Lung Cancer Pathway Board
Annual Report 2015/16

Pathway Clinical Director: Neil Bayman
Pathway Manager: Claire O’Rourke

<table>
<thead>
<tr>
<th>Pathway Clinical Director:</th>
<th>Neil Bayman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathway Manager:</td>
<td>Claire O’Rourke</td>
</tr>
<tr>
<td>Date agreed by Pathway Board:</td>
<td>To be ratified at September 2016 Lung Cancer Pathway board meeting</td>
</tr>
<tr>
<td>Date agreed by Medical Director:</td>
<td></td>
</tr>
<tr>
<td>Review date:</td>
<td>January 2017</td>
</tr>
</tbody>
</table>

Version 1.0
Executive summary

- The Lung Cancer Pathway Board meets every 3 months. Attendance to the board meetings has been excellent with representation from each provider trust, primary care and commissioning. In 2016, the board welcomed 2 people affected by cancer (PAbC) representatives.

- The Lung Cancer Pathway Board is committed to wider engagement, with pathway board members represented on local, national and international lung cancer groups and committees.

- The Lung Cancer Pathway Board held the second annual Lung Cancer Education and Engagement Event on 18th March 2016, attended by >100 delegates and rated "useful" or "really useful" by > 98%.

- The Lung Cancer Pathway board has defined a vision for partnership working and collective accountability to improve outcomes and reduce variation based on 3-steps:
  1) Defining measurable lung cancer quality standards
  2) Provider trusts working in partnership in a sectorised model of care, with a sector MDT responsible for performance of the entire pathway
  3) Pathway governance and quality improvement, based on robust real-time pathway performance data

- The Lung Cancer Pathway Board has approved an updated list of Manchester Cancer Lung Cancer Quality Standards and associated outcome measures defining what a “gold standard” lung cancer pathway should look like in Greater Manchester and East Cheshire, including the ambition for 50% of patients to be diagnosed in 14 days and 95% being diagnosed in 28 days from referral with suspected cancer (from an average of 30-days currently – MC Lung Pathway audit, July 2015). These standards were formed from a wider consultation workshop at the Lung Cancer Education and Engagement Event in March 2016.

- The MC Lung Pathway Board has succeeded in establishing 4 weekly sector lung cancer MDT from the 10 weekly MDTs (8 single hospital-based) in 2014. The final sector MDT (South Sector MDT) formed in November 2015. All Sector MDTs are working to the MC Sector MDT Charter.
• There has been an immediate improvement in oncology and surgery attendance at MDT with both > 95%. Medical oncology expertise is now present in 3 of the 4 SMDTs. Moving UHSM secondary care MDT work to a sector MDT has enabled a weekly regional specialists Mesothieoma in its place.

• The MC Lung Cancer Patient Experience Survey was launched in January 2016 and is being piloted in the Central Sector MDT. Developed in partnership with people affected by cancer and based on the national cancer patient experience survey, it aims to continuously collect standardised lung cancer patient experience data across GM and East Cheshire for the first time.

• The Lung Pathway Board was awarded a grant from the NHS England Support Accelerate, Co-ordinate, Evaluate (ACE) for a pilot project using the Clinical Web Portal (CWP) for electronic referral to the NW sector MDT. This was to ensure robust real-time data collection relevant to lung pathway performance for all new NW sector lung cancer patients. CWP was successfully introduced to the NW sector MDT June-September 2015 and continues to collect robust, real-time data and outcomes on all patients diagnosed with lung cancer within the sector.

• The NW Sector MDT held a Quality Improvement Workshop 27th November 2015. Using the first dataset produced by CWP, the sector MDT were able to demonstrate where improvements needed to be made and act accordingly, and defined 4 potential quality improvement projects which are shaping future directions of the lung pathway board. These included implementing a single-sector based rapid diagnostic pathway, and reducing time to lung cancer treatment.

• An outline for a sector-based rapid lung cancer pathway has been agreed based on 4 steps:

1. Direct access to CT from primary care
2. Immediate triage to rapid PETCT
3. Rapid access lung cancer clinic with 1-stop diagnostic bundle
4. Sector-based treatment clinics, including joint clinics with surgery, oncology, palliative care.

• Work is ongoing to test each step, including direct access to CT at Pennine, and rapid access 1-stop diagnostics in NW sector.
The Lung Cancer Board secured funding in May 2016 for a 5 month pilot study to develop direct access to CT from primary care, in partnership with the Vanguard/ACE-2 work under development for the Multidisciplinary Diagnostic Cancer Clinic.

- A quality improvement project to reduce time-to-treatment for lung cancer patients referred for radical radiotherapy, with all patients now receiving their first fraction within 14-days of decision-to-treat.

- Early engagement with palliative care has been identified as a priority. A pilot project at Pennine Acute NHS Trust is exploring a model for lung cancer.

- The Lung Cancer Pathology Subgroup is defining standard operating procedures for processing lung cancer histology, cytology, and molecular testing. A newly NHS funded diagnostic test for ALK gene rearrangement necessary to select treatment with an ALK inhibitor (crizotinib) is being established for each sector to reduce delays in sending samples to the Christie site. Medical education funding (Pfizer) has been secured for a short term project manager to oversee development of the Lung Pathology pathway. A new service for EGFR mutation testing from blood has been established at Central Manchester Genetics Laboratory to detect patients who may benefit from treatment with an EGFR inhibitor but who are unfit for biopsy or who do not have enough tissue to test from their diagnostic biopsy. This widens access to precision medicine treatments for the majority of lung cancer patients.

- Recruitment to lung cancer clinical trials remains high at UHSM and The Christie. Ambitious plans are in development to establish a Lung Cancer Research and Innovation Board led by Dr Fiona Blackhall, to bring together the lung cancer research and clinical networks in GM and East Cheshire.

- The Lung Cancer Pathway Board continues to work with partners, in particular
  - MacMillan Cancer Improvement Partnership (MCIP) to support projects aimed at improving outcomes and experience for lung cancer patients in Greater Manchester and East Cheshire,
  - Cancer Vanguard to develop faster transition from primary to secondary care for people with suspected lung cancer,
  - The pathology team received a MedEd Pfizer grant for a key pathology project.
  - The lung pathway has supported the collaboration with researchers of Manchester Cancer Research Centre and the CRUK Lung Centre of Excellence
to conduct leading and innovative research with ultimate aim to improve clinical outcomes.

- The Lung Cancer Pathway Board recognise the importance of co-production with people affected by cancer (PAbC), and has taken a number of steps to engage our patients in the service redesign:
  - Improving the Lung Cancer Patient Experience Survey
  - Designing a single synchronised sector-based pathway (NW Sector pilot)

Challenges:

- **Co-production with People affected by Cancer (PAbC):** This was a significant challenge for the first 2 years, now rectified with 2 PAbC representatives recently joining the board. Local Lung Cancer Support groups have been the source of PAbC involvement to date (for example supporting Patient Experience Survey)

- **Collaboration versus Competition paradox:** The core value of the lung Cancer board is collaboration, with teams working in partnership across organisational boundaries to develop single-synchronised-sector based pathways a key aim. This ambitious goal is made more challenging if counter indicatory to organisational interests of some trusts.

- **Resources:** This has been a significant challenge at every step. The core issues have been from time available to board members to develop lung pathway work, to availability of services required for rapid pathways (e.g. CT, PETCT, pathology, surgery, oncology and palliative care).

- **Balancing developments across entire pathway:** success of pathway projects to date has distracted from developing other aspects of pathway board work. Plans for restructuring pathway board aims to rebalance focus of work and developments going forward, for example living with and beyond.

