

The Role of the Pharmacist in Referring Clients with Lung Cancer ‘Alarm’ Signs and Symptoms

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Lung cancer facts and figures

Lung cancer is the fourth most commonly diagnosed cancer in Ireland, accounting for 1 in 10 new cancer cases, equating to approximately 2,750 cases per year. Alarming, annual numbers of lung cancer cases in Ireland are projected to increase by 119%, to a total of 5,450 cases per year, by 2045. Lung cancer is the leading cause of cancer death among men and women in Ireland, accounting for 1 in 5 cancer deaths, equating

to approximately 1,880 deaths per year (National Cancer Registry Ireland, 2020). The median age at diagnosis in Ireland is 70-74 years, with 97% of lung cancer cases diagnosed in people over 50 years, and three quarters (75%) of cases diagnosed in people over 65 years (National Cancer Registry Ireland, 2018).

Around 60% of lung cancer cases in Ireland are diagnosed at Stage 3 or 4 (National Cancer Registry Ireland, 2018). Late-stage diagnosis is associated with reduced treatment options and poorer survival rates. Indeed, one-year survival is 71% for people diagnosed with Stage 1 lung cancer, compared to just 16% for people diagnosed with Stage 4 disease (Department of Health, 2017). Early detection of lung cancer is key to improving patient outcomes.

A late diagnosis of lung cancer can result from the complex interplay between numerous factors. These include lack of knowledge of lung cancer signs and symptoms amongst both the public and healthcare professionals, barriers to accessing primary care services, delays in referral from the primary care setting, and delays in accessing diagnostics and specialist review in the secondary care setting.

Lung cancer prevention

January is traditionally associated with New Year’s resolutions, fresh motivation, and healthy intentions. Patients are often more willing to have open conversations about smoking cessation. Quitting tobacco is high on the resolution agenda for many smokers, due to the well documented health implications, particularly the risk of lung cancer.



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Figure 1. Lung cancer signs and symptoms

Know the signs Find Lung Cancer Early
National Cancer Control Programme

If lung cancer is found early, your chances of survival are much better than if it is picked up late. Contact your doctor if you have any of the following signs or symptoms.

Call your GP TODAY if you notice any of the following

- New cough, lasting for more than 3 weeks
- A change to your normal cough
- Breathlessness more than is normal for you
- Coughing up blood
- Unexplained chest pain
- Chest infections that keep coming back
- Unexplained weight loss
- Constantly very tired
- Loss of appetite

Don't be scared Don't delay Call your GP today

Community pharmacists are trusted healthcare professionals and are uniquely well placed to support people in making healthier lifestyle choices. During routine interactions, such as dispensing medication, pharmacists may ask patients about lifestyle risk factors for chronic disease and cancer, including smoking habits. Time and resource permitting, pharmacists may arrange a consultation with a client to further discuss their health, and to encourage and support positive behavioural change, including smoking cessation. Signposting to Health Service Executive (HSE) resources, including the Quit Programme, may be beneficial <https://www.hse.ie/eng/services/list/5/cancer/prevention/couple-its-never-to-late-to-quit-smoking.pdf>

Early detection of lung cancer

As previously discussed, stage at diagnosis is an important predictor of lung cancer survival, with early diagnosis increasing the likelihood of longer-term survival. Pharmacists and their staff are uniquely well placed within the community to recognise people with signs and symptoms suspicious for cancer and encourage them to consult their General Practitioner (GP) without delay, thereby contributing to the early detection of cancer. Pharmacists experience millions of annual interactions with the public. On average, patients attend a pharmacy 24 times per year, compared to just six consultations

per year with a GP. Pharmacists were identified as the most trusted healthcare professional group in the 2021 Ipsos MRBI Veracity Index, with a 96% level of trust. A recent Irish Pharmacy Union survey found that almost 40% of respondents see their pharmacist as their most important healthcare professional. As a result of frequent interactions and strong therapeutic relationships with their clients, pharmacists and pharmacy staff are in an excellent position to identify patients with signs and symptoms suspicious for cancer, broach the subject in a timely and sensitive manner, and make appropriate suggestions for further action, e.g., timely GP consultation for further clinical evaluation and referral for diagnostic testing if required.

