

# Influencing Frontline Nurses Through an Academic- Practice Partnership to Drive a PCU Quality Improvement Initiative

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# No disclosures

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# Learning Objectives

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1. The learner will be able to discuss benefits of an academic practice partnership in the mentoring of frontline nurses as innovators in translating data into excellence in care.
2. The learner will be able to examine how effective EBP strategy solutions to address one problem can be successfully applied to an unrelated problem

# Background

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- Level 1 trauma regional academic medical center
- Safety-net medical center
- ED inpatient throughput times twice the national average.
- ED overcrowding and extended boarding times have been directly associated increased mortality and length of stay (Singer et al., 2011)
- Progressive Care Unit (PCU) - manage care of patients on the critical care spectrum, but at a lower acuity level (AACN, 2016)

# Background of PCU

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- Our PCU had 6 beds
- Lack of available PCU beds contributed to:
  - ED overcrowding
  - ED diversion status
  - High ED nurse workload
  - over flow admission to:
    - ICU
    - Burn Center
    - Postanesthesia Care Unit (PACU)

# Nursing Practice Congress

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- Place for frontline nursing staff to bring issues for resolution
- Part of our shared governance model
- Uses an academic-practice partnership model between the Medical Center and the College of Nursing
- Faculty advisors to NPC mentor frontline nurses in:
  - Integrating evidence-based practice
  - Making decisions (Dearmon, Riley, Mestas, & Buckner, 2015; Riley, Mestas, Dearmon, & Buckner, 2016)

# NPC and PCU Issue

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- Frontline nurses identified issue of inappropriate designation and retention of PCU Patients
  - Brought issue to Nursing Practice Congress (NPC)
  - NPC voted to form a Professional Action Coordinating Team (PACT)

# PCU PACT

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- PCU PACT had no faculty advisor for > 1 year
  - Lacked data to enable implementation of an action plan.
- Adding faculty advisor with a background in clinical research to the PACT enabled:
  - Thoughtful clarification of the problem
  - Formulation of realistic goals
  - Data driven analysis of the problem



# PCU Pact Process with Faculty Member

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- Reviewed medical center's admission policy & procedure
  - No clear criteria for admission or transfer
- Reviewed literature for PCU admission and extended retention
  - Used the Society for Critical Care Medicine Guidelines for Admission and Discharge for Adult Intermediate Care Units (Nasraway et al., 1998)
  - Dearth of literature on strategies for enhancing PCU throughput

# PCU Pact Process with Faculty Member

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- Reviewed related literature for application to PCU throughput
  - High reliability organizations (HROs) use checklists to standardized processes
  - Lack of examination regarding potential care process failures identified as a contributing factor for health care organizations difficulty in evolving to HROs (Vogus & Hilligoss, 2015)
  - Nurse driven checklists associated with decreased incidences of nurse sensitive indicators such as CAUTIs (Parry, Grant, Sestovic, 2013).
- Created PCU Status Re-Assessment Checklist

# PCU Status Re-Evaluation Checklist

Patient Sticker

## PCU Status Tool

**Admission to PCU Instructions:** RN to complete when patient receives PCU orders. RN to hand-off completed "PCU Tool" to PCU RN upon transfer.

Admitting Diagnosis	
Admitting Physician	
Date/Time PCU order written	
Date/Time PCU bed available	

1. Does patient meet PCU admission criteria (refer to table on back of tool): Yes No
2. If patient does not clearly meet PCU criteria, state MD's reason for admission:
3. At time of transfer to PCU, does patient still meet PCU criteria: Yes No
4. Was there any delay in patient getting a bed in PCU? If so, why?

Signature: \_\_\_\_\_ Date/Time: \_\_\_\_\_

**Continue or Discharge from PCU Instructions:** PCU RN to complete to evaluate readiness to transfer patient. PCU RN to hand-off completed "PCU Tool" to RN upon transfer.

Time period	12 hours	24 hour	36 hour	48 hours	60 hours	72 hours
Date & Time						
Does patient still meet PCU admission criteria? Yes or No						
Is patient requiring extensive nursing care? (example: requires 3 staff members to position, requires frequent safety interventions) Yes or No, If "yes", explain						
Nurse Signature						

