Introduction

Pressure ulcers are:
- Common in hospitals
- Distressing and degrading for patients
- Sometimes life-threatening
- Expensive to treat: £2.1BN per year in the UK
- Almost always avoidable

Setting
- ABM University Health Board, South Wales
- 4 Acute Hospitals
- 17,000 Staff
- 92 Secondary and tertiary care wards
- Serving 600,000 population (DGH services)

Objectives
- To identify patients at risk of pressure ulcers
- To achieve cultural change through the model for improvement / PDSA cycles (figure 1)
- To apply the SKIN prevention bundle for at risk patients
- To reduce by 50% the incidence of pressure ulcers per 1000 bed-days
- To introduce new measures for pressure ulcer incidents
- To create real-time reporting of pressure ulcers as they occur

Measures
- % Compliance with standard risk assessment tools (Waterlow score, Nutrition risk scores)
- Number of days since a pressure ulcer (of any grade) last developed on the ward
- Incidence per 1000 bed-days

Methods
- The SKIN bundle communication tool was designed and refined (Figure 2) using small cycles of change (PDSA cycles)
- The bundle is applied to patients “at risk” (Waterlow score >15)
- Interventions are tailored to individual patients need and reviewed frequently
- SKIN Bundle communication tool is highly visible to all
  - All staff groups, patients and carers actively engaged through education, visual cues, information sheets and publically displayed "Safety Crosses" on wards
  - PDSA cycles repeated on each ward as programme rolled out to create local ownership
- Strong executive support and key stakeholder involvement through a project team and executive safety "walk-rounds"

Results
- After a phased roll out over 2 years, all 92 wards and A&E are using the SKIN bundle
- Pressure ulcer rates have dropped dramatically (Figure 3)
- Pilot ward went over 630 days without an ulcer of any grade developing
- All wards have seen long periods without any ulcers
- The culture of pressure ulcers as “inevitable” has changed
- Reduced rates has allowed root cause analysis of any ulcers that do occur
- SKIN bundle now to be rolled out across the whole of NHS Wales in 2010

Conclusions
- It is possible to apply the knowledge of pressure ulcer prevention in an effective and sustained way
- Cultural change and local ownership are essential components of the success
- The SKIN Bundle is an effective set of interventions for prevention
- The Model for Improvement is an effective vehicle for introducing these changes
- The "number of days since an ulcer last developed" is a powerful measure
- A Zero Tolerance to hospital acquired pressure ulcers is realistic
- We should strive to make all our hospitals pressure ulcer free

References
- www.1000livescampaign.wales.nhs.uk
- www.abm.wales.nhs.uk

**Figure 1.** PDSA Cycle: The Model for Improvement uses small cycles of change to create local ownership as the care bundle is adapted and adopted to suit ward practices

**Figure 2.** An example SKIN Bundle Communication Tool, kept at the end of the patients bed and tailored according to the individuals need

**Figure 3.** Data from a range of different ward settings during rollout demonstrating long periods without a pressure ulcer (grade 1-4) developing. A dramatic improvement.