# Reflections on the implementation of a web-based non-prescription ordering system

In 2008, following a successful pilot within Central Essex Community Services, the Online Non-Prescription Ordering System was introduced. The system has continually evolved over time offering many benefits to the organisation, the health professional and the patient. Working in collaboration with industry, it has been possible to develop the system and local process to maximise the benefit to the organisation and the patient. This paper reflects on and discusses the benefits of introducing the system across community nursing services, podiatry and three community hospitals.

he author is a clinical nurse specialist in tissue viability for Central Essex Community Services, a community interest company (CIC) providing NHS services to a population of approximately 368,000 split across three boroughs (NHS Mid Essex, 2008). The clinical nurse specialist for tissue viability has organisational responsibility for ensuring that systems and processes for care delivery for patients with wounds are appropriate, evidence-based and promote clinical and cost effective use of limited resources.

Wound management has a significant impact on the health economy costing an estimated 2–3% of local healthcare budgets (Vowden et al, 2009). Wound care audits within the UK report that the majority of wound management is carried out within the community setting (Drew et al, 2007) Therefore it is not surprising that over the years organisations providing community health care services have experienced an increase in expenditure for wound management products as the majority are prescribed or procured in the community (National Prescribing Centre, 2012a).

Local demographics highlight that by the year 2028, 29% of the population will be over 60 years old, an increase of 8% since 2008 and equating to an increase of around 30,000 more adults in this age bracket by 2031(Mid Essex, 2008). A significant increase in age distribution has a direct effect on the need for clinical services and resources. It is recognised that increasing age and age-associated pathological disorders predispose

individuals to the development of chronic wounds and possible delayed healing (Morison et al, 1997). Therefore it is essential that there is an efficient and effective process for ordering appropriate wound management products.

A search of the literature revealed very little evidence or experiences of the use of systems to assist practitioners in the non-prescription supply of wound management products. However, anecdotally there are many organisations who have implemented systems, for example the Online Non-Prescription Ordering System (ONPOS). This paper reflects on and shares the experiences of a community provider organisation when implementing ONPOS.

Prior to the introduction of ONPOS, prescriptions were in general requested by community nurses and prescribed by GPs. Nurses who have successfully completed the non-medical prescribing course may also prescribe dressings (Department of Health, 2004). All prescription products were supplied by local community pharmacists. This process is not necessarily the most effective and does not offer the best value for money because prescribed products legally become the patient's property and cannot be shared with others (Dimond, 2011). This practice often leads to dressings being wasted or being illegally used for other patients. The National Prescribing Centre (NPC) states that to prevent waste the clinician should carry out a full holistic clinical assessment which determines the patient's needs and the minimum amount of dressings should

# KEY WORDS

- ➤ Community services
- ➤ Cost effectiveness
- ► Non-prescription
- >> Wound management

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be prescribed to prevent waste (NPC, 2012b). Therefore it seems appropriate that a system which provides non-patient named stock which can be shared between several patients and clinical teams would eliminate waste. An audit carried out by a community organisation in the West Midlands identified that where large quantities of dressings were prescribed, 35% remained unused (NPC, 2012b). Locally, a 'boot stock' amnesty revealed products estimated to cost up to £4000.

Within Central Essex Community Services there was no single system of ordering dressing products between teams and professional groups. For example, within podiatry services and the three local community hospitals, wound dressing orders were made via the local supplies team and supplied by NHS supply chain. This system led to a vast array of different products being used, as clinicians tended to order those products they were most familiar with and frequently ordered products that were off formulary. This practice led to an overuse of expensive products and staff changing dressing types at regular intervals. Knight (2010) discusses that it is particularly problematic to secure formulary adherence, promote best practice and reduce costs when clinicians have access to a plethora of dressing products and no standardisation in practice.

# **IMPLEMENTATION**

In 2008, in order to address the problems of wastage and to attempt to standardise practice, a pilot of ONPOS was introduced to community nursing services and was then extended to the tissue viability service, podiatry, and the three community hospitals. Four formularies were listed on the system, each one slightly different depending on the clinical speciality, with the majority of the products being the same to promote continuity of care. Additional products were added that were pertinent to specific patient groups (e.g. different width adhesive tapes and smaller size dressings for podiatry).

