**Improving Nurse Navigator Effectiveness and Geriatric Oncology Patient Tracking**

### Project Background

**Nurse Navigator**

Supports geriatric (age 65+ oncology patients through all phases of treatment. Helps remove barriers to care, increase quality of life, and improve outcomes.

**Desired H-Lab contributions:**
- Screening measure suggestions
- Academic and market research
- Process clarification and gaps
- Tangible role and tool opportunities

**Program key challenges:**
- One resource for ~90 patients
- Isolated program for RWMC
- Growing patient population
- Lack of standardized processes
- Ad-hoc collaboration
- Cancer Clinic and hospital intake
- Manual, disparate tracking tools

### Project Description

#### Main Literature


#### Methodology

**General and healthcare-oriented process improvement:**
- Lean Six Sigma – Drive E2E efficiency via value-add activities
- FOCUS-PDCA – Emphasize quality with a defined plan

**Supplemental Data Analyses**
- High variance in patient assessment result

**In-Depth Stakeholder Interviews**
- *Nurse Navigator* – Director of Surgical Oncology
- *Nurse Navigator* – Social Worker
- *Nurse Navigator* – Executive Director of Cancer Services

**Recommended Next steps:**
- Finalize and implement Nurse Navigator patient management workflows
- Work with IT to build automated, symptom-specific patient tracking tools and KPIs
- Align with core care team on role-specific activities
- Approve streamlined screening assessment use and triggers
- Document processes and set QAQC reviews for continued improvement
- Collaborate with SW to align new patient finder (WIP) content and contacts

### Supporting Database Analyses

**Assessment-Based Referral Compliance**

<table>
<thead>
<tr>
<th>Care Referral</th>
<th>Pre-Treatment</th>
<th>30-Day</th>
<th>90-Day</th>
<th>180-Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Worker</td>
<td>148 48 36% 71 32 44% 54 21 31% 30 8 27%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist</td>
<td>12 11 92% 3 3 100% 6 1 100% 0 0 100%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Review</td>
<td>130 74 96% 74 74 100% 74 47 100% 43 46 96%</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Dietician</td>
<td>110 108 98% 68 68 100% 37 37 100% 23 22 96%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Therapy</td>
<td>45 15 43% 41 11 61% 98% 98%</td>
<td></td>
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</tr>
</tbody>
</table>

**Initial Follow-Up Visits**

<table>
<thead>
<tr>
<th>Initial</th>
<th># Patients</th>
<th>Retention Rate</th>
<th># No-Show</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-Up</td>
<td>(311 Total)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90-day</td>
<td>171</td>
<td>56%</td>
<td></td>
</tr>
<tr>
<td>90-180</td>
<td>142</td>
<td>84%</td>
<td>28</td>
</tr>
</tbody>
</table>

**Recommended progress implications**

- Designed and mocked-up set of digital patient tracking tools
- Updated daily report attributes for prioritizing care and taking notes
- Established KPIs to track program effectiveness and efficiency

### Recommendations and Implications

**Workflows:**

- Distinct Nurse Navigator role, responsibilities, and pain points
- Standardized processes supported by stakeholder input and data
- Streamlined assessment tools and clear risk stratification triggers

**Patient lifestyle management:**

- Designed and mocked-up set of digital patient tracking tools
- Updated daily report attributes for prioritizing care and taking notes
- Established KPIs to track program effectiveness and efficiency

**Cancer treatment is a complex process, and it is especially stressful for the elderly.** RWMC found a way to help these patients by dedicating a nurse role; a geriatric oncology Nurse Navigator to oversee visits, conduct screening assessments, coordinate team-based care, and reduce stress throughout treatment. However, this important role seemed to keep adding additional responsibilities. During COVID-19, the Nurse Navigator even had to check all incoming clinic patient temperatures, hardly finding time for main duties.

Hospital management H-Lab to define and evaluate the Nurse Navigator workflow for recommendations to improve efficiency and patient outcomes. We spent months interviewing staff, researching relevant literature, and analyzing data. Our proposed solutions concentrate on modifying current processes and establishing a set of tools with KPIs to manage patients.

#### The Team

- Olivia Goldman
- Roman Khabibulin
- Flore Nouvel
- Christine Zhang

Special thanks to the highly-engaged RWMC project team, broader interviewees, and our MIT Mentor, Mike Benedetto, as well as our H-Lab instructors and peers.