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ABBOTT NORTHWESTERN HOSPITAL

Progressive Care: Integrating Flexible Beds into a Med-Surg Unit

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Abbott Northwestern Hospital

- Largest not-for-profit hospital in the Twin Cities area
- Quaternary teaching medical center
- 952 licensed beds
- Serves 200,000 patients / year
- 2,200 RNs
- Magnet designated

Purpose

This presentation will outline information about the process and development of incorporating progressive care (PC) beds into a Med-Surg unit with the goal to provide the right care in the right place, advance nursing knowledge, and reduce intensive care unit closures.

Background

- ICU closures increased due to bed issues and/or staffing issues, resulting in decrease in ICU bed availability in the hospital
- Data was collected to identify patients with the need for intermediate level of care. Data showed:
  - The primary reason for needing a stepdown bed was respiratory diagnosis
  - The second highest reason was for heavy care needs and/or closer monitoring
- At the time, the hospital did not have a PC unit
- A Med-Surg unit with primarily respiratory diagnosis or surgery piloted the PC beds

Literature Review

- PC bed usage has significantly increased for Medicare patients between 1996 and 2010
- Research is lacking for PC beds integrated within a Med-Surg unit
- There are not specific standardized definitions for PC patients. Only generalized concepts exist in the Society of Critical Care Medicine guidelines

Planning for PCU

Goal: Provide right care in the right place

- The interprofessional team consisted of collaborative efforts between Hospitalists, Intensivists (critical care), Emergency Department Providers, Respiratory Therapy, and Nursing (from ICU and Med/Surg)

Planning

Development of Inclusion/Exclusion Criteria:
- Respiratory
- Chronic Ventilator
- Sepsis
- GI Bleed
- Diabetic Ketoacidosis (DKA)
- Sub-massive PEs
- Optional Variance diagnosis

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Guidelines for E4000 Progressive Care beds

Inclusion-Exclusion Criteria for E4000 Progressive Care Beds

Respiratory patients

Inclusion Criteria

- Patient has respiratory failure requiring BIPAP, but felt to be stable or improving (not nearing intubation)
  - Patient on BIPAP must be alert, cooperative, able to remove full mask when needed
  - Patient has uncompromised airway
- Patient who has the ability to control secretions requiring no more than Q2hr suctioning (oral or NT suctioning)
- Patient on heated High Flow O2
- Patients with primary respiratory diagnosis requiring increased respiratory assessments
  - Recent extubation but not nearing re-intubation

Exclusion Criteria

- Patients physically unable to remove the BIPAP mask when needed or impaired cognition prevents them from removing the mask
- Concerns about airway stability or management (i.e. known difficult airway, airway edema, high risk for urgent/emergent intubation)

ZL1

Methodology: Measures

- Process Measures:
  - Capture Rate
  - Patient Type
  - ICU Transfers within 24 hours of admission
  - RRT calls within 48 hours of PCU admission
- Outcomes Measures:
  - ICU Closure Rates
  - Length of stay (LOS)

Implementation and Expansion Timeline

Pilot go-live **February 28th, 2017**
- Respiratory Patients
- Accept transfers from PB2000 only

1st patient 3/13/2017

May 31st 2017
- Expand to accept transfers from CV-ICU
- Up to 3 beds

November 2017
- Accept PCU patients from all inpatient units
- 1 ICU bounce back
- RRT rate lower than E40 gen pop

April 10th 2018
- PCU Expansion to more diagnoses
- Sepsis, GI Bleed, DKA, Chronic Vent (May 10th)
- PCU open to ED and direct admits
- Up to 6 beds
- Trained some float pool

July 2019
- Expand to more diagnoses
  - ~Sub Massive Pulmonary Embolism
  - ~Hepatobiliary and thoracic surgery

Results:

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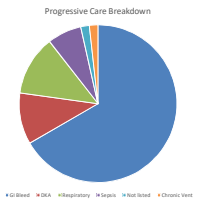
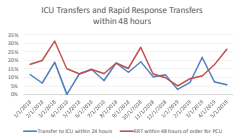
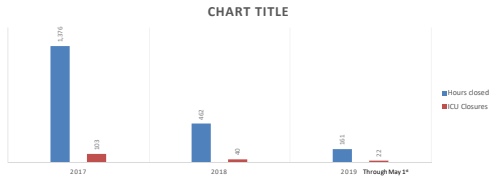




Outcomes

- As time goes on we get better



Barriers

- Unable to take PC patients due to the unit being at bed capacity
- Providers not writing adequate order for PC (the charge nurse then needs to contact physicians to obtain order)
- Providers unfamiliar with criteria
- Inadequate number of trained staff to take the PC patients (not all float pool staff trained)
- Geography of unit

Slide 8

ZL1 insert graphic
Zachary Linde, 8/7/2019

Slide 10

GA1 These colors don't match up and I don't know how to change them!!
Gode, Autumn, 8/1/2019

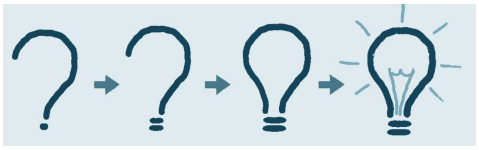
Conclusion

- PC beds incorporated into a Med-Surg unit provides the right care at the right time for patients
- Low transfer to the ICU rates demonstrate this is a safe and effective way to care for patients not needing full intensive care interventions
- PC beds can reduce ICU days and open beds for more critically ill patients

References

REFERENCES

1. Sjoding MW, Valley TS, Prescott HC, Wunsch H, Iwashyna TJ, Cooke CR. Rising billing for intermediate intensive care among hospitalized Medicare beneficiaries between 1996 and 2010. Am J Respir Crit Care Med. 2016;193(2):163-170
2. Nates JL, Nunnally M, Kleinpell R, et al. ICU admission, discharge, and triage guidelines: a framework to enhance clinical operations, development of institutional policies, and further research.Crit Care Med. 2016;44(8):1553-1602



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