Background

- Oral chemotherapy drug development and use has increased.
- Evidence suggests variability in oral chemotherapy administration practices.
- Variability in safety practices can cause gaps in care as oral chemotherapy does not have the same safeguards as intravenous (I.V.) chemotherapy.
- Need for improved safety practices has been acknowledged.
- Without appropriate structure of processes to meet the unique needs of patients on oral chemotherapy, unaddressed complications may threaten therapeutic outcomes and patient safety.

Design: Pretest-Posttest Design
Setting: Outpatient ambulatory oncology clinics center within an academic medical center
Translational Framework: Pronovost's Model for Large Scale Knowledge Translation

Phases of implementation:

Purpose

This quality improvement (QI) project sought out to:

- Assess provider & staff general knowledge on oral chemotherapy and national safety standards
- Evaluate the implementation and ease of use of an electronic medical record (EMR) integrated chemotherapy documentation template to improve compliance with national safety standards

Methods

Design: Pretest-Posttest Design
Setting: Outpatient ambulatory oncology clinics center within an academic medical center
Translational Framework: Pronovost's Model for Large Scale Knowledge Translation

Results-Knowledge Gained

<table>
<thead>
<tr>
<th>Phase of Implementation</th>
<th>Provider/Staff Education Mean</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-intervention</td>
<td>64.6 (11.6)</td>
<td>65.0 (11.7)</td>
<td></td>
</tr>
<tr>
<td>Post-intervention</td>
<td>75.5 (10.7)</td>
<td>75.5 (10.7)</td>
<td></td>
</tr>
</tbody>
</table>

Results-By National Safety Standards

- A multidisciplinary approach and leveraging the use of the EMR can make a significant impact in patient safety and meeting quality and accreditation indicators of care.
- The role of nurse practitioners is prominent in chemotherapy education (over 60% of participants).
- Provider and staff awareness, understanding, and education is a critical component in achieving high safety standards in which further focus should be placed.

Results-By National Safety Standards

- Chart Review Demographics

<table>
<thead>
<tr>
<th>Age Category</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (SD)</td>
<td>72 (11.6)</td>
<td>75 (11.7)</td>
</tr>
</tbody>
</table>

Conclusion

- Refine the documentation template to meet the needs of other areas (i.e., stem cell transplant) and lessen time needed to complete.
- Follow-up visit documentation template created to address adherence/toxicity.
- Build out reports for Quality Department to assure continued high compliance rates for upcoming accreditation survey.
- Develop annual education for providers as a refresher on the safety standards.

Future Directions/Sustainability

- Refine the documentation template to meet the needs of other areas (i.e., stem cell transplant) and lessen time needed to complete.
- Follow-up visit documentation template created to address adherence/toxicity.
- Build out reports for Quality Department to assure continued high compliance rates for upcoming accreditation survey.
- Develop annual education for providers as a refresher on the safety standards.