

Database of a wound therapy to meet the Quality Agenda

Negative pressure wound therapy (NPWT) is often viewed as an expensive therapy by clinicians and commissioners (Ousey and Milne, 2010). It is often the therapy of choice for the management of complex wounds and symptom control (Chariker et al, 1989). To ensure optimum wound care for the patient and cost-effectiveness, a database was developed by Smith and Nephew and three senior tissue viability nurses from community trusts to track wound care outcomes in three primary care trusts. The data from this tracker has provided essential information for clinicians, as well as showing the clinical and cost-effectiveness of NPWT.

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KEY WORDS

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Negative Pressure Wound Therapy (NPWT) has been available since 1986 and is widely used in acute and primary care. It is an appropriate therapy for both acute and chronic wounds and has been shown to promote wound healing, alleviate signs and symptoms of exudate and odour and improve patient quality of life (Chariker et al, 1989; Wounds UK, 2008; Dunn et al, 2009).

In the authors' experience, clinicians have almost unanimously accepted the efficacy of NPWT, and most would agree that it has radically changed their practice over the last decade. However, empirical evidence to support its use is limited to a handful of randomised controlled trials (RCTs), prospective

non-comparative studies, retrospective case cohorts, consensus guidelines and case reports (Gregor et al, 2008). Some purist review bodies have suggested that there is no robust evidence to support the use of NPWT in practice (National Institute for Health and Clinical Excellence [NICE], 2011). In the absence of empirical evidence, clinicians face a dilemma. However, clinicians should not accept that RCTs alone can provide evidence from which to base therapy choices and purchasing decisions (Grocott, 2010; White and Jeffery, 2010; White et al, 2011). It is clear that wound care does not attract the research funding necessary to answer all unanswered questions. What is also clear, as a result of complexities inherent with patient groups, is that RCTs often exclude patients who may benefit the most from particular therapies (Timmons, 2009).

It is essential that clinicians start collecting prospective data that can be analysed and compared to highlight trends that can then inform clinical practice and future research projects, as well as offering support to commissioning decisions. In the current economic climate, healthcare professionals are increasingly required to justify the use of resources and to demonstrate patient outcomes that include time to healing and patient satisfaction. It is important, therefore, that NPWT is monitored in terms of its use and efficacy. The project

discussed in this paper has been made possible due to partnership working between the NHS and the commercial sector.

In partnership with industry, an outcomes database was developed that allows the prospective monitoring of all episodes of NPWT. The database enables the understanding of practice, measures clinical outcomes and demonstrates areas for quality improvement in patients receiving NPWT. In addition, the database facilitates the collection of patient satisfaction questionnaires.

There are many government reports outlining the need for care closer to the patient in the community, and the Darzi report 'Transforming community services' (Department of Health [DH], 2009) states that more complex wound care can now be provided in the community and that therapies should be available in community-led tissue viability services. NPWT is mentioned in the report as a service that should be community-driven, along with an investment in tissue viability services.

However, provision of NPWT in the community has been difficult due to access to equipment and consumables (Millard, 2002). A recent specialist opinion group held by Ousey and Milne (2010) identified several issues related to the implementation and continuation of NPWT in primary care. These included:

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- ▶▶ The untimely referral of patients requiring NPWT
- ▶▶ Lack of training for patients on using NPWT in the community
- ▶▶ Lack of coordination between secondary and primary care teams
- ▶▶ Funding pathways for therapy in the community
- ▶▶ Coordination of consumables
- ▶▶ Staff training in the community.

In order to be funded, therapies need to show efficiency and that they ensure the highest standards of quality and safety.

Previous methods of collecting outcome data have been rudimentary being mainly used to provide evidence for year on year spend. There was little detail of outcomes for the therapy and improvement in patient care.

The collection of good quality data can be used to highlight trends that inform:

- ▶▶ Clinical practice
- ▶▶ Patient experience
- ▶▶ Effectiveness of interventions
- ▶▶ Commissioning for quality improvement payment (CQUIN)
- ▶▶ Patient reported outcome measures (PROMS)
- ▶▶ Commissioning decisions
- ▶▶ Care delivery
- ▶▶ Future research projects.

The database was developed over a 12-month period in partnership with industry and three primary care organisations across England. Each primary care organisation (PCO) was influential in developing the database with a health economist from Smith and Nephew Healthcare. The data is collected on all episodes of NPWT within the participating trusts.

The content of the database was developed after consultation between the lead tissue viability nurses in each PCO. The database was then utilised by each of the three PCOs for several months. The dataset collected included:

- ▶▶ Wound history and type
- ▶▶ Duration
- ▶▶ Referring clinician and trust
- ▶▶ Wound volume

- ▶▶ Changes over time
- ▶▶ Interface and device details
- ▶▶ Therapy goals
- ▶▶ Reason for discontinuation
- ▶▶ Patient satisfaction.

The database also had several reporting facilities:

- ▶▶ Daily snapshot of all patients on current caseload
- ▶▶ Monthly, quarterly and annual reports of activity and outcomes.

The database also highlights the patients for review at two-weekly intervals.

After becoming familiar with the database and collecting several months' pilot data, the group analysed the data and identified areas of improvement.

The database was first laid out as one long online form to be completed. However, following suggestions from clinicians, tabs were developed with each heading to make completing the database more efficient and user-friendly for inputting the data.

The patient satisfaction questions were expanded, i.e. a sliding scale for pain, overall satisfaction and how the patient felt while the device was in use was added. Also, being available as a printed version allows patients to complete it without the healthcare professional having to be present.

Conclusion

Previous rudimentary data collection has proved useful for analysing year on year expenditure and commonalities of wound types treated with NPWT. What appears to be evident from the first year's data outcomes can answer some of the unanswered questions about NPWT, such as:

- ▶▶ How many patients use NPWT in each setting?
- ▶▶ Where is NPWT initiated?
- ▶▶ How long is the therapy in place?
- ▶▶ Are the goals of therapy achieved?
- ▶▶ What are the most common indications?

Thus, at the outset of treatment clinicians can accurately predict the

length of treatment and associated costs for certain wound types in patients with similar comorbidities. In addition, the information will be available to commissioners of care to support the use of NPWT and any subsequent business cases that are required. **WUK**

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