

CHECKLIST to support the multidisciplinary assessment and management of pressure injury for people with SCI

This checklist is intended for use with the **SCI PI Toolkit** found on the Agency for Clinical Innovation website [<https://www.aci.health.nsw.gov.au/networks/spinal-cord-injury/resources>]. It provides a summary of actions based on best practice guidelines that should be considered in the assessment and management of pressure injuries for people with SCI. Additional information and resources can be found in the toolkit. Not all actions will be applicable to all clients and situations.

Assessment of Ongoing Pressure Injury Risk		Tool / Resource
	<input type="checkbox"/> Pressure injury risk assessment completed <input type="checkbox"/> Level of risk identified	<ul style="list-style-type: none"> Waterlow Pressure Ulcer Scale Braden Scale SCI PI Toolkit: PI risk assessment in SCI - Risk stratification
Red Flags		
Persistent Autonomic Dysreflexia (AD)	<input type="checkbox"/> Screening for persistent AD <input type="checkbox"/> AD identified and treated	<ul style="list-style-type: none"> Autonomic Dysreflexia Treatment Algorithm
Sepsis	<input type="checkbox"/> Screening for sepsis <input type="checkbox"/> Sepsis identified and treated	<ul style="list-style-type: none"> Sepsis Pathway - Clinical Excellence Commission
Severe malnutrition	<input type="checkbox"/> Screening for severe malnutrition <input type="checkbox"/> Referral made to dietitian for comprehensive nutritional assessment <input type="checkbox"/> Relevant investigations completed <input type="checkbox"/> Referral made to the tertiary Spinal Cord Injury service	<ul style="list-style-type: none"> Malnutrition Screening Tool (MST) Spinal Nutrition Screening Tool (SNST) Mini Nutritional Assessment (MNA) Healthy Eating for Adults Factsheet. ACI 2014
Multiple pressure injuries	<input type="checkbox"/> Screening for multiple pressure injuries <input type="checkbox"/> Assessment of each wound completed <input type="checkbox"/> Relevant investigations completed <input type="checkbox"/> Referral made to dietitian <input type="checkbox"/> Referral made to the tertiary Spinal Cord Injury service	
Deep wound infection	<input type="checkbox"/> Screening for deep wound infection and possible presence of biofilm <input type="checkbox"/> Investigations for osteomyelitis completed <input type="checkbox"/> Contact with / referral made to the tertiary Spinal Cord Injury service	
Assessment of Wound and Cause and Contributing Factors		
	<input type="checkbox"/> Comprehensive wound assessment completed <input type="checkbox"/> Cause and contributing factors identified <input type="checkbox"/> Plan for regular monitoring in place	<ul style="list-style-type: none"> SCI PI Toolkit: SAMPLE Wound and Contributing Factors Assessment Form
Wound assessment	<input type="checkbox"/> Location of wound(s) identified <input type="checkbox"/> Possible cause and contributing factors related to wound location identified with the person	<ul style="list-style-type: none"> SCI PI Toolkit: Wound assessment - Location
	<input type="checkbox"/> Stage of wound determined <input type="checkbox"/> For stage 3, 4, deep tissue and unstageable PIs, a referral has been made to the tertiary Spinal Cord Injury service	<ul style="list-style-type: none"> National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance (2014). Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline.
	<input type="checkbox"/> Size of the wound measured and documented <input type="checkbox"/> The position of the person when wound measurements taken is documented	
	<input type="checkbox"/> All other descriptors documented	
	<input type="checkbox"/> Signs of superficial and deep wound infection identified	
	<input type="checkbox"/> Validated tool used to evaluate healing <input type="checkbox"/> Photograph taken in accordance with guidelines	<ul style="list-style-type: none"> Pressure Ulcer Scale for Healing (PUSH) Bates-Jensen Wound Assessment Tool (BWAT) Photographic Wound Assessment Tool (PWAT)
	<input type="checkbox"/> Screening for adequate community resources to support wound healing	

