

Driving efficiencies in wound care expenditure through service redesign utilising an online non-prescription ordering service

KEY WORDS

- ▶ Evidence-based care
- ▶ Improved outcomes
- ▶ Online non prescription ordering service
- ▶ Prudent healthcare
- ▶ Wound care formulary

Evidence-based practice ensures that resources are allocated to treatments that offer the best clinical outcomes. Specialist Nurses have been successful in improving the patient experience by leading clinical practice and offering enhanced services, often within the home environment. The Welsh government is demanding prudent healthcare spending; only what is needed to get the desired outcomes. This article reviews the Powys Health Board's management of wound care products across their community services, exploring how working collaboratively with industry they were able to demonstrate improved access to products for nurses and patients, effective cost management, and compliance to formulary.

Improving patient care and experience while saving money is not without its challenges. Practitioners must explore creative ways of working in order to deliver efficiencies. Mark Drakeford, Health Minister for Wales, has deemed prudent health care 'that fits the needs and circumstances of patients and actively avoids wasteful care and resources that are not to the patient's benefit' as the way forward. This reflects the agenda of the Quality Innovation, Productivity and Prevention (QIPP) in England (Department of Health [DH], 2012), a transformational programme designed to improve the quality of care delivered by the NHS.

In response to these recent directives and a 13.2% increase on wound care spend within Powys in 2008 (Powys Teaching Health Board, 2009), tissue viability and medicines management teams agreed that a new approach was needed to ensure improved clinical results and cost-effectiveness. Various options for a complete redesign of the delivery of wound care within Powys were investigated in an attempt to rationalise the formulary and gain greater formulary compliance; reduce waste and cost, since wastage accounts for a large proportion of the NHS spend on dressings (DH, 2012); and improve care through meeting the needs of patients and achieving clinical excellence.

In order to address these issues, the National

Institute for Health and Care Excellence (NICE) suggests the following solutions (NICE, 2013):

- ▶ Review and, if appropriate, revise prescribing of wound dressings to ensure that the least costly dressings that meet the required clinical performance characteristics are routinely chosen
- ▶ Prescribe the minimum quantity of dressings sufficient to meet people's needs
- ▶ Do not routinely choose antimicrobial (for example, silver, iodine or honey) dressings ahead of non-medicated dressings
- ▶ The minimum quantity of dressings necessary to meet people's needs should be prescribed to reduce avoidable wastage. Healthcare professionals making visits to people with chronic wounds should monitor supplies to prevent stockpiling.

EVALUATING THE OPTIONS FOR REDESIGNING WOUND CARE DELIVERY IN POWYS

Powys is a rural location in Mid Wales. Care is delivered via 10 community hospitals, 15 district nursing teams, and a team of specialist nurses. The office for National Statistics estimated 132,952 people were resident in Powys in June 2012, of which 20.7% were aged between 65 and 84, and

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3.2% aged 85+. The majority of wound care is undertaken by district nursing teams. Poor local transport in many outlying rural areas means home visits are required (Powys Country Council [PCC], 2012).

The process of exploring how care in Powys could become more efficient involved considering current requirements and those of the future, i.e. an assumed projected increase on the district nursing services as the population of older people increases over time (PCC, 2012).

THE ONLINE NON PRESCRIPTION ORDERING SERVICE

It was agreed that a pilot study of the online non-prescription ordering service (ONPOS) would be undertaken (Coloplast Ltd, UK). ONPOS is an online portal through which items can be ordered from an agreed formulary without the need for a prescription. It is currently used by 27 community organisations in the UK and processes transactions to the value of £21 million per annum, with over 300 orders per day (60,000+ orders per year) sent through the system. The system supports three supply routes — the NHS supply chain, local pharmacies, and wholesalers — negating the need for a GP prescription, as confirmed by the ONPOS provider Coloplast.

The ONPOS was piloted in order to address spend on dressings, limit the number of products used, and facilitate compliance with the wound formulary. It was envisaged that rationalising the choices available and having a central store of dressings held at each community nurse base would lead to cost savings and improved formulary compliance. Unlike prescribed dressings, those sourced via ONPOS can be used on any patient. Additionally, by managing stock at each base, there would be no need to order ‘just in case’ dressings to cover patients over holiday periods (*Box 1*).