It was important that all professional groups were involved in the implementation of ONPOS. Alongside the chief pharmacist for commissioning, it was agreed that requests for dressings could continue to be placed with community pharmacists who were willing to take part in the scheme, thus maintaining a positive working relationship between clinicians and the local community. Some staff groups who historically had ordered via supplies were able to order online, selecting NHS supply chain to provide the products. The chief pharmacist instructed local GPs not to prescribe dressing products for patients being cared for by the teams participating in ONPOS.

## **PROJECT OBJECTIVES**

The initial objectives of the project were to support the wound dressings formulary, maximise formulary compliance, reduce waste and ensure compliance with excellent governance regarding a safe process for the supply of dressing products. However, the system has demonstrated many other advantages since 2008, including:

- Improved ability to monitor expenditure and act responsively to high-spending teams when necessary.
- Dencouraging joint working between healthcare professionals, leading to continuity of care for the patient and maximum compliance with formulary from all disciplines.
- Sharing of data ensures local responsibility and accountability for use of resources. Information is owned by team leaders and may be used to highlight areas of good practice and potential challenges.
- Provides an educational resource storing guidance, policies, training events and educational materials. Due to the system being web-based, this is easily accessible to staff from any location.

## **QUALITY AND SAFETY**

Nationally, the Care Quality Commission (CQC) regulates healthcare provision to ensure care which is provided or commissioned meets essential standards. Organisations need to demonstrate evidence of effective, safe and appropriate care, including reporting of patient experience and clinical outcomes.

To be assured that the local organisation was able to meet and attempt to exceed standards for safety and quality, it was recognised that the use of "boot stock" needed to be eliminated as a key priority. Implementing a system which negates the need for this type of practice protects the clinician and the organisation from the risk of litigation. Dimond (2011) discusses that it is extremely dangerous to supply dressings named for one patient to another because the clinician could be viewed as a supplier according to the Consumer Protection Act (1987), and therefore becomes liable for any defects in the product. This is of particular importance where clinicians have stored dressings in their car and cannot guarantee product safety.

To ensure that governance measures are observed and embedded into practice, there had to be a standardised process, as with any new system. With the support of industry (Coloplast), a Standard Operating Procedure (SOP) for the use of ONPOS was developed (Grothier, 2012). A group of clinicians representative of those using the system were asked to take part in a group to help develop the SOP. The group consisted of tissue viability nurses, ward managers, community nursing team managers, community nurses, podiatrist, community hospital matron, lead nurse for infection prevention and control, pharmacy and two clinical nurse specialists - one from the local area and a colleague from a community provider in the north of England. The reason for including a tissue viability nurse specialist from another area was to produce a document that could be utilised by other organisations. It is important when developing an SOP to include the end users so that it is applicable to practice and to avoid it becoming a set of rules that are impractical and which have the potential to become ignored (Baker, 1999).

The group discussed the process of the pathway from assessing the patient, choosing a product through to receiving the order and payment to the supplier. Key areas identified were:

- >> Determining who the SOP should apply to
- Identifying what training was required and who should receive training
- >> Levels of access for ordering, management, and finance
- Key responsibilities of all those involved in using the system
- >> Stock levels, ordering and maintenance
- >> Emergency supplies procedure
- Storage of stock both in bases and in the patient's home
- Transferring of stock between bases and patients' homes
- Monitoring and ownership of data generated by the system.

Dissemination of the SOP was via tissue viability link nurses and team managers to inform clinicians of the correct way to use the system and highlight the responsibilities of key individuals. The document is now included in wound management training and induction of new staff to introduce them to the local process and how they may use the system to assist them with their role.

