Nurses As Leaders In Design Thinking

Nicolle Davis, PhD, RN, SCRN
Candace Rouse, DNP, RN, CNS-BC, RN-BC
Beth Talaga, MSN, APRN, RNC-NIC, NE-BC
Jaime Thomas, MSN, RN, CCRN-K
Objectives

- Recognize design thinking in problem solving & implementation of healthcare processes
- Review facilitators & barriers to healthcare application of design thinking
- Discuss the role of the nurse leader in inspiring, facilitating, & using design thinking for healthcare improvement
System-Level Opportunities

Jaime Thomas, MSN, RN, CCRN-K
Data Management Infrastructure

1. Nurse-Sensitive Clinical Indicators
   - Inpatient & Ambulatory
   - All Indicators
   - All Levels
   - Across Time

2. Patient Satisfaction
   - Inpatient & Ambulatory
   - All Questions
   - All Dimensions
   - All Levels
   - Across Time

3. Nurse Engagement
   - Org-Wide
   - All Settings
   - All Domains
   - All Levels

Exemplary Professional Practice
Design Thinking to Improve Data Management Processes

- **DEFINE**
  - Not intuitive
  - Error-Prone
  - Delayed
  - Inefficient
  - Fragmented

- **IDEATE**
- **PROTOTYPE**
- **TEST**
  - Original
  - Drill-down
  - Roll-up
  - Slice
  - Dice
### Magnet Tracker

<table>
<thead>
<tr>
<th>Unit Name</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Unit 10</td>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
</tr>
<tr>
<td>Sample Unit 11</td>
<td>Injury Falls Per 1,000 Patient Days</td>
</tr>
<tr>
<td>Sample Unit 2</td>
<td>HAPI Stage 2+</td>
</tr>
<tr>
<td>Sample Unit 3</td>
<td>CLABSI per 1000 Central Line Days</td>
</tr>
<tr>
<td>Sample Unit 4</td>
<td>CAUTI per 1000 Catheter Days</td>
</tr>
<tr>
<td>Sample Unit 5</td>
<td></td>
</tr>
<tr>
<td>Sample Unit 6</td>
<td></td>
</tr>
<tr>
<td>Sample Unit 7</td>
<td></td>
</tr>
<tr>
<td>Sample Unit 8</td>
<td></td>
</tr>
<tr>
<td>Sample Unit 9</td>
<td></td>
</tr>
</tbody>
</table>

#### Outperformed Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Outperformed</th>
<th>Units Tracking</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAPI Stage 2+</td>
<td>25</td>
<td>29</td>
<td>86.21%</td>
</tr>
<tr>
<td>CAUTI per 1000 Catheter Days</td>
<td>28</td>
<td>30</td>
<td>93.33%</td>
</tr>
<tr>
<td>CLABSI per 1000 Central Line Days</td>
<td>23</td>
<td>29</td>
<td>79.31%</td>
</tr>
<tr>
<td>Injury Falls Per 1,000 Patient Days</td>
<td>17</td>
<td>30</td>
<td>56.67%</td>
</tr>
<tr>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
<td>23</td>
<td>24</td>
<td>95.83%</td>
</tr>
</tbody>
</table>

#### Unit Performance

<table>
<thead>
<tr>
<th>Unit Name</th>
<th>Unit Type</th>
<th>Measure</th>
<th>2017Q4</th>
<th>2018Q1</th>
<th>2018Q2</th>
<th>2018Q3</th>
<th>2018Q4</th>
<th>2019Q1</th>
<th>2019Q2</th>
<th>2019Q3</th>
<th>Rolling 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample Unit 1</td>
<td>Cancer Care</td>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>[6/8]</td>
</tr>
<tr>
<td>Sample Unit 2</td>
<td>Interventional Cardiology/Radiology</td>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>[8/8]</td>
</tr>
<tr>
<td>Sample Unit 3</td>
<td>Cardiac Services</td>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>[8/8]</td>
</tr>
<tr>
<td>Sample Unit 4</td>
<td>Endoscopy</td>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>[7/8]</td>
</tr>
<tr>
<td>Sample Unit 5</td>
<td>Perioperative Services - Combined</td>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>[5/7]</td>
</tr>
<tr>
<td>Sample Unit 6</td>
<td>Cancer Care</td>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>[6/8]</td>
</tr>
<tr>
<td>Sample Unit 7</td>
<td>Pre/Postoperative includes Phase I</td>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>[6/6]</td>
</tr>
<tr>
<td>Sample Unit 8</td>
<td>Procedural Unit</td>
<td>Injury Falls Per 1K Patient Visits/Cases</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>✔️</td>
<td>[8/8]</td>
</tr>
</tbody>
</table>