PILOTING THE ONPOS IN POWYS

The district nursing teams chosen for the pilot study were carefully considered and represented the different ways in which wound care products are ordered in Powys:

- ▶▶ Team 1 comprised the largest number of nurse prescribers in the health board; they had reservations, feeling that ONPOS may

Box 1. Why was the ONPOS tool chosen?

- ▶▶ To reduce waste
- ▶▶ To prevent technical fraud
- ▶▶ To reduce time waiting for correct dressings
- ▶▶ To increase formulary compliance and control
- ▶▶ To allow access to live data enabling realistic budget setting, and negotiation of costs with suppliers.

compromise their prescribing rights and reduce their skill

- ▶▶ Team 2 was based on the border of Wales and England, where prescriptions are paid for in England, not Wales: a potential complicating factor
- ▶▶ Team 3 was based in Newtown, one of Powys’ largest conurbations. Newtown has a population of approximately 13,000 and ranks amongst the worst 20–23% in Wales for deprivation (PCC, 2014), offering challenges for those who work in the area.

After 6 months, the teams met to discuss their experience of the ONPOS pilot study. They were unanimous in praise of the ONPOS and adamantly refused to switch back to their previous system. The cost of the pilot was monitored using the online system and reviewed against the teams’ previous costs via the WP10 prescription form (FP10 in England) and nurse prescription; neither an increase or decrease in spend was seen. However, in view of the positive feedback from the teams and the advantages of being able to view expenditure in real time, it was decided that the system would be fully adopted within Powys. Over the next 4 months, the district’s remaining 12 teams were introduced to the system.

An audit of ONPOS in early 2014 demonstrated that the system served both nursing staff and patients effectively, primarily because a change in dressing regimen could be achieved almost instantly, without the delay of waiting for a prescription. Moreover, teams had immediate access to the right dressings to provide the best care for patients — the products on the ONPOS formulary being suitable for the majority of wounds, including complex wounds.

Both Lead Nurses (*Box 2*) and GPs have

Box 2. Lead Nurse Feedback

**District Nurse Team Leader
(Llandrindod Wells)**

'The introduction of ONPOS has decreased the amount of time nurses spend writing prescriptions, obtaining prescriptions from the GPs, and trips to the pharmacy for people unable to get their prescriptions. It has given the nurses a more coherent approach to what dressings to use (in the first instance). It is very helpful to have dressings to hand so treatment can be commenced straight away. It is also beneficial and less wasteful not having a stock of dressings in a patient's house, which cannot be used if no longer needed for that patient. The system is easy to use and there are generally no problems with getting the dressings delivered.'

District Nurse Team Leader (Builth Wells)

'From the experiential evidence I have, I can confirm our time spent chasing prescriptions and waiting in chemists for dressings for patients is now negligible since the introduction of ONPOS. The ordering system is easy to use and we order once weekly after our leg clinic. We have not experienced delay in treatment if an item is not available via ONPOS as we have sufficient nurse prescribers who can prescribe as required. I think the system works pretty well.'

welcomed the ONPOS system. Prior to ONPOS, GPs had to prescribe dressings, which was both time-consuming and sometimes outside their area of expertise. Now they have more time to spend with patients and confidence that the right people are making dressing selections for patients.

DISCUSSION

Cost savings

The ONPOS system was introduced in stages, and therefore immediate costs savings were not realised. In December 2009, spending on dressings was raised; a possible explanation for this is that the district nurses were still becoming familiar with the system and stock building at their bases took some time. In 2008, Powys health board's primary wound care dressing spend was £48,887.19, which rose to £56,519.17 by December 2014; however, these costs include the 2009 VAT rise and the introduction of a lymphedema service

