Implementing a Video Patient Observation Program: Lessons from a Tertiary Care Children’s Hospital

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**Introduction**

**Background:**
Patient Safety Attendants (PSAs) have been utilized in a wide array of health care settings for decades. However, PSA education, efficacy and cost research are highly inconsistent for diagnosis outside of falls (ex. delirium, elopement, or self-harm.)

Growing volumes of technology dependent patients and pediatric psychiatric boarders has resulted in increasing patient safety observation needs within our children’s hospital, as well as increased system cost. The multidisciplinary behavioral health task force (BHTF) was created to consider alternative observation models, such as video patient observation (VPO,) safety banding, and room alarms.

Our needs assessment brought to light three key issues: 1. Our system had experienced a significant increase in staffing needs for patient observation. 2. There was a lack of standard PSA selection and education, and 3. An increase in documented safety events related to patient observation.

**3 Primary AIMS:**

1. To explore the feasibility of a virtual patient observation program (VPO) for pediatric patients with specific behavioral, clinical, or social diagnosis
2. To standardize education of health care technicians, providers and nursing about patient observation, professional boundaries, therapeutic relationships, and de-escalation.
3. To increase sitter productivity and decrease cost inefficiency.

**Results:**

Program feasibility, utilization, safety, and cost savings where evaluated during implementation.

**Improvement Process:**

After review of the current care model, knowledge gaps, and national best practices, our team created a blended sitter program working in three phases:

**PHASE ONE: VPO program development**
- Adaptation of VPO/ IPO decision tree
- Incorporate into EMR
- Equipment purchase
- Staff Allocation

**PHASE TWO: Education**

**Observation of Patients with Technology Dependence**

**PHASE THREE: IPO/VPO Comparison**

In head to head comparison period:
- VPO found adequately observing 26% of the time
- MORE often than matched IPOs
- Average VPO response time was <1sec

**Discussion**

This process shows that VPO technology can be utilized in the pediatric hospital setting, when used in with a well-designed PSA program. Future programs have potential to improve PSA education, reduce hospital cost and improve patient & staff safety.

More studies and quality improvement are needed focusing around retention, fidelity, & diagnosis specific safety. Our team continues this improvement process with these focuses.

**References**

11. Gomperts, M. “National patient safety goals: Hospital program.” Joint Commission, Oakbrook Terrace, IL; 2010
12. Gomperts, M. “National patient safety goals: Hospital program.” Joint Commission, Oakbrook Terrace, IL; 2010

**Projected VPO Cost Savings**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Patients Observed (n)</th>
<th>Blended Model</th>
<th>Traditional Model</th>
<th>PSA Hourly Rate</th>
<th>Program Cost</th>
<th>Cost Savings</th>
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<td>Staff #</td>
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