

**SOUTH EAST SCOTLAND CANCER NETWORK (SCAN)  
PROSPECTIVE CANCER AUDIT**

**Acute Leukaemia 2019 - 2020  
COMPARATIVE AUDIT REPORT**

**PATIENTS DIAGNOSED IN BORDERS, FIFE, AND LOTHIAN**

Dr Fiona M Scott, NHS Lothian  
SCAN Lead Haematology Cancer Clinician

Dr PH Roddie, Consultant Haematologist, NHS Lothian

Dr Kerri Davidson, Consultant Haematologist, NHS Fife

Dr Rosie Jones, Consultant Haematologist, NHS Borders

Valerie Findlay  
SCAN Cancer Audit Facilitator

Alison Robertson Audit Facilitator NHS Fife

Report number: SA H02/21W

## CONTENTS

|  |    |
|--|----|
| Document History .....   | 2  |
| Chair Summary .....  | 3  |
| Action Points from 2019-20 .....                                 | 3  |
| Acute Leukaemia QPI Attainment Summary 2019-20 .....             | 4  |
| Introduction and Methods .....                                   | 5  |
| Quality Assurance .....  | 7  |
| QPI 1: Complete Diagnostic Panel .....                           | 8  |
| QPI 3: MDT Discussion .....                                      | 9  |
| QPI 5 (i) - AML Early Deaths in patients aged 16- 60 years ..... | 10 |
| QPI 5 (i) - AML Early Deaths in patients aged > 60 years .....   | 10 |
| QPI 5 (ii) Early Deaths ALL 16-60 years .....                    | 11 |
| QPI 5 b ii – Early Deaths ALL >60 years .....                    | 11 |
| QPI 7 Deaths in Remission .....                                  | 12 |
| QPI 8 Clinical Trials with Curative Intent .....                 | 13 |
| QPI 9 Tissue Typing for Transplant .....                         | 14 |
| QPI 10 (i) Intensive Chemotherapy in Older Adults .....          | 15 |
| QPI 10(ii) Intensive Chemotherapy in Older Adults .....          | 16 |
| QPI 11 Clinical Trials with Non Curative Intent .....            | 17 |
| QPI 12 Palliative Treatment .....                                | 18 |
| Age Distribution .....   | 20 |
| Appendix .....   | 21 |
| Acute Leukaemia QPI Attainment Summary 2018-19 .....             | 21 |

### Document History

| Version       | Circulation  | Date       | Comments   |
|---------------|--|------------|--|
| Version 1     | Lead clinicians  | 18/01/2021 | Data and comments agreed.                                    |
| Version 2     | SCAN Haematology Group lead clinicians                                     | 05/02/2021 | Actions points and comments agreed. Chair's summary pending. |
| Version 3     | SCAN Haematology Group   | 15/03/2021 | For final comments.  |
| Final Version | SCAN Group<br>SCAN Governance Framework<br>SCAN Action Plan<br>Board Leads | 29/04/2021 | Assessed for disclosure and Board breakdowns removed.        |
| Web Version   | Published to SCAN Website  | June 2021  |  |

## **Chair Summary**

The results of the 2019-20 Acute Leukaemia QPI audit show similar levels of attainment as in previous years. The main area where QPI targets are consistently not met related to clinical trials. There are a number of factors why this is the case. Whilst there is a UK randomized treatment trial for patients treated with non-curative intent (LI1) the therapeutic options within the investigational arms do not offer promise of meaningful clinical benefit and this is reflected in the fact that the trial has failed to achieve its recruitment target despite being open for approaching 10 years. For clinical trials in patients treated with curative intent AML19 (for patients <60 years) and AML18 (>60 years) there have been periods of time when the trials have been closed due to significant amendments and recruitment has been further hampered by the fact that new AML therapies have become available as the standard of the care which were not available within the clinical trial. Some of the latter issues have been addressed and both trials have opened to recruitment in the SCAN region in recent months. However as consequence of them being closed to recruitment and the impact of the covid pandemic on trial activity it is anticipated that the QPI AML trials recruitment target will not be achieved in the 2020-21 audit year.

The other area where QPI targets were not attained relates to deaths within the first 30/35 days from start of treatment. For patients >60 treated both for AML and ALL percentage deaths were just above the QPI target. This is not necessarily a finding of concern as with the relatively small numbers of patients results can be skewed by just one or two patients. This is a target which is best looked at over a number of years which will give a more meaningful measure of whether early deaths are at an acceptable and anticipated level or are higher than would be expected.

Huw Roddie  
SCAN Lead for Acute Leukaemia,  
March 2021

## **Action Points from 2019-20**

No Board specific action points were identified. The availability of appropriate clinical trials contributed significantly to QPIs which fell short of target. This was considered to be outwith the control of the contributing health boards. This should be considered at the next formal review (2021).

## **Action Points from 2018-19**

There were no action points identified.

| Acute Leukaemia QPI Attainment Summary 2019-20  |   | % Target | SCAN         |       |
|---|---|----------|--------------|-------|
| QPI 1 Diagnostic Panel  |   | 90       | N 35<br>D 37 | 94.6% |
| QPI 3 Proportion of patients discussed at MDT   |   | 95       | N 69<br>D 71 | 97.2% |
| QPI 5 Patients treated with curative intent who die within 30/35 days of treatment  | AML 16-60   | <8       | N 1<br>D 16  | 6.3%  |
|   | AML >60 years   | <18      | N 2<br>D 10  | 20.0% |
|   | ALL 16-60 years   | <2       | N 0<br>D 6   | 0.0%  |
|   | ALL > 60 years  | <20      | N 1<br>D 4   | 25.0% |
| QPI 7 Patients treated with curative intent who die in first complete remission, within 1 year of diagnosis.                              |   | <10      | N 0<br>D 14  | 0.0%  |
| QPI 8 Patients treated with curative intent , enrolled on a clinical trial (16-60 years)  |   | 60       | N 7<br>D 22  | 31.8% |
| QPI 9 Patients treated curatively who have tissue typing performed at diagnosis.  |   | 90       | N 19<br>D 26 | 73.1% |
| QPI 10 Intensive chemotherapy in older adults (over 60)   | PS 0-1 receiving intensive chemotherapy                           | 30       | N 13<br>D 29 | 44.8% |
|   | Receiving intensive chemotherapy and enrolled in a clinical trial | 70       | N 1<br>D 13  | 7.7%  |
| QPI 11 Proportion of patients treated with non curative intent who are enrolled in a clinical trial                                       |   | 10       | N 1<br>D 27  | 3.7%  |
| QPI 12 Proportion of patients with AML treated with non curative intent who receive appropriate SACT regimen                              |   | 55       | N 7<br>D 16  | 43.8% |
| QPI 13 Proportion of patients with APL who die within 30 days of diagnosis  |   | <25      | N 1<br>D 4   | 25.0% |
| QPI 14 Clinical Trial and Research Study Access (N = All AL patients consented for trials/research D = 5 year average in Cancer Registry) |   | 15       | N 6<br>D 51  | 22.0% |

