NOSCAN
North of Scotland Cancer Network

NHS SCOTLAND

NORTH OF SCOTLAND PLANNING GROUP

Urological Cancer Managed Clinical Network

Audit Report

Prostate Cancer
Quality Performance Indicators

Patients diagnosed July 2015 to June 2016

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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.

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EXECUTIVE SUMMARY

This publication reports the performance of prostate cancer services in the six NHS Boards in the North of Scotland (NOS) against the Prostate Cancer Quality Performance Indicators (QPIs) for patients diagnosed between 1st July 2015 and 30th June 2016.

In 2016, following the first three years of reporting, the QPIs for prostate cancer were reviewed to ensure that they continued to be clinically relevant. As part of this national process, some of the QPIs were removed or updated, while some new QPIs were added. Where data availability has permitted, the new QPI definitions have been used to report performance during 2015-16. Results are also compared with those from previous years where appropriate.

2015-16 is the fourth year in which prostate cancer QPI data have been collected, during which time in the North of Scotland:

- 823 patients diagnosed with prostate cancer were audited.
- Overall case ascertainment was high at 99.2% and results were considered to be representative of prostate cancer services in the region.

Summary of QPI Results

QPI	QPI Target	Performance[b]					
		NOSCAN	NHS Grampian	NHS Highland	NHS Shetland	NHS Tayside	NHS W Isles
QPI 1: Biopsy Procedure - Proportion of patients with prostate cancer who undergo trans-rectal ultrasound guided (TRUS) prostate biopsy for histological diagnosis where a minimum of 10 cores are received by pathology.	90%	**95%** n=437	96% n=187	90% n=105	93% n=14	96% n=124	100% n=7
QPI 2: Radiological Staging - Proportion of patients with intermediate or high risk prostate cancer undergoing radical treatment who have had Magnetic Resonance Imaging (MRI) and bone scan staging.							
Specification (i) Patients with intermediate prostate cancer who undergo MRI	95%	**100%** n=71	100% n=21	100% n=16	-	100% n=34	-
Specification (ii) Patients with high risk prostate cancer who undergo MRI and bone scan	95%	**81%** n=269	71% n=129	92% n=52	33% n=12	99% n=72	-
QPI 3: Pathology Reporting - Proportion of patients who undergo needle biopsy where the pathology report contains a full set of data items (as defined by the Scottish Urological Pathologists dataset).	90%	**68%** n=585	66% n=224	32% n=139	88% n=17	99% n=193	-

QPI 4: MDT Meeting - Proportion of patients with prostate cancer who are discussed at MDT meeting before definitive treatment.							
Specification (i) - Patients with non-metastatic prostate cancer	95%	**94%** n=463	90% n=242	97% n=119	100% n=17	99% n=78	100% n=7
Specification (ii) - Patients with metastatic prostate cancer	95%	**83%** n=159	73% n=83	91% n=33	-	97% n=34	83% n=6
QPI 5: Surgical Margins - Proportion of patients with pathologically confirmed, organ confined (stage pT2) prostate cancer who undergo radical prostatectomy in which tumour is present at the margin, i.e. positive surgical margin.*	< 20%	**22%** n=87	24% n=51	-	-	19% n=36	-
QPI 6: Volume of Cases per Surgeon - Number of radical prostatectomy procedures performed by a surgeon over a 1 year period.*	Min. 50	**NHS Board**	**Surgeon**	**No. procedures**			
		Tayside	A	50			
		Grampian	A	52			
		Grampian	B	16			
		Grampian	C	3			
QPI 7: Hormone Therapy - Proportion of patients with metastatic prostate cancer (TanyNanyM1) who undergo immediate management with hormone therapy and docetaxel chemotherapy.							
Specification (i) Patients who receive immediate hormone therapy	95%	**90%** n=144	92% n=76	85% n=27	-	97% n=32	-
Specification (ii) Patients who receive immediate hormone therapy and docetaxel chemotherapy.	70%	New QPI requiring new data items. To be reported in 2018					
QPI 8: Post Surgical Incontinence - Proportion of prostate cancer patients who undergo radical prostatectomy with post surgical incontinence approximately 1 year after surgery.[b]*							
Specification (i) Proportion of patients with post surgical incontinence (> 0 pads per day)	< 20%	**17%** n=95	26% n=53	-	2% n=42	-	
Specification (ii) Proportion of patients with post surgical incontinence (> 1 pads per day)	< 10%	**5%** n=95	8% n=53	-	2% n=42	-	
QPI 11: Early Management of Active Surveillance - Proportion of men with prostate cancer under active surveillance who undergo multiparametric MRI within 6 months, and prosatate re-biopsy within 14 months of diagnosis.							
(i) Multiparametric MRI within 6 months if diagnosis	95%	New QPI requiring new data items. To be reported in 2018.					
(ii) Prostate re-biopsy within 14 months of diagnosis	75%						

QPI 12: 30 Day Mortality following Chemotherapy - Proportion of patients with prostate cancer who die within 30 days of chemotherapy	< 5%	New QPI requiring new data items. To be reported in 2018.	
Clinical Trials Access - Proportion of patients with prostate cancer who are enrolled in an interventional clinical trial or translational research.			
Interventional clinical trials	7.5%	**13%** n=830	
Translational research	15%	**9%** n=830	

Performance shaded pink where QPI target has not been met at regional level.
[a] Excluding Boards with less than 5 patients.
[b] Reported one year in arrears, patients diagnosed 2014-15
* Results are analysed by Hospital of Diagnosis with the exception of QPIs 5, 6 & 8, which are presented by 'Board of Surgery'.

The audit report indicates that during 2015-16, the QPI targets for prostate cancer were met over the North of Scotland for two of the nine QPIs reported. Although a meeting the target for just two QPIs is far from satisfactory, several of the QPI's were very close to being achieved and improvements made last year should continue to show improved results in the QPI result for patients diagnosed in 2016 -2017. Overall the 2015 – 16 results have shown improvement on previous years.

As a result of the QPI results for 2015-16 the following actions to improve services have been identified. These are

- All NHS Boards to introduce proforma pathology reporting to ensure all information required for QPI 3 is recorded in a way that can be interpreted by audit staff.
- NHS Highland to ensure that steps are taken to improve capacity in biopsy and in clinic to ensure hormone therapy is provided in a timely manner.

In addition, some areas were identified where further work might be required with national partners to ensure that the prostate cancer QPIs are as clinically relevant as possible in the future, and able to better evaluate patient and service outcomes.

Contents

1. Introduction

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

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 NHS MEL(1999)10[2]. This has since been further restated and reinforced in HDL(2002)69[3], HDL (2007) 21[4], and most recently in CEL 29 (2012)[5].

This report assesses the performance of specialist cancer services for patients diagnosed with prostate cancer in the North of Scotland Cancer Network during the twelve months from 1st July 2015 to 30th June 2016.

Using clinical audit data performance is reported against the Prostate Cancer Quality Performance Indicators (QPIs)[6] which were implemented for patients diagnosed on or after 1st July 2012. 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[7]. There were 823 patients diagnosed with prostate cancer in the North of Scotland between 1st July 2015 and 30th June 2016. The configuration of the Multidisciplinary Teams (MDTs) in the North of Scotland for the management of urological cancer, which includes prostate 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

Prostate cancer is the most common cancer in males, with over 3,000 cases diagnosed in Scotland in 2015, and is ranked as the most commonly diagnosed cancer in male patients in Scotland and the fourth most commonly diagnosed cancer in males and females after lung, breast and colorectal cancers[8].

Following a previous trend for increasing incidence rates for prostate cancer in Scotland, the incidence of prostate cancer has in fact decreased slightly in the past ten years by 0.5%[8]. While part of the increasing incidence of prostate cancer may reflect a genuine increase in risk, much of the increase since the mid 1990s seems likely to reflect increased detection of latent disease through increasing use of the prostate-specific antigen (PSA) test[10]. However, it is now suggested that this increased use of PSA testing may have resulted in prostate cancer

diagnoses which otherwise might not have been detected within the patient's lifetime (ie overdiagnosis) and thereby the overtreatment of prostate cancer[11].

Relative survival of patients diagnosed with prostate cancer in Scotland is increasing[12]. The table below shows the percentage change in one-year and five-year age-standardised survival rates for patients diagnosed in 1987-1991 compared to those diagnosed in 2007-2011.

Relative age-standardised survival for prostate cancer in Scotland at 1 year and 5 years showing percentage change from 1987-1991 to 2007-2011[12].

