

# Sustained improvement in the Quality of Nurse-Influenced Patient Care in the ICU

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# Introduction



# Nurse Influenced Care Initiative

Quality  
Improvement  
Initiative  
(Practice change  
framework)

Literature  
Review:  
7 Standards of  
evidence  
based nursing  
care

Highlight  
Promote  
Affirm  
Engrain

Culture  
of Care

# Nurse influenced patient care in Wellington ICU: 7 standards.

Pressure  
ulcer  
prevention

## 1. Enteral Nutrition

All eligible patients have enteral nutrition started within 24 hours of admission to the ICU.

## 2. Antibiotics

Prescribed antibiotics are administered within half an hour of time to be given.

## 3. Sedation hold

All eligible patients have a daily sedation interruption (DSI) (min once daily).

## 4. Mobilisation

All eligible patients are mobilised daily from bed to chair (min once daily).



5.  
Three hourly  
turns (min)  
(repositioning)



6.  
Endotracheal  
or  
tracheostomy  
tubes re-  
taped/re-  
tied & repositioned  
minimum 12  
hourly



7.  
Nasogastric  
tubes re-  
taped/re-  
tied & repositioned  
minimum 12  
hourly

# Framework for practice change

Jarden R, & Sutton, L. (2014). A practice change initiative to improve the provision of enteral nutrition to intensive Care patients. *Nursing in Critical Care*; 20: 214-255.

Jarden, R & Quirk, S. (2010). Improving safety and documentation in intra-hospital transfer; development of an intra-hospital transport tool for critically ill patients. *Intensive and critical care nursing*; 26: 101-107.

**PRACTICE DEVELOPMENT**  
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## A practice change initiative to improve the provision of enteral nutrition to intensive care patients

Rebecca J Jarden and Lynsey J Sutton

**ABSTRACT**  
**Aim:** To describe a practice change initiative that improved the provision of enteral nutrition (EN) to patients in a New Zealand tertiary intensive care unit (ICU).  
**Methods:** The project reviewed and summarized EN literature, amended local policy, and an evidence-based EN delivery algorithm was developed. The EN practice change initiative was implemented and evaluated. Data was collected and analysed in a pre-audit (2009) and a post-audit (2013).  
**Results:** Comparison of the pre-audit (N=25) and the post-audit (N=40) data demonstrated improvements in three areas of EN delivery. The commencement of early EN within 24 h of admission was evident for a large proportion of patients in both 2009 and 2013 audits. There was a large reduction in time between the two audits for both ICU admission to achievement of EN goal rate (M=57.71 h versus M=33.79 h, p=0.006) and also for EN commencement to achievement of EN goal rate (M=31.65 h versus M=10.15 h, p=0.000). The volume of prescribed EN delivered on days 2, 4 and 6 was greater in the 2013 audit in comparison to the 2009 audit. Staff compliance with adhering to the EN policy and algorithm improved from 46% in 2009, to 95% in 2013.  
**Conclusions:** The practice change has significantly improved the practice delivery of EN for patients in the local ICU resulting in optimal care.  
**Relevance to clinical practice:** Malnutrition is highly prevalent among intensive care patients. Strategies and initiatives that improve the delivery of enteral nutrition to the critical care population is therefore vitally important. This article describing such an initiative is thus highly relevant to all health care professionals delivering enteral nutrition in intensive and critical care units.  
**Key words:** enteral nutrition • gastric residual volumes • intensive care • literature review • practice change

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**SERVICE IMPROVEMENT ARTICLE**

## Improving safety and documentation in intrahospital transport: Development of an intrahospital transport tool for critically ill patients

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**KEYWORDS**  
Intensive Care Unit (ICU);  
Intrahospital transport;  
Guidelines;  
Patient safety

**Summary** Transporting the critically ill patient is described within the literature as a high-risk procedure. Both guidelines and minimum standards are available to inform practice. However, a practical, clinically useful, and evidence-based document (tool) for the ICU nurse to use when transporting a critically ill patient was not identified in the literature. Consequently, the development of an intrahospital transport tool is described. This transport tool was designed to mitigate the risks associated with patient transport by providing the Intensive Care Unit (ICU) nurse with an integrated documentation record, incorporating patient assessment with a procedural guideline. The result is a framework for the ICU nurse to use throughout intrahospital transfers, informing and supporting them to provide and document continuity of nursing care. The potential benefits of using this tool is enhanced patient outcomes through safer ICU intrahospital transport processes.  
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# Project Overview



## Initiate

1. Gather team and identify stakeholders.
2. Literature review
3. Baseline data collection June – Dec 2014.

## Engage

Jan 2015;  
Standards Roll Out: Information dissemination & reporting of baseline data.  
Awareness & focus to staff.

