

# Quality Performance Indicators Audit Report

<b>Tumour Area:</b>	Acute Leukaemia
<b>Patients Diagnosed:</b>	1 <sup>st</sup> July 2018 – 30 <sup>th</sup> June 2019
<b>Published Date:</b>	21 <sup>st</sup> January 2021
<b>Clinical Commentary:</b>	Dr Al Lawrie, Consultant Haematologist, NHS Grampian

## 1. Acute Leukaemia in Scotland

With 572 new cases of leukaemia diagnosed in Scotland during 2017; leukaemia was the 16<sup>th</sup> most common cancer, with incidence declining by 22% in the last 10 years<sup>1</sup>. Of these, 232 patients were diagnosed with acute leukaemia.

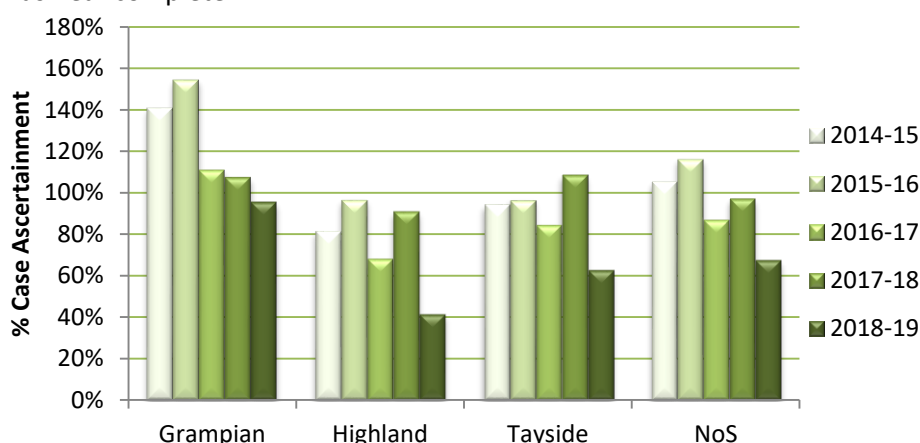
Relative survival from all types of leukaemia in Scotland has increased considerably since 1987-1991<sup>2</sup>. The table below details the percentage change in 1 and 5 year relative survival for patients diagnosed 1987-1991 to 2007-2011.

**Relative age-standardised survival for leukaemia in Scotland at 1 year and 5 years showing percentage change from 1987-1991 to 2007-2011<sup>2</sup>.**

Relative survival at 1 year (%)		Relative survival at 5 years (%)	
2007-2011	% change	2007-2011	% change
73.3%	+ 17.3%	53.6%	+ 17.2%

## 2. Patient Numbers and Case Ascertainment in the North of Scotland

Between 1<sup>st</sup> July 2018 and 30<sup>th</sup> June 2019 a total of 47 cases of acute leukaemia were diagnosed in the North of Scotland and recorded through audit. Although case ascertainment for the North of Scotland was lower than in previous years at 67.1%, this is likely to be due to natural fluctuations in the numbers of patients being diagnosed. QPI calculations based on data captured are considered to be representative of patients diagnosed with acute leukaemia during the audit period. For patients included within the audit, data collection was near complete.

