1. Background and Aim

Lung cancer is the most common cause of cancer death in the UK.1 In Portsmouth, around 400 people are diagnosed with lung cancer each year.2

Diagnosing lung cancer faster leads to better outcomes. The new National Optimal Lung Pathway mandates that patients receive a diagnosis and start treatment for lung cancer within 49 days of referral from their GP, by April 2020.3

I aimed to reduce the time from GP referral to first definitive treatment for patients referred under the “two-week-wait” lung cancer pathway in Portsmouth.

2. Principles

My improvement work was based on five key principles:

1. Every day matters - Limiting any delays in a patient’s pathway, always moving towards diagnosis & treatment
2. Better communication, accurate data - Proactively communicating results and decisions, and accurately evaluating our outcomes
3. Right investigations requested, first time - Reducing variation in clinical practice to limit delays in diagnosis and treatment
4. Cancer clinics reserved for cancer patients - Ensuring clinic appointments are available for patients who need them most urgently
5. Encouraging smoking cessation - Improving the chance of treatment success, and the health of people without cancer

3. 4. Improvements So Far

Change ideas are being implemented throughout the diagnostic pathway to improve capacity and efficiency, with each change being delivered and evaluated using Quality Improvement methodology such as Plan/Do/Study/Act (PDSA) cycles. Some of these changes have been supported through a £2.1 million Department of Health Transformation Grant.

- Cycle 1: July 2018
  - I asked doctors performing procedures to highlight patients for MDT on the procedure report. However, procedure reports are not produced for pleural procedures (48% of all procedures). Doctors were also unreliable at documenting the need for MDT. Overall success: 55%.
- Cycle 2: Autumn 2018
  - I asked nurses from the Day Ward to highlight patients for MDT in the ward admissions book. The initial documentation rate was 90%. However, a loss of staff engagement resulted in a decline to only 10% after two months.
- Cycle 3: Spring 2019
  - I asked the nurses to record patients for MDT in the sample record book held within the procedure room. The book is checked daily by the lung cancer admin team. This has resulted in 100% documentation.

5. Plan / Do / Study / Act Example

Patients attend the Respiratory Day Ward for diagnostic procedures. I wanted to improve the communication between the Day Ward and Lung Cancer Office, to ensure patients having diagnostic tests for possible cancer were identified and reviewed at the Lung MDT.

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6. Early Evidence of Improvement

This graph displays the number of days after GP referral on which patients were seen in 2018. Although nearly every patient was seen within the 14-day target, most patients were not seen until Day 15. The graph also does not reflect the effort required to see patients within 14 days, such as ‘emergency’ clinic appointments.

7. Reflections & Conclusions

- Reflections
  - This work has been a collaborative effort from the whole clinical team. Some of the most significant learning opportunities were identified by administrative staff, who are often overlooked in Service Development projects.
  - Establishing lines of communication between the clinical team, managers and Information Services has been central to understanding performance and identifying areas for improvement.

- Conclusions & Future Work
  - By reviewing every stage of the lung cancer pathway I have identified areas of inefficiency, and have introduced changes which I am confident will reduce the time to diagnosis and first treatment whilst also improving patient experience.
  - Evaluation of the impact of these changes is ongoing, as data becomes available.
  - The learning from my improvement work will be shared with other lung cancer departments in Wessex, and with other tumour sites, to help teams improve their cancer pathways.

References