High Impact Intervention
Reducing the Incidence of Pressure Ulcers for Critically Ill Patients

North West Critical Care Networks SKIN Bundle Version 1.1 Document Feb 2013

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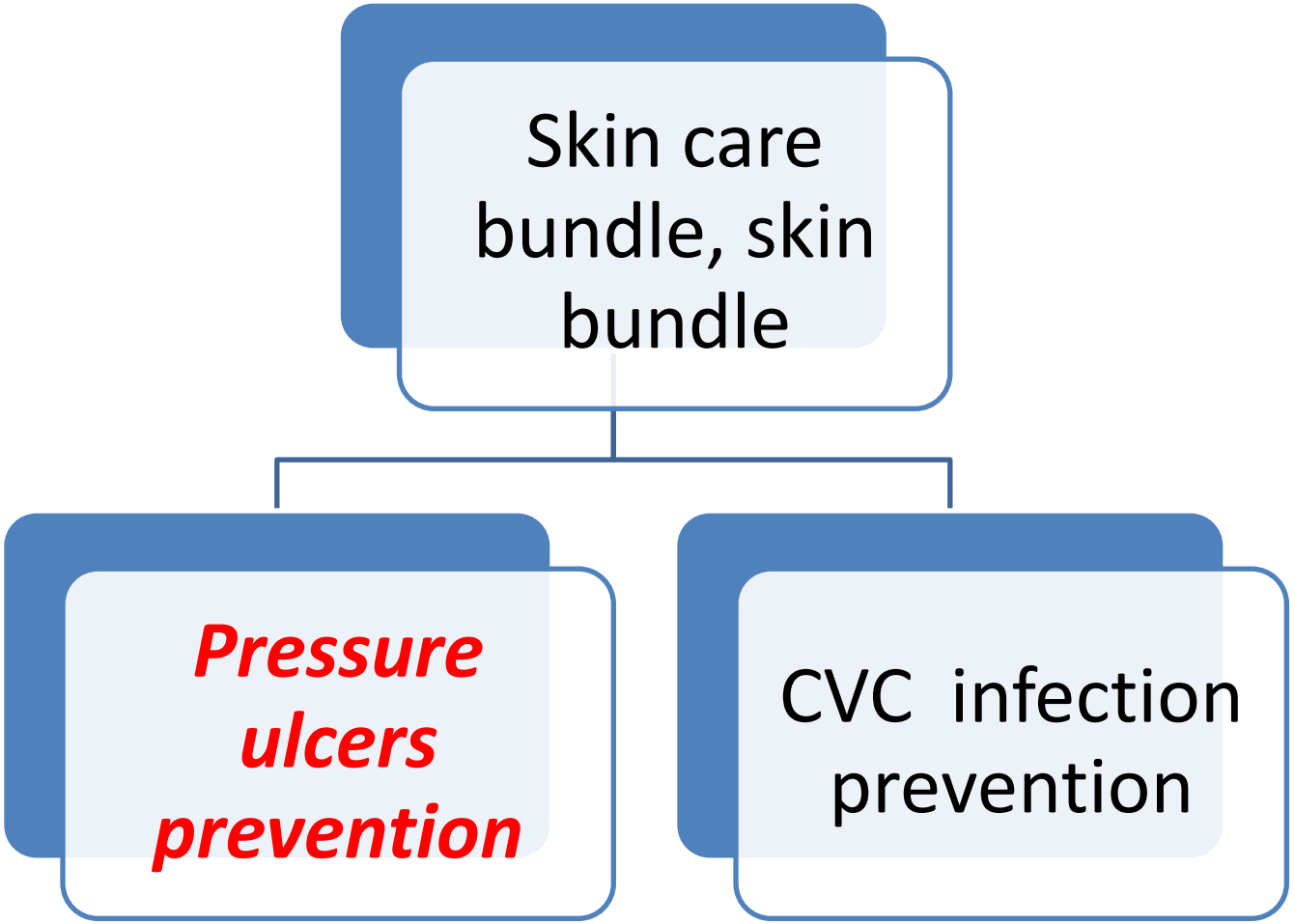
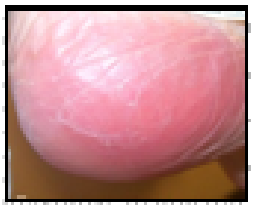
2014.03.25.

