Aim
The aim of this project was to improve pressure ulcer prevention for high-risk patients in a 12-month period as measured by specified indicators.

Background
The occurrence of pressure ulcers poses a significant burden to patients, their carers, and the broader health system (NSW Health Circular 2002/77 on Clinical Practices – Pressure Ulcer Prevention). In this circular, NSW Health not only identified the extent of this problem but provided the framework for this project, which was initiated as part of the Clinical Practice Improvement Program in 2002.

During an audit at Illawarra Health, a detailed analysis of a single case history of a patient with a pressure ulcer identified the additional cost to the service in treating that single patient was approximately $119,000. The cost analysis reinforces the significant actual and potential financial burden resulting from inadequate prevention and management of pressure ulcers in patients.

Methodology
An Area Wide Pressure Ulcer Prevention Working Party was established in 2002. The team convened monthly led by the Acting CNC for Wound Care and the RAEC Quality Manager, with support from the Area Executive Team and included consumers and staff from Nursing, Allied Health, Risk Management, Biomedical Engineering, Purchasing, Infection Control and Medical suppliers.

Priorities
Five priority issues for systemic improvement were identified:
1. Lack of Area-wide policy on pressure ulcer prevention.
2. Inconsistent use of and non-compliance with completion of pressure ulcer risk assessments on admission to ward or service.
3. Inadequate access to and appropriate use of pressure relieving equipment.
4. Poor documentation and communication of identified pressure ulcers and prescribed prevention strategies in patient’s medical records.
5. Limited education and training opportunities.

Planning and implementation
A Business Plan was developed to address the five priority areas listed above. As part of this process an extensive literature review and consultation with other Area Health
Services was undertaken to determine best practice for pressure ulcer prevention.

The actions and outcomes achieved from the business plan include:

- **Policy and Clinical Practice** – An Area Pressure Ulcer Prevention Policy was developed that gave direction on assessment tools, documentation, prevention strategies as well as including pressure ulcer prevention procedures in the Area Nursing Procedure Manual (Joanna Briggs).

- **Risk Assessment Tool** – Through broad consultation, a standard tool was implemented for use across Illawarra Health.

- **Equipment** – After long and difficult negotiations with the medical supplier, a safer mattress design that does not require staff to calculate weight requirements was introduced. Procedures were developed to provide 24 hour access to these mattresses in conjunction with an internal biomedical engineering maintenance program, which ensures all mattresses are functional at all times.

- **Documentation** - Strategies to improve documentation in patient medical records included: clear guidelines in the Area Pressure Ulcer Prevention Policy, continued emphasis on requirements at the Site Champion Training days and promotion through poster campaigns on stages of pressure ulcers, risk assessment tools and equipment usage. Reporting measures include the implementation of clinical indicators in the form of:
  * Annual prevalence and incidence audits across IH
  * Collection of International Centre Disease (ICD) codes on pressure ulcers
  * Introduction of Illawara Incident Management System (IIMS) whereby pressure ulcer incidents are reported.

- A consumer pamphlet was developed, with significant contribution from consumers and staff, which has been distributed for use in wards/units.

- **Education** – A targeted training program was introduced and is now routinely provided through the Wound Care Course (monthly) and at various mandatory training forums which include: Casual Nursing Staff; Nursing Refresher Course; RN New Graduation Program and the Certificate 3 Assistants in Nursing Course.

Most importantly, training has been provided through the annual Site Champion Training Program. This ‘train the trainer’ program, involved designated site (facility or ward based) staff being provided with support, intensive up-to-date training and development of pressure ulcer prevention skills, which enabled them to provide on site support to nursing staff.

### Outcomes and evaluation

- Over an 18-month period, 100% of the Business Plan objectives were achieved.

- An annual Area-wide prevalence and incidence audit was undertaken in 2003 and 2004. The results over a 12 month period show:
  * An increase from 52% to 79% of risk assessments identified as completed;
  * A decrease from 17% in 1993 to 7.5 % in 2003 to 5.4% in 2004 (incidence 2.3%, prevalence 3.1%) the number of patients identified with pressure ulcers;
  * Additional outcomes for RAEC indicate that there was a decrease from 13% in 2002 to 5% in 2004 of patients transferred for rehabilitation with a pre-existing pressure;
  * An increase from 90% to 99.2% in the number of patients identified as requiring equipment that received appropriate equipment.

- Site champion selection and training has been developed and implemented to increase the nursing skill base within organisations to sustain pressure ulcer prevention practices. Training included:
  * 39 site champions trained in first session;
  * 9 new champions trained as replacements for staff that left the service or changed roles;
  * 35 site champions attended refresher training;
  * Over 75% of ward staff trained by site champions.

- All systems/programs that have been implemented have inbuilt quality assurance processes that continue to measure performance and sustain improvements.

### Future scope

The innovative site champion training can be effectively applied to any area of clinical practice in which the individual or nursing staff in general is appropriately supported, and consequently highly motivated to champion new and better practices within their normal duties.

Significant opportunities have been identified and are currently being developed for the early detection of clients who are at risk of developing pressure ulcers at patient transport services and preadmission clinics. Strategies include: ensuring availability of preventative equipment for high risk clients attending hospital, and ensuring pressure ulcer preventative equipment is made available on transport trolleys.

The posters on risk assessments, equipment and stages of pressure ulcers have been adopted in several other health services in NSW.

This project has taken the pressure off clients, staff and the organisation.