

Pharmacy training for early diagnosis of cancer

Accelerate, Coordinate, Evaluate (ACE) Programme

An early diagnosis of cancer initiative supported by:
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Support

ACE Pharmacy and other primary care cluster
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Overview of the report

This report looks at the training of community pharmacy staff who participate in early diagnosis of cancer related activities. Firstly, the role community pharmacies can and do play in early diagnosis of cancer is presented, before outlining what skills and knowledge are needed to perform such activities.

Secondly, the report goes on to look at the training programmes used by five community pharmacy early diagnosis of cancer projects, comprising two ACE programme projects and three other projects undertaken prior to the ACE programme. Appendix 1 gives an overview of these five community pharmacy projects. The training programmes are analysed in terms of content, organisation, promotion and evaluation. Commonalities and key themes including barriers encountered and factors for success are drawn out and recommendations made. Appendix 2 presents all five training programmes in more detail.

It is hoped this report will be useful for organisations such as Local Pharmaceutical Committees (LPCs) and Clinical Commissioning Groups (CCGs), which seek to undertake community pharmacy based early diagnosis of cancer activities.

The report is an edited version of the interim publication of the ACE programme Pharmacy and other Primary Care cluster. This version includes two additional appendices (3 and 4) with updated information and findings from two projects looking at direct referral for chest x-ray (CXR) from community pharmacist and driving awareness of bowel and lung cancer through pharmacies. Both project summaries include findings and learnings which should benefit colleagues planning similar approaches.

Introduction to ACE pharmacy and other primary care cluster

The ACE (**A**ccelerate, **C**oordinate, **E**valuate) programme on early diagnosis of cancer is an NHS England led initiative supported by Cancer Research UK and Macmillan Cancer Support. ACE seeks to support NHS organisations to implement best practice and to test innovative approaches to early diagnosis of cancer. This will strengthen the evidence base to inform quality improvement and future commissioning in cancer.

Cancer outcomes in England lag behind other European countries with comparable healthcare systems and a key factor in this is failing to diagnose patients early enough.ⁱ Late stage diagnosis is associated with poorer survival (lower one year and five year survival rates), because treatment is less likely to be curative.ⁱⁱ ACE aims to drive an increase in earlier stage (stages 1 and 2) diagnosis, a reduction in diagnosis via emergency presentation, as well as improve patient experience.

Projects accepted into the ACE programme were assigned to a thematic cluster in order to facilitate peer learning and evidence gathering. One of these clusters is “Pharmacy/Primary Care” which consists of projects seeking to develop the role of non-GP primary care health professionals in early diagnosis of cancer. Two of these projects are community pharmacy based; one seeking to raise awareness of bowel and lung cancer and the other undertaking a direct referral to CXR pilot for suspected lung cancer.

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The role of community pharmacy in early diagnosis of cancer

Community pharmacies are ideally placed to play a role in early diagnosis of cancer due to their accessibility, opening hours and familiarity with the local population.ⁱⁱⁱ A study by Todd, Copeland, Husband et al,^{iv} found that in England 89% of the population can walk to a community pharmacy within 20 minutes, rising to 98% in urban areas and 99% in areas of high deprivation.

People may present at community pharmacies with “red flag” cancer symptoms. A study of 33 pharmacies in Northern England reported 642 patients presenting with cancer alarm symptoms over a six month period; the most common was a cough lasting longer than three weeks, followed by unexplained dyspepsia for more than three weeks.^v In addition, patients may self-manage symptoms that can indicate cancer via purchasing non-prescription medicines in community pharmacies, putting pharmacists in an ideal position to identify at-risk individuals who may not consult their GP about such symptoms.^{vi,vii} This could involve people purchasing indigestion remedies for symptoms that could indicate bowel cancer.^{viii}

The fact that pharmacies are highly accessible even to deprived population groups is important as they are more likely to get some forms of cancer, for example lung cancer,^{ix} and to have their cancer diagnosed late because they delay going to the GP.^x Failure to consult a GP about symptoms can lead to diagnoses via emergency presentation, which is associated with poorer outcomes including lower one year survival rates, compared to people diagnosed following a GP two week wait referral.^{xi}

The NHS community pharmacy contract in England defines promotion of healthy lifestyles (public health) as an essential pharmacy service, and community pharmacies are required to participate in six local campaigns a year, which often include Stop Smoking and Flu Vaccination.^{xii} Many community pharmacies have included cancer as one of their six local campaigns, for example the national Be Clear on Cancer^{xiii} campaigns such as the ovarian cancer campaign in 2013.^{xiv} Community pharmacy awareness raising can also support cancer screening programmes where they exist, for example bowel cancer screening. One of the ACE programme community pharmacy projects is addressing bowel screening.^{xv} Initial feedback from this ACE project revealed many pharmacy customers in the target age group for bowel screening were unaware of the programme.

The role of community pharmacy does not have to be limited to raising awareness, but can also extend to referring on patients with suspected cancer.^{xvi,xvii} Pharmacists have proven themselves capable of direct referral; a 12 week South West London pilot in 2011-21 found that 55/60 direct referrals to secondary care for suspected lung cancer by community pharmacists were appropriate; no lung cancer was diagnosed, but 14 cases of undiagnosed COPD were identified.^{xviii}

What knowledge and skills do community pharmacy staff need to undertake early diagnosis of cancer activities?