皮膚整合式照護


Skin care bundle, skin bundle
Pressure ulcers prevention
CVC infection prevention

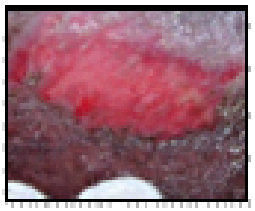
National Pressure Ulcer Advisory Panel pressure ulcer stages/categories

Stage: I



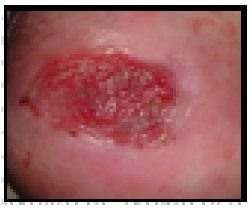
Intact skin with non-blanchable redness of a localized area usually over a bony
Darkly pigmented skin may not have visible blanching; its color may differ from the surrounding area.

Stage: II



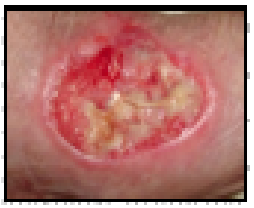
Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister.

Stage: III



Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscles are not exposed. Slough may be present but does not obscure the depth of tissue loss.
May include undermining and tunneling.

Stage: IV



Full thickness tissue loss with exposed tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often includes undermining tunneling.

Suspected Deep Tissue Injury [a]

Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft from pressure and/or shear. The area may be preceded tissue that is painful, firm, ushy, boggy, warmer or cooler as compared to adjacent tissue.

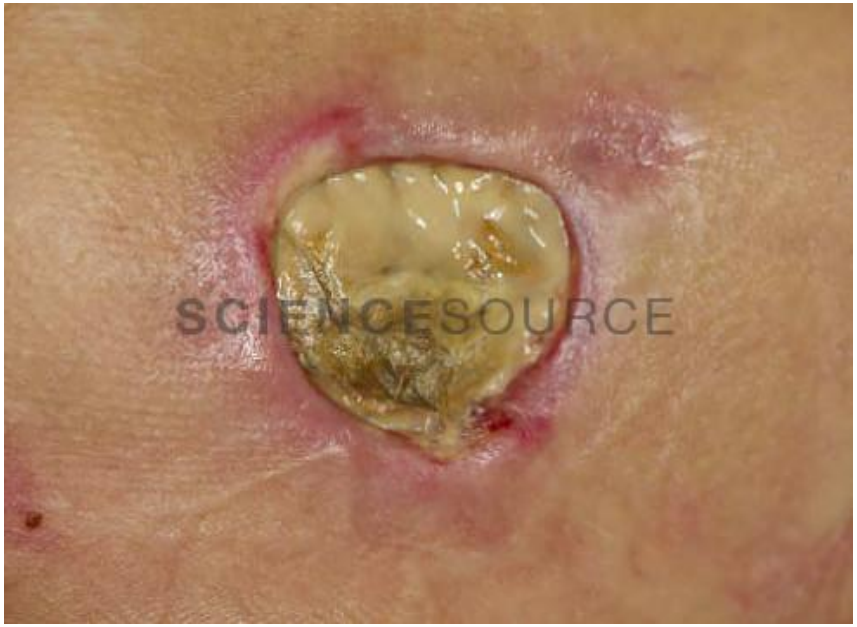
Unstageable [a]

Full thickness tissue loss in which the base of the ulcer is covered by (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed.

