Standardizing triage nurse – provider communication in an acute care setting

St. Jude Children’s Research Hospital
Mission Statement: The mission of St. Jude Children’s Research Hospital is to advance cures, and means of prevention, for pediatric catastrophic diseases through research and treatment. Consistent with the vision of our founder Danny Thomas, no child is denied treatment based on race, religion or a family's ability to pay.

Founded by Danny Thomas in 1962

70+ inpatient beds, hybrid model with many patients receiving outpatient therapy living in adjacent housing

The Acute Care Clinic for Established Patients (ACC) was launched in 2020 to provide around-the-clock access to specialized care in an outpatient setting.

www.stjude.org
Team members

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Pediatric Hematologist-Oncologist

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APP – Pediatric Hematology-Oncology

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Pediatric Hematologist-Oncologist
Problem Statement

Numerous events, including a significant adverse patient event, have been reported involving the after-hours triage process in the medicine room. Clinical providers report that standardized hand off obtained from triage nurses occurs only 25% of the time, which leads to more than 75% of providers having decreased comfort in giving a clinical decision due to lack of important information.
**Problem Statement**

Standardized hand-off obtained from triage nurses occurs only 28% of the time, leading to more than 75% of providers having decreased comfort in giving a clinical decision due to lack of important information.
<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure: Standardization index</td>
<td>% of handoffs using standardized format</td>
</tr>
<tr>
<td>Patient population: incoming phone calls from pt/caregivers</td>
<td>All phone calls coming from on therapy patients calling triage nurses in med room</td>
</tr>
<tr>
<td>Calculation methodology: (i.e. numerator &amp; denominator)</td>
<td># of phone calls presented on a standardized form / total triage calls</td>
</tr>
<tr>
<td>Data source:</td>
<td>TBD</td>
</tr>
<tr>
<td>Data collection frequency:</td>
<td>Weekly</td>
</tr>
<tr>
<td>Data limitations: (if applicable)</td>
<td>TBD</td>
</tr>
</tbody>
</table>
## Secondary Outcome Measure
### Baseline data summary

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure: Provider’s comfort</td>
<td>Provider comfort level determining severity of illness based on Triage RN hand offs</td>
</tr>
<tr>
<td>Patient population: N/A (Exclusions, if any)</td>
<td></td>
</tr>
<tr>
<td>Calculation methodology: Survey (i.e. numerator &amp; denominator)</td>
<td># of surveyed providers who felt comfortable making decision based on hand offs /total providers surveyed</td>
</tr>
<tr>
<td>Data source:</td>
<td>Provider surveys</td>
</tr>
<tr>
<td>Data collection frequency:</td>
<td>Monthly</td>
</tr>
<tr>
<td>Data limitations: (if applicable)</td>
<td>Difficulty in getting providers to answer survey (survey fatigue)</td>
</tr>
</tbody>
</table>
I am given the information obtained in phone triage in a consistent format

14 responses

- 71.4% Never
- 21.4% Sometimes
- 7.1% Often
- Always

Baseline data
Baseline data

I am comfortable advising triage and determining the severity of the situation based on the current triage practices

14 responses

- 35.7% Strongly agree
- 42.9% Agree
- 21.4% Neutral
- Disagree
- Strongly Disagree
Aim Statement

We aim to increase standardized hand offs between provider and triage nurses from 25% to 50% by the end of June 2022, thus increasing provider comfort level in medical decision making.
### Priority Matrix

<table>
<thead>
<tr>
<th>Impact</th>
<th>Ease of Implementation</th>
<th>Priority Matrix</th>
</tr>
</thead>
</table>
| High  | • Development and revision of new triage protocols  
|       | • Implementation of nursing education |
| Low   | • Implement hand off sheet |
|       |                           | Difficult       |

**Ease of Implementation**
### Triage Pathway

- **Parent/caregiver contacts advice line**
- **Call directed to trained triage nurse**
- **Triage nurse performs a rapid initial assessment of the situation.**
- **Data collected and documented in the triage record**
  - **The toxicity scoring the highest grading takes priority**
  - Advice and action should be according to the assessment tool, this should be recorded on the triage sheet

#### Symptoms may be managed at home
- Instructions for care given to caregiver, and asked to call back if the situation changes

#### Symptom Categories
- **1 Yellow only**
  - Requires follow up review within 24 hours
  - 2 or more yellows = RED

#### Red toxicity or problem requires URGENT assessment
- Inform assessment team providing as much information as possible.