First of all, it is important to note that undertaking early diagnosis of cancer activities in a community pharmacy setting is a team endeavour, not just a task for the pharmacist. Medicines counter assistants (MCAs) in particular are crucial as they are often the first and most frequent point of contact for pharmacy customers. This means MCAs are in a better position to get to know the local population and build relationships with regular pharmacy customers.

To undertake cancer awareness raising activities, MCAs need to:

- Understand the signs and symptoms of cancer and be familiar with cancer screening programmes
- Be able to identify and engage with individuals who are potentially at risk of cancer, which may involve initiating conversations and asking questions about their health and lifestyle
- Be able to answer questions from pharmacy customers about cancer and cancer screening
- Know when to refer on an individual pharmacy customer for more detailed counselling with the pharmacist.

To undertake cancer awareness raising activities, pharmacists need to:

- Have detailed knowledge about the signs and symptoms of cancer and cancer screening programmes
- Be able to offer confidential and knowledgeable counselling to customers presenting with signs and symptoms of cancer
- Be able to assess individuals based on symptoms, health status and lifestyle information to ascertain whether it is appropriate to refer them on to their GP for further investigation.

In addition to the knowledge and skills required for awareness raising, pharmacists undertaking direct referral to secondary care or diagnostics need to:

- Understand and be able to follow a referral protocol
- Be knowledgeable about the diagnostic tests a person will undertake in secondary care after being referred
- Be able to inform and (where necessary) reassure the referred patient in relation to likelihood of cancer being diagnosed.

Content

- All MCA training programmes covered signs and symptoms of cancer, screening programmes (where relevant), cancer statistics and counselling skills
- Pharmacists were found to already possess good knowledge of cancer, so training focused on updating knowledge e.g. latest cancer statistics, recent developments in a specific cancer
- Data collection was covered in all training programmes for those staff members required to undertake it
- Pharmacists undertaking direct referral had to undergo specific additional training including familiarising themselves with the referral protocol.

Format and Organisation

- MCAs could attend daytime or evening training and did not require backfill or payment, although some projects offered some nominal payment or incentive
- Pharmacists found it far easier to attend evening training sessions and were likely to require backfill or other incentives to attend daytime training
- Counselling skills training for MCAs always involved interactive exercises such as role play
- The costs incurred by all projects included: venue and refreshments, trainer time, project staff preparation time and printing training materials. Some projects also incurred backfill type costs.

Promotion & Incentivisation

- All projects found a way to mandate training; in general this was by requiring participating pharmacies to send at least one staff member to training. However, it is important to note that with one exception (pharmacies seeking healthy living pharmacy accreditation in Cumbria) participation was voluntary
- Although training was not always presented as a career development opportunity for MCAs (some projects did, some did not), there was a strong feeling that it should be considered and presented as such.

Evaluation

- All projects conducted some kind of evaluation in the form of feedback forms or on-line surveys for training participants and reported that feedback was mostly positive
- Only one project evaluated cancer knowledge before and after training, although a second said they would consider this in future.

Barriers & Challenges

- It can be difficult to get hold of sufficient quantities of good quality information materials for an awareness raising campaign, and it can take time to do so.

Information materials have to be available at training sessions so participants familiarise themselves with the materials, and ask questions if needed

- One project tried cascading training in the first phase of their work and found that it did not happen. For the second phase of their work they then required one pharmacist and one MCA from each pharmacy to attend training. The same project also found that locum pharmacists (who had not undergone project specific training) could not undertake direct referrals.

Enablers & Factors for Success

- All projects reported that MCA counselling skills training is absolutely vital in order for MCAs to feel confident in their cancer knowledge and be able to identify and engage with pharmacy customers. In participant feedback, this element of the training was highly appreciated by those who undertook it
- The fact that all projects found a way to mandate training (except the first phase of one project as explained above), indicates the importance of having some staff in each participating pharmacy undergo training
- Online training modules were only used as a substitute for face-to-face training when pharmacy staff were unable to attend the planned training event
- Two projects found that bringing pharmacy staff together in a training event enabled them to learn from each other including generating campaign ideas and discussing how to engage with pharmacy customers.

Conclusions

The ability of community pharmacies to undertake early diagnosis of cancer related activities has been demonstrated in a number of projects, several of which have generated peer reviewed articles. Early diagnosis of cancer activities in community pharmacy fit into two broad sorts of activities; raising awareness of cancer and cancer screening programmes and identifying high risk individuals and where appropriate advising them to see their GP or referring them on to secondary care for diagnostic tests. Pharmacists have proved themselves capable of appropriately referring patients for chest x-rays and Medicines Counter Assistants (MCAs) have proved themselves capable of approaching and engaging pharmacy customers in discussions about cancer and cancer screening.

It is clear that training is a vital part of any community pharmacy early diagnosis of cancer project and that taking part in an intervention requires each pharmacy to send some staff members to undertake training. Even more important was that this training must involve MCAs, not just community pharmacists themselves. All the projects featured in this report stressed the importance of training to equip MCAs with good basic knowledge of cancer and the counselling skills needed to proactively approach and engage pharmacy customers for the success of a project overall. In addition, the staff concerned appreciated the training and the importance placed on their role in the interventions.

