audit Facilitator	WoSCAN / NHS Arran and Ayrshire
Rosie Millar	Macmillan Gynae Clinical Nurse Specialist	SCAN / NHS Grampian
Kathryn Morton	Clinical Pathologist	WoSCAN / NHS Forth Valley
Emma Ramage	Consultant Radiologist	NOSCAN/ NHS Grampian

Name	Designation	Cancer Network/Base
Nadeem Siddiqui	Consultant Gynaecological Oncologist	WoSCAN / NHS Greater Glasgow and Clyde
Azmat Sadozye	Consultant Clinical Oncologist	WoSCAN / NHS Greater Glasgow and Clyde
Smutra Shanbhag	Consultant Gynaecological Oncologist	WoSCAN / NHS Greater Glasgow and Clyde
Allison Stillie	Consultant Clinical Oncologist	SCAN/ NHS Lothian
Evelyn Thomson	Regional Manager (Cancer)	WoSCAN
Alistair Williams	Reader in Pathology	SCAN / NHS Lothian
Mark Zahra	Consultant Clinical Oncologist	SCAN / NHS Lothian

NOSCAN - North of Scotland Cancer Network
SCAN - South East Scotland Cancer Network
WoSCAN - West of Scotland Cancer Network

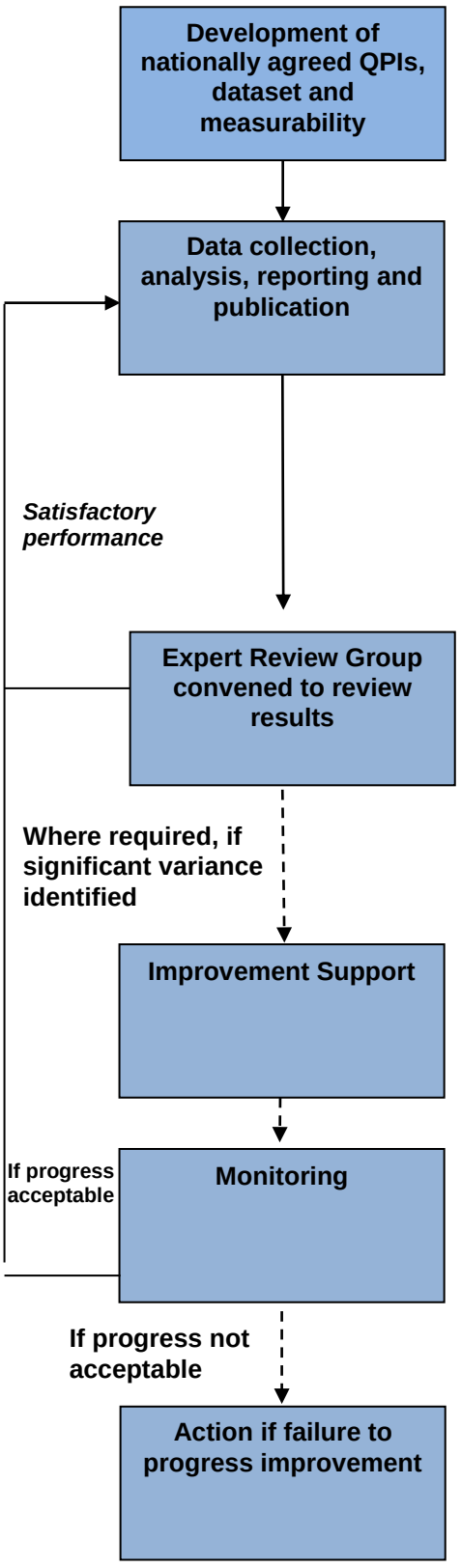
Appendix 3: Cervical and Endometrial Cancer Formal Review Group Membership (2018)

