



**Scottish Cancer Taskforce
National Cancer Quality Steering Group**

Endometrial Cancer Clinical Quality Performance Indicators

**Published: October 2014
Updated: April 2025**

**Published by:
Healthcare Improvement Scotland**

Revision History

V1.0	October 2014	Initial publication
V1.1	June 2015	Updated document to ensure accurate measurement of QPI 1: Radiological Staging
V2.0	August 2016	Baseline review changes
V3.0	December 2018	Formal review changes (1st Cycle)
V4.0	April 2022	Formal review changes (2nd Cycle)
V5.0	April 2025	Formal review changes (3rd Cycle)

Contents Update Record

April 2025 (v5.0)

This document was updated following formal review (3rd cycle) of the Endometrial Cancer Quality Performance Indicators (QPIs) which took place following analysis of year 9 of the endometrial cancer QPI data.

The following QPIs have been updated:

- QPI 2: Multidisciplinary Team Meeting (MDT)
- QPI 3: Total Hysterectomy and Bilateral Salpingo-Oophorectomy

The following QPIs have been archived:

- QPI 4: Laparoscopic Surgery
- QPI 8: Clinical Trial and Research Study Access*

The following new QPIs have been added:

- QPI 9: Genetic Testing in Endometrial Cancer

* This important indicator will continue to be monitored via other national reporting systems rather than through the QPI process.

As a result of the changes above, the contents page and page numbering differ from earlier versions of this document. Sections 1 – 10 and the appendices have also been updated.

Please note that this version of the Endometrial Cancer QPI document applies to cases diagnosed from 1st October 2024 onwards.

Previous Updates:

April 2022 (v4.0)

This document was updated following formal review (2nd cycle) of the Endometrial Cancer Quality Performance Indicators (QPIs) which took place following analysis of year 6 of the Endometrial Cancer QPI data.

The following QPIs have been updated:

- QPI 4 - Minimal Access Surgery

The following QPI has been archived:

- QPI 5 – Adjuvant Radiotherapy

- QPI 7 - 30 Day Mortality Following Surgery

As a result of the changes above, the contents page and page numbering differ from earlier versions of this document. Sections 1 – 10 and the appendices have also been updated.

Please note that this version of the Endometrial Cancer QPI Document applies to cases diagnosed from 1st October 2021 onwards.

December 2018 (v3.0)

This document was updated following formal review of the Endometrial Cancer Quality Performance Indicators (QPIs) which took place following analysis of year 3 of the Endometrial Cancer QPI data.

The following QPIs have been updated:

- QPI 1 - Radiological Staging
- QPI 2 - Multidisciplinary Team Meeting (MDT)
- QPI 3 - Total Hysterectomy and Bilateral Salpingo-Oophorectomy
- QPI 5 - Adjuvant Radiotherapy
- QPI 6 - Systemic Anti-Cancer Therapy / Hormone Therapy

The following new QPI has been added:

- QPI 7 - 30 Day Mortality Following Surgery

Please note the Clinical Trial and Research Study Access has now been added into each tumour specific QPI document (See QPI 8 – Clinical Trial and Research Study Access).

As a result of the changes above, the contents page and page numbering differ from earlier version of this document. Sections 1 – 10 and the appendices have also been updated.

Please note that this version of the Endometrial Cancer QPI Document applies to cases diagnosed from 1st October 2017. Where amended or new QPIs require new data items for measurement, this will apply for patients diagnosed from 1st October 2018.

August 2016 (v2.0)

This document was updated following baseline review of the Endometrial Cancer QPIs which took place following analysis of year 1 of the Endometrial Cancer data. As a result, the following QPIs have been updated:

- QPI 1 - Radiological Staging
- QPI 2 - Multidisciplinary Team Meeting (MDT)
- QPI 3 - Total Hysterectomy and Bilateral Salpingo-Oophorectomy
- QPI 4 - Laparoscopic Surgery
- QPI 6 - Chemotherapy

Please note that this version of the Endometrial Cancer QPI document applies to cases diagnosed from 1st October 2015.