Lung cancer has a wide symptom signature as illustrated in Figure 1, on page 50 'Red flag' signs and symptoms include haemoptysis (i.e., coughing up blood) and unexplained weight loss. However, other more subtle signs and symptoms include a new cough of more than three weeks duration, or changes to an existing cough. These symptoms may be minimised by clients and healthcare professionals alike, especially when they occur in people who smoke tobacco products, who may dismiss them as a "smokers' cough." Pharmacists are well placed to identify clients at risk of lung cancer, including smokers with prolonged or changing cough,

who may attend the pharmacy to purchase over-the-counter products such as cough medicine or nicotine replacement therapy. Other clients at risk of lung cancer include those with chronic obstructive pulmonary disease (COPD) as well as people with recurrent chest infections who the pharmacist may notice attending for multiple courses of antibiotics. As trusted healthcare professionals, pharmacists can encourage these clients to consult their GP in a timely manner for review of concerning signs and symptoms.

Training and education of over-the-counter pharmacy staff, who are likely to be the first to encounter many of these clients, could assist in identifying people who may benefit from further consultation with the pharmacist and advice regarding arranging a GP consultation. Further detail on lung cancer early detection and risk reduction is available here: <https://www.hse.ie/eng/services/list/5/cancer/prevention/lung-cancer-detect-early-factsheet.pdf>

Pharmacists' role in patient referral

University College Cork (UCC) nursing and pharmacy researchers worked with the National Cancer Control Programme (NCCP) to conduct research with 36 healthcare professionals in Ireland, including 10 pharmacists, about their experiences of patient referral for lung cancer and ways to

enhance practice in this regard. Pharmacists perceived their role to include advising, encouraging, and reassuring patients, and upholding and respecting their autonomy. Knowledge of the client cohort and trust between pharmacist and client were identified as key enablers of recognising and referring people with signs or symptoms suspicious for lung cancer. Pharmacists highlighted a persistent cough, particularly among smokers, as a key trigger for referring patients to their GP. Pharmacists were also cognisant of the risk of lung cancer among clients requesting recurrent cough medicine or repeat prescriptions for antibiotics or steroids. Pharmacists described the challenge of encouraging clients to consult their GP without causing alarm. The close pharmacist/client relationship was highlighted as positive, facilitating dialogue and openness, and enabling pharmacists to readily detect changes among their regular clients, such as unresolving cough or unexplained weight loss.

Challenges faced by pharmacists during referral

Referring patients who have signs and symptoms suspicious for lung cancer is not without challenges. Our research showed that pharmacists believed they had a limited role in referral due to their scope of practice and siloed provision of healthcare in Ireland. Their professional concerns included referring appropriate

Triggers for pharmacists to refer patients	<ul style="list-style-type: none"> • Typical signs and symptoms of cancer (localised [e.g., cough] and non-localised [e.g., weight loss, lack of energy] signs and symptoms of lung cancer) • Fear caused by haemoptysis • Smoking as lung cancer risk factor • Recurrent prescriptions (e.g., cough medicine, steroids, and antibiotics)
Pharmacists' perceived role in patient referral	<ul style="list-style-type: none"> • Advising, encouraging, and reassuring patients • Upholding and respecting patient autonomy • "Knowing" the patient and the relationship of trust
Challenges faced by pharmacists during referral	<ul style="list-style-type: none"> • Limited knowledge of Lung Cancer Rapid Access Clinics • "The missing link": lack of communication within the healthcare system and the resulting disruption in continuity of care • Limited role and scope of practice • Fear of frightening patients while emphasising the urgency of referral • Pressures on pharmacists and the healthcare system • Pharmacist fatigue from repeated patient presentations
Enhancing early referral among pharmacists	<ul style="list-style-type: none"> • Delivery of education and webinars by professional organisations (e.g., IOP) • Using patient stories to educate pharmacists • Adopting an interprofessional approach to education • Enhancing communication and continuity of care (e.g., interprofessional communication, strong relationship with GPs, and keeping records of consultations)

Table 1. Summary of results from focus groups with pharmacists

patients for GP consultation, even where they felt that signs and symptoms were clearly associated with lung cancer.

There is no formal referral pathway from community pharmacy to general practice in Ireland, and pharmacists described how, having advised the patient to see the GP, they often heard nothing further and had to follow up with the patient directly to ascertain the outcome of referral. Moreover, pharmacists felt that they were not appropriately informed about referral pathways for patients, such as the Lung Cancer Rapid Access Clinics.

