Regional Wound Management Clinical Nurse Consultant Initiative Evaluation

Executive Summary

Prepared for

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Executive Summary

Background

Management of wounds is an important part of the care provided by District Nursing, Bush Nursing and Public Sector Residential Aged Care (PSRAC) services in Victoria. In recent decades advances in wound management, together with the increasing number of wounds associated with an ageing population, has resulted in rising demand for wound management services. As wound management techniques have advanced, many of the approaches used by nurses in the past have been shown to slow the healing of wounds.

In metropolitan Melbourne the Royal District Nursing Services (RDNS) delivers wound management through community nurses supported by a tiered structure of senior nurses and nurse consultants. In regional Victoria, nurses providing wound care in community nursing funded through Home and Community Care (HACC) and high care PSRAC services have not had consistent access to the same level of support. Training needs analyses in rural areas have identified gaps in the capacity of the services delivering quality wound management for the management of chronic and complex wounds to clients and residents.

The Regional Wound Management Clinical Nurse Consultant (CNC) Initiative (the Initiative) commenced in 2008. The objective of the Initiative was to improve the capacity of Community Nursing, Bush Nursing and PSRAC services to implement evidence based wound management practice in regional Victoria. It was also to improve the capability of nurses to support that capacity. The anticipated outcomes were improved quality of care for clients and residents.

The Initiative funded the equivalent of one CNC position in each of the five rural regions. It was funded by the Aged Care Branch of the Victorian Department of Health (the department) through regional offices. Each region was free to implement a model to address local needs and circumstances within the framework established by the Aged Care Branch.

The Initiative was implemented through a range of measures focused on clinical review of wounds, training nurses and building service capacity including:

- a wound management consultancy service, supporting the management of people with chronic and complex wounds;
- Working with services to identify training needs;
- Providing and facilitating access to training in wound management for nurses, including class room learning, clinical review of individual patients with nurses and web based learning;

- Developing links and networks across the region to support both services and nurses; and
- Providing leadership, strategic and operational support.

The CNCs commenced work from late in 2008. Positions were filled in each region by April 2009. In addition to the funded CNC positions, funds were made available for training, equipment and the purchase of specialist wound management products by CNCs. This increased the funding pool for activities related to the Initiative by approximately $40,000 a year or 30%.

Methodology

The evaluation commenced with an establishment meeting with the department and consultations with experts in the field.

Reports prepared by the CNCs for the department were analysed. These included reports of the barriers and enablers encountered during implementation, time logs, education logs, data on the number of wounds in services, wounds referred to CNCs, the appropriateness of referrals; and an analysis of available training data and internal evaluations.

Site visits were conducted in October 2011. These were conducted by Stephen Campbell and Kathleen Menzies. During the site visits, stakeholders were interviewed. These included: every CNC, managers of the auspicing agencies responsible for the CNC, managers from regional offices and Nurse Unit Managers (NUMs) and managers of District Nursing and PSRAC services. Interviews were conducted with 32 stakeholders, many of which were by phone. Two of the stakeholder interviews were conducted as mini groups with NUMs who were team leaders in District Nursing services.

To identify the extent to which the qualitative findings applied across regional Victoria, an online survey was completed in late November and early December 2011 by NUMs with responsibility for the wound portfolio in District Nursing, Bush Nursing and PSRAC services. The survey measured the perspective of service management regarding the impact of the CNCs in regional Victoria.

Finally, findings from all the components were reported back to the statewide reference group on 9 February 2012 to enable judgement about the importance of each of the findings to be made and to rank enablers of, and barriers to, successful implementation.

Findings

Models of Implementation

The model of implementation was determined by each Region within the broad framework developed by the Aged Care Branch. The common elements were:

- Recruitment to the CNC positions of locally based nurses with demonstrated experience and qualifications in wound management and nurse education;
- A regional steering committee;
- Provision of training through seminars and workshops;
- Clinical review of clients and residents to provide practical demonstration of techniques with small groups of nurses;
- Provision of a consulting service including remote support through e-mail and telephone as well as practical client-based training for nurses;
- Development of networks based around the 'go to' nurses in each service; and
- Development of resources for use in services and reviews of service based resources.

Key differences in implementation between regions were:

- The auspicing agency in which the CNC was located–either the regional office or a health service;
- Engagement of CNCs as fractional appointments or as full-time. Two regions funded two 0.5 EFT positions to facilitate coverage of large geographical areas and reduce the amount of travel time. Another region funded a position at 0.6 EFT.

