SPINAL OUTREACH SERVICE HEALTH QUESTIONNAIRE (SOS-HQ)

CLIENT DETAILS

Surname:	**Given Names:**
DOB:	**Medicare Number:**

Address:

Style of accommodation: ☐ Dept. of Housing ☐ Rented ☐ Own home
Living: ☐ Alone ☐ With family/spouse ☐ With friends/other

Phone: H: ( ) _____ W: ( ) _____ M: _____	COB: Preferred Language:

SPINAL DIAGNOSIS

Date of Injury:	Cause:
Level of Injury:	ASIA Score:
Hospital of Acute Admission:	Spinal Specialist:

Other injuries sustained at time of accident other than SCI? ☐ Yes ☐ No If Yes, please state

Hospital Admissions/Review by specialist dates

Medical History

Current Medications

1. Bladder Function

PATIENT SECTION	GP/NURSE SECTION
1.1 How do you empty your bladder? ☐ Voiding spontaneously with some voluntary control ☐ Clean intermittent self-catheterisation (CISC) ☐ Permanent indwelling urethral catheter (IDC) ☐ Suprapubic catheter (SPC) with ☐ continuous drainage ☐ intermittent drainage (eg. 'flicker' valve) ☐ Voiding by reflex (wearing urodome or other device) with/without tapping ☐ Straining or pressing down over bladder ☐ Other technique (eg. ileal conduit) Please list _____	Examination notes:
1.2 How frequently do you empty your bladder each day? (if indwelling catheter, free drainage or use of valve system?) Frequency of catheters/drainage procedures during day _____ overnight ____	
1.3 Has the way you empty your bladder changed in the last 12 months? ☐ Yes ☐ No If yes, please describe _____ _____	
1.4 How much fluid do you drink each day? _____Litres (1glass= 250ml) List types of fluid drunk (eg. water, tea/coffee, alcohol): _____ _____	
1.5 Are you taking any medications to control your bladder? ☐ Oxybutynin(Ditropan) ☐ Tolterodine(Detrusitol) ☐ Solifenacin(Vesicare) ☐ Phenoxybenzamine ☐ Urecholine ☐ Other _____ **Dose and frequency** _____	
1.6 If you have an indwelling or suprapubic catheter, how long have you had it for? ☐ < 5 years ☐ 5-10 years ☐ > 10 years (list no. of years _____)	☐ If >15-20 years, organise cystoscopy[1]
1.7 Have you had any serious or recurring urinary tract infections (associated with symptoms such as fever, abdominal discomfort, incontinence, increased spasm or autonomic dysreflexia), requiring treatment with antibiotics in the last 12 months? ☐ Yes ☐ No If yes, how many? ☐ 1-2 ☐ 3-4[2] ☐ 5 or more	Most recent CSU Results: _____ _____ Actions required: ☐ Repeat CSU ☐ Check SPC site and swab if

[1] There is some evidence that the incidence of bladder cancer in people with SCI who have had an indwelling or suprapubic catheter for more then 20 years. Risk factors include recurrent UTIs, indwelling catheters, urinary tract stones, and cigarette smoking over a long period of time. The tumours are commonly metastatic and invasive at the time of diagnosis and highlights the importance of effective screening such as cystoscopy.

[2] Increased frequency of Urinary Tract Infections (>2 per year) should prompt a search for causes.

Please provide details _____ _____ Do you currently have the above symptoms? ☐ Yes ☐ No Please provide details _____ _____	necessary ☐ Organise renal ultrasound/KUB to exclude calculi ☐ Prescribe antibiotics if pathogenic organism and person symptomatic ☐ Repeat CSU after antibiotics ☐ Refer to urologist
1.8 Have you experienced any of the following symptoms[3] / problems recently? Difficulty passing intermittent catheters (or bleeding afterwards)? ☐ Yes ☐ No Requiring more straining or time to pass urine? ☐ Yes ☐ No Frequent catheter blockages? ☐ Yes ☐ No Increased sediment, gravel/calcified material or blood in urine?[4] ☐ Yes ☐ No Urinary leakage, urgency or less warning before leaking? ☐ Yes ☐ No Passing or catheterizing more urine volumes than usual? ☐ Yes ☐ No Increased bladder spasms or lower abdominal discomfort? ☐ Yes ☐ No Increased episodes of autonomic dysreflexia or spasticity? ☐ Yes ☐ No Please provide details _____ _____	
1.9 Have you had any of the following investigations in the last 2 years? ☐ Renal Ultrasound ☐ Intravenous pyelogram (IVP) ☐ CT Scan kidneys ☐ Blood tests for kidney function ☐ Videourodynamic study (to measure the pressures in your bladder) If NO, when was the last time you had any tests for your bladder? _____	☐ Compare results of last 2 imaging and renal function tests ☐ Compare BP trend ☐ Review VUD result
1.10 Have you ever seen a urologist? ☐ Yes ☐ No If YES, what was the reason (and when was your last appointment)? _____ _____ **Have you had any of the following procedures?** ☐ Intravesical Botulinum toxin injection (injection of botox into your bladder) ☐ Bladder augmentation (increasing the volume of your bladder)	☐ Review urologist letters

NB : Risk factors for Urology Complications include

- Males, age >50 years (menopause, prostatism), increased age at injury & increased duration of injury
- Higher level of spinal cord injury and complete (ASIA A) injuries are at higher risk than incomplete injuries (ASIA D)
- Recent hospital admission or bed-rest, smoking, compromised immune function
- Known renal compromise or having only 1 kidney, on medications which are toxic to the kidney

[3] The presence of these symptoms are red flags which should alert to further investigation.