## Introduction and Methods

### Cohort

This report covers patients newly diagnosed with Acute Leukaemia in Borders, Fife, and Lothian Health Board areas between 1<sup>st</sup> July 2019 and 30<sup>th</sup> June 2020. Management and audit of patients with Acute Leukaemia in Dumfries & Galloway is via the West of Scotland Cancer Network. The results contained within this report have been presented by NHS board of diagnosis.

### Dataset and Definitions

The QPIs have been developed collaboratively with the three Regional Cancer Networks, Information Services Division (ISD), and Healthcare Improvement Scotland. QPIs will be kept under regular review and be responsive to changes in clinical practice and emerging evidence.

The overarching aim of the cancer quality work programme is to ensure that activity at NHS board level is focused on areas most important in terms of improving survival and patient experience whilst reducing variance and ensuring safe, effective and person-centered cancer care.

Following a period of development, public engagement and finalisation, each set of QPIs is published by Healthcare Improvement Scotland<sup>1</sup>.

Accompanying datasets and measurability criteria for QPIs are published on the ISD website<sup>2</sup>. NHS boards are required to report against QPIs as part of a mandatory, publicly reported, programme at a national level.

The QPI dataset for Acute Leukaemia was implemented from 01/07/2014. As part of the National Cancer Quality Programme a systematic national review process has been developed whereby all tumour specific QPIs published are subject to formal review following 3 years analysis of comparative QPI data. Formal review of the Acute Leukaemia QPIs was undertaken in April 2018 after which QPIs 3, 5, 10 and 12 were updated, QPIs 2,4 and 6 were archived and a new QPI 13 was added. The next formal review will be in 2021.

The standard QPI format is shown below:

|                         |  |  |
|-------------------------|--|--|
| QPI Title:              | Short title of Quality Performance Indicator (for use in reports etc.)         |  |
| Description:            | Full and clear description of the Quality Performance Indicator.               |  |
| Rationale and Evidence: | Description of the evidence base and rationale which underpins this indicator. |  |
| Specifications:         | Numerator:   | Of all the patients included in the denominator those who meet the criteria set out in the indicator.  |
|                         | Denominator:   | All patients to be included in the measurement of this indicator.  |
|                         | Exclusions:  | Patients who should be excluded from measurement of this indicator.  |
|                         | Not recorded for numerator:  | Include in the denominator for measurement against the target. Present as not recorded only if the patient cannot otherwise be identified as having met/not met the target.  |
|                         | Not recorded for exclusion:  | Include in the denominator for measurement against the target unless there is other definitive evidence that the record should be excluded. Present as not recorded only where the record cannot otherwise be definitively identified as an inclusion/exclusion for this standard. |
|                         | Not recorded for denominator:  | Exclude from the denominator for measurement against the target. Present as not recorded only where the patient cannot otherwise be definitively identified as an inclusion/exclusion for this standard.   |
| Target:                 | Statement of the level of performance to be achieved.                          |  |

<sup>1</sup> QPI documents are available at [www.healthcareimprovementscotland.org](http://www.healthcareimprovementscotland.org)

<sup>2</sup> Datasets and measurability documents are available at [www.isdscotland.org](http://www.isdscotland.org)

## Audit Process

Data was analysed by the audit facilitators in each NHS board according to the measurability document provided by ISD. Lothian and Borders data was collated by Valerie Findlay, SCAN Audit Facilitator for Haematology, Fife data was collected by Alison Robertson, Audit Facilitator for Fife.

Data capture is focused round the process for the weekly multidisciplinary meetings ensuring that data covering patient referral, investigation and diagnosis is being picked up through the routine process.

Lothian and Fife have now ceased routine use of case notes with Oncology data obtained either from electronic clinical record systems including downloads from ARIA (within radiotherapy department) or ChemoCare for chemotherapy data.

Each of the 3 health boards provides chemotherapy data but radiotherapy is provided centrally in Edinburgh Cancer Centre. Patients living closer to Dundee may opt to have oncology treatment outwith the SCAN region. Collecting complete audit data for these patients remains a challenge.

The process remains dependent on audit staff for capture and entry of data, and for data quality checking

Data was recorded by all health boards using E-case.