Pharmacists were generally found to have good knowledge of cancer and required only updating with a focus on clinical knowledge. When it came to direct referral, pharmacists needed to attend training to update themselves with the latest developments in that

particular tumour site and to familiarise themselves with the referral protocol. Pharmacists who did not undertake training were not able to perform referrals.

There was loose agreement that it was more effective to organise pharmacist training sessions in the evening and that MCAs could attend either daytime or evening training sessions. Costs of training varied, but typically included venue and refreshment costs (relatively minor), the printing of materials and the cost of trainers' time. It was not thought necessary (although some did) to covers costs or provide incentives for MCAs to participate in daytime or evening training sessions, and pharmacists only required backfill if training sessions took place during working hours.

Recommendations

Based on the findings of the five projects examined here, we would recommend that organisations undertaking training for pharmacy staff to take part in early diagnosis of cancer related activities should:

- Require that at least one pharmacist and one Medicines Counter Assistant from each participating pharmacy to undertake training
- Prioritise face-to-face training sessions, especially for MCAs
- Use on-line training only for cancer knowledge type education
- Use on-line training ideally in addition to face-to-face training or as a replacement for it only where individuals are unable to attend face-to-face training for unforeseen reasons
- Focus on updating clinical knowledge of cancer for pharmacists
- Focus on basic cancer knowledge and counselling skills for MCAs
- Include interactive exercises e.g. role play, when training MCAs in counselling skills
- Organise pharmacist training in the evening and provide refreshments

APPENDIX 1 – OVERVIEW OF FIVE COMMUNITY PHARMACY EARLY DIAGNOSIS OF CANCER PROJECTS

Early diagnosis of bowel and lung cancer through community pharmacy in Cumbria

This project is part of the ACE programme (reference A50/66) pharmacy/other primary care cluster. It is being run by Cumbria Local Pharmaceutical Committee (LPC) with support from Cumbria Clinical Commissioning Group (CCG).

This project overview was originally published in 2015. An updated overview was added in 2017 as an appendix at the end of this document.

The LPC recruited community pharmacies from across Cumbria (most of which are in the process of becoming Healthy Living Pharmacies^{xix}) to participate in the project, which uses “Healthy Living Champions” (mostly MCAs) to drive one month awareness campaigns on bowel and lung cancer. These tumour sites were chosen as bowel cancer was an NHS England priority, and lung cancer was a local priority for Cumbria CCG. The approach had also been originally piloted on a small scale with bowel cancer by the project’s pharmacist lead.

The campaigns use posters, window displays and prescription bag leaflets as well as direct engagement with pharmacy customers to raise awareness of cancer and where appropriate, cancer screening. It also seeks through proactive engagement with pharmacy customers to identify those who might be at higher risk of bowel or lung cancer and then refer them on the pharmacist if appropriate, and/or encourage those in the target group to undertake screening. Individuals considered (on the basis of responses to questions from MCAs) to have a high risk of lung or bowel cancer are advised to speak with the pharmacist for more detailed counselling, and where appropriate the pharmacist will recommend a GP visit for further investigations.

The bowel cancer campaign took place in July 2015 and the lung cancer campaign is planned for November 2015.

Community pharmacy direct access to chest x-ray in Doncaster

This project is part of the ACE programme (reference A1) pharmacy/other primary care cluster. It is being run by Doncaster CCG and is part of a larger cancer awareness programme which also involves the local football club. Lung cancer is being targeted in Doncaster because it is a local public health priority due to higher than average incidence, poorer than average outcomes, and relatively high rates of emergency presentation.

This overview was originally published in 2015 – a one-page summary can be found at the end of this report (appendix 4) or the full project summary published in May 2017 can be found [here](#)

The direct referral to chest x-ray pilot involves 9 community pharmacies mostly situated in deprived neighbourhoods of Doncaster. Pharmacists taking part follow a referral protocol to identify and refer (symptomatic) individuals suspected of lung cancer to the local acute trust for a CXR. The project hopes to improve early diagnosis of lung cancer by identifying and referring on symptomatic individuals,

who may not present to their GP until they are very unwell or present to A&E once very unwell. The project also hopes to pick up some non-cancer related diagnoses, such as COPD, through the pharmacist direct referral pathway.

The project began in September 2015 and will run for 12 months.

Promoting cancer awareness and early detection within community pharmacies in Essex

This project was a NAEDI^{xx} funded initiative delivered jointly by Essex Cancer Network and Essex Local Pharmaceutical Committee in 2010.

The project sought to raise awareness of skin, colorectal and bowel cancer among the pharmacy visiting public. This was done using a wide variety of means including posters, window displays, information leaflets, a sun safe quiz, and Medicines Counter Assistants (MCAs) proactively engaging with pharmacy customers. Colorectal and bowel cancer were chosen as tumour sites for the campaign due to high mortality rates from these cancers in Essex, and skin cancer due to its increasing incidence in the area.

Surveys completed by people who visited pharmacies during the campaign found that they had confidence in the ability of pharmacy staff to communicate important health messages. Those pharmacy customers who had spoken with a pharmacy staff member said they had greater awareness of the signs and symptoms of cancer than prior to the conversation.