- **Up-scaling pilot projects:** in partnership with The Christie Clinical Outcomes Group, CWP was successfully implemented in the NW SMDT collating real-time robust outcome data on all lung cancer patients within the sector. Similarly, the lung cancer patient experience survey has been tested in the Central Sector. Both projects require evaluation, improvement, and roll-out across the Manchester Cancer footprint.

- **One Manchester:** The board is acutely aware that the decision making around the re-organisation of NHS services in Greater Manchester is a potential risk to the objectives to the board and the decisions made will have implications on the services.
Introduction – the Pathway Board and its vision

This is the annual report of the Manchester Cancer Lung Pathway Board for 2015/16. This annual report is designed to:

- Provide a summary of the work programme, outcomes and progress of the Board – alongside the minutes of its meetings, its action plan and its scorecard, it is the key document for the Board.
- Provide an overview to the hospital trust CEOs and other interested parties about the current situation across Manchester Cancer in this particular cancer area
- Meet the requirements of the National Cancer Peer Review Programme
- Be openly published on the external facing website.

This annual report outlines how the Pathway Board has contributed in 2015/16 to the achievement of Manchester Cancer’s four overarching objectives:

- Improving outcomes, with a focus on survival
- Improving patient experience
- Increasing research and clinical innovation
- Delivering compliant and high quality services

1.1. Vision

The Lung Cancer Pathway Board has a 3-year plan to establish truly integrated lung cancer care, with provider trusts working in partnership taking collective accountability for pathway performance and quality improvement. Promoting engagement and encouraging innovation through a sustainable system to identify and share best practice will ultimately improve outcomes and reduce variation in lung cancer care across Greater Manchester and East Cheshire.

1.2. Membership

The Lung Cancer Pathway Board membership listed below has representation from each provider trust, every discipline involved in the management of lung cancer, primary care and commissioning.

<table>
<thead>
<tr>
<th>Name</th>
<th>Provider Trust</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christine Eckersley</td>
<td>Bolton</td>
<td>Lung Cancer CNS</td>
</tr>
<tr>
<td>Neil Bayman</td>
<td>Christie</td>
<td>Consultant Clinical Oncology</td>
</tr>
<tr>
<td>Yvonne Summers</td>
<td>Christie</td>
<td>Consultant Medical Oncology</td>
</tr>
<tr>
<td>Fiona Blackhall</td>
<td>Christie</td>
<td>Consultant Medical Oncology</td>
</tr>
<tr>
<td>Ben Taylor</td>
<td>Christie</td>
<td>Consultant Radiologist</td>
</tr>
</tbody>
</table>
The board is delighted to have such a broad spectrum of representatives and especially the two new User Involvement representatives of Manchester Cancer.
Specific roles as set out in the Terms of Reference are designated to the following members:

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Neil Bayman</td>
<td>Pathway Board Clinical Director and Lead for Education</td>
</tr>
<tr>
<td>Dr Yvonne Summers</td>
<td>Pathway Board Lead for Oncology</td>
</tr>
<tr>
<td>Dr Fiona Blackhall</td>
<td>Pathway Board Lead for Research</td>
</tr>
<tr>
<td>Dr Ben Taylor</td>
<td>Pathway Board Lead for PETCT</td>
</tr>
<tr>
<td>Dr Durgesh Rana</td>
<td>Pathway Board Lead for Cytopathology</td>
</tr>
<tr>
<td>Mrs Lorraine Creech</td>
<td>Pathway Board Lead for Mesothelioma</td>
</tr>
<tr>
<td>Dr Paul O’Donnell</td>
<td>Pathway Board Lead for Palliative Care</td>
</tr>
<tr>
<td>Dr Carolyn Allen</td>
<td>Pathway Board Lead for Radiology</td>
</tr>
<tr>
<td>Mrs Carol Diver</td>
<td>Pathway Board Lead for Living With and Beyond Cancer</td>
</tr>
<tr>
<td>Mr Rajesh Shah</td>
<td>Pathway Board Lead for Surgery</td>
</tr>
<tr>
<td>Dr Richard Booton</td>
<td>Pathway Board Lead for EBUS</td>
</tr>
<tr>
<td>Dr Phil Barber</td>
<td>MCIP Programme representative</td>
</tr>
<tr>
<td>Dr Leena Joseph</td>
<td>Pathway Board Lead for Histopathology</td>
</tr>
<tr>
<td>Dr Ram Sundar</td>
<td>Pathway Board Lead for Early Detection</td>
</tr>
<tr>
<td>Dr Liam Hosie</td>
<td>Pathway Board Lead for Primary Care</td>
</tr>
</tbody>
</table>
1.3. Meetings

Lung Pathway Board meetings are held every 3 months. There have been 6 pathway board meetings held to date. The minutes and attendance record of the Lung Pathway Board meetings can be found on the Lung Pathway Board page of the Manchester Cancer website http://manchestercancer.org/services/lung/.

The Lung Pathway Board is committed to wider engagement with partners involved in the care of patients with lung cancer. In particular, we work closely with the MacMillan Cancer Improvement Partnership (MCIP) to ensure complementary objectives and work-plans. Dr Barber (MCIP Lung Clinical Lead) represents MCIP on the Lung Cancer Pathway Board, and Dr Bayman sits on the MCIP Early Diagnosis Steering Group. We have been keen to engage the Greater Manchester Cancer Commissioning Board (GMCCB). At a national level, we are represented on the NHS England Lung Cancer Clinical Reference Group (CRG). Furthermore, pathway board members are also steering-group/committee members on several international lung cancer groups (IASLC, ETOP, BTOG etc).

The lung pathway board undertook a survey in August 2015 of to review member’s perceptions of the board meeting to instigate improvements, see below:

M:\Services\04 Pathways\Lung\Pathway Board Meetings\2015\Pathway board engagement.pdf

Educating healthcare professionals involved in lung cancer care is a key core aim of the lung cancer pathway board. The board has had 2 Lung Cancer Pathway Board Annual Education and Engagement Events in Manchester in March 2015 and March 2016.
## 2. Summary of delivery against 2015/16 plan

<table>
<thead>
<tr>
<th>No</th>
<th>Objective</th>
<th>Alignment with Provider Board objectives</th>
<th>Tasks</th>
<th>By</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Define and assure high quality care</td>
<td>Improving outcomes, with a focus on survival</td>
<td>Agree a list of MC Lung Pathway Quality Standards and Outcome Measures</td>
<td>June 2016</td>
<td>Complete actions to be agreed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Define a list of Manchester Cancer Endobronchial-Ultrasound Key Performance Indicators</td>
<td>June 2015</td>
<td>complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Define Annual Quality Account/Scorecard</td>
<td>June 2015</td>
<td>complete</td>
</tr>
<tr>
<td>2</td>
<td>Expanding the role of the MDT</td>
<td>Delivering compliant and high quality services</td>
<td>Mapping of current lung cancer MDT arrangements across Manchester Cancer</td>
<td>June 2015</td>
<td>Complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Agree proposed Lung Cancer Sector MDT configuration</td>
<td>June 2015</td>
<td>complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Define Manchester Cancer Lung Cancer Sector MDT Charter</td>
<td>October 2015</td>
<td>Complete-reviewed through pathway board</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Implement Lung Cancer Sector MDTs</td>
<td>Nov 2015</td>
<td>Complete-reviewed through pathway board</td>
</tr>
<tr>
<td>3</td>
<td>Effectively measure lung cancer patient experience across Manchester Cancer</td>
<td>Improving Patient Experience</td>
<td>Develop a Manchester Cancer Lung Pathway Patient Experience Survey</td>
<td>June 2015</td>
<td>complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Implement a Manchester Cancer Lung Pathway Patient Experience Survey</td>
<td>Nov 2015</td>
<td>Complete-uptake low under review</td>
</tr>
<tr>
<td></td>
<td>Increase Lung Cancer Research in all provider trusts/sectors</td>
<td>Increasing research and innovative practice</td>
<td>Develop a Manchester Cancer Lung Pathway Clinical Trial Portfolio</td>
<td>June 2015</td>
<td>Under development</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>----------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Research Nurses to become core members of Sector MDTs</td>
<td>Nov 2015</td>
<td>Under development</td>
</tr>
<tr>
<td>5</td>
<td>Education and collaborative working</td>
<td>Increase education</td>
<td>Develop a fully engaged representative Lung Cancer Pathway Board</td>
<td>June 2016</td>
<td>complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Patient representation on the Lung Cancer Pathway Board¹</td>
<td>June 2015</td>
<td>complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Host 1st Manchester Cancer Lung Pathway annual education event</td>
<td>June 2015/2016</td>
<td>complete</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Host regional GP/Primary Care Education Events</td>
<td>Nov 2015</td>
<td>Under review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Work alongside MacMillan Cancer Improvement Partnership (MCIP)</td>
<td>June 2015</td>
<td>complete</td>
</tr>
</tbody>
</table>
3. Improving outcomes, with a focus on survival

