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Making nursing matter - using actionable data to improve patient outcomes

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Abstract
This presentation will describe the development of the Australian Nursing Outcomes Collaborative (AUSNOC). AUSNOC is a data registry and implementation science centre that assists health care organisations to measure the quality and safety of nursing care with the aim of improving patient outcomes. The indicator set is founded upon a conceptual framework that explores nursing care using the following constructs: Care and Caring; Communication; Coordination & Collaboration; and Safety. Data collected includes administrative data, adverse events (falls, pressure injuries, medication errors, staphylococcus blood stream infections), observational studies of processes of care and the use of three periodic surveys that use validated tools (Nursing Work Index - Revised: Australian; Caring Assessment Tool; and one of a number of approved Patient Experience Surveys). Feasibility testing of the AUSNOC indicator set was undertaken in three hospitals in New South Wales, Australia in 2016. AUSNOC has now expanded into a collaborative research centre that assists a growing number of health care services in Australia to improve patient outcomes through recording, evaluating and benchmarking nursing care at the unit level. This presentation will present key findings from the feasibility study and highlight how organisations are using data from AUSNOC to improve patient outcomes and make nursing matter within their care environments. In addition, the presentation will explore the ongoing development of AUSNOC as a collaborative research centre and the potential for measuring both the quality and safety of nursing care at the unit level.

Disciplines
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MAKING NURSING MATTER - USING ACTIONABLE DATA TO IMPROVE PATIENT OUTCOMES

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Australian Nursing Outcomes Collaborative (AUSNOC)

- Based on PhD project “Measuring the quality & safety of nursing care”
- Feasibility testing in 3 hospitals
- Lessons learned
- Development of AUSNOC as a collaborative research centre
- Ethics approval (HE15-425)
MEASURING NURSING CARE

PhD project – completed in 2015

- Multi-phase, mixed methods project
  - Focused on “patients” and “patient outcomes”
  - Data collection from clinical nurses about what was important to measure
  - Identified what to measure & how to measure it

- Outcome 1: Development of a conceptual framework for measuring the quality & safety of nursing practice
- Outcome 2: Development of an indicator set for measuring the quality & safety of nursing practice
MEASURING NURSING CARE

A conceptual framework for the measurement of the quality and safety outcomes of nursing care.
MEASURING NURSING CARE

AUSNOC Indicator Set includes:

- 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
AUSNOC INDICATOR SET

What data is collected ...

➢ Administrative data (Patient Administration system, Human Resources / Payroll databases)
➢ Safety Indicators (Risk Management system)
➢ Infection Control data (Risk Management system)
➢ Survey data:
  ▪ Patient Experience surveys (Annual or Continuous)
  ▪ NWI:R-A, Safety Culture & Nurse demographics survey (Annual)
  ▪ Caring Assessment Tool (At time of discharge)
➢ Process Measures
  ▪ WHO “5 moments of hand hygiene” observational assessment
  ▪ Pressure Ulcer Prevalence & Processes of Care Survey (Periodic)
THE INVISIBILITY OF NURSING CARE ....

“Nursing may be the oldest art, but in the contemporary world, it is also one of the most invisible. One of the most invisible arts, sciences, and certainly one of the most invisible parts of our health care system”.

Suzanne Gordon (2012)
AUSNOC

Mission

To make nursing matter by using data to improve patient outcomes

AUSNOC is a data registry and implementation science centre collecting, analysing and using actionable data to assist hospitals and healthcare organisations to improve the quality and safety of nursing care and therefore patient outcomes.
AUSNOC

... making Nursing matter
LESSONS LEARNED

3 key lessons from first 2 years of AUSNOC

1. Nursing outcomes: known or unknown?
   - Pressure Ulcers

2. Measuring caring
   - Gathering data
   - Making it meaningful for staff

3. Structure, process and outcome measures
   - The key to practice improvement
NURSING OUTCOMES: KNOWN OR UNKNOWN?

Pressure Ulcer Prevalence

- Incidence data routinely collected
- Pressure Ulcer Prevalence studies undertaken for accreditation / regulation
- Risk Assessment processes in place
  - Braden Scale
  - Integrated Care Plans
- No evidence of pressure ulcer problem!
NURSING OUTCOMES: KNOWN OR UNKNOWN?

