



NORTH OF SCOTLAND PLANNING GROUP

**Gynaecology Managed Clinical Network** 

# **Audit Report**

## Endometrial Cancer Quality Performance Indicators

Patients diagnosed October 2015 – September 2016

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Neil McLachlan MCN Manager The North of Scotland Cancer Network (or NOSCAN), is one of the 3 regional Scottish Cancer Networks, which report to their respective regional NHS Board Planning Groups and for specific workstreams, to the Scottish Cancer Taskforce Group.

The principle role of NOSCAN is to support the organization, planning and delivery of regional and national cancer services, and thereby to ensure consistent and high quality cancer care is being provided equitably across the North of Scotland.

www.noscan.scot.nhs.uk

## EXECUTIVE SUMMARY

This publication reports the performance of cancer services in the six NHS Boards in the North of Scotland (NoS) for patients diagnosed with endometrial cancer between October 2015 and September 2016. The quality of Board and regional performance are measured and reported against a set of nationally agreed standards (the Endometrial Cancer Quality Performance Indicators, or 'QPIs') that were clinically identified and thereafter service implemented across Scotland.

2015-2016 is the second year in which endometrial cancer QPI data have been collected in Scotland, during which time in the North of Scotland:

- 206 patients diagnosed with endometrial cancer in 2015-16 were audited, an increase from 169 patients since 2014-2015.
- Overall case ascertainment was very high at 112%: this indicates excellent capture of patients through audit.
- The results reported were considered to be representative of endometrial cancer services in the region.

## Summary of QPI Results

				Perfor	mance <sup>t</sup>	)	
QPI	QPI Target	NOSCAN	NHS Grampian	NHS Highland	NHS Orkney	NHS Tayside	NHS W Isles
<b>QPI 1: Radiological Staging -</b> Proportion of patients with endometrial cancer who have an MRI and/or CT scan of the abdomen and pelvis performed prior to first treatment.	90%	<b>96%</b> n=90	<b>93%</b> n=27	<b>94%</b> n=16	-	<b>100%</b> n=38	<b>100%</b> n=5
<b>QPI 2: Multidisciplinary Team Meeting</b> <b>(MDT) -</b> Proportion of patients with endometrial cancer who are discussed at a MDT meeting before definitive treatment.	95%	<b>94%</b> n=89	<b>93%</b> n=27	<b>94%</b> n=16	-	<b>97%</b> n=37	<b>100%</b> n=5
<b>QPI 3: Total Hysterectomy and Bilateral</b> <b>Salpingo-Oophorectomy -</b> Proportion of patients with endometrial cancer who undergo TH/BSO.	80%	<b>88%</b> n=183	<b>90%</b> n=52	<b>95%</b> n=38	<b>60%</b> n=5	<b>86%</b> n=78	<b>78%</b> n=9
<b>QPI 4: Laparoscopic Surgery -</b> Proportion of patients with endometrial cancer undergoing definitive surgery who undergo laparoscopic surgery.	70%	<b>88%</b> n=170	<b>88%</b> n=77	<b>90%</b> n=21	-	<b>95%</b> n=66	<b>0%</b> n=5

<b>QPI 5: Adjuvant Vaginal Brachytherapy</b> - Proportion of patients with stage IB, grade 1 or 2, or stage IA, grade 3 endometrioid or mucinous endometrial cancer having adjuvant vaginal brachytherapy.	90% 35% 43% 29% - 31% n=13					-
<b>QPI 6: Chemotherapy -</b> Proportion of patients with stage IV endometrial cancer receiving chemotherapy.	75%	<b>36%</b> 50%				-
<b>Clinical Trials Access</b> - Proportion of patients with endometrial cancer who are enrolled in an interventional clinical trial or translational research.	Tar	Target NOSCAN Performance			9	
Interventional clinical trials	7.5% 0% n=184					
Translational research	15% 0%					

Performance shaded pink where QPI target has not been met by NOSCAN.

<sup>b</sup> Excluding Boards or results where figures are based on less than 5 patients.

Within NOSCAN 3 out of 7 QPIs were achieved during this audit cycle. To date, areas identified requiring further work to improve on the quality of clinical services particular to the care and management of patients with endometrial cancer in the North of Scotland include:

- MCN to facilitate regional or national discussion to clarify the suitability of CT versus MRI for staging patients with endometrial cancer.
- NOSCAN to initiate discussion on possible guidelines for pre-operative endometrial assessment of any woman having hysterectomy for apparently benign disease.
- All NHS Boards to ensure that discussion should be initiated on the barriers to surgery in overweight women such that all appropriate management options are offered to these women irrespective of their place of residence.
- NHS Board protocols should clarify that recommended management of precancerous change (hypersplasia with atypia) should be pelvic clearance (total hysterectomy with BSO and peritoneal washings).
- NOSCAN to consider whether all women should be given the option of being referred to units that do routinely offer laparoscopic surgery for endometrial cancer and whether this can be justified and resourced.
- NOSCAN to update regional clinical management guidelines in light of the outcome of discussions on the role of adjuvant vault brachytherapy for intermediate risk disease and lymph node assessment in surgical staging.
- MCN to suggest that the Formal Review of Endometrial Cancer QPIs considers whether QPI 6 is an appropriate measure of quality in cancer care.