[4] The presence of these symptoms may indicate the presence of renal tract calculi. Urinary stones can harbour infection and lead to recurrent UTIs until the calculi are removed. Bladder stones can also cause outlet obstruction and predispose to cancer from chronic irritation.

2. Bowel Function

PATIENT SECTION	GP/NURSE SECTION
2.1 What method/s do you usually use to empty your bowel? ☐ Spontaneous/voluntary evacuation ☐ Reflex stimulation with evacuation using following: ☐ Enema OR ☐ Suppository AND/OR ☐ Digital stimulation ☐ Manual evacuation ☐ Other (eg. Colostomy, sacral stimulator) Please describe details _____ _____	
2.2 How often do you empty your bowels? ☐ Daily ☐ Every Second Day ☐ 3x weekly (ie. Mon, Wed, Friday) ☐ Other (eg. more than once daily, irregular pattern) If other, please describe _____ _____ **When do you or your carer perform bowel program?** ☐ AM ☐ PM	
2.3 On a typical day, how long does your bowel program take? ☐ 0-15 mins ☐ 15-30 mins ☐ 30-45 mins ☐ 45-60 mins ☐ >1 hr	
2.4 What is your stool consistency usually like? ☐ Smooth, well formed motions ☐ Hard, formed or separate lumps ☐ Soft, poorly formed or loose ☐ Both hard and soft segments ☐ Other _____	
2.5 Do you take any oral medications for your bowels? ☐ Yes ☐ No ☐ None required, diet only ☐ Bulking agents (eg. Psyllium husks, Metamucil, Normafibe, Normacol) ☐ Stool softeners (eg. Coloxyl, Lactulose, Movicol) ☐ Irritant cathartics (eg. Sennakot, Bisacodyl) ☐ Other medications Please describe details _____ _____	
2.6 Has your diet changed recently? ☐ Yes ☐ No How many serves of fruit do you have a day? _____ How many serves of vegetable do you have a day? _____	
2.7 Do you use the gastro-colic reflex to assist emptying (ie. Attend to bowel care 20-45 minutes after a meal)? ☐ Yes ☐ No	

2.8 Has your bowel pattern changed significantly in the last year?

☐ Yes ☐ No

Please provide details _____

_____

Have you lost a substantial amount of weight in the last year?

☐ Yes ☐ No If YES, _____ (amount in kg)

2.9 Is there any history of bowel disease in your family (eg. inflammatory bowel disease, cancer)?

☐ Yes ☐ No

If YES, provide details _____

_____

Have you ever had a colonoscopy? ☐ Yes ☐ No ☐ Unsure

☐ Date of last colonoscopy

_____/_____/_____

☐ Review results

☐ Refer to colorectal surgeon/gastroenterologist if high index of suspicion

2.10 Have you experienced any of the following problems recently?

Constipation?	☐ Yes	☐ No
Bowel accidents/faecal incontinence?	☐ Yes	☐ No
Required increased amounts of laxatives?	☐ Yes	☐ No
Sweating, headache or rash during bowel care?[5]	☐ Yes	☐ No
Bleeding during or after bowel evacuation?	☐ Yes	☐ No
Rectal discomfort or mucus discharge after evacuation?	☐ Yes	☐ No
Abdominal bloating or cramping pain?	☐ Yes	☐ No
Nausea or vomiting?	☐ Yes	☐ No
Reflux/Heartburn (burning discomfort in chest, acid taste in mouth) after meals, when leaning forward or lying flat?	☐ Yes	☐ No
Are these symptoms relieved by milk or antacids?	☐ Yes	☐ No

☐ Other _____

Please provide details _____

_____

Findings on physical examination:

Haemorrhoids Stage _____

2.11 Do bowel problems ever stop you from going out?

☐ Yes ☐ No

If YES, provide details _____

_____

[5] These symptoms may indicate the occurrence of autonomic dysreflexia. Please see next section for further details.

3. Autonomic Dysreflexia

PATIENT SECTION	GP / NURSE NOTES
3.1 Have you recently experienced any of the following possible symptoms or signs of Autonomic Dysreflexia (AD)[6]? Pounding headache? ☐ Yes ☐ No Nasal stuffiness? ☐ Yes ☐ No Flushing/blotching of skin above your spinal level? ☐ Yes ☐ No Blurred vision? ☐ Yes ☐ No Profuse sweating above your spinal injury level? ☐ Yes ☐ No Shortness of breath? ☐ Yes ☐ No Pale skin and/or goose bumps below your spinal level? ☐ Yes ☐ No Chills without fever? ☐ Yes ☐ No Sense of apprehension or anxiety? ☐ Yes ☐ No Please provide details _____ _____	Examination Findings: Pulse rate (lying): Pulse rate (sitting): Blood pressure (lying): Blood pressure (sitting):
3.2 What appeared to trigger these symptoms and signs? **Bladder[7]** ☐ Distension (eg. due to blocked catheter) ☐ Urinary tract infection ☐ Stones ☐ Procedures (eg catheter change) **Bowel** ☐ Distension (eg. constipation, impaction) ☐ Rectal irritation (eg. enema, manual evacuation, haemorrhoids) **Skin** ☐ Ingrown toenails ☐ Pressure areas ☐ Cellulitis (infection) ☐ Burns ☐ **Other** (eg. fracture) Please provide details _____ _____	
3.3 How often do you experience autonomic dysreflexia (AD)? ☐ Never ☐ Rarely ☐ Monthly ☐ Weekly ☐ Daily Is it becoming more frequent or getting worse? ☐ Yes ☐ No Please provide details _____ _____	☐ If frequency increasing, investigate for causes