Practice Improvement begins with Evidence-Based Practices

➢ Risk Assessment processes
  ▪ Suggest PURPOSE T Version 2 – organisations must use evidence based risk assessment tools (Nixon et al. 2015)

➢ Integration of Care into Nursing Care Plan
  ▪ Must be more than “tick and flick”
  ▪ Requires critical thinking & purposeful actions

➢ Appropriate equipment

➢ Staff education and continuous reinforcement via monthly process improvement audits
MEASURING CARING

Caring Assessment Tool & Patient Experience data

- Caring Assessment Tool version V (Duffy et al 2014)
  - Completed by patients at discharge
  - iPad’s used for data collection
  - 27 questions

- Patient Experience Surveys
  - HCAHPS / Picker surveys
  - Used existing survey data
MEASURING CARING

Caring Assessment Tool

➢ Data Collection methods
  ▪ iPad’s
  ▪ Hospital WiFi
  ▪ “App” development
  ▪ Staff engagement
  ▪ Psychometric testing
CARING ASSESSMENT TOOL ITEMS

1. Help me to believe in myself
2. Make me feel as comfortable as possible
3. Support me with my beliefs
4. Pay attention to me when I am talking
5. Help me see some good aspects of my situation
6. Help me feel less worried
7. Anticipate my needs
8. Allow me to choose the best time to talk about my concerns
9. Are concerned about how I view things
10. Seem interested in me
11. Respect me
12. Are responsive to my family
13. Acknowledge my inner feelings
14. Help me understand how I am thinking about my illness
15. Help me explore alternative ways of dealing with my health problem/s
16. Ask me what I know about my illness
17. Help me figure out questions to ask other health professionals
18. Support my sense of hope
19. Respect my need for privacy
20. Ask me how I think my health care treatment is going
21. Treat my body carefully
22. Help me with my special routine needs for sleep
23. Encourage my ability to go on with life
24. Help me deal with my bad feelings
25. Know what is important to me
26. Talk openly to my family
27. Show respect for those things that have meaning to me
STRUCTURE, PROCESS & OUTCOME MEASURES

Avedis Donabedian (1966)

— **Structure**: relates to the attributes of the settings in which the care occurred
— **Process**: relates to what actually occurred in giving and receiving care
— **Outcome**: relates to the changes that are observed in a patient health and/or condition that result from the care that has been provided to them
STRUCTURE, PROCESS & OUTCOME MEASURES

Designing the Indicator Set

➢ Administrative data (hourly data in each unit) = STRUCTURE
➢ Pressure Ulcer Prevalence surveys include observational audits
  ▪ Pressure ulcer risk assessment, nursing care & equipment
  ▪ Falls risk assessment & nursing care
  ▪ Patient identification
  = PROCESS
STRUCTURE, PROCESS & OUTCOME MEASURES

Designing the Indicator Set

- Hand Hygiene audits = PROCESS
- Caring, Safety Culture, Nursing Work environment = PROCESS / OUTCOME
- Falls, pressure ulcer incidence & prevalence, medication errors, bacteraemia, patient experience, caring = OUTCOME
DEVELOPMENT OF AUSNOC AS A COLLABORATIVE RESEARCH CENTRE

Data Registry & Implementation Science Centre

➢ Data is the first step
➢ Staff Engagement must be at Unit level
➢ Providing solutions is pivotal to success
   ▪ Implementation “bundles”
   ▪ AUSNOC focus areas: Pressure Ulcer prevention; Falls prevention; Medication errors; Safety culture; Person-centred care; Nursing practice environment
AUSTRALIAN NURSING OUTCOMES COLLABORATIVE (AUSNOC)

Any questions?

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REFERENCES