Community pharmacy suspected lung cancer referral scheme, South West London

This project was run by the South West London Cancer Network and received some funding from NAEDI. The intervention involved community pharmacist direct referral to CXR for pharmacy customers with suspected lung cancer.

The Cancer Network decided to focus on lung cancer as there was very little publicity at national level about this tumour site, and local health data showed that there was high incidence of stage three and four lung cancer with frequent late presentation. In addition, the symptoms of lung cancer are quite generic, which made it an important awareness raising campaign.

The initial phase, which ran from December 2011 to March 2012, involved 18 pharmacies in deprived areas of Wandsworth and Croydon. Pharmacy customers at risk of lung cancer were identified by MCAs and referred to the pharmacist for a confidential consultation. If appropriate, the individual was then referred on for a CXR in one of two acute trusts. Those who attended the acute trust appointment were given a clinical assessment, CXR and a spirometry.

A second phase of the project took place involving 43 pharmacies. The project found that the vast majority (55/60) pharmacist direct referrals were appropriate and although no lung cancer was detected, 30% of patients attending their clinic appointment (14/47) were found to have undiagnosed COPD.

Cancer awareness campaign within Islington community pharmacies

Cancer Research UK and Islington Council's public health department worked together to undertake a six month project to raise awareness of the signs and symptoms of cancer from February to July 2014.

Half the pharmacies in Islington took part in the project, and pharmacies used leaflets, posters, DVDs, window displays, a "Cancer Myths and Truths" quiz, and direct engagement with pharmacy customers to raise awareness of the signs and symptoms of cancer.

Feedback from customers who visited pharmacies during the campaign found that the majority agreed that pharmacies should raise awareness of cancer and that most were comfortable talking about cancer in a pharmacy setting.

APPENDIX 2 – DETAILS OF FIVE PHARMACY EARLY DIAGNOSIS OF CANCER TRAINING PROGRAMMES

Pharmacy project/training characteristics	ACE programme project A50/66 – early diagnosis of bowel and lung cancer through community pharmacy (ongoing 2015)	ACE programme project A1 – community pharmacy direct referral to chest X-ray (ongoing 2015)	Essex Cancer Network and Essex LPC – promoting cancer awareness and early detection within community pharmacies (June 2010)
Content of training			
Pharmacists	Update on bowel or lung cancer plus cancer statistics.	<p>Signs and symptoms of cancer, cancer statistics update, counselling skills (directly relating to referrals), data collection, familiarisation with documentation including referral forms, cancer survivor story (presented by patient), management of chemotherapy and radiotherapy side effects.</p> <p>Specific to direct referral for suspected lung cancer: prompt counter questions linked to OTC purchases, sharing sensitive data, signs and symptoms for referral protocol, IRMER training.</p> <p>NB: screening was not covered as there is no screening programme for lung cancer.</p>	Signs and symptoms of cancer, cancer statistics, data collection, familiarisation with information materials, campaign planning and ideas.
MCAs/other pharmacy staff	(Healthy Living Champions) Signs and symptoms of cancer, screening programmes, cancer risk factors/healthy lifestyles, national cancer statistics, counselling skills, data	MCAs had previously undertaken training as part of a larger cancer awareness raising programme, which focused on cancer knowledge and counselling skills.	Signs and symptoms of cancer, screening programmes, counselling skills (strong focus), familiarisation with information materials, how to link OTC purchases to cancer symptoms, familiarisation with

	collection, familiarisation with information materials, campaign planning and ideas.		bowel screening kits.
Format/organisation of training			
Pharmacists	Did not attend training, but received training presentation and were sent an update on bowel cancer.	<ul style="list-style-type: none"> • Attended evening face to face training sessions from 19.00 - 21.00. • Presentations on: lung cancer signs and symptoms. • Training was organised by the CCG in collaboration with the local acute trust. • Training was delivered by a respiratory consultant and the radiology team from our local trust along with a cancer survivor. The local pharmaceutical committee was involved and consulted. • One or two pharmacists from each participating pharmacy took part in the training. 	<ul style="list-style-type: none"> • Attended two hour evening face-to- face training sessions. • Presentations on: cancer signs and symptoms. • Training was developed in collaboration with National Pharmaceutical Association and delivered by cancer Clinical Nurse Specialist from local trusts and a cancer survivor/patient.
MCAs/other pharmacy staff	<ul style="list-style-type: none"> • Healthy Living Champions attended 2 hour face-to-face training sessions. • Presentations on: cancer signs and symptoms, cancer statistics, risk factors/healthy lifestyle, bowel screening, data collection. • Interactive exercises on: counselling skills. • Training was delivered by a community pharmacist who is one of the project leads and an accredited Centre for Postgraduate Pharmacy Education (CPPE) trainer, although the training was not developed with 	<ul style="list-style-type: none"> • Training was aimed at pharmacists for the direct referral project, although some dispensing staff attended. • A representative of the LPC went to every pharmacy to work through the counter tool with all MCAs. 	<ul style="list-style-type: none"> • Attended half day daytime face-to-face training sessions. • Presentations on: cancer signs and symptoms and administrative requirements of the project e.g. data collection. • Interactive exercises: on counselling skills. • Other topics covered: explaining the purpose of the campaign to MCAs and their role. • Also: presenting bowel screening kits to MCAs (sourced from secondary