[6] Note: Autonomic dysreflexia (hyperreflexia) is a potentially life-threatening condition of uncontrolled, paroxysmal hypertension that typically occurs in persons with SCI at or above the T6 neurological level, due to widespread vasoconstriction (particularly of splanchnic bed) from reflex sympathetic nervous system overactivity. Any irritating 'noxious' stimulus below level of lesion may trigger an episode of AD, however, the commonest causes are related to the bladder and bowel. Refer to AD Factsheet and Treatment Algorithm for further information.

[7] The most common causes for AD are due to bladder problems, followed by bowel problems.

3.4 Have you called for help when AD occurs? ☐ Yes ☐ No If YES, whom? ☐ Community Nurses ☐ Ambulance ☐ Local Accident & Emergency Department/Hospital If NO, what occurs? ☐ Not required / resolves by removing stimulus ☐ Managed at home by self and/or carers	
3.5 Do you have a plan for when AD occurs? ☐ Yes ☐ No If YES ☐ Medication available to use in emergency (ie. GTN spray, Anginine tablet or Nitroderm patch) ☐ AD Treatment Card that you carry to alert staff of condition ☐ MedicAlert Bracelet that you wear to alert staff of condition ☐ Other _____	If no plan exists, actions required: ☐ Prescribe GTN spray or anginine tablet ☐ Give patient AD treatment card ☐ Organise Medicalert bracelet

4.Skin

PATIENT SECTION	GP/NURSE SECTION
4.1 Have you had any pressure areas (PA) in the *past*? ☐ Yes ☐ No If Yes, please describe location[8] (where), when it occurred, how long it took to heal and how it was managed. **Where PA occurred** **When it occurred** **Time taken to heal** If hospital admission required in the past for PA management, please supply: Hospital Name: _____Year of Hospital admission_____ Procedure done: _____ Have you been to RNSH or POW specialised plastics clinic before? ☐ Yes ☐ No	
4.2 Do you have any pressure areas *now*? ☐ Yes ☐ No If Yes, please list location, when you first noticed it, how severe it is and how it is being managed. (*See footnote to assess severity*[9]*)* **Where PA is** **When it occurred** **How severe is it (Stage)**	Examination notes
4.3 If YES, How do you think the pressure area/s occurred? ☐ Poor Transfer ☐ Equipment ☐ Weight Loss ☐ Sustained pressure ☐ Lifestyle changes (eg change of employment) ☐ Illness ☐ Other Details_____	

[8] Common areas where pressure areas (PA) develop are:
Ischial tuberosity (IT) – under the buttocks where you sit
Greater trochanter (GT) – over the hip bone
Medial or lateral malleolus (ML or LL) – over the inner or outer aspect of the ankles
Heels, Shoulder blades
Sacrum – lower end of spine

[9] *NB: To assess severity, PA are often classified according to the following stages*
Stage 1 – Skin is not broken but may be red (or change color), feel warmer or cooler & firmer
Stage 2 – Ulcer involves topmost layer of skin and looks like a scrape, blister or shallow crater. (Superficial or partial thickness)
Stage 3 – Ulcer extends through the skin into the fascia (subcutaneous tissue) underneath. It looks like a deep crater. (Full thickness)
Stage 4 – Ulcer extends through skin & fascia to involve muscle, bone, tendons and joints.

PATIENT SECTION	GP/NURSE SECTION
4.4 Skin management **4.4.1.Do you (or your carers) inspect your skin regularly?** ☐ Yes ☐ No How frequently? ☐ 1-2 times/day ☐ 2nd Daily ☐ 1-2 times per week **4.4.2. Do you perform regular pressure relief?** ☐ Yes ☐ No If YES, what techniques are utilised? ☐ Lifting ☐ Weight Shifting ☐ Reclining ☐ Transferring onto bed / recliner ☐ Rolling / changes in positioning ☐ Other _____ **4.4.3. How frequently do you perform pressure relief?** ☐ Every 15-30 mins ☐ Every 1-2 hrs ☐ 3-4 times/day ☐ Once daily ☐ Twice daily	Review adequacy of skin protection behaviours
4.5 What is your main method of transferring? ☐ Independent lift ☐ Independent with sliding board ☐ Standing transfer ☐ Standing transfer with assistance of one ☐ Sliding transfer w/Assistance ☐ Sliding transfer w/ Slide Board ☐ Hoist ☐ Other _____ How many transfers do you do a day? _____ (Example: Bed to chair, Chair to commode, Chair to car, Chair to lounge, chair to farm equipment/other vehicles	
4.6 When did you last have a review of your seating? _____ Have you been linked to any seating services? ☐ Yes ☐ No If Yes, are you linked to? ☐ Northern Sydney (ATTS) – Sydney ☐ Northern Sydney (ATTS) – Rural Clinic ☐ Local Seating Supplier ☐ SESIAHS Seating Service Are any of your equipment (bed, mattress, commode, shower seat, sling, hoist) > 10 years old? ☐ Yes ☐ No	
4.7 Nutrition : Does your daily diet include : 1 or more servings of meat/fish/chicken/eggs or legumes ☐ Yes ☐ No 2 or more servings of milk, cheese or yoghurt most days ☐ Yes ☐ No 5 or more serves of fresh fruit and vegetables (including juices) ☐ Yes ☐ No Do you prepare meals or shop for yourself? ☐ Yes ☐ No	