Contents Page

1. National Cancer Quality Programme	5
1.1 Quality Assurance and Continuous Quality Improvement	5
2. Quality Performance Indicator Development Process	5
3. QPI Formal Review Process	6
4. Format of the Quality Performance Indicators	6
5. Supporting Documentation	7
6. Quality Performance Indicators for Endometrial Cancer	8
QPI 1: Radiological Staging	8
QPI 2: Multi-disciplinary Team Meeting (MDT)	9
QPI 3: Total Hysterectomy and Bilateral Salpingo-Oophorectomy	10
QPI 6: Systemic Anti-Cancer Therapy (SACT) / Hormone Therapy	12
QPI 9: Genetic Testing in Endometrial Cancer	13
7. Survival	15
8. Areas for Future Consideration	15
9. Governance and Scrutiny	15
9.1 National	15
9.2 Regional – Regional Cancer Networks	16
9.3 Local – NHS Boards	16
10. References	17
11. Appendices	19
Appendix 1: QPI Development Process	19
Appendix 2: Endometrial Cancer QPI formal Reviews	22
Appendix 3: 3 Yearly National Governance Process & Improvement Framework for Cancer Care	25
Appendix 4: Regional Annual Governance Process and Improvement Framework for Cancer Care	26
Appendix 5: Glossary of Terms	27

1. National Cancer Quality Programme

Beating 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 19 different tumour types. 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 which 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 Multidisciplinary 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 summary reports published annually. These reports highlight the publication of performance data in the Cancer QPI Dashboard held within the Scottish Cancer Registry and Intelligence Service (SCRIS). The dashboard includes 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 Public Health Scotland (PHS) for inclusion in the Cancer QPI Dashboard and subsequent national summary reports. This 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, Information Services Division and patient/carer representatives. The development process and membership group can be found in appendix 1.

3. QPI Formal Review Process

As part of the National Cancer Quality Programme, a systematic rolling programme of national review process has been developed. This ensures all tumour specific QPIs are subject to formal review following every 3rd year of comparative QPI data analysis.

The formal review process is clinically driven with proposals for change sought from specialty specific representatives in each of the Regional Cancer Networks. It is designed to be flexible in terms of the extent of review required with tumour specific Regional Clinical Leads undertaking a key role in this decision making. Formal review meetings to further discuss proposals are arranged where deemed necessary. The review builds on existing evidence using expert clinical opinion to identify where new evidence is available, and a full public engagement exercise will take place where significant revisions have been made or new QPIs developed.

During formal review QPIs may be archived 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. Where QPIs have been archived, associated data items will continue to be collected where these are utilised for other indicators, or measures such as survival analysis.

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?

Three formal reviews of the Endometrial Cancer QPIs have been undertaken to date. Further information can be found in appendix 2.

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 monitoring and reporting of the Cervical Cancer QPIs. The latest version of these documents can be found at:

[Public Health Scotland Cancer Audit](#)

6. Quality Performance Indicators for Endometrial Cancer

QPI 1: Radiological Staging

QPI Title:	Patients with endometrial cancer should have their stage of disease assessed by magnetic resonance imaging (MRI) and/or computed tomography (CT) prior to definitive treatment.
Description:	Proportion of patients with endometrial cancer who have an MRI and/or CT scan of the abdomen and pelvis performed prior to definitive treatment.
Rationale and Evidence:	<p>It is necessary to fully image the pelvis and abdomen prior to starting definitive treatment in order to establish the extent of disease and minimise unnecessary or inappropriate treatment.</p> <p>Locoregional staging is based on clinical examination and imaging including pelvic magnetic resonance imaging (MRI) including MRI assessment of the para-aortic lymph nodes. If MRI is contraindicated, abdominal and pelvic CT scan associated with pelvic ultrasound can be considered².</p>
Specifications:	<p>Numerator: Number of patients with endometrial cancer having a MRI and/or CT scan of the abdomen and pelvis carried out prior to definitive treatment.</p> <p>Denominator: All patients with endometrial cancer.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> • Patients with Grade 1 endometrioid or mucinous carcinoma on pre-operative biopsy. • Patients with atypical hyperplasia on pre-operative biopsy.
Target:	<p>90%</p> <p>The tolerance within this target accounts for situations where patients require urgent treatment before imaging has been performed or where endometrial cancer is an incidental finding at hysterectomy. It also allows for those patients who are deemed unfit for investigation.</p>

QPI 2: Multi-disciplinary Team Meeting (MDT)