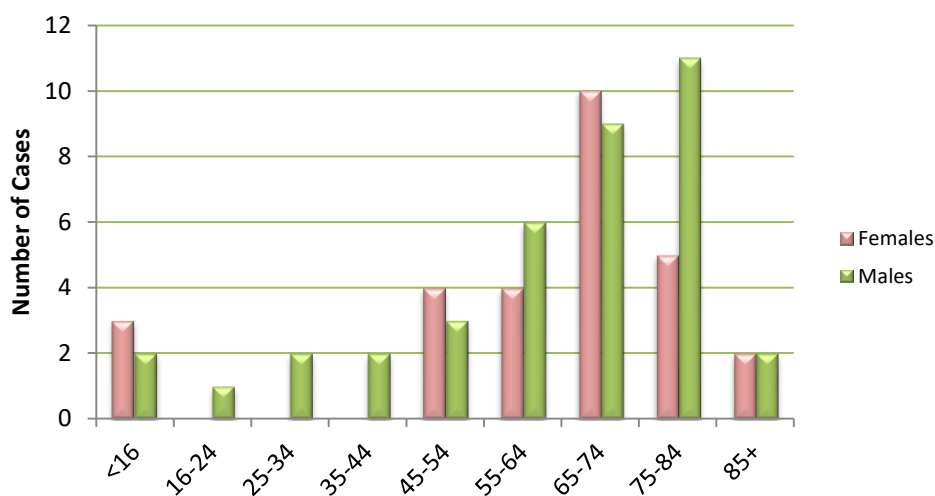


**Case ascertainment by NHS Board for patients diagnosed with acute leukaemia in 2014-2019.**

	Grampian	Highland	Orkney	Shetland	Tayside	W Isles	NoS
<b>No. of Patients 2017-18</b>	28	8	0	0	11	0	47
<b>% of NoS total</b>	59.6%	17.0 %	0%	0%	23.4%	0%	100%
<b>Mean ISD Cases 2013-17</b>	29	19	2	1	18	1	70
<b>% Case ascertainment 2018-19</b>	95.2%	41.2%	0%	0%	62.5%	0%	67.1%

### 3. Age Distribution

The figure below shows the age distribution of patients diagnosed with acute leukaemia in the North of Scotland in 2018-19, with numbers of patients diagnosed highest in the 75-84 years age bracket for both men and women.



Age distribution of patients diagnosed with acute leukaemia in the North of Scotland 2018-2019.

### 4. Performance against Quality Performance Indicators (QPIs)

This document reports the performance of the NHS Boards in the North of Scotland against the revised QPI definitions published in 2018 for patients diagnosed between July 2018 and June 2019<sup>3</sup>, while further information on datasets and measurability used are available from Information Services Division<sup>4</sup>. Data for QPIs are presented by Board of diagnosis. QPI 7 is reported in year in arrears therefore results presented here are for patients diagnosed in 2017-18. Please note that where QPI definitions have been amended, results are not compared with those from previous years.

Due to the small numbers of patients diagnosed with Acute Leukaemia annually, it was agreed by the QPI development group that annual results for the Acute Leukaemia QPIs would be presented at a regional level rather than for individual NHS Boards. However, three yearly cumulative national reports will include information presented by individual NHS Boards.

QPI results presented include only patients aged 16 years and over. It has been agreed at a national level that analysis of patients under the age of 16 years will not be included in published QPI reports, due to the very small numbers of patients involved. However, these data have been analysed and results supplied to clinical staff for consideration, should any obvious areas for improvement in service be identified.

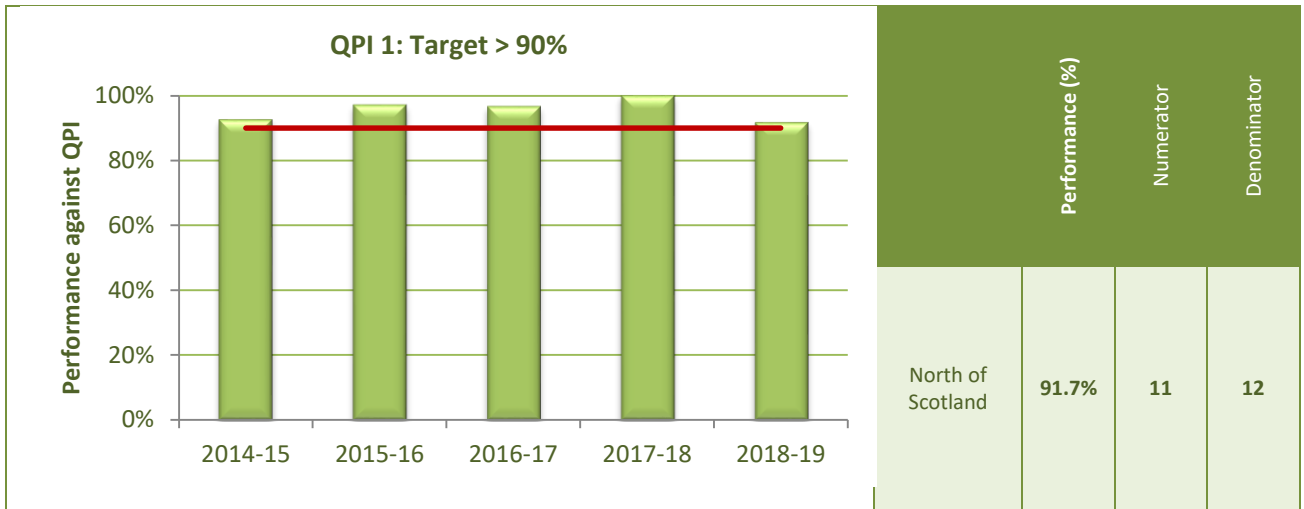
Further information on how QPI data is analysed and reported can be found at [https://www.nrhc.scot/uploads/tiny\\_mce/NCA/Images/Factsheet%20QPIs.pdf](https://www.nrhc.scot/uploads/tiny_mce/NCA/Images/Factsheet%20QPIs.pdf)

## 5. Governance and Risk

QPI performance is overseen by the North Cancer Alliance and its constituent groups, with an assessment of clinical risk and action planning undertaken collaboratively and reporting at board and regional level. Actions will be overseen by the Pathway Boards and reported concurrently into the NCA governance groups and the Clinical Governance committees at each North of Scotland health boards.