4.8 Have you had any other skin problems apart from pressure areas?

☐ Yes ☐ No

If Yes, please tick one of the following,

☐ Leg Ulcers ☐ Right Leg ☐ Left Leg

☐ Osteomyelitis (Bone infection) – Where _____

☐ Cellulitis (Skin infection) – Where_____

☐ Psoriasis – Site _____

☐ Fungal infections – Site _____

☐ Other – Site _____

Details_____

_____

4.9 Have you had any investigations for the current PA? ☐ Yes ☐ No

If Yes, please list results if you know what they showed:

☐ Blood tests _____

☐ Wound Swab _____

☐ Xray _____

☐ Bone Scan _____

☐ Ultrasound _____

☐ Sinogram/CT Scan _____

☐ Other _____

_____

4.10 Management so far : Please describe treatment/s provided (for most serious area, if more than one)

☐ Bedrest _____

☐ Debridement and/or dressing_____

☐ Antibiotics _____

☐ Nutritional supplementation_____

☐ Surgery_____

☐ Other_____

Please provide further details (eg. about treatment/s, duration and effect on quality of life) _____

_____

4.11 Do you have any additional risk factors for skin breakdown such as:	Actions required :
☐ Medical co morbidities (eg diabetes, kidney or liver disease)	☐ Check fasting BSL, UEC & LFTs
☐ Problems with memory or a history of brain injury or mental illness	☐ Check with others re:symptom
☐ Problems with excessive skin moisture (eg. Incontinence or sweating)	☐ Investigate for incontinence
☐ Functional decline / poor transfers	☐ Investigate reason/refer to OT
☐ Old equipment (>5 years old) needing review / replacement	☐ Refer to OT
☐ Poor nutrition / anaemia (low blood count) or weight loss	☐ Check FBC, albumin, Zn, Mg
☐ Psychosocial factors (poor social support/depression)	☐ Explore further
☐ Change in carers or decrease in care hours	☐ Check adequacy of care
☐ Smoking	☐ Advise to stop
☐ Alcohol intake > 4 standard drinks a day	☐ Review alcohol intake (CAGE)
☐ Illicit substance use	☐ Review further
Describe_____	Does person require:
_____	☐ Refer to S/W

Notes:
Skin integrity should be checked and recurrent breakdown/ chronic ulceration investigated routinely -

- Patient's FBC girth measurement and nutritional status checked
- Is there evidence of depression, change in social support or functional capacity (may require psychology, social work or OT assessment)?
- Evidence of underlying osteomyelitis (radiological or bone scan changes, elevated ESR or CRP)?
- Occupational therapy (OT) assessment of adequacy of wheelchair, cushion and mattress must be part of complete treatment. A referral can be made to the local OT. Specialised support services are available to local therapists should they need specialist advice

5. Cardiovascular

PATIENT SECTION	GP/NURSE SECTION
5.1 Have you had of the following symptoms in the last 12 months? ☐ Chest pain ☐ Palpitations ☐ Shortness of breath at rest or lying down ☐ Excessive SOB with exertion ☐ Increased ankle/leg swelling ☐ Episodes of dizziness/feeling lightheaded ☐ Episodes of transient weakness/facial droop/slurred speech ☐ Other (details) _____ How have these symptoms impacted on your day to day life? _____ _____	Examination Findings Sitting BP _____ Supine BP _____ HR _____ Auscultation:
5.2 Risk factors : Do you have any of the following? ☐ Smoking history ☐ Previous heart attack or stroke ☐ Family history of heart attacks or strokes ☐ Diabetes or family history of diabetes ☐ Symptoms of frequent thirst, increased frequency of urination, or changes in sensation? ☐ Obesity	Most recent: BSL _____ TG _____ C'ol _____ Does person need: ☐ Fasting BSL/TG/Cholesterol (recommended yearly) ☐ Dietician review ☐ Discussion re: lifestyle changes
5.3 Do you do any regular exercise? ☐ Yes ☐ No Describe exercise program _____ _____	

Notes:
Heart disease is a leading cause of death in persons with SCI. They are at increased risk of cardiovascular disease and hence it is recommended that SCI patients have annual cardiovascular review.

- BP should be measured annually instead of biannually from the age of 18. If biological risk factors and established disease is present, BP should be monitored every 6 months. Review risk factors for heart disease from 40 years of age and stroke from 55 years of age. Lifestyle risk factor counselling should be done at the same time. See Hypertension management guide for doctors, Heart Foundation 2004 for more information
- Check triglycerides, cholesterol and fasting blood sugar level to screen for diabetesi every 1-2 years from 45 years of age. Screening is advised every 3 years in the normal population. It should be done more frequently in persons with SCI as they are more likely to have impaired glucose metabolism due to changes in body composition and diminished activity level that contribute to insulin resistance.
- Assess nutritional history, BMI & waist circumference. Screening of healthy people without risk factors is recommended every 5 years from age 45 years. Persons with SCI have a higher risk and are more likely to have low HDL than the average population and should thus have screening every 1-2 years. Persons with diabetes, cardio- or cerebrovascular disease, an absolute cardiovascular risk>15% over the next 5 years, hypercholesterolemia or chronic kidney disease should be screened yearly.