## Lead Clinicians and Audit Personnel

| SCAN Region        | Hospital                                      | Lead Clinician | Audit Support    |
|--------------------|---|----------------|------------------|
| NHS Borders        | Borders General Hospital                      | Dr R Jones     | Valerie Findlay  |
| NHS Fife           | Queen Margaret Hospital/Victoria Hospital     | Dr K Davidson  | Alison Robertson |
| SCAN & NHS Lothian | St Johns Hospital<br>Western General Hospital | Dr H Roddie    | Valerie Findlay  |

## Data Quality

### Estimate of Case Ascertainment

An estimate of case ascertainment (the percentage of the population with Acute Leukaemia recorded in the audit) is made by comparison with the Scottish Cancer Registry five year average data from 2014 to 2018. High levels of case ascertainment provide confidence in the completeness of the audit recording and contribute to the reliability of results presented. Levels greater than 100% may be attributable to an increase in incidence. Allowance should be made when reviewing results where numbers are small and variation may be due to chance.

| Number of cases recorded in audit | SCAN |
|-----------------------------------|------|
| ALL                               | 15   |
| AML                               | 56   |
| Total                             | 71   |

| Estimate of case ascertainment:               | SCAN   |
|---|--------|
| Cases from Audit                              | 71     |
| Cancer Registry 5 year Average                | 51     |
| Case Ascertainment %                          | 139.2% |
| Cancer Registry data (2014-2018) IR2020-00904 |        |

With the aim of explaining differences between cancer registry data and audit data, Acute Leukaemia registrations for 2018 were extracted from the ACaDMe Confidential datamart and compared with Audit data from the same period. The reasons for not recoding by audit were: diagnosis unconfirmed by bone marrow, patient not discussed at MDM. The reasons for not recording by ISD were: difference in hospital of diagnosis, secondary AML not recorded, difference in dates of cohort collected.

| Health board | PHS | SCAN Audit |
|--------------|-----|------------|
| Lothian 2018 | 42  | 44         |
| Borders 2018 | 4   | 5          |

### Quality Assurance

All hospitals in the region participate in a Quality Assurance (QA) programme provided by the National Services Scotland Information Services Division (ISD). QA of the Acute Leukaemia data was carried out in Jan 2018 and overall accuracy percentage results are shown below.

|                                | Borders | Fife | Lothian | Scotland |
|--------------------------------|---------|------|---------|----------|
| Accuracy of data recording (%) | N/A     | 89.4 | 98.6    | 96.1     |

90 records were assessed throughout mainland Scotland excluding NHS Borders where patient numbers were considered too small. This represented 34% of Acute Leukaemia patients in the QPI cohort who were diagnosed between 1<sup>st</sup> July 2015 and 30<sup>th</sup> June 2016 and for which 261 records were submitted to ISD

Overall, the accuracy of recording was high at 96.1% apart from two NHS Boards where the accuracies fell below the ISD recommended minimum standard of 90%. However, it should be noted that only a small sample of five records was assessed from each of these NHS Boards and different interpretation by Cancer Registry Staff mean that the performance is not a true reflection of audit practice in SCAN and around the country.

### Clinical Sign-Off

This report compares data from reports prepared for individual hospitals and signed off as accurate following review by the lead clinicians from each service. The collated SCAN results are reviewed jointly by the lead clinicians, to assess variances and provide comments on results:

- Individual health board results were reviewed and signed-off locally.
- Collated results were presented and discussed at the Acute Leukaemia Sign off meeting on 5<sup>th</sup> February 2021
- Final report circulated to SCAN Haematology Group and Clinical Governance Groups on 29/04/2021.
- 

### Actions for Improvement

After final sign off, the process is for the report to be sent to the Clinical Governance groups with action plans for completion at Health Board level.

The report is placed on the SCAN website with completed action plans once it has been fully signed-off and checked for any disclosive material.

### QPI 1: Complete Diagnostic Panel

Target=90%

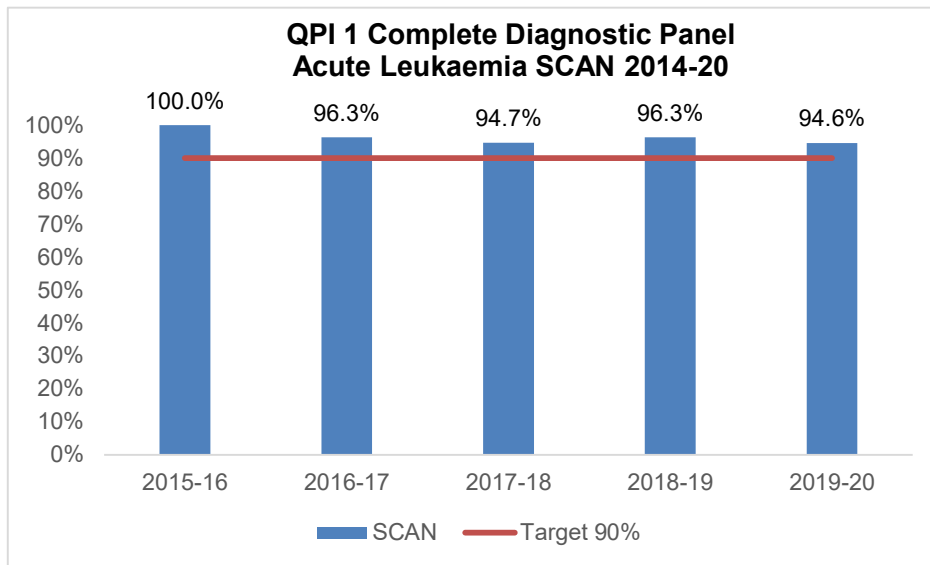
Numerator = Number of patients with acute leukaemia undergoing treatment with curative intent where complete diagnostic panel is undertaken.

Denominator = All patients with acute leukaemia undergoing treatment with curative intent (no exclusions).

| Target 90%   | SCAN         |
|--|--------------|
| 2019-20 cohort   | 71           |
| Ineligible for this QPI – not fit for curative treatment | 34           |
| Numerator  | 35           |
| Not recorded for the numerator                           | 0            |
| Denominator  | 37           |
| Not recorded for exclusions                              | 0            |
| Not recorded for denominator                             | 0            |
| <b>% Performance</b>                                     | <b>94.6%</b> |