QPI Title:	Patients with endometrial cancer should be managed through a multidisciplinary team (MDT) process ^a prior to definitive treatment.
Description:	Proportion of patients with endometrial cancer who are managed through a MDT process before definitive treatment.
Rationale and Evidence:	<p>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 care³.</p> <p>Discussion prior to definitive treatment decisions being made provides reassurance that patients are being managed appropriately. A streamlined pathway approach will be suitable for some patients whereby a standard protocol can be used to guide management and treatment decisions. These patients will therefore not require discussion, however this will be documented and agreed by the MDT.</p>
Specifications:	<p>Numerator: Number of patients with endometrial cancer managed through a MDT process before definitive treatment.</p> <p>Denominator: All patients with endometrial cancer.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> • Patient with atypical hyperplasia on pre-operative biopsy. • Patients who died before first treatment.
Target:	<p>95%</p> <p>The tolerance within this target accounts for situations where patients require urgent treatment or where endometrial cancer is an incidental finding at hysterectomy.</p>

^a Some patients will be suitable for protocolised treatment and are therefore registered at MDT but do not require discussion.

QPI 3: Total Hysterectomy and Bilateral Salpingo-Oophorectomy

QPI Title:	Patients with endometrial cancer should undergo total hysterectomy (TH) and bilateral salpingo-oophorectomy (BSO), using a minimal access approach ^b .
Description:	<p>Proportion of patients with endometrial cancer who undergo TH/BSO, completed by a minimal access approach.</p> <p>Please note: The specifications of this QPI are separated to ensure clear measurement of the following:</p> <ul style="list-style-type: none"> (i) Patients with endometrial cancer who undergo TH/BSO; and (ii) Patients with endometrial cancer who undergo TH/BSO completed by a minimal access approach.
Rationale and Evidence:	<p>Total hysterectomy with bilateral salpingo-oophorectomy for endometrial cancer is associated with best long term survival (compared to primary radiotherapy or hormonal treatment)^{2,4}.</p> <p>TH/BSO via minimally invasive surgery (MIS) is recommended for patients with endometrial cancer as it has been found to be feasible and surgically safe with reduced post-operative complications and length of stay^{2,5,6}.</p>
Specification (i):	<p>Numerator: Number of patients with endometrial cancer who undergo TH/BSO.</p> <p>Denominator: All patients with endometrial cancer.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> • Patients with FIGO Stage IV disease. • Patients who decline surgical treatment. • Patients having neo-adjuvant chemotherapy.
Target:	<p>85%</p> <p>The tolerance within this target reflects the fact that some patients are not fit for surgical intervention. It also allows for those patients having fertility conserving treatment.</p>

(Continued overleaf)

^b Minimal access approach includes laparoscopic or robotic surgery.

QPI 3 - Total Hysterectomy and Bilateral Salpingo-Oophorectomy (continued)

Specification (ii):	Numerator: Number of patients who undergo TH/BSO completed by a minimal access approach. Denominator: All patients with endometrial cancer who undergo TH/BSO. Exclusions: <ul style="list-style-type: none">• Patients with FIGO Stage IV disease.• Patients having neo-adjuvant chemotherapy.
Target:	85% The tolerance within this target reflects the fact that for some patients a minimal access procedure may not be clinically suitable.

Please note:

Analysis on the time from diagnosis to surgery will be undertaken across NHS Boards to provide additional information to support reporting of this QPI. This information will be reviewed to ensure there is no impact on quality of care for patients undergoing this treatment option.

QPI 6: Systemic Anti-Cancer Therapy (SACT) / Hormone Therapy

QPI Title:	Patients with stage IV endometrial cancer should have systemic anti-cancer therapy (SACT) or hormone therapy.
Description:	Proportion of patients with stage IV endometrial cancer receiving SACT or hormone therapy.
Rationale and Evidence:	<p>Hormonal therapy and chemotherapy play an important role in the management of advanced endometrial cancer.</p> <p>Platinum chemotherapy can improve progression free survival in patients with stage IV endometrial cancer. The use of chemotherapy should be considered for patients with stage IV disease or those with stage III disease plus residual disease at the completion of surgery^{4,7}.</p> <p>Hormonal therapy is indicated for patients with advanced endometrial cancer and endometrioid histology⁸.</p>
Specifications:	<p>Numerator: Number of patients with stage IV endometrial cancer receiving SACT or hormone therapy.</p> <p>Denominator: All patients with stage IV endometrial cancer.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> • Patients who decline any SACT or hormone therapy.
Target:	<p>75%</p> <p>The tolerance within this target reflects the fact that not all patients are suitable for systemic therapy due to fitness levels and co-morbidities.</p>