6. Respiratory

PATIENT SECTION	GP/NURSE SECTION
6.1 Have you experienced any of the following in the past 12 months? ☐ Increased frequency of Respiratory Infections (> 2 or 3 per year) ☐ Shortness of Breath (SOB) and/or tightness in chest ☐ A decline in function or fatigue (tiredness) from shortness of breath ☐ Decreased ability to clear secretions (e.g. having a "wet cough"). ☐ Coughing up blood & recent weight loss ☐ New leg swelling Did any of the above result in hospital admission? ☐ Yes ☐ No	Examination Findings: PEF _____ Vital capacity _____ litres Auscultation Findings: ☐ Review cause of hosp admission
6.2 Have you had the fluvax injection in the last year? ☐ Yes ☐ No Have you had a pneumovax injection before? ☐ Yes ☐ No	
6.3 Do you have any of the following symptoms? ☐ Excessive snoring or episodes when you stop breathing during the night? ☐ Excessive sleepiness or tiredness during the day? ☐ Waking with early morning headache? ☐ Difficulty concentrating / learning new things ☐ Other Describe_____ _____	Does patient need further evaluation with the Epworth Sleepiness Scale ☐ Yes ☐ No
6.4 Have you ever had a sleep study? ☐ Yes ☐ No If you have a CPAP or BIPAP machine, have you encountered any problems with your mask or machine? ☐ Yes ☐ No	Does person need referral for: A sleep study? ☐ Yes ☐ No Refer to sleep Dr. ☐ Yes ☐ No

Respiratory complications are a leading cause of death during as well as after the first year following spinal cord injury. The 4 most common respiratory complications are Respiratory Failure, Atelectasis, Pneumonia and Pulmonary Embolus. Obstructive sleep apnoea is also common (up to 40% of patients with SCI).

Recommendations for people with SCI are:

- ALL individuals with tetraplegia and high paraplegia (>T8) would benefit from a Pneumococcal vaccination (once around time of injury and at 50 and 65 years of age) and annual Influenza vaccination.
- Check of resting respiratory rate and vital capacity every year. Consider respiratory insufficiency (particularly sleep apnoea) if VC trending downward or there are symptoms of tiredness and sleepiness during the day or elevated waking BP.
- All symptoms of respiratory infection must be treated seriously with assisted coughing, physiotherapy & antibiotics if appropriate.

Risk factors for Respiratory Complications include

- Greater degree of neurological impairment (Higher neurological level, ASIA A Complete)
- Age >50 years, Increased age at injury, Increased duration of injury
- Recent hospital admission or bed-rest, no previous immunisations e.g. Pneumovax, Fluvax
- Smoking, Asthma, Chronic Lung diseases e.g. bronchitis, emphysema, bronchiectasis
- Severe postural deformity (decreases mobility of the chest), Scoliosis (sideways lean deformity), Kyphosis (slumped deformity)
- Obesity, Abdominal complications (distension or bloating), Increasing spasticity (of the abdominal and chest wall)
- Drop in Peak Flow or Forced Vital Capacity (FVC) if measures available

7. Neurological Function

PATIENT SECTION	GP/NURSE SECTION
7.1. Have you had any concerns regarding your function, mobility, or sensation declining or deteriorating over the past year[10]? ☐ Yes ☐ No Details_____ _____	Examination notes
7.2 Have you had an MRI scan of your spine since your initial spinal cord injury? ☐ Yes ☐ No If yes, why did you have to have one and when? _____ _____	☐ Review MRI results
7.3 Have you been diagnosed with a syrinx? (Ie, fluid filled sac in spinal cord?) ☐ Yes ☐ No ☐ Not Sure If yes, have you seen a neurosurgeon? ☐ Yes ☐ No Details (name of neurosurgeon and date last reviewed) _____	☐ Review letters if available
7.4 Have you had any increasing difficulty with any of these activities? Transfers ☐ Yes ☐ No ☐ Not Applicable Wheelchair Mobility ☐ Yes ☐ No ☐ Not Applicable Walking ☐ Yes ☐ No ☐ Not Applicable Bed Mobility ☐ Yes ☐ No ☐ Not Applicable Performing Stretches ☐ Yes ☐ No ☐ Not Applicable Transport/Driving ☐ Yes ☐ No ☐ Not Applicable Employment ☐ Yes ☐ No ☐ Not Applicable ADLs ☐ Yes ☐ No ☐ Not Applicable Describe _____ _____	☐ Refer back to surgeon if appropriate

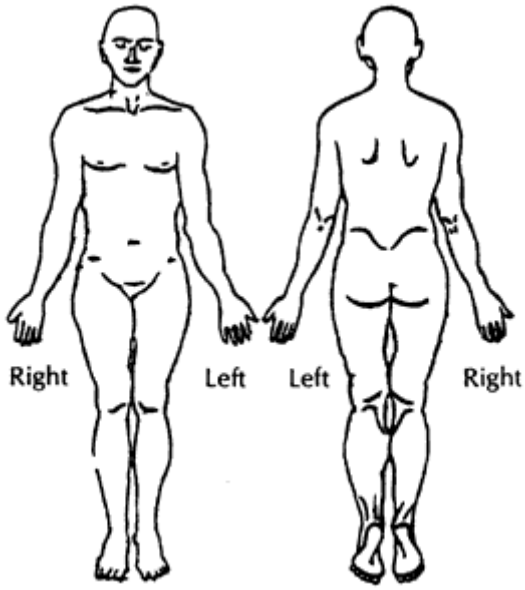
[10] Ascending sensory loss or new neurological symptoms and signs may suggest the possible presence of post-traumatic syringomyelia or syrinx (PTS). This is a cyst filled with CSF within the spinal cord. It has been reported to occur in 20 to 30% of patients after a traumatic spinal cord injury (SCI). It is characterised clinically by the often insidious progression of pain and loss of sensorimotor function that may manifest months to many years after a traumatic SCI. The presence of PTS requires neurosurgical review, and regular monitoring. If left untreated, PTS can result in loss of function, chronic pain or even respiratory failure.