### **CONTRIBUTION TO QIPP**

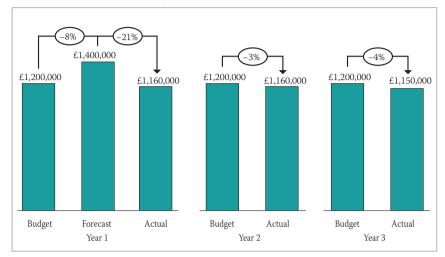
The system lends itself to the Quality, Innovation, Productivity, Prevention (QIPP) agenda (Department of Health, 2008) and focuses on ensuring that the patient is included in the decision regarding the choice of wound dressing by:

- **• Q**: Ensuring safe, quality care by using products which have been evaluated and chosen for both cost and clinical effectiveness.
- **• I**: Innovative system capable of evolving.
- **P**: Productivity is maximised as healthcare professionals are no longer waiting for prescriptions to be written or products to be delivered by the chemist. GPs and their administrative staff can utilise their time more effectively because they are not processing dressing prescription requests.
- P: Prevention of complications in wound management can be minimised with timely interventions, particularly where antimicrobial products are required for the local treatment of wound infection.

The system supports a more patient-centred approach to care. Prior to the introduction of ONPOS, patients attending the tissue viability centre brought their prescribed dressings to clinic. This was not the most effective process as patients often forgot their dressings or brought the wrong products with them. There were also concerns with how some products had been stored, which led to the clinic having to hold a supply of dressings at additional cost to the organisation. Using ONPOS negates the need for reliance on the patient to supply the appropriate dressing products as well as the other benefits highlighted above.

# **COST EFFECTIVENESS**

When considering a non-prescription system for the supply of dressing products it is important to take into account any additional expenditure "The system supports a more patient-centred approach to care."



#### Figure 1. Consistent annual savings achieved.

including VAT, as FP10 items are zero-rated (NPC, 2012a). Products ordered using ONPOS are subject to VAT. Despite the VAT costs, locally significant savings have been demonstrated year on year. This has been achieved via:

- ✤ Formulary adherence has improved from <40% to 99%</p>
- ▶ Reduction of waste
- Access to live data informing decision-making and promoting a cost-effective culture
- ➤ Cost-effective procurement of products through negotiation with industry.

In year one, through implementing ONPOS and working with clinicians, we have been able to reduce spend, which according to local data was forecast as  $\pounds 1.4$  million ( $\pounds 0.2$  million overspent), to  $\pounds 1.1$  million.

Financial investment for setting up the system has been relatively low, considering the return. The only costs were to supply community staff bases with an initial shelf stock in line with the local formulary. The system and all associated training was made available free, and continues to be supported by Coloplast Ltd. Training on data access and reporting was given to all relevant managers, including pharmacy, tissue viability, finance and clinical leads. Although the company have visibility of the data generated by the system a contract was agreed with regard to ownership and use of the data. The system is available to organisations where Coloplast products are listed on the formulary. However, this is not exclusive locally and clinicians within Central Essex

Community Services have access to a range of products from several manufacturers.

Over time several initiatives have been implemented with the benefit of almost immediate effect. Access to live data and control realises instant savings when changing products to more cost-effective alternatives, with no detrimental impact on care delivery. One example of this was following a change of product in the super absorbent category. Over 3 months, the amount spent was reduced by 30% by identifying where the product had been misused, retraining and sourcing an alternative product.

Consistent savings have been achieved (*Figure 1*), despite increases in VAT and product prices. In year two, through maximising the real time data and working closely with integrated care teams, we were able to reduce expenditure to £1.16 million, achieving a saving of £40,000 (3%) from an allocated budget of £1.2 million. With continual evaluation and evolution of the project in year three (2011/12), we realised savings of £50,000 (4%), again against a budget of £1.2 million.

#### **REFLECTION AND MOVING FORWARD**

Using ONPOS has enabled patients and clinicians to be empowered when choosing the most appropriate products for wound management. Redesigning our working practices has ensured that as individuals and as teams we are productive, proactive, efficient and safe. Clinicians now have immediate access to nonpatient named stock across all locations. The stock is standardised to the local formulary, which has led to clinical staff becoming familiar with the products and their mode of action, thus aiding decision-making. This familiarity also benefits the patient as clinicians are able to assist patients in making an informed choice. Involving patients in their care maximises patient wellbeing and the potential for concordance (Wounds International, 2012), and protects the organisation from potential litigation

ONPOS is very much a long-term, evolving project. Formulary review is no longer based on a biannual re-evaluation. Products are continually monitored for cost and clinical effectiveness. Local champions for wound management are identified as link practitioners and are responsible and accountable for the review process and implementation of any changes.

