Decreasing PEG Complications and Improving Communication for Head and Neck Cancer Patients receiving Chemo-Radiation

RCN Head and Neck Disease Site Group

INTRODUCTION

Head and neck (HN) chemo-radiation cancer cases are often complex and patients experience high complication rates. Depending on the complication(s), patients may act by visiting the emergency department (ED) or outpatient clinics including oncology, radiation, and GI clinics where they cannot always articulate their diagnosis, treatment or treatment team. This makes it difficult for staff to determine the correct contact to refer the patient to, resulting in delays and frustration.

Health care professionals (HCP) in the HN team have expressed interest in developing a patient care tool that summarizes key information to facilitate communication between teams including the ED, cancer treatment teams, and other hospital units and clinics.

Further analysis of Percutaneous Endoscopic Gastronomy (PEG) feeding tubes processes, showed us that patients who experience complications often go to their radiation clinic, or directly to the gastroenterology clinic where the PEGs were inserted. Given the high percentage of patients who have a complication with their PEG feeding tubes, resulting in visits to the ED, GI, or radiation clinic, the team decided to look into ways to reduce complications.

OBJECTIVES

- Improve coordination of care and healthcare professional experience: facilitating communication between patients and different HCP teams
- Improve patient experience: providing tools that ensure they are comfortable with the management of their feeding tubes
- Improve quality of care: reducing the number of PEG feeding tube complications and by ensuring ED staff have key information available in a timely manner

METHODOLOGY

A. Patient Care Tool

- **Observations, root causes, data measurement**
- **Patient and staff surveys on current tools and need**
- **Alternatives generation and selection of tool(s)**
- **Training, implementation, & evaluation**

**Potentials for cause of communication gap between HCP teams, in particular ED and treatment (Tx) team:**

- Patients may not always remember their type of cancer or treatment.
- ED staff don’t know who is part of the Tx team or how to contact them.

**Surveys were designed for the following teams to understand the need, current tools, and value of tool creation:**

- ED team
- HN Tx team

**Potential causes for communication gap between HCP teams, in particular ED and treatment (Tx) team:**

- Patients may not always remember their type of cancer or treatment.
- ED staff don’t know who is part of the Tx team or how to contact them.

**Literature review showed us that some tools available at other organizations are business cards or handouts including diagnosis (Dx), Tx, team names, and in some cases, allergies. Other alternatives to be looked into are based on interviews with HCPs and patients and stickers and other tools in accessing documentation on the EMR systems.**

B. PEG Feeding Tubes

<table>
<thead>
<tr>
<th>Observation, root causes, data measurement</th>
<th>Patient training on PEG feeding tube education and tools</th>
<th>Comparison and selection of processes and tools</th>
<th>Training, implementation, &amp; evaluation</th>
</tr>
</thead>
</table>
| **Potential causes for PEG complications:**
  - Patient education
  - Chemotherapy drug used
  - PEG insertion date in relation to the Tx start date
  - PEG insertion process steps
  - PEG removal date
| **Review of tools and processes at the JGH and MUHC showed differences in which teams’ provided education, when education was provided, and the format (in person, video, group session, and the internally-developed handouts).**
  - Additional external review of PEG education tools provide guidelines for content, should education tools be created.
| **Followings changes to the PEG insertion process at MUHC, as advised by infectious disease, the operating room, and the otolaryngology & wound care teams, there are differences in the hospitals’ aseptic techniques and the prophylactic administration of antibiotics. The project team plans to discuss these differences and potentially implement standardization.**

SURVEY RESULTS TO DATE

**Fig 3:** “How useful would a tool with the patient’s problem list (Dx, Tx) and Tx team contact info be during treatment?” (N = 13 HN Tx team HCPs)

<table>
<thead>
<tr>
<th>Information</th>
<th>Emergancy Department</th>
<th>HN Tx Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Name</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>Diagnosis and stage</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>Treatment type</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>Tx team names</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>Level of care</td>
<td>17</td>
<td>11</td>
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CONSIDERATIONS & DISCUSSION

- Some considerations to keep in mind are:
  - Patients are currently receiving tools such as oncology passport, business cards (from different HCPs), and pamphlets
  - A patient care tool would need to be updated with current information as the treatment progresses
  - PEG complication rates may not be captured in the same way by the different teams: at JGH, the nutritionist and radiation oncology nurses document rates while at MUHC, the GI clinic nurses document them

- **Questions for discussion:**
  - How can we ensure that patients carry a tool we create?
  - Who would be the most appropriate person to complete the tool?
  - Does it make sense to create a new tool (if paper-based)? or should education stay the same?
  - Can a similar tool be implemented for other types of cancer?
  - Who should track PEG complications going forward?

NEXT STEPS

**A. Patient Care Tool**

- **Patient surveys to understand lack of use of current tools and need for tool with key information**
- **Discuss EMR possibilities with IT and medical records teams at each hospital**
- **Decide on potential solution**
- **Train, implement, and evaluate**

**B. PEG Feeding Tubes**

- **Patient surveys to identify areas for improvement for PEG education processes and tools**
- **Discuss MUHC’s PEG insertion process at JGH for differences and potential standardization**
- **Train, implement, and evaluate**