# Case study

# Identifying surgical wound care priorities from the perspectives of clinicians and health consumers in an Australian private healthcare context: a case study

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Keywords surgical wound care, priorities workshop, clinicians, health consumers

For referencing Walker RM et al. Identifying surgical wound care priorities from the perspectives of clinicians and health consumers in an Australian private healthcare context: a case study. Wound Practice and Research 2020; 28(1):17-21.

DOI https://doi.org/10.33235/wpr.28.1.17-21

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## **Abstract**

**Objective** To identify the priorities and challenges related to surgical wound care from the perspectives of clinicians and health consumers / patients at a private hospital in Australia.

**Methods** Twenty-five clinical questions related to five surgical wound management topics were developed a priori and presented to four clinicians at a workshop. Questions were ranked by participating clinicians using a consensus building approach to identify the top two research priorities. One health consumer who had experience with a surgical wound was interviewed. Transcripts from the workshop and the consumer interview were analysed using a deductive approach.

**Results** The clinicians' top priority questions focused on the importance of the consumer in their postoperative wound management, and the role of the wound care team in providing evidence-based care. The patient highlighted the vital role collaboration with clinicians played in the successful management of their surgical wound and continuity of care.

**Conclusion** Strategies to partner with consumers in the prevention of surgical wound complications can be successfully incorporated into clinical practice.

# Key points

What is known about the topic? While there are clear gaps in current surgical wound care practices, there is also

increasing evidence that suggests wound care outcomes can improve when patients partner with clinicians.

What does this paper add? Surgical wound care outcomes improved when clinicians prepared and worked with consumers using frequent education, support and assessment approaches.

What are the implications for practitioners? Partnership approaches between clinicians and consumers in the prevention of surgical wound complications can be successfully incorporated into clinical practice.

## Introduction

It is estimated that over 4,500 people per 100,000 population in upper middle-income countries have surgical procedures, or one operation for every 22 people<sup>1</sup>. In Australia, 25% of hospital admissions involve surgery, with 58% occurring in private hospitals<sup>2</sup>. Adverse events are more likely to occur in surgical rather than non-surgical admissions, with hospital-acquired infection cited as the most common complication<sup>3</sup>. While most surgical wounds heal by primary closure<sup>4</sup>, some may have delayed healing due to complications such as surgical site infection. As such, the effective management of surgical wounds is an essential nursing activity, playing a significant role in consumer care and reducing the social and economic burden on the healthcare system.

While there are clear gaps in current practice<sup>5</sup>, there is also increasing evidence that shows improved wound care outcomes when patients partner with clinicians<sup>6</sup>. It is therefore imperative to include patients in healthcare improvement. This approach is advocated by patient safety organisations such as the Australian National Safety and Quality Health Service Standards who recommend clinicians partner with consumers<sup>7</sup>. Recently this end-user contribution has been extended to research, with practical examples for consumer involvement in Australia via the National Health and Medical Research Council (NHMRC)<sup>8</sup>, and in the United Kingdom via 'priority setting partnerships' between patients, their carers and clinicians as outlined by the James Lind Alliance<sup>9</sup>.

### **Objectives**

The aim of this case study was to identify priorities and/or challenges in surgical wound care from the perspective of clinicians and consumers.

#### Setting

This study was undertaken at a tertiary, not-for-profit private hospital in Queensland, Australia. The facility offers 30 speciality areas with 19 operating theatres and six surgical units (189 beds). Ethics approval, including informed consent for participating clinicians and health consumers, was granted by the hospital (HREC/2018/30/271) and university (HREC/2017/723) Human Research Ethics Committees.

#### **Participants**

Participants included four clinicians with experience in surgical wound management who participated in a workshop, and one health consumer with experience of a surgical wound who participated in an individual interview. We were unable to recruit family members. All participants were invited via electronic flyer and word-of-mouth, and all consented to participate.

