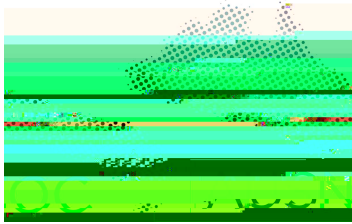
University of Wollongong

Wollongong, NSW, Australia

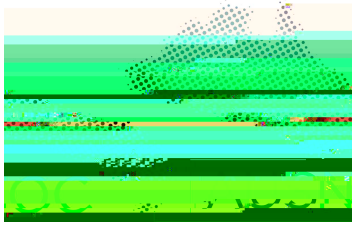
AUSNOC DATA REGISTRY



Purpose of this presentation

To describe the development, testing and implementation of a data registry of nursing-sensitive indicators for measuring the quality and safety of nursing practice in three hospitals in Australia using a multi-site, cross-sectional design.

DATA REGISTRY DEVELOPMENT

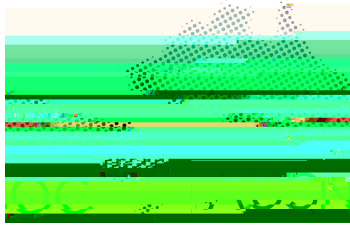


Aim of the AUSNOC data registry

Focuses on structure, process and outcome data to:

- Provide **data** for unit and hospital managers;
- Evaluate **decisions about nurse staffing**, nursing processes, and improvements to patient outcomes; and
- Provide **data to** about patient care

BACKGROUND



Australian Nursing Outcomes Collaborative (AUSNOC)

Based on PhD project “Measuring the quality & safety of nursing care”

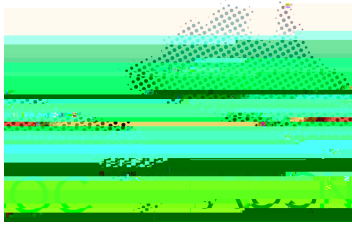
Indicator set and data registry development

Feasibility testing in 3 Australian hospitals

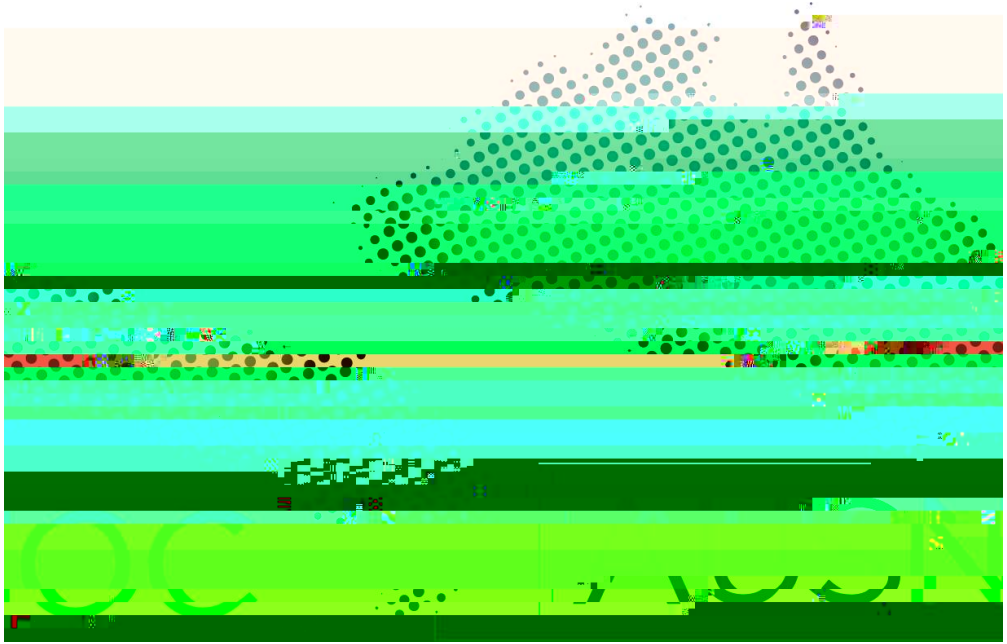
Findings and future expansion

Ethics approval (HE15-425)

A conceptual framework for the measurement of the quality and safety outcomes of nursing care