SCI-specific and other medical conditions contributing to PI and healing	<input type="checkbox"/> SCI-specific and other medical conditions identified, assessed and investigated including: <ul style="list-style-type: none"> Level and extent of SCI impairment Previous Pressure Injury Time since injury Acute illness Ageing Autonomic Dysreflexia Bladder and bowel dysfunction Cognitive Impairment Heterotopic Ossification Leg fracture Pain Poor Nutrition Psychological / Mental Health Disorder Respiratory complications Shoulder / upper limb pain and injury Spasticity and contracture Smoking 	<ul style="list-style-type: none"> The ACI SCI Pain Navigator
Nutrition	<input type="checkbox"/> Nutritional screen completed <input type="checkbox"/> Comprehensive nutritional assessment completed: <ul style="list-style-type: none"> Anthropometric measures Physical examination Biochemistry Clinical signs and symptoms Dietary intake Estimated nutrition requirements 	<ul style="list-style-type: none"> Malnutrition Screening Tool (MST) Spinal Nutrition Screening Tool (SNST) Mini Nutritional Assessment (MNA) Healthy Eating for Adults Factsheet. ACI 2014
Mechanical factors	<input type="checkbox"/> Pressure, friction and shear forces across a 24-hour period identified <input type="checkbox"/> Early referral made to occupational therapist (OT) <input type="checkbox"/> Comprehensive 24-hour assessment completed by OT including: <ul style="list-style-type: none"> Mobility and weight shifting Positioning and mobility in bed Transfers Personal care Support surfaces Activity <input type="checkbox"/> Early referral made for seating assessment <input type="checkbox"/> Referral made to physiotherapist for further assessment as indicated	<ul style="list-style-type: none"> The Pressure Management Assessment Tool (PMAT) designed by Jennifer Birt ACI (2014) Occupational Therapy Interventions for Adults with Spinal Cord Injury Houghton PE, Campbell KE and CPG Panel (2013). Canadian Best Practice Guidelines for the Prevention and Management of Pressure Ulcers in People with Spinal Cord Injury. A resource handbook for Clinicians.
Psychological disorders	<input type="checkbox"/> Screening for depression <input type="checkbox"/> Screening for substance use <input type="checkbox"/> Screening for other psychological and mental health disorder	<ul style="list-style-type: none"> Brief Psychosocial Clinical Assessment Tool
Psychosocial and lifestyle factors	<input type="checkbox"/> Screening for factors including: <ul style="list-style-type: none"> Limited social support or living alone Inadequate personal care and/or domestic assistance Caregiver fatigue Financial concerns (Including access to quality equipment, repairs, provision of services) Unsustainable work or family commitments <input type="checkbox"/> Identified: <ul style="list-style-type: none"> Lifestyle priorities Competing interests, roles and responsibilities Coping and problem solving strategies <input type="checkbox"/> Referral made to social worker and/or psychologist for comprehensive assessment	<ul style="list-style-type: none"> ACI SSCIS Emotional wellbeing toolkit: a clinician's guide to working with spinal cord injury Chapter 2: Human Factors in Houghton PE, Campbell KE and CPG Panel (2013). Canadian Best Practice Guidelines for the Prevention and Management of Pressure Ulcers in People with Spinal Cord Injury. A resource handbook for Clinicians. The ACI SCI Pain Navigator
Psychosocial impact of PI	<input type="checkbox"/> A strategy in place to regularly assess the psychosocial impact of a pressure injury	
Self management skills	<input type="checkbox"/> Self management support needs addressed <input type="checkbox"/> Level of self-management determined	<ul style="list-style-type: none"> Skin Management Needs Assessment Checklist Flinders Model of Chronic Condition Self Management Principle 1: Self Management p.27 The SSCIS Model of Care for Prevention and Integrated Management of Pressure Injuries in People with Spinal Cord Injury and Spina Bifida

