Healthcare Improvement Scotland's Improvement Hub

# Pressure Ulcer Prevention in the Peri-operative Environment

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NHS Tayside

# Pressure Ulcer Prevention in the Peri-operative Environment

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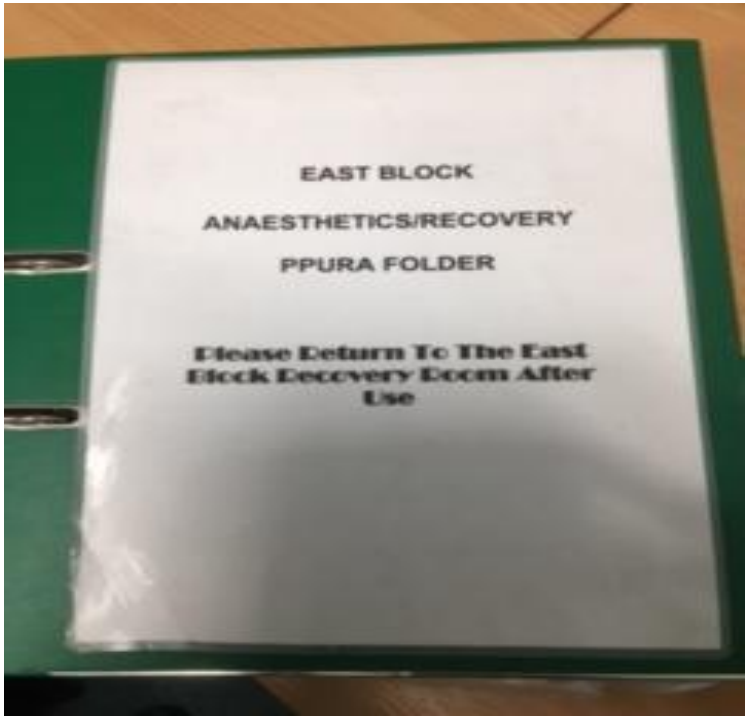
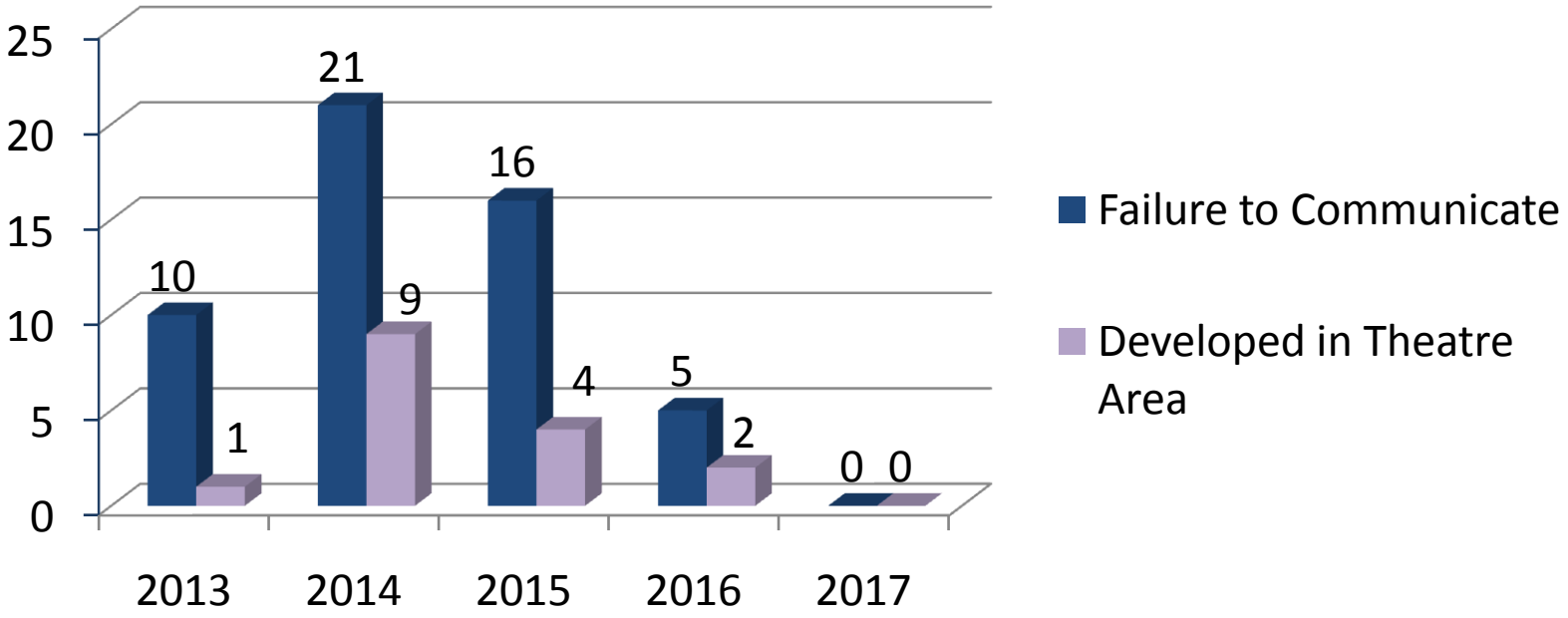
It's time to move …….
on pressure ulcer prevention

