

# IMPACT OF NURSING SURVEILLANCE ON ADVERSE EVENTS FOR HOSPITALIZED ADULTS: A SYSTEMATIC REVIEW PROTOCOL (PROSPERO 2020 CRD42020147557)

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## BACKGROUND

Medical errors result in more than a million injuries and nearly 98,000 deaths annually. These statistics were published in the Institute of Medicine 2000 report, *To Err is Human*. Rapid response teams were implemented to identify, and rescue deteriorating patients in order to improve patient safety and reduce preventable deaths.

Nurses use surveillance at the bedside to identify patients in distress and make decisions for patient safety. **Nursing surveillance** involves purposeful and ongoing acquisition, interpretation, and synthesis of patient data for clinical decision-making (Bulechek et al., 2013). An aim for **global healthcare transformation is quality**. Nursing surveillance complements quality of care by decreasing the measure of *failure to rescue*.

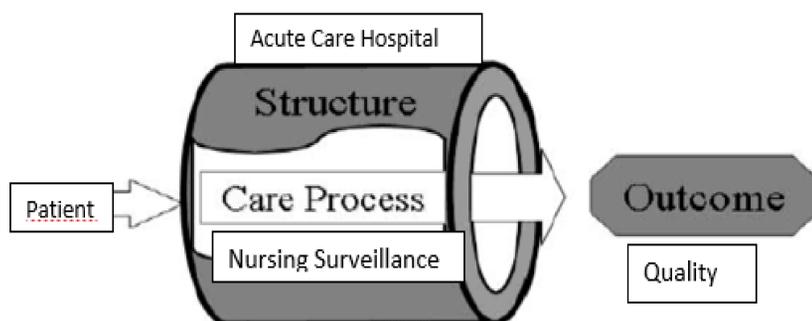
## OBJECTIVES AND RESEARCH QUESTIONS

The aim of this systematic review is to evaluate the impact of nursing surveillance on specific cardiac, respiratory, and cognitive adverse events of hospitalized adults. The research questions are:

- What researched processes or systems reportedly facilitate nursing surveillance in acute care hospitals?
- What processes are used to measure nursing surveillance?
- What is the impact of nursing surveillance on adverse events?

## THEORETICAL FRAMEWORK

Donabedian Structure → Process → Outcome



## DECISION POINTS FOR SELECTION OF DATA FOR NURSING SURVEILLANCE

- Library collaboration: to plan and execute search strategies.
- Multi-phase search strategy: to identify studies related to 3 designated adverse health outcomes: cardiac, respiratory, and cognitive.
- Statistician consultation: to guide design, plan synthesis and analysis of findings.
- The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) process: to guide with display of inclusion and exclusion decision for relevant research (Liberati et al., 2009).
- Rayyan Software: to collect and track citations for review
- Registered with PROSPERO: to gain International Prospective Registration of Systematic Reviews to avoid duplication of effort.
- Johns Hopkins Nursing Evidence-Based Practice Evidence Appraisal Tool approval: to evaluate quality of studies

## LITERATURE SEARCH

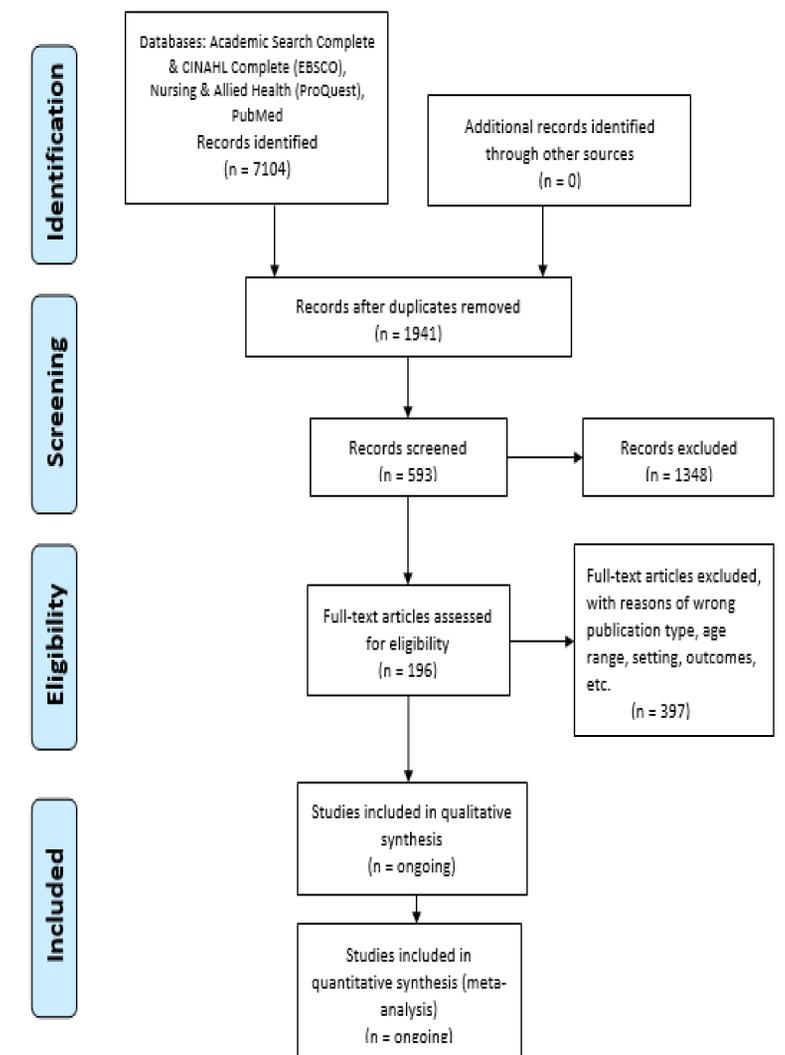
The systematic review of the literature began with the selection of 4 databases in the fields of biomedical sciences and nursing as well as a cross-disciplinary database (see PRISMA flow diagram).

The search terms included database-specific controlled vocabulary as well as natural language terms. *Nursing surveillance* has not been designated as a controlled vocabulary Subject Term or a MeSH term, so a broad list of search terms was compiled to ensure comprehensiveness.

Searches were limited to the following:

- nursing surveillance of hospitalized adults over the age of 19,
- near misses, failure-to-rescue, and rescue of deteriorating patients,
- the three health outcomes: cardiac, respiratory, cognitive,
- English language,
- studies published since 1990, which marked the introduction of rapid response systems in acute care.

## PRISMA FLOW DIAGRAM



## REFERENCES

Bulechek, G. M., Butcher, H. K., Dochterman, J. M., & Wagner, C. M. (2013). *Nursing Interventions Classifications (NIC)*. (6<sup>th</sup> ed.) St. Louis, MO: Mosby.

Donabedian, A. (1988). The quality of care. How can it be assessed? *Journal of the American Medical Association*, 260, 1743–1748.

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gatzsche, P. C., Ioannidis, J. P. A.,... Moher, D. (2009) The PRISMA statement for reporting systematic review and meta-analysis of studies that evaluate healthcare interventions: explanation and elaboration. *BMJ*, 339,b2700. doi: 10.1136/bmj.b2700