Binning Benign Lung Nodules….

Can looking to the past help us?

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A Talwar, A Falolu, J Yates, C Ridgeon, A Moore, J Park, R Benamore

Lung Nodule Service, Oxford University Hospitals NHS Foundation Trust

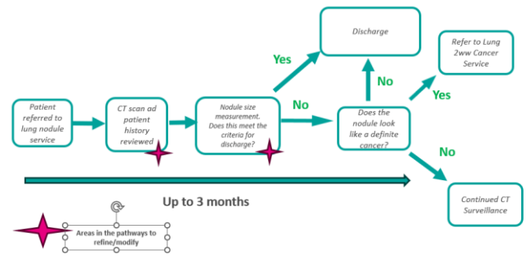
Background

Patients wait **months** to hear whether a nodule spotted on a scan is lung cancer. **Most of these nodules are not cancer.**

Patient's worry and staff have less time to work on cases that are cancerous.

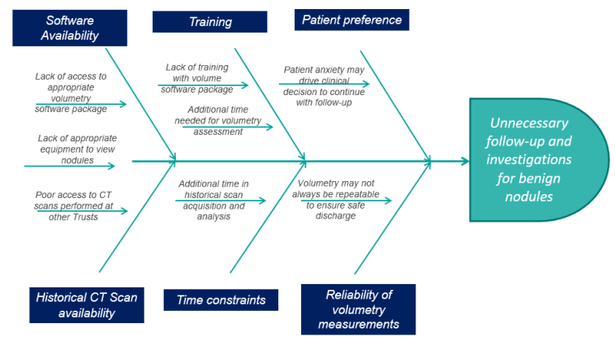
Diagnostics 1

What can we modify in the current pathway?



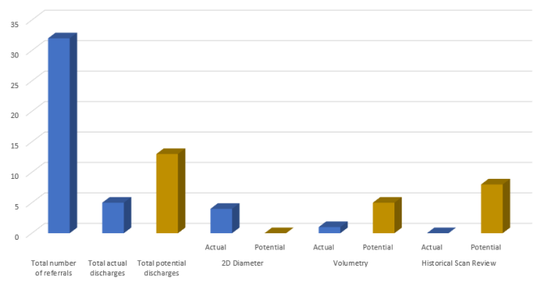
Diagnostics 2

What are the obstacles to change?

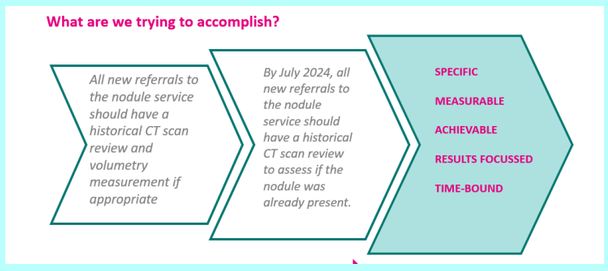


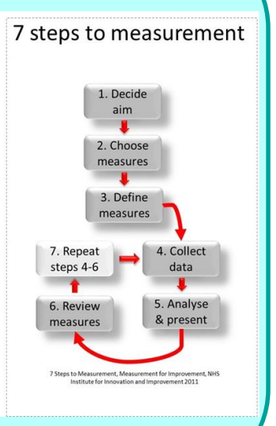
What is the potential impact of change?