# Teaching tool initiated prior to any link nurses or e-learning modules



# Pressure Ulcers in Theatre

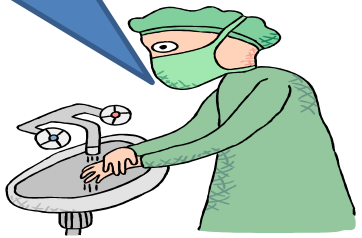


But we never get any pressure ulcers

How do I complete YOUR form?

Why is this necessary? There isn't much time

OMG! Don't we have enough paperwork to complete?



We always check the pressure areas at the end of surgery

STANDARD OPERATING PROCEDURE – Peri-Operative Pressure Ulcer Prevention in Adults

| Policy:<br>Pressure Ulcer Prevention and Care for Adults in Hospital | Policy Reference:<br>DOCS 026783 | Originator:<br>Marilyn Johnson |
|---|---|---|

| | |
|---|---|
| Operation | The provision of pressure ulcer prevention for peri-operative adult in-patients within NHS Tayside |
| Part Number/ Name | The management of pressure ulcer prevention for all adult in-patients undergoing elective and unplanned surgery in all operating theatres and reception/ recovery rooms across NHS Tayside |
| Tools/ Equipment | Peri-Uperative Skin Chart Record<br>Treatment Plan D<br>Theatre Ticket<br>Core Data Set/PPURA Nursing Record<br>Adjuncts to protecttissue viability<br>Pressure relieving and protective dressings – Mepilex Sacrum Border<br>Audit Tool |

| No | Main Operating Steps | Rationale | Evidence/support |
|---|---|---|---|
| 1 | Staff will referto patient's Theatre Ticket on arrival to theatres. | To ascertain pressure ulcer status. | NMC The Code (2015)<br>NHS Tayside Policy for Records and Record Keeping for Nursing and Midwifery Staff (2013) |
| 2 | Staff will referto patient's Core Data Set and PPURAnursing record that accompanies them fromthe ward. | To ascertain pressure ulcer status. | NMC The Code (2015)<br>NHS Tayside Policy for Records and Record Keeping for Nursing and Midwifery Staff (2013) |
| 3 | Un admission to the anaesthetic room, a pre-operative assessment will be conducted for all patients using the Peri-operative SKIN Chart Sheet; This does not replace professional judgement.. If unable to comply, the reason must be recorded. | To ensure vulnerable patients do not develop pressure ulcers whilst in the peri-operative environment. | NHS Tayside Policy (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.2 |
| 4 | The patient's skin should be inspected in the anaesthetic room by the anaesthetic nurse and floor nurse as appropriate. All patients at risk will have measures put in place to alleviate factors that cause pressure ulcers. | To ascertain pressure ulcer status.<br>To ensure vulnerable patients do not develop pressure ulcers whilst in the peri-operative environment. | NHS Tayside Policy (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.2 |
| 5 | Commence the Peri-operative SKIN Chart and continue with Treatment Plan D. For those patients who meet the inclusion criteria, implement appropriate prevention measures. | To ensure vulnerable patients do not develop pressure ulcers whilst in the peri-operative environment. | NHS Tayside Policy (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.2 |
| 6 | Following a skin inspection, The Scottish | To ensure that any | NHS Tayside Policy |