3.1. Information

Lung cancer is the leading cause of cancer mortality in England and the world. It is also the leading cause of premature death in the UK.

Table 1:

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>Number of Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lung Cancer</td>
<td>1000</td>
</tr>
<tr>
<td>Breast Cancer</td>
<td>800</td>
</tr>
<tr>
<td>Bowel Cancer</td>
<td>600</td>
</tr>
<tr>
<td>Other Cancer</td>
<td>400</td>
</tr>
</tbody>
</table>

Lung cancer causes more premature deaths in Greater Manchester than all other cancers combined

Lung Cancer common and the majority of people with lung cancer present late when treatment has a limited effect on mortality. Although tobacco smoking causes around 85% of lung cancers, almost half of people are ex-smokers or never smokers at presentation with almost 7000 people who develop lung cancer unrelated to smoking each year in the UK (about the same number as for ovarian or stomach cancer).

The diagnosis, staging, fitness assessment, treatment and supportive care of lung cancer are complex and require specialist expertise that is not always locally available. There is marked variation in treatment rates in England and marked variation in outcomes:

- Better outcomes are associated with better facilities and faster diagnostic pathways. It is important that all people have equal access to the best treatment rates if we are to achieve the outcomes seen in other European countries.
- The local commissioning structure offers flexibility but has the potential to increase variation if evidence based standards for services are not applied.
- Local service planning should involve patient representatives and consideration given to co-commissioning of integral specialist services.

3.2 Clinical web portal data and lung Cancer:

The Lung Cancer pathway board has taken an integrated approach to improving information and data quality as recommended by the Independent Cancer Taskforce 2015 and the new cancer taskforce strategy 2016.
A fundamental principle of the Lung Pathway Board during 2015-16 was to ensure robust governance of the lung cancer pathways, with collective accountability via the sector multidisciplinary teams (MDT) for performance and quality assurance.

To achieve this aim, the Lung Cancer Pathway Board was awarded a grant from the NHSE/CRUK/MacMillan Cancer Support Accelerate, Co-ordinate, Evaluate (ACE) programme for a pilot project proposing to transfer the Christie Clinical Web-Portal (CWP) (which uses web-forms into which clinicians input data on newly diagnosed cancer patients in real-time, resulting in a robust, prospective data-set of all patients treated at The Christie, from a single provider setting to a lung cancer sector MDT for 3 separate trusts outside of The Christie).

A bespoke lung pathway web-form which was instigated in June 2015 which has measured lung pathway performance against national key performance indicators, and local outcome measures defined in the recently approved Manchester Cancer Lung Cancer Pathway Quality Standards. Web-forms have acted as the electronic referral to the sector MDT. Data has been inputted by clinicians referring to the MDT, updated by the Web-form co-ordinator (funded by ACE) during the MDT, and completed by clinicians at the treatment clinics. The sector MDT’s have been responsible for ensuring complete, robust and real-time data collection for all patients diagnosed in that sector.

Following a review of the pathway and analysis of the CWP data from July 2015 until June 2016, the following data was produced:

- 830 patients (927 discussions) for diagnosis and staging prior to treatment
- 27 patients (27 discussions) for post-treatment management
- Together 850 patients (954 discussions) 7 patients had both (discussion before and after treatment)
- 756 patients discussed once, 84 discussed twice, 10 discussed three times.
- Example of SMDT electronic form:
The data that has been produced from the first analysis in November 2015, this has provided a very rich data set to be analysis by all the NW Sector MDT teams. A full analysis will be presented to in the pathway board for lung September 2016.

MDT Discussion by Month (July 2015-june 2016).

Presentation by Trust emergency/ non emergency.
Timings of CT scan.

First respiratory physicians seen.

Performance status

Lung Cancer stage by Trust.
Smoking history

<table>
<thead>
<tr>
<th>Bolton</th>
<th>Salford</th>
<th>Wigan</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>41</td>
<td>23</td>
<td>119</td>
</tr>
<tr>
<td>40</td>
<td>41</td>
<td>8</td>
<td>89</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>13</td>
<td>8</td>
<td>14</td>
<td>35</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>1</td>
<td>13</td>
</tr>
</tbody>
</table>

Further investigations
- Further investigations or review and MDT discussion required
- Further investigations or review required but referral to go ahead
- Interval scan with further MDT discussion
- Interval scan and refer back to MDT if necessary
- Referred to another MDT or specialty

Treatment planned
- Surgery (central)
- External beam radiotherapy
- Concurrent chemoradiotherapy
- Chemotherapy
- Chemotherapy with biological therapy
- Intraluminal brachytherapy
- Biological therapy alone
- Surveillance
- Best supportive care
- No further oncological care
- Discharge from pulmonary oncology care
- Other

MDT outcomes

<table>
<thead>
<tr>
<th>Bolton</th>
<th>Salford</th>
<th>Wigan</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15%</td>
<td>15%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td>11%</td>
<td>15%</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>3%</td>
<td>3%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>1%</td>
<td>3%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Further investigations
- Further investigations or review and MDT discussion required
- Further investigations or review required but referral to go ahead
- Interval scan with further MDT discussion
- Interval scan and refer back to MDT if necessary
- Referred to another MDT or specialty

Treatment planned
### 3.3. Survival

Data and information from the national lung Cancer patients Audit published in 2015 highlighted marginal improvements have been made in the last few years in survival and the proportion of patients with small cell lung cancer receiving chemotherapy, and in the proportion having access to a lung cancer nurse specialist (LCNS).

Despite these improvements, there remains marked variation across Trusts and Networks and differences in case-mix. The proportion of patients with early stage lung cancer who receive surgery varies from 33.3 per cent to 62.9 per cent when measured at Network level (data from the lung Cancer patient Audit 2014). Since surgical treatment represents the best chance of cure of the disease, these data suggest that a substantial number of patients are needlessly dying of lung cancer as a result of local variation in care.

A similar picture emerges for patients who have advanced and incurable disease. In this group chemotherapy is known to extend life expectancy and improve quality of life, yet treatment rates vary 47.5 per cent to 62.9 per cent across the Networks.

This variation is evident in Greater Manchester and Cheshire and one of the key objectives and outcomes of the pathway board in the next 3 years is to support Trusts to control such variation.

The clinical web portal has produced data on survival, but as this is only one years’ worth of data analysed limited assumptions can be drawn from this, but this will be more evidenced in once more data is available through 2016-17.
For the purposes of the National Lung Cancer Audit, survival time is measured from the date first seen in secondary care and is therefore subject to lead-time bias. It is not possible to extract a Manchester Cancer specific 1 year survival from the national dataset.
3.4. Lung Cancer Clinical Nurse Specialists (CNS)

The Manchester Cancer Lung Cancer Pathway Quality Standards includes the national standard which states “People with known or suspected lung cancer have access to a named lung cancer clinical nurse specialist who they can contact between scheduled hospital visits.” This was highlighted in the National Cancer patient Audit in 2014 and the national cancer patient audit in 2015.

