

Abnormal GP Chest X-Ray Straight to CT Pathway

James Diss, Mark Gregory, David Hinson, Liz Penn, Zowie Copeman, Elena Stefan, Vijay Jayaram, Sri Redla, Sandra Dimmock

Radiology Department Project Aim

Lung cancer is the leading cause of UK cancer deaths, largely due to advanced stage at initial presentation. Approval of National CT screening targeting 'at-risk' individuals is expected in the near future. To further enable earlier lung cancer detection, a few NHS Trusts have initiated 'Straight to CT' pathways in the event of a GP-referred chest radiograph (CXR) suspicious for malignancy: on reporting a such a CXR, a Radiologist can directly refer a patient for a CT scan; the GP receives the CXR report and a simultaneous report stating that an urgent CT has been arranged, and patients with CTs consistent with cancer are referred directly to the Lung MDT. We analysed the impact of the Pathway's first 18 months at PAH.

Measures and Timeline *Imaging of all Pathway cases (Nov 2017-April 2019) was reviewed.*

Results

- On average 11 cases were referred to the Pathway each month.
- Mean Pathway Duration (from CXR to CT Report) was 8.1 +/- 0.3 days.
- This was significantly quicker than the pre-Pathway timescale as a result of improved 'Time to CT report following the initial CXR': 6.6 ± 0.2 versus 11.4 ± 1.0 days.
- Follow-up CT was consistent with cancer in 43% cases (75% of these were in keeping with a primary lung cancer).
- Malignancy was excluded in 37%.
- Indeterminate CT findings requiring further investigation accounted for 20% cases.

Implemented changes

- Radiographers reported that initially many patients on the Pathway were unaware of the possibility of being referred for an urgent CT scan subsequent to their CXR.
- To improve Pathway awareness: (1) a new eye-catching poster for patients was placed in all the Radiology Waiting Areas, and (2) a presentation was given to GPs at the local 'CCG Meeting on Direct Access Imaging' (Summer 2018).
- In Jan 2019, extra measures to more easily identify patients and reduce the risk of missed cases were adopted, including the introduction of a new 'PACS Macro' to aid Radiologist reporting/referral.



Learning and next steps

This Pathway has reduced the time for new lung cancer diagnosis in patients with an initial abnormal GP CXR by ~1 week. Further improvement of both patient and GP awareness is planned in 2020 with the development of GP Waiting Room posters and downloadable patient leaflets