- **Does the patient live more than one hour from St. Jude?**
  - Yes  
  - No  

- **Triage log completed with a record of the actions taken. Appropriate medical team informed of the patient's symptoms/problems**

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### Triage Rapid Assessment Log Sheet

<table>
<thead>
<tr>
<th>Hospital department:</th>
<th>Patient history</th>
<th>Inquiry details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
<td>Diagnosis (yes, other diagnosis / can walk-in):</td>
<td>Date: Call start time:</td>
</tr>
<tr>
<td>MRN:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cell number:</td>
<td>Caller's relationship to the patient and name:</td>
<td></td>
</tr>
<tr>
<td>Age: Male [ ] Female [ ]</td>
<td>Phone number for return call</td>
<td></td>
</tr>
<tr>
<td>Phone no:</td>
<td>Reason for the call (in caller's own words):</td>
<td></td>
</tr>
</tbody>
</table>

What treatment is the patient receiving? (Please tick below)

- [ ] Chemotherapy (incl. oral maintenance)
- [ ] Immunotherapy
- [ ] Car-T
- [ ] Radiotherapy
- [ ] Stem Cell Transplant
- [ ] Surgery
- [ ] None

When did the patient last receive treatment?

- [ ] Date

What is the patient's temperature? °C  
**Please note** that hypothermia is a significant indicator of sepsis

When was the patient last discharged / reviewed?

- [ ] Date

Does the patient have a central line? Yes [ ] No [ ]  
Does the patient have a shunt / Dymmys Reservoir / other medical device? Yes [ ] No [ ]

Review of actions taken:

- [ ] Provider Name:

- [ ] Triage Nurse Name:

- [ ] Date:

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*American Society of Clinical Oncology (ASCO) Quality Training Program*
# PDSA Plan

<table>
<thead>
<tr>
<th>Date of PDSA Cycle</th>
<th>Description of Intervention</th>
<th>Results</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Utilization of standard triage worksheet</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overhaul of triage process and implementation of red/yellow/green system</td>
<td></td>
<td></td>
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</tbody>
</table>
Primary Outcome

• Use of standardized triage format
  ▪ We anticipate this to be virtually 100% given it is now mandatory
Secondary Outcome

- Provider comfort with triage information received
Balancing Measure

- Nursing time to complete triage

![Pie chart](chart1.png)

- Less than 5 minutes
- 6-10 minutes

![Pie chart](chart2.png)

- More Time
- Same Amount of Time
Conclusions

• Improving triage process does lead to improved provider comfort
• Change is hard
• Buy in from all parties is NECESSARY
Next Steps

• Continue collecting data with current phase
• Epic transition begins 10/1/2022
  ▪ Triage process built in
• Further PDSA cycles following Epic go live
5/24/2022 visit with Poorna A Gajar, RN for Nurse Triage

Background Information

- Chart Review:
  - Has patient received chemotherapy in the last 6 weeks?
  - Date and type of last chemo

Last ANC and Date

Initial Assessment Questions

1. How was T taken? ***
2. Has the patient had Tylenol or Ibuprofen when the last dose? ***
3. Any recent immunizations? ***
4. Has the patient had CAR-T in the last 2 weeks? ***

RED - Arrange Urgent Review in Infusion Center

Current temp = 38°C

Please note that fever (≥38°C) is a significant indicator of sepsis.

Current temp: 38.3°C (100.9°F or above)

Currently taking aspirin

Is patient dehydrated?

AMBER - RECHECK in 1 HR

"If the patient has 2 or more symptoms in this section, escalate to RED ***"

Current temp: 38.3°C - 38.9°C (100.4°F - 101.8°F)

GREEN - Self Care

Current Temp: 37.0°C - 37.9°C (98.6°F - 100.2°F)

Complete Infection Protocol

Answer Assessment

- Yes
- No

Infection

- Yes
- No

Next

Documentation

- Create Note
Questions?