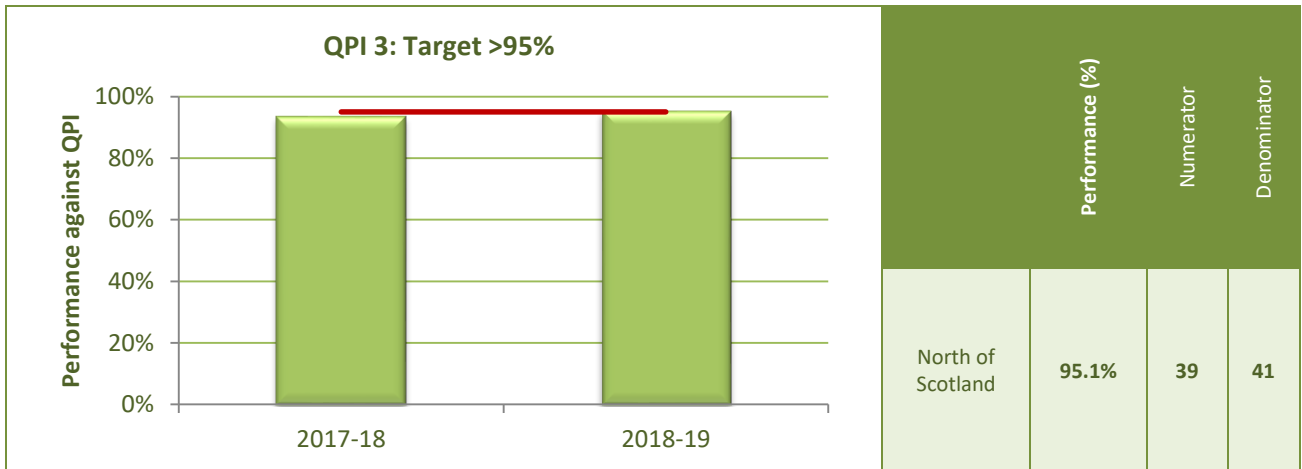
Further information is available [here](#).

<b>QPI 1</b>	<b>Complete Diagnostic Panel</b>
Proportion of patients with acute leukaemia undergoing treatment with curative intent who have complete diagnostic panel undertaken.	



<b>Clinical Commentary</b>	One patient did not have a complete diagnostic panel undertaken.
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

<b>QPI 3</b>	<b>MDT Discussion</b>
Proportion of patients with acute leukaemia who are discussed at MDT meeting within 8 weeks of diagnosis.	



<b>Clinical Commentary</b>	The North of Scotland overall met this QPI target, however, NHS Highland did not in this reporting year resulting in one patient not being discussed at an MDT meeting within 8 weeks of diagnosis. This was due to multiple reasons including shared care with NHSGGC. NHS Highland are working on ways to improve capture of all patients for MDT incorporating a tracking list, however without a dedicated MDT coordinator this remains a challenge for the board.
<b>Actions</b>	1. NCA have raised issue of lack of an MDT coordinator to facilitate the MDT process with NHS Highland cancer management.
<b>Risk Status</b>	Manage