8. Spasm and Spasticity

PATIENT SECTION	GP/NURSE SECTION
8.1 Do you experience any spasm or spasticity[11]? ☐ Yes ☐ No If yes, where does it occur? ☐ Arms ☐ Legs ☐ Neck/Trunk/Abdomen Details _____ _____ **Has it become worse in the last 12 months?** ☐ Yes ☐ No _____ **How often do you have spasms?** ☐ None ☐ Less than 10 spasms per hour ☐ 10 or more spasms per hour	Examination Findings
8.2 What usually triggers the spasms? ☐ Position changes ☐ Going over rough ground ☐ Infections (bladder, etc) ☐ Pressure areas ☐ Constipation Details _____ _____	☐ Investigate for reversible causes
8.3 Does the spasm impact on your function, independence, care or activities? (e.g. are you falling more, or need more help?) ☐ Yes ☐ No Details _____ _____	
8.4 Do you take any medications to manage your spasms? (E.g. baclofen, diazepam, dantrolene, clonidine or clonazepam?) ☐ Yes ☐ No Details _____ _____	
8.5. Have you used any other treatments for your spasm? (E.g. physiotherapy, pump insertion, surgery or injections?) ☐ Yes ☐ No Details _____ _____	

[11] *Spasticity* is defined as an increase in muscle tone and is characterised by a velocity dependent increase in tonic stretch reflexes. *Spasm* is defined as a sudden involuntary contraction of a muscle, which may be associated with spasticity.

9. Pain

PATIENT SECTION	GP/NURSE SECTION
9.1 Do you regularly experience any sort of pain? ☐ Yes ☐ No If yes, please indicate whether there has been: ☐ No real change in the quality or severity of existing pain ☐ Worsening in quality or severity of existing pain ☐ Worsening of day to day function due to pain ☐ Onset of new pains	Examination Findings (see appendix at end of section)
9.2 Please indicate on the body chart below, where you feel pain: (please shade-in and label location 1,2,3 etc.)  	If new or worsening pain, are there any possible exacerbating causes[12] Is the pain neuropathic, musculoskeletal or visceral in nature?
9.3 For each location, please fill in the following: **Location 1** Describe how the pain feels in your own words: _____ _____ _____ Frequency: _____ Severity (please circle number on scale below): 0 1 2 3 4 5 6 7 8 9 10 No Pain Worst Pain Imaginable	**Location 1** ☐ Neuropathic ☐ Musculoskeletal (please go to section 10) ☐ Visceral Location:_____ Duration:_____ Relieving/Exacerbating factors:____ _____ _____

[12] Descriptors of neuropathic pain may include the following: e.g. hot, burning, scalding, searing, cold, freezing, quivering, pulsing, throbbing, beating, pounding, sharp, shooting, cutting, lacerating, stabbing, stinging, lancinating, pinching, pressing, gnawing, crushing, nagging, agonising, punishing, exhausting.

Location 2

Describe how the pain feels in your own words: _____

_____

_____

Frequency:_____

Severity (please circle number on scale below):

0 1 2 3 4 5 6 7 8 9 10

No Pain Worst Pain Imaginable

Other

Please describe: _____

_____

_____

_____

Location 2

☐ Neuropathic

☐ Musculoskeletal (please go to section 10)

☐ Visceral

Location:_____

Duration:_____

Relieving/Exacerbating factors:____

_____

_____

Other

_____

_____

_____

_____

9.4 Does the pain interfere with your activities of daily living or social/work interactions? ☐ Yes ☐ No

Details:_____

_____

_____

_____

☐ Presence of yellow flags: (see appendix)

9.5 Do you use any other treatments for pain? ☐ Yes ☐ No

☐ Medications ☐ Physiotherapy

☐ Other treatment (e.g. acupuncture)

☐ Implanted device (e.g. intrathecal pump, dorsal column stimulator)

☐ Psychological approaches (e.g. relaxation)

Details:_____

_____

_____

☐ Rationalise medications (see appendix)

