Tissue Issue

New Zealand Wound Care Society

New Zealand Wound Care Society Newsletter

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Welcome

A warm welcome to the summer edition of Tissue Issue. For those of you attending the NZWCS Dunedin conference, I look forward to catching up with you.

This edition brings you two excellent practice based articles, both from Wellington based authors.

An often bewildering and complex choice is available in terms of what dressings we can use on our patients. In this era of evidence based practice, the requirement to be cost effective and the busy multi-tasking that practitioners are required to do day in and day out, it is imperative that specialists in wound care are able to give guidance to staff as to what dressings to use and when to use them. Paula McKinnel, CNS in Wound Care along with Helen Drewry, CNS Theatre, give an overview of how in the acute hospital setting of Capital and Coast DHB they have addressed these issues by developing a 'Wound Care Cupboard'.

For years we have been introducing quality improvements in pressure ulcer preventative care and then judging their effectiveness solely on the annual pressure ulcer audit. Our second article by Jan Weststrate challenges this practice and suggests a more accurate method that has been used as part of quality control in industry for many years.

Carol Tweed — Wellington

From the President

There is exciting news this month with the launch of the Australia and New Zealand Clinical Practice Guideline for Prevention and Management of Venous Leg Ulcers. The Guidelines have been endorsed by Australia's National Health and Medical Research Council and the New Zealand Guidelines Group. Two versions will be available following the launch in Canberra in mid-October; there will be the full version with all the evidence reviews and an abridged version focussed on the key recommendations.

There has also been considerable work undertaken on the pan-Pacific pressure ulcer guidelines over the past two months. A number of members have been working on sections of the Guidelines in small trans-Tasman groups. Rather than rushing to finish the guidelines, a consultation draft is being prepared to be launched at Canberra. Consultation will commence following the Forum and will be taking place in New Zealand at the same time.

We have also received a press release on dietetic guidelines for pressure ulcers developed by the Trans-Tasman Dietetic Wound Care Group. These guidelines are well timed to fit with pan-Pacific Guidelines.

Copies of the full Dietetic guidelines are available from:

- www.dietitians.org.nz
- www.daa.asn.au
- or by email: katrinapace@gmail.com

Inside this issue

Editor of Tissue Issue

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What is the New Zealand Wound Care Society?

The NZWCS is a voluntary organisation made up of health care professionals from a variety of disciplines who share a common interest in wound management. As an organisation it gives its members an opportunity to share experience, expertise and knowledge providing a forum to network with other members throughout the country.

Currently there are fourteen branches New Zealand-wide. Each has an area coordinator and a national committee member. The area coordinator is responsible for coordinating meetings and seminars for the local branch members, while the national committee member represents each branch at a national level. In some areas these duties are undertaken by the same volunteer.

For more information & membership forms visit: www.nzwcs.org.nz

Lastly, the NZWCS has received an invitation to submit a joint bid with AWMA to host the 2016 World Union of Wound Healing Societies Congress in Brisbane.

The overall objective for the congress, held every four years, is to provide evidence-based information for best clinical practice allowing all congress participants to provide optimal patient care.

The Congress attracts around 3000 delegates representing over 70 countries and includes nurses, wound specialists, wound researchers, wound clinicians, facility managers, physicians, paramedics. The joint bid was discussed at the AWMA committee meeting I attended in 2010 and has been discussed with our National Committee. I have responded on the Society's behalf supporting the bid.

Wayne Naylor, President, NZWCS

Advanced Wound Management Dressing Cupboard

Paula McKinnel, Wound Care CNS; Helen Drewry, Theatre CNS (Project Leader), Capital & Coast District Health Board

Rationale:

- To provide timely access to appropriate, evidence based and cost effective wound care within Wellington hospitals
- To empower nurses to deliver evidence based practice
- To reduce stock piling of dressings, wastage through expiry and inappropriate selection
- To accurately reflect the budget required for wound dressings in the organisation per ward, particularly Negative Pressure Wound Therapy (NPWT)

This project was piloted in the medicine and surgical directorates, which deal with most acute adult care and are the largest acute directorates in the organisation. A senior nurse was seconded to lead this project over a 3 month period.

Process:

An audit was undertaken across both Directorates to evaluate wound care documentation and wound management practice, along with a nursing staff questionnaire to assess knowledge of basic wound tissue types and dressing selection. Stores provided us with information about the dressing products/sizes delivered regularly to each ward via the hospital stock control system (Imprest), and any other dressing stock held (i.e. buy-in products).

