I.     Workshop title

## Making nursing visible: Researching Nurse-Sensitive Indicators and consensus frameworks.

II.     Authors and affiliations

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III.     Learning objectives (1-4 objectives)

Participants will learn about current nurse-sensitive indicator research, particularly:

1) The Donabedian framework which underpins health quality research and the nature of indicators which populate the Donabedian framework

2) Communication between indicators as "cause and effect"

3) Identification and consensus techniques used to identify clinical nurse-sensitive indicators

4) A proposed mediation framework that may identify future indicators for an Australian Nurse Minimum data set at ward level.

IV.     Abstract / Outline of workshop

**How are nurse sensitive indicators categorised?**
Donebedian's framework [1] underpins performance and quality monitoring research in the healthcare system [2], the framework identifies three connected key domains for performance and quality monitoring . The Donabedian domains are: Structure, Process and Outcome (the SPO paradigm).  Each SPO domain can be populated by a set of relevant and/or connected indicators that can be used as measurement for nurse performance and quality.
This interconnectedness of structure, process and outcome through indicators form the basis of nursing SPO paradigm research. The research hopes to track cause and effect from one indicator to another and in particular, how patient and nurse outcomes are impacted by structure and process.

**The spread of indicators across domains**
The tracking of cause and effect through indicators across domains can be difficult. In most nursing data sets, outcome and structural indicators out number process measures because of their relative easy extraction from existing hospital

and national health administrative data bases [3]. These outcome indicators are generally adverse events such as falls, pressure ulcers and nosocomial infections. Indicators measuring the nursing process are scant, particularly any measuring the positive input nurses have toward patient recovery.

**How are indicators selected, Nursing Minimum Data Sets (NMDS) derived and consensus achieved?**

Indicators are categorised into taxonomies reflecting their usage in the structure, process and outcome domains. These taxonomies can be stripped to the "bare-bones" to form Nursing Minimum Data Sets containing a minimum set of items of information with uniform definitions and categories concerning the specific dimension of nursing which meets the information needs of multiple data users in the health care system [4].

Indicators for a NMDS can be selected by:
1) *Consensus.* Consensus normally uses nurse experts in focus groups or panels to determine the clinical meaning and appropriateness of terms and
2) *Mediation plus consensus.* Mediation or alignment of terms is the bringing together of two documents by comparison, determining like terms (semantic equivalence) and completing consensus rounds.

The literature revealed that indicator selection is not a straight-forward process, problems with achieving consensus amongst nurse experts regarding the meaning and clinical appropriateness of terms were identified [5]. However, researchers have successfully used mediation and consensus frameworks to derive overseas NMDS.

**Mediation and consensus frameworks**

Nursing literature illustrates two methods of mediation; Manual and Semi-automatic.
1) *Manual mediation* uses focus groups or forums of nurse experts to determine semantic equivalence and clinical appropriateness of indicators derived from one or two documents [6], [7] and [8].
2) *Semi-Automatic mediation*, examples include nurse experts interacting with software which contain rules of semantic equivalence. Semi-automatic mediation occurs where software scans terms in two taxonomies and identifies equivalences. These equivalences are suggested to a human which accepts or rejects the suggestion on the basis of clinical appropriateness and semantic equivalence [9], [5].

The literature suggests semi-automatic mediation and consensus could be used to produce agreed-upon terms achieving a pre-determined level of consensus. This list of indicators

may be a stepping-stone towards a future clinical Australian Minimum Data Set (Au-NMDS) at ward level. The researcher will outline the framework for consideration.

V. Target audience

Nurses interested in indicator research

VI. Content level / Assumed knowledge and experience of participants

Participants are assumed to have an interest in measuring nurse and patient outcomes and its research, prior knowledge about the subject is not necessary.

VII. Maximum number of participants

I'll leave that to the organiser's discretion

VIII. Keywords: 3-6 words

Nurse outcomes, nurse sensitive indicators, consensus frameworks

References

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