Discharges at the point of referral w/c 30th Oct



Aims



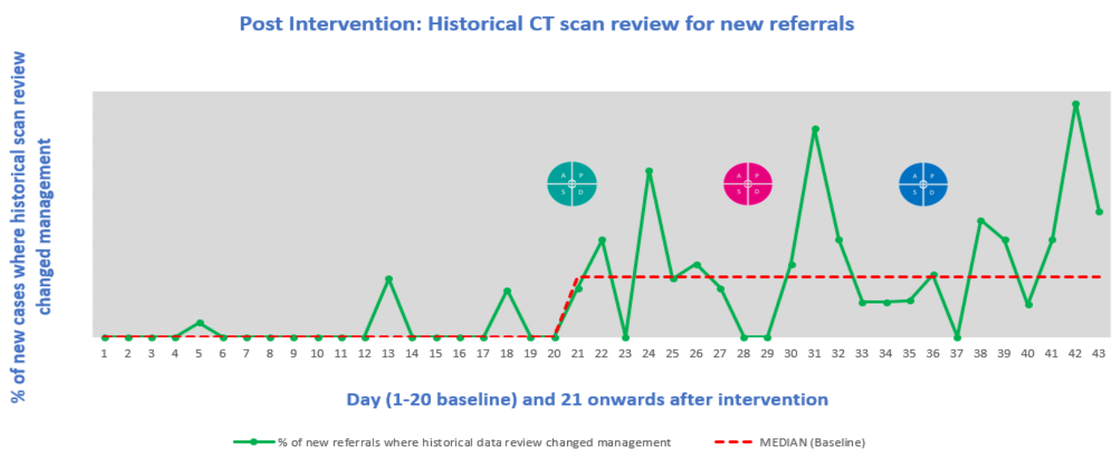


"I was so worried when I was told I may have lung cancer after having a CT scan. When I was called by the specialist team to say the nodule was present on a scan, I had many years ago and so was not a cancer, it was such a relief!"

Change idea	Reviewing historical CT scans if available for all new referrals to the lung nodule service
ONE thing to test	How many patients had retrospective CT scan reviews when they were first referred to the lung nodule service
What to do	When a new referral is received, review old CT scans on OUH PACS system to see if the nodule was present before and when this was?
When to do it	At the time of referral to the service W/C 15th Jan 24
Where to do it	Lung Nodule Service Office
Who to do it	Lung nodule navigators
Predict outcome	Reviewing historical scans will identify nodules that have been present for 2 years or least and hence to do not need further follow-up and can be classed as benign.
Data to collect	Number of new referrals where: 1. Historical scan was available on OUH PACS system 2. Where review of scan identified the nodule of interest 3. Number of cases that qualified for discharge at the point of referral based on historical CT scan review 4. Opinions from navigators of incorporating this into work-flow

PDSA Test #	PLAN	Do	STUDY	ACT
1a. How can we improve the service?	Discussing ways to streamline and triage new referrals with the Lung Nodule Navigators	Presenting observational data and QI Story Board	Gathering opinion on what to act on first/ what is feasible based on choose one idea	The nurses chose to focus on review of historical baseline data first.
1b. First Metric to assess	Review of any historical CT scans available for new referrals W/C 22nd Jan	Uploading of all prior scans available at OUH to compare to the baseline/ referral CT scan	In how many cases was the nodule previously present? Did this review change patient management?	Noticed that some patients had CT scans outside of Trust. Should this be incorporated into patient assessment at the start?
1c. Inclusion of scans performed outside OUH	In addition to 1b, asking the patient if they ever had a CT chest scan outside of OUH W/C 29TH Jan	Asking patient for this information at point of referral and Accessing scans from outside OUH ready for assessment	In how many cases was the nodule previously present? Did this review change patient management? - Did this delay patient assessment	Nurses felt that this can be time-consuming. Work to be carried out by administrator instead of them.
1d. Involvement of administrator in obtaining historical scans	As above W/C 5th Feb	Administrator gathering above information	Is this time-consuming? How many patients have had CT scans performed outside of OUH? Out of these, in how many cases did this change management?	Opinion was that this worked better but only if scans done in Oxfordshire region. Scans from outside the county and abroad can be considered for review on an individual basis

Run Chart



Reflections and Conclusions

1. **Review of historical data** significantly changed the management of new nodule cases
2. **This is demonstrated in the run chart, showing an immediate shift in the median number of new referrals influenced by historical scan review.**
3. When starting a new service, **small interventions can make a significant difference** to patient care.
4. **Engagement** of the team is essential to make any changes possible**.**
5. **Doing one intervention at a time** allows you to evaluate this and ascertain what has made a difference.

Acknowledgements:
To the QIC Learn Team