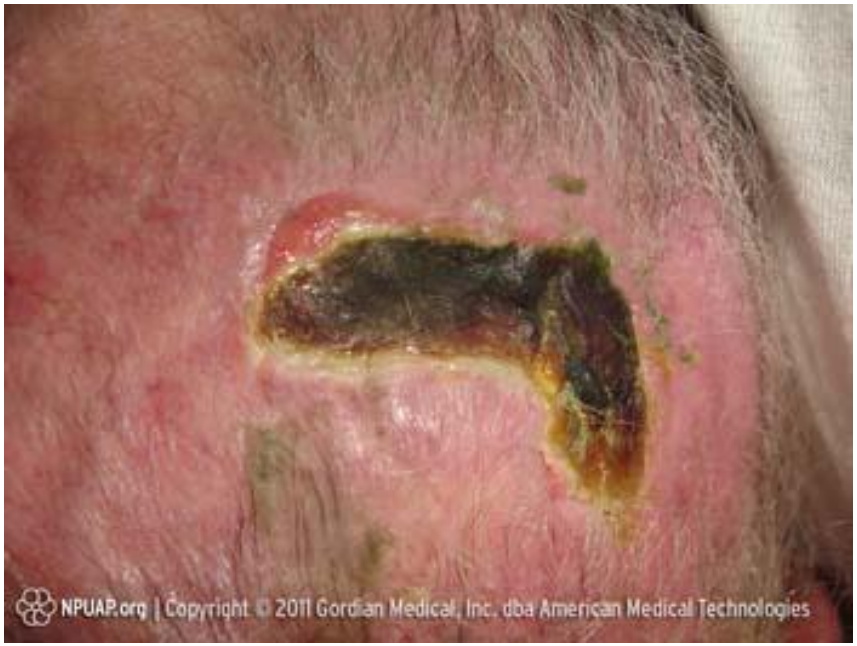
[a] Not pictured.

Unstageable pressure ulcers

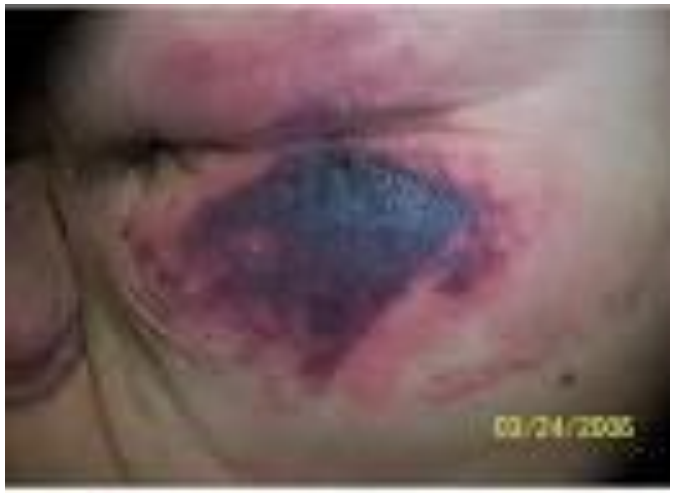
Hip, Unstageable

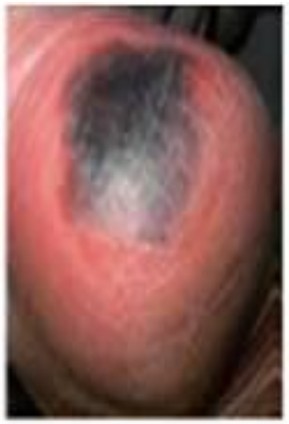


Occiput, **Unstageable**



Deep tissue injury





領域1：範圍與目的/
SCOPE AND PURPOSESCOPE

P3

Context & Aim

The aim of care bundles as set out in this high impact intervention (HII) is to ensure appropriate and high quality “harm free” patient care. Regular auditing of the care bundle elements will support cycles of review and continuous improvement in care settings.

Registered nurses must audit compliance against key policies and procedures for pressure ulcer prevention and management, in line with the relevant legislation at the time of publication[1, 2].

1.有特別描述指引的整體目的/	7

領域1：範圍與目的/
SCOPE AND PURPOSESCOPE

P3

Objectives

The North West Critical Care Networks' Pressure Ulcer Group has identified their intention to:

- **Reduce the risk and incidence of pressure ulcer acquisition in the critical care environment.**

- **Eradicate all category 3 & 4 and unstageable pressure ulcers acquired in critical care, that on route cause analysis are demonstrated to be avoidable.** (Appendix 1).

