Medicines optimisation: an agenda for community nursing

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The prescribing of medication is by far the most common form of medical intervention. However, it has been shown that up to 50% of medicines are not taken as prescribed, that medication-related problems can occur, and that up to 7% of hospital admissions can be due to adverse drug reactions. A new approach termed ‘medicines optimisation’ has been developed that is intended to focus attention on outcomes rather than process in relation to improving quality, the benefits, and value patients receive from their use of medicines. This article describes the role that community nurses can play in achieving the ambitions of the medicines optimisation agenda.

KEYWORDS:
Medicines optimisation • Compliance • Complex medication regimens • Prescribing

Medicines optimisation is a new concept/approach that was launched by the Royal Pharmaceutical Society in May 2013 to improve the outcomes obtained from medicines use. The medicines optimisation approach has been endorsed by NHS England, Royal College of General Practitioners, Royal College of Nursing (RCN), Academy of Medical Royal Colleges, and the Association of the British Pharmaceutical Industry. Similarly, the National Medical Director for England, the Chief Nursing Officer (CNO) and Chief Pharmaceutical Officer for England have all provided their support to ensure that the medicines optimisation principles are delivered through a multidisciplinary approach (Royal Pharmaceutical Society, 2013).

At its heart, medicines optimisation can be considered as an approach that seeks to maximise the beneficial clinical outcomes for patients from medicines. The approach focuses on safety, governance, professional collaboration and patient engagement. The National Institute for Health and Care Excellence (NICE, 2013) define medicines optimisation as:

… requires evidence-informed decision-making about medicines, involving effective patient engagement and professional collaboration to provide an individualised, person-centred approach to medicines use, within the available resources.

NICE are in the process of developing a guideline based on these principles.

Evidence currently suggests medicines use is far from optimal; despite medicines being the most frequent treatment intervention and costing the NHS over £12.9 billion in 2011 (Office of Health Economics, 2011). Research shows that only 16% of patients who are prescribed a new medicine take it as prescribed, experience no problems and receive as much information as they need (Barber et al, 2004). In addition, ten days after starting a medicine, almost a third of patients are already non-adherent and, of these, 55% do not realise that they are not taking their medicines correctly, while 45% are intentionally non-adherent (Barber et al, 2004). Similarly, evidence also demonstrates that approximately 7% of all hospital admissions can be attributed to, or associated with, adverse drug reactions — with up to two-thirds of these being preventable (Pirmohamed et al, 2004). With respect to prescribing, a recent study conducted by the General Medical Council found that 5.9% of consultants and 10.3% of trainee doctors in UK hospitals made prescribing errors in one week (Dornan et al, 2009), and, in general practice, an estimated 1.7 million serious prescribing errors occurred in 2010 (Avery et al, 2012).

As illustrated above, ensuring optimal outcomes from medicines use is a challenge. The community nursing profession, ranging from specialist nurses, rapid response nurses, community matrons and district nurses are often the frontline professionals involved in the care of some of the highest risk, most complex and vulnerable patients within our health system. Similarly, the patient groups that community nurses manage are more often than not on significant polypharmacy. Therefore, the community nursing fraternity are one of the key professional groups in delivering many of the ambitions of the medicines optimisation agenda.
This article sets out the principles of medicines optimisation, looks at the ways in which community nurses can deliver some of the outcomes and takes a look at how the medicines optimisation agenda is being addressed within Ealing Integrated Care Organisation NHS Trust.

THE FOUR GUIDING PRINCIPLES FOR MEDICINES OPTIMISATION

Four guiding principles (Figure 1) underpin medicines optimisation; these four principles support all healthcare professionals to enable patients to improve their quality of life and outcomes from medicines.

Principle 1: Aim to understand the patient’s experience
The aim of principle 1 is to ensure that the best possible outcomes from medicines are obtained, that there is an ongoing, open dialogue with the patient and/or their carer about the patient’s choice and experience of using medicines to manage their condition, recognising that the patient’s experience may change over time even if the medicines do not.

It is intended that:
- Patients are more engaged, understand more about their medicines and are able to make choices, including choices about prevention and healthy living.
- Patients’ beliefs and preferences about medicines are understood to enable a shared decision about treatment.
- Patients are able to take/use their medicines as agreed.
- Patients feel confident enough to share openly their experiences of taking or not taking medicines, their views about what medicines mean to them, and how medicines impact on their daily life.