9.6 Have you ever been referred to a pain clinic? ☐ Yes ☐ No

If yes, details: (when, where and treating specialist): _____

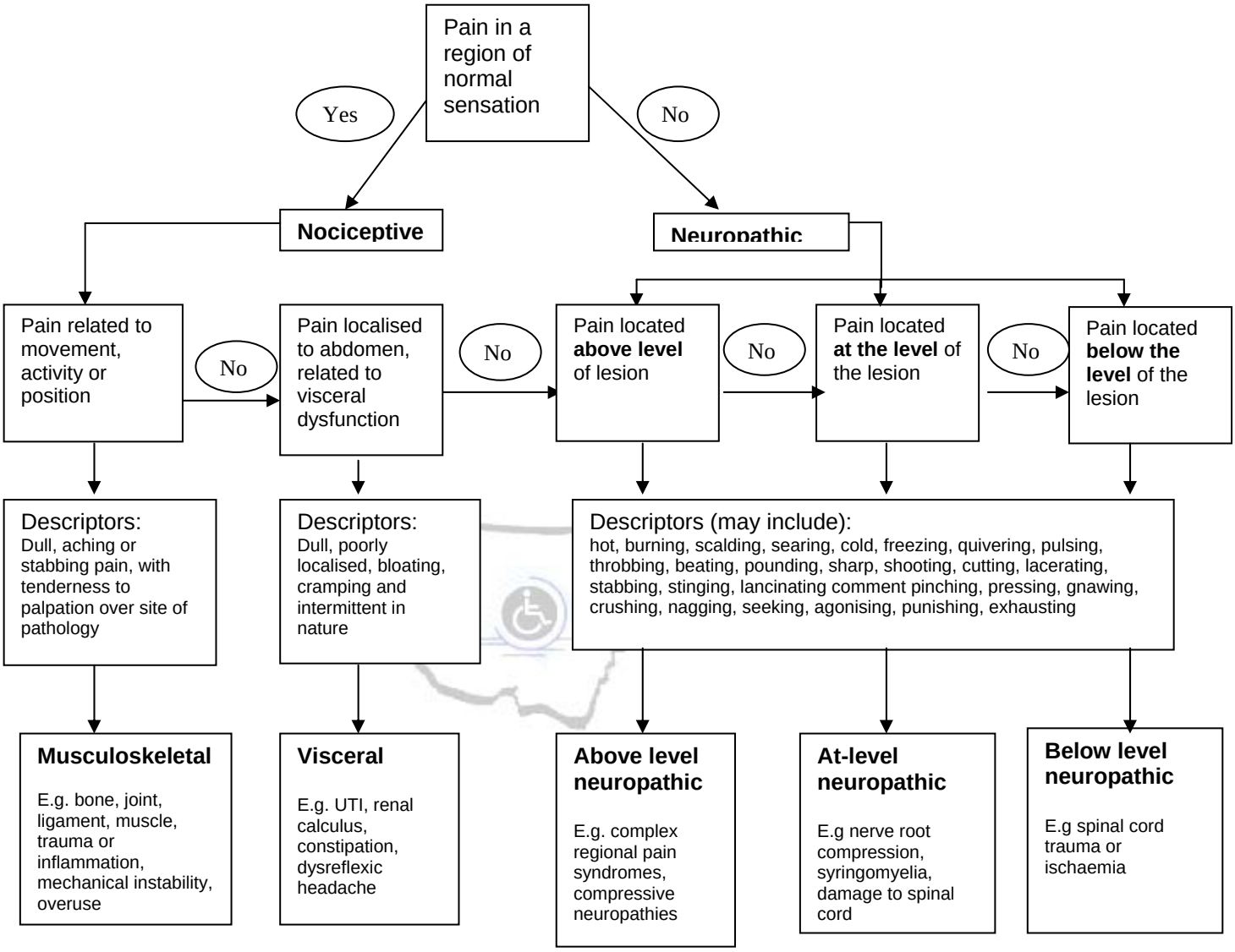
_____

_____

☐ Review report

APPENDIX TO PAIN SECTION

The main types of pain experienced after SCI are musculo-skeletal, visceral (abdominal), and neuropathic. The diagram below may help in your assessment of the person's pain:



Adapted from: Siddall PJ, Middleton JW. (2006) A proposed algorithm for the management of pain following spinal cord injury. *Spinal Cord*, 44: 66-77

Yellow Flags

Yellow Flags are indicators that psychosocial factors may be important in the pain problem. They include:
- belief that pain and activity are harmful
- sickness behaviours (like extended rest, medication seeking)
- history of anxiety or depression, current low or negative moods, social withdrawal
- problems with claim and compensation, time off, other claims
- problems at work, poor job satisfaction, relationship difficulties
- overprotective family or lack of support

Medications

Simple non-narcotic analgesics, paracetamol, nonsteroidal anti-inflammatory drugs (NSAIDs) and non-narcotic "muscle relaxants" (benzodiazepines) may be useful treatments to trial in musculoskeletal pain. Antidepressants and anticonvulsants are often trialled in neuropathic pain. Gabapentin and/or Pregabalin are now regarded as first-line treatments for neuropathic pain and are the only anticonvulsant drugs which have strong research evidence for their effectiveness in post-SCI neuropathic pain. Tricyclic antidepressants (TCA) may be helpful as an adjuvant agent in some SCI patients with dysaesthetic pain.
There are no studies which have studied opioid analgesics in post-SCI pain specifically. Careful consideration of issues such as sedation, constipation, dependence and tolerance should occur. Controlled-release oxycodone (Oxycontin) may be helpful in neuropathic pain, but possible benefits need to be carefully weighed up against side-effects such as constipation.

