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An affordable solution for meeting the standards of the new National Register for quality assured spirometry



Francesca Robinson talks to PCRS-UK Executive member **Vikki Knowles** about a pragmatic solution she has devised for training her colleagues to the required standards of the new National Register of certified spirometry professionals and operators

A Respiratory Nurse Consultant, Vikki was Clinical Lead for West Surrey's community multidisciplinary respiratory care teams but is currently seconded to Guildford and Waverley Clinical Commissioning Group (CCG). She is a member of the Respiratory Expert Advisory Group (REAG) of the Kent, Surrey and Sussex Academic Health Science Network (AHSN) and a trainer for Education for Health.

The new competency assessment framework which describes the process by which healthcare professionals can become certified and join the new National Register for quality assured spirometry¹ was launched in April and has been welcomed by PCRS-UK.

However, there is a fear that it may be seen as causing difficulties for CCGs and practices in financially challenging times, who may see the cost of training healthcare professionals to the required Association for Respiratory Technology and Physiology (ARTP) standard as unaffordable.

Vikki explains: "We need to be careful that people do not interpret the new scheme as requiring everyone who provides respiratory care in primary care to undergo 'gold standard' training. Locally, there has been concern that practices might not reach the level of competency identified in the new scheme leading to disengagement in the provision of spirometry. This has the potential to prejudice patient care and the practice income. If this was to happen, there is the possibility of a significant increase in referrals, either to another service to perform spirometry or secondary care clinics to diagnose and manage longterm conditions that could otherwise be looked after in primary care."

Vikki has come up with a pragmatic solution to spirometry training for her locality. In her role as a member of KSS AHSN REAG and Respiratory Nurse Lead for Guildford and Waverley CCG, she has been working on the problem for the last three years with Simon Dunn, a GP from Kent, and other respiratory colleagues. Initially, Vikki identified there was a need to skill up the workforce locally to meet the requirements identified in the new scheme. The workforce consisted of a mixture of practice nurses carrying out spirometry, who had had good training but not necessarily to the ARTP standard, while others had done only a minimal half-day study. Meanwhile, some of the more highly qualified nurses were reaching retirement age, leading to a shortage in the skill set, and many GPs had concerns regarding their spirometry interpretation skills because they had devolved spirometry to their practice nurses. "GPs", she says, "were aware that this was an issue and were asking for this training because they understood the importance of their staff performing spirometry to the correct standard."

The REAG had discussed the need for an affordable training package as a viable, safe and cost effective 'silver standard' alternative. As some funding was arranged, the only cost to practices was for releasing their healthcare professionals for the day.

The package, provided by an affordable private training organisation, which is run by trainers who have achieved ARTP accreditation, comprises a study day with an assessment at the end of the day. The day is split into a practical session in the morning and an interpretation session in the afternoon. Six weeks later candidates are required to submit a portfolio of their work to Vikki for review to ensure the spirometry is being performed to the correct standard and that calibration and cleaning logs have been completed. Additional traces with interpretation are submitted for the candidates responsible for reporting on the spirometry. This ensures that everything is to the standards set by the requirements of the new register.

Because the AHSN is not an educational organisation or aligned with a university, Vikki can only record that she is satisfied that the spirometry they are performing is of a high quality and meets the quality guidance that has been set for Kent, Surrey and Sussex AHSN. Vikki is hoping that candidates who have attended the training and completed the portfolio to a satisfactory standard can then be accepted on to the register via the Experienced Practitioner Scheme.

As there had been no identifiable funding set aside locally for the training package, a variety of avenues were explored to fund the training which included Health Education England (HEE) funding and industry.

To date, three study days have been run with 20 practice nurses and three GPs from 11 practices attending the full day and three healthcare assistants for a half-day to learn the practical component of doing spirometry. Feedback has been positive with attendees saying they learned a lot. Vikki's eventual aim is to have at least one nurse and one GP from every practice across Guildford and Waverley CCG complete the course. Vikki attends every study day to ensure she is marking the spirometry to the level that it is being taught.

Guildford and Waverley CCG is supportive of Vikki's work and have put forward a business case for a Locally Commissioned Service (LCS) to provide a diagnostic spirometry service from next year which will support the training. This is excellent news for the CCG; however, Vikki says: "The bottom line is that, although the LCS is in the pipeline, it will be reliant on working with our colleagues in HEE and industry to fund the training during this financially challenging time."