2.有特別描述指引所涵蓋的健康問題	7

領域1：範圍與目的/ SCOPE AND PURPOSESCOPE

P3-4

- **Critically Ill Patients**
- Due to the very **nature of** their **illness**, critically ill patients are often at higher risk of developing pressure ulcers. The reasons for the increased risk are patients may well **be sedated** and unaware of their environment; **be compromised physically** due to their clinical condition, **have catheters, lines and drains that can create pressure** and be just too weak to be able to reposition themselves to relieve pressure.
- For those patients with **poor local and systemic oxygenation and perfusion** consider the need to change support surfaces …….**Patients with spinal instability, haemodynamic instability and/or nursed in the prone position**…..

3.清楚定義適用的族群(病人 ,公眾等)	7

領域2：權益相關人的參與情形/ STAKEHOLDER INVOLVEMENT

P2

- This document has been developed by the North West Critical Care Networks' Pressure Ulcer Management Group.

4. 指引發展團隊成員包含所有相關專業團體 | 5

領域2：權益相關人的參與情形/ STAKEHOLDER INVOLVEMENT

5. 已納入目標族群、(病人、公眾等)的看法和偏好	1

領域2：權益相關人的參與情形/ STAKEHOLDER INVOLVEMENT

P3

- **Registered nurses** must **audit** compliance against key policies and procedures for pressure ulcer prevention ….

6. 清楚界定指引使用者	4

領域3：發展的嚴謹度 / RIGOUR OF DEVELOPMENT

7.運用系統性的方法搜尋證據	**1**

領域3：發展的嚴謹度 / RIGOUR OF DEVELOPMENT

- Pressure ulcers are largely preventable and the **National Institute of Clinical Excellence (NICE)** has produced comprehensive guidance for the prevention and management of these ulcers.

8. 清楚描述選擇證據的標準	**5**

領域3：發展的嚴謹度 / RIGOUR OF DEVELOPMENT

9. 清楚描述整體證據的強項及限制	1
10.清楚描述形成建議的方法	1
11.形成建議時有考慮到健康效益、副作用及風險	1

領域3：發展的嚴謹度 / RIGOUR OF DEVELOPMENT

- **Pressure ulcers should be classified using the NPUAP/EPUAP system and recorded in the patient’ s notes** [10].

.

- **10. Skin damage determined to be as a result of incontinence and/or moisture alone should NOT be recorded as a pressure ulcer** [11]

10. NPUAP/EPUAP (2009) *Prevention and treatment of pressure ulcers.* Clinical Practice Guideline.

11. Tissue Viability Society (2012) Achieving Consensus in Pressure Ulcer Reporting.

12.指引建議與其支持證據間有明確的關聯	4

領域3：發展的嚴謹度 / RIGOUR OF DEVELOPMENT

13.指引公告前已經由其他外部專家審閱/	1
14.提供指引更新的程序	1

領域4：清楚呈現 / CLARITY OF PRESENTATION

Elements of the Care Process

1. Surface

a) Type of mattress – All patients should be visibly assessed on admission to critical care and placed on the appropriate pressure relieving surface

b) Where patients are sat out in a chair, pressure relieving cushions or equivalent should be used

c) Checks should observe for patients lying on drains, catheters, lines etc. Repositioning of lines, drains etc. should be done with due consideration to care of pressure areas

d) Patient assessment checks should be made to ensure the bed sheets and surfaces are wrinkle free

Keep Moving

a) All patients should be repositioned 2 hourly
NB. Position changes or clinical contraindications to repositioning should be clearly documented

b) Patients should not be sat out in chairs for longer than 2 hours

c) Patients with existing sacral pressure ulcers should not be sat out putting direct pressure on the ulcer

d) ET tubes and fixation devices should be checked 2 hourly to prevent mouth ulcers developing around the lips and mouth

e) The site where naso-gastric tubes meet with the nostril should be checked and position assessed 2 hourly to prevent nasal ulcers

f) If a patient is on non-invasive ventilation appropriate preventative measures should be taken to reduce pressure on the bridge of the nose/forehead

g) Where oxygen masks are in situ preventative measures should be taken to protect the tops of the ears from pressure. This should be included in the 2 hourly assessment

h) Where saturation probes are used the site should be alternated at least 2 hourly

i) Where patients are being nursed in the prone position pressure should be redistributed/alleviated as per local policy

j) Where TED stockings are in place the skin should be assessed and the stocking resized at least 8 hourly

k) Where Flowtrons are in place the skin should be checked 8 hourly as a minimum – 2 hourly checks should be made at the site of the connecting tubes