	CPPE.		care). <ul style="list-style-type: none"> • Linking some cancer symptoms to OTC medicines purchase. • Training was developed in collaboration with National Pharmaceutical Association and delivered by CNS from local trusts and cancer survivor/patient
Cost of training (inc cost breakdown if possible)	<ul style="list-style-type: none"> • Average £60 venue rental. • The trainer did not charge any fee due to being part of the project team. If backfill time had been requested, then the cost would have been half a day's locum pharmacist time (£250) plus preparation time (around half a day). • The project manager spent approximately 10 days preparing and organising the training sessions. • Approximately £100 costs were incurred preparing and printing training materials. 	<ul style="list-style-type: none"> • £550 for each session (three were organised) including venue and refreshments. 	<ul style="list-style-type: none"> • Costs included: venue and refreshments, trainers' time and backfill for three MCAs per pharmacy.
Promotion & incentivisation			
Dissemination/promotion	<ul style="list-style-type: none"> • Event registration via EventBrite. • Each pharmacy was sent details of the event via PharmOutcomes including link to registration. • Details of event and link to registration also on LPC website. 	Pharmacies were informed about the project via the Local Pharmaceutical Committee. This involved contact via email and letter as well as information on the LPC website.	<ul style="list-style-type: none"> • Wrote to each pharmacy (post and email) to tell them about the project and asked them to complete expression of interest if they wanted to participate. • Around a third of pharmacies took part
Mandated participation	<p>Yes, participation of a pharmacy was contingent on attending training. Pharmacies seeking Healthy Living Pharmacy (HLP) status were required to participate and others could choose to do so.</p> <p>All participating pharmacies had to send at</p>	<p>Yes for pharmacists undertaking direct referral. Each participating pharmacy had to send at least one pharmacist for training, some sent two.</p> <p>In addition, one of the LPC team went to each participating pharmacy to work through the counter tool (detail aid)</p>	<ul style="list-style-type: none"> • Yes, all participating pharmacies had to have at least one pharmacist attend one of the evening training sessions. • Participating pharmacies were also strongly encouraged to send one MCA/other member of pharmacy team to attend one of the half day training sessions. A few did not

	least one MCA although they were free to send more staff members and many did.	with all of the MCAs.	manage.
Backfill/incentives	None. However, as part of campaign, a box of chocolates (for the pharmacy team) and a bunch of flowers (for the individual MCA) was offered for the pharmacy with the best in-store display (judged by photos submitted).	<ul style="list-style-type: none"> • M&S vouchers for counter staff participating in training. • £25 per participating pharmacy to create a display to promote the awareness campaign. • Backfill was paid to pharmacists for attending direct referral training sessions. 	No backfill or incentives for pharmacists. £50 to cover backfill and travel expenses for each MCA with up to three per pharmacy.
CPD/professional development opportunity	Training was not presented as professional development opportunity, but could easily be considered as such.		No formal CPD accreditation for MCAs or pharmacists. Presented as development opportunity for MCAs.
Other (specify)	Cancer awareness campaign is branded as one of the six public health campaigns pharmacies are required to undertake as per the pharmacy contract in England.		Campaign had a “best window” competition.
Evaluation			
	Training participants were asked to complete Survey Monkey feedback form on training. Before and after surveys of cancer knowledge were not undertaken, but this is being considered for future projects.	Participants were asked to complete training feedback survey which was available on the LPC portal.	MCAs and pharmacists were asked to complete a self-assessment questionnaire on cancer awareness and the role of community pharmacy before the training and after completion of the project.

			Feedback on training was overwhelmingly positive.
Barriers/enablers/key factors for success and other comments			
Barriers	<ul style="list-style-type: none"> Getting hold of enough good quality information materials in a timely manner was a challenge. Information material packs had to be distributed at the training event, so all pharmacies got the same materials and training participants could go through them and ask questions if they had any. Staffing levels can be an issue in relation to releasing people to attend training. 		Availability of cancer nurse specialists and expert patients to deliver training.
Enablers/key factors for success	Using PharmOutcomes for data collection made it easy to do/explain project data collection as Healthy Living Champions use the database in their daily work anyway.	It is vital that MCAs are equipped with the knowledge, skills and confidence to engage with customers in order to identify those at risk of lung cancer and refer them to the pharmacist.	<ul style="list-style-type: none"> Pharmacists welcomed the clinical update on cancer delivered in the training and it was brought to life by having a cancer patient/survivor there. Face-to-face training for MCAs was highly useful. They were able to learn from each other as well as the trainers; this would not have been possible with on-line training. Counselling skills training for MCAs was crucial; they need to have the confidence to initiate conversations with pharmacy customers. Getting secondary care involved in the training and the development of questions to ask pharmacy customers was really valuable.