QPI 9: Genetic Testing in Endometrial Cancer

QPI Title:	All patients with a confirmed diagnosis of endometrial cancer should undergo molecular testing to allow treatment planning and to screen for Lynch Syndrome.
Description:	<p>Proportion of patients with a histological diagnosis of endometrial cancer (including carcinosarcoma) who undergo molecular testing, and are referred to clinical genetics where results are suggestive of Lynch Syndrome^c.</p> <p>Please note: The specifications of this QPI are separated to ensure clear measurement of the following:</p> <ul style="list-style-type: none"> (i) Patients with a histological diagnosis of endometrial cancer who have Mismatch repair (MMR) and p53 status assessed by immunohistochemistry (IHC); and (ii) Patients who are <70 years of age at diagnosis with results suggestive of Lynch Syndrome who are referred to clinical genetics.
Rationale and Evidence:	<p>National and international guidelines recommend that all endometrial cancers should undergo combined molecular and immunohistochemical (IHC) testing of endometrial cancers for mismatch repair defects, p53 aberrations and POLE mutations^{9,10,11}. This is to provide prognostic information and to guide adjuvant treatment decisions such as chemotherapy and immunotherapy.</p> <p>It is estimated that approximately 25-30% of patients with endometrial cancer harbour MMR deficiency.</p> <p>NICE guidance recommends MMR immunohistochemical testing of all endometrial cancers to identify those at risk of Lynch Syndrome who would benefit from assessment by clinical genetics services¹². Approximately 3% of cases of endometrial cancer are associated with Lynch Syndrome¹³. Lynch syndrome is an inherited condition associated with a higher risk of cancer including endometrial and colorectal cancer, therefore patients could benefit from genetic testing to confirm the diagnosis and test any family members at risk.</p> <p>Depending on family history, patients > 70 years of age may be further tested for Lynch syndrome, however due to difficulties with accurate measurement of these criteria, the QPI selects patients who are < 70 years of age. This enables an appropriate target to be set for the majority of suitable patients.</p>

(Continued overleaf)

^c Results suggestive of Lynch Syndrome include the following (but not limited to):

- Combined MSH2 and MSH6 loss;
- Isolated loss of MSH2, MSH6 or PMS2;
- Combined loss of MLH1 AND PMS2 with no evidence of MLH1 promoter hypermethylation.

QPI 9: Genetic Testing in Endometrial Cancer (continued)

Specification (i):	<p>Numerator: Number of patients with a histological diagnosis of endometrial carcinoma who undergo MMR and p53 IHC testing.</p> <p>Denominator: All patients with a histological diagnosis of endometrial carcinoma.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> • No exclusions
Specification (ii):	<p>Numerator: Number of patients <70 years of age at diagnosis with endometrial carcinoma who have MMR status assessed and where results are suggestive of Lynch Syndrome are referred to clinical genetics.</p> <p>Denominator: All patients <70 years of age at diagnosis with endometrial carcinoma who have MMR status assessed, and where results are suggestive of Lynch Syndrome.</p> <p>Exclusions:</p> <ul style="list-style-type: none"> • Patients who decline genetics referral. • Patients with a known inherited cancer syndrome.
Target	<p>95%</p> <p>The tolerance level within this target is designed to account for situations where there is insufficient tissue for testing.</p>

7. Survival

Improving survival forms an integral part of the national cancer quality improvement programme. Endometrial cancer survival analysis will be reported and analysed on a 3 yearly basis by Public Health Scotland (PHS). The specific issues which will be addressed 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 PHS 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 Improvement Board and Scottish Cancer Strategic Board. 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. Areas for Future Consideration

The Cervical and Endometrial Cancer QPI Groups have not been able to identify sufficient evidence, or determine appropriate measurability specifications, to address all areas felt to be of key importance in the treatment of endometrial cancer, and therefore in improving the quality of care for patients affected by endometrial cancer.

The following areas for future consideration have been raised across the lifetime of the Endometrial Cancer QPIs.

- Lymphadenectomy for grade 2 disease.
- Nodal assessment and treatment.

9. 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 3 and 4 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.

9.1 *National*

- Scottish Cancer Strategic Board
 - Accountable for overall National Cancer Quality Programme and overseeing the quality of cancer care across NHSScotland.
- 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.
- Public Health Scotland (PHS)

- Publish national comparative report on tumour-specific QPIs and survival analysis for approximately three tumour types per annum as part of the rolling programme of reporting.