### Comments

The target was met by all Health boards





**QPI 3: MDT Discussion**

Target=95%

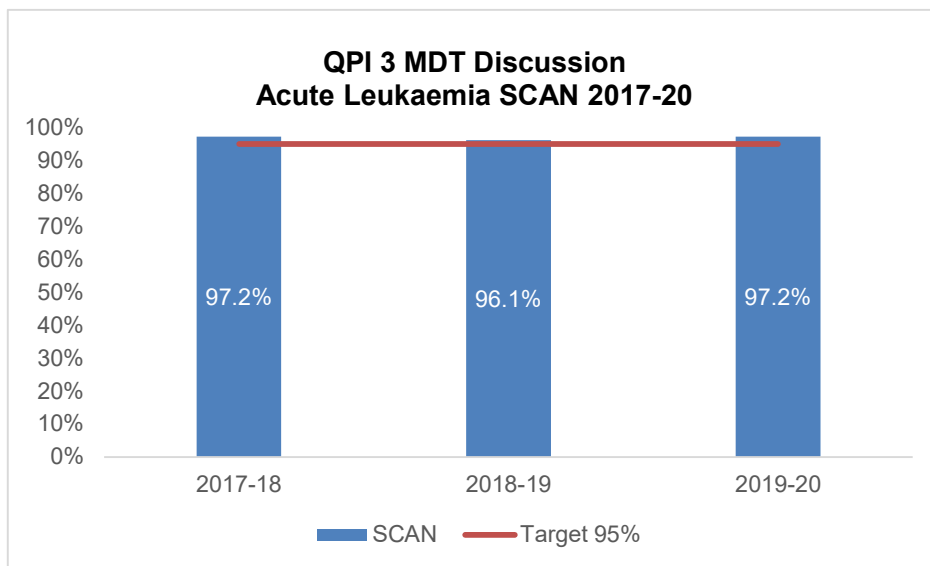
Numerator = Number of patients with acute leukaemia discussed at the MDT meeting within 8 weeks of diagnosis.

Denominator = All patients with acute leukaemia (no exclusions).

| Target 95%                     | SCAN         |
|--------------------------------|--------------|
| 2018-19 cohort                 | 71           |
| Ineligible for this QPI        | 0            |
| Numerator                      | 69           |
| Not recorded for the numerator | 0            |
| Denominator                    | 71           |
| Not recorded for exclusions    | 0            |
| Not recorded for denominator   | 0            |
| <b>% Performance</b>           | <b>97.2%</b> |

**Comments:** QPI 3 was updated in 2017-18 to allow 8 weeks from diagnosis to discussion at MDT meeting and is not directly comparable to data reported in years 1-3, 2014-17 (6 weeks)

The target was met by all health boards.



**QPI 5i (a) - AML Early Deaths in patients aged 16- 60 years**

Target &lt;8%

Numerator = Proportion of patients with Acute Myeloid Leukaemia being treated with curative intent who die within 30 days of treatment

Denominator = All patients with Acute Myeloid Leukaemia being treated with curative intent (no exclusions)

| Target <8%                     | SCAN        |
|--------------------------------|-------------|
| 2019-20 cohort                 | 71          |
| Ineligible for this QPI        | 55          |
| Numerator                      | 1           |
| Not recorded for the numerator | 0           |
| Denominator                    | 16          |
| Not recorded for exclusions    | 0           |
| Not recorded for denominator   | 0           |
| <b>% Performance</b>           | <b>6.3%</b> |

**Comment:** The target was changed following Formal Review in April 2018.

The minimum target was exceeded by 1 case. The patient suffered a intracerebral haemorrhage following first cycle of chemotherapy.

| % Performance in previous year | SCAN |
|--------------------------------|------|
| 2017-2018                      | 5.6% |
| 2018-2019                      | 0.0% |

**QPI 5i (b) - AML Early Deaths in patients aged > 60 years**

Target &lt;18%

Numerator = Proportion of patients with Acute Myeloid Leukaemia being treated with curative intent who die within 30 days of treatment.

Denominator = All patients with Acute Myeloid Leukaemia over 60 years of age being treated with curative intent (no exclusions).

| Target <18%                    | SCAN         |
|--------------------------------|--------------|
| 2019-20 cohort                 | 71           |
| Ineligible for this QPI        | 61           |
| Numerator                      | 2            |
| Not recorded for the numerator | 0            |
| Denominator                    | 10           |
| Not recorded for exclusions    | 0            |
| Not recorded for denominator   | 0            |
| <b>% Performance</b>           | <b>20.0%</b> |

**Comment** The target was changed following Formal Review in April 2018.

The minimum target was exceeded by 2 cases. 1 patient suffered a cardiac arrest and 1 suffered a fatal head injury as the result of a fall.

| % Performance in previous years | SCAN  |
|---------------------------------|-------|
| 2017-2018                       | 13.3% |
| 2018-2019                       | 0%    |

**QPI 5ii (a) Early Deaths ALL 16-60 years**

Target &lt;8%

Numerator = proportion of patients with Acute Lymphoblastic Leukaemia being treated with curative intent who die within 35 days of treatment.

Denominator = All patients with ALL 16-60 years being treated with curative intent (no exclusions).

| Target <8%                     | SCAN        |
|--------------------------------|-------------|
| 2019-20 cohort                 | 71          |
| Ineligible for this QPI        | 65          |
| Numerator                      | 0           |
| Not recorded for the numerator | 0           |
| Denominator                    | 6           |
| Not recorded for exclusions    | 0           |
| Not recorded for denominator   | 0           |
| <b>% Performance</b>           | <b>0.0%</b> |

**Comments:** The target was changed following Formal Review in April 2018.

The target was met in all Health Boards with eligible patients.

| % Performance in previous years | SCAN |
|---------------------------------|------|
| 2017-2018                       | 0%   |
| 2018-2019                       | 0%   |

**QPI 5ii (b) Early Deaths ALL >60 years**

Target &lt;20%

Numerator = Proportion of patients with Acute Lymphoblastic Leukaemia being treated with curative intent who die within 35 days

Denominator = All patients with ALL >60 years being treated with curative intent (no exclusions)

| Target <20%                    | SCAN         |
|--------------------------------|--------------|
| 2018-19 cohort                 | 71           |
| Ineligible for this QPI        | 67           |
| Numerator                      | 1            |
| Not recorded for the numerator | 0            |
| Denominator                    | 4            |
| Not recorded for exclusions    | 0            |
| Not recorded for denominator   | 0            |
| <b>% Performance</b>           | <b>25.0%</b> |

**Comments:** The target was changed following Formal Review in April 2018.

The minimum target was exceeded by 1 case (neutropenic sepsis and bronchopneumonia).

| % Performance in previous years | SCAN  |
|---------------------------------|-------|
| 2017-2018                       | 0%    |
| 2018-2019                       | 33.0% |

**QPI 7 Deaths in Remission**

Target &lt;10%

Numerator = Number of patients with acute leukaemia undergoing treatment with curative intent who achieve first complete remission (CR) and die within 1 year of diagnosis, whilst in CR.