Some of the CNCs chose to focus on specific areas:

- In Gippsland, a close relationship with Monash University facilitated the implementation of the Mobile Wound Care (MWC) project; MWC is a web-based program providing the CNC with remote access to client files to minimise travel and maximise the utilisation of the CNC resources;
- In the Grampians, the support of the regional office facilitated the establishment of web-based training resources which have been also made available to CNCs and nurses in other regions;
- In Loddon-Mallee, the focus was on developing a structured competency based system to identify and assess levels of support for

wound management in District Nursing, Bush Nursing and PSRAC services - the Wound Resource Education Nurse (WREN);

- In Hume, the focus was on an individual patient where over one hundred separate health professionals were engaged in providing services (for a chronic wound lasting several years). This led to improved outcomes for the patient and increased inter-service relationships to improve service delivery in the region.
- In Barwon South West, the Barwon CNC focused on clinical review to training nurses while the South West developed the Webex to deliver PowerPoint based training over the geographically dispersed region.
- In the Grampians, the model of training delivery is referred to as the Highway Model because it delivers training strategically at various points along the highway to maximise training resources and minimise the time and cost to services. Similar models are used in Hume and Gippsland.

While each region developed a unique focus, the framework within which the CNCs worked and the strong networking between the CNCs achieved consistency in implementation across regional Victoria. This report focuses on the common elements of the Initiatives rather than individual differences between regions, except where they add insight to the success of the Initiative.

Key Findings

In the first two years of the Initiative, 2009 and 2010, work focused on establishment of the CNCs as an authoritative source of support for services and nurses. This was characterised by a relatively high proportion (30%) of time spent on administration, establishing networks and relationships with services, identifying areas where support could be provided for clinical governance, roll-out of basic equipment necessary to determine wound aetiology and monitor progress of wounds. By the time of writing this report, May 2012, the CNCs were in a position to consolidate the gains made.

The initiative has been effective in improving the capacity of District Nursing, Bush Nursing and PSRAC services in regional Victoria to provide evidence based wound management to HACC clients and high care PSRAC services residents. The services identified improved client outcomes as one of the top three impacts, together with nurses being willing to seek advice about wound management and being able to access up to date information.

The success of the Initiative was quantified through the responses to the on-line survey by 67 NUMs who were responsible for wound management in District Nursing, Bush Nursing or PSRAC services.

The NUMS identified:

- An improvement on the overall capacity of services to provide evidence based wound management.

  This was measured by rating the capacity of each service. The average rating across regional Victoria was 6.0 (out of a possible 10) before the Initiative was implemented in 2008 and 8.2 in November 2011 (when the survey was conducted).

- The CNCs had provided a diverse range of support to nearly all (97%) of the services, with multiple types of support provided including:
  - Personal visits to the services (77%);
  - Identification of training needs (72%);
  - Facilitation of equipment (72%);
  - Provision of training (58% in house and 72% through external workshops and seminars);
  - Resource books (55%);
  - Accessing wound products (43%);
  - Development of policy and procedures (43%); and
  - Establishing Special Interest Groups (22%).
- Direct consultation where CNCs demonstrated the practical aspects of classroom learning was rated most highly of all education strategies (8.1 out of a possible 10) and was rated much higher than the training provided by product representatives (6.3) and internet based training (5.9);
- Nearly all services (87%) had referred chronic and complex wounds at some point. 30% referred such wounds all or most of the time;
  - Where wounds were not referred to the CNCs it was mainly because the wounds were not considered serious enough (45%) and/or services felt they already had the capacity and expertise (64%) to manage the wounds.

Other evidence supporting the effectiveness of the CNCs included:

- Improved capacity of services to count and report the prevalence of chronic and complex wounds;
  - A total of 2,305 wounds were reported for Victoria in December 2010, 30.5% of which were in PSRAC services.

- An increase in the number of wounds being referred to CNCs from 105 in June 2009 to 306 in December 2010, representing 13% of the wounds reported;
- The proportion of referrals that CNCs deemed to be appropriate increased from 38% in June 2009 to 77% in December 2010;
- The CNCs focusing their clinical role on supporting and enhancing the capability of nurses to effectively manage wounds;
- The strong, near universal support for the Initiative identified in course of the site visits with regional offices, auspicing health services and managers of District Nursing and PSRAC services; and
- Review of evaluations of the training sessions which indicated that the training was rated by participants as highly relevant and effective.

The improved capacity has been achieved through the increased capability of nurses to assess the aetiology of wounds, identify and apply the most appropriate treatment, use relevant diagnostic and monitoring equipment and build confidence to work effectively with other health professionals (GPs, allied health and surgeons).