	Relative survival at 1 year (%)		Relative survival at 5 years (%)	
	2007-2011	% change	2007-2011	% change
Prostate Cancer	96.0 %	+ 11.3 %	84.0%	+ 31.0 %

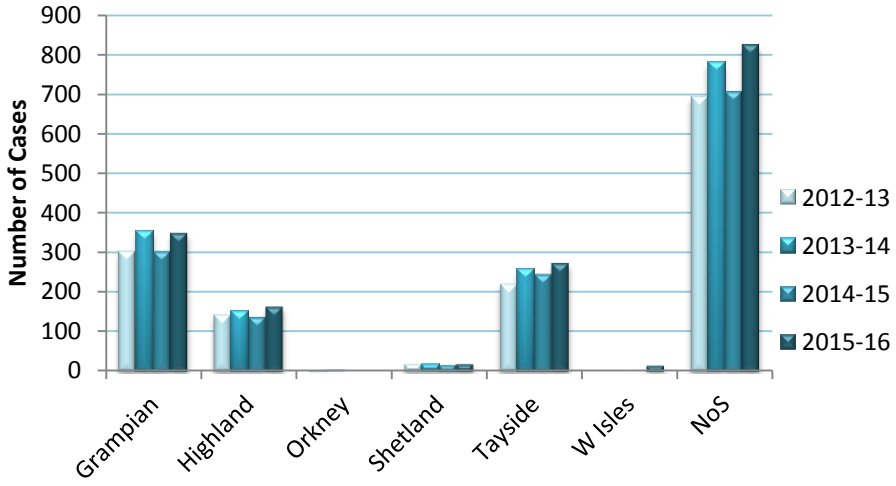
The significant increase in five-year survival rates may in part be due to the increased use of PSA testing in Scotland since 1990s. As the PSA test enables some invasive prostate cancers to be detected earlier[11], this leads to an increase in survival time even in cases where a patient's life is not necessarily extended by treatment.

A recent study in the USA by the National Cancer Institute found that men who underwent annual prostate cancer screening had a higher incidence of prostate cancer than the control group but had the same rate of deaths from the disease[13]. Another European study, the European Randomised Study of Screening for Prostate Cancer (ERSPC), also showed that men in the screening group had a higher incidence of prostate cancer but, in contrast, this study showed that the men who were screened had a lower rate of death from prostate cancer[13]. However, the study showed that screening had no effect on all-cause mortality and concluded that more evidence was required on the balance of benefits and risks of prostate-cancer screening before recommendations could be made[14].

2.2 North of Scotland Context

A total of 823 cases of prostate cancer were recorded through audit as diagnosed in the North of Scotland between 1st July 2015 and 30th June 2016. The number of patients diagnosed within each Board is presented in Figure 1.

	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NoS
Number of Patients	**349**	**164**	**0**	**20**	**274**	**16**	**823**
% of NoS total	**42.4%**	**19.9%**	**0%**	**2.4%**	**33.3%**	**1.9%**	**100%**



3. Methodology

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

Data for patients diagnosed between 1st July 2015 and 30th June 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 has 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

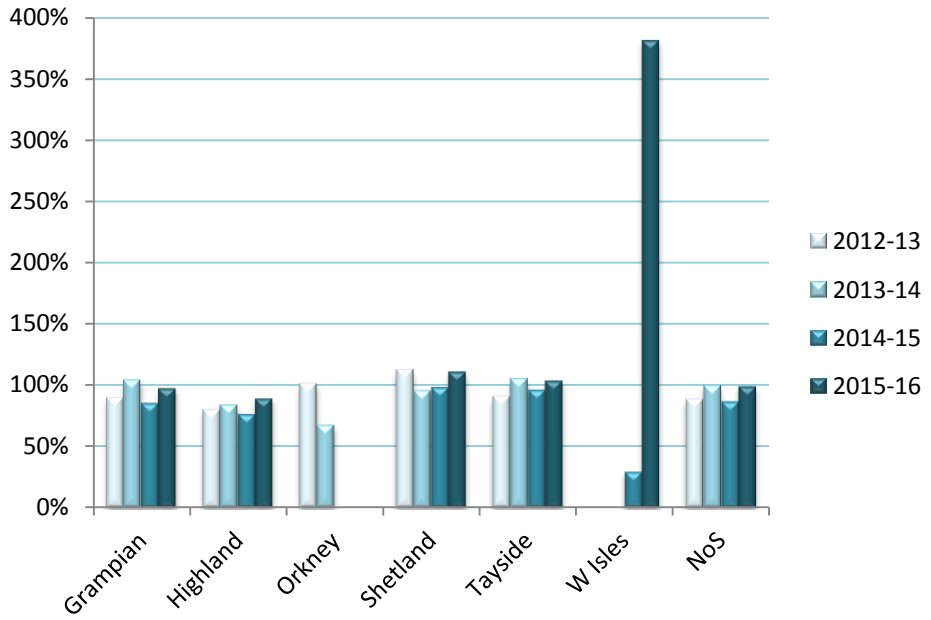
4.1 Case Ascertainment

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 the total numbers having a similar diagnosis, as recorded by the National Cancer Registry (provided by Information Services Division (ISD)), for a particular NHS Board of diagnosis.

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. 2010 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.

Overall case ascertainment for the period reported in the North of Scotland was high at 99.2%, an increase from the 2014 figure of 86.0%. Case ascertainment for each Board across the North of Scotland is illustrated below. Fluctuations in case ascertainment are expected in the island boards as a result of chance variation due to the small numbers of patients diagnosed.

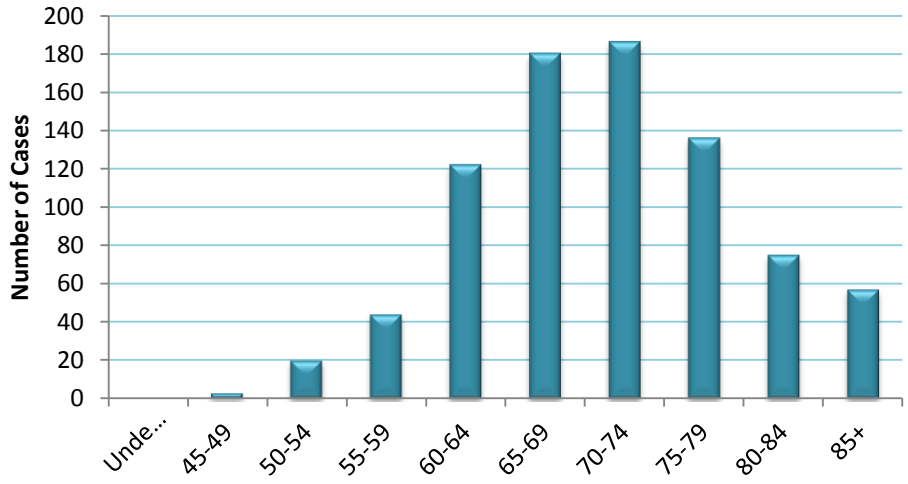


	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NoS
Number of Patients 2015-2016	349	164	0	20	274	16	823
ISD Cases 2011-2015	358.0	183.8	2.0	18.0	263.8	4.2	829.8
% Case ascertainment 2015-16	97.5%	89.2%	0.0%	111.1%	103.9%	381.0%	99.2%
% Case ascertainment 2014-15	84.9%	75.9%	0.0%	97.7%	95.4%	29.4%	86.0%

Audit data were considered sufficiently complete to allow QPI calculations. While difficulties with recording of clinical TNM in NHS Tayside and NHS Grampian resulted in incomplete datasets there have been significant improvements in the collection of these data in recent years. For QPIs 2, 3 and 7 clinical TNM staging data is required to derive results. The absence of these data for some patients has resulted in QPI results not being calculated from information on all patients. In addition, some data on continence was missing for some NHS Tayside patients, affecting the results for QPI 8 for this NHS Board.

4.2 Age Distribution

The age distribution of patients diagnosed with prostate cancer in the North of Scotland in 2015-16 is shown below. Incidences of prostate cancer peak in the 70-74 age group.



Age distribution of patients diagnosed with prostate cancer in NOSCAN 2015-16.

4.3 Performance against Quality Performance Indicators (QPIs)

Results of the analysis of Prostate 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 QPIs 5 and 8 are presented by Hospital of Surgery and QPI 6 is presented by surgeon. 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.

