

## Appendix 1 Description of potential prognostic determinants mentioned in literature

Category*	Determinant	Category	Description
1, 3	Age[14, 27, 28]†	In years	
1	Medical specialty†	Surgery, Medical, Neurology or Geriatrics	
1	Sex[27]	Male, female	
2, 3	Weight at admission[14]†	In kg	
	Height[14]	In cm	
2, 3	Body mass index at admission[14, 27]†	Weight/height <sup>2</sup>	
3	Malnutrition at admission[14]	Yes/no	>5% weight loss in 1♣month or >10% weight loss in 6♣months prior to admission
3	Current smoking[14, 27]	Yes/no	
2, 3	Neurological impairment[28]	No	Minor impairment Sensibility impaired Hemiplegic Spinal cord lesion above th 6 Spinal cord lesion under th 6
2,3	General physical condition[29]	Good	

Category*	Determinant	Category	Description
		Fair	
		Poor	
		Very bad	
2	Mental condition[28, 29]	Alert	
		Listless/drowsy	
		Confused	
		Severe	
		depression/apathetic	
		Stupor/coma	
		Sedated	
2	Mobility[14, 27–30]†	No limitation	Makes major and frequent changes in position without assistance.
		Slightly limited	Makes frequent though slight changes in body or extremity position independently.
		Very limited	Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.
		Completely immobile	Does not make even slight changes in body or extremity position without assistance.
2	Activity[14, 28–30]†	Walks frequently	Walks outside the room at least twice a day and inside room at least once every two hours during waking hours.
		Walks occasionally	Walks occasionally during day but for very

Category*	Determinant	Category	Description
			short distances, with or without assistance.
			Spends majority of each shift in bed or chair.
		Chair fast	Ability to walk severely limited or non-existent. Cannot bear weight and/or must be assisted into chair or wheelchair.
		Bed fast	Confined to bed.
2	Sensory perception[27–30]	No impairment	Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort.
		Slightly limited	Responds to verbal commands but cannot always communicate discomfort or need to be turned  OR Has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.
		Very limited	Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness  OR Has a sensory impairment which limits the ability to feel pain or discomfort over half body.

<b>Category*</b>	<b>Determinant</b>	<b>Category</b>	<b>Description</b>
		Completely limited	Unresponsive (does not moan, flinch or grasp) to painful stimuli, due to diminished level of consciousness or sedation  OR  Limited ability to feel pain.
2	Urine catheter[27, 28]†	No  Foley catheter  Suprapubis catheter	
2	Incontinence[27–30]†	Not  Occasional  Usually/urine  Usually/feces  Doubly	
2	Moisture[30]	Rarely moist  Occasionally moist  Very moist  Constantly moist	Skin is usually dry; linen only requires changing at routine intervals.  Skin is occasionally moist, requiring an extra linen change approximately once a day.  Skin is often but not always moist. Linen must be changed at least once a shift.  Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.

Category*	Determinant	Category	Description
3	Normal skin[27]†	Yes/no	
3	Dry skin[27]†	Yes/no	
3	Discoloration of skin[27]†	Yes/no	Not non-blanchable erythema (grade 1 pressure ulcer)
3	Broken skin[27]	Yes/no	Not a pressure ulcer grade 2 or worse
3	Oedema (localized)[27]†	Yes/no	
3	Tube feeding[30]	Yes/no	
3	Total parenteral feeding[30]†	Yes/no	
3	Oral feeding[14, 30]	Excellent	Eats most of every meal. Never refuses a meal. Usually eats a total of 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.
		Adequate	Eats over half of most meals. Eats a total of 4 servings of protein (meat or dairy products) each day. Occasionally will refuse a meal but will usually take a supplement if offered.
		Probably inadequate	Rarely eats a complete meal and generally eats only about half of any food offered. Protein intake includes only 3 servings of meat or dairy products per day.

Category*	Determinant	Category	Description
			Occasionally will take a dietary supplement.
		Very poor	Never eats a complete meal. Rarely eats more than 1/3 of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly.
		No	Does not take a liquid dietary supplement.
3	Appetite[27]	Good	Is NPO
		Fair	What the patient says
		Poor	
		Very bad	
3	Nutritional condition[27, 28]	Good	
		Fair	As if not having eaten for a few days or has eaten very badly.
		Poor	As if not having eaten for more than a week with vomiting or diarrhoea.
		Very bad/cachectic	As with terminal cancer patients
3	Oral fluid intake[14, 30]	>2♣litre	
		1-2♣litre	
		<1♣litre	
		None	
3	IV drip[30]	Yes/no	
2	Friction and shear[14,	No apparent	Moves in bed and in chair independently

Category*	Determinant	Category	Description
	30]†	problem	and has sufficient strength to lift up completely during move. Maintains good position in bed or chair at all times.
		Potential problem	Moves feebly or requires minimum assistance. During a move skin probably slides to some extent against sheets, chair, restraints or other devices. Maintains relatively good position in chair or bed most of the time but occasionally slides down.
		Problem	Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures or agitation leads to almost constant friction.
3	Medication use[14, 27, 28]	Categorized according to the pharmacological compendium	Painkillers, sleep medication, tranquilizers, antibiotics, β blockers, cytostatics, morphine, steroids, anticoagulants, other.
2	Pain[15]	No pain or effective pain medication	

Category*	Determinant	Category	Description
		Occasionally	
		Frequently	
		Constantly	
3	Fever[14, 28]	Yes/no	Temperature >38.5°C
3	Hypotension[14]	Yes/no	Systolic BP <100♣mm♣Hg and/or diastolic BP <60♣mm♣Hg
3	Hypertension[14]	Yes/no	Systolic BP >160♣mm♣Hg and/or diastolic BP >95♣mm♣Hg
3	Former pressure ulcer[21]†	Yes/no	
3	Hemoglobin level[14]†	In 0.1♣mmol/l	
3	Leukocytes at admission[14]	Absolute count	
3	Albumin <35♣g/l at admission[14]	Yes/no	
3	Total protein <60♣g/l at admission[14]	Yes/no	
3	Lymphocyte count <1200♣mm <sup>3</sup> at admission[14]	Yes/no	
3	Co-morbidity, diagnosis, complications[14]	Grouped according to ICD 9 code	
3	Diabetes[14, 27, 28]†	Yes/no	



<b>Category*</b>	<b>Determinant</b>	<b>Category</b>	<b>Description</b>
3	Spinal cord lesion[14, 27, Yes/no 28]		
2	Surgery[31]†	Yes/no	
2	Length of surgery[31]†	In hours	

\*Category 1, demographic data; 2, risk factors influencing the duration and intensity of pressure and shearing forces; 3, risk indicators influencing tissue tolerance.

†Univariate analysis ( $p < 0.15$ ).