Principle 2: Evidence-based choice of medicines
The aim of principle 2 is to ensure that the most appropriate choice of clinically and cost-effective medicines (informed by the best available evidence base) are made that can best meet the needs of the patient.

It is intended that:
- Optimal patient outcomes are obtained from choosing a medicine using best evidence (for example, following NICE guidance, local formularies, etc), and that these outcomes are measured.
- Treatments of limited clinical value are not used and medicines no longer required are stopped.
- Decisions about access to medicines are transparent and in accordance with the NHS Constitution.

Principle 3: Ensure medicines use is as safe as possible
The aim of principle 3 is to ensure the safe use of medicines is the responsibility of all professionals, healthcare organisations and patients, and should be discussed with patients and/or their carers. Safety covers all aspects of medicines usage, including unwanted effects, interactions, safe processes and systems, and effective communication between professionals.

It is intended that:
- Incidents of avoidable harm from medicines are reduced.
- Patients have more confidence in taking their medicine.
- Patients feel able to ask healthcare professionals when they have a query or difficulty with their medicines.
- Patients remain well and there is a reduction in admissions and readmissions to hospitals related to medicines usage.
- Patients discuss potential side-effects and there is an increase in reporting to the Medicines and Healthcare products Regulatory Agency (MHRA).
- Patients take unused medicines to community pharmacies for safe disposal.

Principle 4: Make medicines optimisation part of routine practice
Healthcare professionals routinely discuss with each other and with patients and/or their carers how to get the best outcomes from medicines throughout patient care.
It is intended that:
- Patients feel able to discuss and review their medicines with anyone involved in their care
- Patients receive consistent messages about medicines because the healthcare team liaise effectively
- It becomes routine practice to signpost patients to further help with their medicines and to local patient support groups
- Inter-professional and inter-agency communication about patients’ medicines is improved
- Medicines wastage is reduced
- The NHS achieves greater value for money invested in medicines
- The impact of medicines optimisation is routinely measured.

HOW CAN COMMUNITY NURSING SUPPORT THE MEDICINES OPTIMISATION AGENDA?

In the authors’ opinion, the community nursing profession is extremely well positioned to support the medicines optimisation agenda, as they have an established personal connection/relationship with patients and are involved in managing the care of vulnerable patients that have complex medical needs.

With respect to principle 1 and improving medication adherence, the close and personal relationship that community nurses have with their patients can be utilised to identify any possible adherence barriers or concerns, such as the patient’s ability to follow a medication regimen, or confusion about timing, dosage, adverse drug reactions or perceived efficacy, etc. Community nurses are an excellent resource to assess patients holistically and identify any problems/needs, and are able to ensure that patients understand the effects of their medication, the expected outcome in relation to their treatment, and what will happen if the treatment prescribed is not adhered to. Community nurses can be pivotal in re-emphasising the instructions regarding the medication regimen and in assessing the patient for any adherence issues.

A key objective for many NHS trusts and clinical commissioning groups (CCGs) at present is to reduce the enormous wastage associated with medication. As one of the few healthcare professional groups that visit patients in their own home, community nurses are in a unique position to assess how patients manage their medicines when at home. Such visits also provide the opportunity to view medication cupboards and identify any possible stockpiled medication or non-adherence. Community nurses could use this information to enter into a discussion with the patient and understand the reasons for non-adherence, which can then be fed back directly to the patient’s GP, enabling them to review the patient’s medication regimen or request the community pharmacist to conduct a medication usage review to ensure that only the appropriate medicines are prescribed and wastage reduced.

Within the authors’ organisation several initiatives have been undertaken to support community nurses to deliver on many of the outcomes in principle 1. For example, a tool has been developed that allows community nurses to assess patients for a compliance aide. Similarly, a standard operating procedure (SOP) has been developed that allows community human immunodeficiency virus (HIV) nurses to fill compliance aides for patients that have no other means of obtaining a filled compliance aide. Often these patients have medications prescribed for them by different teams/providers for several comorbidities. Most recently, a service has been developed by the community heart failure team in Harrow that aims to administer furosemide in the patient’s home under a strict protocol, thereby preventing hospital admissions, delivering care closer to home and improving patient experience.