Following completion of the first three years of reporting, and as part of an agreed national process, the Prostate Cancer QPIs were formally reviewed during 2016 and some of the QPI definitions were amended, either to make them more clinically relevant or to raise the required performance threshold. Some of the new and amended indictors for prostate cancer require the collection of data that was not recorded for patients diagnosed in 2015-16; in these instances it is not possible to report the QPIs for this cohort. This will be highlighted in the commentary and the QPIs will be reported in subsequent years.

QPI 1: Biopsy Procedure

QPI 1: Biopsy Procedure: Procedure for performing prostate biopsy should be optimised.

Proportion of patients with prostate cancer who undergo trans-rectal ultrasound guided (TRUS) prostate biopsy for histological diagnosis where a minimum of 10 cores are received by pathology.

Numerator:	Number of patients with prostate cancer who undergo TRUS biopsy where a minimum of 10 cores are received by pathology.
Denominator:	All patients with prostate cancer who undergo TRUS biopsy of the prostate.
Exclusions:	• Patients enrolled in clinical trials • Patients with advanced (T4NanyMany) or metastatic disease (TanyNanyM1)
Target:	90%

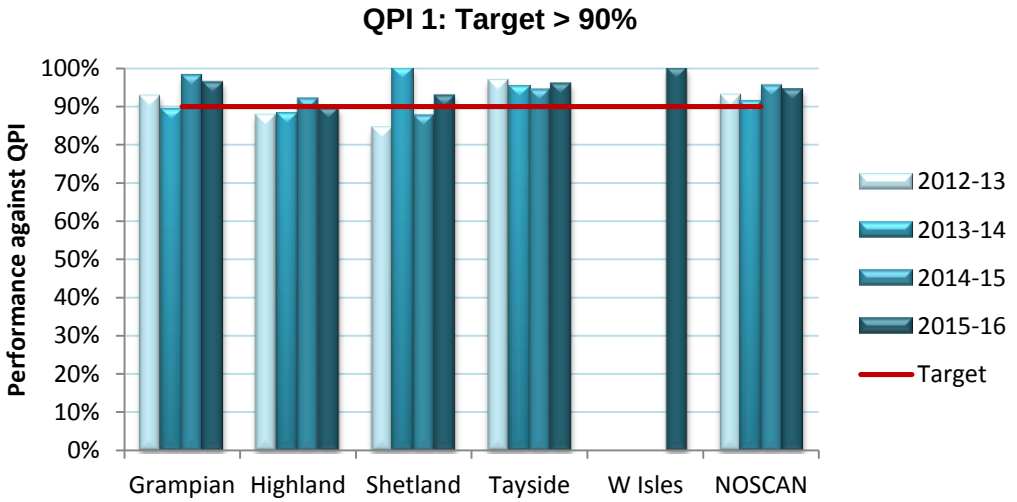
QPI 1 Performance against target

Pathology received a minimum of 10 cores for 94.5% of patients with prostate cancer undergoing TRUS biopsy in 2015-16, an decrease from the 2014-5 figure of 95.3% but higher than the target rate of 90%.

Results both between NHS Boards and between years were very similar across the North of Scotland, although where slightly lower in NHS Highland, where the QPI target was narrowly missed in 2015-16.

This QPI should exclude patients with advanced or metastatic disease. The absence of clinical TNM data for over approximately 4% of patients included within this QPI measurement will likely have resulted in some patients with advanced or metastatic disease having been erroneously included within calculations, thereby potentially lowering results. This is most notable in NHS Grampian, although there has been considerable improvement in reporting of disease stage over the last 4 years of audit.

Please note that version 2 measurability is used to report these data as not all data items required to report version 3 measurability are available for patients diagnosed during this audit period.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded Denominator	Change in Performance since 2014-2015
Grampian	**96.3%**	180	187	1	0.5%	15	8.0%	0	-1.7%
Highland	**89.5%**	94	105	2	1.9%	1	1.0%	0	-2.4%
Shetland	**92.9%**	13	14	1	7.1%	1	7.1%	0	+5.4%
Tayside	**96.0%**	119	124	0	0%	1	0.8%	0	+1.8%
W Isles	**100%**	7	7	0	0%	0	0%	0	-
NoS	**94.5%**	**413**	**437**	**4**	**0.9%**	**18**	**4.1%**	**0**	**-0.8%**

QPI 1 was general achieved well throughout NOSCAN. The only board to miss the target of 90% was NHS Highland; they missed the target by 0.5%. The result for NHS Highland was thought to be affected by the number of men biopsied with very advanced disease, for whom 10 or more cores may not be necessary.

It was noted that it may not be appropriate to take 10 biopsies from some patients with T3 disease and as such these patients should possibly be excluded from the QPI definition.

Actions Required:

- **MCN to suggest to Formal Review of Prostate Cancer QPIs that patients with T3 disease be excluded from QPI 1.**

QPI 2: Radiological Staging

QPI2: Radiological Staging: Patients with intermediate or high risk prostate cancer, who are suitable for radical treatment, should be evaluated for locally advanced, nodal or bony metastatic disease.

Proportion of patients with intermediate or high risk prostate cancer undergoing radical treatment who have had Magnetic Resonance Imaging (MRI) and bone scan staging.

Specification (i) Patients with intermediate risk prostate cancer who undergo MRI.

Numerator: Number of patients with intermediate risk prostate cancer undergoing radical treatment who have an MRI of the prostate.

Denominator: All patients with intermediate risk prostate cancer undergoing radical treatment.

Exclusions:

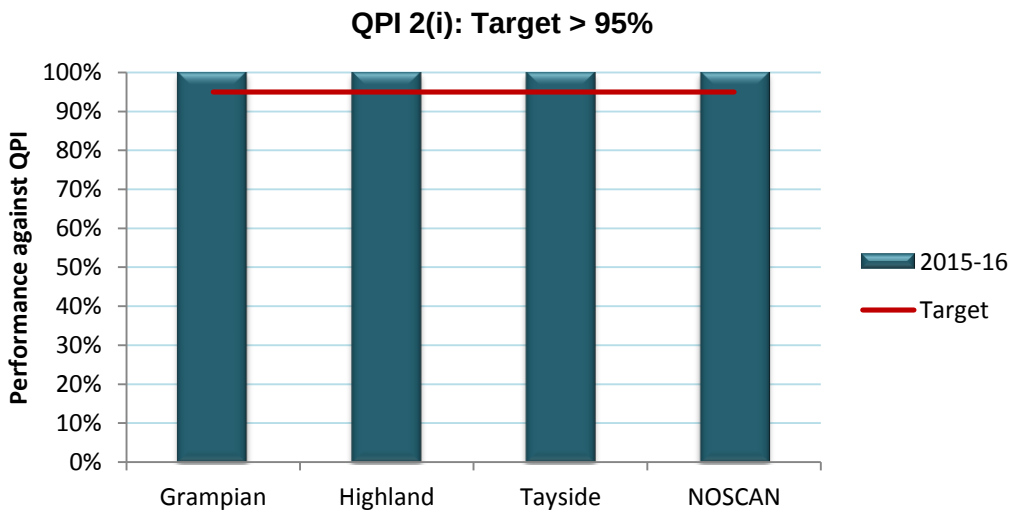
- Patients unable to undergo an MRI scan:
  - Pacemaker or other MRI incompatible implanted device.
  - Cerebral aneurysm clip.
  - Metal in eye.
  - Claustrophobia.
  - Unable to fit bore of scanner.
  - Too heavy for MRI table.
- Patients who refuse MRI.

Target: 95%

QPI 2(i) Performance against target

100% of patients diagnosed in 2015-2016 with intermediate risk prostate cancer and undergoing radical treatment had an MRI of the prostate, meeting the target of 95% both at a regional and NHS Board level.

Please note that results cannot be compared with previous years due to changes in the way that high risk patients are defined.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**100%**	21	21	0	0%	0	0%	6
Highland	**100%**	16	16	0	0%	0	0%	0
Shetland	**-**	0	0	0	-	0	-	1
Tayside	**100%**	34	34	0	0%	0	0%	0
W Isles	**-**	0	0	0	-	0	-	0
NoS	**100%**	**71**	**71**	**0**	**0%**	**0**	**0%**	**7**

QPI 2: Radiological Staging: Patients with intermediate or high risk prostate cancer, who are suitable for radical treatment, should be evaluated for locally advanced, nodal or bony metastatic disease.

Proportion of patients with intermediate or high risk prostate cancer undergoing radical treatment who have had Magnetic Resonance Imaging (MRI) and bone scan staging.

Specification (ii) Patients with high risk prostate cancer who undergo MRI and bone scan.

Numerator: Number of patients with high risk prostate cancer undergoing radical treatment who have an MRI of the prostate and isotope bone scan (or alternative whole body MRI evaluation).