## Enable



## Sustain

Monthly and annual reporting of results through variety of different means.

# Engage and focus staff



- Dissemination of quarterly and annual results/reports to the whole unit (Dashboard, TV screen, monthly unit updates pdf).



- Review of 24 hour flow charts to reflect standards (visual reminders).
- Mobilising, nutrition and sedation holds addressed at every ward round with medical staff and nurses.
- Importance of the key standards iterated to new staff during their orientation.
- Education on relevant study days.



Most importantly





# Results (mean percentage)



	2014	2015	2016
EN within 24 hours of admission.	89%	94%	93%
Antibiotics given within half an hour of time to be given.	79%	83%	90%
Daily sedation interruption (DSI) (min once daily).	76%	100%	92%
Daily Mobilisation (min once daily).	70%	83%	81%
Turning 3 hourly (min).	82%	83%	86%
ETT/TT tapes retied and tube repositioned 12 hourly.	80%	94%	82%
NGT tapes retied and tube repositioned 12 hourly.	80%	84%	74%



# Importantly.....

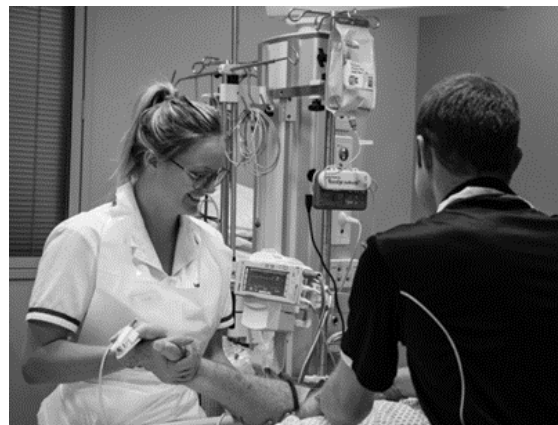
- Collaboration with medical staff, senior nursing staff, health care assistants, dietitian, speech and language therapist and physiotherapy teams crucial.





# Summary

- Using a framework for practice change continues to support locally developed quality improvement initiatives with good results.
- Positive feedback to staff on areas of success helps to bolster morale, improve culture of the unit and contributes to better nursing care and improved patient outcomes.
- Using a collaborative approach is key to achieving high quality care.



# Finally.....

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PRACTICE DEVELOPMENT

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## Improving the quality of nurse-influenced patient care in the intensive care unit

Lynsey J. Sutton and Rebecca J. Jarden

### ABSTRACT

**Background:** Quality of care is a major focus in the intensive care unit (ICU).

**Aim:** To describe a nurse-initiated quality improvement (QI) project that improved the care of critically ill patients in a New Zealand tertiary ICU.

**Design:** A framework for QI was developed and implemented as part of a practice change initiative.

**Methods:** Audit data were collected, analysed and reported across seven nurse-influenced patient care standards. The seven standards were enteral nutrition delivered within 24 h of admission, timely administration of antibiotics, sedation holds for eligible patients, early mobilization and three pressure ulcer prevention strategies.

**Results:** Comparison of audit data collected in 2014 and 2015 demonstrated improvements in five of the seven standards. Those standards with the largest practice improvements were related to the following standards: all eligible patients have enteral nutrition commenced within the first 24 h of ICU admission (3% increase); all eligible patients receive antibiotics within 30 min of prescription time (6% increase); all eligible patients have a daily sedation interruption (DSI; 24% increase); and all eligible patients are mobilized daily in their ICU stay (11% increase in percentage of patients mobilized daily).

**Conclusions:** The nursing-initiated QI project demonstrated improved ICU patient care in relation to early enteral nutrition commencement, DSIs and early and daily mobilizing.

**Relevance to clinical practice:** The use of a nursing QI framework incorporating audit and feedback is one method of evaluating and enhancing the quality of care and improving patient outcomes. This initiative demonstrated the improved quality of nursing care for ICU patients, particularly in relation to early enteral nutrition commencement, timely antibiotics, DSIs and daily mobilizing. It is thus highly relevant to critical care nursing teams, particularly those working to create a culture where change is safe, achievable and valued.

**Key words:** Audit • Nursing care • Practice change • Quality of care

# Thankyou

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