

Executive Summary

Pressure ulcers are an internationally recognised patient safety problem and are one of six such issues being addressed by the Victorian Quality Council (VQC), which is the expert strategic Ministerial advisory council in Victoria. The primary role of VQC is to improve safety and quality in health care by: Establishing a Safety and Quality Framework, Providing Improved Access to Better Data, Educating on Safety and Quality and Responding to Known Problems and Risks¹.

A pressure ulcer is any lesion caused by unrelieved pressure resulting in damage of the skin and underlying tissue², and in most instances is an adverse outcome of a healthcare admission³⁻⁶. Pressure ulcers primarily occur during periods of acute illness or trauma and predominantly affect the frail, debilitated, elderly, the neurologically impaired, and those who are immobile for long periods of time. Irreversible tissue damage can occur quickly and can have considerable impact on patients, their family, carers and health services.

The number of Australians living with a pressure ulcer is unknown. This situation could be described as a hidden 'epidemic under the sheets'⁷, with a large proportion of these ulcers remaining not only unseen but also untreated, unrecorded, and uncosted.

The physical consequences of pressure ulceration can lead to scarring, surgical intervention and death. Victorians accounted for almost 30% of the 923 people who died in Australia where pressure ulcers were identified as either the primary or secondary cause of death, for the period 2001 to 2003⁸. Already

stretched healthcare resources are further strained by the increased length of stay and associated cost of care required to treat patients with pressure ulcers^{3,4,9-12}.

In 2003 VQC conducted the first state-wide survey of the prevalence of pressure ulcers within Victoria's acute and subacute health services. With the release of the VQC State-wide PUPPS Report – 2003 (PUPPS 1), Victoria became the first Australian state to publicly detail the scope of the pressure ulcer issue in their public hospitals thereby setting a benchmark for the collection and distribution of information on this scale. The survey identified that one in four patients in these facilities had a pressure ulcer and that two thirds of the ulcers found were hospital acquired. The State-wide PUPPS Report – 2003 made a number of recommendations, one of which was that a further state-wide survey should be conducted at the end of 2004, to track the influence of initiatives recommended within the report in reducing the prevalence of pressure ulcers within Victorian public hospitals¹³.

This Pressure Ulcer Point Prevalence Survey Report – 2004 (PUPPS 2) is presented by VQC in response to the above recommendation. PUPPS 2 had two primary objectives:

1. To determine the prevalence of pressure ulcers in Victorian public hospitals and compare current findings to the prevalence of pressure ulcers identified in PUPPS 1; and
2. To track the level of improvement in pressure ulcer management through the implementation of the key recommendations from PUPPS 1.

The mean prevalence of pressure ulcers identified in PUPPS 2 was 20.8% (range 0% to 60%). This is a 21.5% improvement since PUPPS 1 in 2003. As in PUPPS 1, two thirds (66%) of the ulcers identified in PUPPS 2 were hospital acquired. A total of 2,559 ulcers were identified on 1,381 patients with 63% of these ulcers involving more than superficial skin damage. Patients over 60 years of age accounted for 80% of patients with ulcers.

Twenty paediatric patients (less than 18 years of age) were identified with a pressure ulcer, accounting for 1.5% of patients with ulcers. PUPPS 2 is the first time paediatric pressure ulcer prevalence has been detailed on a state-wide level.

While PUPPS 2 identified a prevalence of 20.8%, only 4.5% of these patients appear to have attracted a pressure ulcer code in the Victorian Admitted Episodes Dataset (VAED) over the same period. PUPPS 2 analysis indicated that patients with pressure ulcers stayed in hospital longer than patients without ulcers. Modelling of the VAED data indicates that patients with pressure ulcers have a 50% longer length of stay (LOS) than patients without ulcers, accounting for 44,406 beddays per annum. Although factors other than pressure ulcers may play a role in the extended LOS, the risk-adjusted cost of these additional beddays is approximately \$19 million.

Risk assessment to identify the level of risk for developing a pressure ulcer is widely acknowledged as a best practice strategy in the prevention of pressure ulcers. PUPPS 2 found that just over half the patients surveyed had had a risk assessment performed. Pressure reducing equipment was used for 60% of patients with pressure ulcers. Documentation of pressure ulcer management in the medical record was found in 45% of cases where pressure ulcers were identified. Written information for patients on pressure ulcer prevention was provided by 27% of health services.

The results indicate there is an improvement in state-wide pressure ulcer prevalence within Victorian public hospitals with the average prevalence being similar to that found in a recent national study¹⁴. The decrease in pressure ulcer prevalence positions Victoria closer to data described in comparable international studies^{11,15,16}. Overall, the report demonstrates that improvement of organisational management of the

pressure ulcer issue in public hospitals has occurred state-wide with the majority of health services having implemented the key elements of a pressure ulcer prevention and management program as recommended in PUPPS 1. For the majority of facilities this includes an evidence-based prevention and management program, policies that are supported by executive staff and wound care committees. The results indicate however, that across all health services there remain diverse practices in pressure ulcer management. There are gaps between organisational policy and clinical practice with particular deficits in pressure ulcer risk assessment, the use of pressure reduction equipment, and documentation of pressure ulcer prevention or treatment strategies by all health professionals. Less than 38% of health services have staff trained in wound management with specific hours allocated to wound management education, prevention and management.

Immobility was again the primary associative risk factor identified in PUPPS 2 for developing a pressure ulcer. This emphasises the need to inform patients and staff of the importance of frequent position changes and early mobilisation. This message is reinforced within the VQC's pressure ulcer prevention patient publications 'Move, Move, Move' and 'Preventing Pressure Ulcers – a patient information booklet'^{17,18}. To decrease the risk associated with immobility, a comprehensive prevention plan that includes regular skin assessment, hygiene/skin care, a turning or re-positioning regimen, optimised nutrition and maximised opportunities to mobilise combined with pressure reducing support services is required^{2,19,20}.

As noted in PUPPS 1, the implementation of a multifaceted program to reduce the prevalence and incidence of pressure ulcers should be developed or continued. This program should be inclusive of wound management staff resources, pressure ulcer risk assessment, patient and staff education, pressure reduction equipment and associated reporting. As a consequence of conducting PUPPS 2 the VQC has identified a number of additional recommendations to those emanating from PUPPS 1. There should be a health service focus on two identified areas of greatest need, with improvements sustained through clinical risk reporting, regular review of data and outcomes, evaluation of the program and feedback to all stakeholders. Organisation-wide pressure ulcer data should be included in an organisation's minimum data set. The key message is to "implement, focus and sustain".

Through PUPPS 1 & 2, Victoria has taken a comprehensive step towards improving the prevention and management of pressure ulcers. The findings of this study indicate that significant improvement has occurred, but that more needs to be done. There is still a need for a co-ordinated and facilitated approach at both state and individual organisation levels to support sustained implementation of targeted prevention and management programs in order to minimise harm from a patient safety risk that is largely preventable.