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Acuity Tool Use in a Pediatric ICU

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BACKGROUND / INTRODUCTION

- The current method of patient assignments on the pediatric units at LVHN is based on the charge nurse's subjective judgment
 - In a survey distributed to 14 PICU RNs, 84.6% report having difficulty making equal patient assignments when serving as a charge RN
 - Equality of patient assignments is defined in this project as equal nurse workload. For example, an unstable PICU patient may be equal in workload to 2 stable PICU patients.
- Research has shown that use of an acuity tool in a pediatric inpatient setting has increased nurse satisfaction in regard to patient assignments and has assisted charge nurses to create equal assignments based on objective criteria patient assignments

METHODS

- Implemented in the LVHN CC Pediatric ICU, 8 bed unit with 4-6 RNs per shift for approximately 4 weeks
- Survey to staff and charge RNs before and after implementation of Acuity Tool
- Acuity tool implemented
 - Intended to be used on every patient once during each shift to aid the charge nurse in creating equal patient assignments for the oncoming shift
 - 117 acuity tools filled out by staff RNs

OUTCOMES

- Of 13 RNs who responded to the survey after implementation of the tool:
 - 38.4% RNs felt assignments were equal to others on the floor, down from 64.3% prior to implementation
 - 46.1% think patient assignments were made more objectively using the acuity tool
 - 4 charge RNs felt that the acuity tool was helpful in making patient assignments
 - There was a slight decrease in nurse satisfaction with use of acuity tool to create patient assignments from 7.8/10 to 7.46/10.

Acuity Category	1	2	3	4
Complicated Procedures	___ Continuous Pulse Ox ___ Foley ___ Oral Care ___ Telemetry ___ Drains ___ <4LNC	___ >4LNC O2 ___ BiPAP/CPAP at naps/nightly ___ Trach with routine care ___ PICC/Central Line ___ NG/NJ Tube ___ Incontinent ___ PCA/ Epidural ___ Rectal Tube ___ Isolation ___ Fall Risk	___ High Flow O2/home vent ___ Continuous BiPAP/CPAP ___ New Trach or frequent suctioning ___ Trach care ≥3x/shift ___ Wound/dressing change <1h ___ Ostomy ___ Q1/Q2 Neuro or Blood Glucose checks ___ Chest Tube ___ Unfinished admission ___ Arterial Line	___ Total Care ___ Restraints ___ Confused, restless, combative ___ Total Feed ___ ETT ___ Dressing Change >1h ___ Post code/rapid response ___ Ventriculostomy
Education	___ Standard	___ New meds, side effects	___ Discharge today ___ Family education ___ Pre/post procedure	___ New Diagnosis ___ Inability to comprehend ___ Multiple Comorbidities
Psychosocial or Therapeutic Interventions	___ ≤2 interventions per shift	___ 3-5 interventions per shift	___ 6-10 interventions per shift	___ >10 interventions per shift
Oral Medications	___ 0-5 per shift	___ 6-10 per shift	___ 11-15 per shift	___ ≥16 per shift
IV drugs and other meds	___ Glucometer with coverage ___ Continuous IV fluids	___ 2-5 IV meds	___ >5 IV meds ___ Heparin/K+ protocol ___ TPN	___ Blood/blood products ___ Continuous sedation meds ___ Cardiac drip ___ Insulin drip
Acuity Total:	1: 1 to 15	2: 16 to 30	3: 31 to 45	4: >45

RESULTS

- The use of an acuity tool did not increase nurse satisfaction in regard to patient assignments
- Charge RNs did not find the use of the acuity tool helpful when creating patient assignments
- Other factors that could have skewed results:
 - Compliance using the tool was variable
 - Nurse to nurse scoring was variable
 - Decreased satisfaction with assignments over the 4 weeks could be related to extraneous variables, i.e. overall acuity of the floor increasing
- Due to the small sample size and limited time frame, a future robust pilot of the tool would be valuable

CONCLUSIONS

- The results of this pilot did not prove to be significant, therefore, it is difficult to draw a final conclusion on whether an acuity tool would be valuable
- Suggested next steps would be:
 - Trials with increased sample size, longer time frame
 - Trials on larger unit with more nurses to survey
 - Further research on different available acuity tools
 - Surveys of other children's hospitals for existing acuity tools that are not present in literature

References:

Dini, A., Guirardello, E. (2014). Pediatric patient classification system: improvement of an instrument. *Rev Esc Enferm*, 48(5):786-92

Harper, K., & McCully, C. (2007). Acuity systems dialogue and patient classification system essentials. *Nursing Administration Quarterly*, 31(4), 284-299.

Kidd, M., Grove, K., Kaiser, M., Swoboda, B., Taylor, A. (2014). A new patient-acuity tool promotes equitable nurse-patient assignments. *American Nurse Today*, 9(3), 1-4.

Thomasos, E., Brathwaite, E. E., Cohn, T., Nerey, J., Lindgren, C. L., & Williams, S. (2015). Clinical Partners' Perceptions of Patient Assignments According to Acuity. *MEDSURG Nursing*, 24(1), 39-45.

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