Other comments	Bringing Healthy Living Champions together in training sessions proved an excellent forum to generate new campaign ideas.	For the direct referral pilot, the acute trust required pharmacist undertaking direct referral to have done IRMER training, although GPs do not generally undertake this training.	MCAs love the project; they were enthused and got the right training to enable them to fulfil their role.
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Pharmacy project/training characteristics	South West London Community Pharmacy direct referral to chest X-ray pilot (December 2011-March 2012)	Cancer Awareness Campaign within Islington Community Pharmacies (February to July 2014)
Content		
Pharmacists	<p>Update on lung cancer, local cancer statistics including emergency presentations for lung cancer, data collection (focus on completing referrals forms), role that pharmacies can lay in reaching people at higher risk of lung cancer.</p> <p>NB: screening not covered as there is no lung cancer screening programme.</p>	<p>Signs and symptoms of cancer, screening programmes including age ranges, how they are organised and local take- up, national and local cancer statistics, data collection, links between OTC medicines and cancer signs and symptoms including case studies, counselling skills.</p> <p>Cancer risk factors/healthy lifestyles not addressed as covered in previous training.</p>
MCAs/other pharmacy staff	<p>Signs & symptoms of cancer, cancer risk factors/healthy lifestyles, local cancer statistics including emergency presentations for lung cancer, counselling skills, role that pharmacies can lay in reaching people at higher risk of lung cancer.</p> <p>NB: screening not covered as there is no lung cancer screening programme.</p>	<p>Signs and symptoms of cancer, screening programmes including age ranges, how they are organised and local take-up, national and local cancer statistics, data collection, links between OTC medicines and cancer signs and symptoms including case studies, counselling skills.</p> <p>Cancer risk factors/healthy lifestyles not addressed as covered in previous training.</p>
Format/organisation		
Pharmacists	<ul style="list-style-type: none"> • During the first phase, one pharmacist from each pharmacy attended training. • Pharmacist training sessions took place in the evening from 19.30-21.30. 	<ul style="list-style-type: none"> • One pharmacist from each pharmacy attended a half day “Talk Cancer” training session from 09.00-13.00. • Presentations on: cancer signs and symptoms, screening programmes, cancer statistics. • Interactive exercises on: counselling skills (role plays). • Pharmacists unable to attend the face to face workshops were required to follow a BOPA on-line training modules for pharmacists. • Training was developed and delivered by Cancer Research UK (“Talk Cancer” face-to-face workshops) and BOPA (on- line training modules).
MCAs/other pharmacy staff	<ul style="list-style-type: none"> • In the first phase, MCAs were not required to attend the training, but most pharmacies sent one 	<ul style="list-style-type: none"> • One MCA from each pharmacy attended a half day training “Talk Cancer” training session from 09.00-

	<p>such staff member along anyway.</p> <ul style="list-style-type: none"> • In the second phase, it was mandatory for at least one MCA from each pharmacy to attend training and in many cases, two MCAs attended. • MCAs attended an evening training session from 19.30- 21.30. • Interactive exercises on: counselling skills. • MCAs unable to attend the face to face workshops were required to follow a BOPA on-line training modules for MCAs and where feasible the project team visited the pharmacies to go through the training on-site. Where this occurred, often two MCAs were able to be trained. • Training was developed with CPPE and the Local Pharmaceutical Committee was involved. • Training was delivered by an accredited trainer who was also a community pharmacist. 	<p>13.00.</p> <ul style="list-style-type: none"> • Presentations on: cancer signs and symptoms, screening programmes, cancer statistics. • Interactive exercises on: counselling skills (role plays). • MCAs unable to attend the face to face workshops were required to follow a BOPA on-line module for MCAs. • Training was developed and delivered by Cancer Research UK ("Talk Cancer" face-to-face workshops) and BOPA (on-line training modules).
Cost of training (inc cost breakdown if possible)	<ul style="list-style-type: none"> • Had to pay trainer for his time. • Used some (paid) role play actors. • No venue costs, as used conference room of cancer network. • Refreshments (tea/coffee/water and dinner) were relatively cheap. • Printing costs were incurred. 	<p>£250 backfill per pharmacist to attend training = £6,250 £4,000 for delivery of training sessions. £50 per MCA to attend training = £1,300 TOTAL = £11,550</p>
Promotion & incentivisation		
Dissemination/promotion	<ul style="list-style-type: none"> • Direct email to all pharmacies in the target areas (phase 1 pilot was in Wandsworth and Croydon, phase 2 expanded to Sutton and Merton). • Had complete list of pharmacies and contacted each individually. • Royal Pharmaceutical Society promoted the pilot. 	<ul style="list-style-type: none"> • The project was commissioned by Islington Public Health, which undertook the recruitment of pharmacies. • All pharmacies received details of the project via email including a project specification. • Around half the pharmacies in Islington took part.
Mandated participation	<p>One pharmacist and one MCA from each pharmacy were required to attend training, although a number of pharmacies sent more than one MCA</p>	<p>At least two staff members from each participating pharmacy (one pharmacist and one MCA) were required to attend.</p>