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## 1. Introduction

In 2010, the <u>Scottish Cancer Taskforce</u> established the <u>National Cancer Quality Steering</u> <u>Group</u> (NCQSG) to take forward the development of national <u>Quality Improvement Indicators</u> (QPIs) for all cancer types to enable national comparative reporting and drive continuous improvement for patients. In collaboration with the three Regional Cancer Networks (<u>NoSCAN, SCAN & WoSCAN</u>) and <u>Information Services Division</u> (ISD), the first QPIs were published by <u>Healthcare Improvement Scotland</u> (HIS) in January 2012. <u>CEL 06 (2012)</u> mandates all NHS Boards in Scotland to report on specified QPIs on an annual basis. Data definitions and measurability criteria to accompany the Endometrial Cancer QPIs are available from the ISD website<sup>1</sup>.

The need for regular reporting of activity and performance (to assure the quality of care delivered) was first nationally set out as a fundamental requirement of a Managed Clinical Network (MCN) in <u>NHS MEL(1999)10<sup>2</sup></u>. This has since been further restated and reinforced in <u>HDL(2002)69<sup>3</sup></u>, <u>HDL (2007) 21<sup>4</sup></u>, and most recently in <u>CEL 29 (2012)<sup>5</sup></u>.

This report assesses the performance of specialist cancer services for patients diagnosed with endometrial cancer in the North of Scotland Cancer Network during the twelve months from 1<sup>st</sup> October 2015 to 30<sup>th</sup> September 2016.

Using clinical audit data, which has been collected at individual Board level for all patients diagnosed with endometrial cancer during the period indicated, performance is reported against the Endometrial Cancer Quality Performance Indicators (QPIs)<sup>6</sup> which were implemented for patients diagnosed on or after 1<sup>st</sup> October 2014. Results are reported both by Board, and collectively as a network, with supporting narrative to enhance understanding of performance outcomes.

## 2. Background

Six NHS Boards across the North of Scotland serve the 1.40 million population<sup>7</sup>. There were 206 patients diagnosed with endometrial cancer in the North of Scotland between 1<sup>st</sup> October 2015 and 30<sup>th</sup> September 2016. The configuration of the Multidisciplinary Teams (MDTs) in the North of Scotland for the management of gynaecological cancers, which includes endometrial cancer, is set out below.

MDT	Constituent Hospitals
Grampian	Aberdeen Royal Infirmary, Balfour Hospital, Kirkwall, Gilbert Bain Hospital, Lerwick
Highland	Raigmore Hospital, Inverness
Tayside	Ninewells Hospital, Dundee

## 2.1 National Context

Latest available cancer registration figures indicate that with 755 cases recorded in Scotland during 2015, endometrial cancer was the fourth most common types of cancer in women, with incidence rates increasing by almost a third in the last 10 years<sup>8</sup>. The overwhelming driver for this very significant increase is increasing rates of obesity, which also makes surgical and adjuvant treatment concomitantly more challenging.

Relative survival from endometrial cancer in Scotland is relatively high and has increased since 1987-1991<sup>9</sup>. The table below details the percentage change in 1 and 5 year relative survival for patients diagnosed 1987-1991 to 2007-2011.

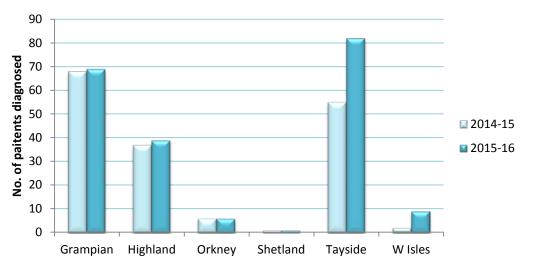
Relative age-standardised survival for endometrial cancer in Scotland at 1 year and 5 years showing percentage change from 1987-1991 to 2007-2011<sup>9</sup>.

Relative surviv	val at 1 year (%)	Relative survival at 5 years (%)				
2007-2011	% change	2007-2011	% change			
88.5%	+ 6.3%	76.7%	+ 10.6%			

## 2.2 North of Scotland Context

Between 1<sup>st</sup> October 2015 and 30<sup>th</sup> September 2016, a total of 206 cases of endometrial cancer were diagnosed in the North of Scotland and recorded through audit, an increase compared with the 2014-15 figure of 169. The number of patients diagnosed within each Board is presented below.

