Organisational models of care for chronic wound

Evidence check

30 June 2021

Experiential evidence: healthcare professionals

In brief

- An online survey was completed by 48 health professionals, sharing their experiences and perspectives on providing wound management in NSW.
- There was significant variation in how respondents described the delivery of wound care. Models included multidisciplinary and interdisciplinary teams, wound care clinics, specialist care, and primary care, community nurse-led and wound champions.
- Components of wound management that enhanced the quality of care were identified. They were rapid processes for diagnosis, referral and triage, comprehensive assessment, coordinated treatment and access to quality products.
- Availability and access to education was considered important to health professionals to build their confidence in wound care. Particularly, ongoing education to maintain currency with wound products, application and limitations.
- Consumer information was described as not accessible or user-friendly and, frequently, non-existent. Several respondents identified the need to consider health literacy and provide consumers with information in different formats across various time points during their treatment.
- Product and equipment challenges were identified by many respondents and included access to quality products, correct use and cost.
- Respondents suggested that in the medical record, wound history, progress and treatment should be documented and easy to find. Also, photographs of the wounds were a useful addition to the written documentation and assisted with diagnosis and monitoring progress.
- The sample size was relatively small, but given the open-ended questions and qualitative data generated, the findings provide insights from the frontline about the delivery of wound care.(1) Part of the Agency for Clinical Innovation (ACI) tripartite model of evidence, involves experiential evidence triangulated with research and empirical evidence.

Background

The Chronic Wound Management Project is part of the second set of initiatives of the NSW Ministry of Health's Leading Better Value Care (LBVC) program. Improving the management of people living with chronic wounds is a major challenge for health services across local health districts (LHDs) and in community settings, particularly in Residential Aged Care Facilities and primary care. The LBVC Chronic Wound Management initiative provides opportunities to improve the prevention and management of chronic wounds.

As part of this initiative, experiential evidence has been sought from health professionals delivering care to people with a chronic wound in NSW. Experiential evidence is knowledge based on insights drawn from experience or practice in a certain setting, context or life circumstance. As part of the ACI tripartite model of evidence, experiential evidence is triangulated with research and empirical evidence. This process enhances the understanding and knowledge about variation in clinical practice, innovation and implementation of change.

Definition of a chronic wound (NSW Health)

A chronic wound is one that has failed to heal in a timely manner despite standard care. Types of chronic wounds include arterial ulcers, venous ulcers, pressure injuries (bed sores), ulcerated and fungating malignant wounds, and infected wounds, including surgical site infections.

Methods

An online survey with open-ended questions to obtain qualitative data on the multi-perspective of wound management from health professionals in NSW at a single point in time. This experiential evidence was triangulated with the peer-reviewed research on organisational models for wound care.

Participants and recruitment

Email invitations to participate in the survey were sent to a convenience sample of health professionals via the Chronic Wound Management Initiative, the Chronic Wound Management Community of Interest and via relevant ACI networks. A passive snowballing approach was used where the survey link could be shared to reach broader audiences and gather multi-perspectives from across NSW. The survey was open to healthcare professionals with experience in managing chronic wounds who worked in NSW.

Data collection

Data were collected from respondents using an online qualitative questionnaire administered through Quality Audit Reporting System (QARS) between 24 August 2020 and 28 September 2020 (see Appendix A for survey design and questions).(8)

Data analysis

Data were analysed by the ACI Evidence Generation and Dissemination Manager and the ACI Manager Chronic Care Network, using a qualitative framework analysis approach: familiarisation, coding, applying the framework; charting into a framework matrix, and interpreting the data. The LBVC Standards for Wound Care (2019) was used as a thematic framework: wound model of care, wound team, clinical staff development, consumer information, wound documentation, applying data to improve care, and products and equipment. Themes were developed by interrogating and comparing data between, and within, cases. The report was peer-reviewed by co-chairs from the Chronic Wound Taskforce.

Ethical considerations

This was a quality assurance activity conducted for the primary purpose of improving service provision in the NSW health system. As a quality assurance activity, an ethical review was not required by National Health and Medical Research Council, *Ethical Considerations in Quality Assurance and Evaluation Activities* guidance and the NSW Health *Quality Improvement and Ethical Review: A Practice Guide for NSW*.