3. Integument /Incontinence

a) Where patients are persistently incontinent of urine, a urinary catheter should be considered in line with Trust guidelines

b) Where patients are having persistent diarrhoea, proactive processes and systems should be applied in line with Trust guidelines, e.g. faecal/bowel management systems

c) Barrier creams to protect the skin should be used in line with Trust guidelines and protocols

4. Nutrition

a) A nursing nutritional assessment must be completed within 24 hours of admission to critical care

b) Nutrition supplements should be commenced within the first 24-48 hours following admission. Where contraindications exists, follow trust protocol

c) Adequate hydration should be maintained

5. Documentation

a) There should be appropriate available documentation to demonstrate that all care elements/assessments have been performed at least 2 hourly unless otherwise specified (examples - Appendix 3)

15. 建議明確不含混 | **6**

領域4：清楚呈現 / CLARITY OF PRESENTATION

- 13. Where patients are *incontinent of urine/feaces* hygiene needs are to *be addressed in a timely* manner to preserve skin integrity.

- 3. Integument /Incontinence
- b) Where patients are having *persistent diarrhoea, proactive processes and systems should be applied* in line with Trust guidelines, e.g. *faecal/bowel management systems*

- 15. Where there is evidence of either a category *3 or 4 pressure ulcer or unstageable pressure ulcer*, *Medical Illustrations should be asked to photograph the ulcer*. Advice should be sought from the *Tissue Viability Nurse. Medical staff must be informed*

16.清楚呈現處理狀況或健康議題的不同選項 | 7

領域4：清楚呈現 / CLARITY OF PRESENTATION

Elements of the Care Process

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b)	Where patients are sat out in a chair, pressure relieving cushions or equivalent should be used
c)	Checks should observe for patients lying on drains, catheters, lines etc. Repositioning of lines, drains etc. should be done with due consideration to care of pressure areas
d)	Patient assessment checks should be made to ensure the bed sheets and surfaces are wrinkle free

Keep Moving	
a)	All patients should be repositioned 2 hourly *NB. Position changes or clinical contraindications to repositioning should be clearly documented*
b)	Patients should not be sat out in chairs for longer than 2 hours
c)	Patients with existing sacral pressure ulcers should not be sat out putting direct pressure on the ulcer
d)	ET tubes and fixation devices should be checked 2 hourly to prevent mouth ulcers developing around the lips and mouth
e)	The site where naso-gastric tubes meet with the nostril should be checked and position assessed 2 hourly to prevent nasal ulcers
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c)	Barrier creams to protect the skin should be used in line with Trust guidelines and protocols

4. Nutrition	
a)	A nursing nutritional assessment must be completed within 24 hours of admission to critical care
b)	Nutrition supplements should be commenced within the first 24-48 hours following admission. Where contraindications exists, follow trust protocol
c)	Adequate hydration should be maintained

5. Documentation	
a)	There should be appropriate available documentation to demonstrate that all care elements/assessments have been performed at least 2 hourly unless otherwise specified (examples - Appendix 3)

P6-7

17.主要建議清楚易辨	7

領域5：應用性/Applicability

18.指引有描述在應用時會遇到的助力或障礙	1

領域5：應用性/Applicability

P7, P8, Appendix

- Care Bundle Electronic Tool
- Appendix 3:skin bundle audit tool
- Critical care skin bundle ….