Over recent years, modernisation to regulations has permitted non-medical prescribers (NMP) to occupy an extended role in prescribing and managing medicines for their patients, which has revolutionised the delivery of healthcare (Courtenay et al, 2011). Currently, there are over 50,000 practising non-medical professionals across the UK, of which community nurses form the largest group (Courtenay et al, 2011). Community nurse prescribers thus have a central role in ensuring that the use of evidence-based medicines is practised and the outcomes associated with principle 2 are achieved.

Within the authors organisation great efforts have been made to develop and communicate the trust prescribing formularies. Currently, all community prescribers are requested to follow the North West London Integrated Formulary. In addition, within the local health economy, the trust tissue viability nurses and pharmacy team have collaborated to develop an evidence-based cost-effective wound care formulary. Compliance against the formularies is monitored through prescribing information received via electronic prescribing data (e.Pact). To support continued education and ensure an evidence-based culture of prescribing, the trust NMP group have organised the delivery of a series of clinical updates for NMPs, which are well received by staff. Specifically with respect to medicines optimisation, a suite of updates were delivered to community nursing staff over a period of 12 months, which were well received, evaluated and published (Shah and Coyne, 2012).

Community nurses, along with all healthcare professionals, have an important duty to ensure that medicines use is as safe as possible and that the tenets of principle 3 are adhered to. Medication safety in itself is a key priority for all NHS organisations. In 2007, the National Patient Safety Agency (NPSA) published a document, ‘Safety in Doses: Improving the use of medicines in the NHS’, in which it made a series of recommendations on how to improve medication safety (NPSA, 2007). The recommendations were based on the analysis of 72,482 medication incidents reported.
between 1 January 2007 and 31 December 2007 to the NPSA Reporting and Learning System (NPSA, 2007). The most serious incidents were caused by errors in medicine administration (41%) and, to a lesser extent, prescribing (32%). Incidents involving injectable medicines represent 62% of all reported incidents leading to death or severe harm (NPSA, 2007). As government policy encourages the delivery of care ‘closer to home’, community nurses are increasingly being asked to conduct more complex medicines administrations in the home setting, such as community IV therapy (Department of Health [DH], 2009).

The medication safety agenda within the authors’ organisation receives extreme high priority and is led by the trust medication safety group which incorporates community nursing representation. In April 2013, a web-based incident reporting system, DATIX, was installed in all three community service directorates. This allowed the community services pharmacy team to promote and monitor medication incident reporting. As a result, over 100 medication-related incidents have been reported over the past 12 months, helping to improve practice and processes.

One of the key actions as a result of the incident reporting has been to deliver training to community nurses around the management of high-risk medicines. As a result of the positive feedback received regarding this training, the community services pharmacy team have developed an in-house e-learning package for medicines optimisation (to be launched once the trust has implemented its virtual learning environment). The medicines optimisation e-learning package signposts staff to all trust medicines-related policies, discusses the safe use of high-risk drugs, such as insulin, considers safe medication administration practices and informs the learner of good medicines management processes.

A significant action from the lessons learned has been to develop a revised and harmonised medication drug chart for the three community services directorates.

To ensure that the medicines optimisation agenda succeeds, its principles must be embedded within the practice of all healthcare professionals. As an organisation, Ealing Hospital ICO has formulated a medicines optimisation strategy in collaboration with North West London Hospitals NHS trust and Ealing, Brent and Harrow Clinical Commissioning Groups that encompasses both the secondary care setting and primary care agenda.

NEXT STEPS…

To realise the ambitions of the medicines optimisation agenda and ensure that patients receive the best outcomes from their medicines, the authors suggest that community nurses:

- Talk to their organisation’s pharmacy team and discuss how they are embracing the medicines optimisation agenda and how they may be able to support community nursing to deliver the principles of medicines optimisation
- Develop stronger links and collaborations with their local acute trust pharmacists and local community pharmacists so that information regarding medicines is communicated seamlessly and care is delivered in an integrated manner
- Find out whether their organisation has a medicines optimisation strategy, and, once published, how the NICE guidance on medicines optimisation is to be implemented
- Ensure that a review of patients’ medication is included at regular multidisciplinary team meetings and encourage self-administration where possible
- Ensure that community nurses are supported if being requested to administer increasingly more complex medication regimens to achieve the ambitions of the care closer to home and early discharge initiatives.

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