The proportion of patients diagnosed in Greater Manchester and East Cheshire has increased and there was an increase in nurse specialist present in 2014. This is mirrored by the views of patients in the patient experience survey 2015, in which 92% of patients reports being seen by a specialist nurse at diagnosis.
The lung cancer pathway crosses multiple specialities and the lung CNS is essential for ensuring continuity of care. CNSs serve important roles as links between clinicians from different specialities acting as advocates and liaising between specialities (including primary care and palliative care teams).

CNSs provide holistic assessment for patients, covering physical, emotional, social, spiritual, sexual, financial and everyday life needs, triaging to other services if needed. Lung CNSs have a special role to play in communicating information and enabling patients to take a full role in decisions around their care. Data from the National Lung Cancer Audit have also revealed the influence that CNSs may have in supporting patients to choose active treatment.

The proportion of lung cancer patients in Greater Manchester and Cheshire who had seen a lung cancer CNS was higher than the national average (86.4% vs 83.9% respectively).

**Progress:**
The Christie hospital in June 2016 has agreed to fund 4 new specialists’ nurses in lung Cancer services to support the MDT teams, but most importantly to patients and their families. There will be a full evaluation of the benefits to the services, supported by MacMillan Cancer Care, with project management support, this will be evaluated in 2017.
3.5. Treatments for Lung Cancer

Active treatment for lung cancer includes surgery, chemotherapy and radiotherapy. The National Lung Cancer Audit recommends an operational standard active treatment rate > 60%. In 2015, the active treatment rates for lung cancer patients in Greater Manchester and East Cheshire was greater than the national average.

3.6 Progress

The lung Cancer pathway board has made significant progress in setting ambitious plans to improve outcomes and survival in lung Cancer patients in Greater Manchester and Cheshire. The pathway board have recognised that early detection of lung cancer is the single most important factor likely to improve survival, innovative work in underway across Greater Manchester and East Cheshire, supported by the ACE programme.

The lung Cancer pathway board have acknowledged that during 2015 there have been significant projects across organisations to improve outcomes:

- The Rapid access project at UHSM commenced in May 2016
- The MacMillan Cancer Improvement Program (MCIP) project for early detection and diagnosis on lung cancer
- Mid-Cheshire Hospitals NHS FT in collaboration with South Cheshire and Vale Royal CCGs, supported by MacMillan, ACE, and the Public Health Transformation Fund, an ambitious project is underway to improve outcomes of people with symptoms of lung cancer, focussing on education, increasing awareness with a pro-active approach to high-risk groups, reducing barriers to diagnosis.
- An ACE supported project is currently underway in Wigan aiming to risk assess for lung cancer and nurse led triage and direct access to CT
- Pennine have been heavily involved in the ACE 1 and ACE2 of rapid access diagnosis and MDC cancer clinic proposal.
Current clinical guidelines for the management of lung cancer in Greater Manchester can be found at [http://manchestercancer.org/services/lung/](http://manchestercancer.org/services/lung/). The guidelines will be updated as part of the 2015/6 annual plan.

3.7 Challenges

The data collection using CWP in the NW sector MDT started July 2015, but there have been some difficulties in extracting the data and producing a robust reporting structure for this with the clinical web systems team at the Christie. However the data produced so far has been excellent if the CWP pilot is successful, it is important that the system is quickly expanded to all 4 sector MDTs. Furthermore, it is essential that the Manchester Cancer/Christie Joint CWP Development Group, NW sector MDT and Lung Cancer Pathway Board work together to overcome any failings identified.

Early engagement with the Cancer Commissioning Board has been established with support for the process outlined above. It is essential that the Lung Cancer Pathway Board continues to work in partnership with the Cancer Commissioning Board, providing high quality data on pathway performance, clinical outcomes and patient experience to empower and inform effective commissioning of lung cancer services going forward. This is particularly important for the innovative early detection projects outlined above, so that any clinical benefits resulting from successful projects can be shared and implemented across Greater Manchester.
4 Improving patient experience

4.1 Information

The 2016 National Cancer Patient Experience Survey included all patients who had been treated as inpatients or day cases between 1st September 2014 and 30th November 2015.

The results of the survey relating to lung Cancer of detailed below on the Manchester Cancer website:
M:\Services\05 Outcomes and data\Patient experience\NCPES 2015\NCPES 2015 - Tumour Site.xlsx

A number of improvements have been made to the survey from previous years. This means that caution needs to be applied when comparing this with previous surveys.

Due to the late publication of these findings the board has not had an opportunity to review the survey results and will do so at the next meeting of the board.

4.2 Progress

Due to the late publication of the national cancer patient survey in June 2016, it is still to be reviewed by the pathway board and full analysis will be planned in September 2016.

The lung Cancer Pathway Board has ensured that despite a national survey being in place, the pathway would instigate a speciality designed survey based on the national survey framework.

During the pathway meeting in June 2015, it was agreed that the limited response from Greater Manchester and East Cheshire lung cancer patients to the National Cancer Patient Experience Survey was likely to be a function of the methodology employed, and did not provide enough data to measure lung cancer patient experience across the whole of Greater Manchester and East Cheshire.

A working group led by Carol Diver, lead Clinical Nurse specialist at Tameside Hospital, developed the questionnaire based on questions from the national survey to capture data to measure against locally agreed quality standards, meet requirements for peer review, and to include the questions identified by a steering group of the Greater Manchester Cancer Partnership Group, colleagues at Macmillan, and other people affected by cancer, as meaning most to patients in our region. The Manchester Cancer Lung Cancer Patient Experience Survey has been reviewed by people affected by lung cancer at local lung cancer support groups and the local provider trusts. The survey was approved at the Lung Cancer Pathway Board meeting in June 2015.

The Manchester Cancer Lung Cancer Patient Experience Survey has been sent by post to all lung cancer patients approximately 4-weeks after diagnosis. The diagnosing NHS trust’s lung cancer CNS’s was responsible for distributing the questionnaire, which will include a stamped-address envelope to be returned directly to Manchester Cancer for analysis.
There was unfortunately a limited response to the survey through the electronic path, as most patients who have responded so far and completed a paper survey. A full analysis of the survey results will take place in September 2016.

4.3 Challenges

The Implementation of the Manchester Cancer Lung Cancer Patient Experience Survey has been delayed from July 2015 and full roll out was not achieved until November 2015. This is a planned delay to enable the MCIP patient experience survey to complete at the MCIP trusts. The challenge going forward is to ensure effective and complete implementation of the survey across Greater Manchester, and appropriate analysis within Manchester Cancer to produce a twice-yearly lung cancer patient experience response for individual trusts and sectors.

The lung Cancer pathway board have reviewed the process of question selection for the survey due to the low response rate. The two patient user representatives on the pathway board met with Carol in June 2016 and they will jointly work on a plan to review the questions and develop an improved plan for the survey.

4.4 User involvement within the lung Cancer pathway board.

Macmillan, in partnership with Manchester Cancer have funded a team to facilitate a User Involvement Programme of work that will establish a structure and platform for people affected by cancer to influence and steer the design of cancer services locally. The Lung Board is currently supported by the Macmillan User Involvement Team who provide support Service User Representatives (SURs) on the Board.

Key objectives of the User Involvement team working across Manchester Cancer up to March 2016:

- To ensure at least one person affected by cancer on each Pathway Board representing the wider community and where there is already one, to recruit another.
- For People Affected by Cancer to be fully involved and treated as equals.
- To recruit patients and carers to form a wider community of people affected by cancer involved at different levels through coproducing a menu of opportunities.
- To develop a robust UI strategy for Greater Manchester & East Cheshire, co-produced with people affected by cancer.