Enablers

The success of the Initiative has been strongly influenced by the recognition of the need to access up to date, evidence based specialist wound support. This need has been recognised by all stakeholders including GPs, surgeons and allied health staff.

Services providing wound management are complex organisations and changes require the engagement simultaneously and different levels. It was the alignment of clinicians, teams and organisations as well as the demonstrated commitment of the department to fund the CNCs, training and equipment that was central to the success of the Initiative. This has been achieved to a greater or lesser extent across the five regions.

The whole of the Initiative has been more than the sum of its parts: The Initiative has been implemented in a way that has added value for both services and nurses. Success has been facilitated through the strong alignment of support by all levels of a complex system: the department, regional offices, Health Services, District, Bush and PSRAC services, and individual clinicians. The clearly identified need, recognised at each level, to increase capacity of services and capability of nurses facilitated success.

Regional level enablers

- The support by auspicing agencies provided the administrative foundation for success.
- The CNCs, over and above their responsibilities to establish links within their region, have established a peer support network enabling the learning and experience of individual CNCs to be taken on by the group as a whole.
- Support from the regional training units in rolling out the additional training sessions and coordinating course attendance.

Service level enablers

- District Nursing work is dominated by wound management.

  In general wound management was estimated to comprise 40% of nursing workload for District services. In PSRAC services, wound management competes with many other demands. Estimates were by NUMs and DoNs indicated that "less than 5% or 10%" of nursing workload in PSRAC services was devoted to wound management.

  The take-up of CNC wound management support by PSRAC services has been less consistent than for District and Bush Nursing services. This is associated with the lower number of wounds and the smaller proportion of nursing work taken up by wound management in PSRAC services.

- Existing capacity within services has provided a foundation on which the CNCs could build.

  Existing capacity included the existing experience of nurses working with wounds, the established presence of wound champions – the 'go to' nurses, clinical systems for recording and managing wounds (including wound charts) and the availability of other wound care experts working in the regions.

- The CNCs have been able to deliver classroom learning that has been consolidated through practical client based nurse training.

- The provision for minor equipment funds enabled services to obtain the physical capacity to manage wounds.

  This was supported by focused in-house training and workshop training for nurses to use the equipment appropriately. Back-up support through on site demonstration and remote support through internet, telephone and e-mail consolidated the utilisation of the investment in equipment.

Nurse level enablers

- For nurses, wound management is 'real' nursing work.

  Being able to successfully heal or, minimally, manage wounds that cannot be healed, provides a great deal of professional and personal satisfaction. Working with nurses to "*help nurses do what nurses do well"* has been an important element of job satisfaction for the CNC.

- The CNCs are "*passionate about wounds*". Nurses being able to do nurse specific tasks that result in positive patient outcomes have been a driver for nurse engagement with wound management training. The commitment of the CNCs has engaged nurses in the services.

- The quality of the seminars and workshops supported by one-on-one practical client based training.

Barriers to successful implementation

While the primary enablers have been the alignment of all stakeholders, barriers have arisen when stakeholders did not actively support the Initiative. Other barriers, discussed below relate to the regions, the services, individual clinicians and patients.

Tyranny of distance

- Distances CNCs are required to travel (including attendance at central reference group meetings).

  This was overcome in some cases through splitting positions to minimise travel distance. Other strategies to overcome the tyranny of distance included use of internet and telecommunication based solutions also enabled remote consulting support to overcome the distances between the CNCs and the services.

Part-time position

- All the CNCs identified that the demand for their services exceeded their capacity to deliver.

  The part-time CNCs identified that their capacity to meet demand of services and nurses for consultation, training, and support for developing clinical governance through regional meetings could not be met in a timely manner because of the limited hours they were working.

Service level barriers

- Lack of support by some services, including cancellation of scheduled appointments.

- Inconsistent or incomplete wound management protocols and clinical records, including wound chart.
- Engagement of PSRACS was uneven across the regions.

  In one region the Directors of Nursing group for PSRAC service did not engage with the regional steering committee and the CNC. In another there was a service providing for their needs in wound management.
- Individuals who attended training not being supported by their peers.
  - This was overcome by in-house training and services sending at least two staff members to external courses.
- Lack of clinical governance within services and different systems between services creating difficulties in relation to reporting wound outcomes for staff who work across a number of different services.
- Reliance on paper based systems for patient records and time management increasing the time required to review records and making extraction of relevant data for clinical review and remote management time consuming and difficult.
- Different referral systems.

  In one region it was noted that the PSRAC services had a different referral system to the District Nursing services which made referral of wounds to the CNC more difficult.
- Services' resistance to collecting evaluation data systematically.