Limitations

The sample is small, self-selected and there may be a bias in reporting practices on the part of respondents. While the sample lacks a variety of health professionals from different clinical and geographical areas, it provides insights from the frontline into the delivery of wound care in NSW. We cannot, however, generalise from these findings and claim that this is a statewide account of current care for chronic wounds.

Findings

There were 48 responses to the qualitative survey, with 47 respondents employed by NSW Health. Of the respondents, 28 were nurses; tertiary, (n=8, 17%), community (n=20, 41.7%), primary care (practice nurse) (n=3, 6.3%). There were four clinical nurse consultants and four wound specialists. Responses were primarily from health professionals working in public health settings.

Table 1. Respondent demographics

Demographic	N
Professional Role	
Aboriginal Health Practitioner	1
Dietitian	1
Doctor – medical	2
Doctor – surgical	1
Doctor – general practice	2
Manager	3
Nurse – tertiary facility	8
Nurse – community	20
Nurse – primary care (practice nurse)	3
Occupational therapist	3
Podiatrist	1
Physiotherapist	2
Other	1

Wound models of care (Standard 1)

In total, 21 (43.8%) respondents indicated their LHD had a documented and implemented model of care for chronic wounds, noting there were multiple respondents from some LHDs. Eleven respondents (22.9%) indicated that their LHD did not have a model of care for chronic wounds and 12 (29.2%) were unsure. In LHDs where there was a documented model of care, some respondents in those LHDs were unaware that was the case.

Overall, there was significant variation in how the delivery of wound care was identified and delivered across LHDs. Respondents described several models for wound management, including multidisciplinary and interdisciplinary teams, wound care clinics, specialist care, primary care, community nurse-led approaches and wound champion models.

Five respondents suggested that using telehealth could remove access barriers to specialist wound care and improve collaboration between disciplines.

A small number of respondents highlighted the value of wound care clinics, including access to multidisciplinary teams and expert, evidence-based wound care. One respondent described a local process:

"Complex wounds due to vascular issues are managed in an MDT [multidisciplinary team] vascular wound clinic, with regular dressings by community nursing. A vascular surgeon attends this clinic. For wounds on the foot, these patients are managed in the high-risk foot clinic MDT." Doctor

Some respondents raised the importance of rapid access to specialist wound care, for example, plastic surgeons or other suitably trained surgeons, for surgical debridement and skin grafting, along with continuity of care across settings and roles.

"Centralised service wound clinic patients to be triaged by clinical experts and referred to relevant specialities, if required, will prevent over-servicing in some instances, and more timely access to expert wound management advice to achieve the patient's goals." Nurse

Some respondents emphasised the importance of escalation points for wound care and identified some common barriers. For example, in some instances, wounds were not considered a priority in the emergency department (ED), and this impacted on diagnosis and delayed treatment.

"A patient presented with a fall and a de-gloving injury. He was elderly with multiple comorbidities. The extent of the injury was not appreciated when it was seen in ED." Doctor

Similarly, there may be insufficient time on ward rounds to assess wounds. Referral processes and access to specialist wound assessment were also identified.

Respondents suggested a need to focus on delivering wound care outside of tertiary settings.

"It is not enough to 'fix' wound management in hospitals as the majority of chronic wound management is occurring outside of the hospital." Doctor

Overall, respondents identified several components of quality wound management. They included a rapid process for diagnosis, including referral and triage, for example a single point of contact, pathways to and from the hospital, specialist services and escalation points. Also included is comprehensive assessment and review, for example comorbidities, medical, surgical, social and wound history; coordinated treatment including evidence-based interventions and dressing regimens; and access to quality products.

Wound team (Standard 2)

A third of the respondents (16 of 48, 33%) described the importance of a multidisciplinary approach, including the benefit of accessing specialist and evidence-based wound care practices through a wound champion, wound nurse practitioner or wound specialist.

"Having adequate staff, ideally medical or CNC [clinical nurse consultant] level nurses, available to diagnose wound aetiology is an enabler." Doctor

Respondents noted that multidisciplinary input into wound management is broader than other clinical areas. For example, teams can include, but are not limited to, nursing (tertiary and community), medical, surgical, general practice, nutrition and dietetics, psychology, occupational therapy, physiotherapy, social work, podiatry, pharmacy and Aboriginal health.

