Evaluation of an Experiential Learning and Simulation Based Clinical Orientation at UVMHN-CVPH

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Objectives

• Discuss the development of an experiential and simulation based orientation.

• Discuss how increased Clinical Education Manager time on clinical units strengthens orientation for registered nurses.
The development of an experiential and simulation based orientation.
Purpose of Study

• To strengthen the orientation for all Registered Nurses (RN’s) hired at UVHN-CVPH through the utilization of experiential learning, simulated clinical orientation experiences and increased Clinical Education Manager time on the units.
Our Journey
Rationale and Significance

• JumpStart Program
  – Jason Zigmont, PhD, CHSE-A
  – 2 years of work in development of program
  – First pilot included 153 RN’s
    • New and experienced RN’s had over a 3 1/2 week reduction in orientation time.
    • Gross savings of $702,270.

Blooms Taxonomy

Learning Outcomes Model

The Individual
- Well-Tuned Learning Orientation
- Mental Models
- Analogical Reasoning

Experiences
- Challenging
- Emotionally Charged
- Mistakes or Errors

Improved Patient Outcomes
- Skilled Mentors
- Evidence Based Medicine
- Products and Protocols

Environment

Learning Outcomes Model

The Individual
- Individualized online competency based orientation, electronic CBO
- Experiential Learning/MBTI

Experiences
- Five days of skills and scenarios
- Focus on the what and how
- Critical Care Course

Improved Patient Outcomes
- Preceptor Class
- Policies and Protocols
- Unit Based Changes

Environment

JumpStart/UVHN CVPH Orientation

- Experienced and new graduate nurses
- Small groups (maximum of 7 students to 1 facilitator)
  - UVHN-CVPH – maximum of 4-5 students to 1 facilitator, ideal is 2-3 students.
- Experiential Learning Based Program
- Individual assessed at mid-point and end of their orientation
  - UVHN-CVPH – consistent regular weekly meetings with
- Shared Mental Model
- Use of 3D Model of Defusing, Discovering, Deepening for Debriefing
  - UVHN-CVPH – mixture of + Delta, Good Judgement, 3D
What did we want to accomplish?

- Provide a smoother transition into the workplace
  - Improve graduate nurses' work ready skills and attributes
  - Focus on teamwork and communication skills
    - Clinical competence
  - Relationship building
Essential Practice Elements

- **JumpStart**
  - Rhythm Recognition
  - Oxygen Therapy
  - Waive test
  - Clinical Applications
  - IV Pumps
  - Peripheral IV
  - Med Administration
  - Blood Administration
  - Safe Patient Handling
  - Restraints
  - Defibrillation
  - Central Line Dressings/Blood Draw

- **UVHN-CVPH**
  - Peripheral IV Therapy
  - Oxygen Therapy
  - Waive Test
  - Clinical Applications
  - IV Pumps
  - MAK
  - Blood Administration
  - Safe Patient Handling
  - Central Line Blood Draw/TPA Administration
  - Pain Identification
  - Pressure Ulcer Prevention
  - Ostomy/Wound Care
  - Sepsis
  - Fall Equipment
  - Hypoglycemia Treatments
  - Foley Care
  - Central Line Care and Maintenance

Simulations

- **JumpStart**
  - CHF
  - Find the Wound
  - STEMI
  - IDDM
  - Fall
  - Pre-op Preparation/Sepsis
  - End of Life
  - Stroke
  - Clinical Institute Withdrawal Assessment
  - Central Line

- **UVHN-CVPH**
  - Hourly Rounding
  - Hypoglycemia
  - Falls
  - Sepsis
  - Pain and PUPS

<table>
<thead>
<tr>
<th>General Orientation Day 2</th>
<th>Clinical Orientation Day 1</th>
<th>Clinical Orientation Day 2</th>
<th>Clinical Orientation Day 3</th>
<th>Clinical Orientation Day 4</th>
<th>Clinical Orientation Day 5</th>
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<tbody>
<tr>
<td>CPR &amp; Waive Test Competencies 12-2pm</td>
<td>Clinical Staff 8-1pm</td>
<td>Clinical Staff 8-1230</td>
<td>Clinical Staff 8-1630</td>
<td>Clinical Staff 8-1630</td>
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Staff Satisfaction

- Descriptive evaluations were distributed to participants on the simulations days to get immediate feedback.
  - Take extra care in checking the events when the patient fell.
  - Follow protocol for different fall levels. Make sure Star is up for high risk.
  - I will advocate for my patients and stop the pain! And follow protocol.
  - I will look for signs of sepsis and use the protocol.
  - Ensure SBAR model is followed.
  - Rely more on protocols and keep them with me.
  - I found the protocols very helpful, and it’s great to know I can pull them up as a reference. I will always remember to look down to the next step to see if it applies to the situation.
Staff Satisfaction

• Descriptive evaluations were given after orientation was complete.
  
  – Thirteen evaluations were distributed, nice were completed and returned from the first group.
  
  – Favorable emphasis on learning Pain, Pressure Ulcer Prevention, Falls, Sepsis and Hypoglycemia Protocols, assessment, document standards, and equipment.
  
  – An average overall score of 4.2 (1-5 Likert scale) demonstrated how participants felt the simulations/skills helped them care for patients.
Lessons Learned

• Orientation binders with policies were a huge success.

• With large groups it is okay to have simulations before skills sessions.

• Schedule more time between the skills sessions and simulations for instructor debriefing and setting up for next group.