9.2 *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 monitor progress against agreed actions.
- Provide assurance to NHS Board Chief Executive Officers and Scottish Cancer Strategic Board that any issues identified have been adequately and timeously progressed.

9.3 *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.

10. References

1. Scottish Government (2016). Beating Cancer: Ambition and Action (accessed December 2016). Available online from: <http://www.gov.scot/Resource/0049/00496709.pdf>.
2. Querleu et al (2011). Clinical Practice Guidelines for the Management of Patients with Endometrial cancer in France. Recommendations of the Institut National du Cancer and the Societe Francaise d'Oncologie Gynecologique. International Journal of Gynaecological Cancer. 5, 945-50.
3. NHS Quality Improvement Scotland (2008). Management of Core Cancer Services Standards. (accessed August 2013 and September 2017).
4. American College of Obstetricians and Gynecologists (2005). ACOG Practice Bulletin, Clinical Management Guidelines for Obstetrician-Gynecologists, Number 65, August 2005: Management of Endometrial Cancer. Obstetrics & Gynecology. 106(2), 413-425.
5. Australian Government: Cancer Australia (2011). Clinical practice guidelines for the treatment and management of endometrial cancer. (accessed December 2012) Available from: : <https://www.cancer.org.au/clinical-guidelines/endometrial-cancer>
6. Natarajan P, Delanerolle G, Dobson L, Xu C, Zeng Y, Yu X, Marston K, Phan T, Choi F, Barzilova V, et al (2024). Surgical Treatment for Endometrial Cancer, Hysterectomy Performed via Minimally Invasive Routes Compared with Open Surgery: A Systematic Review and Network Meta-Analysis. *Cancers*. 2024; 16(10):1860. <https://doi.org/10.3390/cancers16101860>
7. Alberta Health Services (2012). Endometrial cancer. (accessed December 2012) Update available from: <https://www.albertahealthservices.ca/cancer/Page18314.aspx>
8. Colombo et al (2015) ESGO-ESTRO Consensus Conference on Endometrial Cancer: diagnosis, treatment and follow-up. *Annals of Oncology*, Volume 27, Issue 1, 1 January 2016, Pages 16–41. (accessed August 2018). Available from: [ESMO-ESGO-ESTRO consensus conference on endometrial cancer: Diagnosis, treatment and follow-up - PubMed \(nih.gov\)](https://pubmed.ncbi.nlm.nih.gov/26111111/)
9. León-Castillo A, de Boer SM, Powell ME, Mileschkin LR, et al TransPORTEC consortium. Molecular Classification of the PORTEC-3 Trial for High-Risk Endometrial Cancer: Impact on Prognosis and Benefit From Adjuvant Therapy. *J Clin Oncol*. 2020 Oct 10;38(29):3388-3397. doi: 10.1200/JCO.20.00549. Epub 2020 Aug 4. PMID: 32749941; PMCID: PMC7527156.
10. Concin N, Matias-Guiu X, Vergote I, Cibula D, et al. ESGO/ESTRO/ESP guidelines for the management of patients with endometrial carcinoma. *Int J Gynecol Cancer*. 2021 Jan;31(1):12-39. doi: 10.1136/ijgc-2020-002230. Epub 2020 Dec 18. PMID: 33397713
11. British Association of Gynaecological Pathologists (BAGP) & British Gynaecological Cancer Society. Guidance – POLE testing in Endometrial Cancer. 2022 Available at: [BAGP-POLE-testing-in-Endometrial-cancer-v1.2-July-2022.pdf \(thebagp.org\)](https://www.bagp.org.uk/wp-content/uploads/2022/07/BAGP-POLE-testing-in-Endometrial-cancer-v1.2-July-2022.pdf)
12. Testing strategies for Lynch Syndrome in people with Endometrial Cancer. NICE Diagnostics Guidance [DG42]. Published 28 October 2020.

