Capturing Quality Metrics Through the Use of Nursing Documentation in an Outpatient Chemotherapy Infusion Center

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Cancer Infusion Room

• 1 of 5 VICC Outpatient Infusion Rooms
• 14.55 Nursing FTEs
• Expanded Hours (7am to 11pm with occasional weekend and holiday coverage)
• Total Visits: 19,449 (average 1621 patients/month)
• 37,714 chemotherapy infusions FY 2011-12

Challenges to Manual Abstractions/Voluntary Reporting

Potential for Inaccurate Numbers

Unable to Measure Practice Changes

Inability to Evaluate Nursing Interventions

Implementation of Bar Coded Medication Administration System

Expanded Nursing Documentation to Capture Events

WEEKLY REPORT:
• Collects all infusions events not charted as completed.
• Includes medication administration including pre-medications and interventions.
• Captures cycle of event as well patient outcome.
Results

ADVERSE EVENTS RELATED TO CHEMOTHERAPY ADMINISTRATION

Weekly Report initiated in 10/11

<table>
<thead>
<tr>
<th></th>
<th>10/10/9/11</th>
<th>10/11-10/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>183</td>
<td>158</td>
</tr>
<tr>
<td>Cessation of Infusion</td>
<td>183</td>
<td>158</td>
</tr>
<tr>
<td>Transfer of Care</td>
<td>183</td>
<td>158</td>
</tr>
</tbody>
</table>

Hypersensitivity Reactions Breakout

Agents Associated with Reactions Identified in Weekly Report

Paclitaxel, 34%
Rituxan, 29%
Cetuximab, 6%
Oxaliplatin, 5%
Sipuleucel, 5%
Carboplatin, 3%

Agents Associated with Reactions Resulting in Cessation of Infusions

Paclitaxel 32%
Rituxan 3%
Cetuximab 25%
Oxaliplatin 7%
Sipuleucel 4%
Carboplatin 7%
Temsirolimus 11%
Ofatumumab 7%
Infliximab 4%

Nursing Impact

Timing of Pre-Medication
Cycle
Time to Reaction

Conclusions

• Nursing documentation can capture key metrics.
• Source document can reduce need to use other documentation methods.
• Nursing documentation can be used to measure outcomes that lead to practice changes.
• Practice changes can be evaluated for effectiveness.

Next Steps

Expansion weekly reporting to include:

• Level of reaction.
  – Level 1
  – Level 2
  – Level 3
  – Level 4
• Identify missed medications.
• IV complications with scoring tool.
• Pain assessments and interventions