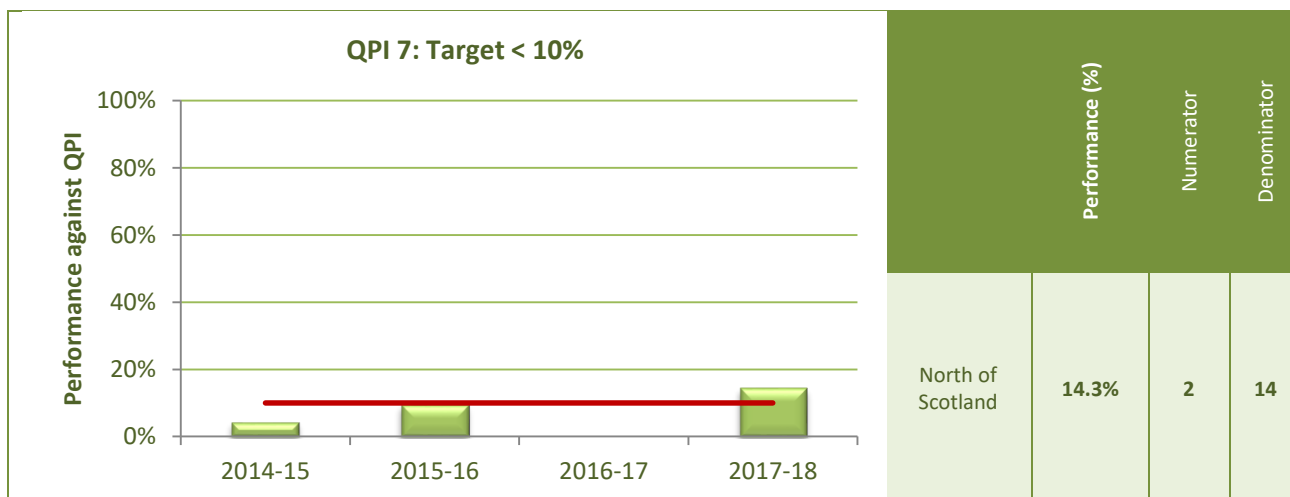
<b>QPI 5</b>	<b>Early Deaths</b>
Proportion of patients with acute leukaemia being treated with curative intent who die within 30/35 days of treatment.	

	Specification (i) Patients with Acute Myeloid Leukaemia (AML) treated with curative intent who die within 30 days of treatment.				Specification (ii) Patients with Acute Lymphoblastic Leukaemia (ALL) treated with curative intent who die within 35 days of treatment.			
	Target	Performance (%)	Numerator	Denominator	Target	Performance (%)	Numerator	Denominator
Patients aged 16 to 60 years	< 8%	0%	0	6	< 8%	-	0	0
Patients aged over 60 years*	< 18%	-	-	-	< 20%	-	-	-

\*Performance not reported as based on small numbers of patients (1-4)

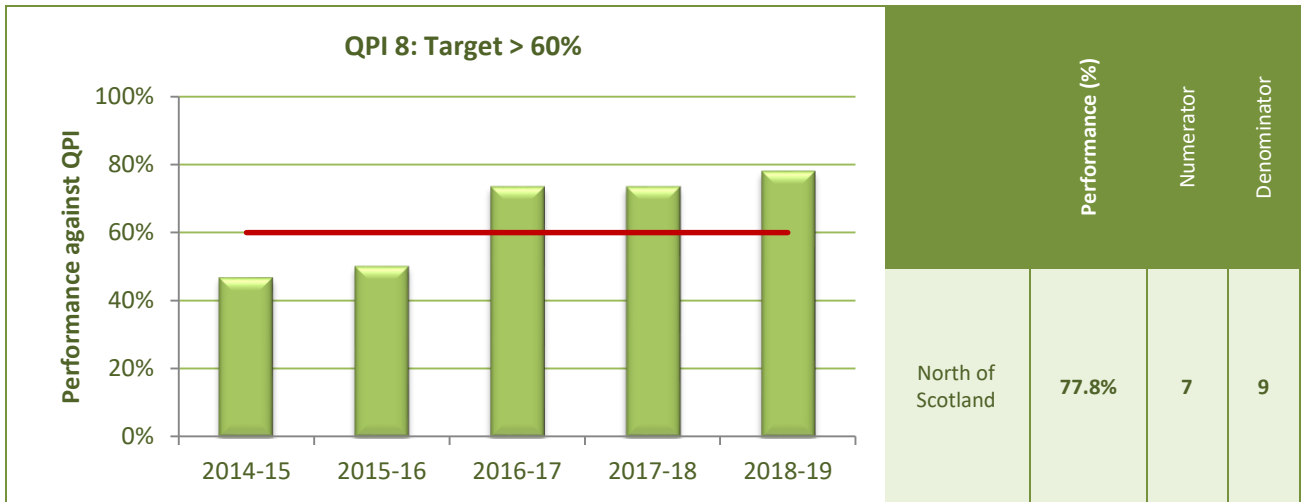
<b>Clinical Commentary</b>	As previously recognised, the numbers of patients in this QPI are low limited the value of this analysis at board level over a short (one year) timeframe.
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

<b>QPI 7</b>	<b>Deaths in Remission</b>
Proportion of patients with acute leukaemia undergoing treatment with curative intent who die in first complete remission (CR), within 1 year of diagnosis. This QPI is reported 1 year in arrears so data presented is for patients diagnosed in 2017-18.	