PCU Admission Criteria	
<b>Cardiac</b>	Acute Coronary Syndrome
*may be on a non-titratable infusion initiated in a SCA	Dysrhythmias* (patient may not be receiving temporary pacing)
	Moderate congestive heart failure without shock*
	Pre and Post Coronary Intervention, without a sheath *
<b>Pulmonary</b>	Acute but stable exacerbation of chronic respiratory disease
	Pulmonary contusion
	New permanent tracheostomy, suctioning no > q 2 hrs
	Stable home ventilated patients per management approval
<b>Neurological</b>	Stable ischemic stroke with neuro checks no > q2hrs
	Post traumatic brain injury requiring neuro checks and intervention no > q2hrs
	Stable post surgical spinal cord injury
	Acute but stable exacerbation of chronic neurological disorder
<b>Gastrointestinal</b>	GI bleed with minimal orthostatic hypotension
	Acute but stable exacerbation of chronic liver failure or pancreatitis
<b>Endocrine</b>	DKA (transfer to ICU if BG checks q 1hr for > 24hrs)
	Hyperosmolar state with resolution of coma
<b>Close observation</b>	Patient with psych consult that are potentially harmful to self/others
<b>Other</b>	Diagnoses not specified, requiring vital signs and intervention no >q2hrs

Exclusions to PCU Admission
Vital signs, neuro checks, neurovascular checks > q2hs
Respiratory suctioning > q2hrs
Invasive hemodynamic monitoring
Severe Sepsis and Septic Shock Algorithm
Invasive procedure requiring conscious sedation
Arterial and femoral sheaths, including TR bands



# Hypothesis

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The utilization of a nurse driven checklist for determining PCU status and re-evaluation similar to the strategy used by Parry et al. (2013), could decrease PCU length of stay (LOS) and improve appropriate PCU status designation, therefore improving PCU throughput.

# Data Collection

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Data collection examined the time the patient:

- was designated as a PCU status patient,
- physically arrived to the PCU,
- status was changed from PCU status, and
- patient physically left the PCU

Baseline (one quarter 2015): n= 114

Post-Implementation (one quarter 2016):

(a) Tool used: (n = 116)

(b) An unintended control group (n = 124)

# Results

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	Average (Mean) Time as PCU Status Pt	Median Time as PCU Status Pt
Baseline (n = 114)	117.78 Hours	63.19 hours
Post Implementation- No PCU Status tool used (n = 116)	72.9596 Hours	48.3350 Hours
Post Implementation- PCU Status Tool used (n = 124)	46.9820 Hours	25.5500 Hours

# Results

## - Mann-Whitney U Test

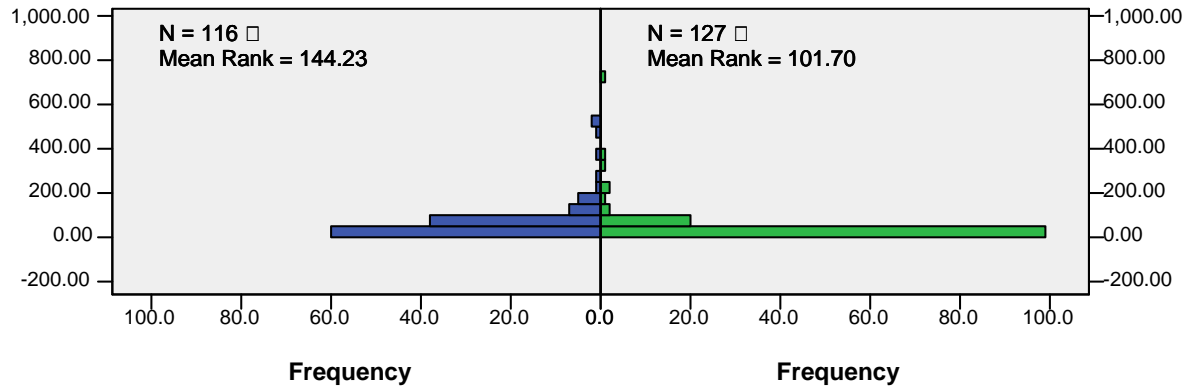
-SPSS version 24

### Independent-Samples Mann-Whitney U Test

PCU Tool Group

Tool NOT Used

Tool Used



<b>Total N</b>	243
<b>Mann-Whitney U</b>	9,944.500
<b>Wilcoxon W</b>	16,730.500
<b>Test Statistic</b>	9,944.500
<b>Standard Error</b>	547.310
<b>Standardized Test Statistic</b>	4.711
<b>Asymptotic Sig. (2-sided test)</b>	.000

# Discussion

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- Analysis demonstrated 22% unmet need for PCU bed
- Increased PCU capacity by 2 beds
- PCU is continually at full capacity
- Transitioned PCU PACT into a standing sub-committee under EBP committee



# Implications for Nursing Practice

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- Academia introduces evidence based practice (EBP) to students; however, the forum to integrate EBP into daily practice must be thoughtful and meaningful.
- Frontline nurses develop skills toward deliberate, thoughtful, and meaningful integration of EBP into practice.
- Academic mentors develop acute awareness of challenges and issues relevant to modern healthcare, and are welcomed in the practice environment as real team members.
- This partnership informs relevant education of current and future students, positively influences nursing practice and leads change toward improved patient outcomes.

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# Questions?

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