



Community pharmacy chest X-ray pilot report

July 2024-March 2025



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Wessex Cancer Alliance (WCA) led a small pilot on the Isle of Wight to test the feasibility of community pharmacists referring eligible patients with red flag symptoms for lung cancer directly for a chest X-ray. The pilot ran from July 2024-March 2025.

Background

Lung cancer is the third most common cancer in the UK, accounting for 13% of all new cancer cases with a lower proportion being diagnosed at an early stage. The introduction of lung cancer screening is helping to address this; however, it is still in its roll out phase and not available in all areas. It also only covers smokers over 55 and is for asymptomatic patients. Other initiatives are still needed to quickly identify those with concerning symptoms and investigate them.

The Isle of Wight (IOW) has the third highest deprivation score for the Hampshire, Isle of Wight (HIOW) Integrated Care Board (ICB) area (behind Southampton and Portsmouth). Out of the LDS areas the IOW has the fifth highest incidence of lung cancers for the HIOW ICB. However, mortality rates are third highest (again after Southampton and Portsmouth), potentially showing that cancers are not picked up as early on the IOW. Unlike Southampton and Portsmouth, the IOW are awaiting roll out of Lung Cancer Screening (previously Targeted Lung Health Check programme), which is why it was felt that other initiatives were needed in this region.

Some people, particularly those from more deprived neighbourhoods will wait longer to consult their GP, but will often visit their pharmacy, where the pharmacist or counter staff may be able to identify that they are unwell with red flag symptoms for lung or pleural cancer (mesothelioma). At present pharmacists would need to refer this patient back to their GP for review and onward investigation adding further delays to the pathway.

The aim of the project was to pilot the feasibility of an opportunistic service whereby community pharmacists can refer these patients, who fulfil NG12 criteria, directly for chest X-ray. The overall aim of this was earlier identification of patients with lung or pleural cancer.

Aims and objectives of the pilot

- To support pharmacies to identify patients with symptoms of possible lung/pleural cancer and develop an appropriate pathway for pharmacists to refer those patients directly for chest X-ray
- To develop a robust communication pathway between pharmacy and GP to ensure follow up and safety netting of patients referred for chest X-ray
- To develop a supporting education programme that ensures pharmacists, and their staff have the confidence and knowledge to identify those who may need review, appropriately refer patients for chest X-ray and discuss the implications of referral in a sensitive manner
- To reduce delays in identifying patients with lung or pleural cancer
- To demonstrate feasibility of the pathway to help support a case for further roll out across the IOW

Pathway development

A working group was established to develop the pathway and service specification for the pilot. This consisted of key stakeholders from Wessex Cancer Alliance, HIOW ICB, HIOW Local Pharmacy Committee (LPC), Isle of Wight NHS trust.

When developing the pathway, learning was taken from a recent pilot by Surrey and Sussex Cancer Alliance. Key considerations for the pathway were patient safety and safety netting, appropriate education and imaging policies, identification of the correct patients and good record keeping and communication with the patient's GP practice.

Criteria for patient inclusion in the pilot was carefully considered and was kept in line with current NICE urgent suspected cancer referral guidelines.

It was agreed that the reviews should be documented on the software PharmOutcomes. This is the software in current use in pharmacies in the region and there is functionality whereby information can be safely and securely transferred to the patient's GP practice to ensure follow up. The template for the pilot was developed by the PharmOutcomes team with content agreed by the steering group, with support from the Local Pharmacy Committee.

Training and education requirements were agreed by the group and are outlined in section below.

Pharmacies on IOW do not have access to the system whereby online X-ray referrals can be made. It was agreed with the trust that paper referrals would be accepted as long as the minimum data set for radiology requests was met.

There was discussion of the trust's policies for non-medical referrers. Due to there being no existing non-medical referrers agreement for the scope of the referrals required in the pilot and the pilot was taking place in the community, it was advised that the pharmacists involved in the pilot would need an extended scope of practice for referral for X-ray agreement with the participating GP practice.

See **Appendix A** for process map outlining the final pathway and **Appendix B** for the full service specification.

Education and training

To meet the requirements for referring patients for chest X-ray the pharmacist had to undergo education and training.

They attended a training course delivered by WCA GP lead for IOW. This education course included:

- The process to be followed as part of the service
- NICE guideline NG12 (Suspected cancer: recognition and referral)
- Instruction on how to complete a good referral

In addition, the pharmacist was required to complete a suitable 'IRMER for non-medical referrers' course. They had to be authorised as a non-medical referral for IOW NHS Trust with an extended scope of practice agreement in place outlining the imaging they can refer for (chest X-ray only).

The extended scope of practice agreement was signed by the participating GP practice who agreed to take responsibility for the pharmacist and their referrals.