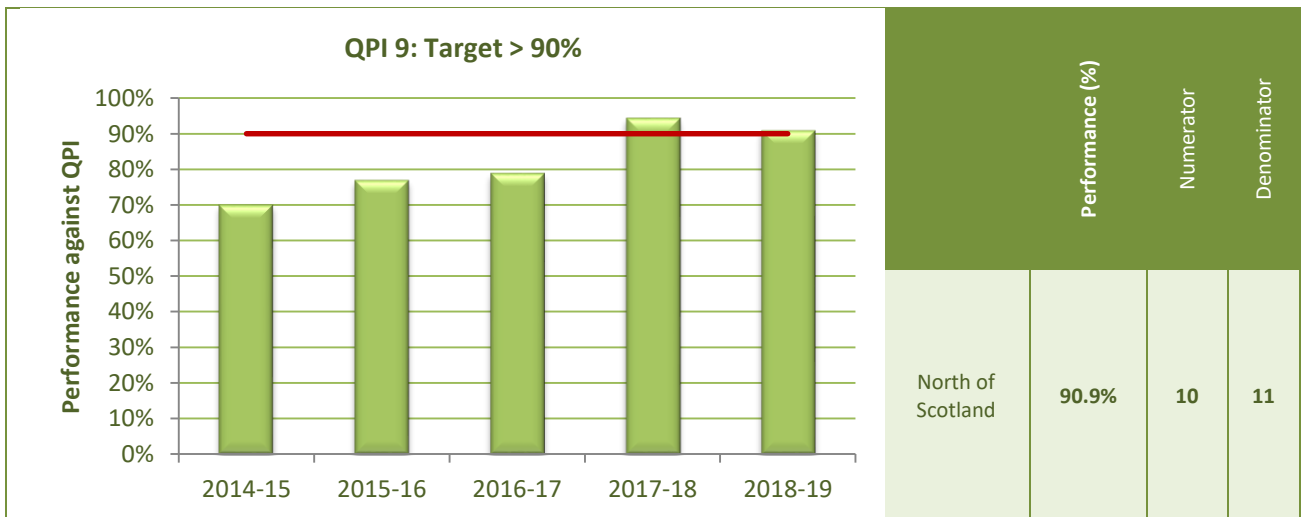
<b>Clinical Commentary</b>	The North of Scotland did not meet this QPI target due to two patient deaths following post-transplant complications; investigations to the deaths have been undertaken at board level.
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

<b>QPI 8</b>	<b>Clinical Trials with Curative Intent</b>
Proportion of patients with acute leukaemia being treated with curative intent who are enrolled in a clinical trial.	



<b>Clinical Commentary</b>	This QPI target was overall met by the North of Scotland boards. Two patients were not enrolled in a clinical trial due to additional clinical issues, rendering them ineligible for trial entry.
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

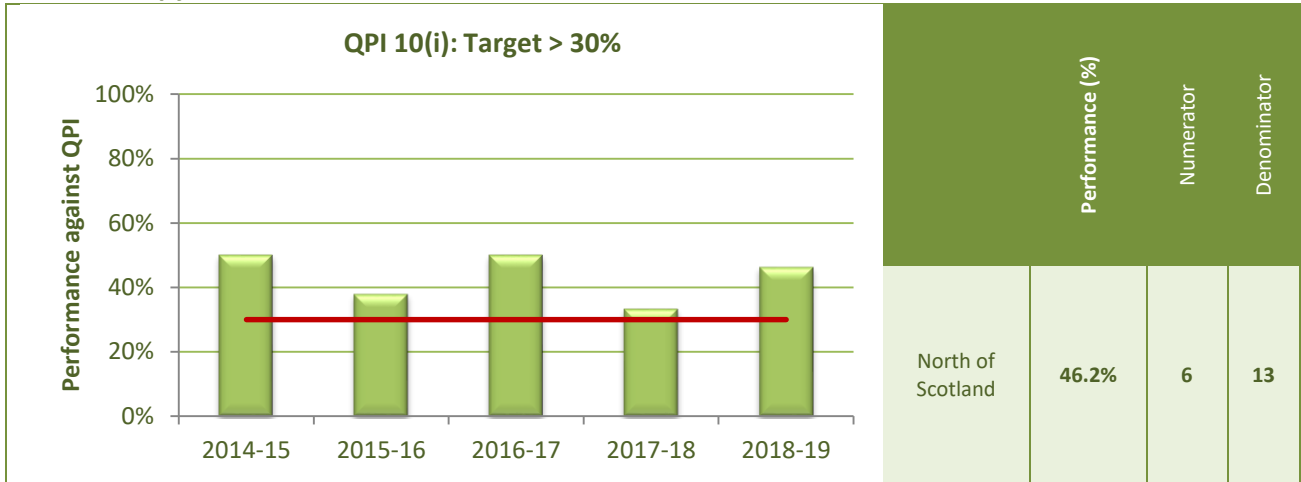
<b>QPI 9</b>	<b>Tissue Typing for Transplant</b>
Proportion of patients with acute leukaemia eligible for transplant (i.e. over 16 years of age and under 65 years of age) being treated with curative intent should have a specimen sent to the lab for tissue typing at diagnosis.	