	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NoS
Number of Patients	69	39	6	1	82	9	206
% of NoS total	33.5%	18.9%	2.9%	0.5%	39.8%	4.4%	100.0%



Number of patients diagnosed with endometrial cancer by Board of diagnosis, 2014-2015 and 2015-2016.

## 3. Methodology

The clinical audit data presented in this report was collected in accordance with an agreed dataset and definitions<sup>1</sup>. The data was entered into the electronic Cancer Audit Support Environment (eCASE): a secure centralised web-based database.

Data for patients diagnosed between 1<sup>st</sup> October 2015 and 30<sup>th</sup> September 2016 were locally collated by cancer audit staff within individual NHS Boards. These data and any comments on QPI results were then signed-off at NHS Board level to ensure that the data was an accurate representation of service in each area prior to submission to NOSCAN for collation at a regional level. The reporting timetable was developed to take into account the patient pathway (i.e. time taken from first cancer diagnosis until the point at which all information required to measure the QPIs is available) and thereby ensure that a complete treatment record was available for the vast majority of cases.

Where the number of cases meeting the denominator criteria for any indicator is between one and four, the results have not been shown in any associated charts or tables. This is to avoid any unwarranted variation associated with small numbers and to minimise the risk of disclosure. Any charts or tables impacted by this are denoted with an asterisk (\*). However, any commentary provided by NHS Boards relating to the impacted indicators will be included as a record of continuous improvement.

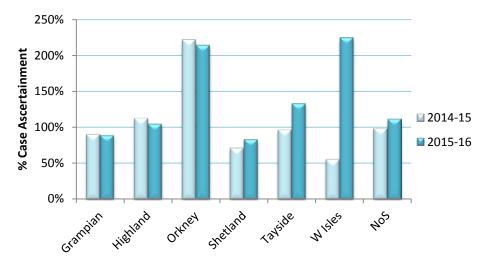
## 4. Results

## 4.1 Case Ascertainment

Audit data completeness can be assessed from case ascertainment, which is the proportion of expected patients that have been identified through audit within the time period measured. Case ascertainment is calculated by comparing the number of new cases identified by the cancer audit with a five year average of the numbers having a similar diagnosis, as recorded by the National Cancer Registry (provided by Information Services Division (ISD)).

Cancer Registry figures were extracted from ACaDMe (Acute Cancer Deaths and Mental Health), a system provided by ISD. Due to timescale of data collection and verification processes, National Cancer Registry data are not available for 2016. Consequently an average of the previous five years' figures (i.e. 2011 to 2015) is used to take account of annual fluctuations in incidence within NHS Boards. It should be noted that case ascertainment figures are provided for guidance only: as it is not possible to compare the same cohort of patients, they are not an exact measurement of audit completeness. It also cannot correct for the recent increase in incidence (as described in 2.1 above).

Overall case ascertainment for 2015-16 in the North of Scotland was very high at 111.8%, an increase from the 2014-15 figure of 98.6%. Figures for each Board across the North of Scotland are illustrated below.



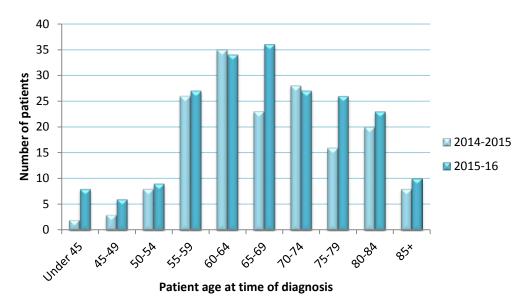
Case ascertainment by NHS Board for patients diagnosed with endometrial cancer in 2014-2015 and 2015-2016.

	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NoS
Cases from audit	69	39	6	1	82	9	206
ISD Cases (2010- 2014)	77.6	37.2	2.8	1.2	61.4	4	184.2
% Case ascertainment	88.9%	104.8%	214.3%	83.3%	133.6%	225.0%	111.8%

As a result of the high levels of case ascertainment, QPI calculations based on data captured are considered to be representative of patients diagnosed with endometrial cancer during the audit period. For patients included within the audit, data collection was near complete, with all data required for QPI reporting being recorded.

## 4.2 Age Distribution

The graph below shows the age distribution of women diagnosed with endometrial cancer in the North of Scotland in 2014-15 and 2015-16. Incidence peaked in patients aged 65-69 in 2015-16.



Age distribution of patients diagnosed with endometrial cancer in NOSCAN 2014-15 and 2015-16.

Age	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NOSCAN
Under 45	2	1	0	0	4	1	8
45-49	3	0	1	0	2	0	6
50-54	2	1	1	0	5	0	9
55-59	7	6	0	0	12	2	27
60-64	10	7	2	1	14	0	34
65-69	16	10	0	0	9	1	36
70-74	10	10	0	0	7	0	27
75-79	7	2	1	0	14	2	26
80-84	7	2	1	0	11	2	23
85+	5	0	0	0	4	1	10
Total	69	39	6	1	82	9	206

## 4.3 Performance against Quality Performance Indicators (QPIs)

Results of the analysis of the Endometrial Cancer Quality Performance Indicators are set out in the following sections. Graphs and charts have been provided where this aids interpretation and, where appropriate, numbers have also been included to provide context.