| | | | |
|---|---|---|---|
| | Adapted (2015) European Advisory Panel (EPUAP) grading and moisture lesion tool will be used to assess and document any identified pressure ulcers, the grade and site will be documented on the Peri-operative SKIN Chart. Commence Treatment Plan D. | identified pressure ulcer is assessed and documented in a consistent manner. | (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.3.1 Scottish Adapted (2015) European Advisory Panel (EPUAP) |
| 7 | Any pressure ulcers that are identified but unreported when the patient arrives in the theatre environment, should have a Datix completed under "failure to communicate presence of ulcer" and forwarded to the appropriate SCN. | To enable consistent reporting of pressure ulcer developments within areas. | NHS Tayside PPURA Chart. |
| 8 | Staff will treat ulcer as per wound management formulary. | To ensure that the appropriate pressure dressing is applied. | www.nhstaysideadtc.scot.nhs.uk/wound formulary |
| 9 | All individuals identified as high risk of developing a pressure ulcer should be considered for the application of prophylactic pressure dressing(s), taking cognisance of the positioning required for surgery; use of adjuncts to protect tissue viability and repositioned as appropriate during the peri-operative phase. Continue with Treatment Plan D | To ensure vulnerable patients do not develop pressure ulcers whilst in the peri-operative environment.<br><br>2 hours in a single position is the maximum duration of time recommended for patients with normal circulatory capacity | NHS Tayside Policy (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.3.3<br>How –to Guide: Prevent Pressure Ulcers. Cambridge,MA: Institute for Healthcare Improvement: (2011).<br>NICE (2014) Pressure Ulcers: Prevention and management of ulcers |
| 10 | The floor nurse will, at agreed regular intervals e.g. 2 hourly, inform the scrub nurse of the length of time the patient has been in that position and enquire if there is an appropriate time during surgery to alleviate any pressure areas. This should be recorded on the Peri-operative SKIN Chart Sheet (including if it is not appropriate to re-position the patient) | To reduce the risk of pressure ulcers developing. | NHS Tayside Policy (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.3.6<br>NICE (2014) Pressure Ulcers: Prevention and management of Ulcers (CG179/5)<br>NICE Quality Standard (QS89) (June 2015).<br>Health Improvement Scotland (2011) |
| 11 | In the middle section of the Peri-operative | To enable the theatre | NHS Tayside Policy |