Progress

Key developments with User Involvement within the Lung Board are detailed below:

- Two SURs have been recruited to the Board and are directly feeding into meetings to advocate on behalf of people affected by cancer.
- The SURs have been fully inducted through the User Involvement Programme to ensure that they have an understanding of the Manchester Cancer structure they are feeding into, and the involvement opportunities available to them.
- The SURs are also linked in with the User Involvement Steering Group where issues relating to the Board can be taken to gain the views of wider people affected by cancer.
• A small group of people affected by Lung cancer have expressed an interest in being involved remotely.

Priorities
• To develop clear communication lines between the Pathway Board, the SURs and the Steering Group so that people affected by cancer can steer and support the work of the Board in a meaningful way by adding real value.
• To proactively seek out opportunities and projects within the Board with which the SURs can actively become involved.
• To write a case study to showcase how the involvement of the SURs has resulted in positive outcome for the Lung Pathway.
5. Increasing research and innovative practice

5.1 Information

The following lung cancer clinical trial recruitment activity is based on the NIHR Clinical Research Network: Greater Manchester report, using data extracted from the National NIHR Portfolio.

Within Greater Manchester CRN, recruitment to lung cancer trials was second only to breast cancer for site specific trial activity.

**Lung Cancer Clinical Trials Report – 2015/16 Q1 and Q2 report**

<table>
<thead>
<tr>
<th>Trust Name</th>
<th>Trust Type</th>
<th>ODS Code</th>
<th>Portfolio ID</th>
<th>Studies</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Christie NHS Foundation Trust</td>
<td>Acute</td>
<td>RBV</td>
<td>45</td>
<td>12</td>
<td>94</td>
</tr>
<tr>
<td>University Hospital of South Manchester NHS Foundation Trust</td>
<td>Acute</td>
<td>RM2</td>
<td>52</td>
<td>7</td>
<td>49</td>
</tr>
<tr>
<td>East Cheshire NHS Trust</td>
<td>Acute</td>
<td>RJN</td>
<td>57</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Pennine Acute Hospitals NHS Trust</td>
<td>Acute</td>
<td>RW6</td>
<td>220</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Salford Royal NHS Foundation Trust</td>
<td>Acute</td>
<td>RM3</td>
<td>48</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>149</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Trust</th>
<th>ODS Code</th>
<th>Portfolio ID</th>
<th>Studies</th>
<th>Participants</th>
<th>By FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Total</td>
<td>Total</td>
<td>454</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tameside Hospital NHS Foundation Trust</td>
<td>RMP</td>
<td>59</td>
<td>1</td>
<td>175</td>
<td>175</td>
</tr>
<tr>
<td>The Christie NHS Foundation Trust</td>
<td>RBV</td>
<td>45</td>
<td>14</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>University Hospital of South Manchester NHS Foundation Trust</td>
<td>RM2</td>
<td>52</td>
<td>10</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Wrightington, Wigan and Leigh NHS Foundation Trust</td>
<td>RRF</td>
<td>46</td>
<td>1</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>NHS Bury CCG</td>
<td>00V</td>
<td>861</td>
<td>1</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>East Cheshire NHS Trust</td>
<td>RJN</td>
<td>57</td>
<td>2</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>NHS Central Manchester CCG</td>
<td>00W</td>
<td>862</td>
<td>1</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Salford Royal NHS Foundation Trust</td>
<td>RM3</td>
<td>48</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>East Lancashire Hospitals NHS Trust</td>
<td>RXR</td>
<td>73</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Pennine Acute Hospitals NHS Trust</td>
<td>RW6</td>
<td>220</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Recruitment to lung cancer clinical trials in Greater Manchester and East Cheshire is among the highest for the NIHR CRNs in the UK and second only to breast cancer for disease site. This is primarily led by the research activity at The Christie and UHSM, with an opportunity to increase access to lung cancer clinical trials in secondary care.

The Manchester Cancer Lung Cancer Clinical Trial portfolio is currently being defined. Fiona Blackhall (Lung Pathway Board lead of research) leads on developing and maintaining the portfolio. Fiona and the team have been involved in the coordination of the clinical trials portfolio at the Christie. With over 2000 new lung cancer patients referred to The Christie NHS Foundation Trust each year, the clinical trials portfolio in Manchester must continuously evolve to provide novel treatment options to our diverse population.

Over the past 3 years we have conducted 70 clinical trials, 55 of which have offered novel Investigational Medicinal Products (IMPs) to lung cancer patients. 45% of our IMP trials fell in to the category of Precision Medicine (PM), providing patients whose tumours harbour rare genetic mutations or are known to express biological markers access to drugs that are specifically tailored to target their disease. As opposed to traditional methods, this personalised approach to lung cancer treatment is now an absolute necessity. The team in Manchester together with our patients have significantly contributed to the successes of recent years in which several PM agents have been licensed for clinical use.
Now well over a decade ago, Manchester clinicians treated the first patient globally with gefitinib, the earliest successful targeted agent for patients with adenocarcinoma of the lung harbouring an EGFR mutation. Since then, Manchester has continued to lead the way in PM contributing significantly to the development and licensing of several agents including Analplastic Lymphoma Kinase (ALK) inhibitors crizotinib, alectinib, ceritinib and brigatinib and third generation Epidermal Growth Factor Receptor Tyrosine Kinase Inhibitor (EGFR-TKI) osimertinib. All of these agents boast manageable toxicity profiles while providing better outcomes when compared to established chemotherapy regimens.

Our existing clinical trials infrastructure facilitates efficient and safe patient recruitment and the experienced team of coordinators provide a network of support to our clinical staff. In 3 years the team have conducted 10 early phase dose-finding studies, 16 phase II and 29 phase III clinical trials, several of which in this short period, have been practice changing. Each year we enrol approximately 250 patients in to clinical trials of IMPs however, our aim is to offer at least one patient each day the option to enter a research study and access personalised medicine. With continued expansion and investment, the potential to meet this target and in time exceed it is a certainty.

Given the substantial patient population in Manchester, we frequently take pole positions in global, European or national recruitment league tables. For example, we surpassed our recruitment target to the first-in-human AURA trial of osimertinib enrolling in excess of 15 patients in 4 months, paving the way for the later Phase III trial, the results of which have expedited the licensing process. As a top 3 European recruiter to the SELECT-1 trial of selumetinib in combination with docetaxel, we screened over 61 patients for presence of a KRAS mutation and enrolled 11 in just 12 months.

In the era of immunotherapy, it is important that clinical trial centres have the clinical expertise available to manage the complexities of administering agents such as nivolumab and ipilimumab to patients with lung cancer. In Manchester, we have several clinicians who have treated over 30 lung cancer patients with immunotherapy, skilfully managing their side effects, co-morbidities and burdensome disease symptoms. As such, Manchester played a significant role in the pivotal phase III trial that resulted in the licensing of nivolumab for the treatment of relapsed squamous cell carcinoma of the lung.

To complement our IMP trials portfolio, we have conducted several academic translational research projects including the Manchester led Chemores study which aims to understand mechanisms of chemotherapy resistance in patients with lung cancer. With over 600 patients enrolled in Chemores to date, the biological samples and data collected provides unprecedented insight in to the ways in which lung cancer evolves over time to defy treatment with chemotherapy.
The remainder of our portfolio is complimented with research concerned with palliative and supportive care, patient reported outcomes and patient experience. The NIHR have recently awarded funding to Manchester to conduct a national multicentre study of a Respiratory Distress Symptom Intervention aiming to help patients manage a common symptom cluster of breathlessness, cough and fatigue, and via an NIHR PhD clinical fellowship award we conducted a repurposing early phase study of the NK1 inhibitor aprepitant for suppression of lung cancer related cough that will now move forwards to a definitive, randomised study.