Denominator = All patients with acute leukaemia undergoing treatment with curative intent who achieve first CR.

Exclusions = Patients undergoing bone marrow /stem cell transplant

| Target <10%                    | SCAN        |
|--------------------------------|-------------|
| 2018-19 cohort                 | 51          |
| Ineligible for this QPI        | 36          |
| Numerator                      | 0           |
| Not recorded for the numerator | 0           |
| Denominator                    | 15          |
| Not recorded for exclusions    | 0           |
| Not recorded for denominator   | 0           |
| <b>% Performance</b>           | <b>0.0%</b> |

**Comments:** This QPI is reported 1 year in arrears using data collected during 2018-2019.

The target was met by all boards.

| % Performance in previous years | SCAN |
|---------------------------------|------|
| 2014-15                         | 0.0% |
| 2015-16                         | 0.0% |
| 2016-17                         | 0.0% |
| 2017-18                         | 7.7% |
| 2018-19                         | 0.0% |

## QPI 8 Clinical Trials with Curative Intent

Target 60%

Numerator = Number of patients with acute leukaemia who are treated with curative intent enrolled in a clinical trial.

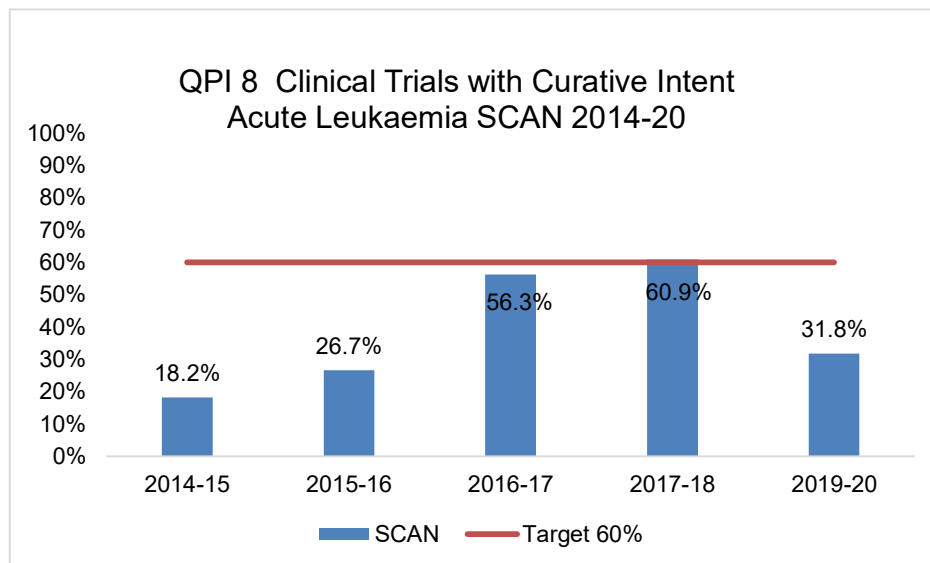
Denominator = All patients with acute leukaemia who are treated with curative intent

Exclusions = Patients who refuse entry into a clinical trial, patients over 60 years of age.

| Target 60%                     | SCAN         |
|--------------------------------|--------------|
| 2019-20 cohort                 | 71           |
| Ineligible for this QPI        | 49           |
| Numerator                      | 7            |
| Not recorded for the numerator | 0            |
| Denominator                    | 22           |
| Not recorded for exclusions    | 0            |
| Not recorded for denominator   | 0            |
| <b>% Performance</b>           | <b>31.8%</b> |

**Comments:** Patients who are considered ineligible for entry to a clinical trial are included in the measurability. This was queried with ISD and will be discussed at the Formal Review in 2021.

Trial activity was halted during Covid19 pandemic, AML 18 and 19 were both closed. There was no negative impact on patient treatment. In some cases the best treatment options were not available on trial and patients were treated off trial by choice. AML 18 has reopened and AML19 is about to open (already open in Fife) at time of reporting, no other action required.



### QPI 9 Tissue Typing for Transplant

Target 90%

Numerator = Proportion of acute leukaemia patients with acute leukaemia between 16 and 65 treated with curative intent with a specimen sent to the lab for tissue typing at diagnosis

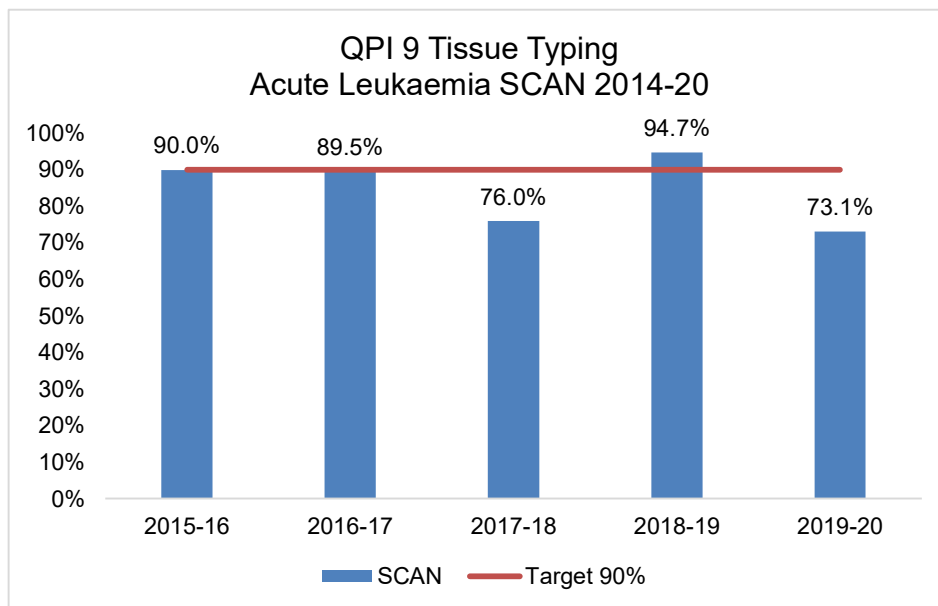
Denominator = All patients with acute leukaemia between 16 and 65 being treated with curative intent (no exclusions).