# Methodology

### Design

We used a modified nominal group technique (NGT)<sup>10</sup> as a method to gain consensus during a priority-setting workshop. In NGT, data are systematically collected from all participants, resulting in divergent views<sup>10</sup>. An advantage of the NGT is that face-to-face interactions allow for rich discussion and debate between participants which can generate new and novel solutions<sup>10–12</sup>. As such, the structured approach of NGT requires involvement from all group members, allowing individual participants to be heard<sup>11</sup>. This technique has been successfully used where group processes and consensus are required to generate recommendations<sup>10,12</sup>.

#### Development of priority questions for clinicians

While not formally validated, generation of a priori questions was informed by wound care literature<sup>13–15</sup> and available clinical practice guidelines<sup>16–18</sup>. Questions were verified for clinical relevance by eight nurse practitioners and nurse experts who specialise in the assessment and management of surgical wounds. The subsequent list of 25 clinically relevant questions provided a short-list through which clinicians could identify priorities and/or challenges in wound management practice from their perspectives. Questions were provided to recruited participants in the form of a printed handout in a workshop setting and covered five wound care practice topics: 1) information/evidence sources; 2) patient involvement; 3) cost effective strategies; 4) wound care education and; 5) wound assessment and documentation.

## Wound care priorities workshop

A 2-hour workshop was undertaken to understand clinicians' priorities and/or challenges in wound management practice.

In conducting the modified NGT, we were guided by Potter and colleagues' protocol<sup>12</sup> that recommend the following steps: introduction and explanation of the process to participants; quiet time to independently consider the questions; sharing of ideas over four round-robins until all viewpoints have been conveyed; group discussion/clarification and; voting and ranking where each participant votes to prioritise the recorded ideas relative to the original question. Votes were tallied in an electronic spreadsheet and then ranked to identify the top two priority questions.

#### Interview with a health consumer

The insight and experiences of the health consumer, and

their surgical wound care preferences, were sought using five semi-structured interview questions related to: their experience with a surgical wound; satisfaction with the care of the wound; aspects of wound care that could be improved; the most important aspect of wound care and; their role in managing the wound.

Both the NGT workshop and consumer interview were digitally recorded, deidentified and professionally transcribed prior to analysis. While the aim was to capture participants' perspectives, a deductive content analysis approach allowed these to be mapped against the top two priority questions generated from wound care priority topics<sup>19,20</sup>.

A preparation phase for the analysis of transcripts resulting from the NGT workshop and health consumer interview allowed the research team to make sense of the data – immersion in interview transcripts by reading the textual data multiple times to develop an understanding of content and its meaning. Following subsequent reading of the text, codes were grouped into categories to identify associations between clinicians' top priority questions, and the health consumer interview in relation to the NGT topics<sup>19</sup>.

# **Findings**

Four clinicians participated in the workshop – three nurses and one doctor. All were women with a median age of 52 years (range 27–56). The top two wound care priority questions they identified were: 1) What role does the patient play in postoperative surgical wound care? (patient involvement theme) and; 2) What role does the wound care team play in evidence-based wound care? (wound assessment and documentation theme).

Despite repeated recruitment efforts, as permitted by Human Research Ethics Committees, only one health consumer with a current wound was available for interview. The participant discussed his experience of surgical wound care provided by clinicians at the participating hospital. A deductive content analysis of the transcript was compared to clinicians' conversations during the NGT when the top two priority question were identified. Analysis revealed the importance of a partnership approach between consumers and clinicians to promote optimal surgical wound management.

#### Patient involvement

The key category that emerged from the deductive content analysis was that clinicians need to prepare the health consumer in order to enable them to work collaboratively in the care of their surgical wound. This was achieved via a combination of education and support. Some comments are listed below – note that individual clinical voices were not able to be differentiated during the transcribing process:

...we do a lot of education before they go have their procedure... with our work I think the patient plays a massive role in how their outcome is, definitely. If they look after themselves [Clinician].

...if we educate them well before they have the procedure, then it might go better, basically... it's all about them really and how they heal and from everything, from education to knowledge to their own like their overall health, their comorbidities. It all comes back to them really and that's it [Clinician].

Combined with a friendly and authentic approach, the health consumer spoke positively about the support he received from clinicians and was motivated to take an active role in his wound care:

Well the wound care sisters [sic] here were absolutely brilliant, I've got to say... I was brought back to the hospital once a week for their assessment and they... were absolutely brilliant and couldn't do enough... [Health consumer].