The research conducted in Manchester is extensive and well supported by a team of experienced healthcare professionals and scientists. We aim to continue to lead the way in the delivery of Phase I-III clinical trials, translational research projects and supportive care research programmes.

5.2 Challenges

To boost recruitment to lung cancer clinical trials in Greater Manchester, engagement of the sector MDTs is a priority. The CWP pilot in the NW SMDT will mandate that a trial is considered for every patient discussed, facilitated by the MC Lung Cancer Clinical Trial Portfolio.

The other key obstacle to lung cancer trial accrual in secondary care in Greater Manchester is limited resource and cancer research infrastructure. Achieving the aim of increasing lung cancer clinical trial accrual within secondary care will require increased engagement between the local lung cancer teams and the trust cancer research teams.

The current metrics of the Greater Manchester CRN is not ideal for measuring lung cancer trial activity across the MC footprint, as it includes trusts in East Lancashire and does not include Mid-Cheshire NHS FT. Effective implementation of CWP to facilitate accurate and real-time data collection will in time provide a complete and accurate picture of lung cancer trial activity across the MC footprint.

The pathway board have agreed in June 2016 to work with the NHIR team at CMFT with Sue Dyde to review a new strategy for lung cancer trial recruitment to increase the numbers of research nurses present at the MDTs and greater presence of research teams on the pathway boards.
6. Delivering high quality, compliant, coordinated and equitable services

6.1. Information

A key aim of the Lung Cancer Pathway Board is to reduce variation in practice and outcomes across Greater Manchester, driving up standards across the region to match those of the best performing trusts. This requires trusts working together in partnership across organisational boundaries.

The lung Cancer pathway board have made significant progress in the plan to deliver high quality, compliant and equitable services. This has been achieved in 2015 by:

- The roll out of the sector MDT model
- Instigation of robust data reporting through the CWP and enhancing patient experience
- Mesothelioma services. Moving UHSM secondary care MDT work to a sector MDT has enabled a weekly regional specialist’s mesothelioma MDT to be its place.
- Streamlining of radiotherapy pathway
- Agreement on the optimal pathway for lung cancer patients in the north West Sector
- Pathway board agreement on quality standards set against the national guidance

6.1.1 Sector based MDT model and CWP data reporting:

This new sector based model was proposed as priority in the Lung Cancer Pathway Boards annual plan to 2015 was to define and implement a sector based model for lung cancer care across Greater Manchester, in particular merging trust MDTs to form larger sector MDTs. The aims of sector MDT (SMDT) working are:

- Facilitating the Integrated Cancer System
- Pooling expertise to drive standards
- Reducing variation in clinical practice and outcome
- Improve core member attendance
- Increase recruitment to clinical trials
- Increase opportunities for education
In January 2015, work began on implementing the SMDTs. Central Sector MDT functioning since April 2015. 100% attendance from oncology/surgery. South Sector MDT went live on 3rd November 2015. All SMDT’s are now fully functioning.

It is clear from the data that in Q3 of 2015, there was a marked improved in SMDT attendance, which has been a significant achievement for the Lung Pathway team and board members. SMDTs are now viewed as the "command centres" for the integrated lung cancer pathways, accountable for quality assurance and quality improvement of the pathway within the sector. The multi-organisational SMDTs are accountable for performance of the integrated lung cancer pathway within their sector. Governance and quality will be assured using the real time pathway performance review in a prospective, robust, trust and sector-level dataset of all patients diagnosed with lung cancer is collected via a bespoke Clinical Web-Portal and Patient Experience Survey.
There have already been improvements seen against the 62 day target the lung Cancer as a result of CWP data being produced from the SMDT. From analysis of the 3 Trusts below, the data prompted Trust B to review performance against Lung Pathway Quality Standards correlates with 62-day breach rates. This data triggered diagnostic pathway improvements at Trust B.

This evidence has provided data to indicate there was an overall improvement in the proportion of lung cancer patients treated within the national 62-day target from referral with suspected cancer, with all except one trust performing better in 2015/16 than the previous year.

The Lung Cancer pathway board, as part of the quality standard review, set out a plan to review the radical radiotherapy pathway at The Christie following inconsistencies in the pathway, long waits and variation. The team reviewed the current pathway with key stakeholders including clinicians, nursing teams, radiotherapy teams and management. Simple strategies such as improving administrative processes and communications to patients regarding appointments, led to a reduction in the pathway from over 40 days to 14 days (outliers noted due to patient choice).
This pathway will of course have significant improvements on outcome for this patient group and a review is under way of the data in the next 6 months, to evaluate if this is transferable to other radiotherapy pathways.

### 6.1.3 Mesothelioma Update

There were 2,515 mesothelioma deaths in Great Britain in 2014. The latest projections suggest that there will continue to be around 2,500 deaths per year for the rest of this current year before annual numbers begin to decline.

The Specialist Mesothelioma Multidisciplinary Team is a multi-professional group based and hosted at University Hospital South Manchester serving Manchester and Cheshire. The aim of the Team is to ensure a co-ordinated approach to diagnosis, treatment and care services for all patients diagnosed with malignant pleural mesothelioma.

Approximately 130 people are diagnosed with mesothelioma in Manchester, East and Mid Cheshire annually. Approximately 90 of these patients are treated with chemotherapy. It is essential that services develop in line with the NHS England Malignant Mesothelioma Service Specifications 16/17.

The North West Regional Mesothelioma MDT Meeting was launched at University Hospital South Manchester in November 2015 and the use of the electronic MDT Smart Form was utilised from April 2016. This is a portal which is populated comprehensively prior and completed during the meeting. The benefits of the smart form are that:

- It prompts quality discussion, accurate staging, radiological and pathological evidence
- It prompts clinical trials entry
- A detailed MDT outcome is immediately printed and recorded in the case notes
- Referrals are generated instantaneously and emailed to the relevant secretaries and teams
- Data is generated for audit and research
Currently limited numbers of mesothelioma patients from other Trusts are being referred to the Regional MDT Meeting prior to referral to oncology services. Liaison and collaboration is in progress with other Trusts to improve this by using a proforma for discussion.

6.1.4 Agreement on the optimal pathway for lung cancer patients in the north West Sector:

In January 2016 the pathway director for lung Cancer shared with members of the board a proposal for a MC Lung Cancer Referral to Decision to Treat Pathway based on the NHS England optimal lung cancer pathway and the MC aspiration for a 10-day diagnostic pathway. This was designed following a workshop of all the key clinician’s teams from the board in November 2015. It is based on the 3 Trusts within each sector pooling resources and working together to provide a daily single lung cancer service via a 1-stop lung cancer unit.

This optimal pathway also formulates part of the aspirations of the GM Cancer Vanguard programme and they were very keen to prioritise this model in their work programme. This would help with the complex commissioning arrangements resulting from collaborative working, and access to financial support from the Vanguard transformation fund in the long term.

The 4 key features are:

- GP direct access to CT
- Daily triage of CTs including direct referral to PETCT as appropriate (with report available in 72 hours - PETCT group believe this is achievable and are keen to work with us)
- One-stop new patient clinic and diagnostic bundle (results available within 3 days) at sector-based lung cancer unit
- One-stop results clinic and treatment decision clinic (surgery/oncology/palliative care) at sector-based lung cancer unit.
The optimal lung pathway is a very ambitious proposal and to ensure delivery will require considerable redesign of services. The current pathway for patients to diagnosis can extend to over 62 days, this pathway aims for diagnosis of lung cancer to occur within 10 days.