Name	Designation	Cancer Network / Base
James Powell (Chair)	Consultant HPB Surgeon	SCAN / NHS Lothian
Kevin Burton	Clinical Lead	WoSCAN / NHS Greater Glasgow & Clyde
Kevin Campbell	MCN Manager	WoSCAN / NHS Greater Glasgow & Clyde
Jen Doherty	Project Co-ordinator	National Cancer Quality Programme
Ann-Maree Kennedy	Consultant Clinical Oncologist	NOSCAN / NHS Grampian
Cameron Martin	Clinical Lead	SCAN / NHS Lothian
Wendy McMullen	Consultant Gynaecologist	NOSCAN / NHS Tayside
Azmat Sadozye	Consultant Clinical Oncologist	WoSCAN / NHS Greater Glasgow & Clyde
Alison Stillie	Consultant Clinical Oncologist	SCAN / NHS Lothian
Lorraine Stirling	Project Officer	National Cancer Quality Programme
Christine Urquhart	Audit Manager	NOSCAN
Mark Zahra	Consultant Clinical Oncologist	SCAN / NHS Lothian

Formal review of the Cervical Cancer QPIs has been undertaken in consultation with various other clinical specialties.

Appendix 4: 3 Yearly National Governance Process & Improvement Framework for Cancer Care

This process is underpinned by the annual regional reporting and governance framework (see appendix 5).



1. National QPI Development Stage

- QPIs developed by QPI development groups, which include representation from Regional Cancer Networks, Healthcare Improvement Scotland, ISD, patient representatives and the Cancer Coalition.

2. Data Analysis Stage:

- NHS Boards and Regional Cancer Advisory Groups (RCAGs)* collect data and analyse on yearly basis using nationally agreed measurability criteria and produce action plans to address areas of variance, see appendix 6.
- Submit yearly reports to ISD for collation and publication every 3 years.
- National comparative report approved by NHS Boards and RCAGs.
- ISD produce comparative, publicly available, national report consisting of trend analysis of 3 years data and survival analysis.

3. Expert Review Group Stage (for 3 tumour types per year):

- Expert group, hosted by Healthcare Improvement Scotland, review comparative national results.
- Write to RCAGs highlighting areas of good practice and variances.
- Where required NHS Boards requested to submit improvement plans for any outstanding unresolved issues with timescales for improvement to expert group.
- Improvement plans ratified by expert group and Scottish Cancer Taskforce.

4. Improvement Support Stage:

- Where required Healthcare Improvement Scotland provide expertise on improvement methodologies and support.

5. Monitoring Stage:

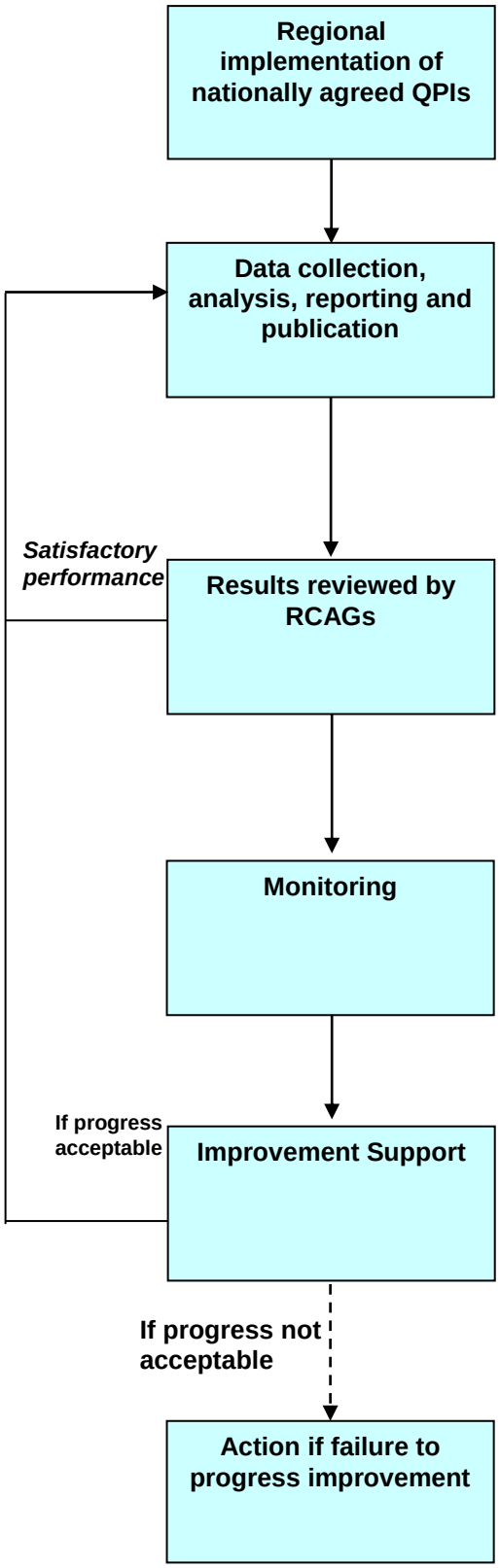
- RCAGs work with Boards to progress outstanding actions, monitor improvement plans and submit progress report to Healthcare Improvement Scotland.
- Healthcare Improvement Scotland report to Scottish Cancer Taskforce as to whether progress is acceptable**.**