| | | | |
|---|---|---|---|
| | SKIN Chart, at the end of the patient's surgery, the scrub nurse should inspect the patient's pressure areas and record the patient's position on the operating table and length of time on the operating table. If unable to comply, the reason must be recorded. | practitioner to evaluate the efficacy of pressure - relieving devices used and re-positioning of the patient, where appropriate. | (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.3.6 |
| 12 | Any pressure ulcers which have developed in theatres will be treated as appropriate. Recorded on the Peri-operative SKIN Chart, ward staff informed and complete the ward PPURA(bottom section). The Safety Cross should be completed and any grade 2 or above ulcers should have a Datix completed. | To ensure that the appropriate pressure dressing is applied. To enable consistent reporting of pressure ulcer developments within areas. | NHS Tayside Policy (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.3.1 NHS Tayside PPURA Chart. |
| 13 | On admission to the recovery ward, the theatre practitioner handing over the patient will refer to the "Theatre to Recovery SBAR" which includes PPURA & Care Plan as an aide memoire. The recovery nurse will inspect the patient's skin, unless the patient is in the low risk category e.g. < 2 hours on the operating; no other factors that are likely to increase the risk of developing a pressure ulcer. . If unable to comply, the reason must be recorded. | To ascertain pressure ulcer status. | NHS Tayside Policy (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.3.6 |
| 14 | The patient should where appropriate, be positioned in a different posture post operatively than the posture adopted during surgery. If unable to comply, the reason must be recorded. | Identifying the most effective position and the optimum frequency of repositioning, will minimise discomfort and maximise pressure ulcer prevention. | NHS Tayside Policy (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.3.6 NICE (2014) Pressure Ulcers: Prevention and management of Ulcers (CG179/5) NICE Quality Standard (QS89) (June 2015). |
| 15 | Prior to discharging the patient from the recovery ward, the recovery nurse will inspect and record the condition of the patient's skin on leaving recovery, unless the patient is in the low risk category e.g. < 2 hours on the operating; no other factors that are likely to increase the risk of developing a pressure ulcer. The patient's skin integrity will be discussed with the nurse receiving the patient to return to the ward. If unable to comply, the reason must be recorded. | To ascertain pressure ulcer status. | NHS Tayside Policy (2016) Pressure Ulcer prevention and care for Adults in Hospital 2.3.6 |

# Peri-operative SKIN* Chart Record Sheet

Date ..... Time .....

Theatre .....

Any pre- exisitng skin conditions? .....

**PATIENT DETAILS**
( Affix Label)

Operation/ speciality _____

Anaesthetic type _____

**Mark each box with TICK or N/A**

| TIME | | Comments | | Comments | | Comments | | Comments |
|---|---|---|---|---|---|---|---|---|
| **Pressure Relief (SKIN)** | **Check Skin .....hrly** | | | **and reposition on operating table if applicable** | | | | |
| Position Code (State CODE in box) | | | | | | | | |
| Correct pressure relieving surface (and switched on)? | | | | | | | | |
| Heel pressure relieving device in situ? | | | | | | | | |
| Arm / head movements? | | | | | | | | |
| **Inspect - Skin Condition** | | | | | | | | |
| Pressure areas checked? | | | | | | | | |
| Skin is free from any wetness/incontinence? | | | | | | | | |
| Saturation probe in correct position? | | | | | | | | |
| Barrier cream/spray applied? | | | | | | | | |
| Check skin around pressure dressings if applied. | | | | | | | | |
| **Hydration/ Dressings** | | | | | | | | |
| Intra venous fluids given if prescribed? | | | | | | | | |
| Pressure dressing applied - State type/location | | | | | | | | |
| Initials | | | | | | | | |

CODES

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| S | Supine | LL | Left Lateral 30 degree tilt | RL | Right lateral 30 degree tilt | P | Prone (front) | REP | Repositioned |
| L | Lithotomy | D | Deckchair | MD | Modified Deckchair | HD | Head Down | SR | Semi-recumbent |
| LT | Left Tilt | RT | Right Tilt | LD | Lloyd Davis | SF | Semi-Fowler | TT | Theatre table |

* Follow NHST Policy for the prevention and management of pressure ulcers for all sections and document care and progress in the record of ongoing care.

