**Background**

Children with Medical Complexity (CMC) commonly interact with the medical system, often at great cost. Their care can be complicated by duplication and errors leading to suboptimal patient outcome and patient/family experience.

**Objective**

Nationwide Children’s Hospital’s (NCH) 2013 – 2018 Strategic Plan includes an element known as “Navigate My Care” (NMC), which encompasses the goal to improve the patient/family experience and the overall care of CMC.

**Description**

- Patients with cerebral palsy (CP) were chosen as a proxy group for understanding the challenges that affect patients with complex, chronic illness, including:
  - Frequent hospital admissions
  - Inefficient scheduling amongst multiple providers
  - Confusing and/or conflicting medical recommendations
  - Poor alignment of the family and medical team goals

- Efforts to date have centered on meeting the goal outlined in our specific aim through impacting the key drivers (Figure 1).

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**Navigate My Care**

- **Specific Aim:**
  - **Key Drivers:**
    - Improve the efficiency of referral process through (a) Global Coordination of Care, (b) providing non-interruption to patient/family education, and (c) patient/family experience.
    - **Exemplars:**
      - Care coordination
      - Provider activation
      - Transitions of care

  - **Performance Measures:**
    - Improvement in patient/family satisfaction
    - Decrease in hospital readmissions
    - Improvement in patient/family education

  - **Strategic Goal:**
    - Improve the efficiency of referral process through (a) Global Coordination of Care, (b) providing non-interruption to patient/family education, and (c) patient/family experience.

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**Sample Interventions**

- **Suggested Process Map for Pre-Trach Placement**
  - **Non-Emergent Trachea Placement**
  - **Unplanned Prior to Admission**

- **Process Step**
  - **Decision Point**
  - **Outcome**

- **Figure 2. Draft of process map for pre trach placement care coordination**

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**Learning and Discussion**

- **NMC is helping to reduce redundancy and increase alignment** in patient care amongst multiple providers caring for children with CMC.

- **Our trach QI team is interdisciplinary and multispecialty**, which allows us to negotiate and delineate roles/responsibilities, processes, and timelines for trach patients across the continuum of care.

- We have observed significant reductions in utilization by children with feeding tubes, while improving measures of health.

- **CP Team Clinic families are satisfied** with their healthcare experience; we will seek to maintain parent activation and satisfaction as the clinic expands.

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**Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Current</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient days per 100 CP patients per month</td>
<td>22</td>
<td>16.4</td>
<td>25% ↓</td>
</tr>
<tr>
<td>Preventable harm events per 100 hospital days per month for CP patients</td>
<td>2.7</td>
<td>2.4</td>
<td>11% ↓</td>
</tr>
<tr>
<td>Parent satisfaction with CP Team Clinic</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of CP Team Clinic parents at Level 4 on the P-PAM©</td>
<td>61%</td>
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<tr>
<td>7-day unplanned, related hospital readmissions per 100 discharges for all patients</td>
<td>3.5</td>
<td>3.4</td>
<td>3% ↓</td>
</tr>
<tr>
<td>Hospital admissions per 100 tube feeding patients per month</td>
<td>15.5</td>
<td>13.6</td>
<td>13% ↓</td>
</tr>
<tr>
<td>Census days per chronic trach patient per month</td>
<td>1.4</td>
<td>1.1</td>
<td>21% ↓</td>
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<tr>
<td>Days to trach placement after admission</td>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days to discharge after trach placement</td>
<td>46</td>
<td></td>
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</tr>
</tbody>
</table>

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