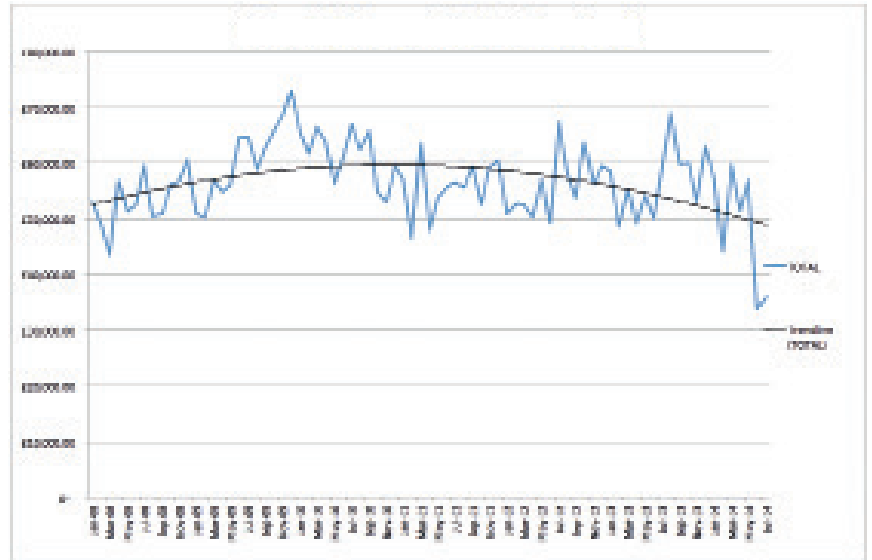


Figure 1. Powys (teching) Health Board Primary wound care dressing spend 2008–2014.

in 2013, which both increased expenditure. Taking into account overall expenditure by the District Nurse, Nursing Homes and Prescription Team, *Figure 1* demonstrates a trend towards cost reduction (blue line).

Inter-agency working

In Powys, most ONPOS orders were fulfilled by a network of community pharmacists. It was determined that engaging with pharmacists would be integral to the scheme's success and long-term future. The decision to use community pharmacies over other possible distribution networks proved positive. Relationships with community pharmacists and district nurse have been enhanced on the basis of formulary compliance, enabling pharmacists to predominantly hold stock items they know will be used within the community. The service provided was excellent, which in turn allowed bases to hold minimal stock levels safe in the knowledge that they can replenish stock within 24 hours. When nursing homes joined the system, the option of using a previously-used wholesaler, North West Ostomy Supplies, was also added.

Adherence to wound formulary

Prior to the introduction of ONPOS, the health board formulary had not been adhered to. A series of awareness meetings were held to address this

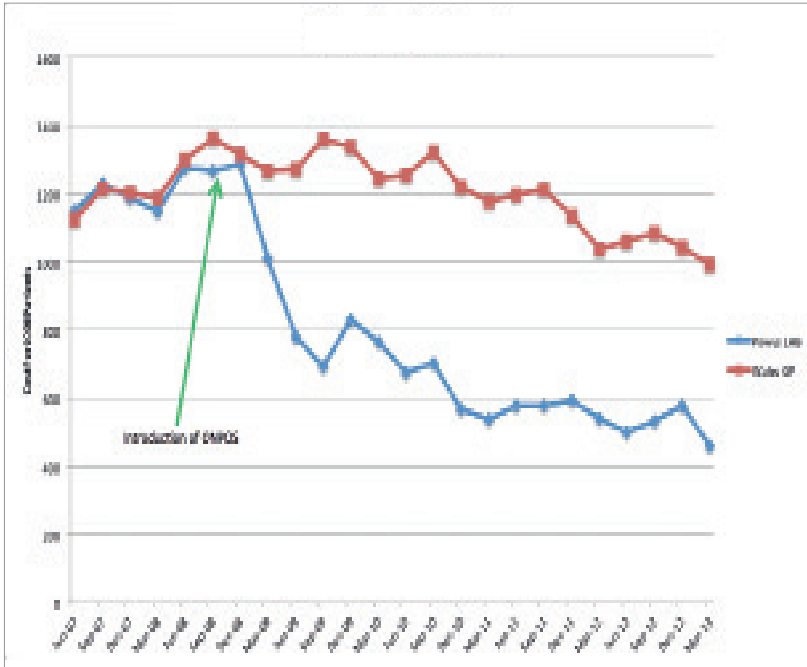


Figure 2. Powys (teaching) Health Board's silver-based dressing spend

issue, and to reduce the concern of district nurse prescribers that they would become de-skilled in prescribing dressings. Costs and number of products available were explained, and staff were reminded that in terms of accountability, generating a prescription is equal to making a decision to use a product from a centrally held store. It was explained that there could be occasions when they would still have to write a prescription for an off-formulary dressing.