# Peri-operative SKIN* Chart Record Sheet

**Refine risk assessment of individuals undergoing surgery by examining other factors that are likely to occur and will increase risk of pressure ulcer developing**

• Expected to be longer than 2 hours in a single position • Expected high level of blood loss • Past history of, or existing pressure ulcer • BMI of < 18.5 or > 40 • Bedbound • MUST Score > 2
• Pre-existing medical conditions e.g. PVD, Diabetes, Neurological impairment/sensory loss (including spinal or epidural anaesthesia)

**Treatment Plan D**

All at risk patients receiving surgery will have a pressure-relieving device on the operating table and transfer trolleys.
All nursing staff in the **anaesthetic room, operating theatre and recovery** will ensure that they know the patient's risk status at all points of the patient's journey through theatre.
All patients identified as at risk will have their pressure areas inspected in the **anaesthetic room, in the operating room immediately after surgery has finished and in the recovery** area and where possible during the operation. In collaboration with the anaesthetist, move the head position to prevent continued pressure on the occipital area (if patient condition allows).
All patients at risk will have measures in place to alleviate factors that cause pressure ulcers in the **anaesthetic room, operating theatre and throughout the recovery phase.**
Use of prophylactic dressings, use of adjuncts to protect tissue viability e.g. elevate heels completely in such a way as to distribute weight of the leg along the calf without putting all the pressure on the Achilles tendon. If possible the knee should be in slight flexion, (hyperextension of the knee may cause obstruction of the popliteal vein predisposing to deep vein thrombosis), consider re-positioning of the patient during the surgical procedure. Position the individual in a different posture preoperatively and post operatively than the posture adopted during surgery and record this on the SKIN chart. If a pressure ulcer develops this will be recorded.

Position of patient in anaesthetic room state:-
Length of time in anaesthetic room _____mins / hrs Any significant event causing increased risk state:-

Condition of skin on **transfer to table:**- (circle) No red areas red area(s)- blanching red area(s) non blanching Grade 1 Grade 2 Grade 3 Grade 4
Site(s) please state:_____

Treatment plan D Active? Yes No Unable to comply state reason_____ Time Sig._____

Position of patient on the theatre table state:

Length of time in theatre _____min/ hrs Any significant event causing increased risk state:-

Condition of skin **leaving theatre**:- (circle) No red areas red area(s)- blanching red area(s) non blanching Grade 1 Grade 2 Grade 3 Grade 4
Site(s) please state:_____
Treatment plan D Active? Yes No Unable to comply state reason_____ Time Sig._____

Position of patient in recovery area_____ Length of time in recovery area _____min/hrs
Any significant event causing increased risk state:-

Conditon of skin in **recovery:**- (circle) No red areas red area(s)- blanching red area(s) non blanching Grade 1 Grade 2 Grade 3 Grade 4
Site(s) please state:_____
Condition of skin leaving recovery (circle)
No red areas red area(s)- blanching red area(s) non blanching Grade1 Grade 2 Grade 3 Grade 4
Site(s) please state:_____
Treatment plan D Active? Yes No Unable to comply state reason_____ Time Sig._____

