### Medicines optimisation in East Sussex care homes

**KAYT BLYTHIN AND ELIZABETH HARRIES**

**Clinical pharmacists now have an important role in medicines optimisation within the care home setting. In this article, the authors discuss their approach to medication reviews and medicines optimisation in care homes in East Sussex.**

It is no secret that our population is ageing and as this progresses, more patients are moving into the care home setting. Nowhere is this more relevant than in East Sussex where over 4000 people live in care homes for the elderly. This is where our team of six clinical pharmacists and three pharmacy technicians are based. In March 2018, NHS England announced funding for 240 pharmacists and pharmacy technicians to review the medication of the 180,000 patients living in nursing or residential homes across England. The role of the clinical pharmacist in care homes has thus become part of the mainstream.

**Lessons learnt**

Our team was formed two and a half years ago, well ahead of the new NHS funding, as a commissioned service. Many lessons have been learnt as the team has expanded in both role and number.

Managing the workload of clinical pharmacists has been an interesting learning point. Initially we were commissioned to complete one medication review per hour – it became rapidly evident that this was unachievable in our mix of rural and town locations. For example, in the rural Rother area, care homes and GP practices are spread out over a substantial geographical area, requiring an allowance for driving time. In Eastbourne, care homes are closely packed and are many in number often with small numbers of residents each. Parking is an issue here and the time and effort required in establishing relationships with so many different homes is a challenge. Time management and meticulous organisation has become an essential skill for all members of our team in all locations but for different reasons.

We conducted a time and motion study that gave us data to support re-negotiation of the contract. The study findings are summarised in Table 1 – and the performance target is now two hours per medicines optimisation review cycle; this reflects similar work done by NHS Scotland.

We have refined the key performance indicator (KPI) data reported to our commissioner to provide sufficient qualitative and qualitative information, as shown in Table 2, balanced with minimising data collection and analysis to ensure patient contact time is maximised, and present this as a quarterly report.

The number of reviews achieved each quarter has steadily grown as the team expands. Additionally, we have become more efficient: focused systematic preparation and a bespoke template (see Figure 1) to enter the review details and recommendations, plus capture of the medicines optimisation data, allow semi-automation.

We are keen to report the medicines optimisation activity, including changing and starting medicines, to demonstrate and

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**Table 1. Time and motion study summary for medicines optimisation reviews in East Sussex care homes**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Average time spent on medicines optimisation review per patient (in minutes)</th>
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<tbody>
<tr>
<td>Pre-visit preparation</td>
<td>9</td>
</tr>
<tr>
<td>Driving</td>
<td>7</td>
</tr>
<tr>
<td>Care home visit</td>
<td>26</td>
</tr>
<tr>
<td>Write up</td>
<td>47</td>
</tr>
<tr>
<td>Next of kin contact</td>
<td>6</td>
</tr>
<tr>
<td>Discuss with GP</td>
<td>7</td>
</tr>
<tr>
<td>Discuss with other healthcare professional</td>
<td>3</td>
</tr>
<tr>
<td>Update plan/changes on EMIS</td>
<td>10</td>
</tr>
<tr>
<td>Communication to care home</td>
<td>4</td>
</tr>
<tr>
<td>Communication to pharmacy</td>
<td>1</td>
</tr>
<tr>
<td>Total time</td>
<td>120 (range 45–180)</td>
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n=336 patients, in 40 care homes, interfacing with 51 GPs, recorded by 7 clinical pharmacists
emphasise that the focus is on optimisation and not just on stopping medicines. We consistently use the term optimisation and steer away from other terminology such as de-prescribing or rationalising as these may be associated with cost-cutting or care withdrawal. We no longer measure the proportion of intervention recommendations accepted by GPs, as within the first few months it was clear that this ran at 99%.

We have clinical support from the consultant geriatrician within the frailty team via biannual shared supervision sessions presenting challenging case studies, and share local, national and international developments in medicines optimisation.

The pharmacy technician service supports care homes with a medicines management systems and process review. Initially, we were unsure how much value this added, but 18 months in, feedback from the Care Quality Commission (CQC), council social services, GPs and care homes is consistently positive. This aspect of our service influences care homes to be aware of the institutionalisation effect medicines rounds and administration have, and to challenge this to adapt to a person-centred approach. We have ensured that every home has had a review irrespective of the CQC rating to baseline the homes and ensure relationship building. One aspect of a review is avoidable waste reduction, and the work done here in influencing the stock ordering process has demonstrated a consistent reduction in waste.