| Target 90%                     | SCAN         |
|--------------------------------|--------------|
| 2019-20 cohort                 | 71           |
| Ineligible for this QPI        | 45           |
| Numerator                      | 19           |
| Not recorded for the numerator | 0            |
| Denominator                    | 26           |
| Not recorded for exclusions    | 0            |
| Not recorded for denominator   | 0            |
| <b>% Performance</b>           | <b>73.1%</b> |

#### Comments

The target was not met showing a shortfall of 7 cases. 2 were APML patients who were considered curable and therefore did not require tissue typing, 2 had clinical decisions not to perform tissue typing, 1 patient died within 3 days of diagnosis giving insufficient time to prepare a sample for tissue typing. In 2 cases the response to first chemotherapy cycle was monitored before considering transplant.

A check list is in place to achieve this QPI. There were no clinical concerns and no action identified.



**QPI 10 (i) Intensive Chemotherapy in Older Adults**

Target 30%

Numerator = Number of patients with acute leukaemia 60 years of age and over with PS 0-1 who receive intensive chemotherapy

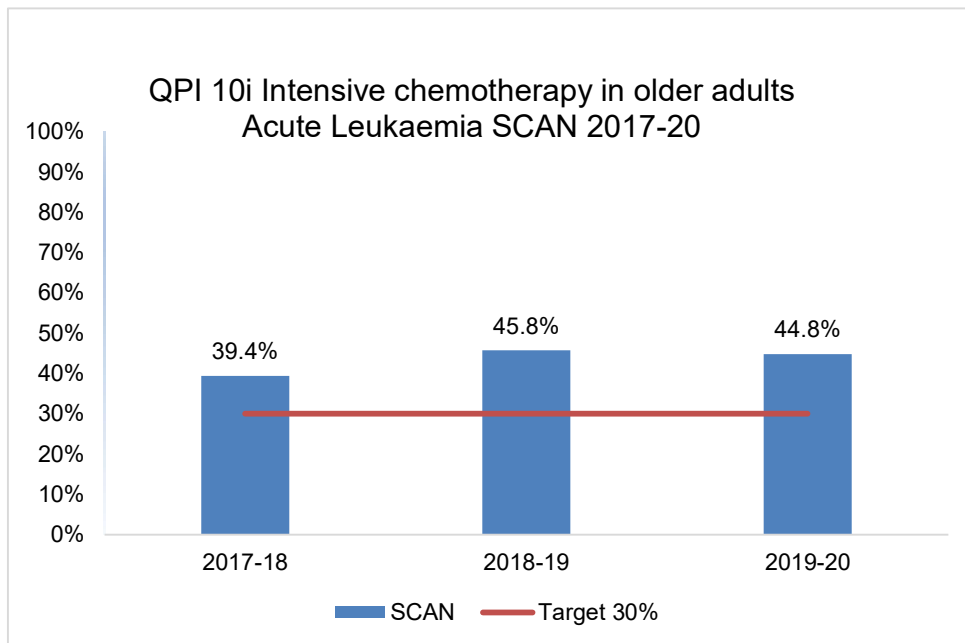
Denominator = All patients with acute leukaemia 60 years of age and over with PS 0-1 (no exclusions).

| Target 30%                     | SCAN         |
|--------------------------------|--------------|
| 2018-19 cohort                 | 71           |
| Ineligible for this QPI        | 42           |
| Numerator                      | 13           |
| Not recorded for the numerator | 0            |
| Denominator                    | 29           |
| Not recorded for exclusions    | 0            |
| Not recorded for denominator   | 0            |
| <b>% Performance</b>           | <b>44.8%</b> |

**Comment:** The target has changed following Formal Review in April 2018 therefore this QPI is not directly comparable with years 2014-17 (target 20%) Patients who decline treatment are included in the measurability. This was queried with ISD and will be discussed at the next Formal Review in 2021.

The target was met in SCAN

This QPI is largely affected by patient choice and no action has been identified.



### QPI 10(ii) Intensive Chemotherapy in Older Adults

Target 70%

Numerator = Number of patients with acute leukaemia 60 years of age and over who receive intensive chemotherapy enrolled in a clinical trial.

Denominator = All patients with acute leukaemia 60 years of age and over who receive intensive chemotherapy (no exclusions).