Denominator: All patients with high risk prostate cancer undergoing radical treatment.

Exclusions:

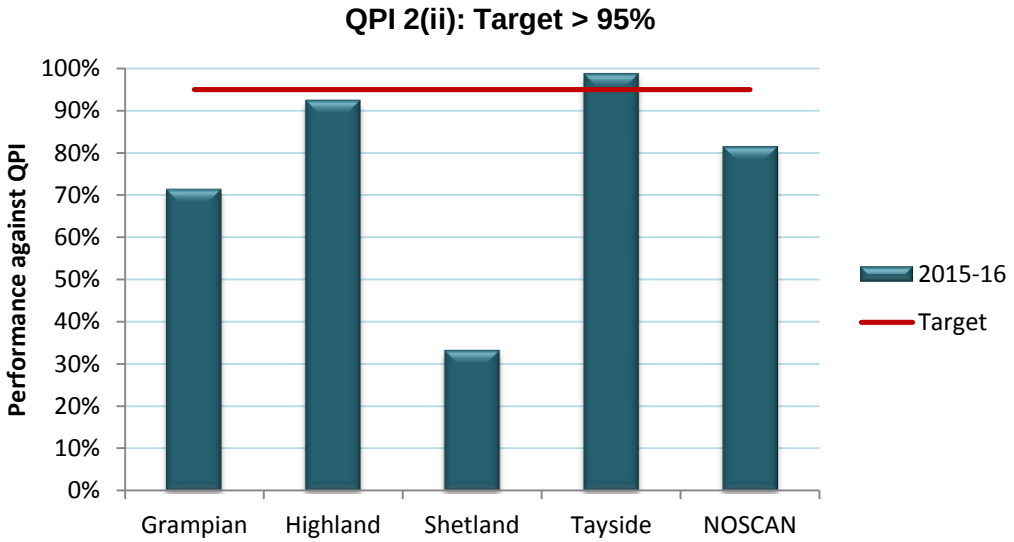
- Patients unable to undergo an MRI scan:
  - Pacemaker or other MRI incompatible implanted device.
  - Cerebral aneurysm clip.
  - Metal in eye.
  - Claustrophobia.
  - Unable to fit bore of scanner.
  - Too heavy for MRI table.
- Patients who refuse MRI.

Target: 95%

QPI 2(ii) Performance against target

81.4% of patients diagnosed with high risk prostate cancer in 2015-2016 and undergoing radical treatment had an MRI of the prostate and bone scan. This is below the target of 95%. Please note that results cannot be compared with previous years due to changes in the way that high risk patients are defined.

At a Board level only NHS Tayside and NHS W Isles met the 95% target.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**71.3%**	92	129	0	0%	0	0%	6
Highland	**92.3%**	48	52	0	0%	0	0%	0
Shetland	**33.3%**	4	12	0	0%	0	0%	1
Tayside	**98.6%**	71	72	0	0%	0	0%	0
W Isles*	**-**	-	-	-	-	-	-	-
NoS	**81.4%**	**219**	**269**	**0**	**0%**	**0**	**0%**	**7**

This QPI was met for all patients with intermediate risk prostate cancer. However the target was not met for patients with high risk prostate cancer in any NHS Board except NHS Tayside. This is due to a fundamental difference in the interpretation of intermediate and high risk prostate cancer, specifically the difference is the stratification of cT2c prostate cancer. Some class it as intermediate risk where as other classifications put cT2c disease in the high risk category. The QPI definition now classes this as high risk, therefore requiring MR and bone scan. In NOSCAN cT2c disease is considered to be intermediate risk and there for most patients don't get a bone scan.

Until there are amendments to the QPI definition then NOSCAN are likely to continue to fail the second specification for this QPI.

Actions Required:

- **MCN to ensure that the classification of high risk and intermediate risk prostate cancer, and its implications for the reporting of QPI 2, are raised at the next Formal Review of Prostate Cancer QPIs.**

QPI 3: Pathology Reporting

QPI 3: Pathology Reporting: All surgical pathology reports for prostate needle biopsies should contain full pathology information to inform treatment decision making.

Proportion of patients who undergo needle biopsy where the pathology report contains a full set of data items (as defined by the Scottish Urological Pathologists dataset[2]).

Numerator: Number of patients with prostate adenocarcinoma who undergo prostate needle biopsy where needle biopsy pathology report contains all data items (as defined in the Scottish Urological Pathologists dataset[2]).

Denominator: All patients with prostate adenocarcinoma who undergo prostate needle biopsy.

Exclusions: No Exclusions.

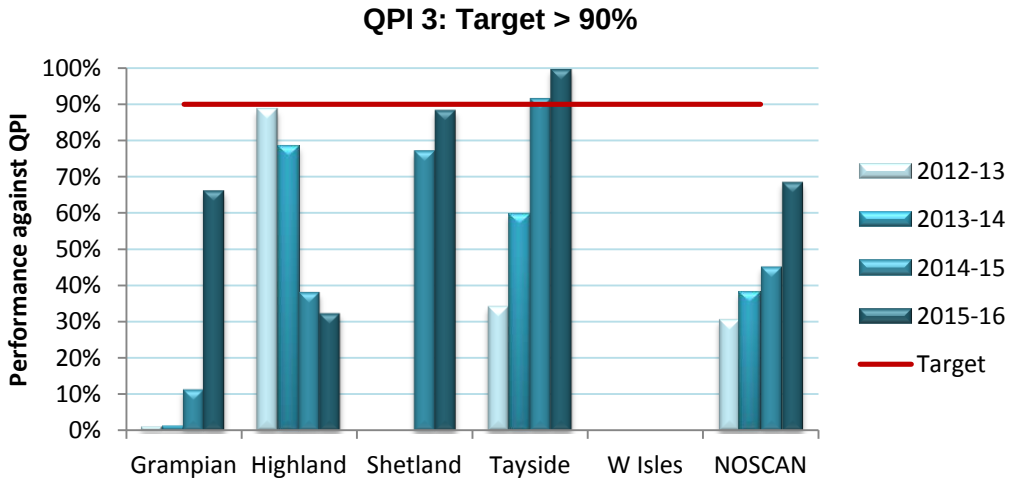
Target: 90%

The tolerance within this target is designed to account for situations where it is not possible to report all components of the dataset due to specimen size.

QPI 3 Performance against target

68.4% of surgical pathology reports for prostate needle biopsies contained a full set of data items in 2015-16, below the target of 90% but an improvement on the 2014-15 figure of 45.1%.

There is a wide variation is results between Boards, with only 0% of patients in NHS W Isles having a full set of data items as defined in the Scottish Urological Pathologists dataset, while in NHS Tayside these data were available for 99.5% of patients. There is also considerable variation in how NHS Boards are performing against this QPI over time, with large increases in performance by NHS Grampian and NHS Tayside in recent years but considerable decrease in NHS Highland.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded Denominator	Change in Performance since 2014-2015
Grampian	**66.1%**	148	224	0	0%	0	0%	0	+54.7%
Highland	**32.4%**	45	139	0	0%	0	0%	0	-5.7%
Shetland	**88.2%**	15	17	0	0%	0	0%	0	+11.3%
Tayside	**99.5%**	192	193	0	0%	0	0%	0	+8.3%
W Isles	**0%**	0	12	0	0%	0	0%	0	-
NoS	**68.4%**	**400**	**585**	0	0%	0	0%	0	**+23.3%**

Over the whole of NOSCAN there has been year on year improvement in QPI 3. However despite significant improvement, NHS Grampian still falls short of the target of 90% and NHS Highland performance has declined over time.

NHS Highland have made specific changes in 2016 to address this. Results from these changes will not show until the 2016 – 2017 data is published and outcomes of these changes will not be fully evident until the 2017 – 2018 data is seen.

Actions Required:

- **All NHS Boards to introduce proforma pathology reporting to ensure all information required for QPI 3 is recorded in a way that can be interpreted by audit staff.**

QPI 4: Multi-Disciplinary Team (MDT) Meeting

QPI 4: Multi-Disciplinary Team (MDT) Meeting: Patients should be discussed by a multidisciplinary team prior to definitive treatment.

Proportion of patients with prostate cancer who are discussed at MDT meeting before definitive treatment.

Specification (i) Patients with non-metastatic prostate cancer

Numerator: Number of patients with non-metastatic prostate cancer (TanyNanyM0) discussed at the MDT before definitive treatment.

Denominator: All patients with non-metastatic prostate cancer (TanyNanyM0).

