Appendix 1: OptiLink Criteria at the time of the study in the PICU at The Children’s Hospital of Philadelphia

|  |  |
| --- | --- |
| OptiLink Acuity Level | Criteria |
| Low Acuity Patients  (~16% of the unit) | * Uncomplicated admission (i.e. VPS malfunction, PACU after phase 1) * Stable awaiting discharge * Drains/dressings: chest tube, VAC * Stable acuity with telemetry monitoring * Stable vital signs and assessment * Pending transfer to lower levels of care |
| Average Acuity Patients  (~66% of the unit) | * Art line/CVP, low dose vasopressor * Bedside procedure (ex. CVL or chest tube placement) * DKA patient with pH>7.0 * Dressing change with sedation * ICP monitoring stable * Intubated: stable vent settings * Invasive hemodynamic monitoring with multiple lab draws (Q1/Q2) * Peritoneal Dialysis or Hemodialysis * Positive Airway Pressure * Post op recovery (phase 1) * Stable pulmonary hypertension * Q1 hour assessments |
| High Acuity Patients  (~16% of the unit) | * Multiple bedside procedures per shift * Blood products > 3 or more units per shift, exchange transfusion * Complex dressing changes requiring sedation * Continuous renal replacement therapy * Fresh trach < 7 days * ICP monitoring: unstable ICPs * Multiple vasopressors * Multi-system trauma patient with hemodynamic or respiratory instability * Sepsis pathway initiation * Unstable HFOV or VDR |
| Extreme Acuity Patients (~2-3% of unit) | * ECMO * Admission or transfer of patient requiring multiple interventions * OR procedure performed at bedside * Organ donor patient * Resuscitation * Unstable shock |

Appendix 2: Safety Huddle Review Script and Bedside Rounding Review Script

*Part 1: To review with charge nurses prior to huddle:*

* Today’s high alarm patients are:
* Any new clinical concerns about these patients?

*Part 2: To be stated during safety huddle:*

* Rooms \_\_\_\_\_\_\_\_ have very high alarm rates despite being labeled by Optilink as low acuity.  Please review these patients on rounds.
* *Hand bedside alarm rounding review sheet to the bedside nurse.*

*Part 3: Alarm Bedside Rounding Review Tool*

* Room \_\_\_\_\_\_
  + High alarms for

☐ SpO2 % low ☐ SpO2% high ☐ RR low ☐ RR high ☐ HR low ☐ HR high

* Are the monitoring parameters still appropriate?
* For the bedside nurse:
  + What seems to be causing the alarms?
  + Is the monitor functioning correctly?
  + Are the alarms real or are they due to movement, sensor/lead position, or something else?
* For the provider team:
  + What values would make us want to take action? (for example, increase oxygen for low SpO2)
  + Should any of our settings be adjusted to reduce alarms that we all agree we wouldn’t intervene on?
  + If we all agree to change the alarm, could you enter that order now and we will make the change on the bedside monitor?