13. Ryan, N.A.J., Glaire, M.A., Blake, D. *et al.* The proportion of endometrial cancers associated with Lynch syndrome: a systematic review of the literature and meta-analysis. *Genet Med* **21**, 2167–2180 (2019). Available from: <https://doi.org/10.1038/s41436-019-0536-8>
14. Brouwers M, Kho ME, Browman GP, Burgers JS, Cluzeau F, Feder G, Fervers B, Graham ID, Grimshaw J, Hanna S, Littlejohns P, Makarski J, Zitzelsberger L for the AGREE Next Steps Consortium (2010). AGREE II: Advancing guideline development, reporting and evaluation in healthcare. *Can Med Assoc J.* 182(18), E839-E842 (accessed August 2013). Available online from: <http://www.cmaj.ca/content/182/18/E839.full.pdf+html?maxtoshow=&hits=10&RESU%20LTFORMAT=&fulltext=brouwers&searchid=1&FIRSTINDEX=0&volume=182&issue=%2018&resourcetype=HWCIT%2520%2520%2520>

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 Endometrial 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
<p><i>Endometrial cancer types:</i></p> <ul style="list-style-type: none"> Primary endometrial cancer (including: endometrioid, carcinosarcoma, mucinous, serous and clear cell carcinomas) <p><i>Interventions:</i></p> <ul style="list-style-type: none"> Diagnosis Staging Surgical management of disease Non-surgical management of disease (chemotherapy, radiotherapy, brachytherapy) <p><i>Age range:</i> Adults only</p> <p><i>Date:</i> 2005 to present day</p> <p><i>Language:</i> English only</p> <p><i>Document type:</i> Clinical guidelines</p>	<ul style="list-style-type: none"> Pre-cancerous conditions including: glandular intra-epithelial neoplasia (GIN) <p><i>Related cancers:</i></p> <ul style="list-style-type: none"> Secondary/malignant endometrial cancer Neuroendocrine carcinomas Lymphomas Uterine leiomyosarcoma <p><i>Interventions:</i></p> <ul style="list-style-type: none"> 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 – Endometrial 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 II¹⁴ instrument. 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 were included without appraisal. Overall, 8 guidelines for the management of endometrial 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 Endometrial 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 endometrial cancer and the wider public were given the opportunity to influence the development of Endometrial 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.

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

Name	Designation	Cancer Network/Base
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
Azmat Sadozye	Consultant Clinical Oncologist	WoSCAN / NHS Greater Glasgow and Clyde
Nadeem Siddiqui	Consultant Gynaecological 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 2: Endometrial Cancer QPI formal Reviews

Formal review of the Endometrial Cancer QPIs was undertaken for the first time in June 2018 following reporting of 3 years of national QPI data. A Formal Review Group was convened, chaired by Mr James Powell, Consultant Hepatopancreatobiliary (HPB) Cancer Surgeon. Membership of this group is outlined below.

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	MCN Clinical Lead / Consultant Gynaecological Oncologist	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	MCN Clinical Lead / Consultant Gynaecological Oncologist	SCAN / NHS Lothian
Wendy McMullen	Consultant Obstetrician and Gynaecologist	NOSCAN / NHS Tayside
Azmat Sadozye	Clinical Director / 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 Endometrial Cancer QPIs has been undertaken in consultation with various other clinical specialties.

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

2nd Cycle Formal Review

The 2nd cycle of formal review commenced in July 2021 following reporting of 6 years of QPI data. This cycle of review is more selective and focussed on ensuring the ongoing clinical relevance of the QPIs. A Formal Review Group was convened, with Ioanna Nixon, Consultant Clinical Oncologist, West of Scotland Cancer Network appointed as Clinical Advisor/Chair to the group. Membership of this group is outlined below.

Cervical and Endometrial Cancer Formal Review Group Membership (2021)

Name	Designation	Cancer Network / Base
Ioanna Nixon (Chair)	Consultant Clinical Oncologist	WoSCAN
Kevin Burton	MCN Clinical Lead	WoSCAN
Enhsun Choi	Radiologist	WoSCAN
Jen Doherty	Project Co-ordinator	National Cancer Quality Programme
Sophie Hepple	Consultant Radiologist	WoSCAN
Rosie Harrand	Consultant Clinical Oncologist	WoSCAN
Ann-Maree Kennedy	MCN Clinical Lead	NCA
Cameron Martin	MCN Clinical Lead	SCAN
Julie McMahon	Information Analyst	WoSCAN
Alison Stillie	Consultant Clinical Oncologist	SCAN
Lorraine Stirling	Project Officer	National Cancer Quality Programme
Evelyn Thomson	Regional Manager (Cancer)	WoSCAN)

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

NCA - North Cancer Alliance

SCAN - South East Scotland Cancer Network

WoSCAN - West of Scotland Cancer Network

3rd Cycle Formal Review

The 3rd cycle of formal review commenced in June 2024. Mr Graham Mackay, Consultant Surgeon and Regional Cancer Clinical Lead, WoSCAN was appointed as Clinical Advisor/Chair to the group. Membership of this group is outlined below:

Cervical and Endometrial Cancer QPI Formal Review Group Membership (2024)

Name	Designation	Cancer Network / Base
Graham Mackay (Chair)	Consultant Surgeon & Regional Cancer Clinical Lead	WoSCAN
Sarah Bell	Consultant Pathologist	WoSCAN
Jen Doherty	Project Co-ordinator	National Cancer Quality Programme
Stanka Easton	Senior Cancer Information Analyst	SCAN
Nidal Ghaoui	Clinical Lead	SCAN

Name	Designation	Cancer Network / Base
Mahalakshmi Gurumurthy	Clinical Lead	NCA
Rosie Harrand	Consultant Clinical Oncologist	WoSCAN
Ann-Maree Kennedy	Consultant Clinical Oncologist	NCA
Rhona Lindsay	Clinical Lead	WoSCAN
Julie McMahon	Information Analyst	WoSCAN
Alison Stillie	Consultant Clinical Oncologist	SCAN
Lorraine Stirling	Project Officer	National Cancer Quality Programme

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

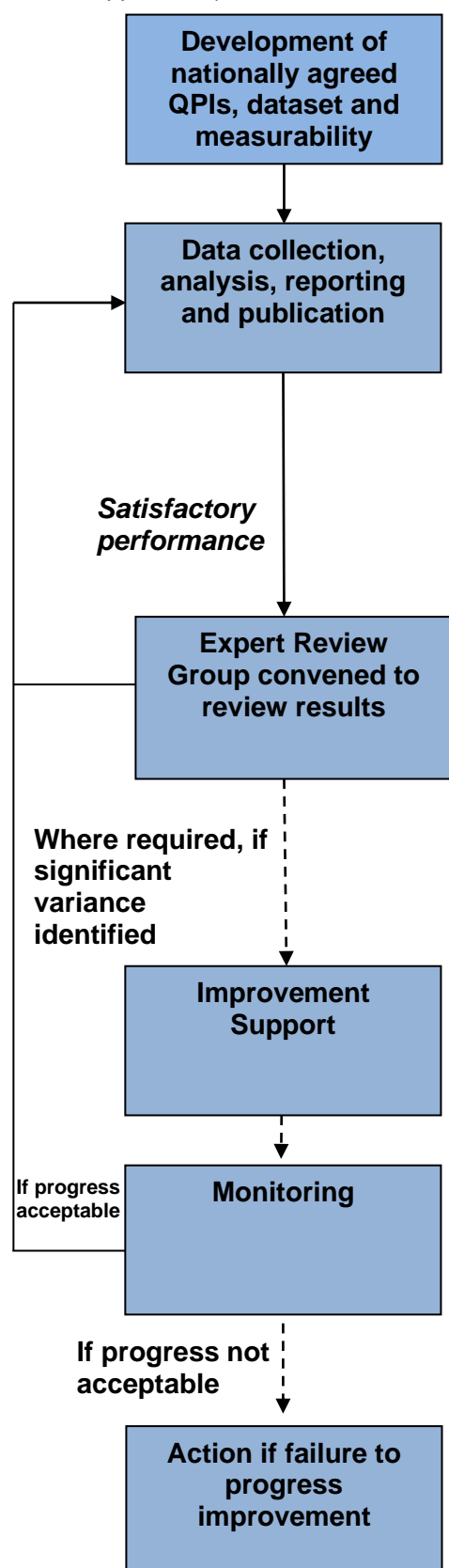
NCA - North Cancer Alliance

SCAN - South East Scotland Cancer Network

WoSCAN - West of Scotland Cancer Network

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

This process is underpinned by the annual regional reporting and governance framework (see appendix 4).



1. National QPI Development Stage

- QPIs developed by QPI development groups, which include representation from Regional Cancer Networks, Healthcare Improvement Scotland, PHS, 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 4.
- Submit yearly reports to PHS for collation and publication every 3 years.
- National comparative report approved by NHS Boards and RCAGs.
- PHS 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 Strategic Board.