• Coordinate distribution of the Clinical Simulation Evaluations prior to the end of their orientation.
How increased Clinical Education Manager time on clinical units strengthens orientation for registered nurses.
Clinical units orientation
2015 New Graduate Nurses

• 16 Med/Surg
  – 10 night shift
  – 6 evening shift
  – 10 resource pool
  – 2 R5
  – 2 R6
  – 2 R7

• 14 Critical Care
  – 6 night shift
  – 7 evening shift
  – 1 day shift
  – 8 progressive care
  – 6 short stay unit
What did we know?

• Graduate nurses experience significant stress:
  
  – professional role adjustment and adaptation
  
  – difficulty managing the social and work environment
  
  – role conflict…..student vs registered nurse
  
  – perceptions of a lack of clinical competence

(Ramritu and Barnard, 2001)
What did we do?

• Preceptor workshop

• Critical Care Course

• Electronic Clinical Based Orientation (CBO) document

• Schedules

• Unit presence of Clinical Education Managers
Preceptor Workshop

• Began in 2015 for all disciplines
  – Focuses on:
    • Sustaining Safe Practice
    • Engaging Communication & Diversity
    • Developing Performance & Critical Thinking
    • Experiences in Precepting: Coaching & Conflict Management
Critical Care Course

- 5 days, total of forty hours
- Scheduled during the middle to end of orientation
- Days divided by topics/systems
  - Topics Covered
    - Cardiac (MI, Post-PCI care, HF), Respiratory (COPD, ARF, etc), Multisystem (Severe Sepsis), Endocrine (DKA, Hyperglycemia), Renal (Renal Failure, Dialysis), Gastrointestinal (Pancreatitis, Cirrhosis), ETOH withdrawal, Neurologic (Stroke Recognition and Intervention), Patient Safety/TeamSTEPPS
  - Included a total of 6 simulations
    - Chest Pain/Heart Failure exacerbation
    - Respiratory Distress/Chest Tube troubleshooting
    - Sepsis Recognition/Sepsis Intervention with transfer to HLOC
  - Included skills testing and case scenarios
    - Arterial Puncture (ABG Collection)
    - Chest Tube Set-up/Troubleshooting
    - Groin Management (Femostop/TR-Band)
    - Insulin Drip Management Case Scenarios
    - CIWA Scoring Case Scenarios
  - Staff content experts guest lectured during each topic
    - Diabetic Educator, Respiratory Therapist, Pharmacist, Progressive Care RN, ICU RN, Dialysis RN
• Historically, paper document was 18 pages long (front and back).

• Required preceptors to fill out and sign before end of orientation.

• Electronic version
  – Flipped the focus from preceptor ownership to orient ownership.
Schedules

• 2013/2014 Nurse Residency survey results.
  – Orientations begin on hired shifts

• Limited “off the unit” classes.

• Telemetry class scheduled once off orientation.
  – Exception: Critical Care orients received 3 day telemetry class prior to coming off orientation.

• Resource pool orienting with resource pool preceptors.
Educators Presence on Clinical Units

- Weekly schedule of clinical time for orients
- Shoulder-to-shoulder support
- Real-time learning opportunities
- Frequent preceptor/orient meetings
- Build relationships
Lessons Learned

• Preceptor guidance and education
  – Expanding instructional time between CEMs and preceptors prior to the new GN’s orientation.
  – Formalize a system for preceptor knowledge of new GN’s education and work history.

• Resource pool preceptors and scheduling
  – Scheduling new Resource Pool GNs with a Resource Pool preceptor and following their schedule.

• Increasing our preceptor pool to decrease burnout

• Preparing unit staff for the influx of new nurses during the prime GN season (June-Aug)
  – Looking at knowledge gaps and competency completion
Our Data
2013-2014 New Graduate Nurses

- **2013**
  - 15 Med/Surg Nurses
    - Average 7.18 Weeks
  - 15 Critical Care Nurses
    - Average 10.05 Weeks

- **2014**
  - 1 Med/Surg Nurse
    - Average 8.12 Weeks
  - 4 Critical Care Nurses
    - Average 11.74 Weeks
2015 New Graduate Nurses

- **2015**
  - 16 Med/Surg Nurses
    - Average 5.46 Weeks
  - 14 Critical Care Nurses
    - Average 8.75 Weeks
Estimated Cost Savings

• 2013 Cost for Orientation
  – 15 Med/Surg RN’s at 7.18 weeks = 287.2 hours
  – 15 Critical Care RN’s at 10.5 weeks = 420 hours

• 2014 Cost for Orientation
  – 1 Med/Surg RN at 8.12 weeks = 324.8 hours
  – 4 Critical Care RN’s at 11.74 weeks = 469.6 hours

• 2015 Cost for Orientation
  – 15 Med/Surg RN’s at 5.46 weeks at 218.4 hours
  – 13 Critical Care RN’s at 8.75 weeks at 350 hours
Orientation Cost in $$

- Med/Surg:
  - 2013: $7812
  - 2014: $9010
  - 2015: $6178

- Critical Care:
  - 2013: $11424
  - 2014: $13027
  - 2015: $9901
Outcome

• The utilization of:
  – Preceptor classes
  – Feedback from previous Nurse Residency Classes
  – Experiential learning, skills training, and simulations
  – Increased educator time on the units

Has helped to strengthened the orientation of graduate nurses and decrease overall orientation time at UVHN-CVPH.
Retention

- As of October 29, 2015, all Graduate Nurses hired are currently still employed at UVHN-CVPH.
Questions
References


