

Immediate reporting of chest X-rays referred from general practice by reporting radiographers

Submission date 19/06/2017	Recruitment status No longer recruiting	☒ Prospectively registered ☒ Protocol
Registration date 20/06/2017	Overall study status Completed	☐ Statistical analysis plan ☒ Results
Last Edited 10/11/2022	Condition category Respiratory	☐ Individual participant data

Plain English summary of protocol

Background and study aims

When compared to other common cancers, lung cancer patients are less likely to survive their cancer. This is often due to a delay in the recognition of the condition and performance of the chest X-ray (CXR). Delayed diagnosis reduces treatment choices because the cancer may have spread further and the person may have become too ill for treatment to be given safely. It is hoped that by diagnosing lung cancer sooner this will help improve survival, help with patient satisfaction and potentially extend the range of treatment options, which are more limited in delayed diagnosis. CXRs are often used when lung cancer is suspected, but there can be long delays for the results to be available to the patient and the GP. Radiographers traditionally take the X-ray, but they are reported by a radiologist, a medical specialist. Recent studies show that radiographers who have completed further training can report CXRs with similar accuracy to radiologists. This project will help to reduce delays in diagnosis for lung cancer in two ways. First, a trial of immediate reporting of GP requested CXRs may help to reduce delays and allow further tests to be performed sooner. Second, it is hoped having quicker access to results will reduce the number of patients who need to see a specialist. This should both reduce specialist referrals and anxiety. Based on previous work, so that patients have the best information about their care, and are able to make informed decisions, have constructed an information leaflet which will be distributed to general practitioners. This will be given to patients when they are referred for a CXR, explaining that further tests may be required, and some of the reasons for this. Hopefully this will help to reduce patient anxiety and give them insight into the pathway.

Who can participate?

Adults aged 16 and older who are referred for a chest x-ray.

What does the study involve?

Participants are randomly allocated to one of two groups using block randomisation at session (half day level). Those in the first group receive immediate reporting of chest X-rays referred by general practice, with CT chest when indicated. Those in the second group receive the standard level of care. This includes the routine reporting of chest X-rays referred by general practice.

Participants are followed up to see how long it takes to diagnose lung cancer or how long it took to be discharged from the lung cancer pathway and to evaluate the effectiveness of immediate reporting of chest X-rays by general practice.

What are the possible benefits and risks of participating?
Not provided at time of registration.

Where is the study run from?
Homerton University Hospital NHS Foundation Trust (UK)

When is the study starting and how long is it expected to run for?
July 2016 to January 2019

Who is funding the study?
Cancer Research UK (UK)

Who is the main contact?
Mr Nick Woznitza (Public)
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Contact information

Type(s)

Public

Contact name

Mr Nick Woznitza

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Additional identifiers

Protocol serial number

34539

Study information

Scientific Title

Impact of radiographer immediate reporting of chest X-rays from general practice on the lung cancer pathway

Acronym

radioX

Study objectives

Immediate reporting of chest X-rays from general practice will reduce the time to diagnosis of lung cancer.

Ethics approval required

Old ethics approval format

Ethics approval(s)

London – Brent REC, 05/06/2017, ref: 17/LO/0870

Study design

Randomised; Interventional; Design type: Diagnosis, Process of Care, Imaging

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Specialty: Health services and delivery research, Primary sub-specialty: Health Services and Delivery Research; UKCRC code/ Disease: Cancer/ Malignant neoplasms of respiratory and intrathoracic organs, Respiratory/ Other diseases of the respiratory system

Interventions

Participants are randomly allocated to one of two groups using block randomisation at session (half day level).

Group 1: Participants receive immediate reporting of chest X-rays referred by general practice, with CT chest when indicated.

Group 2: Participants receive the standard level of care. This includes the routine reporting of chest X-rays referred by general practice.

Participants are followed up to see how long it takes to diagnose lung cancer or how long it took to be discharged from the lung cancer pathway and to evaluate the effectiveness of immediate reporting of chest X-rays by general practice.

Intervention Type

Other

Primary outcome(s)

Time (in days) to decision to treat (with intermediate time points) for lung cancer or discharge from the lung cancer pathway is measured using patient records at the time where there is a decision to treat or to be discharged from the lung cancer pathway.

Key secondary outcome(s)

1. Number of CT scans requested is measured using the number of CT chest scans through Radiology Information System at study completion
2. Survival is measured using aggregate data from cancer waiting time reporting at six and 12 months
3. Emergency admissions are measured using data from cancer waiting time reporting at study completion
4. Performance status is measured using data from cancer waiting time reporting at time of decision to treat
5. Number of urgent respiratory cancer referrals are measured from respiratory department records at study completion
6. Relative accuracy and usefulness of chest X-rays reporting by radiographers and consultant radiologists are measured using index diagnosis of thoracic radiologist and/or CT chest within 2 weeks of chest X-ray
7. Number of first 2WW appointments with all radiology results measured using clinician recorded data at time of appointment
8. Cost-effectiveness is measured using QALYS (Quality adjusted life years) at study completion
9. Patient satisfaction is measured using patient questionnaires at two weeks after chest x-ray

Completion date

30/01/2019

Eligibility

Key inclusion criteria

1. Patients referred for a chest X-ray from general practice
2. Over 16 years

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Active diagnosis of lung cancer
2. Aged under 16 years
3. Chest X-rays referrals from any other practitioner (Emergency Department, Inpatient, Outpatient)

Date of first enrolment

01/07/2017

Date of final enrolment

30/06/2018

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

Homerton University Hospital NHS Foundation Trust

Homerton Row

London

United Kingdom

E9 6SR

Sponsor information

Organisation

Canterbury Christ Church University

ROR

<https://ror.org/0489ggv38>

Funder(s)

Funder type

Government

Funder Name

Cancer Research UK

Alternative Name(s)

CR_UK, Cancer Research UK - London, Cancer Research UK (CRUK), CRUK

Funding Body Type

Private sector organisation

Funding Body Subtype

Other non-profit organizations

Location

United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

The current data sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	protocol	08/11/2022	10/11/2022	Yes	No
Protocol article		06/11/2017	12/12/2019	Yes	No
HRA research summary	primary outcome report	01/01/2019	28/06/2023	No	No
Other publications			12/12/2019	Yes	No