Exclusions: Patients who died before first treatment.

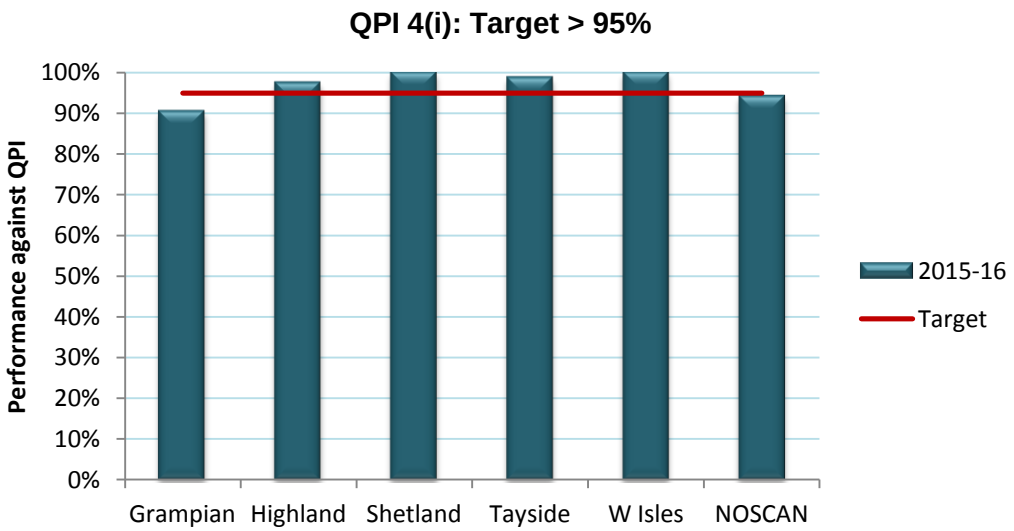
Target: 95%

The tolerance within this target accounts for situations where patients require treatment urgently, or where prostate cancer is an incidental finding at surgery.

QPI 4(i) Performance against target

94.2% of patients diagnosed with non-metastatic prostate cancer in 2015-16 were discussed at the MDT before definitive treatment, narrowly missing the target of 95%. It is not possible to compare results with previous years due to changes in the way that this QPI is reported.

There was some geographical variation in performance for this indicator within NOSCAN, with all NHS Boards meeting the QPI target except NHS Grampian.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**90.5%**	219	242	0	0%	0	0%	5
Highland	**97.5%**	116	119	0	0%	0	0%	4
Shetland	**100%**	17	17	0	0%	0	0%	0
Tayside	**98.7%**	77	78	0	0%	0	0%	16
W Isles	**100%**	7	7	0	0%	0	0%	3
NoS	**94.2%**	**436**	**463**	**0**	**0%**	**0**	**0%**	**28**

QPI 4: Multi-Disciplinary Team (MDT) Meeting: Patients should be discussed by a multidisciplinary team prior to definitive treatment.

Proportion of patients with prostate cancer who are discussed at MDT meeting before definitive treatment.

Specification (ii) Patients with metastatic prostate cancer

Numerator: Number of patients with metastatic prostate cancer (TanyNanyM1) discussed at the MDT within 4 weeks of commencing treatment.

Denominator: All patients with metastatic prostate cancer (TanyNanyM1).

Exclusions: Patients who died before first treatment.

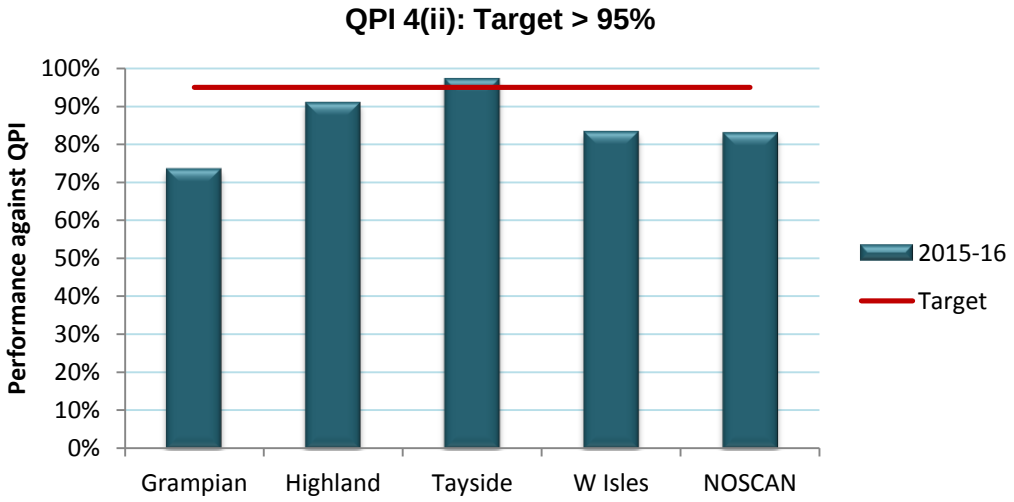
Target: 95%

The tolerance within this target accounts for situations where patients require treatment urgently, or where prostate cancer is an incidental finding at surgery.

QPI 4(ii) Performance against target

83.0% of patients diagnosed with metastatic prostate cancer in 2015-16 were discussed at MDT within 4 weeks of commencing treatment, below the target of 95%. It is not possible to compare results with previous years due to changes in the way that this QPI is reported.

There was some variation in performance against this indicator between NHS Boards, with NHS Tayside meeting the target but NHS Grampian falling well below at 73.5%.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded - Denominator
Grampian	**73.5%**	61	83	0	0%	0	0%	5
Highland	**90.9%**	30	33	1	3.0%	0	0%	4
Orkney	**-**	0	0	0	-	0	-	0
Shetland*	**-**	-	-	-	-	-	-	-
Tayside	**97.1%**	33	34	0	0%	0	0%	16
W Isles	**83.3%**	**5**	**6**	**0**	**0%**	**0**	**0%**	**3**
NoS	**83.0%**	**132**	**159**	**1**	**0.6%**	**0**	**0%**	**28**

QPI 4 was not met by NHS Grampian, NHS Highland or NHS Western Isles due to patients with advanced disease starting treatment before being discussed at an MDT. It is prudent to wait until all imaging is available before patients are discussed at MDT, however this can take more than 4 weeks for patients with advanced disease. To prevent delays in treatment in this group of patients, androgen ablation is started immediately and then the patient is discussed at MDT once imaging results are available. This is considered to be clinically appropriate.

Actions Required:

No specific actions identified.

QPI 5: Surgical Margins

QPI 5: Surgical margins: Organ confined prostate cancers which are surgically treated with radical prostatectomy should be completely excised.

Proportion of patients with pathologically confirmed, organ confined (stage pT2) prostate cancer who undergo radical prostatectomy in which tumour is present at the margin, i.e. positive surgical margin.

Numerator: Number of patients with stage pT2 prostate cancer who underwent radical prostatectomy in which tumour is present at the margin.

Denominator: All patients with stage pT2 prostate cancer who underwent radical prostatectomy.

Exclusions: No Exclusions

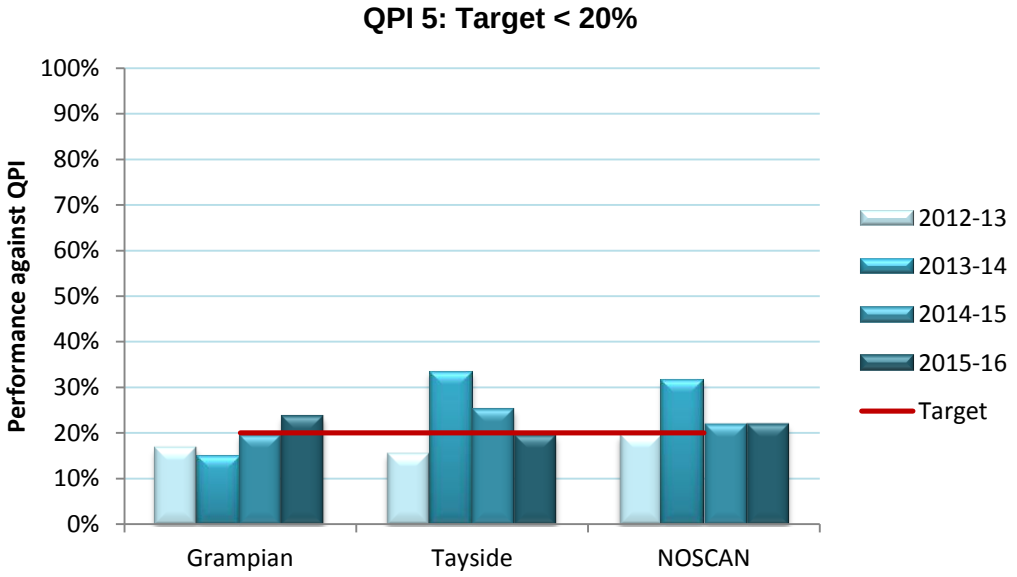
Target: < 20%

Varying evidence exists regarding the most appropriate target level therefore this may need redefined in the future, to take account of new evidence.

