PRESSURE ULCER PREVENTION PROGRAMME* (PURP), ENABLING CLINICALLY EFFECTIVE MANAGEMENT OF PATIENTS AT RISK OF PRESSURE ULCERS (PU)

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Introduction

This analysis reports the combined results of a pressure ulcer prevention programme (PURP) undertaken in 3 different countries.

The PURP enables clinicians to evaluate the impact of an innovative device** designed to measure sub-epidermal moisture (SEM) as an invisible precursor for early tissue damage through a systematic process. This provides the opportunity to implement anatomically specific interventions designed to reduce PU incidence.

Methodology

- PURP introduced in 2015: 3 countries UK; Spain and Canada included to date
- 11 Facilities: 905 patients in 8 different clinical care settings
- Baseline data of number of ward or hospital acquired PU recorded for preceding months, OR, a parallel control group was established, as was the case in Spain
- No changes were made to existing prevention protocols during the PURP period except the addition of the SEM measurement
- During PURP the following data is captured:
  - Risk score according to facility protocol
  - Skin visual assessment – change in skin redness or further deterioration
  - SEM delta value on each anatomical site
  - Intervention implemented as a result of SEM measurements or the prevailing standard of care
  - Details of any HAPUs
- On completion of PURP, data is analysed to:
  - Identify changes in HAPU rates during the PURP compared to baseline or a concurrent control group
  - Identify impact on clinical decision making regarding anatomically targeted preventative interventions applied according to SEM delta value

Prevention Protocol

- Visual skin assessment and clinical judgement were used by all sites
- 73% sites used Waterlow as the primary risk assessment tool
- 64% of sites conducted risk assessments at admission and daily for high risk patients

Results

- 7 sites (64%) experienced zero HAPUs during the PURP when SEM monitoring was implemented (Figure 1)
  - The weighted average reduction in HAPU’s at all 11 sites was >62.5% during the PURP
  - The straight average reduction in HAPU at all 11 sites was 86.2% during the PURP
- 64% sites indicated that measuring SEM could be easily adopted into clinical practice
- 2 sites studied the Hawthorne effect and determined that there was no Hawthorne effect was present during PURP period

Publications

- Peer reviewed articles have been published, or submitted or are being drafted for: Rouge Canada, Isle of Wight and Spain
- Conference presentations have been given by Virgin Care, Isle of Wight, Rouge Canada, NSECH, and Marie Curie

![Figure 1: PU Incidence Before And During PURP By Site](image)

Conclusions

- PU Incidence rates were repeatedly and significantly reduced in the PURP care settings
- PURP has enabled clinicians to study the impact on PU incidence of measuring SEM by using a new technology** when used as an adjunct to current clinical practice
- SEM delta value information prompted healthcare practitioners to implement anatomically targeted interventions
- Patients received targeted therapeutic interventions earlier than current standard of care
- Earlier deployment of anatomically targeted interventions was the clinical practice change common to all PURP sites