Action plan:

1. Identify core dressing products required for each ward/clinical area (nurses requested less dressing choice to enable easier decision making, but with access to effective products).
2. Develop supportive wound care education and resource material (this information was influenced by the audit findings).
3. The Project Lead then reviewed and updated the wound care manual and poster to reflect C&C DHB current products and new processes. We based our manual upon one developed in Hawke's Bay DHB.
4. Education about the Advanced Wound Management process (tier 1,2,3), dressing cupboard, wound care resource material, documentation and referral process to Wound Care CNS & DN was undertaken in each ward for all nursing staff by the Project Lead and Wound Care CNS.
5. Communication to Physicians & Surgeons (who were very supportive of the programme).

A three tier system for management of wound care products was implemented:

Tier One: A selection of standard dressings identified as being regularly required in each clinical area, accessible to all nursing staff.

Tier Two: Advanced Wound Care Dressings (as per the wound care poster). Following assessment and identification of the need for an advanced dressing, discussion is required with the senior nurse on shift as to the rationale. The product(s) are accessed from the central cupboard.

Tier Three: Currently includes NPWT products and consumables, but could in the future include other specialist products/devices. All stock is centrally located.

The dressing cupboard

This is centrally located in the hospital and all staff nurses have swipe card access. It is an honesty system where a form is completed giving product code, quantity taken, patient's name and budget cost code.

Dressing items can be returned if not contaminated and the ward is credited. The cupboard is stocked during the week by stores staff using the Imprest system.

The stock levels were agreed between the Wound Care CNS and the Store Manager.

The cupboard stocks: NPWT consumables, silicone sheet dressings, antimicrobial dressings, super absorbent dressings, compression bandages, sterile scissors, skin preps, any new dressings being evaluated.

What we have learnt

The cupboard works, it's accessible, saves money and nursing has owned the concept by proactively and objectively assessing any new dressings that are available on the market. Discussion takes place between nursing

staff and the Wound Care CNS to determine what tier any new dressing is and whether it should replace existing dressings or be additional.

The honesty system is successful and is run on the concept that one ward has the whole budget for the advanced wound dressings with Stores undertaking a cross crediting process according to patient location. Any clinical area in the hospital now has access to the cupboard as long as they have a cost code.

The future

The Advanced Wound Care Cupboard is a dynamic and evolving process with contents changing parallel to evidence-based practice and advances in new product development.

The Wound Care CNS meets at least 3 monthly with the Stores Manager to review cupboard contents and evaluate stock control.

This enables decisions to be made on which products are being used, which ones aren't and whether we still require stock of them.

When undertaking a literature review at the outset of the project in mid 2009, we thought we were the first ones to think of the concept of the dressing cupboard. However, a similar programme has since been published [1]. I would recommend reading this article for further useful information about this type of process.

Thanks to Hawke's Bay DHB for the material and structure of the resource file.

Reference

1. McInnes, W.A. (2009). The Dressing Bank™ — a system for providing access, equity and cost-effectiveness for advanced wound dressings in the acute care setting. *Wound Practice & Research*; 17(3): 146–152. (http://www.awma.com.au/journal/library/1703_04.pdf)

The Year After the Pressure Ulcer Survey

Jan Weststrate — Research Fellow, School of Nursing, Midwifery and Health, Victoria University of Wellington

Most hospitals organise once a year some form of pressure ulcer survey or audit. The main purpose of these surveys is to count the number of hospital acquired and non-hospital acquired pressure ulcers that are in that institution at that time, and identify areas of preventative care where quality could be improved.

A more detailed look at the results often shows a variation in the pressure ulcer prevalence between patient wards. At that particular point in time when the audit was undertaken, some wards may have no patients with a pressure ulcer and yet others have more than they had ever had before. This warrants a closer look at the cause of this variation. To do this you need to ask questions like; are the nurses and doctors following the hospital protocol in assessing the patients risk in developing a pressure ulcer? Are the correct preventive products provided at the right time? Often you find that in one or two of those areas improvements are necessary.

Ideally you do not want to wait until next year's pressure ulcer survey to see if the changes you are making with respect to pressure ulcer prevention strategies have been effective with a corresponding reduced pressure ulcer prevalence figure. So, is there a reliable method available that measures the effect of quality improvement interventions?

Traditional research designs (pre-test — post-test) are mostly not fit for this purpose, as they require control of extraneous variables of which there are many in an in-patient ward. Emergency admissions, very high acuity patients, being short staffed, new staff and insufficient pressure redistributing equipment are all examples that we have to take in to account as they will influence the outcome of our care.