One benefit of nurse prescribing is that it is timesaving for both nurse and GP (Carey and Stenner, 2011); the ONPOS further enhanced timesaving by allowing access to required front-line dressings without the need to write a prescription.

Rationalisation of product usage

All teams were included in a rationalisation of product usage, with the initial formulary including a selection of both silicone and silver products. Unfortunately, even with the addition of alerts on to the ONPOS system that highlighted alternatives, usage of alternatives did not reduce.

To combat this, the following two options were discussed:

- ▶ an authorisation function that allowed the ordering of silicone and silver products after the

tissue viability team's authorisation

- ▶ the removal of the silicone and silver dressings from the first-choice dressings formulary on ONPOS (keeping them on the health board formulary for prescribing only).

Due to Powys' geography, it is the largest county in Wales but has poor mobile phone and internet coverage, access to the online authorisation function would be limited to when the tissue viability teams were based in their offices, potentially delaying the ordering process. As such, it was decided that the second option was the most appropriate. In addition, it was felt that extra training was needed to identify wound infection, as this would reduce inappropriate use of silver-containing dressings.

As a consequence of implementing this option, an increase in nurse prescriptions for these products was expected, but this did not happen, perhaps due to the overall change in practice from prescribing to non-prescription. The idea of writing a prescription for habitually used products now seemed a lengthy process, when the first-choice formulary on ONPOS offered appropriate alternative dressings. The outcome has been usage of all products offered on the online system as a first-line approach, with no reported decline in wound healing outcomes — nurses used their prescribing skills for those wounds that proved harder to heal.

A dramatic decline in spending on silver-containing dressings was also seen (Figure 2). Instead, Inadine and/or honey-containing products were used, which are cheaper but no less effective (Sibbald et al, 2011). To date, these benefits have continued, indicating that nurses may have used products for convenience rather than in view of their particular properties. Considering this reduction in usage, placing silver-containing products back onto ONPOS on an authorisation basis is now being considered (originally option 1).

Following the initial increase in spending due to stock-build during the implementation stage of this trial, 4 years after full implementation (2012–2013) spending was approximately the same amount as it was in 2008/09 (Table 1). This is despite the additional expense of VAT associated with dressings sourced via ONPOS and an

increasing workload in terms of patient numbers and wound complexity.

Overall, Powys (teaching) Health Board has stabilised its wound care expenditure.

CONCLUSION

With support from Coloplast, the tissue viability and medicines management teams now meet on a quarterly basis to review usage and spend trends across district nursing teams and nursing homes.

ONPOS has been a key part of the Powys (teaching) Health Board’s efforts to improve wound care management. Its introduction has made a great difference to district nurses, providing instant access to appropriate formulary dressings, thus increasing formulary compliance to approximately 95% and reducing wastage. The system’s reporting tools have been useful in identifying variations in practice across the region. Moreover, local pharmacies have noted that the whole process is now simpler and quicker than it was previously.

Regular meetings between the tissue viability team, medicines management, and the ONPOS support team have helped in continually reviewing and improving the efficiency of the system, and Coloplast have been keen to provide additional assistance, including wound care audits and support material for nurses and care homes.

Since the initial pilot in 2008, the system has enabled the health board to easily monitor expenditure, identify local product usage trends, and identify training requirements.

Table 1. Year-on-year dressings spend

Year	Total dressing spend
2008–2009	▶▶ £653,228.69
2009–2010	▶▶ £763,110.70
2010–2011	▶▶ £711,113.18
2011–2012	▶▶ £654,888.33
2012–2013	▶▶ £655,761.35
2013–2014	▶▶ £677,954

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