



Objectives

A two-phased study designed to evaluate the clinical utility of the SEM Scanner and to see if the Hawthorne effect played a part in the results



Method

Phase 1 - patients provided with a standard of care risk assessment and interventions and scanning by SEM Scanner but the resulting SEM scores were not used to determine interventions

Phase 2 - identical to phase 1 except that the resulting SEM scores were used in conjunction with risk assessment to determine appropriate interventions and care planning



Results

284 patients evaluated in the 2 phases

- On 3 inpatient wards
- Over a 7-month period

Phase 1 results:

12/89 patients developed pressure injuries/ulcers (PI/PUs) [4 category 1, 6 Category 2, 1 Category 3 and 1 Deep Tissue Injury (DTI)].

Phase 2 results:

2/195 patients developed PI/PUs (1 Category 1 and 1 Category 2).

This illustrated a 93% reduction in Hospital Acquired Pressure Injury/Ulcer (HAPI/PUs) compared to phase 1.

Pressure Ulcer Prevalence & Incidence

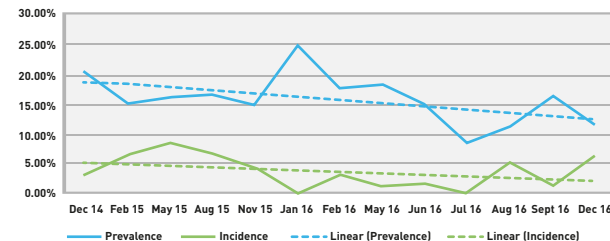


Figure 2 Monthly prevalence and incidence rates for SHN Dec 2014 to Dec 2016. Abbreviations: SHN, Scarborough Health Network [Colour figure can be viewed at wileyonlinelibrary.com]



Discussion

- 93% decrease in HAPI/U rate following interventions using the SEM Scanner scores
- A strategic approach to PI/PU management with the use of SEM Scanner for identification of PI/PU improves patients outcomes
- SEM Scanner made non-visible damage identifiable by providing a numerical readout, alerting clinicians to implement stronger prevention strategies.
- No Hawthorne effect noted