"With referral to the OT [occupational therapy] team, there was successful management of complex treatment for a patient with a reputation for being 'difficult' within the local community nursing service. The patient complied with the process and community nurses were confident with providing what appeared 'non-typical' intervention because they had support available to them when they needed it. The wound healed – at last." Occupational therapist

The presence of a cohesive multidisciplinary team that communicates effectively across all care settings was considered critical to effective wound management and continuity of care.

"We work collaboratively across the LHD [as a] cohesive network of expert wound clinicians. This allows for continuity of care across the care continuum." Nurse

However, some respondents suggested that often wound experience and expertise within the LHD is not easy to access.

"At any given time, there may be one, or more than one, nurse [on staff] who has expertise in wound care and tissue viability, but this expertise is, in my experience, not always available due to individuals being on leave." Doctor

Clinical staff development (Standard 3)

More than half of the respondents (26 of 48, 54%) indicated the need for continuing education to increase understanding and knowledge of wounds across different professional disciplines in various settings. Respondents also highlighted that health professionals need access to education and resources on evidence-based practices**.** Several respondents indicated that wound care education in their LHD was poor.

Some respondents suggested that education is required to maintain currency with wound products, application and limitations. To further optimise wound management, respondents indicated that health professionals need to understand life factors and challenges that impact on wound healing for consumers. They also suggested this should be part of professional development.

"More education [is needed] around the psychosocial challenges and engaging difficult clients to optimise wound management. [Also] understanding resistance in chronic clients where it sometimes feels like they actually don't want their wounds to heal." Nurse

Specialist wound clinics that could focus on developing and supporting wound care through education in primary care was highlighted as important to the provision of wound care.

"The doctors here think Bactroban is the only answer to wound healing. Patients are coming in every two to three days for wound care and they ask the patient to be put more Bactroban on in the meantime. I have suggested other ways and I am looked at like I am mad. A doctor said today, 'Let the wound dry out and it will heal'. I am finding it difficult to change practice here and I'm unfortunately over-ruled." Nurse

The accessibility and availability of education was seen as important ways for health professionals to build their confidence in wound care.

Consumer information (Standard 4)

Respondents identified the importance of consumer engagement to optimise health and wound healing. This included addressing the causes of poor wound healing, behaviour change and self-management strategies.

"Patients are actively involved in managing their own wounds and taught to be vocal about dressing choices made and the care of the surrounding skin (correct moisturisers, etc) and the rationale for compression that works." Occupational therapist

Respondents suggested that often consumer information is not user friendly or accessible and, frequently, non-existent. Several respondents identified the need to consider health literacy and provide consumers with information in different formats across various time points.

"Keep instructions and product use simple and have clear guidelines of wounds." Nurse

"[Provide] both verbal and written info where necessary. Contact details for appropriate health care professionals [need] to be made available to the patient/client." Nurse

Some respondents highlighted the need to consider the social determinants of health. They suggested that to appreciate better and understand the consumers' life contexts could improve outcomes.

"Having worked primarily in rural NSW, I have always dreamed of having a mobile High-Risk Foot Care team (much like the breast screen bus) that could regularly travel to smaller sites to provide that expert care that city dwellers are afforded.

"So many [people] in rural communities cannot afford to travel for specialist care or are just too elderly to travel great distances. I can tell many horror stories of clients creating their own off-loading in their inappropriate shoes with folded pieces of cardboard in the sole of their shoe with holes cut in it in an attempt to off load their chronic ulcer, or the use of pocketknives to de-bulk calloused areas, etc." Nurse

Wound documentation (Standard 5)

Several respondents (18 of 48, 37%) provided examples relating to the wound documentation standard, and most suggested that documentation was critical to enabling continuity of care. Wound history, progress and treatment need to be documented, and easy to find, in the medical record. Photographs of the wounds are a useful addition to documentation and can assist with diagnosis and monitoring progress. Respondents suggested that wound charts and plans should be supplied with a referral for the continuation of care.

The MEASURE acronym (Measure, exudate, appearance, suffering, undermining, re-evaluate and edge) and WATEP acronym (Wound Assessment Treatment and Evaluation Plan) were both cited as simple means of wound documentation to track wound progress and the products used.

