Out of the Seat and Into the Sim
Transforming Nursing Orientation

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Avera McKennan

- Simulation Lab
- CNE – 24
- Culture change
- New RN’s
Simulation Growth

Simulation Participation Growth 2014-2016

Simulation Hours Growth 2014-2016
Nurses Hired FY 2017
(July 2016-June 2017)

Total of 161
121 New Grads, 40 Experienced RN’s
Why change?

• **Knowledge Retention**
  
  “I enjoy hands on – sitting being lectured at sucks and its boring”

• **Lecture**

• **Evaluations**
  
  “Less power points, more games”

Add “Nothing – glad it was over when it was”
Transforming Orientation

• Pilot group – Professional Development Program (PDP)
  – 22 participants – 4 sessions
The Seat

Day 2
• Glucometer Training + Lab Services
• Skin Care
• Advanced Directives
• VAD/IV Care
• Diabetes/Insulin
• Meditech/Computer training

Day 3
• Science of Safety (CUSP)
• CAUTI
• Infection Control
• Pain
• Blood Administration
• Time out/Consents
• Falls
• Clinical Codes
• Restraints
The Change

• Content
  • Review of lectures
  • Required
  • Duplication
• Simulation Development
  • 2 Patients
  • Unfolding scenarios
• Schedule
The Sim – Bernie Simulator

- 81 y/o patient from the Emergency Department
- Hx: COPD, Myocardial Infarction, Type 2 Diabetic, Hypertension
- Admit Diagnosis – COPD exacerbation, respiratory distress, pneumonia
- Confused, combative at times, anxious
- Blood sugar on admit = 405
Observation Sheets

• Differential Diagnoses: (what do you think might be going on) & Orders you would request
• Assessment pieces you would complete that weren’t done:
• Priorities for Bernie:
• What is the worst thing that could happen to Bernie?
• Things done well:
• Areas for improvement:
• Things you need more info/experience with:
Bernie Simulator

• Phase 1:
  – Begins antibiotics
  – Questions need for restraints
  – Identifies wound on leg
  – Seeks clarification on fluid orders
  – Notifies health care provider of significant changes (glucose) and obtains new orders
Bernie Simulator

• Phase 2:
  – Initiate orders for insulin drip
  – Increasing oxygen needs
  – Blood pressure drops, heart rate increases
  – Monitor urine output, question need for Foley catheter
  – Notify provider of changes
Bernie Simulator

• Phase 3:
  – Increasing oxygen needs, non-rebreather oxygen mask
  – Labored breathing
  – Becomes unresponsive
  – Recognized the need to call for help, Rapid Response
  – Pulseless, initiates CPR and Medical Emergency
The Sim - Charlie Simulator

• 52 y/o Trauma patient – Motor Vehicle Crash
• Bilateral pulmonary contusions, bilateral rib fractures, small head bleed, grade 1 spleen and liver lacerations
• Increased pain during the night
• Just received IV pain medication
Charlie Simulator

• Phase 1
  – Increased pain
  – Pain assessment
  – Notify physician and initiate orders for PCA
Charlie Simulator

• Phase 2
  – Patient had fallen trying to get out of bed
  – Increased pain in abdomen and flank
  – Sweaty, tachycardia, blood pressure drops
  – Notify provider, check Hemoglobin
  – Blood Infusion (Packed Red Blood Cells)
Charlie Simulator

• Phase 3
  – Planned to go to Operating Room
  – Goes into pulseless V-tach
  – Medical Emergency/Code Blue
    • Code Leader
    • Pharmacist
Charlie Simulator

• Phase 4
  – Moved to comfort cares
  – End of life cares
  – Patient passes away
The Progression

• February 2016 – July 2016: Pilot with PDP
• October 2016: expanded to include experienced RNs and former Patient Care Technicians
  – De-briefing vs pre-briefing
• November 2016: All new RNs
• January 2017
Outcomes

Evaluation

• Perceived competence
• Nursing knowledge on content
• Staff’s perception of the experience
Benner’s Model of Novice to Expert

- Novice
- Beginner
- Advanced
- Competent
- Proficient
- Expert
# Survey

<table>
<thead>
<tr>
<th>Topic</th>
<th>N/A</th>
<th>Novice</th>
<th>Advanced Beginner</th>
<th>Competent</th>
<th>Proficient</th>
<th>Expert</th>
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</thead>
<tbody>
<tr>
<td>Initiate admission profile</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Enter/review Orders</td>
<td></td>
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<tr>
<td>Nursing Care Plan</td>
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_HPSN World 2017_
Knowledge Based Questions