6. Escalation Stage:

- If progress not acceptable, Healthcare Improvement Scotland will visit the service concerned and work with the RCAG and Board to address issues.
- Report submitted to Scottish Cancer Taskforce and escalation with a proposal to take forward to Scottish Government Health Department.

*In the South and East of Scotland Cancer Network (SCAN) the Regional Cancer Planning Group is the equivalent group to Regional Cancer Advisory Group (RCAG).

Appendix 5: Regional Annual Governance Process and Improvement Framework for Cancer Care



1. Regional QPI Implementation Stage:

- National cancer QPIs and associated national minimum core dataset and measurability specifications, developed by QPI development groups.
- Regional implementation of nationally agreed dataset to enable reporting of QPIs.

2. Data Analysis Stage:

- NHS Boards collect data and data is analysed on a yearly basis using nationally agreed measurability criteria at local/ regional level.
- Data/results validated by Boards and annual regional comparative report produced by Regional Networks.
- Areas of best practice and variance across the region highlighted.
- Yearly regional reports submitted to ISD for collation and presentation in national report every 3 years.

3. Regional Performance Review Stage:

- RCAGs* review regional comparative report.
- Regional or local NHS Board action plans to address areas of variance developed.
- Appropriate leads identified to progress each action.
- Action plans ratified by RCAGs.

4. Monitoring Stage:

- Where required, NHS Boards monitor progress with action plans and submit progress reports to RCAGs.
- RCAGs review and monitor regional improvement.

5. Improvement Support Stage:

- Where required Healthcare Improvement Scotland maybe requested to provide expertise to NHS Boards/RCAGs on improvement methodologies and support.

6. Escalation Stage:

- If progress not acceptable, RCAGs will escalate any issues to relevant Board Chief Executives. If progress remains unacceptable RCAGs will escalate any relevant issues to Healthcare Improvement Scotland.

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Appendix 6: Glossary of Terms