Nurse level barriers

- Some nurses resisting change in practices with which they are familiar and comfortable.
  - One solution suggested to manage this barrier was to implement a system requiring nurses who changed a wound management regime to document the rationale for the change and thereby be accountable for their actions. This was considered to be partially effective.

Client and resident barriers

- For District Nursing services where clients are required to pay for dressings, a client reluctance to pay for a more expensive product. This barrier was overcome by identifying cost savings arising due to fewer dressing.

Ongoing demand

There remains substantial unmet demand for CNC support for wound management services to continue.

All services that participated in the survey identified an ongoing need for further training. Services identified an average of five different aspects of wound management in which their staff required additional training. Nearly all services indicated that they expected to continue to use the CNCs in the future at either the same level as they had previously (49%) of more often (46%). The services that indicated they would use the CNC "less frequently" were PSRAC services.

It is CR&C's view that, should funding be continued, the nature of the work would change as the Initiative moves from the Establishment stage to a Consolidation stage. This would be characterised by:

- A lower proportion of work being allocated to administration and more focus on clinical consulting, training and developing clinical governance;
- More efficient use of the CNCs as consultants as referrals become more appropriate and the services learn how to use the CNCs;
- Services supporting the CNC via more appropriate clinical governance through the development of standardised wound charts and protocols for wound management.

During the site visits, stakeholders indicated that, if the CNC positions were no longer available, the gains made to date will gradually erode. All were clear there was a need to sustain the momentum achieved by the Initiative.

In addition to the current unmet demand, the growth in the older population and rates of diabetes in the community are expected to increase demand even further over the next decade, making this Initiative timely and further work developing wound management capacity warranted.

In summary

The Establishment phase of the CNC Initiative is now complete. The Establishment phase has been characterised by:

- CNCs contacting each individual service to:
    - Identify the needs of the service in relation to training and other support for wound management;
    - Introduce the role of the CNC;
    - Establish communication protocols.

- Providing training through workshops and seminars that met specific needs of services and individual nurses.
    - The additional training that has been made possible through the additional training funds has supplemented what the CNCs have been able to provide.
- A high proportion of time spent on administration and developing the capacity building infrastructure - establishing relationships by travelling to services and meeting with DoNs and NUMs, identifying an appropriate contact person, setting up systems, getting the services to collect data on the number of wounds.
- Access to the provision of expert consulting advice:
    - The practical client-based training has resonated with nurses. It has provided practical and hands on experience with the expert CNCs who have been able to demonstrate the application of techniques for managing chronic and complex wounds. CNCs have attempted to deliver this training as small group sessions to facilitate peer nurse support within the service;
    - Providing additional support through remote consultation services using e-mail, internet and phone.

The most important impact of the CNC Initiative has been to empower nurses working in the services to take responsibility for wound management by providing effective training and support. Supporting services to develop clinical governance processes to support the implementation of newly learned practice has enabled nurses who learn best practice wound management to implement best practice. It is also clear that while momentum is starting to build in the improvement of the capability of nurses and the capacity of services in wound management, there remains a strong demand for further support across regional Victoria.

Recommendations

1. The Regional Wound Management CNC Initiative should be established as an ongoing regionally based program.
2. The focus of the CNC positions should be to provide consulting services, clinical leadership and training through seminars and workshops and reinforced through practical client-based training, with less time spent on administration.
3. Improve clinical data.

   Establish a clinical working group to identify the minimum data required to achieve consistency of wound management recording and protocols for managing wounds. Services should develop procedures for nurses to simply and quickly document and justify any change in wound management.
4. Data should continue to be captured in four key areas:
    1. Clinical data required for managing wounds;
    2. Prevalence of wounds;
    3. CNC time-logs; and
    4. The number of training sessions conducted.

   Ideally the collection of clinical data, prevalence data and allocation of CNC time could be managed through an electronic record keeping system such as the Mobile Wound Care system implemented in Gippsland or the RDNS Camillus system. It must be user friendly or have good help desk support.
5. Consider a structured competency assessment for services that will focus advanced wound management training on nurses who can actively support other nurse in the service, or a cluster of services. Continue to provide more general training across the spectrum of nurses.
6. Support initiatives to identify the cost effectiveness of evidence based care.
7. Provide centralised support for web-based on-line learning.
8. The model provides a template for improving capacity in clinical areas other than wound management or providing positions that could service the range of clinical care needs.

   However, care should be taken to ensure that the key enablers are present and a series of silos based around clinical areas are not created.