QPI 5 Performance against target

21.8% of patients diagnosed with stage pT2 prostate cancer in 2015-16 who underwent radical prostatectomy had a positive surgical margin, just missing the QPI target and very similar to the results for 2014-15. It should be noted that the target for this QPI was decreased at the recent Formal Review from less than 25% to less than 20%, making compliance more challenging.

There was some variation between NHS Boards however, with the proportion of patients with positive margins increasing in NHS Grampian in recent years, but declining in NHS Tayside.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded Denominator	Change in Performance since 2014-2015
Grampian	**23.5%**	12	51	0	0%	0	0%	1	+4.1%
Highland	**-**	0	0	0	-	0	-	0	-
Shetland	**-**	0	0	0	-	0	-	0	-
Tayside	**19.4%**	7	36	0	0%	0	0%	0	-5.6%
W Isles	**-**	0	0	0	-	0	-	0	-
NoS	**21.8%**	**19**	**87**	0	0%	0	0%	1	**+0.1%**

NOSCAN results were marginally above the positive margin rate of 20% for QPI 5. It is felt that this is acceptable as there has recently been a move from open and laparoscopic surgery in NOSCAN to mainly robotically assisted surgery and a small rise in the positive surgical margin rate can be expected during this transition period.

Actions Required:

No specific actions identified.

QPI 6: Volume of Cases per Surgeon

QPI 6: Volume of Cases per Surgeon: Surgery should be performed by surgeons who perform the procedure routinely.

Number of radical prostatectomy procedures performed by each surgeon over a 1 year period.

Exclusions: None.

Target: Minimum 50 procedures per surgeon in a 1 year period.

This is a minimum target level and is designed to ensure that all surgeons performing radical prostatectomy perform **a minimum of** 50 procedures per year.

QPI 6 Performance against target

Two out of the 4 surgeons performing radical prostatectomy procedures in the North of Scotland in 2015-16 performed 50 or more procedures and thereby met this target.

It should be noted that the target for this QPI has become much more challenging, increased from a minimum of 12 procedures per surgeon to a minimum of 50 following the Formal Review of Prostate Cancer QPIs in 2016.

Board of Surgery	Surgeon	Number of Prostatectomy Procedures in 2015-16
NHs Grampian	A	52
	B	16
	C	3
NHS Tayside	D	50
NOSCAN Total		**121**

There were several changes taking place in the provision of prostate surgery in the North of Scotland during the 2015-16 reporting period. Open surgery was phased out in NHS Highland and moved to laparoscopic surgery in NHS Grampian. Mentoring for the change from laparoscopic to robotically assisted surgery also occurred in this time period. Consequently, it is difficult to draw meaningful conclusions from the 2015-16 audit period and it will not be until the 2016 -17 figures are published that the surgical volumes of the revised prostate surgery service can be seen.

Actions Required:

No specific actions identified.

QPI 7: Hormone Therapy and Docetaxel Chemotherapy QPI

QPI 7: Hormone Therapy and Docetaxel Chemotherapy QPI: Patients with metastatic prostate cancer should undergo immediate‡ hormone therapy§, and chemotherapy where appropriate**.

Proportion of patients with metastatic prostate cancer (TanyNanyM1) who undergo immediate management with hormone therapy, and docetaxel chemotherapy.

Specification (i) Patients who receive immediate hormone therapy

Numerator: Number of patients presenting with metastatic prostate cancer (TanyNanyM1) treated with immediate hormone therapy.

Denominator: All patients presenting with metastatic prostate cancer (TanyNanyM1).

Exclusions:

- Patients documented to have refused immediate hormone therapy.
- Patients enrolled in clinical trials.

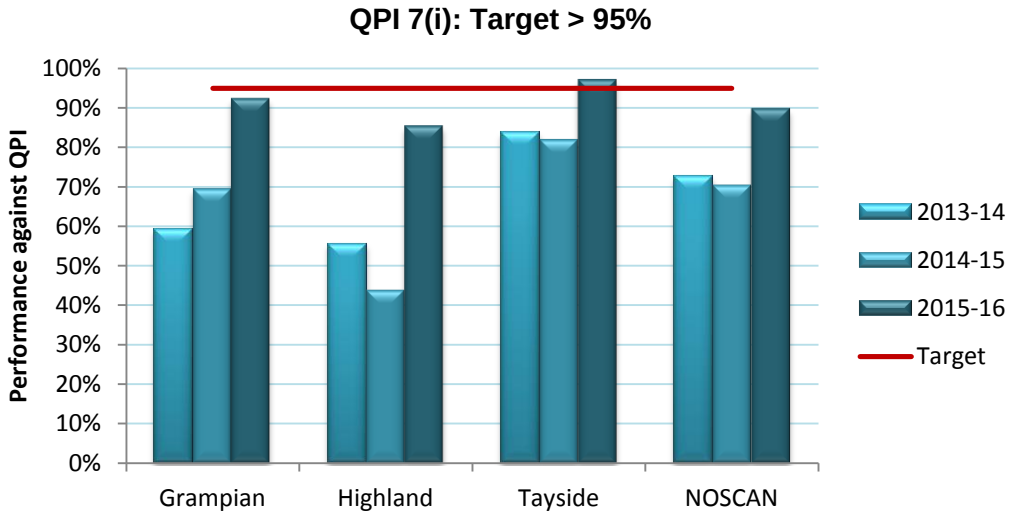
Target: 95%

‡ Immediate hormone therapy would be within 31 days of MDT meeting (pre-treatment).
§ LHRH agonist / antagonist monotherapy, dual androgen blockade or bilateral orchidectomy.
** Docetaxel should be started within 90 days of first dose of hormone therapy.

QPI 7(i) Performance against target

89.6% of patients presenting with metastatic prostate cancer in 2015-16 were treated with immediate hormone therapy, below the target of 95% but an increase from the 2014-15 figure of 70.3%.

At a Board level the QPI target was achieved by NHS Tayside and NHS Shetland. It should be noted that treatment decisions for patients reported from NHS Orkney were undertaken by NHS Highland.



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded Denominator	Change in Performance since 2014-2015
Grampian	**92.1%**	70	76	0	0%	1	1.3%	5	+22.7%
Highland	**85.2%**	23	27	1	3.7%	0	0%	4	+41.4%
Shetland*	**-**	-	-	-	-	-	-	-	-
Tayside	**96.9%**	31	32	0	0%	0	0%	16	+15.1%
W Isles	**33.3%**	2	6	0	0%	1	16.7%	2	-
NoS	**89.6%**	**129**	**144**	**1**	**0.7%**	**2**	**1.4%**	**27**	**+19.3%**

QPI 7 had a target of 95% and overall in NOSCAN the result was 89.6%. While the QPI target was not met at a regional level there has been significant improvement in results compared to the previous year. Also, after analysing each individual patient who failed the QPI, it was clear that most were due to the MDT date not being recorded rather than patients not being started on hormone therapy. Ensuring patients are discussed in MDT and commenced hormone treatment in a timely manner were both discussed after the previous QPI results so it is anticipated that changes implemented over the last year will result in further improvement in the 2016 -17 QPI results.

In NHS Highland improvements to the timing of the diagnostic pathway would reduce the time taken for patients to be treated with hormone therapy. Steps are currently being undertaken to address the lack of capacity for biopsy and within clinics to accelerate this pathway.

Actions Required:

- **NHS Highland to ensure that steps are taken to improve capacity in biopsy and in clinic to ensure hormone therapy is provided in a timely manner.**

QPI 7: Hormone Therapy and Docetaxel Chemotherapy QPI: Patients with metastatic prostate cancer should undergo immediate‡ hormone therapy§, and chemotherapy where appropriate**.

Proportion of patients with metastatic prostate cancer (TanyNanyM1) who undergo immediate management with hormone therapy, and docetaxel chemotherapy.

Specification (ii) Patients who receive immediate hormone therapy and docetaxel chemotherapy.