Care Bundle to reduce incidences of Pressure Ulcers in Critical Care: Review tool

Observation	Elements					Are all elements compliant?
	Surface	Keep Moving	Incontinence & Integumentary	Nutrition	Documentation	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
Total number of times an individual element was performed						
% When all elements of care were given						

NB. Enter 'Y', N/A or 'N' depending if the elements of care have been applied

SKIN BUNDLE AUDIT TOOL

	Elements and Criteria																					
	1a	1b	1c	1d	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	3a	3b	3c	4a	4b	4c	5a	Full Compliance
Patient 1																							
Patient 2																							
Patient 3																							
Patient 4																							
Patient 5																							
Patient 6																							
Patient 7																							
Patient 8																							
Patient 9																							
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Patient 27																							
Patient 28																							
Patient 29																							
Patient 30																							

Y = Element criteria compliant OR N/A

N = Element criteria non compliant

19.指引有提供如何實踐建議的說明和配套工具 | 7

領域5：應用性/Applicability

Critical Care Skin Care Bundle Admission

Type of mattress used:	
Weight of patient (Estimated/Actual) in KGs:	
Waterlow score	

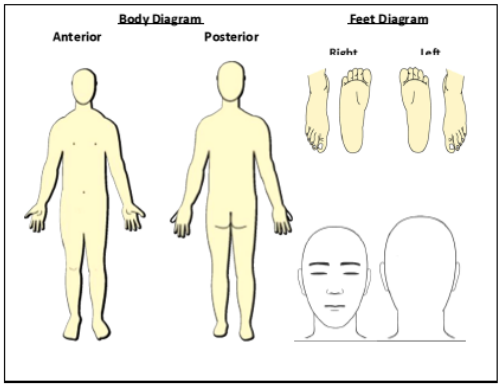
Addressograph:

Does the patient have any existing pressure sores? Yes ( ) No ( )
If yes, list below and document on the body chart

Also document all invasive monitoring lines, cannulae, catheters, surgical wounds and non-surgical wounds on the body chart on admission.

Existing pressure ulcers on admission to Critical Care

Site no.	Wound size	Category/Condition (Description)



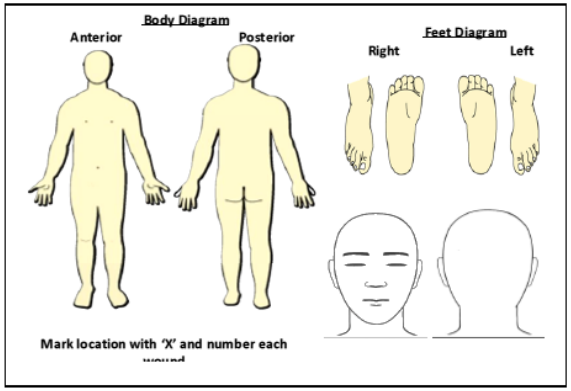
Has the patien
Yes ( ) No

Pressure Areas on Discharge from Critical Care

Addressograph:

Does the patient have any existing pressure sores on transfer from Critical Care? Yes ( ) No ( )
If yes, list below and document on the body chart.
Also document all invasive monitoring lines, cannulae, catheters,

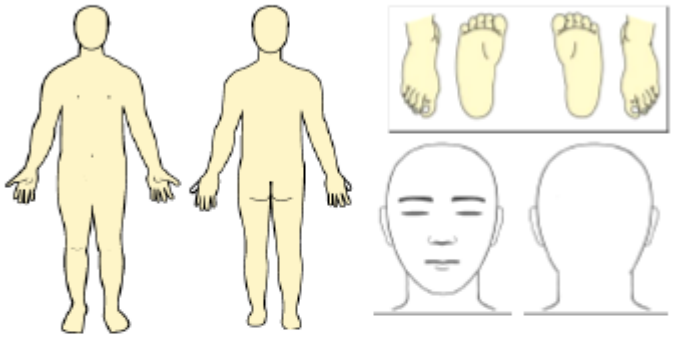
	Existing Pressure Ulcers on Discharge from Critical Care
Ulcer category	Condition and Treatment (Description)



Date & time of transfer	
Sign & print name of transferring nurse	

Pressure Ulcers Developed Whilst In Critical Care

Addressograph



	Ulcer 1	Ulcer 2	Ulcer 3	Ulcer 4
Date Pressure Ulcer Developed				
Category of Ulcer (EPUAP)				
Photograph Taken Y/N				
Referred to Tissue Viability Y/N				
Incident Form Completed Y/N				