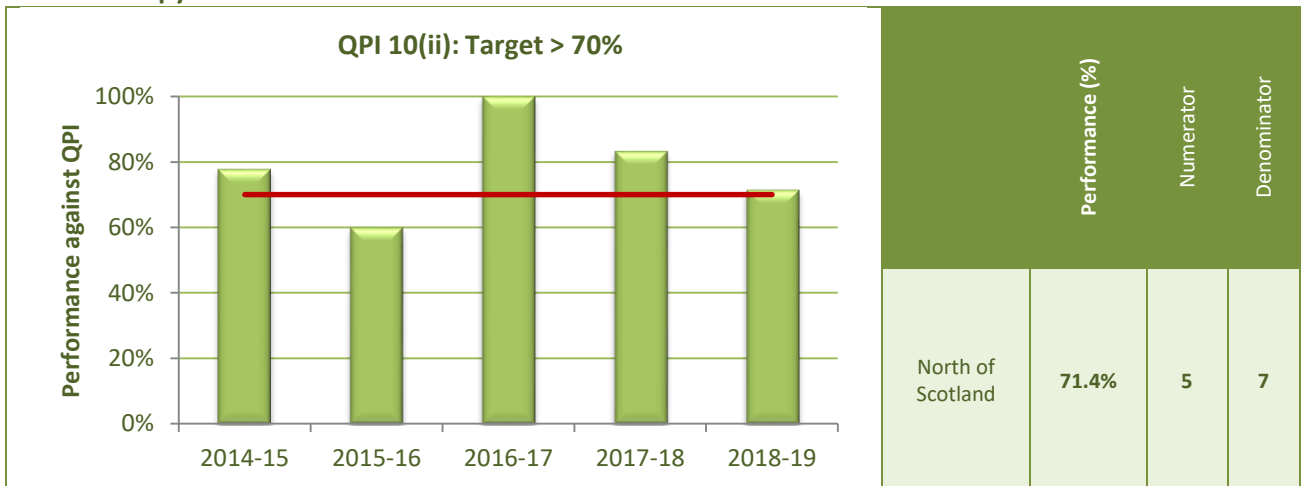
<b>Clinical Commentary</b>	The North of Scotland overall met this QPI target with one patient where allografting was not deemed an appropriate therapy (APML).
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

<b>QPI 10</b>	<b>Intensive Chemotherapy in Older Adults</b>
Proportion of patients with acute leukaemia over 60 years of age with performance status (PS) 0-1 who receive intensive chemotherapy.	

**Specification (i) Patients with acute leukaemia 60 years of age and over who receive intensive chemotherapy.**



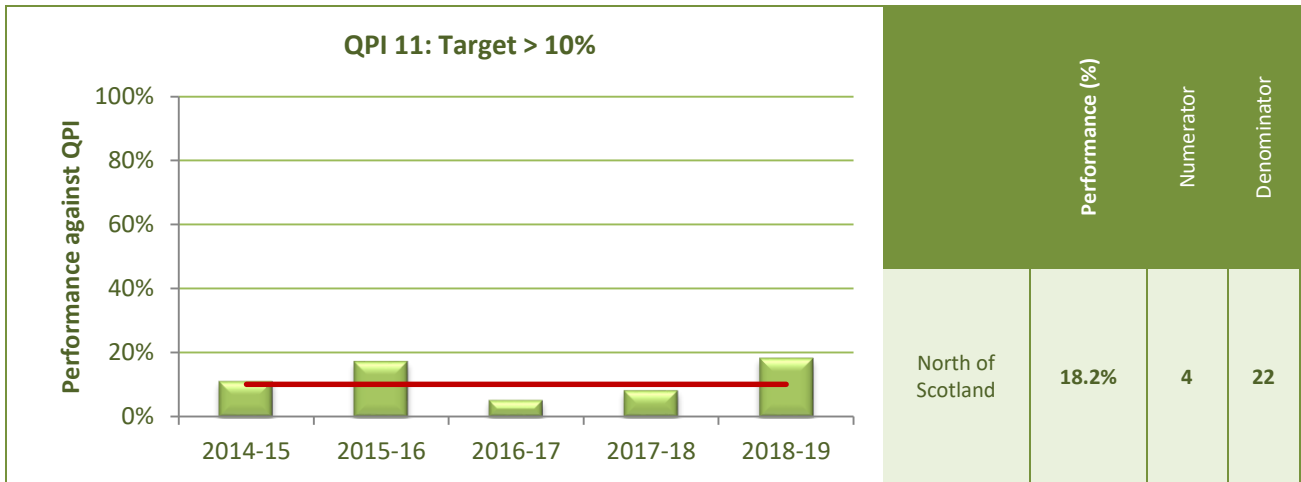
**Specification (ii) Patients with acute leukaemia 60 years of age and over who receive intensive chemotherapy who are treated within a clinical trial.**