		In addition, staff unable to attend the face-to-face workshops had to complete the relevant BOPA module in order to take part in the campaign.
Backfill/incentives	Evening meal was provided for pharmacists attending training.	£250 per pharmacist to cover staff costs and attendance. £50 per MCA to cover staff costs and attendance.
CPD/professional development opportunity	<ul style="list-style-type: none"> No CPD points for pharmacists or MCAs. Did explain to MCAs that their role was crucial and without them the project would not work. Presented to pharmacists as career development opportunities for MCAs. 	Not accredited CPD. Participants received a CR-UK certificate on completion of the training.
Evaluation		
	Questionnaire for training participants covered: did you find training useful, has your knowledge of cancer improved, and has your ability to engage with customer improved?	Pre and immediate post training evaluation forms based on the Cancer Awareness Measure were completed.
Barriers/enablers/key factors for success and other comments		
Barriers	<ul style="list-style-type: none"> Cascading training (tried in phase 1) did not work. Locum pharmacists are a problem as they have not undergone the relevant training and therefore cannot perform direct referral. 	
Enablers/key factors for success	<ul style="list-style-type: none"> Equipping MCAs with engagement/counselling skills was vital Head of Local Pharmaceutical Committee was working at the Cancer Network, which helped in relation to contacting and recruiting pharmacies. 	<ul style="list-style-type: none"> The project used Talk Cancer training as had done it before with pharmacies, but this time specifically asked for a greater focus on communications/counselling skills in the training. The counselling skills training broke participants up into groups and got them to think about what they would do in their pharmacy. This bringing participants together to discuss how they would talk with people and raise cancer with them, was really valued. Hearing examples of how others approach pharmacy customers was also useful.

Other comments	<ul style="list-style-type: none"> • Only pharmacists and MCAs who have undergone training should participate in the intervention. • Informal pharmacist feedback was good; they liked being thanked by patients. 	<ul style="list-style-type: none"> • If the intervention was repeated, it might be a good idea to look at how to engage and speak with men coming into the pharmacy. The project seems to have been less successful at engaging with men, although the reasons for this are unclear and require further investigation. • Final report recommends exploring the potential of developing sustainable cancer training as part of the Healthy Living Pharmacies initiative.
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Appendix 3: Supporting early diagnosis of bowel and lung cancer through community pharmacy in Cumbria – a project summary (June 2017)

Background

The Local Pharmacy Committee (LPC) recruited community pharmacies from across Cumbria to participate in the project, which uses “Healthy Living Champions” (HLCs) - mostly Medicine Counter Assistants (MCAs) – to drive one month awareness campaigns on bowel and lung cancer. These tumour sites were chosen as bowel cancer was an NHS England priority, and lung cancer was a local priority for Cumbria CCG. The approach had also been originally piloted on a small scale with bowel cancer by the project’s pharmacy lead.

The project aimed to build on the healthy living pharmacy concept to raise awareness of bowel and lung cancer including bowel cancer screening. Community pharmacy teams across Cumbria took part in month long programmes that sought to raise awareness of cancer among people visiting community pharmacies and identify and approach people at higher risk of either bowel or lung cancer.

Aims and objectives

- To improve knowledge of cancer and cancer screening in community pharmacy teams across Cumbria and increase their confidence to approach and speak to patients about cancer
- To deliver bowel and lung cancer awareness raising campaigns using the Cumbria Community Pharmacy Network which identify, advise and where necessary refer on (to general practice) patients at higher risk of bowel or lung cancer and to increase bowel screening uptake
- To implement effective collaborative working between Cumbrian Community Pharmacies, the Cumbria Pharmacy Local Professional Network (LPN), the Cumbria Local Pharmaceutical Committee (LPC), Cumbria CCG and Cumbria County Council
- To build on the Healthy Living Pharmacy (HLP) concept to raise awareness of bowel and lung cancer including bowel cancer screening
- To involve community pharmacy teams across Cumbria undertaking one month campaigns

Outcomes and Impact

It was hoped that this project would generate evidence that community pharmacies can be used to effectively undertake cancer awareness raising activities that ultimately improve early diagnosis of cancer through:

- Improving awareness of the signs and symptoms of bowel and lung cancer in the pharmacy visiting general public in Cumbria so that patients will be encouraged to present earlier to their GP should they experience relevant symptoms
- Contributing to increasing bowel cancer screening uptake in Cumbria
- Identifying and counselling patients at higher risk of bowel or lung cancer and where necessary referring on those patients to general practice for further investigation

Project approach

- Pharmacies used in-store displays and information materials to hand out.
- HLCs were equipped with cancer knowledge and counselling/engagement skills to proactively engage and speak with pharmacy customers to:
 - Identify bowel cancer screening targets
 - Identify those at risk of bowel or lung cancer using detail aid(s)
 - Provide dietary and healthy lifestyle information
 - Pharmacist proactive engagement around Medicines Use Review
 - HLC may advise person to speak with pharmacist
 - Pharmacist undertakes more detailed counseling and if appropriate, advises person to see their GP
 - Data collection using PharmOutcomes tracks activities undertaken and contacts made

The campaigns used posters, window displays and prescription bag leaflets as well as direct engagement with pharmacy customers to raise awareness of cancer and where appropriate, cancer screening. It also sought through proactive engagement with pharmacy customers to identify those who might be at higher risk of bowel or lung cancer and then refer them on to the pharmacist if appropriate, and/or encourage those in the target group to undertake screening. Individuals considered (on the basis of responses to questions from MCAs) to have a high risk of lung or bowel cancer were advised to speak with the pharmacist for more detailed counselling, and where appropriate the pharmacist recommended a GP visit for further investigations. The bowel cancer campaign took place in July 2015 for a one month period and the lung cancer campaign took place for the same duration, launching in November 2015.