Mark location with 'X' and number each wound

TREATMENT PLAN

	Ulcer 1	Ulcer 2	Ulcer 3	Ulcer 4
Pressure Relieving Device				
Dressings				

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領域5：應用性/Applicability

20.有考慮到應用建議時對資源的潛在影響	1

領域5：應用性/Applicability

CRITICAL CARE SKIN BUNDLE

NAME:	HOSPITAL No:	DATE: DD/MM/YYYY

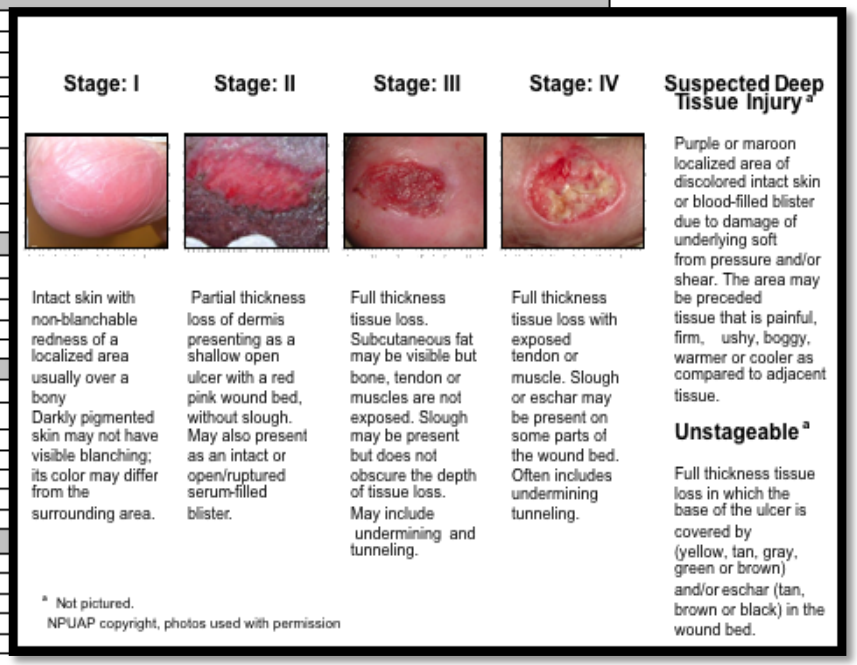
Frequency of care delivery should be **2 hourly** unless there is a valid clinical reason which should then be documented in the patients care plan.

KEY: Care/Action Delivered
√ - Yes
X - No (record why not)
V = Variance (all variances to be documented in nursing notes)

Water flow Score on admission to unit:

TIME - record using 24 hour clock →	HH:MM	HH:MM	HH:MM										
SKIN INSPECTION													
BED: Type of mattress:													
CHAIR: Type of cushion:													
All patient pressure relieving equipment working correctly													
All pressure areas checked													
Evidence of pressure related damage													
If damage evident please document site, grade and action													
MEDICAL DEVICES & PRESSURE SITES													
ET tube/fixation (corners of mouth)													
Naso gastric tube (nostrils)													
Oxygen saturation probe (alternate site)													
Non invasive ventilation (nose/forehead)													
Oxygen mask (tops of ears)													
Other: State device and location site to check below													
If Category 2 - 4 ulcer is present complete Critical Incident form													
If Category 2 - 4 ulcer is present refer to Tissue Viability Nurse													
If Category 3 or 4 ulcer is present refer to Medical Illustration													
POSITIONAL CHANGE													
BED	Right Side												
	Left Side												
	Back												
	Prone												
CHAIR	Stand / Relieve or redistribute pressure												
INCONTINENCE / INTEGUMENT													
Urine	Incontinent												
	Catheterised												
Bowels	Incontinent												
	Stoma												
	Faecal Collector												
	Faecal Diversion System												
	Bowel Management System												
NUTRITION													
MUST Score:□	Enteral/Parenteral (E/P)												
	Oral fluids												
	Oral supplements												
	IV fluids												
NURSES INITIALS													