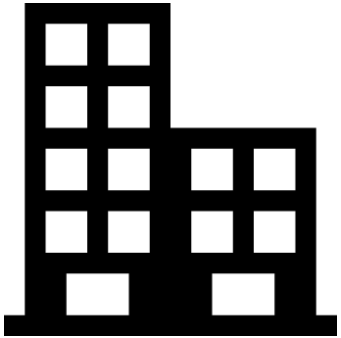


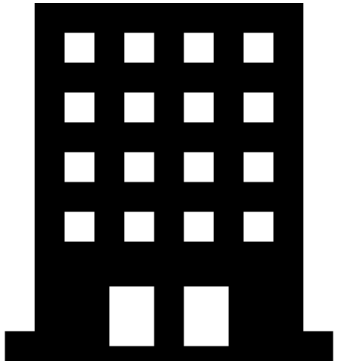
Sim, J, Crookes, P, Walsh, K & Halcomb, E (2018), Measuring the outcomes of nursing practice: A Delphi study, *Journal of Clinical Nursing*, 2018, 27, e368



... making matter

PARTICIPATING HOSPITALS





Hospital A

280 beds

Private Hospital

NSW, Australia

Hospital B

142 beds

Private Hospital

NSW, Australia

Hospital C

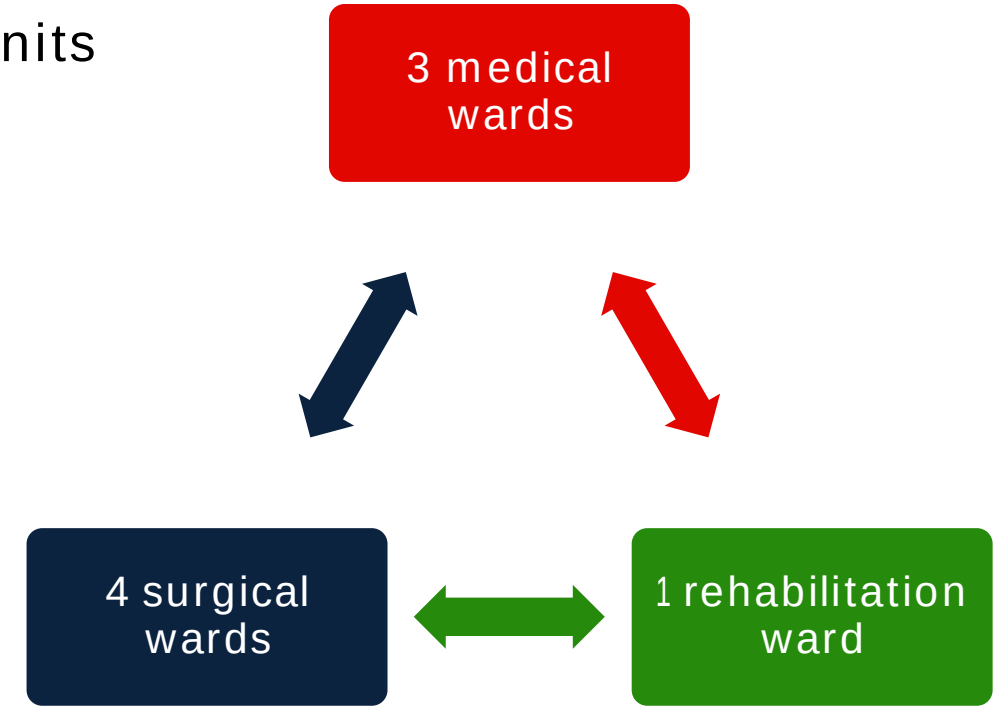
151 beds

Private Hospital

NSW, Australia

DATA COLLECTION

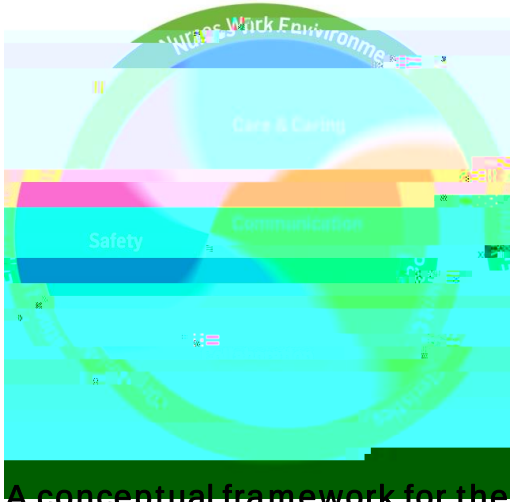
Participating units



AUSNOC DATA REGISTRY

Indicators and instruments:

Nurse staffing (**hourly data** on number of staff & skill mix)
Patient flow (**hourly data** on admissions, discharges, transfers)
Adverse events (pressure injuries, falls, medication errors, staph aureus bloodstream infections, restraint)
Processes of care (hand hygiene, risk assessment procedures falls & pressure injuries, patient identification, communication)
Patient Satisfaction and Patient Experiences of Care
Patients perceptions of Caring (Caring Assessment Tool)
Nurses perceptions of their practice environment (Nursing Work Index - Revised: Australian [NWI-R:A]) and safety assessment questionnaire



A conceptual framework for the measurement of the quality and safety outcomes of nursing care

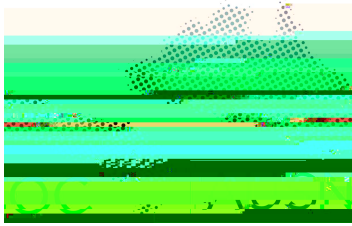
AUSNOC DATA REGISTRY

Reliability

- Administrative data audited
- Adverse event data checked via review of ICD

Validity

FINDINGS



Developmental Phase 1:

- Workshops with key stakeholders at each hospital
  - Developed data definitions, and
  - Achieve consensus on collection methods
- Data codebook developed

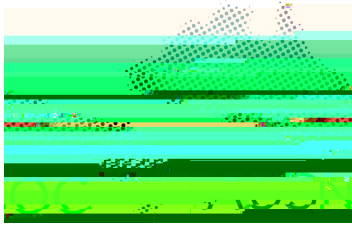
Lengthy process but very valuable to share ideas and existing practices

FINDINGS

Developmental Phase 3:

- Data reporting systems developed
- Quarterly benchmarked reports developed following consultation with stakeholders
- Reporting was labour intensive and time consuming (!!!)
- Data presentation evolved over the course of the project
- Customised data for accreditation and government reporting

FINDINGS



Administrative data in 2016

- 65, 000 bed days
- 12,654 admissions
- 12,627 discharges
- 22,956 transfers

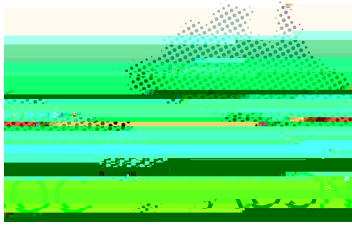
370 adverse events

- 66 Hospital Acquired Pressure Injuries
- 254 patient falls
- 50 medication errors

69,120 hours of staffing analysed for each hour of staffing by …

- Numbers of staff
- Skill mix
- Nursing Hours Per Patient Day

ESTIMATED FINANCIAL SAVINGS

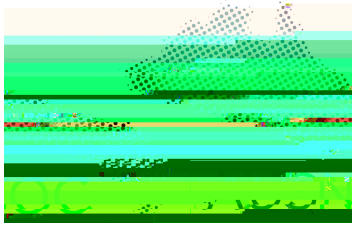


	2013 $AUD / patient

	Increased length of stay (compared to no fall)	Additional hospital costs (2015 $AUD)

FINDINGS

Data Collection Burden



- Administrative data collected with no burden on clinical staff
- Surveys
  - Caring Assessment Tool – all discharged patients
  - NWI-R:A – lower response rates than anticipated (43%)
  - Press Ganey™ Patient experience Surveys – used retrospective data
  - Safety Attitudes Questionnaire - lower response rates than anticipated (43%)
- Pressure Injury Prevalence & Processes of Care Observational Audits
  - Time consuming (16 hours) & costly
  - Changes in processes of care led to significant improvements

AUSNOC data registry can be feasibly collected in the Australian healthcare system

Structure, process and outcome data can be collected on a set of indicators that explore the constructs of

- Care and caring
- Communication
- Coordination and collaboration; and
- Safety

Any questions?

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