Data for most QPIs are presented by Board of diagnosis; however QPI 4, relating to laparoscopic surgery, is presented by Hospital of Surgery. Where performance is shown to fall below the target, commentary is often included to provide context to the variation. Specific regional and NHS Board actions have been identified to address issues highlighted through the data analysis where appropriate.

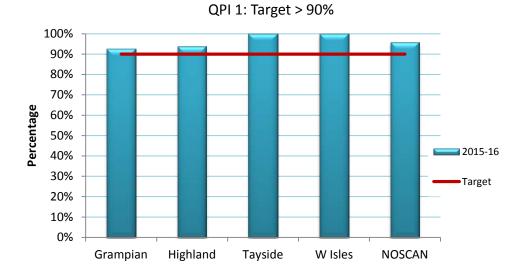
## **QPI 1: Radiological Staging**

QPI 1: Radiological Staging: Patients with endometrial cancer should have their stage of disease assessed by magnetic resonance imaging (MRI) and/or computed tomography (CT) prior to first treatment.									
treatment in c	It is necessary to fully image the pelvis and abdomen prior to starting first treatment in order to establish the extent of disease and minimise unnecessary or inappropriate treatment.								
pelvic magne aortic lymph r	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 considered.								
Numerator:	Number of patients with endometrial cancer having a MRI and/or CT scan of the abdomen and pelvis carried out prior to first treatment.								
Denominator:	All patients with endometrial cancer.								
Exclusions:	<ul> <li>Patients with Grade 1 endometrioid or mucinous carcinoma on pre-operative biopsy.</li> <li>Patient with atypical hyperplasia on preoperative biopsy.</li> </ul>								
Target:	90%								

## **QPI 1 Performance against target**

Of the 90 patients diagnosed with endometrial cancer in North of Scotland in 2015-2016, 86 had an MRI and / or CT scan of the abdomen and pelvis carried out prior to first treatment. This equates to a rate of 95.6%, which is above the target rate of 90%. It is not possible to compare results with the previous year due to changes in the way this QPI is measured.

This QPI was met by all NHS Boards in the North of Scotland with the exception of NHS Orkney. The NHS Orkney figure was based on small numbers of patients and the QPI was not met due to the results for a single patient.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	92.6%	25	27	0	0%	0	0%	0
Highland	93.8%	15	16	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	100%	38	38	0	0%	0	0%	0
W Isles	100%	5	5	0	0%	0	0%	0
NoS	95.6%	86	90	0	0%	0	0%	0

This guidance has been incorporated into the NOSCAN Clinical Management Guidelines and is standard practice across the network, although NHS Tayside use CT staging rather than MRI staging, which would benefit from further regional and national discussion.

## **Actions Required:**

• MCN to facilitate regional or national discussion to clarify the suitability of CT versus MRI for staging patients with endometrial cancer.

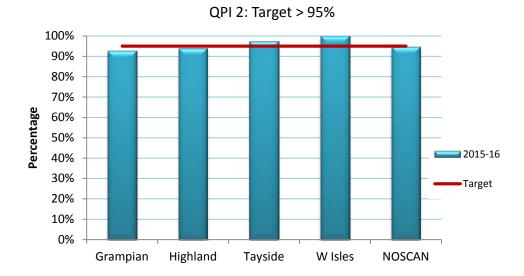
## **QPI 2: Multidisciplinary Team Meeting (MDT)**

QPI2: Multidisciplinary Team Meeting (MDT): Patients with endometrial cancer should be discussed by a multidisciplinary team (MDT) prior to definitive treatment.							
Evidence suggests that patients with cancer managed by a multidisciplinary team have a better outcome. There is also evidence that the multidisciplinary management of patients increases their overall satisfaction with their care.							
Numerator:	Number of patients with endometrial cancer discussed at the MDT prior to definitive treatment.						
Denominator:	All patients with endometrial cancer.						
Exclusions:	<ul> <li>Patients with Grade 1 endometrioid or mucinous carcinoma on pre-operative biopsy.</li> <li>Patient with atypical hyperplasia on preoperative biopsy.</li> <li>Patients who died before first treatment.</li> </ul>						
Target:	95%						

## **QPI 2 Performance against target**

Out of the 89 patients diagnosed with endometrial cancer across the North of Scotland in 2015-16, 84 were discussed at the MDT prior to definitive treatment. At 94.4% this is just below the target rate of 95%.