Frequency of care delivery should be **2 hourly unless there is a valid clinical reason which should then be documented in the patients care plan.**



21. 指引呈現監測和評估的標準	7

領域6：編制的獨立性/ Editorial independence

22.贊助者的見解沒有影響到指引的內容	1
23.記錄和陳述指引發展團隊成員的利益競爭	1

整體品質評分/
Rate the overall quality of this guideline *5*

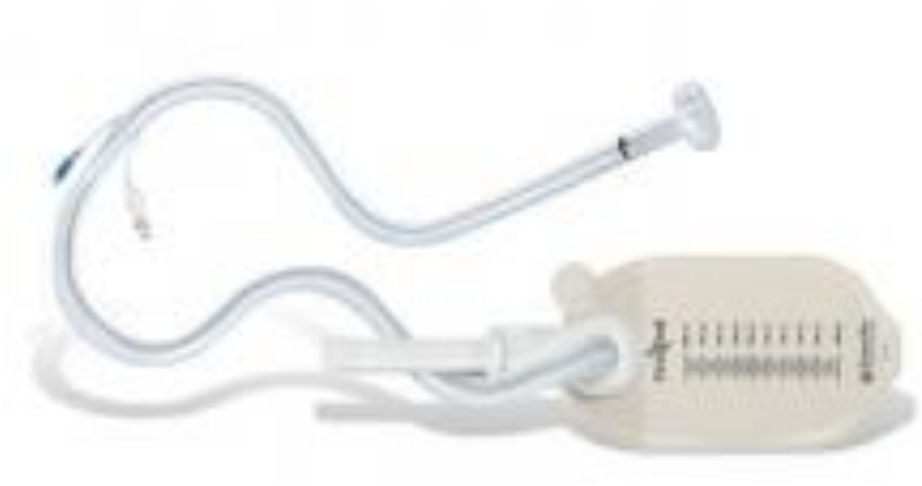
我是否建議採用本指引/
I would recommend this guideline for use?

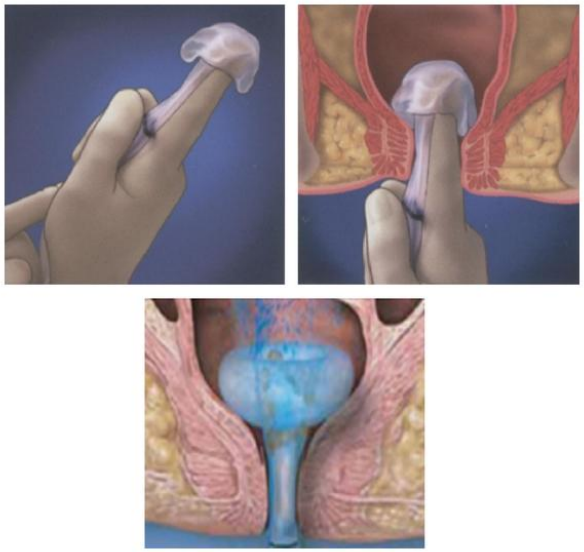
YES! BUT...

- *Device*
  - 氣墊床是否足夠?
  - 引進氣管內管、鼻導管、尿管... 新式固定帶?

討論

- 文章中提到，關於持續性的腹瀉處理可使用fecal/bowel management systems，名為Flexi-Seal™ Fecal Management System (FMS)，目前台灣已有廠商引進，但價格昂貴(1個約8,000元)。
  - 自費，病人接受度?





討論

- 失禁性皮膚炎的照護，建議先以清潔液清除大便，再噴防護液
- 比較便宜的保護皮膚的作法
  - 使用 造口粉:氧化鋅:凡士林=1:1:3 比例，調成保護皮膚的防護乳
  - 塗一層厚厚的凡士林

- **本院是否應用本篇文獻，做為本院 Skin Bundle Care 的規範及查檢表?**
- **Overall:**

  - 本篇許多建議係源自於NPUAP EPUAP 2009年 guideline，下次Journal Club 將評讀另一篇2013年的文獻: Pressure Ulcer Treatment Strategies Comparative Effectiveness，代收集更完善的實證資料後，再進一步整合


Thank you!