10. Musculoskeletal Function

PATIENT SECTION	GP/NURSE SECTION
10.1. Have you noticed any significant change in your posture, increased curvature of the spine and/or difficulty in maintaining an upright seating position (e.g. Leaning to one side, hooking over backrest or slumping forward)? ☐ Yes ☐ No Details _____ _____	Examination
10.2 Do you suffer from pain in the upper limbs with activities? ☐ Yes ☐ No If yes, how often? ☐Never ☐ Sometimes ☐ Often ☐ Always Is the pain present at rest (e.g. lying in bed)? ☐ Yes ☐ No Where do you get the most pain? ☐ Shoulders: left or right ☐ Elbows: left or right ☐ Wrists: left or right ☐ Hands: Left or Right ☐ Other: _____	
10.3 What activities aggravate the pain? ☐ Pushing wheelchair ☐ Dressing/other ADL ☐ Sports/Recreation ☐ Transfers ☐ Computers/Work ☐ Driving ☐ Lifting for pressure relief ☐ Standing/walking with aids ☐ Other_____ Details _____ _____	
10.4 Do you stop activity when the pain develops? ☐ Yes ☐ No	
10.5 Did you suffer any injury and/or have any pain in the upper limbs prior to the spinal cord injury? ☐ Yes ☐ No If Yes, details _____ _____	
10.6 Have you had any fractures (broken bones) from falling from standing height or from low impact accidents? ☐ Yes ☐ No If Yes, when and which bone was broken? _____ _____	Does the person need: ☐ Osteoporosis work up ☐ DEXA scan/Calcaneal ultrasound ☐ Referral to endocrinologist ☐ Treatment for osteoporosis

11. General Health

PATIENT SECTION	GP/NURSE SECTION
11.1 Do you have more than 4 (if male) or more than 2 (if female) servings of alcohol almost every day? ☐ Yes ☐ No	☐ CAGE questionnaire
11.2 If female and aged 18-70, when was your last Pap smear?_____ If female and aged 50-69, when was your last mammogram? _____	Previous results available for review? _____ ☐ Organise Pap smear ☐ Organise mammogram

11.3 Please tick the box that best describes the amount of time you feel for each question.

In the last 4 weeks, How often did you:	**Never/a little of the time**	**Some of the time**	**Most of the time**
Feel tired or lacking energy for no good reason?	☐	☐	☐
Feel depressed, hopeless or worthless?	☐	☐	☐
Feel that everything was an effort?	☐	☐	☐
Feel nervous, tense, worried or panicked?	☐	☐	☐
Have difficulty falling or staying asleep?	☐	☐	☐

Have you:

Lost interest or pleasure in most of your usual activities? ☐ Yes ☐ No

Lost your appetite or are overeating? ☐ Yes ☐ No

Had recurrent thoughts of death? ☐ Yes ☐ No

Describe: _____

_____

11.4 Are you satisfied with the level of care you currently receive for:

Activities of Daily Living? (eg Showering, Feeding) ☐ Yes ☐ No

Domestic tasks (eg Meal Prep, Laundry, Home maintenance) ☐ Yes ☐ No

Clinical care (catheter changes, wound care, home visits) ☐ Yes ☐ No

Does person need:
☐ Review of care needs with relevant care provider?
☐ Referral to social worker?
☐ Referral to Community Nurse?

11.5 How are you getting around at the moment?

☐ Not able to get out ☐ Wheelchair only ☐ Driving Self

☐ Carer / Other Drives ☐ Other service provider transport

☐ Taxi ☐ Bus ☐ Train

Are there any new difficulties/issues? _____

11.6 Are you currently employed? ☐ Yes ☐ No

If Yes, does your workplace adequately suit your needs?

Describe:

If No, would you like to return to work/study? ☐ Yes ☐ No

☐ Referral to occupational therapist

☐ Referral to Commonwealth Rehabilitation Service (CRS)

12. Sexual Function

PATIENT SECTION	GP/NURSE SECTION
12.1 Do you have a satisfying sexual relationship? ☐ Yes ☐ No	
12.2 Do any of the following interfere with your sexual function[13]? Difficulty maintaining an erection? ☐ Yes ☐ No Decreased lubrication? (for females) ☐ Yes ☐ No Altered (eg. Painful or decreased) sensation? ☐ Yes ☐ No Loss of ejaculation or trickling emission? ☐ Yes ☐ No Autonomic dysreflexia (mainly during ejaculation)? ☐ Yes ☐ No Practical difficulty with positioning or incontinence? ☐ Yes ☐ No Sad or anxious mood ☐ Yes ☐ No ☐ Other _____ Please provide details _____ _____	
12.3 If male, do you achieve an erection by: Reflex erection without medication? ☐ Yes ☐ No Psychogenic erection (in absence of reflex)? ☐ Yes ☐ No Oral medication (eg. Viagra, Levitra or Cialis)? ☐ Yes ☐ No Vacuum device with penile ring? ☐ Yes ☐ No Intracavernosal injection (eg. Cavaject, Papaverine)? ☐ Yes ☐ No ☐ Other _____ Please provide details _____ _____	
12.4 If female, do you use a contraceptive/method? ☐ Yes ☐ No Please provide details _____ _____	
12.5 Are you planning to have children? ☐ Yes ☐ No Have either of you been unsuccessful in having children in the past? ☐ Yes ☐ No Have you or your partner attended a fertility clinic or had an assistive procedure such as electro/vibroejeculation performed previously? ☐ Yes ☐ No Please provide details_____	If person would like to explore this issue further, refer to: ☐ Nearest spinal unit for electro/vibroejaculation ☐ Nearest fertility clinic

[13] Consider possible impact of taking medications that may impair erection, lubrication or ejaculation (eg. anticholinergics, tricyclic antidepressants, antispasmodics). Consider possible psychological concerns (eg. depression, drug & alcohol misuse).

GP MANAGEMENT PLAN		
Issue	**Management plan**	**Outcome**