The quality and duration of the relationship with the client was identified as an important factor, with locum pharmacists highlighting the challenge of recognising symptoms of concern or clinical changes, such as prolonged cough or weight loss, in clients with whom they were unfamiliar. Lack of time and resources were identified as additional challenges to recognising and referring symptomatic patients to their GP.

Enhancing early referral among pharmacists

In January 2021, the NCCP, in collaboration with the Irish Institute of Pharmacy (IiOP), delivered a webinar entitled: “Improving Lung Cancer Outcomes in Ireland: The Importance of Pharmacists in Early Detection of Lung Cancer.” This webinar can be accessed here: <https://iiop.ie/h5p/16/embed>.

This webinar provided information on patient pathways to diagnosis, including the Lung Cancer Rapid Access Clinics (RACs), and highlighted the importance of the community pharmacist in

encouraging patients to see their GP, who is the gatekeeper to the RACs and other diagnostic services. Feedback from the webinar was positive, and pharmacists believed that including patient stories that highlight the benefits of early diagnosis would be an important additional element in future educational initiatives. Pharmacists also felt that interprofessional educational sessions delivered by lung cancer specialists would be of benefit to both themselves and GPs.

A summary of results from the study are presented in Table 1 on page 52.

Continuous Professional Development (CPD)

Use this article and the associated documents to inform a Continuing Professional Development (CPD) cycle in your e-portfolio, as illustrated in Figure 2:

- Self-appraisal: Prior to reading this article, consider the early detection of lung cancer, and the role of the pharmacist in educating patients and pharmacy staff. Are there any gaps in your knowledge that you would like to address?
- Develop a personal plan: Use this article as the basis to inform yourself about the pharmacist’s role in the early detection of lung cancer. How might you supplement this information?
- Action: Give yourself a timeframe to implement the personal plan. Did you need to adapt it in any way?
- Document your learning: Reflect on what you’ve learned about the early detection of lung cancer through the actions you’ve taken.



Figure 2. Irish Institute of Pharmacy’s CPD Wheel

- Evaluate the impact on practice: How will your learnings inform your interactions with patients and staff going forward? Are there specific ways that you plan to change your practice?

Resources:

- Lung cancer early detection factsheet: <https://www.hse.ie/eng/services/list/5/cancer/prevention/lung-cancer-detect-early-factsheet.pdf>
- Lung cancer in Ireland factsheet: <https://www.ncri.ie/sites/ncri/files/factsheets/Factsheet%20lung.pdf>

- National Cancer Control Programme and Irish Institute of Pharmacy’s “Improving Lung Cancer Outcomes in Ireland: The Importance of Pharmacists in Early Detection of Lung Cancer” webinar: <https://iiop.ie/h5p/16/embed>

- Taylor’s video on early detection of lung cancer: <https://www.youtube.com/watch?v=PLPHRC16gUE>
- The National Cancer Control Programme’s early detection page: <https://www.hse.ie/eng/services/list/5/cancer/prevention/early-detection-of-cancer-how-to-spot-cancer-early.html>

News

Cervical cancer Elimination

To mark global Cervical Cancer Elimination Day of Action, the National Screening Service – in partnership with key stakeholders – highlighted a joint project that will bring Ireland closer to realising the aim of eliminating cervical cancer.

In January 2022, the National Screening Service (NSS); National Immunisation Office (NIO); National Cancer Control Programme (NCCP); and National Cancer Registry of Ireland (NCRI) will begin working with academics in Australia to develop a model to work towards cervical cancer elimination in Ireland. This will involve using Irish data - for example, on screening uptake and HPV vaccine uptake - to tailor the model for our population and allow Ireland to set a target date for elimination of cervical cancer. The NSS has established a working group with the NIO, NCCP and NCRI to work with the Australian team on this important project.

The model will give the HSE pointers on how to work towards elimination. This will include improving uptake of cervical screening and HPV vaccination to make sure no groups in our society get left behind. It will also advise on how both programmes can adapt and evolve to support the earliest elimination target possible. This will ensure Ireland continues to deliver the high-quality programmes to as many people who are due HPV vaccination and/or screening as possible.

Every year in Ireland about 300 people get cervical cancer and 90 women die from it. Almost 150 women diagnosed with cervical cancer are diagnosed in screening. In women aged 25 to 39 years, cervical cancer is the second most common cause of death due to cancer.