Numerator: Number of patients presenting with metastatic prostate cancer (TanyNanyM1) treated with immediate hormone therapy and docetaxel chemotherapy.

Denominator: All patients presenting with metastatic prostate cancer (TanyNanyM1).

Exclusions:

- Patients documented to have refused immediate hormone therapy.
- Patients documented to have refused chemotherapy.
- Patients enrolled in clinical trials.

Target: 70%

‡ Immediate hormone therapy would be within 31 days of MDT meeting (pre-treatment).
§ LHRH agonist / antagonist monotherapy, dual androgen blockade or bilateral orchidectomy.
** Docetaxel should be started within 90 days of first dose of hormone therapy.

QPI 7(ii) Performance against target

This specification was developed through the Formal Review of Prostate Cancer QPIs in 2016. Data required to report this standard were not collected for patients diagnosed in 2015-16 and therefore it is not possible to report performance against this target here. Results will be reported for patients diagnosed in 2016-17.

QPI 8: Post Surgical Incontinence

QPI 8: Post Surgical Incontinence – Post surgical incontinence for patients with prostate cancer should be minimised.

Proportion of prostate cancer patients who undergo radical prostatectomy with post surgical incontinence approximately 1 year (between 10 and 14 months) after surgery.

Due to the difficultly in reaching an appropriate definition of incontinence and a lack of clear evidence to determine this, two distinct targets based on the use of incontinence pads are detailed. These two distinct target levels have been chosen as they account for differences in patient perceptions of the severity of symptoms following surgery. Evidence suggests that the degree to which these symptoms bother individuals is very variable.

Specification (i)

Numerator: Number of patients with prostate cancer undergoing radical prostatectomy with post surgical incontinence (>0 pads per day) at 1 year (10-14 months) post radical prostatectomy.

Denominator: All patients with prostate cancer undergoing radical prostatectomy.

Exclusions:

- Patients who undergo salvage prostatectomy.
- Patients who receive adjuvant radiotherapy within 6 months of surgery.

Target: < 20%

Specification (ii)

Numerator: Number of patients with prostate cancer undergoing radical prostatectomy with post surgical incontinence (>1 pads per day) at 1 year (10-14 months) post radical prostatectomy.

Denominator: All patients with prostate cancer undergoing radical prostatectomy.

Exclusions:

- Patients who undergo salvage prostatectomy.
- Patients who receive adjuvant radiotherapy within 6 months of surgery.

Target: < 10%

QPI 8 Performance against target

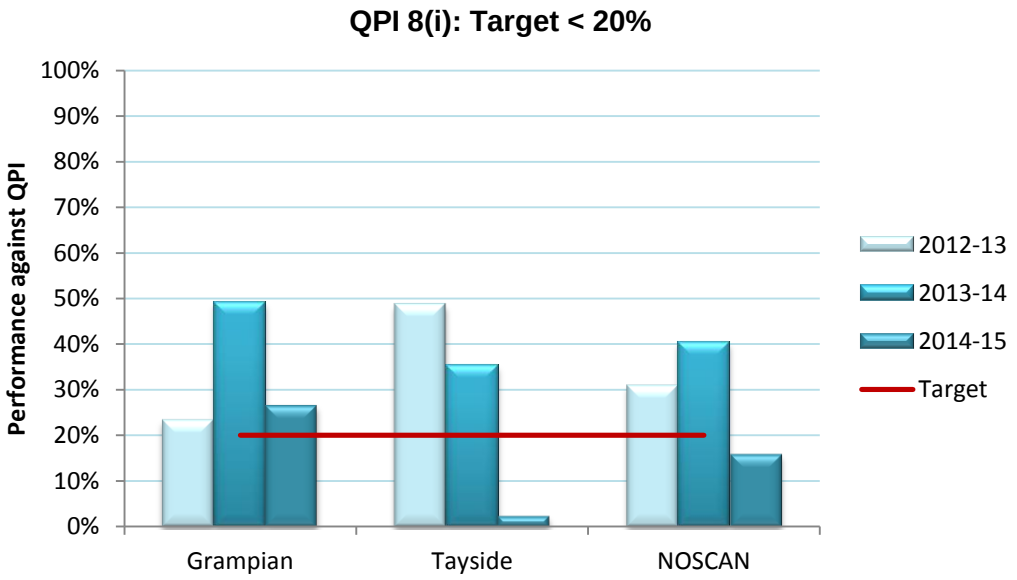
Please note that this QPI is reporting one year in arrears and as such reported using the version 2 definition of the QPI, as appropriate for patients diagnosed in 2014-15.

Of the 95 patients undergoing radical prostatectomy in 2014-15, 15.8% had surgical incontinence (>0 pads per day) at 1 year (10-14 months) post radical prostatectomy, and 5.3% had surgical incontinence greater than 1 pad per day. These figures meet the targets of less than 20% and 10% respectively however for 92.9% of patients in NHS Tayside there was no information recorded on whether pads were used and therefore incontinence could potentially be significantly under-recorded for this NHS Board and so comparisons of regional figures with previous years is inappropriate.

Radical prostatectomies are now only undertaken at two surgical centres in the North of Scotland, Aberdeen Royal Infirmary (ARI), NHS Grampian, and Ninewells Hospital, NHS Tayside. As highlighted above, figures for NHS Tayside were impacted by lack of recording, which will have underestimated incontinence. Incontinence rates in NHS Grampian were better than in 2014-15; although the target for the proportion of patients wearing pads was not met, the target for the proportion of patients wearing more than one pad per day was met.

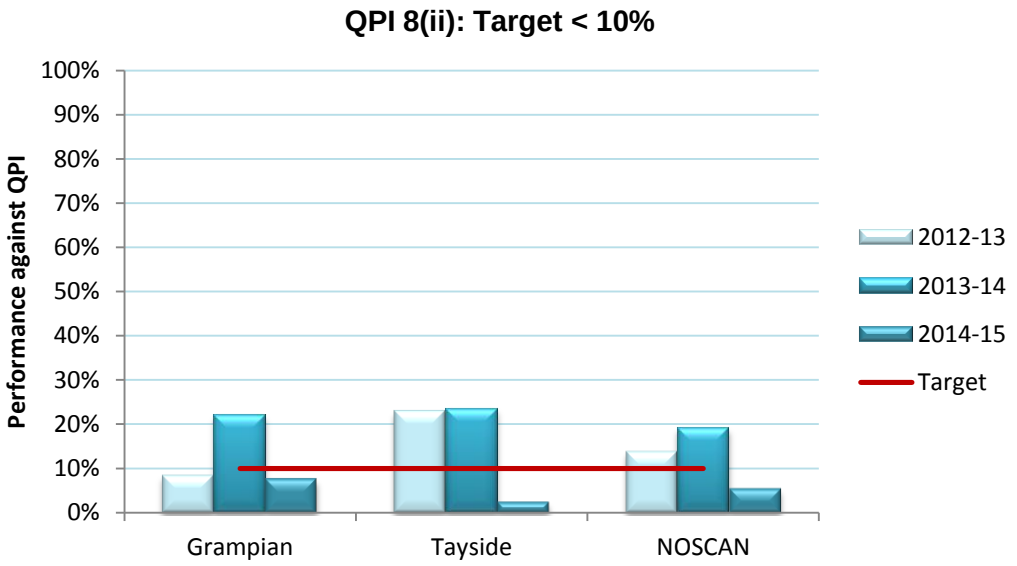
Data for patients undergoing radical prostatectomy in 2015-16 will be reporting in 2018.

Specification (i)



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded Denominator	Change in Performance since 2014-2015
Grampian	**26.4%**	14	53	1	1.9%	0	0%	0	-22.7%
Highland	**-**	0	0	0	-	0	-	0	-
Shetland	**-**	0	0	0	-	0	-	0	-
Tayside	**2.4%**	1	42	39	92.9%	0	0%	0	-32.9%
W Isles	**-**	0	0	0	-	0	-	0	-
NoS	**15.8%**	**15**	**95**	**40**	**42.1%**	**0**	**0%**	**0**	**-24.6%**

Specification (ii)



	Performance (%)	Numerator	Denominator	Not recorded - Numerator	% not recorded - Numerator	Not recorded - Exclusions	% not recorded - Exclusions	Not recorded Denominator	Change in Performance since 2014-2015
Grampian	**7.5%**	4	53	1	1.9%	0	0%	0	-14.3%
Highland	**-**	0	0	0	-	0	-	0	-
Shetland	**-**	0	0	0	-	0	-	0	-
Tayside	**2.4%**	1	42	39	92.9%	0	0%	0	-21.1%
W Isles	**-**	0	0	0	-	0	-	0	-
NoS	**5.3%**	**5**	**95**	**10**	**42.1%**	**0**	**0%**	**0**	**-13.8%**

Actions Required:

No specific actions identified.