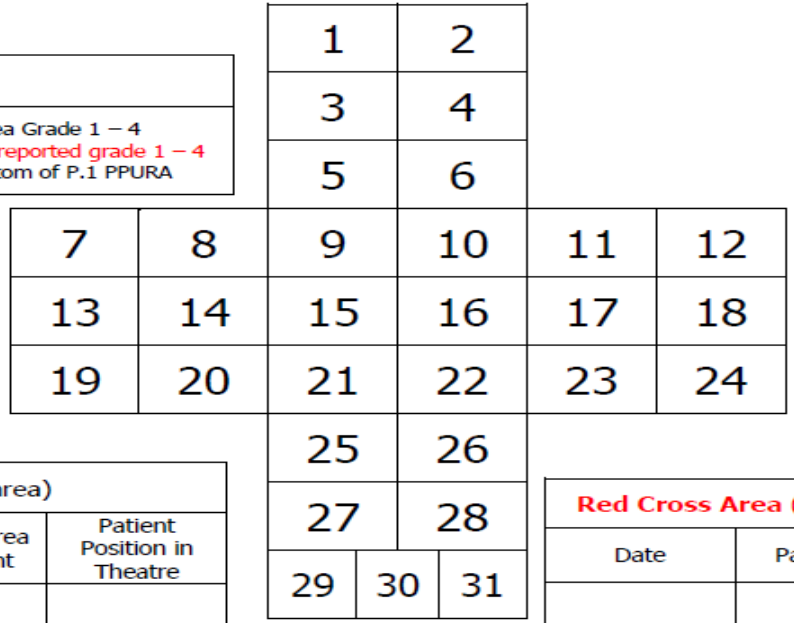
# Pressure Ulcer Safety Cross

| Theatre: East Block Recovery | Month: |
|---|---|

Mark black "X" on the date if a Pressure Ulcer develops in your area Grade 1 – 4
Mark red "X" if patient arrived from the ward/theatre with an un-reported grade 1 – 4
Complete relevant patient details below for both & add to bottom of P.1 PPURA

Please Note:- It is unlikely that a Grade 2 or above will be noted as having developed in this area, but may progress to this as a consequence of positioning within the perioperative environment.

Therefore, please ensure that you distinguish between a **Skin Red & Blanching"** and **"Grade 1 Red & Non Blanching"**




| **Black Cross** (developed in own clinical area) | | | | |
|---|---|---|---|---|
| Date | Patient ID | Grade | Identify Area on Patient | Patient Position in Theatre |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| **Red Cross Area** (Previously un-reported) | | |
|---|---|---|
| Date | Patient ID | Grade |
| | | |
| | | |
| | | |
| | | |

Marilyn Johnson

# Peri-Operative Pressure Ulcer Prevention

NHS Tayside

**CONDUCT A PRE-OPERATIVE ASSESSMENT FOR EVERY PATIENT**

On admission to anaesthetic room – check and record patient's skin condition
(Refer to Theatre Ticket; Core Data Set/PPURA Nursing Record; Visual skin inspection & use of professional judgement – consider high risk inclusion criteria below)

**REMEMBER**

A pressure sore is considered to start when the skin no longer blanches
Always consider patient positioning when assessing area at risk

**HIGH RISK INCLUSION CRITERIA**

EXPECTED TO BE LONGER THAN 2 HOURS IN A SINGLE POSITION E.G. ANAESTHETIC ROOM/OPERATING TABLE OR ANY OF THE FOLLOWING

- Expected high level of blood loss
- Past history of, or existing pressure ulcer
- BMI of < 18.5 or > 40
- Bedbound
- MUST Score > 2
- Pre-existing medical conditions e.g. PVD, Diabetes, Neurological impairment/sensory loss (including spinal or epidural anaesthesia)

**COMMENCE THE PERI-OPERATIVE SKIN CHART**

**ARE THEY AT HIGH RISK?**
(See "inclusion criteria" above)

**YES**

- Use prophylactic dressings – consider areas at risk due to positioning required for surgery
- Use adjuncts to protect tissue viability Consider repositioning patient at hourly intervals (if there is opportunity during surgery) & record action taken.

**NO**

- Was there a pressure ulcer present that had developed in another area?
- Was there a failure to communicate the presence of an ulcer from another area?
- Has a pressure ulcer developed in the theatre area?

**YES**

- Treat area as required
- Record on SKIN chart and theatre care plan
- Inform ward staff
- Record on Safety Cross
- Complete Datix if grade 2 or above and send to the appropriate SCN

**NO**

**CONTINUE WITH TREATMENT PLAN D**

**S** Patient Name
Procedure

**B** PMHx ▷ [Diabetic ? BM ?)
Relevant Current Medications
**Allergies**

**A**

**Type of Anaesthetic** → Drugs given : anaesthetic, analgesia, anti-emetics?

**Airway** → Oxygen plan?

**R**

**Fluids given** → Fluid plan and venflon flushed?

**Antibiotics given** → Further doses?

**DVT prophylaxis** → DVT plan?

**Blood loss** → Red Cells? Haemocue?

**Complications** → Further monitoring

## > PPURA & Care Plan <

Destination : HDU, Ward Number, Theatre Admission Suite?

***

**WASH HANDS**

***

# We’re all singing from the same hymn sheet now