4. Improvement Support Stage:

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

5. Monitoring Stage:

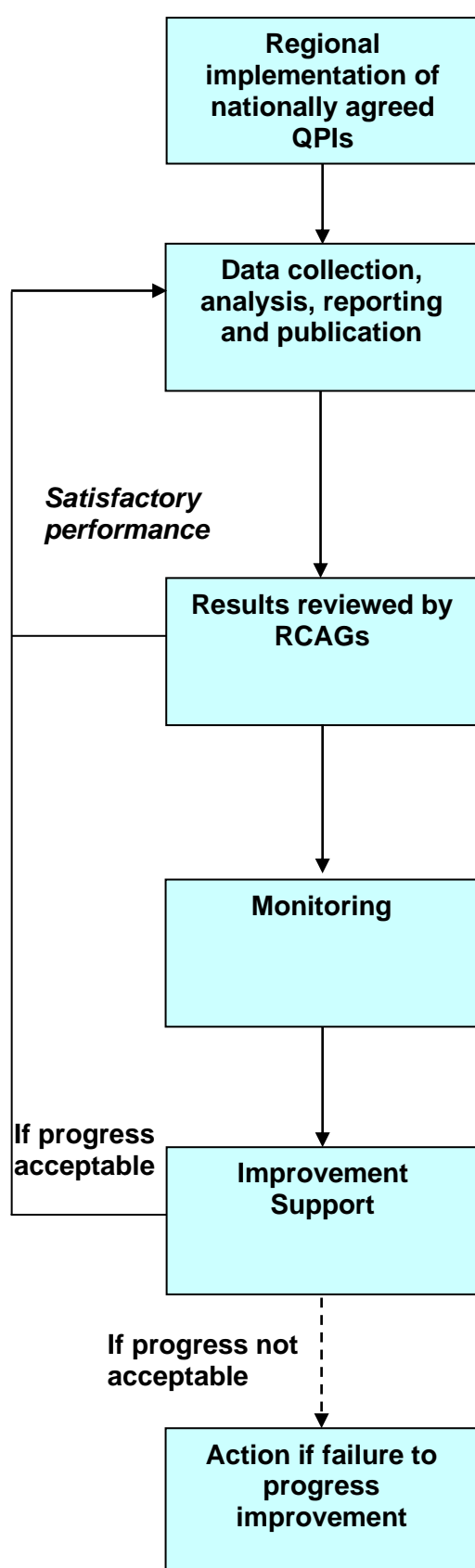
- RCAGs work with Boards to progress outstanding actions, monitor improvement plans and submit progress report to Healthcare Improvement Scotland.
- Healthcare Improvement Scotland report to Scottish Cancer Strategic Board as to whether progress is acceptable.

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 Strategic Board and escalation with a proposal to take forward to Scottish Government Health Department.

* The Regional Cancer Planning Group (South and East of Scotland) and the North Cancer Clinical Leadership Group (North Cancer Alliance) are equivalent to the Regional Cancer Advisory Group (RCAG) in the West of Scotland.

Appendix 4: 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 PHS 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.

*The Regional Cancer Planning Group (South and East of Scotland) and the North Cancer Clinical Leadership Group (North Cancer Alliance) are equivalent to the Regional Cancer Advisory Group (RCAG) in the West of Scotland.

Appendix 5: Glossary of Terms

Abdomen	The abdomen contains the stomach, liver, kidneys, and bladder. In women it also contains the ovaries and uterus.
Bilateral	Affecting both the right and left sides of the body.
Bilateral Salpingo-Oophorectomy	A bilateral salpingo-oophorectomy is a surgery in which both 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.
Histological/Histopathological/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.
Lesion	Tumour, mass, or other abnormality.
Locally advanced	Cancer that has spread from where it started to nearby tissue or lymph nodes.
Lynch Syndrome	An inherited condition that increases the risk of developing some types of cancer including colorectal and endometrial.
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.
Minimally Invasive Surgery	This surgical approach uses smaller incisions which reduce trauma to the body and enables quicker recovery. Examples include laparoscopic and robotic surgery.
Molecular Testing	A method of testing genetic material or proteins to identify specific disease characteristics, and to guide treatment decision making.
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).
Primary Tumour	The original tumour.
Progression	In medicine, the course of a disease, such as cancer, as it becomes worse or spreads in the body.
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)
Systemic Anti Cancer Therapy (SACT)	Treatment of cancer using drugs which prevent the replication or growth of cancer cells. This encompasses biological therapies and cytotoxic chemotherapy.
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.
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.
Total Hysterectomy	During a total hysterectomy both the womb and cervix (neck of the womb) are removed.
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.