

Model of Care for Prevention and Integrated Management of Pressure Injuries in People with Spinal Cord Injury and Spina Bifida: Horizon Scanning Brief

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Overview

The Model of Care for Prevention and Integrated Management of Pressure Injuries in People with Spinal Cord Injury and Spina Bifida, published in March 2014, was developed by the New South Wales Agency for Clinical Innovation's State Spinal Cord Injury Service.

The Model of Care (MoC) describes an integrated approach to the care of patients with spinal cord injuries (SCI) with the aim of improving pressure injury (PI) outcomes, and of limiting their psychosocial and economic impact. Figure 1 captures its main features. Three key principles that apply to all care settings, and to all aspects of PI prevention and management, are identified: self-management, access to equitable and timely services, and integrated care. The core elements of the MoC are captured in Section B of Figure 1. They reflect five MoC-identified phases of care along the patient's journey. Specific goals for each phase are described, and optimal strategies for achieving them are outlined.

Figure 1. Model of Care for Prevention and Integrated Management of PI in People with SCI

A. KEY PRINCIPLES					
Support self-management and education strategies	Provide services and equipment in timely manner		Strengthen processes for an integrated approach to care		
B. PHASES OF PATIENT CARE					
Health promotion	Intervention (<= stage II PI)	Intervention (>= stage III PI)	Restoration and rehabilitation	Quality of life maintenance	
C. IMPLEMENTATION RECOMMENDATIONS					
Develop decision support systems to facilitate access to information and expertise on prevention and management	Provide timely access to care and equipment	Create systems and processes that facilitate integrated care with effective communication	Create systems and processes that facilitate self-management	Develop multi-layered educational strategies for prevention and management	Integrate clinical information and data management systems
D. EVALUATION					

PI = pressure injury; SCI = spinal cord injury.

Overall, the objective of this new MoC is to promote an integrated approach to prevention and intervention. It aims to provide tools to improve PI outcomes, limit their harms, and consequently lessen the need for extended hospitalization.

Clinical Indication

The overall impact of the MoC will depend, in part, on how successfully the recommendations are implemented. The following challenges, observed in smaller SCI and PI prevention and treatment implementation programs, may offer guidance to MoC implementation teams. They include ensuring that health care providers are adequately trained to accurately stage wounds,^{3,6} accommodating the time it takes to record wound injuries, adopting consistent wound injury documentation practices,^{2,3} and identifying materials and strategies that can be efficiently and effectively individualized for the SCI and PI populations.^{7,9}

Delivery of Care: If the key principles of the MoC can be successfully implemented, it is expected that the development of serious (\geq stage 3) PIs will be reduced, lessening the number of hospitalizations and demand for specialist intervention.

Health Care Costs: The SCI and PI populations use five times more resources than all other patients. They also have a high level of emergency admissions and readmission.¹ The MoC estimates costs of approximately A\$22,000 per hospital episode for the SCI and spina bifida population.¹ As such, it is anticipated that the successful implementation of the MoC will reduce overall health care costs.

Quality of Life: Some people with SCI have described the experience of a PI as being “as impactful on their lifestyle as was the original spinal cord injury.”⁵ Quality of life is expected to improve if the MoC is successfully implemented because the pain, discomfort, and distress associated with PIs are prevented, identified at an earlier stage, or treated more efficiently.

Clinical Effectiveness

The MoC was developed through broad stakeholder consultation with more than 130 clinicians (surgeons, rehabilitation and occupational therapists, nurses, clinical psychologists, dietitians, and physiotherapists), consumers, and carers in both hospital and community settings in New South Wales. A literature review, semi-structured interviews, focus groups, and workshops were also used to develop the MoC. It is currently premature to discuss its effectiveness because it is still being implemented; however, a number of evaluations of long-term outcomes, changes in practice and policy, and cost-effectiveness are anticipated over the next three years.

The 2013 *Canadian Best Practice Guidelines for the Prevention and Management of Pressure Ulcers in People with Spinal Cord Injury*⁵ may be of particular interest to an Australian audience, given the similarities between the Canadian and Australian health care systems. Specifically, both are publicly funded models, and both experience challenges relating to the provision of health in rural and remote settings. The core feature of the Canadian guidelines is a series of recommendations supported by “level of evidence” grading that represents the full spectrum of SCI experience. The Australian MoC highlights strategies for managing SCI in five identified phases of care. Whereas each presents its findings differently, both stress an approach to care that brings together “interprofessional team members who address multifactorial issues, consider the social and environmental context, and provide an individualized and effective prevention program and treatment plan.”

Setting for the Technology Use

Multiple settings throughout the continuum of care – community, in-care, primary, secondary, tertiary, acute care, and rehabilitation.

Cost

No data were presented on the cost of implementing the MoC; however, in her research, Scovil states that PIs account for up to one-quarter of the total care costs for persons with SCI, but that appropriate prevention strategies may cost less than one-tenth of this estimate.²

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