Pilot site

Many factors were considered when assessing the best location for the pilot. The pharmacy pilot site had to be an independent pharmacist, as chain pharmacies would not be able to participate due to organisational constraints. It was decided to focus on a more remote area of the island where there were good links between one main pharmacy and GP practice. The aim of this was to target those who may have more difficulty in accessing services or presenting with symptoms but also to reduce the complication of having an area served by multiple practices, many of whom would not be signed up to the pilot. The specific area was chosen due to the availability of support from the IOW WCA GP.

Support and promotion of the pilot

To support counter staff in identifying the correct patients to offer a review to, WCA created a clinical decision support tool with questions that could be used to initiate a conversation, details of inclusion criteria for the pilot and other prompts. This was adapted from a similar tool used as part of a pilot in Doncaster. See appendix C for copy of support tool.

A poster was developed for the pilot to promote the service. See **Appendix D**.

Timeline

Planning for the pilot started in the summer of 2023, however, there were delays to starting the pilot. The main delay was uncertainty about the use of PharmOutcomes for the pilot.

PharmOutcomes is the software used in pharmacies locally and pharmacies can send reports securely to GP practices and keep secure records using this system. However, HIOW changed the commissioning of PharmOutcomes to a single use licence for the whole the region and were unable to support the creation of a new template for the pilot due to very high costs associated with this. However, the IOW primary care team separately commissioned their own PharmOutcomes licence for a further year, which could be used to create the new template for the participating pharmacy (at a small cost).

The pilot started in July 2024 with a plan to run for one year. However, due to low numbers and the IOW PharmOutcomes licence ending in March 2025 the pilot ended earlier than planned at the end of March 2025.

Costs

The total cost for the pilot was £2,154.40:

- The GP practice was paid £500 to take part in the pilot
- The Pharmacy was paid £400 for set up and training costs and a payment of £1,050 to cover assessment of up to 30 patients (based on a cost of £35 per patient assessment).
- Cost of PharmOutcomes licence £153.40
- Cost of resources and printing £51

The payments were based on recommendations from the primary care team at HIOW ICB and the Local Pharmacy Committee.

Results

There were very low numbers of patients assessed as part of the pilot and fewer again who were identified as being eligible for a chest X-ray.

Seven patients had a consultation with the pharmacist to assess for eligibility for a chest X-ray. Of these:

- One patient did not meet the eligibility criteria and advice was given by the pharmacist
- Two patients did not meet the eligibility criteria for chest X-ray but were referred back to their GP practice
- Four patients were referred for a chest X-ray

No cancers were found through the pilot, and it was not possible to establish whether any other pathology was found as a result of the pilot.

Feedback from participating pharmacist

The pharmacist found the education and training clear and straightforward to complete and felt confident following the training to deliver the pilot.

They found the PharmOutcomes template easy to use and the X-ray form easy to complete

Counter staff found the decision support tool a helpful aide for discussing the pilot with patients and helping them understand who to discuss the pilot with and how to approach this conversation.

The pharmacist's only concern about the pilot was the low numbers and difficulty in finding suitable patients for assessment. They had a few suggestions as to why this may have been the case:

- At the start of the pilot there was an accident at the pharmacy causing damage to the front of the shop. The final repairs only happened in the last two weeks of the pilot. This may have impacted footfall to the pharmacy particularly at the start of the pilot
- The pharmacist wondered if the service being new and unfamiliar meant that patients were less trusting of it. They felt with time and increased services being run through pharmacies that this may be less of an issue
- Despite advertisement in the pharmacy, she felt that there was a lack of awareness of the service and wondered for any possible future projects whether it could be advertised more widely
- The pharmacist felt patients were being well served by the GP practice. She spoke to several patients who met the criteria for referral but were already having their X-ray arranged by their GP

Feedback from participating GP practice

Feedback was received from the practice manager, GP lead for the project and nurse lead for the project.

Due to the very small numbers that came through the pilot they found it hard to give a fully informed comment on the acceptability of the pilot. However, they had no specific concerns. They had sought feedback from their administrative manager who they felt had a neutral view of the pilot with no positive or negative feedback.

They had received no comments or feedback from patients on the pilot.

It was felt that the referrals that had come through on the pilot pathway were all appropriate for X-ray and there were no concerns about this.

Although a clear communication pathway from the pharmacy to the practice had been considered when designing the pathway in reality this was not without issue. The formatting of the PharmOutcome reports received by the practice were not straightforward to navigate, although all the key information was there. It was felt that if higher numbers had come through then this would have been harder to track, and patients may have slipped through without follow up.

Despite a decision being made about a named GP at the practice for the pilot and the pharmacist documenting this on the referral form, the X-ray reports often came back assigned to other GPs. This was felt likely to be an issue in the acute trust, but again with higher numbers could cause issues with patient results 'floating in the ether'.

There was some uncertainty from the practice about exact numbers that had come through on the pilot. To mitigate this risk the pharmacy has subsequently informed the practice of all patients that were assessed or referred on the pathway to check that appropriate follow up took place. However, this does highlight that this could be an area for concern if the pilot were to be scaled up.