At an NHS Board level this QPI was not met in NHS Grampian, NHS Highland and NHS Orkney.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	92.6%	25	27	0	0%	0	0%	0
Highland	93.8%	15	16	0	0%	0	0%	0
Orkney*	-	-	-	-	-	-	-	-
Shetland*	-	-	-	-	-	-	-	-
Tayside	97.3%	36	37	0	0%	0	0%	0
W Isles*	100%	5	5	0	0%	0	0%	0
NoS	94.4%	84	89	0	0%	0	0%	0

It is recognised that endometrial cancer will sometimes be discovered incidentally at the time of hysterectomy for other indications. These patients will not be identified for discussion at MDT before surgery and will therefore not meet this QPI.

## **Actions Required:**

• NOSCAN to initiate discussion on possible guidelines for pre-operative endometrial assessment of any woman having hysterectomy for apparently benign disease.

## **QPI 3: Total Hysterectomy and Bilateral Salpingo-Oophorectomy**

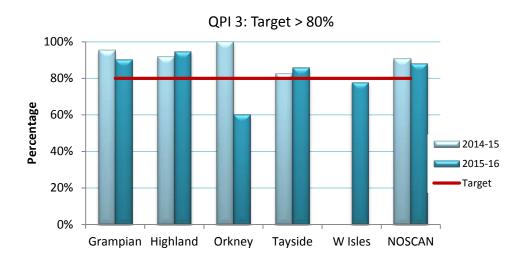
	Hysterectomy and Bilateral Salpingo-Oophorectomy: Patients ometrial cancer should undergo total hysterectomy (TH) and bilateral salpingo-oophorectomy (BSO).
	endometrial cancer is associated with best long term survival primary radiotherapy or hormonal treatment).
Numerator:	Number of patients with endometrial cancer who undergo TH/ BSO.
Denominator	All patients with endometrial cancer.
Exclusions:	<ul> <li>Patients with FIGO Stage IV disease.</li> <li>Patients who decline surgical treatment.</li> <li>Patient having neo-adjuvant chemotherapy.</li> </ul>
Target:	80%

## **QPI 3 Performance against target**

In the North of Scotland, 88.0% of patients diagnosed with endometrial cancer in 2015-2016 had a total hysterectomy and bilateral salpingo-oophorectomy. Although slightly less than the 90.7% in 2014-15; this means that at a regional level, the target of 80% was met.

For patients diagnosed in 2015-16, this QPI was met by all NHS Boards within the North of Scotland except for NHS Orkney and NHS W Isles, where figures were based on small numbers of patients.

In addition to the QPI results, calculations were also made of the average number of days patients waited following diagnosis before having surgery. On average, in NOSCAN patients had surgery 53 days after diagnosis, there was little variation between Boards with figures for NHS Grampian at 56 days, NHS Tayside at 57 days and NHS Highland at 42 days.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator	% change from 2014-2015
Grampian	90.4%	47	52	0	0%	0	0%	0	- 5.1%
Highland	94.7%	36	38	0	0%	0	0%	0	+ 3.0%
Orkney	60.0%	3	5	0	0%	0	0%	0	- 40.0%
Shetland*	-	-	-	-	-	-	-	-	-
Tayside	85.9%	67	78	0	0%	0	0%	0	+ 3.2%
W Isles	77.8%	7	9	0	0%	0	0%	0	-
NoS	88.0%	161	183	0	0%	0	0%	0	-2.7%

It is recognised that endometrial cancer is increasingly becoming a disease of overweight women where BMI and consequent co-morbidity may preclude surgery, especially in low grade disease where medical management may be a valid alternative.

In addition, patients for whom endometrial cancer is an incidental finding of hysterectomy may have total hysterectomy (TH) and bilateral salpingo-oophorectomy (BSO) as a two stage process, such patients would not meet this QPI. This highlights the need for discussion with general gynaecologists regarding the need for endometrial assessment in women having hysterectomy for apparently benign disease, as identified in the action listed under QPI 2, as well as the need to recommend pelvic clearance in women having hysterectomy for apparent pre-cancer (complex atypical hyperplasia).

## **Actions Required:**

- All NHS Boards to ensure that discussion should be initiated on the barriers to surgery in overweight women such that all appropriate management options are offered to these women irrespective of their place of residence.
- NHS Board protocols should clarify that recommended management of precancerous change (hypersplasia with atypia) should be pelvic clearance (total hysterectomy with BSO and peritoneal washings).

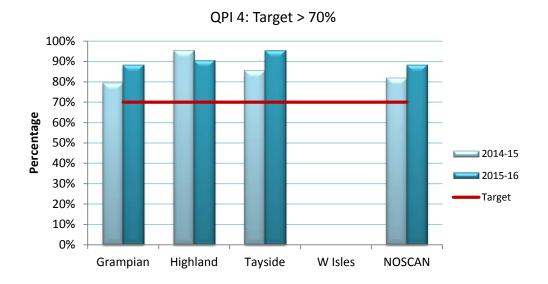
#### **QPI 4: Laparoscopic Surgery**

QPI 4: Laparoscopic Surgery: Patients with endometrial cancer undergoing definitive surgery should undergo laparoscopic surgery, where clinically appropriate.							
Laparoscopic surgery, by appropriately trained surgeons, 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.							
Numerator:	Number of patients with endometrial cancer undergoing definitive surgery who have laparoscopic surgery.						
Denominator:	All patients with endometrial cancer undergoing definitive surgery.						
Exclusions:	No exclusions						
Target:	70%						

#### **QPI 4 Performance against target**

Of the 170 patients diagnosed with endometrial cancer in 2015-2016 who had definitive surgery in the North of Scotland, 150 (88.2%) had laparoscopic surgery, an increase from the 2014-2015 figure of 81.9%. Consequently the target rate of 70% was exceeded at a regional level.