The presence of part-time staff, and the risk of information being lost, also highlighted a need to improve handover and clinical communication to optimise continuity of care for consumers.

"We have worked hard on our handover and clinical communication over the last months to provide more continuity of care for our clients. Many of our staff are part time, so information was being lost, though now we have significantly picked up our game." Nurse

Applying data to improve care (Standard 6)

Very few responses were made to explore this standard (six out of 48, 12%). A small number of respondents suggested the need to improve data capabilities, indicating that it may not be a priority area for healthcare professionals.

"Improve data capabilities to show the value of community services; case studies with quantifiable outcomes vs experience [are] more meaningful to clinicians." Nurse

Products and equipment (Standard 7)

Over half of the respondents (28 of 48, 58%) commented about product and equipment, and a range of challenges were identified by almost all participants. Challenges included access to quality products, for simple and advanced wound management; correct use of appropriate wound products; overall lack of product awareness and knowledge; early versus delayed dressing removal or change in products; access to add-on treatments, for example compression stockings; and the cost, which was most frequently mentioned.

The financial burden of providing wound care products, both for the consumer and the health service, was a prominent finding.

"Our LHD community nursing service provides only two weeks of dressing products. After that period, the patient is expected to contribute to medicated dressings. Not having funding to provide all wound products for the duration of their admission to the service [is a] barrier." Nurse in a metropolitan setting

Other respondents suggested that health service budget restraints can lead to the use of cheaper and less effective products.

"District procurement and product policies and procedures; budget constraints [on] cheap products vs effective products." Nurse in a regional setting

Product awareness and knowledge, along with access to quality products for more prolonged effectiveness and better outcomes, were also identified by respondents.

"Ward nurses are so busy they grab [the] most convenient cover or whatever the doctor suggests, which is rarely the best product." Wound specialist

Appendix A

Survey design

The survey was designed using a collaborative approach by researchers with experience in survey development. The ACI Chronic Wound Initiative project team members were involved in drafting the survey questions, structure, and user testing. The survey involved respondents identifying and describing their own experiences of how chronic wounds are managed locally, including models of care, service approaches and applications of the Leading Better Value Care (LBVC) Standards for Wound Care (2019). Survey questions were aligned to the seven LBVC standards for wound management, which provided the framework for qualitative analysis. Demographic data was also collected.

Survey questions

1. What is your current role? (Select all that apply)

- ◻ Clinical nurse consultant
- ◻ Doctor
- ◻ Dietitian
- ◻ Manager
- ◻ Nurse
- ◻ Podiatrist (general)
- ◻ Podiatrist (specialising in high-risk foot)
- ◻ Physiotherapist
- ◻ Pharmacist
- ◻ Social worker
- ◻ Vascular surgeon
- ◻ Wound specialist
- ◻ Other (describe)

2. Where do you work?

3. How long have you worked here?

- ◻ Less than 6 months
- ◻ 6-12 months
- ◻ 1-2 years
- ◻ 3-4 years
- ◻ 5 years or more

4. (a) Does your local health district or network have a documented and implemented model of care for wounds?

- ◻ Yes, the model of care is documented and has been implemented locally (go to 4b)
- ◻ Yes, the model of care is document but has not been implemented locally (go to 4b and 4 c)
- ◻ No, there is no model of care for wounds (go to 4c)
- ◻ I am not sure (go to 4c)

(b) Can you please share the model of care for wounds? (Attach relevant documents here)

(c) Can you please describe how wounds are managed locally?

5. Thinking about the way wounds are currently managed locally … can you share a specific example of how this improves experiences and outcomes for consumers?

6. (a)Thinking about the way wounds are currently managed locally … can you share a specific example of how this meets at least one of the Leading Better Value Care Standards for Wound Care (2019) (hyperlinked standards as a reference)?

(b) This is an example of Leading Better Value Care Standards for Wound Care (2019) …?

- ◻ Wound model of care
- ◻ Wound team
- ◻ Clinical staff development
- ◻ Consumer information
- ◻ Wound documentation
- ◻ Applying data to improve care
- ◻ Products and equipment

7. Thinking about the way wounds are managed locally … what are the current enablers?

8. Thinking about the way wounds are managed locally … what are the current barriers?

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