- ✔️ indicates performance above expectations.
- ✗ indicates performance below expectations.
Empathize
Design Thinking to Promote Learner Engagement

Define
Design Thinking to Promote Learner Engagement

Ideate

- Insulin Medication Safety
- Heparin Med Safety
- CAUTI Prevention
- CLABSI Prevention
- Pressure Injury Prevention
- Fall Prevention
Design Thinking to Promote Learner Engagement

Prototype
Design Thinking to Promote Learner Engagement

Prototype
Design Thinking to Promote Learner Engagement

Prototype

1. Never leave your high risk patient in the bathroom.
2. It is important to perform independent ventilation with high alert patients.
3. A broken CA device or less makes you at risk for pressure injury. Make sure you complete your every hour task. Document daily skin assessment within 4 hours.
4. A transparent CIVL dressing should be changed every 4 days and pm. When accessing any line, scrub the skin for 1 minute. Patients need a CIVL bath every 4 hours.
5. Number of changes needed to insert a line x number of hours in a SureStep pack x number of required per day x 100.
Design Thinking to Promote Learner Engagement

“It made me think hard about doing what is best for my patient with limited resources and direction.”

“It definitely made me use my critical thinking by having to think outside the box.”

“It confirmed what to look for with nurse sensitive indicators and to look at the whole picture.”
Program-Level Opportunity

Nicolle Davis, PhD, RN, SCRN
Comprehensive Stroke Care

Time Is Brain
Design Thinking to Improve Acute Stroke Outcomes

1. Empathize
   - Immersion Interviews
   - What is the ED RN & Patient Experience

2. Define
   - Secondary Research
   - What do the Outcomes & Literature Say?

3. Ideate
   - Brain Storming Sessions
   - How Can We Think Outside the Box?

4. Prototype
   - Role Development
   - What does this role look like?

5. Test
   - Role Recruitment
   - How does this role function?
IV tPa Administration

- **Average**
  - Jan - June: 56
  - July - Dec: 47

- **Median**
  - Jan - June: 41
  - July - Dec: 38

Door to Groin Puncture

- **Average**
  - Jan - June: 70
  - July - Dec: 56

- **Median**
  - Jan - June: 57
  - July - Dec: 49
Unit-Level Opportunity

Candace Rouse, DNP, RN, CNS-BC, RN-BC
Beth Talaga, MSN, ARNP, RNC-NIC
Transitional Nurse Team: A DYNAMITE PILOT PROGRAM
Family Centered Care
Baby Friendly ® Concepts
The Humanistic Approach to PDSA
At Risk Newborns
January 23- April 30, 2019

<table>
<thead>
<tr>
<th>GA &lt; 34 Weeks</th>
<th>GA/=34 Weeks</th>
<th>Unique Babies</th>
<th>Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>248</td>
<td>274</td>
<td>497</td>
</tr>
</tbody>
</table>
### TNT Interventions

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching (Lactation, Baby Care)</td>
<td>547</td>
</tr>
<tr>
<td>Glucose (Feed, Gel)</td>
<td>264</td>
</tr>
<tr>
<td>Temperature (Assess, Skin to Skin, Warmer)</td>
<td>198</td>
</tr>
<tr>
<td>Assessment</td>
<td>131</td>
</tr>
<tr>
<td>Respiratory (Assessment/Sats)</td>
<td>77</td>
</tr>
<tr>
<td>Sepsis (Screen, labs, abx)</td>
<td>22</td>
</tr>
</tbody>
</table>

Total: 954
Design Thinking: A Non-Linear Process

Empathize → Define → Ideate → Prototype → Test

Interaction Design Foundation
Interaction-design.org