The lung cancer pathway director met with the North West Sector (NWS) Teams (Wigan, Bolton and Salford) as the NWS most established lung cancer sector in Greater Manchester. The meeting took place in July 2016, with Directors of Operations, clinicians and cancer managers present. It was agreed that the NWS would begin a process of consultation to review the optimal pathway for lung to ensure:

- This radical redesign work would need to ensure a gap analysis occurred of the resource implications and service requirements
- Key clinical, nursing, management and patients will be involved in the decision making process of how the new service will be designed and managed.
- Ensuring Sector-based outcomes collected for all patients via CWP would be required to be robust
- This pathway will parallel Rapid treatment pathway developed in other GM sectors for lung.

A scoping exercise will commence in the next 6 months, monitored through the lung Cancer pathway board and through the Cancer Systems Board from September 2016.

6.1.4 Pathway board agreement on quality standards set against the national guidance.

In November 2015 the lung Cancer pathway board agreed to setting of quality standards for the lung cancer service, as it had been identified as one of the first work streams of the Vanguard.

The agreement of what the board would review as quality standards was carried out following the lung education event held on the 18th March 2016 (see attached).

quality standards for lung-march 2016.doc

In March 2016 the board reviewed the tabled proposed standards and had a wide ranging discussion on each section. The board discussed the following sections-

- Standards for Prevention
- Standards for Early Detection and Referral
- Standards for Diagnostics

The Quality Standards were circulated to all board members. Due to the volume of standards requiring review and agreement, the Pathway team instigated a survey to all board members in May 2016, with results being produced in June 2016. A total of 14 responses were given with most of the standards given 80% approval of the standards which were rated as ‘very important’.

The results are attached below and a full analysis will be reviewed at the pathway board in September. The initial results were discussed at the Lung Cancer pathway board in June 2016, where agreement on the standards was reached.

MC Lung Standards Survey Monkey results-with structure.pptx
Example of diagnostic standard in which all of the below were rated as important by >80% of respondents.

<table>
<thead>
<tr>
<th>No.</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Radiologists request CT scan to be performed within 2 days if CXR suspicious for lung cancer</td>
</tr>
<tr>
<td>7.</td>
<td>Time from CT request for suspected lung cancer to report should not exceed 3 days</td>
</tr>
<tr>
<td>10.</td>
<td>All patients where lung cancer is suspected on CT should have access to a rapid access lung cancer clinic</td>
</tr>
<tr>
<td>12.</td>
<td>All patients to have a reported CT before first lung cancer clinic attendance</td>
</tr>
<tr>
<td>16.</td>
<td>All non-squamous cancers should be sent for mutation testing where targeted treatment of the mutations would be offered (Stage IV disease, WHO PS 0-3)</td>
</tr>
</tbody>
</table>

Following review of the standards and to ensure adherence to the roll out of the quality standards a new structure of the lung Cancer pathway board was proposed.
6.2. Challenges

The lung cancer pathway board has faced significant challenges to deliver against the very ambitious objectives set out in 2015. There have been some key improvements in pathways across Greater Manchester and Cheshire to deliver the high quality, compliant, coordinated and equitable services required for our patients.

The board have recognised that the key challenge going forward is to keep the momentum behind ensuring that all organisations in Greater Manchester and Cheshire provide the same standard of care as that provided in the best performing Trusts in the Sector, and improve quality of life for those patients who cannot be cured.

The lung cancer pathway board has enabled all board members to critically appraise their own results and performance of lung cancer pathways and/or clinical cases where investigation or treatment rates are below the national average and they have successfully come up with quality standards and optimal pathway agreements to ensure these key quality improvements can be driven forward.

The challenge for 2016-17 is to ensure this momentum is maintained. The engagement of board members and the key involvement of patients affected by cancer will be pivotal to improving patients experience, outcomes and access to be best lung cancer services in Greater Manchester and Cheshire.
7. Objectives for 2016/17

The Lung Pathway Board has 5 primary objectives for 2015/6, aiming to achieve its vision of fully integrated pathways continuously audited and accountable to provider trusts working in partnership:

1) Continued review of the Sector based MDTs model, with a continued evaluation of CWP
2) Ensure the new quality standards are embedded into practice
3) Implementation of model for lung cancer pathway in the north West sector
4) Improve patient experience and utilise the co-production model with all patient user groups
5) Increasing Living With and Beyond Cancer and Palliative Care engagement

In addition, the pathway board will complete the objectives outstanding from the 2016/17 annual plan:

- To continue to review the care for patients with mesothelioma in line with the advent of regional mesothelioma MDT model, as agreed with the NHS England Malignant Mesothelioma service specification in 2016/17
- Further proposals include a specialist post-operative/adjuvant therapy MDT and combined therapy MDT/clinic (for patients considered for concurrent chemo-radiation and/or surgery). These proposals will be appraised during 2016/17
- Develop a Manchester Cancer Lung Pathway Clinical Trial Portfolio
- Research nurses to become core members of sector MDTs. This will ensure every patient diagnosed with lung cancer is considered for a clinical trial, increasing access and recruitment to lung cancer research in Greater Manchester and Cheshire.
- Increase the Specialist Nursing presence in the sector MDT and map out the validity of this across the sector.
Lung Pathway Board Annual Plan 2016-17

<table>
<thead>
<tr>
<th>Pathway Clinical Director:</th>
<th>Neil Bayman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathway Manager:</td>
<td>Claire O’Rourke</td>
</tr>
<tr>
<td>Date agreed by Pathway Board:</td>
<td>September 2016</td>
</tr>
<tr>
<td>Review date:</td>
<td>January 2017</td>
</tr>
</tbody>
</table>

### Summary of objectives

<table>
<thead>
<tr>
<th>No</th>
<th>Objective</th>
<th>Alignment with Provider Board objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Continued review of the Sector based MDTs model, with a continued evaluation of CWP</td>
<td>Improving outcomes; standardised pathways</td>
</tr>
<tr>
<td>2</td>
<td>Ensure the new quality standards are embedded into practice</td>
<td>Improving patient experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improved outcomes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Innovation and research</td>
</tr>
<tr>
<td>3</td>
<td>The optimal model for lung cancer pathway in the north West sector</td>
<td>Improving patient experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improved outcomes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Innovation and research</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Standards pathways</td>
</tr>
<tr>
<td>4</td>
<td>Increasing Living With and Beyond Cancer and Palliative Care engagement</td>
<td>Improved patient experience</td>
</tr>
<tr>
<td>5</td>
<td>Improve patient experience and utilise the co-production model with all patient user groups</td>
<td>Improve patient experience</td>
</tr>
</tbody>
</table>
**Objective 1: Complete the sectorisation of lung Cancer SMDT and evaluation CWP**

| Aim: | • Ensure that all sector MDTs are working effectively and following the MDT charter  
• Collation of robust data via CWP systems |
| Driver (S) of change: | Sectorised MDTs will adhere to the lung MDT charter, contain multiple professionals, have the improved discussion and decision-making that follows from this, and monitor its outcomes regularly. Improving outcomes and reducing variation. |
| By (date): | June 2017 |
| Domain: | Standardisation of pathways/ improved outcomes |
| Risks to success: | Robust data produced to support the work and systems in place to manage this. IT support |
| How will any risks be mitigated | Ensure excellent communication to the Clinicians and clinical teams with cancer management and executive teams and escalate any issue if required. |
| Support required | IT and systems support |

*The programme of work through which the Pathway Board will achieve the objective should be outlined below. This can take whatever form the Pathway Board considers appropriate. Two suggested formats are provided.*