<b>Clinical Commentary</b>	The North of Scotland boards overall met this QPI target, however where patients have not met this specification, this was mainly due to patient frailty and preference, and remains a recurring theme highlighted in this age group.
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

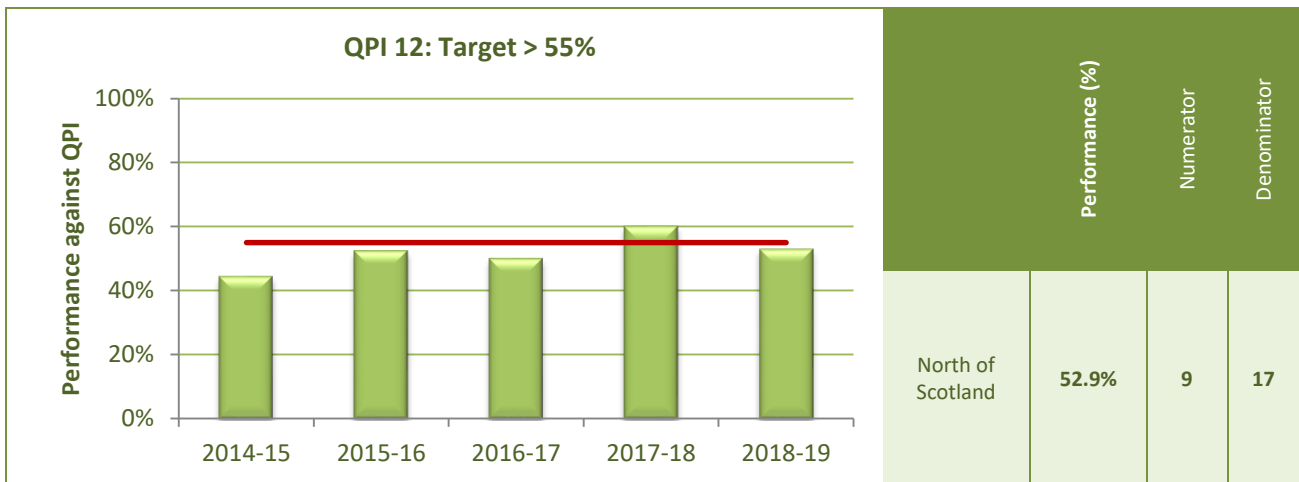


<b>QPI 11</b>	<b>Clinical Trials with Non Curative Intent</b>
Proportion of patients with acute leukaemia being treated with non curative intent who are enrolled in a clinical trial.	



<b>Clinical Commentary</b>	The North of Scotland boards overall met this QPI target. For one study at NHS Tayside, five out of the seven patients were screened for the AGILE study but were not suitable due to lack of an IDH1 mutation. This highlights the challenges of treating this patient group as multiple factors, including patient frailty and preference, as well as lack of access to suitable trials hinder a trial-based approach.
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

<b>QPI 12</b>	<b>Palliative Treatment</b>
Proportion of patients with AML who are suitable only for treatment with non-curative intent who receive an appropriate palliative chemotherapy regimen.	