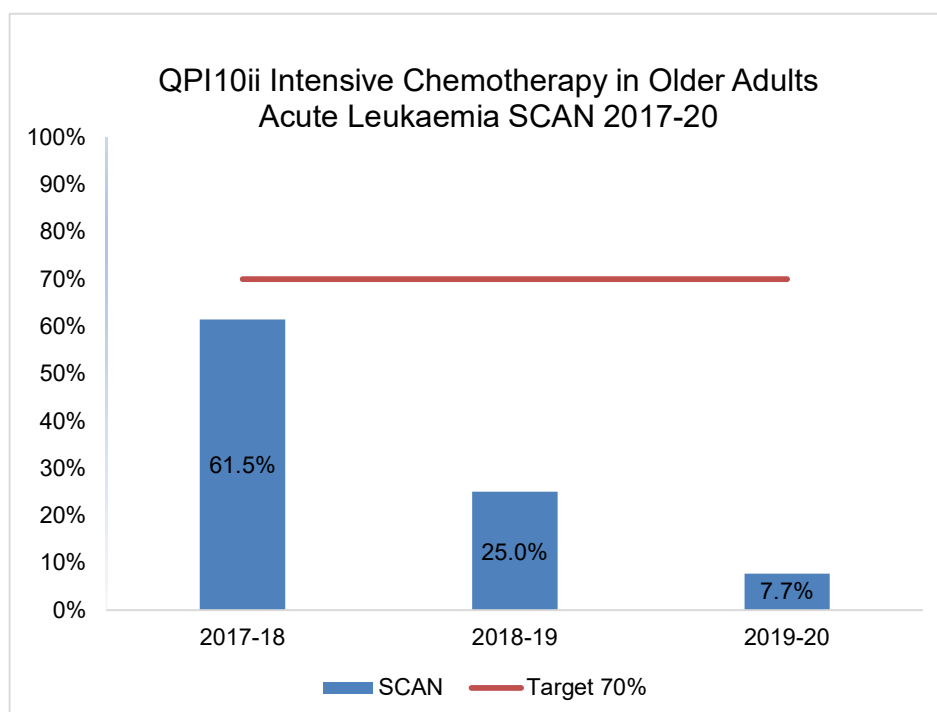
| Target 70%                     | SCAN        |
|--------------------------------|-------------|
| 2019-20 cohort                 | 71          |
| Ineligible for this QPI        | 57          |
| Numerator                      | 1           |
| Not recorded for the numerator | 0           |
| Denominator                    | 13          |
| Not recorded for exclusions    | 0           |
| Not recorded for denominator   | 0           |
| <b>% Performance</b>           | <b>7.7%</b> |

**Comments:** Following formal review the target was changed and is not directly comparable to previous years. (2014-17 target 80%)

Clinical trials are no longer representing a good standard of care and are not in patients best interests.

The target was not met showing a shortfall of 12 cases. Trials were suspended during the Covid 19 pandemic.

Trial availability affected this QPI, and no action was identified.





## QPI 11 Clinical Trials with Non Curative Intent

Target =10%

Numerator = Number of patients with acute leukaemia who are treated with non-curative intent enrolled in a clinical trial.

Denominator = All patients with acute leukaemia who are treated with non-curative intent.

Exclusions= Patients who refuse entry into a clinical trial.

| Target 10%                     | SCAN        |
|--------------------------------|-------------|
| 2019-20 cohort                 | 71          |
| Ineligible for this QPI        | 44          |
| Numerator                      | 1           |
| Not recorded for the numerator | 7           |
| Denominator                    | 27          |
| Not recorded for exclusions    | 0           |
| Not recorded for denominator   | 0           |
| <b>% Performance</b>           | <b>3.7%</b> |

| % Performance in previous years | SCAN  |
|---------------------------------|-------|
| 2014-15                         | 11.1% |
| 2015-16                         | 0.0%  |
| 2016-17                         | 0.0%  |
| 2017-18                         | 0.0%  |
| 2018-19                         | 0.0%  |

**Comments:** Trials were suspended during Covid 19 pandemic. The clinical trials available for this group offer no new treatments and there is no confidence in treatment available on trial. This is applicable to all health boards.

Trial availability affected this QPI, and no action was identified

**Action:** Consider reviewing this QPI at formal review in 2021.

**QPI 12 Palliative Treatment** Target 55%

Numerator: Number of patients with acute myeloid leukaemia who are suitable only for treatment with non curative intent who receive palliative chemotherapy with either low dose cytarabine or azacytidine.

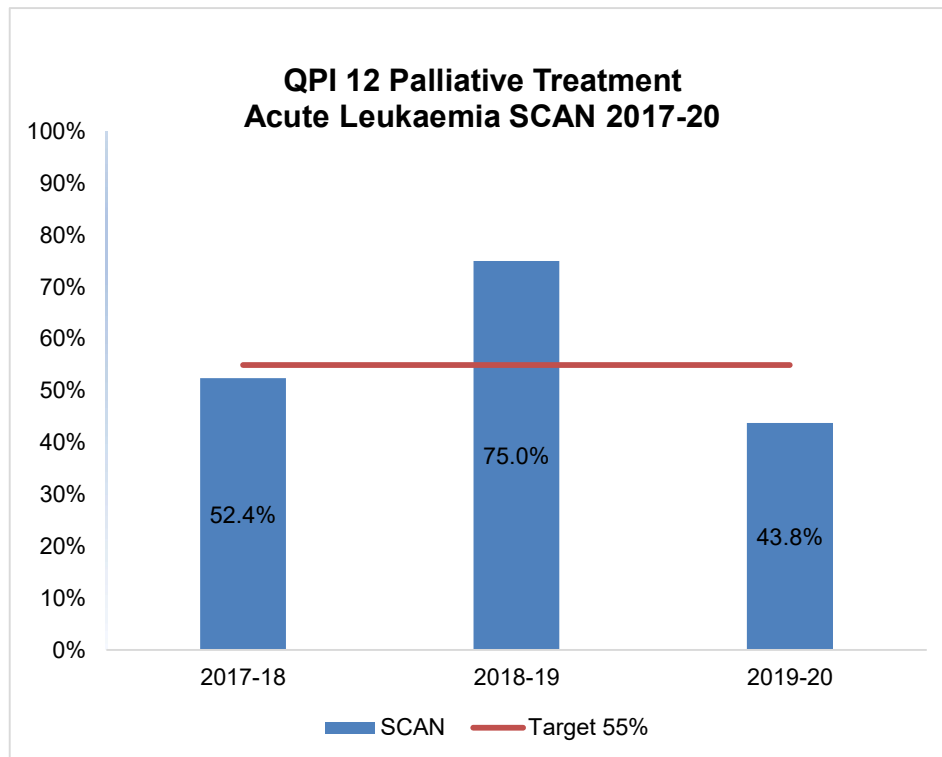
Denominator: All patients with acute myeloid leukaemia who are suitable only for treatment with non-curative intent.