In addition, all NHS Boards within the North of Scotland also met the target, except NHS Orkney and W Isles, where numbers of patients were very small.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator	% change from 2014-2015
Grampian	88.3%	68	77	0	0%	0	0%	0	+9.0%
Highland	90.5%	19	21	0	0%	0	0%	0	-5.0%
Orkney*	-	-	-	-	-	-	-	-	-
Shetland	-	0	0	0	-	0	-	0	-
Tayside	95.5%	63	66	0	0%	0	0%	0	+ 10.1%
W Isles	0%	0	5	0	0%	0	0%	0	-
NoS	88.2%	150	170	0	0%	0	0%	0	+ 6.3%

Analysis of this QPI by the hospital at which surgery was undertaken yielded very similar results to that by Board of Surgery, as the majority of surgery within each NHS Board is undertaken in a single hospital. Of the six hospitals in which definitive surgery for endometrial cancer was undertaken, the three cancer centres (Aberdeen Royal Infirmary, NHS Grampian, Raigmore Hospital, NHS Highland, and Ninewells Hospital, NHS Tayside) considerably exceeded this QPI standard. However, the target level was not met by the three hospitals with very small numbers of patients, Balfour Hospital (NHS Orkney), Perth Royal Infirmary (NHS Tayside) and Western Isles Hospital (NHS Western Isles).

It is a reality that it may be less practical to offer laparoscopic surgery in the smaller units. Many women are happy with open surgery in their local unit with their local gynaecologists.

## **Action Required:**

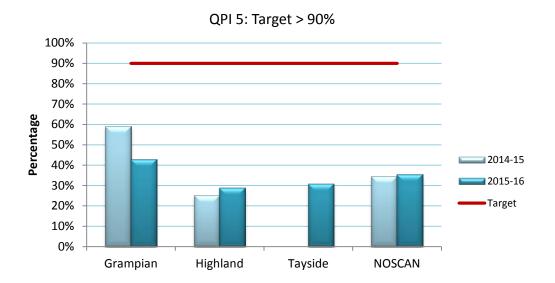
• NOSCAN to consider whether all women should be given the option of being referred to units that do routinely offer laparoscopic surgery for endometrial cancer and whether this can be justified and resourced.

## **QPI 5: Adjuvant Vaginal Brachytherapy**

QPI 5: Adjuvant Vaginal Brachytherapy: Patients with intermediate risk (stage IB, grade 1 or 2; or stage IA, grade 3 endometrioid or mucinous) endometrial cancer should be considered for adjuvant vaginal brachytherapy.							
For stage IB grade 1-2 brachytherapy has been shown to improve local control rates without the toxicity associated with external beam radiotherapy. It should not be used as sole adjuvant treatment for high-intermediate risk patients. Approximately 35% of all patients with endometrial cancer will present with a stage IB.							
Numerator:	Number of patients with stage IB, grade 1 or 2 or stage IA, grade 3 endometrioid or mucinous endometrial cancer receiving vaginal vault brachytherapy.						
Denominator:	All patients with stage IB, grade 1 or 2, or stage IA, grade 3 endometrioid or mucinous endometrial cancer.						
Exclusions:	Patients who decline brachytherapy.						
Target:	90%						

## **QPI 5 Performance against target**

Of the 34 patients diagnosed with intermediate risk endometrial cancer in the North of Scotland in 2015-2016, 35.3% (12) received vaginal vault brachytherapy, very similar to the 2014-15 figure of 34.3%. These figures show that the target of 90% was not met at a regional level. Further, none of the individual NHS Boards in the North of Scotland met this QPI, with the highest figures being 42.9% in NHS Grampian.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator	% change from 2014-2015
Grampian	42.9%	6	14	0	0%	0	0%	0	-15.9%
Highland	28.6%	2	7	0	0%	0	0%	0	+3.6%
Orkney	-	0	0	0	-	0	-	0	-
Shetland	-	0	0	0	-	0	-	0	-
Tayside	30.8%	4	13	0	0%	0	0%	0	+30.8%
W Isles	-	0	0	0	-	0	-	0	-
NoS	35.3%	12	34	0	0%	0	0%	0	+1.0%

There is much more consistency in performance against this QPI between NHS boards in 2015-16 compared to 2014-15 but still a discrepancy between the QPI target and the NOSCAN protocols for advising adjuvant vault brachytherapy for intermediate risk disease. A regional meeting is pending to consider the regional clinical management guidelines, again considering the role of lymph node assessment in surgical staging.