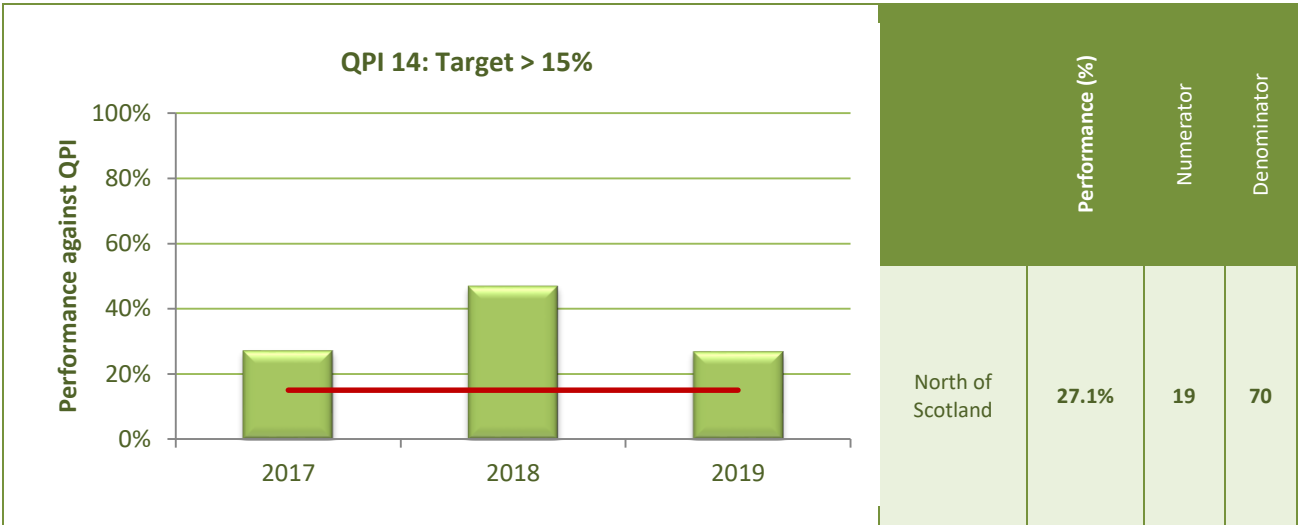


<b>Clinical Commentary</b>	This QPI target was not met in the North of Scotland due to the frailty of patients and patient choice, where supportive care was deemed the best course of treatment. As previously highlighted, this is an extremely challenging QPI to meet due to the patient cohort often involving significant co-morbidities and frailty factors.
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

<b>QPI 13</b>	<b>Early Deaths in Patients with Acute Promyelocytic Leukaemia</b>
Proportion of patients with APL who die within 30 days of diagnosis. Target <25%	

<b>Clinical Commentary</b>	There were less than 5 patients diagnosed with acute promyelocytic leukaemia in the region within the audit period. Therefore this QPI is not reported.
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

<b>QPI 14</b>	<b>Clinical Trials and Research Study Access</b>
Proportion of patients diagnosed with Acute Leukaemia who are consented for a clinical trial / research study.	



<b>Clinical Commentary</b>	Patients in the North of Scotland continue to be recruited to clinical trials and research studies.
<b>Actions</b>	No actions required
<b>Risk Status</b>	Tolerate

## References

1. Information Services Division. Cancer in Scotland, April 2019. [https://www.isdscotland.org/Health-Topics/Cancer/Publications/2019-04-30/Cancer\\_in\\_Scotland\\_summary\\_m.pdf](https://www.isdscotland.org/Health-Topics/Cancer/Publications/2019-04-30/Cancer_in_Scotland_summary_m.pdf)
2. NHS National Services Scotland. Cancer Survival in Scotland, 1987-2011. 2015. <https://isdscotland.scot.nhs.uk/Health-Topics/Cancer/Publications/2015-03-03/2015-03-03-CancerSurvival-Report.pdf>
3. Scottish Cancer Taskforce, 2018. Acute Leukaemia Clinical Performance Indicators, Version 3.0. Health Improvement Scotland. <http://www.healthcareimprovementscotland.org/his/idoc.ashx?docid=62bcc4fd-d9a6-45d3-aa86-d9ca14297884&version=-1>
4. <http://www.isdscotland.org/Health-Topics/Cancer/Cancer-Audit/>

## Appendix 1: Clinical Trials for patient with Acute Leukaemia open for recruitment in the North of Scotland in 2019

Trial	Principle Investigator	Patients consented in 2019
AGILE	Sudhir Tauro (NHS Tayside)	0
AML18	Sudhir Tauro (NHS Tayside) Caroline Duncan (NHS Highland) Dominic Culligan (NHS Grampian)	3
AML19	Sudhir Tauro (NHS Tayside) Caroline Duncan (NHS Highland) Dominic Culligan (NHS Grampian)	12
LI-1	Caroline Duncan (NHS Highland)	0
MyeChild 01	Gordon Taylor (NHS Grampian)	1
NCCPG TDM 2018	Hugh Bishop (NHS Grampian)	1
Phase1b study for patients with relapsed / Refractory AML	Sudhir Tauro (NHS Tayside)	0
The BioCAN Study	Gordon Taylor (NHS Grampian)	1
UKALL 14	Sudhir Tauro (NHS Tayside) Dominic Culligan (NHS Grampian)	1