**Work programme**

<table>
<thead>
<tr>
<th>Action</th>
<th>Resp.</th>
<th>By (date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensure systems in place to escalate any delays in IT support and CWP data</td>
<td>NB/ B.Wilson</td>
<td>Nov 2016</td>
</tr>
<tr>
<td>Reporting system in place to monitor outcomes of SMDT</td>
<td>NB/ B.Wilson/ all board members</td>
<td>January 2017</td>
</tr>
<tr>
<td>Full report to review outcome of SMDT roll out and review of plans to roll out to other sectors</td>
<td>COR/NB</td>
<td>June 2017</td>
</tr>
</tbody>
</table>
Objective 3: Standardising the Optimal lung pathway in the North West sector

| aim | Standardise as far as is reasonable the pathway in the north west sector that lung cancer patients follow in Manchester Cancer by:  
|     | • Optimal pathway has been agreed in principle, this will need to be signed up to by all 3 trusts  
|     | • Exploring and understanding the current variation, particularly in diagnostics  
|     | • Gaps analysis of service redesign  
|     | • Explore the concept of developing a service specification to describe service that patients should receive in detail (possibly in collaboration with other cities/integrated cancer systems)  
|     | • Engage patients in this process. |

| Drivers (S) of change | There can be unacceptable variation in the pathways that lung cancer patients follow in Manchester Cancer.  
|                       | Increased understanding of this variation can lead to the development and agreement of standardised pathways so that all patients experience the same service.  
|                       | Under current Cancer strategy this fulfils requirements of diagnosis pathway realignment. |

| Domain | Standardising pathways, innovation and improving outcomes |

| Risk to success | Agreement of all three trusts to deliver optimal pathway |

| Mitigation of Risks | Ensuring escalation of difficulties to lung pathway board and Cancer systems board |

| Support required: | Project management and resources of senior manager at the Trusts to evaluate the gap analysis required |

The programme of work through which the Pathway Board will achieve the objective should be outlined below. This can take whatever form the Pathway Board considers appropriate. Two suggested formats are provided.

### Work programme

<table>
<thead>
<tr>
<th>Action</th>
<th>Resp.</th>
<th>By (date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector meeting to agree principle of pathway</td>
<td>COR/NB</td>
<td>July 2016</td>
</tr>
<tr>
<td>Clinical and management high level meeting to agree pathway with patient representative involved</td>
<td>COR/NB</td>
<td>September 2016</td>
</tr>
<tr>
<td>Gap analysis undertaken by Trusts</td>
<td>All trust</td>
<td>Dec 2016</td>
</tr>
</tbody>
</table>
Objective 4: Increasing palliative care engagement and LWBC

**Aim**
Ensure that palliative care clinicians are core members of all sectorised lung MDTs, with cover for leave and absence so that palliative care is represented in every MDT meeting. Ensuring board members will deliver against core outcomes set out in the plan, ie, end of treatment summaries and care plans.

**Drivers of change**
Lung cancer is associated with relatively poor outcomes. Many of the patients diagnosed with lung cancer present with late stage disease. The involvement of palliative care professionals from the earliest stage in these care and decision-making for lung cancer patients is therefore vital. Notwithstanding this, coverage can be patchy and greater engagement between professional groups is required.

**By (date):**
January 2017

**Domain**
Improving patient experience.

**Risks to success**
Lack of engagement from wider MDT members. Logistical challenge of ensuring palliative care. Commitments to 7 day working plan (vanguard)

**Mitigation of risk**
Improved communication with the team and presence of the team at the lung board task and finish group for LWBC

The programme of work through which the Pathway Board will achieve the objective should be outlined below. This can take whatever form the Pathway Board considers appropriate. Two suggested formats are provided.

<table>
<thead>
<tr>
<th>Action</th>
<th>Resp.</th>
<th>By (date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement of both teams in task and finish group of the new board</td>
<td>COR/NB</td>
<td>Nov 2016</td>
</tr>
<tr>
<td>Proposal of palliative care support in sector MDT-dial in?</td>
<td>CM/COR</td>
<td>Jan 2017</td>
</tr>
</tbody>
</table>
Objective 5: Understand and improve patient experience

**aim**
Further develop the bespoke lung cancer patient survey, deliver it across the region and use the understanding to develop an improvement plan.

**Drivers of change**
The results of the National Cancer Patient Experience Survey are of limited use when analysed at the pathway level and the survey suffers from other limitations. Historically MDTs have developed and local lung cancer surveys that do not allow easy comparison across the region. A standardised and tailored lung cancer patient experience survey is required.

The need to involve patients affected by cancer in the control of this survey.

**Date**
First iteration of improvement plan by September 2016.

**Domain**
Improving patient experience

**Risks to success:**
Survey design does not yield required data
Survey fatigue from patients
Lack of engagement by one or more trusts
Lack of resources locally to administer

**Mitigation of risk**
Engagement of patients and users
Full review of current Cancer Patient Survey (national)

**support**
Support from colleagues in the Manchester Cancer Macmillan User Involvement Team will be invaluable in developing and analysing the survey and in the creation of an improvement plan.

The programme of work through which the Pathway Board will achieve the objective should be outlined below. This can take whatever form the Pathway Board considers appropriate. Two suggested formats are provided.

**Work programme**

<table>
<thead>
<tr>
<th>Action</th>
<th>Resp.</th>
<th>By (date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review outcome on national patient survey</td>
<td>COR</td>
<td>Nov 2016</td>
</tr>
<tr>
<td>Review outcome of last phase of recruitment drive on lung survey</td>
<td>CD/NB</td>
<td>Nov 2016</td>
</tr>
<tr>
<td>Engagement of patients affected by cancer -- set up small community</td>
<td>TH/COR/NB</td>
<td>October 2016</td>
</tr>
<tr>
<td>Full evaluation of survey and results</td>
<td>CD</td>
<td>Jan 2017</td>
</tr>
</tbody>
</table>
Appendix: Manchester Cancer Provider Board objectives

1. Improving outcomes, with a focus on survival

We aim to:

- have a cancer survival rate for all cancers one year after diagnosis that is consistently higher than the England average for patients diagnosed beyond 2012
- have a one-year survival rate higher than 75% for patients diagnosed in 2018
- narrow the gap with Sweden’s one-year survival rate from 12% (now) to 6% for patients diagnosed in 2020
- approach Sweden’s one-year survival rate by 2025, and
- have greater than 70% of cancer patients diagnosed in 2020 survive at least five years

2. Improving patient experience

We aim to:

- improve year-on-year the patient experience across the region (as measured by the National Cancer Patient Experience Survey), and
- have the best performance in core patient experience questions of any major city area in England by 2015

3. Increasing research and innovative practice

We aim to:

- increase the proportion of patients involved in clinical trials from 30% to more than 40% by 2019

4. Delivering high quality, compliant, coordinated and equitable services

We aim to:

- support our specialist commissioning colleagues to deliver compliance in the four historically non-compliant specialist cancer surgery services (oesophago-gastric, hepatopancreato-biliary, gynaecology and urology) by December 2015, and
- maintain regional compliance with the national cancer 62-day waiting time target
Characteristics of an Effective MDT

In 2010, The National Cancer Action Team (NCAT) set out Characteristics of Effective MDT:

- treatment and care being considered by professionals with specialist knowledge and skills in the relevant aspects of that cancer type;
- patients being offered the opportunity to be entered into high quality and relevant clinical trials;
- patients being assessed and offered the level of information and support they need to cope with their condition;
- continuity of care, even when different aspects of care are delivered by different individuals or providers;
- good communication between primary, secondary and tertiary care;
- good data collection, both for the benefit of the individual patient and for the purposes of audit and research;
- improved equality of outcomes as a result of better understanding and awareness of patients’ characteristics and through reflective practice;
- adherence to national and local clinical guidelines;
- promotion of good working relationships between staff, thereby enhancing their job satisfaction and quality of life;
- opportunities for education/professional development of team members (implicitly through the inclusion of junior team members and explicitly when meetings are used to devise and agree new protocols and ways of working);
- optimisation of resources – effective MDT working should result in more efficient use of time which should contribute to more efficient use of NHS resources more generally.