## **Actions Required:**

• NOSCAN to update regional clinical management guidelines in light of the outcome of discussions on the role of adjuvant vault brachytherapy for intermediate risk disease and lymph node assessment in surgical staging.

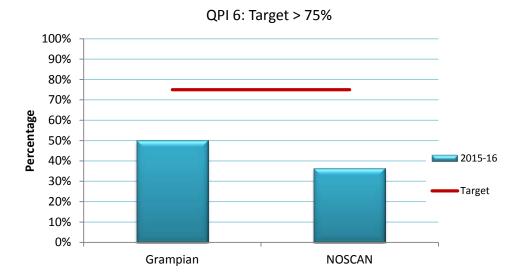
#### **QPI 6: Chemotherapy**

QPI 6: Chemotherapy: Patients with stage IV endometrial cancer should have chemotherapy.								
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.								
Numerator:	Number of patients with stage IV endometrial cancer receiving chemotherapy.							
Denominator:	All patients with stage IV endometrial cancer.							
Exclusions:	Patients who refuse chemotherapy.							
Target:	75%							

#### **QPI 6 Performance against target**

In 2015 - 2016, only 11 patients were diagnosed with stage IV endometrial cancer. Of these, four (36.4%) had chemotherapy, below the target rate of 75%. No NHS Boards in the North of Scotland met this target.

It is not possible to compare results with the previous year due to changes in the way this QPI is measured.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	50.0%	4	8	0	0%	0	0%	0
Highland	-	0	0	0	-	0	-	0
Orkney	-	0	0	0	-	0	-	0
Shetland	-	0	0	0	-	0	-	0
Tayside*	-	-	-	-	-	-	-	-
W Isles	-	0	0	0	-	0	-	0
NoS	36.4%	4	11	0	0%	0	0%	0

This QPI focuses on a small number of potentially very sick women with advanced disease. There is some uncertainty as to whether is appropriate to put a target on the proportion of these patients that should be given potentially toxic chemotherapy treatment or whether it may be more appropriate to allow clinicians to individualise treatment.

## Actions Required:

• MCN to suggest that the Formal Review of Endometrial Cancer QPIs considers whether QPI 6 is an appropriate measure of quality in cancer care.

## **Clinical Trials Access QPI**

The ability of patients to readily access a Clinical Trial is a common issue for all cancer types, and in order to further support recruitment through more active comparison and measurement of Board and network performance across the country, a generic QPI was developed as part of the National Programme of cancer quality improvement. Further details on the development and definition of this QPI can be found <u>here</u>.

The QPI is defined as follows.

	Clinical Trials Access QPI							
All patients should be considered for participation in available clinical trials, wherever eligible.								
Numerator: Number of patients with endometrial cancer enrolled in an interventional clinical trial of translational research.								
Denominator:	All patients with endometrial cancer.							
Exclusions:	No exclusions							
Target:	Interventional clinical trials – 7.5%							
	Translational research - 15%							

Key points during the period audited:

- No patients (0%) diagnosed with endometrial cancer in the North of Scotland were recruited into a interventional clinical trial in one of the three cancer centres in the region in 2016, the same as in 2015; this is well below the required target of 7.5%.
- Recruitment into translational research was also 0% during this period, clearly missing the target of 15% as in 2015.

	Number of patients recruited	ISD Cases annual average (2011-2015)	Percentage of patients recruited
Interventional Clinical Trials	0	184	0%
Translational Research	0	184	0%

The QPI targets for clinical trials are 7.5% for interventional trials and 15% for translational trials. It should be noted that these targets are particularly ambitious, particularly with the move towards more targeted trials. No clinical trials were open and recruiting for endometrial cancer patients during this period in NOSCAN, however patients may have been referred to other centres where trials are open such as the Royal Marsden, London and The Beatson Institute, Glasgow.

## 5. Conclusions

The Quality Performance Indicators programme was introduced in order to drive forward a programme of continuous service improvement and to ensure the quality and equity of access to care for cancer patients across Scotland.

As part of this programme, the North of Scotland has launched a programme of annual reporting of regional performance against QPIs. This is the second time that the results of individual Board performance against the Endometrial Cancer QPIs have been reported in the North of Scotland, providing a clearer measure of overall performance across the region, and a more formal structure around which any improvements will be made.

Case ascertainment high at 112% and results of both Board and regional performance against the Endometrial Cancer QPI's for patients diagnosed between 1<sup>st</sup> October 2015 and 30<sup>th</sup> September 2016 were considered to be representative of cancer services specific to the management of endometrial cancer in the North of Scotland.