... being kept informed and the caring and sharing attitude of the people involved... the nurses upstairs who I almost look forward to coming in once a week to see them and chat with them... So, they seem to take a personal interest... a friendly outgoing attitude and, a personal sort of attitude [Health consumer].

#### Wound assessment and documentation

Regular consultation between clinicians and the patient, as well as the use of resources such as photographs, helped to promote consumer involvement in their wound care which allowed accurate evaluation and documentation of wound progression, as stated by the consumer:

They kept me informed of progress and things like that. When they started, the hole was five centimetres deep and it's now gone [Health consumer].

... they took photos for me and stuff like that, so that I could... follow the progress, so I was fully informed. I was part of the process [Health consumer].

For clinicians, wound care assessment and documentation was embedded in evidence-based procedures:

... that's the main thing if you've got the principles of what you're doing, you may all get to A and B differently but if you've got an over-arching principle, it should stand its test of time... [Clinician].

## Discussion

Health consumer involvement in care was identified as important by the participating consumer and clinicians<sup>23</sup>. Consumers increasingly play a greater role in decision-making within contemporary healthcare systems<sup>26</sup>. In Australia, this aligns with the National Safety and Quality Health Service Standard 2, Partnering with patients in their own care, that recognises a diverse and evolving practice of patient participation and improved health literacy to ensure best health outcomes<sup>7</sup>.

While clinicians in this case study identified the importance of guiding principles in the management of wounds, there continues to be inconsistency in guideline advice regarding the accurate assessment and management of surgical wounds<sup>27</sup>. How guidelines are accessed also appears to be an issue. Authors of a recently published evaluation of surgical site infection guidelines<sup>27</sup> found their applicability to different clinical and financial contexts was low, impacting the adoption of these often lengthy documents<sup>28</sup>. Therefore, clinicians seek alternative, more accessible sources as demonstrated in a survey of surgical nurses that reported 75% of nurses used the hospital's wound care specialist team as their primary source of information<sup>29</sup>.

Effective surgical wound assessment requires the involvement of all stakeholders, including consumers, whose values and preferences should inform clinical decisions<sup>30</sup>. Regular consultation between consumers and clinicians enables effective surgical wound monitoring and feedback, and improves continuity of care. Where nurses are task-orientated or attempting to control competing workload demands, communication with patients is limited31. Meaningful collaboration between consumers and clinicians promotes a high degree of trust, mutual respect and informationsharing necessary for patients to participate in their surgical wound care. Where face-to-face contact is not possible due to distance, financial and/or time constraints, telehealth options should be sought to provide consistent, convenient assessment of surgical wounds, advice for their care, and reassurance for consumers<sup>32-34</sup>.

# Strengths and limitations

Relatively few clinicians were available to participate in the NGT, reflecting challenges faced in health services research<sup>21</sup>. With a focus on production of care, private health services may place less value on research, preventing well-intentioned clinicians from being actively involved in research<sup>22</sup>. Health consumer and family members within private health settings may also be influenced by reduced or absent health service research and be less willing to participate. However, like consumer and family members in public health settings, they face similar demands related to cost and access which often prevent or limit participation. While their involvement is important in shaping policy<sup>23</sup>, the 'relevance' of patient and family member participation may not have been clearly articulated in this study<sup>24,25</sup>. In addition, lack of funding for this study prevented the provision of honorariums to individuals to cover costs such as transport, parking and meals<sup>24,25</sup>.

## Conclusion

Given the small sample, this case study is limited in its conclusions. However, results may guide and encourage researchers, educators and clinicians to develop strategies to partner with consumers in the prevention of surgical wound complications, and influence healthcare reform. While findings suggest patient-centred surgical wound care priorities can be successfully incorporated into clinical

practice, there is clearly a need for larger studies that partner with health consumers and family members in the area of surgical wound care.

## Conflict of interest

The authors declare no conflicts of interest.

# **Funding**

The authors received no funding for this study.

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