Exclusions: Patients who refuse chemotherapy treatment, patients with adverse cytogenetics.

| Target 55%                     | SCAN         |
|--------------------------------|--------------|
| 2019-20 cohort                 | 71           |
| Ineligible for this QPI        | 53           |
| Numerator                      | 7            |
| Not recorded for the numerator | 0            |
| Denominator                    | 16           |
| Not recorded for exclusions    | 0            |
| Not recorded for denominator   | 0            |
| <b>% Performance</b>           | <b>43.8%</b> |

**Comments:**

The target was not met with a shortfall of 9 cases. 8 patients were unfit for chemotherapy and received best supportive care. 1 was treated with an appropriate alternative regime



### QPI 13 Early Deaths in Patients with Acute Promyelocytic Leukaemia (APL)

Target <25%

Numerator = Number of patients with APL who die within 30 days of diagnosis

Denominator = All patients with APL (no exclusions)

| Target <25%                    | SCAN         |
|--------------------------------|--------------|
| 2019-20 cohort                 | 71           |
| Ineligible for this QPI        | 67           |
| Numerator                      | 1            |
| Not recorded for the numerator | 0            |
| Denominator                    | 4            |
| Not recorded for exclusions    | 0            |
| Not recorded for denominator   | 0            |
| <b>% Performance</b>           | <b>25.0%</b> |

**Comments:** This is a new QPI introduced after Formal Review. As numbers are small results will become more meaningful with further years of data collection.

| % Performance in previous years | SCAN                 |
|---------------------------------|----------------------|
| 2017-18                         | 33.3%                |
| 2018-19                         | No eligible patients |

### QPI 14 Clinical Trials QPI

Proportion of patients with Acute Leukaemia who are consented to a clinical trial / research.

Target =15%

**Numerator** = Number of patients with Acute Leukaemia consented to a clinical trial / research.

**Denominator** = Average 5 year incidence of Acute Leukaemia from Cancer Registry (2014 – 2018)

Cancer registry data was obtained from ISD,

| Target 15%           | SCAN         |
|----------------------|--------------|
| Numerator            | 6            |
| Denominator          | 51           |
| <b>% Performance</b> | <b>22.0%</b> |

| Open Trials in 2019      | Numbers recruited |
|--------------------------|-------------------|
| AML18 (over 60 years )   | 2                 |
| AML 19 (under 60 years ) | 2                 |
| UKALL 14                 | 2                 |

**Comment:**

The target was met in SCAN.

## Age Distribution

| Age Range      | SCAN |
|----------------|------|
| 2019-20 cohort | 71   |
| <50 years      | 12   |
| 50-59 years    | 12   |
| 60- 69 years   | 11   |
| 70-79 years    | 23   |
| >80 years      | 13   |

## Summary of Sex and Age Distribution - Acute Leukaemia 2019- 2020

| Age in years | Gender | SCAN |
|--------------|--------|------|
| <16          | M      | 6    |
|              | F      | 0    |
| 16-19        | M      | 0    |
|              | F      | 0    |
| 20-24        | M      | 1    |
|              | F      | 0    |
| 25-29        | M      | 0    |
|              | F      | 1    |
| 30-34        | M      | 0    |
|              | F      | 1    |
| 35-39        | M      | 0    |
|              | F      | 1    |
| 40-44        | M      | 0    |
|              | F      | 3    |
| 45-49        | M      | 1    |
|              | F      | 1    |
| 50-54        | M      | 1    |
|              | F      | 1    |
| 55-59        | M      | 2    |
|              | F      | 3    |
| 60-64        | M      | 4    |
|              | F      | 2    |
| 65-69        | M      | 2    |
|              | F      | 1    |
| 70-74        | M      | 9    |
|              | F      | 0    |
| 75-79        | M      | 4    |
|              | F      | 4    |
| 80-84        | M      | 6    |
|              | F      | 1    |
| >85          | M      | 1    |
|              | F      | 3    |
| Total        |        | 60   |

**Note:** The above figures include the <16 year age group from each health board. The <16 age group are not included in the QPI analysis

## Appendix

| Acute Leukaemia QPI Attainment Summary 2018-19  |   | % Target | SCAN         |       |
|---|---|----------|--------------|-------|
| QPI 1 Diagnostic Panel  |   | 90       | N 26<br>D 27 | 96.3% |
| QPI 3 Proportion of patients discussed at MDT   |   | 95       | N 49<br>D 51 | 96.1% |
| QPI 5 Patients treated with curative intent who die within 30/35 days of treatment  | AML 16-60   | <8       | N 0<br>D 12  | 0.0%  |
|   | AML >60 years   | <18      | N 0<br>D 9   | 0.0%  |
|   | ALL 16-60 years   | <2       | N 0<br>D 3   | 0.0%  |
|   | ALL > 60 years  | <20      | N 1<br>D 3   | 33.3% |
| QPI 7 Patients treated with curative intent who die in first complete remission, within 1 year of diagnosis.                              |   | <10      | N 2<br>D 26  | 7.7%  |
| QPI 8 Patients treated with curative intent , enrolled on a clinical trial (16-60 years)  |   | 60       | N 8<br>D 15  | 53.3% |
| QPI 9 Patients treated curatively who have tissue typing performed at diagnosis.  |   | 90       | N 18<br>D 19 | 94.7% |
| QPI 10 Intensive chemotherapy in older adults (over 60)   | PS 0-1 receiving intensive chemotherapy                           | 30       | N 11<br>D 24 | 45.8% |
|   | Receiving intensive chemotherapy and enrolled in a clinical trial | 70       | N 3<br>D 12  | 25.0% |
| QPI 11 Proportion of patients treated with non curative intent who are enrolled in a clinical trial                                       |   | 10       | N 0<br>D 18  | 0.0%  |
| QPI 12 Proportion of patients with AML treated with non curative intent who receive appropriate SACT regimen                              |   | 55       | N 6<br>D 8   | 75.0% |
| QPI 13 Proportion of patients with APL who die within 30 days of diagnosis  |   | <25      | N 0<br>D 0   | NA    |
| QPI 14 Clinical Trial and Research Study Access (N = All AL patients consented for trials/research D = 5 year average in Cancer Registry) |   | 15       | N 19<br>D 48 | 39.6% |