When asked for any opinions on the low numbers that went through the pilot, they suggested that perhaps the criteria for X-ray referral were too narrow to get many referrals through with such a small pharmacy site.

They felt that the idea in principle for the pilot was good. They felt many people do go to the pharmacy with symptoms that need further assessment when they wouldn't always go to the GP. However, with such small numbers they don't feel there is enough evidence to show this or to identify any possible issues with the pathway that would need addressing if the pilot were to be scaled up.

They did feel that at a larger scale using a model whereby the pharmacist has an extended scope of practice agreement with a named GP practice could be difficult. This is easy to manage with one pharmacist and one practice only. But with multiple pharmacists taking part and being able to refer patients from multiple practices this arrangement would not be feasible.

Discussion

Although this pilot demonstrated that the participating pharmacist was able to make appropriate chest X-ray referrals for the cases seen, it is not possible to demonstrate the feasibility of the pathway due to such a small sample size. Higher numbers of referrals would be needed to fully assess the safety, acceptability and benefit of the pathway.

The reasons for low numbers were likely multi-factorial. The damage to the front of the pharmacy likely had an impact on footfall. The pharmacy is small and in a more remote area of the island, perhaps meaning there was a lower number of eligible patients. Like all other primary care services, pharmacies are under increasing pressure, and this may have impacted their ability to identify those who might have been eligible for the pilot.

In hindsight it would have been useful at the outset to review the data around factors such as smoking rates and population density to identify sites where there would have been a better chance of identifying higher numbers of eligible patients.

For the pharmacist in the pilot to be able to refer for X-ray they needed to become an authorised non-medical referrer. It was advised by the IOW trust that the best way to arrange this was for there to be an ESP agreement, whereby the pharmacist was working in conjunction with the participating practice. If the pilot was to be scaled up or rolled out this would need to be reviewed. A service at a larger scale would see pharmacists reviewing patients from multiple practices, it would not be feasible for the pharmacist to have ESP agreements with each practice and outside of a pilot setting there may be resistance from GP practices to hold the responsibility for referrals from a pharmacist not employed by them.

One issue with the pilot, which led to significant delay, was difficulties with access to PharmOutcomes software. To reduce costs, the ICB had commissioned a single activity licence only, for the whole HIOW region. This could not host any local service template without a prohibitive cost. It was only due to a temporary extension of the individual IOW licence that the pilot was able to go ahead using this software. This remains an ongoing issue and is a barrier to any further pilots or roll out.

Conclusion

There are no plans to repeat the pilot at a bigger scale or spread the pilot more widely due to lack of evidence, small numbers of referrals vs high costs and the challenges in commissioning as detailed above. There are currently NHS England supported pilots taking place in community pharmacy, some of which are allowing pharmacists to refer those with red flag symptoms for lung cancer directly for chest X-ray. These pilots will have a full evaluation, which will allow for further assessment and consideration of any future work in this area. If any future pilots were to be considered we would recommend a different approach to choosing the pilot site(s), incorporating a data-based approach.

For any queries contact Lucy Pickup, Project Manager, Wessex Cancer Alliance by email: lucy.pickup@wca.uhs.nhs.uk

Acknowledgements

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- Dr David Isaac- GP advisor, Wessex Cancer Alliance

Appendices

- **Appendix A: Process map pathway** - see graphic on following page
- **Appendix B: [Service specification for pilot](#)**
- **Appendix C: [Counter assistant support tool](#)**
- **Appendix D: [Promotional poster for pilot](#)**

Appendix A – process map of pathway

Pharmacy

Patient attends pharmacy and counter staff/pharmacist identify those who may meet inclusion criteria (see below*) and offers consultation with pharmacist

Patient declines - advice given

Consultation with pharmacist to assess eligibility for CXR* (outcome, actions and advice given documented on PharmOutcomes, copy sent to GP)

Patient not eligible

(CXR/CT in last 3 months, GP not part of pilot, doesn't meet eligibility criteria)
Advice given to patient
GP informed via PharmOutcomes

Patient eligible

Pharmacist completes paper referral form and gives to patient to attend walk in CXR appointment
GP informed via PharmOutcomes template

Patient eligible but declines CXR

-Advice given
- GP informed via PharmOutcomes template

Pharmacy Safety Netting

Make sure consultation notification is sent to GP practice

Hospital & GP Practice

CXR carried out?

No CXR
See GP safety netting follow up below

Normal CXR

Result to GP
See GP safety netting follow up below

Abnormal CXR (suspicious for lung cancer)

Notify CNS and take further action including contacting GP to request 2ww referral

Abnormal CXR (other pathology)

-Result to GP
See GP safety netting follow up below

GP Safety Netting

Admin staff will send to GP for review before it is filed. If patient sent for CXR this will be coded on patient record and review organised for 4 weeks time