We collate cost savings from our medicines optimisation activity for patients in one month per year; this is a time-consuming activity and the commissioner quickly agreed that a once-a-year data collection would suffice. This is used to establish a projected cost saving on prescribed medicines over 12 months. This is an important measure for the commissioner to evidence a cost-neutral or cost-positive service. Currently, we save double the cost of the service per year.

The qualitative impact of medicines optimisation is currently difficult to measure with no national standard or validated method. We have endeavoured to measure this by using the adapted RiO scoring tool,\(^3\) rating the impact of our interventions on avoiding harm and/or hospital admission. Our figure of 12% of interventions avoiding serious harm is in line with national figures recorded by other similar teams. An analysis of the therapeutic areas targeted reveals a predominance of interventions focusing on antihypertensive treatment, direct oral anticoagulant (DOAC) dosing and medicines affecting the CNS – opiates, anxiolytics,

<table>
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<tr>
<th>Key performance indicators</th>
<th>Reporting frequency</th>
<th>2017–18 data</th>
</tr>
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<tbody>
<tr>
<td>Number of medicines optimisation reviews</td>
<td>Quarterly</td>
<td>Q1: 581 Q2: 704 Q3: 848 Q4: 935</td>
</tr>
<tr>
<td>Medicines optimisation activity: stop, start, change as % of total prescription</td>
<td>Quarterly (annualised)</td>
<td>Stop: 23% Change: 15% Start: 1.8% Before review: 9 After review: 7</td>
</tr>
<tr>
<td>Average length of prescription before and after review</td>
<td>Quarterly (annualised)</td>
<td></td>
</tr>
<tr>
<td>Number of process and systems reviews per care home</td>
<td>Quarterly</td>
<td>Q1: 0 Q2: 40 Q3: 44 Q4: 33</td>
</tr>
<tr>
<td>Cost saving by reducing avoidable waste (eg PRN medicines, laxatives, analgesia and creams)</td>
<td>Annual</td>
<td>£507 per care home per year</td>
</tr>
<tr>
<td>Cost saving per patient as a result of optimised prescription</td>
<td>Annual</td>
<td>£195 per patient per year</td>
</tr>
<tr>
<td>Avoidance of serious harm/hospital admission (adapted RiO scoring tool)</td>
<td>Annual</td>
<td>12% of medicines optimisation reviews were assessed to have avoided serious harm</td>
</tr>
<tr>
<td>Qualitative feedback questionnaire to service users (GPs, care homes and community pharmacy)</td>
<td>Annual</td>
<td>Significant positive change %: 1. How likely are you to recommend the service? 97% 2. What difference has the service made to your patients? 72% 3. What difference has the service made to your practice/care home? 75%</td>
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Table 2. Key performance indicator data reported in 2017–18 for medicines optimisation reviews in East Sussex care homes
Role of the pharmacist

Working as a pharmacist prescriber in the care home setting is both enjoyable and challenging. First and foremost, working in this sector is about improving our patients’ quality of life; this is central to everything we do. This specifically involves making patients and their families or next of kin actively part of all decisions and interventions that we make. Sadly, this is often the first time any healthcare professional has ever explicitly asked what they want in terms of their medication.

It is essential in this role not to assume anything. For example, in our initial paper assessment, we can determine that a patient is on far too many medicines. If we go to speak to a patient who is approaching their 100th birthday, we may find they are perfectly happy taking all their medicines and feel these medicines are exactly what have got them to such a fantastic age. Stopping medication in such patients would be both unfair and inappropriate and had we not involved the patient in our decisions, we could have caused considerable stress to them. Taking patients’ ideas, concerns and expectations into consideration allows us to optimise their medication in accordance with what they want.

Working in this sector, we become experts in the types of medication that pose problems for our group of patients. The following are examples of this.

Anticholinergic burden is an emerging subject with an ever-increasing body of evidence behind it that suggests medication with a high burden should not be prescribed in an elderly patient with dementia. Despite this, prescribing is common. We have always felt that medications with a high incidence of anticholinergic side-effects are not well suited to frail

Role of the pharmacy technician

The pharmacy technician’s role focuses on supporting care homes to deliver good and consistent medicines management practice (see Table 3). This is achieved through an initial systems and process review followed by a detailed write up and action plan with links to both national and locally developed resources. The review is then followed up three months later. Technicians also deliver ‘bite-size’ training to care home staff on inhaler technique, use of creams, as needed (PRN) medicines and controlled drug (CD) records.