For three of the seven QPIs measured, the audit report indicated that the required QPI targets were met.

The actions so far identified to improve services in the North of Scotland include;

- MCN to facilitate regional or national discussion to clarify the suitability of CT versus MRI for staging patients with endometrial cancer.
- NOSCAN to initiate discussion on possible guidelines for pre-operative endometrial assessment of any woman having hysterectomy for apparently benign disease.
- All NHS Boards to ensure that discussion should be initiated on the barriers to surgery in overweight women such that all appropriate management options are offered to these women irrespective of their place of residence.
- NHS Board protocols should clarify that recommended management of precancerous change (hypersplasia with atypia) should be pelvic clearance (total hysterectomy with BSO and peritoneal washings).
- NOSCAN to consider whether all women should be given the option of being referred to units that do routinely offer laparoscopic surgery for endometrial cancer and whether this can be justified and resourced.
- NOSCAN to update regional clinical management guidelines in light of the outcome of discussions on the role of adjuvant vault brachytherapy for intermediate risk disease and lymph node assessment in surgical staging.
- MCN to suggest that the Formal Review of Endometrial Cancer QPIs considers whether QPI 6 is an appropriate measure of quality in cancer care.

The North of Scotland Gynaecology MCN will actively take forward regional actions identified and NHS Boards are asked to develop local Action / Improvement Plans in response to the

findings presented in the report. A blank Action Plan template can be found in the Appendix to this report.

## Completed Action Plans should be returned to NOSCAN within two months of publication of this report.

Progress against these plans will be monitored by the North of Scotland Gynaecology MCN and any service or clinical issue which the Advisory Board considers not to have been adequately addressed will be escalated to the NHS Board Lead Cancer Clinician and Regional Lead Cancer Clinician.

Additionally, progress will be reported to the Regional Cancer Advisory Forum (RCAF) annually by the NOSCAN Endometrial Cancer Clinical Lead as part of the regional audit governance process to enable RCAF to review and monitor regional improvement.

#### References

- 1. http://www.isdscotland.org/Health-Topics/Cancer/Cancer-Audit/
- 2. NHS MEL (1999)10. Introduction of Manager Clinical Networks within the NHS in Scotland <a href="http://www.show.scot.nhs.uk/sehd/mels/1999\_10.htm">http://www.show.scot.nhs.uk/sehd/mels/1999\_10.htm</a>
- 3. HDL(2002)69. Promoting the development of Managed Clinical Networks in NHSScotland. <u>http://www.show.scot.nhs.uk/sehd/mels/HDL2002\_69.pdf</u>
- 4. HDL (2007)21. Strengthening the role of Manager Clinical Networks. http://www.show.scot.nhs.uk/sehd/mels/HDL2007\_21.pdf
- CEL 29 (2012). Managed Clinical Networks: Supporting and Delivering the Healthcare Quality Strategy. <u>http://www.sehd.scot.nhs.uk/mels/CEL2012\_29.pdf</u>
- Scottish Cancer Taskforce, 2014. Endometrial Cancer Clinical Performance Indicators, Version 1.0. Health Improvement Scotland. <u>http://www.healthcareimprovementscotland.org/our\_work/cancer\_care\_improvement/cancer\_qpis/quality\_performance\_indicators.aspx</u>
- ScotPHO, Public Health Information for Scotland. Population: estimates by NHS Board [Accessed on: 9<sup>rd</sup> June 2017]. <u>http://www.scotpho.org.uk/populationdynamics/population-estimates-and-projections/data/population-estimates</u>
- 8. Information Services Division. Cancer in Scotland, 2004. <u>http://www.isdscotland.org/Health-Topics/Cancer/Publications/2017-04-25/Cancer\_in\_Scotland\_summary\_m.pdf</u>
- 9. ISD, NHS National Services Scotland. Cancer Survival in Scotland, 1987-2011. 2015. <u>https://isdscotland.scot.nhs.uk/Health-Topics/Cancer/Publications/2015-03-03/2015-03-03-CancerSurvival-Report.pdf</u>

## **Appendix: NHS Board Action Plans**

A blank Action Plan template can be found attached. Completed Action Plans should be returned to NOSCAN within two months of publication of this report.

## **NOSCAN** North of Scotland

#### Cancer Network

## **Action Plan: Endometrial Cancer**

## Based on QPI results of patients diagnosed 2015-2016

rd:		Status key		
ion Plan Lead:		1	Action Fully Implemented	
		2	Action agreed but not yet implement	
		3	No action taken (please state reasor	

QPI	Action Required	NHS Board Action Taken	Date		Lood	Prograss	Status
QFI	Action Required	NHS BOARD ACTION TAKEN	Start	End	Lead	Progress	Slalus
	Ensure actions mirror those detailed in Audit Report	Detail specific actions that will be taken by the NHS Board	Insert date	Insert date	Insert name of responsible lead for each action.	<b>1 3 . . .</b>	Insert no. from key