"The new register and the requirement for healthcare professionals to be trained to perform high quality spirometry are a good thing and it is important because there are huge implications – if you get spirometry wrong, you get the whole diagnosis wrong, then you're potentially

TIPS FOR SETTING UP A TRAINING SCHEME FOR PERFORMING SPIROMETRY:

Look at what your local needs are

- Identify locally committed people who can work wit you because you can't do it on your own
- Nominate a spirometry champion to support practices achieve the training.
- Identify support within your CCG
- Link with existing organisations who provide spirometry training and agree a training package which meets your local needs

giving patients drugs they don't actually need at vast cost, you're labelling them with a condition they haven't got and you are potentially increasing hospital admission rates because patients aren't being treated correctly."

"In the absence of central government money to support the necessary training and implementation we need to find creative, cost effective ways of doing it locally."

Reference

 Primary Care Commission. Improving the quality of diagnostic spirometry in adults: the National Register of certified professionals and operators. https://www.pcc-cic.org.uk/article/quality-assured-diagnostic-spirometry

The role of the Respiratory Nurse Educator (RNE) in care homes: Respiratory disease management



Sarah Newton, Respiratory Nurse Educator, and **Natalie Shouler**, Service Improvement Manager, Nottingham North and East Clinical Commissioning Group (NNE CCG), report on a recent project to provide respiratory education in care homes

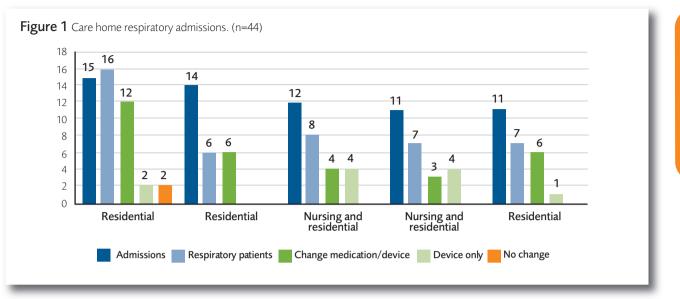
Managing respiratory conditions in care homes is complex. Residents have a combination of complex medical conditions and may take multiple medications, including inhaled medications. Medication errors occur because of failure in prescribing, dispensing, administering or monitoring medication, and inhalers and liquid medications are the most frequently poorly administered medications.¹ It is known that one in 10 care home residents will have been prescribed an inhaler-based medicine for some sort of respiratory disorder.² Many residents depend on care home staff for medications, yet studies have shown that 91% of healthcare professionals are unable to demonstrate the

seven steps in administering pressurised meter dosed inhalers (pMDIs).³ This impacts on the wellbeing of residents and the cost-effectiveness of medications.

Studies show inhaler training for healthcare professionals improves prescribing and reduces admissions.⁴

Method

In July 2015, the Respiratory Nurse Educator (RNE) undertook a pilot project in five care homes in the area with the highest number of



respiratory hospital admissions (Figure 1). External and in-house training sessions were facilitated and attended by 41 care home staff. The RNE facilitated a ward round to review respiratory patients, recommending changes to devices and/or medication to the home and the residents' registered GP practice, resulting in 42/44 patients (95%) requiring a change. All recommendations were implemented.

The results of the pilot led to a programme of in-house training for staff in all 36 eligible care homes. Training encompassed inhaler techniques using 'incheck' devices and placebo inhalers, alongside medication management for COPD and asthma.

Thirty-five of 36 (97%) care homes participated in the training with 171 attending the training. Attendees gave overwhelmingly positive feedback on the evaluation sheets, including increased knowledge and confidence in both inhaler and condition management.

Ward rounds were provided to all 35 care homes for all residents using inhalers. Residents were reviewed and outcome recommendations communicated to the patient's registered GP and followed up a month later. All recommendations bar one were implemented.

Results

Of the 117 patients reviewed, 104 (89%) required a change to either their inhaler, medication or both.

- 23 (19%) patients only on short-acting beta agonists (SABA) with pMDIs were not using spacers
- 18 (15%) patients on inhaled corticosteroid (ICS) pMDIs were not using spacers
- 26 (17%) patients prescribed a dry powder inhaler (DPI) but no spacer for rescue medication
- 16 (14%) patients prescribed large volume spacers
- 10 (9%) patients no rescue SABA was recorded on Medication Administration Records (MARS) charts.