The pharmacy technician’s role contributes to medicines optimisation in two specific and inter-related ways: reducing avoidable waste focusing on PRN medicines, and implementing homely remedy guidance by promoting access to over-the-counter medicines, reflecting NHS England guidance on conditions for which over-the-counter items should not routinely be prescribed in primary care and the Regional Medicines Optimisation Committee (RMOC) Homely Remedies position paper and template policy.

Table 3. The role of the pharmacy technician

1. Arrange visit with care home
   Review CQC report for the care home

2. Visit care home to review:
   • Medicines management policy
   • Process for ordering and receipt of medicines
   • Medication waste
   • Use of PRN protocol
   • MAR chart record keeping
   • Staff training

3. Review and implement self-care/homely remedy guidance
   Review the prescription and remove any items that could be given as self-care or homely remedy

4. Produce detailed write up with next steps to give to the home
   Revisit in three months’ time to review actions taken
elderly patients. Medications that cause dry mouth, blurred vision, constipation, urinary retention, impaired concentration and confusion are not a good idea for the frail elderly, largely due to the increased risk of falls. The emerging evidence relates more to the ‘anticholinergic effect on cognition (AEC)’, which simply adds weight to what we have all suspected for a long time and demonstrates that these medicines will also worsen a patient’s cognition; a huge problem in a patient who already has dementia. The emerging evidence gives us more courage of our convictions and a more scientific basis for our recommendations. We can use this information to educate other prescribers and ultimately improve patient care by ensuring these medicines are never started in our patients.

Another example is bone protection in our patients. We always consider a patient’s mobility when we assess this and often find patients who are bed bound but who remain on bisphosphonates despite having a negligible risk of falling. Conversely, we also find patients at a high risk of falling who are not prescribed bone protection; in these patients, we often recommend it is started. Being flexible and building a medication review around the individual is essential.

Role of the pharmacist in advanced care planning
In addition to our influence on what medication our patients are taking, we are also to a lesser extent involved in advanced care planning. We review each patient’s resuscitation status and ensure this is recorded correctly in the GP notes.

Furthermore, we discuss the patient’s wishes about their preventative medication and help them to decide whether they wish to continue with such medication. For example, we frequently suggest to a patient that the benefit they are getting from medication like statins is a long-term benefit that may surpass their life expectancy and may suggest that these medicines are stopped, highlighting the possible adverse effects. It would be fantastic if in the future advanced care planning became standard for all patients when they move into a care home, so a patient’s intention is understood before their health deteriorates and prevents them from expressing their wishes.

Conclusion
It is fair to say that as members of the multidisciplinary team for care home patients, we all feel both professionally fulfilled and increasingly valued. Our roles are challenging but very rewarding.

The future is both exciting and uncertain. There will undoubtedly be more pressure on pharmacists to take on a larger role in the care of patients in care homes, including the suggestion that we should be involved in the management of acutely unwell patients. However, it is with caution that such roles should be undertaken. Pharmacists are experts in medication and our focus should always be on this aspect of a patient’s overall care and we must be careful not to be drawn into less appropriate roles.

The role of pharmacists in medicines optimisation is now well established and our contribution to patient care accepted. It would be preferable to see less focus on money-driven KPI targets and a greater focus on the improvements we make to patients’ lives and the contribution we make to reductions in harm caused by medication. Sadly, these things are difficult to measure; however, as a team we are striving to be part of the development of such measures. This is one of our main targets for the coming year.

References

Declaration of interests
None to declare.

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KEY POINTS
■ Being a commissioned medicines optimisation service allows a dedicated service that demonstrates accountability for delivering the contract. Ensuring the contract is deliverable is key
■ Pharmacy technicians can provide ongoing support to care homes and can develop and maintain new ways of working with the flow and access to medicines
■ Medicines optimisation is not just about stopping medication – it is about improving patients’ quality of life by involving them in decisions about their medication
■ Communication is a vital part of our role. We actively involve the GP practice, the community pharmacy and the care home in all our reviews