The difference between doing research in quality improvement and carrying out traditional research can be best explained by the following example. Consider trialling a couple of different running shoes while running a 400 metre track. The track is straight, levelled and there are no barriers. The lap time informs us about which running shoe the athletes felt helped them to get the best time. Carrying out research in quality improvement on an in-patient ward is a completely different ballgame. This can be compared by testing out the same new shoes in an Australian Gladiator TV show environment. The distance is the same and the track seems clear but there are many unknown barriers, obstacles and surprises that cannot be controlled for while running. The time in which the gladiator course is completed tells very little about the quality of the shoes that are being worn.

In the 1924 a statistician called Walter Shewhart was confronted with a similar issue. The management of the Bell telephone company asked him how they could improve the quality of their products and services. Shewhart presented at a board meeting a single page of text and one diagram which became the forerunner of what we call today Statistical Process Control (SPC). Shewhart showed that the amount of variation in a process is the biggest threat to quality. He also argued that making continuous adjustments to the process (manufacturing and/or service provision) based on things that went wrong is more likely to have a negative effect on quality, in contrast to the intended quality improvement effect. He demonstrated that, before you can improve the quality of any process in the natural world (this includes nursing), the process (in the case of nursing we mean the environment in which we are practicing) first must be stable. Once a process is stable and in control, the fluctuations in the output (what you are measuring) can be assigned to what he called "normal variation". Based on this valuable insight, Shewhart

designed his famous control charts. These are a type of graph that plots the items being measured (such as the number of pressure ulcers) over time (Figure 1). The mean and the normal variations around that mean are of particular interest.

So, how does this all relate to increasing the quality of care in the prevention of pressure ulcers? If traditional research methods are not capable of measuring effectively the quality of care improvements, can SPC help us move forward? Over the last 20 years medicine has slowly come to the understanding that SPC methodology is helpful in finding out if a particular intervention will improve the quality of care or not. Publications on this subject within the nursing arena have been scarce. Nevertheless, the use of SPC could fit well for measuring quality improvement in pressure ulcer prevention. Pressure ulcer prevention at ward level takes place in a social complex healthcare environment in which a large number of factors will influence the outcome of our care as already explained. It can be assumed that each process in a company manufacturing process (or in the case of pressure ulcer development, in a ward) when it is in control (stable and normal day to day work), will have its own normal variation pattern. When things start to go out of control (such as a high numbers of new pressure ulcers developing), we see a big change in the way in the control chart looks.

Shewhart developed control charts which enable a decision to be made as to whether any change is the result of the quality improvement initiative or if it occurred as a result of the natural variability (i.e. it would have occurred anyway). To date there are two worthwhile publications to read on the subject of pressure ulcers and the use of control charts [1, 2].

In conclusion, the use of control charts can answer more effectively the question — are we as medical and nursing staff *are doing a good job* in preventing our patients from developing a pressure ulcer?[3]. The use of the tools mentioned are an effective and efficient method of monitoring pressure ulcer quality improvement intervention in-between the yearly pressure ulcer surveys. More explanation on how to work with those tools will be described in the next edition of Tissue Issue. For more information please email j.weststrate@gmail.com.

1. Kottner, J. and R. Halfens, *Using Statistical Process Control for Monitoring the Prevalence of Hospital-acquired Pressure Ulcers*. Ostomy Wound Manage, 2010. **56**(5): p. 54–9.
2. Chaboyer, W., et al., *Transforming care strategies and nursing-sensitive patient outcomes*. J Adv Nurs, 2010. **66**(5): p. 1111–9.
3. Gisvold, S.E. and S. Fasting, *How do we know that we are doing a good job — Can we measure the quality of our work?* Best Pract Res Clin Anaesthesiol, 2011. **25**(2): p. 109–22.

NZWCS Scholarships 2012

Need Assistance with Professional Development in 2012?

The New Zealand Wound Care Society is showing its support for education of health professionals involved in wound management by offering nine (9) Scholarship Awards in 2012.

The Awards comprise

- Four (4) awards of $250, available for any educational course or study day(s) that are wound-related
- Two (2) awards of $1000 for post-graduate study in Wound Management either in New Zealand or overseas
- Three (3) awards of $1000 for attendance at a National or International Wound Conference

All awards are for study or conferences in New Zealand or overseas.

Full details of the Scholarships, and application forms, can be found on the NZWCS website: www.nzwcs.org.nz