Abdomen	The abdomen contains the stomach, liver, kidneys, bladder, in women it also contains the ovaries and uterus.
Bilateral	Affecting both the right and left sides of the body.
Bilateral Salpingo-Oopherectomy	A bilateral salpingo-oophorectomy is a surgery in which both of a woman's ovaries are removed, along with the fallopian tubes.
Brachytherapy	Brachytherapy is a specific type of radiotherapy where the treatment is given directly into, or very close to, the tumour.
Chemotherapy	The use of drugs that kill cancer cells, or prevent or slow their growth.
Computed Tomography (CT)	An x-ray imaging technique, which allows detailed investigation of the internal organ of the body.
Co-morbidities	The presence of one or more additional disorders or diseases.
Contraindication/ Contraindicated	A symptom or medical condition that makes a particular treatment or procedure inadvisable because a person is likely to have a bad reaction.
Diagnosis/Diagnosed	The process of identifying a disease, such as cancer, from its signs and symptoms.
External Beam Radiotherapy (EBRT)	The most common form of radiotherapy. An external source of radiation is pointed at a particular part of the patient's body.
First-line/Primary treatment	Initial treatment used to reduce or treat a cancer.
Histological/ Histopathogical/Histology	The study of the structure, composition and function of tissues under the microscope, and their abnormalities.
Laparoscopic Surgery	Laparoscopic surgery, also called minimally invasive surgery or keyhole surgery, is a surgical technique in which operations in the abdomen are performed through small incisions (usually 0.5–1.5 cm) as opposed to the larger incisions.
Magnetic Resonance Imaging (MRI)	A procedure in which radio waves and a powerful magnet linked to a computer is used to create detailed pictures of areas inside the body. These pictures can show the difference between normal and diseased tissue.
Morbidity	How much ill health a particular condition causes.
Mortality	Either (1) the condition of being subject to death; or (2) the death rate, which reflects the number of deaths per unit of population in any specific region, age group, disease or other classification, usually expressed as deaths per 1000, 10,000 or 100,000.
Multi-disciplinary team meeting (MDT)	A meeting which is held on a regular basis, which is made up of participants from various disciplines appropriate to the disease area, where diagnosis, management, and appropriate treatment of patients is discussed and decided.
Palliative	Anything which serves to alleviate symptoms due to the underlying cancer but is not expected to cure it.
Pathological	The study of disease processes with the aim of understanding their nature and causes. This is achieved by observing samples of fluid and tissues obtained from the living patient by various methods, or at post mortem.

Pathologist	A doctor who identifies diseases by studying cells and tissues under a microscope.
Pelvic/Pelvis	Having to do with the pelvis (the lower part of the abdomen located between the hip bones).
Positron emission tomography – computed tomography (PET/CT)	An imaging technique that produces a three-dimensional image of functional processes in the body by combining positron emission tomography
Progression	In medicine, the course of a disease, such as cancer, as it becomes worse or spreads in the body.
Radical Hysterectomy	During a radical hysterectomy the womb and surrounding tissues are removed, including the fallopian tubes, part of the vagina, ovaries, lymph glands and fatty tissue.
Radical Radiotherapy	Radiotherapy given with curative intent.
Radiology	The medical specialty that employs the use of imaging to both diagnose and treat disease visualized within the human body.
Radiological	Of, relating to, or concerning radiology or the equipment used in radiology.
Resect	To perform surgery to cut out part of (a bone, an organ, or other structure or part)
Staging	Process of describing to what degree cancer has spread from its original site to another part of the body. Staging involves clinical, surgical and pathology assessments.
Surgery/Surgical resection	Surgical removal of the tumour/lesion.
Surgical intervention	A surgical measure with the purpose of improving health or altering the course of disease.
Surgical Margin	Surgical margin, refers to the visible normal tissue or skin margin that is removed with the surgical excision of a tumour, growth, or malignancy.Surgical margin in a surgery report defines the visible margin or free edge of "normal" tissue seen by the surgeon with the naked eye. Surgical margin as read in a pathology report defines the histological measurement of normal or unaffected tissue surrounding the visible tumour under a microscope on a glass mounted histology section. A "narrow" surgical margin implies that the tumor exists very close to the surgical margin, and a "wide" surgical margin implies the tumor exists far from the cut edge or the surgical margin.
Survival	The percentage of people in a study or treatment group who are alive for a certain period of time after they were diagnosed with or treated for a disease, such as cancer.
Tumour size	The size of a cancer measured by the amount of space taken up by the tumour.
Vaginal brachytherapy (VBT)	Vaginal brachytherapy or vaginal vault brachytherapy is done by placing a small, radioactive pellet within a special tube into the vagina for a few minutes.