Challenges

- Sourcing good quality information materials in a timely manner
- Tracking pharmacist to GP referrals
- Engagement with large pharmacy chains
- Obtaining bowel screening kits for display in participating pharmacies

Opportunities

- Engagement with cancer leads.
- Build on Healthy Living Champions enthusiasm
- Generation of creative engagement/health zone ideas
- PharmOutcomes made data collection relatively easy
- Patient engagement particularly to highlight the importance of returning screening kits

Results and conclusion

Bowel screening campaign

During the campaign there were 54 champions trained across 38 pharmacies in Cumbria. The bowel cancer campaign recorded 1023 interventions and five GP referrals from 38 pharmacies. The low number of GP referrals is thought to be partly due to challenges in patient tracking and confidentiality, as well as a lack of engagement among some participating pharmacies.

Locality	No of pharmacies	Interventions
Allerdale	6	125
Carlisle	7	105
Copeland	5	237
Eden	3	35
Furness	10	135
South Lakes	7	386
TOTAL	38	1023

A survey, completed by 22 HLCs, gathered insight into the impact of the bowel cancer awareness and screening training on HLC's day-to-day roles. 77% of respondents felt that the training increased their understanding of bowel screening a lot. Over 85% felt the training was either quite or very relevant to their role

"A very informative training session. It was a pity there were no sample bowel screening kits available as it would've been nice if customers had a peek at what they receive when they turn 60, and would've made it easier for us to explain"

Healthy Living Champion

In response to the question "do you expect the training to change the way you work?", 41% felt it would a lot, 32% saying it would sometimes and under 20% responding either not very much or not at all.

It is envisaged that the model of using community pharmacies to raise awareness of cancer including screening and to identify and refer on patients at higher risk of cancer could be expanded to other tumour sites as appropriate.

Lung cancer campaign

Metrics	Figures
Number of participating pharmacies	17
Number of champions	35
Number of interactions	291
Number of referrals	1

A similar survey to that used for the bowel screening campaign was completed by four HLCs who participated in the lung cancer campaign. When asked how much the training increased their understanding of the subject, all respondents either understood lung cancer well or fully. Prior to having attended the training, 75% had some knowledge of lung cancer and 25% had very little knowledge.

75% felt that the training was very relevant to their role.

Supporting materials

A list of example materials used by the project are available at www.cruk.org/ace-resources. These include an information sheet, GP referral form and patient consent form.

Appendix 4: A Lung Health Service – Doncaster pharmacy direct referral for chest x-ray (executive summary, June 2017)

This document is a summary of a project from the cluster looking at the role non-GP primary care health professionals can play in diagnosing cancer earlier in patients at high risk and will be of particular interest to commissioners considering commissioning a pharmacy direct referral to chest x-ray (CXR) pathway. It provides: a breakdown of results; challenges; and, perceived successes.

Context

Doncaster Clinical Commissioning Group (CCG) piloted a pharmacist direct referral to chest CXR pathway in nine community pharmacies called the “Lung Health Service”, which formed part of a larger CCG-led cancer awareness programme. Doncaster CCG ran their direct referral project over eight months. The pilot ran from September 2015 until April 2016.

The pilot aimed to improve the diagnosis of lung cancer and other lung abnormalities by:

- Detecting symptomatic lung cancer earlier
- Reducing the number of people who present at A&E with advanced lung cancer
- Diagnosing previously undetected lung abnormalities other than cancer e.g. COPD
- Testing the pharmacist direct referral pathway over a period of eight months.

Results

16 patients were identified and assessed over the duration of the Lung Health Service. Of these, 10 had a CXR. One patient confirmed a stable lung condition. No lung cancer was diagnosed.

The project yielded broader system benefits. Good communication between primary and secondary care health professionals enabled an efficient referral process for patients. Engagement from a broad cross-section of local stakeholders also lent credibility to the project, which helped to secure initial commitment.

The pilot did, however, face a number of challenges. GPs were apprehensive about pharmacists making appropriate referrals and there were some issues with identifying patients who had previously been referred for a CXR. Counter staff thought the six patients who declined the CXR did so because they were unaware of the validity of the pilot and were unprepared for a formal conversation. There was also concern that the project team didn't have enough capacity to remind pharmacists about the pilot.

These challenges resulted in the project being de-commissioned by the CCG. Although the pilot didn't demonstrate success through quantitative data, it did show that pharmacists can make appropriate quality referrals. There is a growing interest in the increasing role of pharmacists and a number of project members believe there is value in the approach that needs to be explored further. This view is supported by a CRUK-funded cross-sectional survey^{xxi} of 401 community pharmacists which found 74% of respondents agreed they could take a more active role in the early diagnosis of cancer.

A full project report published in June 2017 can be found [here](#).

Contact ACE

If you have any queries about ACE, please contact the team at: ACEteam@cancer.org.uk

In addition, you can visit our webpage: <http://www.cancerresearchuk.org/health-professional/early-diagnosis-activities/ace-programme> where news and reports are published.

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