Stock sharing schemes have been introduced to prevent wastage of products which are no longer required by a location or stock near to expiry date.

Future use of the system will include "nonordering access" for staff. This will mean staff can access the website and educational materials, including local and national guidelines and a library of wound literature, but are unable to order products. We also propose to use the technology to gather information, and analyse and report on local audits.

When considering a large project such as this, identification and engagement with key stakeholders are essential. The project objectives serve a purpose for the patient, the commissioner, and the provider. The commissioner and the patient seek confidence in the clinical services procured and the provider must be able to demonstrate value for money while providing the best clinical outcomes for patients. Several factors may influence the success of the project in achieving its objectives, some of which may be out of the proposer's control. Therefore it is important to establish what and who will influence the outcome including the organisation, resources required, people, financial and information available (Martin et al, 2010).

Identifying and involving local champions in the early stages of the project through to implementation promotes a positive influence and minimises the likelihood of resistance (Levasseur, 2010). Many of the local nurse prescribers expressed concern that they would be de-skilled with regard to prescribing. However, since implementation of ONPOS, clinicians locally have recognised that instead of writing prescriptions for formulary dressing products they are able to use their advanced skills and time to focus on the more complex patients who may require non-formulary products and treatments.

Developing the SOP with a group of clinicians for whom the change in practice had the most impact provided a rationale and promoted sharing of the vision and scope of the project. This in turn promotes commitment and engagement (Levasseur, 2010) and may offer a good starting point for other organisations wishing to implement a non-prescription system.

#### **CONCLUSION**

All healthcare providers should be committed to improving the patient experience. When resources are scarce, we all have a duty to ensure public money is utilised and invested appropriately. It is important that the success of a cost- and clinicallyeffective system is shared with other organisations. The process for using ONPOS is easily replicated due to the flexibility and simplicity of the system.

This initiative has provided many challenges for the organisation and our commercial partners. However, as an early implementer of the system we have had the advantage of being able to contribute to the development of the technology. We have been able to adapt processes associated with the system and implement use of the SOP to ensure we maximise the effect on care delivery and the healthcare economy. Working together and involving clinical and non-clinical teams at all stages of the process, we have succeeded in the implementation of new and sustainable change in practice. We have assured compliance with excellent governance while achieving significant and consistent cost savings. WUK

#### REFERENCES

- Baker H (1999) Standard operating procedures. Global Cosmetics Industry 165(2):40–1
- Consumer Protection Act (1987) HMSO, London
- Department of Health (2004) Extended Independent Nurse Prescribing within the NHS in England. A Guide for Implementation. DH, London Department of Health (2008) High Quality Carefor All. DH, London
- Dimond B (2011) Legal Aspects of Nursing. Pearson Education, Harlow
- Drew P, Posnett J, Rusling L (2007) The cost of wound care for a local population in England. *Int Wound* J4(2):149–55
- Grothier L (2012) Standard Operating Procedure for Ordering Wound Management Products Using ONPOS (Online Non-Prescription OrderingSystem). Central Essex Community Services, Maldon
- Knight S (2010) Introducing a new method of providing wound care products. *Wounds UK*6(2):66–73
- Levasseur RE (2010) People skills: Ensuring project success a change management perspective. *Interfaces* 40(2):159–62
- Martin NA (2011) Project Politics. Gower Publishing, Farnham
- Morison M, Moffatt C, Bridel-Nixon J, Bale S (1997) A Colour Guide to the Nursing Management of Chronic Wounds. Mosby, London
- NHS Mid Essex (2008) Five Year Strategic Plan for NHS Mid Essex 2009– 2014: Delivering Healthy Communities. NHS Mid Essex, Chelmsford
- National Prescribing Centre (2012a) Prescribing of Dressings: Guiding Principles for Improving the Systems and Processes for the Supply and Prescribing of Wound Dressings. NICE, London
- National Prescribing Centre (2012b) Key Therapeutic Topics Medicines Management Options for Local Implementation. NICE, London
- Vowden K, Vowden P, Posnett J (2009) The resource costs of wound care in Bradford and Airedale primary care trust in the UK. J Wound Care 18(3):93–102
- Wounds International (2012) Optimising Wellbeing in People Living Witha Wound. Wounds International, London

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