Management of Wound and Cause and Contributing Factors		
Wound management	<input type="checkbox"/> Wound cleansing regime and dressing selected based on outcome of comprehensive wound assessment, bacterial bioburden and the goals of the person with the pressure injury <input type="checkbox"/> Sharp debridement done, when indicated <input type="checkbox"/> Plan for ongoing wound assessment in place	<ul style="list-style-type: none"> Consortium of Spinal Cord Medicine Table: Type of dressings
SCI-specific and other medical conditions	<input type="checkbox"/> SCI-specific and other medical conditions addressed <input type="checkbox"/> Referral made to medical specialist when indicated	
Nutrition	<input type="checkbox"/> Nutrition optimised and malnutrition addressed including: <ul style="list-style-type: none"> Early nutritional support Strategies to facilitate access to nutritional supplements Calculation of SCI-specific calorie, protein and fluid intake Consideration of Arginine, supplements and enteral feeding in accordance with precautions and contraindication 	<ul style="list-style-type: none"> Healthy Eating for Adults Factsheet. ACI 2014
Mechanical factors over the 24 hour period	<input type="checkbox"/> Strategy in place to offload / remove pressure from the wound <input type="checkbox"/> Bed positioning plan to offload the wound and protect other at-risk areas devised <input type="checkbox"/> Mattress upgrade considered <input type="checkbox"/> Priority equipment to support optimal pressure management in place <input type="checkbox"/> Monitoring for complications of bed rest <input type="checkbox"/> Gradual return to sitting plan implemented when appropriate <input type="checkbox"/> Wheelchair positioning and support surfaces optimised through early seating assessment <input type="checkbox"/> Pressure redistribution strategies are effective <input type="checkbox"/> All other support surfaces optimised	<ul style="list-style-type: none"> Daily Skin Check Guide Bed Rest Factsheet SOS Clinical Considerations for Bed Rest SCI PI Toolkit: SAMPLE Positioning Plan SCI PI Toolkit: AMPLE Gradual Return to Sitting Plan Module 8: Spinal Seating Professional Development Program. Agency for Clinical Innovation and NSW State Spinal Cord Injury Service 2017. Occupational Therapy Interventions for Adults with Spinal Cord Injury Queensland Spinal Outreach Team (SPOT): Information and assessment tool to guide pressure redistribution mattresses (PRM) selection.
Psychosocial and lifestyle factors/ Impact of a PI	<input type="checkbox"/> Essential practical, social and psychological supports <input type="checkbox"/> Possible barriers to successful wound healing identified and managed	<ul style="list-style-type: none"> ACI SSCIS Guide for Health Professionals on the Psychosocial Care of Adults with Spinal Cord Injury ACI SSCIS Emotional Wellbeing Toolkit: A Clinicians Guide to working with Spinal Cord Injury Lifestyle Redesign® for Pressure Ulcer Prevention in Spinal Cord Injury project. University of Southern California (USC) and Rancho Los Amigos National Rehabilitation Center (RLANRC)
Self Management	<input type="checkbox"/> Resources supporting self management provided <input type="checkbox"/> Development of a personal action plan facilitated <input type="checkbox"/> Strategy to support the person to make changes to minimise ongoing PI risks <input type="checkbox"/> Referral for case management considered	<ul style="list-style-type: none"> SCI PI Toolkit – Consumer Resources E.g. SCI-U for Healthy Living
Surgical Options	<input type="checkbox"/> Referral made to the tertiary SCI service <input type="checkbox"/> The person is able to demonstrate post-operative requirements (e.g. bed rest, bed positioning) and has addressed the PI cause and contributing factors <input type="checkbox"/> Prior to admission, equipment, care and other management strategies are in place for discharge	<ul style="list-style-type: none"> SCI PI Toolkit: SAMPLE Wound and Contributing Factors Assessment Form
Maintenance and non-healable wounds	<input type="checkbox"/> Referral made to the tertiary SCI service <input type="checkbox"/> Maintenance wound management plan in place <input type="checkbox"/> Monitor for red flags and subtle signs of deterioration	

Referral		
	<p>Referrals made to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Nurse Practitioner/ Clinical Nurse Consultant/ Specialist in local health district <input type="checkbox"/> SCI-specific services E.g. Spinal Outreach Service (SOS), Rural Coordinator Spinal Outreach Service, Assistive Technology and Seating, Prince of Wales Spinal Seating Clinic, Hunter SCI Service, Paraquad NSW. <input type="checkbox"/> Tertiary SCI services (NSW): <ul style="list-style-type: none"> o Royal North Shore Hospital Spinal Plastics Service o Prince of Wales Spinal Pressure Care Clinic <input type="checkbox"/> Paediatric Rehabilitation Service (for children with SCI or SB < 18 years of age) <input type="checkbox"/> Spina Bifida Adult Resource Team (SBART) (> 18 years of age). 	<ul style="list-style-type: none"> • NSW SSCIS Pathway for Management of PI in SCI • ACI SCI Referral Directory • Paediatric Rehabilitation Service • Spina Bifida Adult Resource Team (SBART) • Royal North Shore Hospital Spinal Plastics Service • Prince of Wales Spinal Pressure Care Clinic
Key Actions		
<ul style="list-style-type: none"> <input type="checkbox"/> Priority referral made to multidisciplinary team including community nurse (and clinical nurse consultant/ specialist / practitioner) and general practitioner <input type="checkbox"/> Assessment and individualised management plan made in collaboration with the person and communicated to carers, care providers and the multidisciplinary team with consent from the person <input type="checkbox"/> Strategy in place for regular reassessment and evaluation of management plan to prevent chronic wounds and complications of bed rest 		