The review recommended:

- 26/117 (22%) change from (DPI) to pMDI and spacer⁵
- 41/117 (35%) on SABA only and ICS pMDI prescribed aerochamber spacers
- 16 (14%) patients disliking large volume spacers offered small volume spacers
- 10 (9%) SABA pMDI prescribed for those with no rescue medication

All recommendations were implemented bar one (long-acting beta agonists (LABA) recommended, GP prescribed an ICS/LABA). Treatment was also reviewed and adjusted for patients who had poor technique and were unable to use certain inhalers or had complained of side effects.

In total, 75 /117 (64%) aerochambers and 18/117 (15%) aerochambers and masks were prescribed.

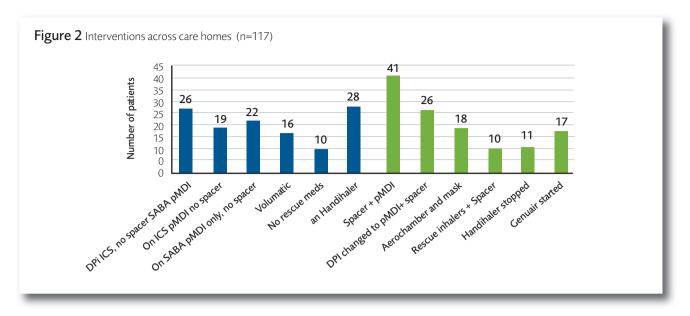
Both reviews found similar issues across all categories of homes (Figure 2).

Discussion

Reductions in hospital admission were not observed during the autumn quarter but staff stated:

- improved knowledge basis for inhaler technique and spacers
- improved knowledge in managing respiratory conditions and confidence identifying and acting on poor inhaler technique⁶
- improved quality of life for patients
- increase in available rescue salbutamol

There are economic implications of this work. In 2011, over 45 million prescriptions for inhalers cost the NHS £900 million.³ More efficient management⁵ has saved in excess of £14,000 per annum for NNE



CCG. The impact on admissions from care homes will be reviewed in 2017.⁷

Conclusions

Training sessions reduce inappropriate prescribing and promote knowledge and confidence among staff in managing respiratory conditions.⁹ Discussion needs to take place with the local long-term conditions nurse, community respiratory nurses and general manager of local partnerships to highlight the needs of respiratory patients and the ongoing training needs of our care workforce.⁷ This initiative has brought better

Recommendations

- Management plans should be given to all care home respiratory residents which can override the MARS chart.
- Refresher inhaler training should be available for all care home staff.⁸
- A care home respiratory care sheet should be implemented supporting communication and care between care homes and GPs. The care sheet should include diagnosis, date of last review including inhaler technique check.
- Review admission data to observe impact of intervention on winter admissions.

management to vulnerable elderly people in our community and we will continue enhancing current achievements.

Acknowledgements

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References

- 1. Alldred D, Standage C. Medication errors in care homes. *Nursing Times* 2011;**107**: 21–7.
- Alldred D, Standage C, Fletcher O, et al. The influence of formulation and medicine delivery system on medication administration errors in care homes for older people. BNJ Qual Saf 2011;20:397–401. http://dx.doi.org/10.1136/bmjqs.2010.046318
- Baverstock M, Woodhall N, Maarman V. Do healthcare professionals have sufficient knowledge of inhaler techniques in order to educate their patients effectively in their use? *Thorax* 2010;65(Suppl 4):A118.
- NICE. Isle of Wight Respiratory Inhaler Project (Shared Learning Database). February 2011. http://www.nice.org.uk/usingguidance/sharedlearningimplementingniceguidance/examplesofimplementat ion/eximpresults.jsp?o=461
- Lavorini F, Magnan A, Dubus JC, et al. Effect of incorrect use of dry powder inhalers on the management of patients with asthma and chronic obstructive pulmonary disease. *Respir Med* 2008;**102**:593–604.
- Magnussen H, Watz H, Zimmermann I, et al. Peak inspiratory flow through the Genuair inhaler in patients with moderate or severe COPD. Respir Med 2009;103:1832–7. http://dx.doi.org/10.1016/j.rmed.2009.07.006
- Unsustainable rise in emergency admissions is avoidable and no longer affordable. Nuffield Trust, 5 Jan 2012.
- Lareau SC, Hodder R. Teaching inhaler use in chronic obstructive pulmonary disease patients. J Am Acad Nurse Pract 2012;24:113–20.
- Bostock-Cox B. Optimising inhaler technique. Independent Nurse 17 Feb 2014. http://www.independentnurse.co.uk/clinical-article/optimising-inhalertechnique/63437/