QPI 11: Early Management of Active Surveillance

QPI 11: Early Management of Active Surveillance – Men under active surveillance for prostate cancer should undergo appropriate investigations at the clinically relevant timings.

Proportion of men with prostate cancer under active surveillance who undergo multiparametric MRI within 6 months, and prostate re-biopsy within 14 months of diagnosis

Specification (i) Patients who have undergone multi-parametric MRI within 6 months of diagnosis.

Numerator: Number of patients with prostate cancer under active surveillance who undergo multiparametric MRI within 6 months of diagnosis.

Denominator: All patients with prostate cancer under active surveillance.

Exclusions:

- Patients unable to undergo an MRI scan:
  - Pacemaker or other MRI incompatible implanted device.
  - Cerebral aneurysm clip.
  - Metal in eye.
  - Claustrophobia.
  - Unable to fit bore of scanner.
  - Too heavy for MRI table.
- Patients who refuse MRI.

Target: 95%

The tolerance within this target is to account for other situations where patients are deemed clinically unsuitable or unfit to undergo MRI.

This QPI was developed through the Formal Review of Prostate Cancer QPIs in 2016. Data required to report this standard were not collected for patients diagnosed in 2015-16 and therefore it is not possible to report performance against this target here. Results will be reported for patients diagnosed in 2016-17.

QPI 12: 30 Day Mortality following Chemotherapy

QPI 12: 30 Day Mortality following Chemotherapy – 30 day mortality following chemotherapy for prostate cancer.

Proportion of patients with prostate cancer who die within 30 days of chemotherapy.

Numerator: Number of patients with prostate cancer who undergo chemotherapy that die within 30 days of treatment.

Denominator: All patients with prostate cancer who undergo chemotherapy.

Exclusions: No exclusions

Target: < 5%

This QPI was developed through the Formal Review of Prostate Cancer QPIs in 2016. Data required to report this standard were not collected for patients diagnosed in 2015-16 and therefore it is not possible to report performance against this target here. Results will be reported for patients diagnosed in 2016-17.

QPI 13: Clinical Trials Access

QPI 13: Clinical Trial Access - All patients should be considered for participation in available clinical trials, wherever eligible.

Proportion of patients with prostate cancer who are enrolled in an interventional clinical trial or translational research.

Numerator: Number of patients with prostate cancer enrolled in an interventional clinical trial or translational research.

Denominator: All patients with prostate cancer.

Exclusions: No exclusions

Target: Interventional clinical trials – 7.5%

Translational research - 15%

Key points during the period audited:

- 109 of the patients with prostate cancer were recruited into interventional clinical trials in one of the three cancer centres in the North of Scotland in 2016 (13.1%); this is well above the required target of 7.5% and similar to the 12.0% recruited in 2015.
- Recruitment into translational research in the North of Scotland in 2015 was lower at 78 patients (9.4%), below the target of 15% but higher than the 2.6% recruited in 2015.

	Number of patients recruited	ISD Cases annual average (2011-2015)	Percentage of patients recruited
Interventional Clinical Trials	109	830	**13.1%**
Translational Research	78	830	**9.4%**

The QPI targets for clinical trials are 7.5% for interventional trials and for translational trials are 15%. It should be noted that these targets are ambitious, particularly with the move towards more targeted trials.

All cancer patients that pass through each of the three cancer centres in NOSCAN are considered for potential participation in the open trials currently available. However, as with other cancer specific studies, consequent to the demise of larger general trials and the advent of genetically selective trials that only target small populations of patients, many of the prostate cancer trials that are currently open to recruitment in the North of Scotland have very select eligibility criteria. Consequently they will only be available to a small percentage of the total number of people who were diagnosed with prostate cancer.

During 2016 in NOSCAN, there were 9 interventional trials and 2 translational trials open and recruiting patients, thereby offering patients with a prostate cancer diagnosis the opportunity to participate in a range of different prostate cancer tumour types and levels of treatment investigation. Furthermore, all the prostate cancer patients passing through the cancer centres in NOSCAN will have been assessed for eligibility for clinical trials: further enquiry indicates that of patients diagnosed with prostate cancer in the NoS during 2016,112 (13.56%) patients were screened for interventional trials and 78 (9.4%) were screened for translational trials during the reporting period.

Due to the increasing complexity of trials and time burden needed to run them effectively, and a lack of clinical and research support to run such further trials, it is not currently possible to open a greater number (and thereby to have a greater scope) of available trials in the North of Scotland. Constraints imposed by the commercial trial sponsors also limit the number of trials it is possible to open in smaller cancer centres such as those in the NOSCAN region. However a large number of feasibility requests for trials are continually being reviewed by all consultants and if an expression of interest is submitted, the chances that the site will be selected for running the trial are high.

5. Conclusions

The Quality Performance Indicators programme was developed to drive continuous improvement and ensure equity of care for cancer patients across Scotland. As part of this the North of Scotland is initiating a programme of annual reporting of regional performance against QPIs. This is the second regional Prostate Cancer QPI comparative performance report to be published and will help to provide a clearer indication of performance and a more formal structure for enabling improvements to be made.

Overall, results from the fourth year of Prostate Cancer QPI reporting are encouraging; case ascertainment and data capture is of a high standard overall, with significant improvements having been reported in some boards over the last year. Further, QPI definitions have been reviewed nationally during 2016 to provide an improved set of indicators, some of which are reported in here.

The audit report indicates that during 2015-16, the QPI targets for prostate cancer were met over the North of Scotland for two of the nine QPIs reported. Although a meeting the target for just two QPIs is far from satisfactory, several of the QPI's were very close to being achieved and improvements made last year should continue to show improved results in the QPI result for 2016 -2017. Overall the 2015 – 16 results have shown improvement on previous years. As a result of the QPI results for 2015-16 the following actions to improve services have been identified. These are

- **All NHS Boards to introduce proforma pathology reporting to ensure all information required for QPI 3 is recorded in a way that can be interpreted by audit staff.**

- **NHS Highland to ensure that steps are taken to improve capacity in biopsy and in clinic to ensure hormone therapy is provided in a timely manner.**

One area was identified where further work might be required with national partners to ensure that the prostate cancer QPIs are as clinically relevant as possible in the future, and able to better evaluate patient and service outcomes. This was:

- **MCN to suggest to Formal Review of Prostate Cancer QPIs that patients with T3 disease be excluded from QPI 1.**

- **MCN to ensure that the classification of high risk and intermediate risk prostate cancer, and its implications for the reporting of QPI 2, are raised at the next Formal Review of Prostate Cancer QPIs.**

The North of Scotland Urological Cancer MCN will actively take forward regional actions identified and NHS Boards are asked to develop local Action 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 Urological Cancer 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 Prostate Cancer Clinical Lead as part of the regional audit governance process to enable RCAF to review and monitor regional improvement.

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Appendix 1: Open clinical trials for prostate cancer that recruited patients in NOSCAN in 2016.

Trial	Principle Investigator	Trial Type
Add-Aspirin	Russell Mullen (Highland)	Interventional
ATLAS	Judith Grant (Grampian)	Interventional
ENZAMET	Graham Macdonald (Grampian)	Interventional
MULTIPROS	Ghulam Nabi (Tayside)	Interventional
PREMISE	Graham Macdonald (Grampian)	Interventional
PRESIDE	Graham Macdonald (Grampian) Neil McPhail (Highland)	Interventional
Stampede	Neil McPhail (Highland)	Interventional
SPARTAN	Ghulam Nabi (Tayside)	Interventional
TriCREST	Neil McPhail (Highland)	Interventional
SWE	Ghulam Nabi (Tayside)	Translational
UK Genetic Prostate Cancer Study	Ghulam Nabi (Tayside)	Translational

Appendix 2: NHS Board Action Plans

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

NOSCAN
North of Scotland Cancer Network

Action Plan: Prostate Cancer

Based on patients diagnosed in 2015-16

Board:	
Action Plan Lead:	
Date:	

Status key	
1	Action Fully Implemented
2	Action agreed but not yet implemented
3	No action taken (please state reason)

QPI	Action Required	NHS Board Action Taken	Date		Lead	Progress	Status
			Start	End			
	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.*	*Detail actions in progress, changes in practice, problems encountered of reasons why no action has been taken.*	*Insert no. from key*