1. Insulin is a high risk medication and requires a double check by another RN. To ensure safety of the patient, it is essential for the nurse to waste 25-30 cc of IV medication prior to administering to the patient.
   A. True
   B. False

2. A patient's need for oxygen has increased from 2L per NC to 6L with saturations at 89%. You are considering initiating a non-rebreather mask. You have been in contact with the primary physician, but are concerned about your patient. At this time you should:
   A. Contact the primary physician again and follow through with orders received.
   B. Initiate a rapid response.
   C. Call Respiratory Therapy to administer a neb treatment
   D. Pull protocol on oxygen administration and follow recommendations.
## Results - Perceived Competence

### Perceived Competence Comparison: Pre PDP and Graduate RN

#### Percent Responding in Aggregate

<table>
<thead>
<tr>
<th>Level</th>
<th>PDP</th>
<th>Grad RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>2.8%</td>
<td>2.3%</td>
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<tr>
<td>Novice</td>
<td>36.4%</td>
<td>54.0%</td>
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<tr>
<td>Advanced Beginner</td>
<td>29.6%</td>
<td>26.2%</td>
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<tr>
<td>Competent</td>
<td>21.5%</td>
<td>14.7%</td>
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<tr>
<td>Proficient</td>
<td>8.9%</td>
<td>2.1%</td>
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<tr>
<td>Expert</td>
<td>0.8%</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

**Legend:**
- Green bar: PDP
- Purple bar: Grad RN
Results – Perceived Competence

Perceived Competence Comparison: Post PDP and Graduate RN
Percent Responding in Aggregate

<table>
<thead>
<tr>
<th>Level</th>
<th>PDP</th>
<th>Grad RN</th>
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<tbody>
<tr>
<td>NA</td>
<td>4.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Novice</td>
<td>17.1%</td>
<td>26.9%</td>
</tr>
<tr>
<td>Advanced Beginner</td>
<td>23.1%</td>
<td>23.7%</td>
</tr>
<tr>
<td>Competent</td>
<td>35.9%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Proficient</td>
<td>14.5%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Expert</td>
<td>5.1%</td>
<td>6.6%</td>
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Practice with a Purpose
Results – Knowledge Questions

Knowledge Comparison: Post
PDP and Graduate RN

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
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</thead>
<tbody>
<tr>
<td>PDP</td>
<td>66.7%</td>
<td>88.9%</td>
<td>77.8%</td>
<td>44.4%</td>
<td>77.8%</td>
<td>88.9%</td>
<td>55.6%</td>
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<tr>
<td>Grad RN</td>
<td>75.0%</td>
<td>54.2%</td>
<td>48.0%</td>
<td>64.0%</td>
<td>92.0%</td>
<td>92.0%</td>
<td>52.0%</td>
</tr>
</tbody>
</table>
Results – Staff Perception of Experience

Classroom:

What was most helpful
• Hands on learning sections
• Case studies were helpful because they put everything into realistic perspective
• Hands on activities and scenarios

What was least helpful
• Day was long
• PowerPoints
• Compact content (some presentations were a little long) Lengthy ppts

What would you like to see added
• More hands on
• Moving around
• More interaction instead of listening, let us all practice with the dressings for PICC’s, role playing an advance directive scene, practice putting on ostomy bags
Results – Staff Perception of Experience

Simulation:

What was most helpful
• Being able to use hands on and then review the information after each scene
• Hands on learning! Talking through scenarios and what we could do better and what we did well. I feel like we covered a lot of material that is exactly what we could/will see out on the floor

What was least helpful
• 2 seems like a good amount to have per sim – 3 caused some standing around

What would you like to see added
• Maybe a code video or something. It is a lot easier to absorb things when you are watching and not involved in the chaos
• More “rare” opportunities
• Maybe different areas of the care team added, such as RT, Resource RN, etc
Financial Impact

Pilot Project - 1st year

19 New Hire graduate nurses competed the Simulation Orientation

Decreased Orientation time from 16 hrs to 8 hrs with nearly $4000 savings

FY 2017–All nurses

Anticipate nearly 200 new RN hires

Estimated savings of nearly $30,000
Challenges & Lessons Learned

• Group size, space constraints
• Timing – with the simulation calendar
• Buy in – Nurse Leadership + CNE’s
• Debriefing – group dynamics
• Content – what is needed in General Hospital Orientation
• Proving outcomes, data collection
Next Steps

• CNE involvement
  – Facilitator binder
  – Set up instructions

• Improved data collection and proven outcomes

• Divisional/Unit specific orientation
  – floating