

Multi-method Critical Care Orientation Improves Critical Thinking, Skills and Confidence

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Disclosure

- None of the authors have a financial relationship to disclose that may cause a conflict of interest.
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Objectives

The learner will be able to

- Connect the key elements of the evidence- and competency-based Critical Care Orientation (CCO) to its impact on nurses' knowledge, skills, and confidence
- Describe best practices for implementation based on lessons learned.

CCO prior to the Change

Issues needed addressing:

- Curriculum needed updating with new standards/evidence
- Methods of teaching limited to mostly didactic lectures
- Core content taught by multiple instructors with variation in content and delivery
- Difficulty finding instructors for classes each month
- No post-testing for core content
- Variability in competency evaluation at the point of care

Background

2008 Wholesale Change for CCO

- Critical Care Orientation Program goals, objectives and guiding principles
- Comprehensive content outline with learning objectives
- Adoption of the synergy model as the framework for the redesign
- Desire for an interactive learning model with more opportunities for hands on practice.

Background

Fall 2010

- Most recommendations from whole scale change event were implemented
- Still difficulties existed, especially in maintenance of evidence –based curriculum & instructors

Program Participants

- Combined Adult and Pediatric Critical Care orientation
- Participants include New Graduate Nurses as well as experienced RNs
 - Critical care unit nurses
 - Intermediate/Moderate care unit nurses
 - Telemetry care unit nurses
 - Adult and Children's Emergency Department nurses (almost 50% of participants due to the new ED ICU)

Multi-Methods for CCO 2012 July

- AACN Online modules – Adults & Peds
- Facilitated Discussions, Reviews, Case Studies
- Supplement Lecture on ECG
- C-Tools: Online resources and references
- Application
 - Skills Lab
 - Simulation
 - Coaching

Schedule for CCO

WEEK 1 Pulmonary	WEEK 2 Cardiovascular	WEEK 3 Neuro/Stroke	WEEK 4 Multi-System
<u>Monday</u> ECG I	<u>Monday</u> ECG II		
<u>Tuesday</u> OM – Classroom	<u>Tuesday</u> OM – Classroom	<u>Tuesday</u> OM – Classroom	<u>Tuesday</u> OM – Classroom
<u>Wednesday</u> OM – Classroom Skills Lab/ Simulation	<u>Wednesday</u> OM – Classroom Skills Lab/ Simulation	<u>Wednesday</u> OM – Classroom Skills Lab/ Simulation	<u>Wednesday</u> OM – Classroom Skills Lab/ Simulation

OM: Online Module by AACN

Evaluation

- Critical care basic knowledge test:
 - Pre- and Post-CCO
- Completion of Online Module
- Competency evaluated through performance in skills lab and simulation
- Weekly participant evaluation of sessions
- Six-month Post Survey
 - Learner Confidence at the point of care
- Completion of orientation on time

Results (July, 2012 – Sept, 2015)

- Total N of RNs who attended CCO: N=~500
- Knowledge test: Pre- and Post-CCO
 - Pre-test score avg 73.52 (41-99; n=256)
 - Post-test score avg 83.74 (52-100; n=201)
 - Paired *t*-test: 72.82 to 83.84 ($p < .001$; n=196)
- Completion of the Online Module (n=457)
 - Almost 80%, completed $\geq 90\%$
 - Approx. 70%, completed 100%

Results

- Weekly Evaluation of Sessions
 - AACN Online Module Beneficial

	Week 1		Week 2		Week 3	
	Adult	Peds	Adult	Peds	Adult	Peds
Yes (%)	92.9	96.6	97.0	98.7	98.8	94.4
No (%)	7.1	3.4	3.0	1.3	1.2	5.6
Total (n)	225	119	168	75	167	72

- Skills Lab and Simulation Beneficial

	Week 1		Week 2		Week 3	
	Adult	Peds	Adult	Peds	Adult	Peds
Yes (%)	95.4	94.7	96.8	95.7	100.0	94.9
No (%)	4.6	5.3	3.2	4.3	0.0	5.1
Total (n)	194	95	158	46	114	39

Results

- Weekly Evaluation of Sessions: 4th week
 - Helpful in preparing for the Point of care
 - Mock Arrest Simulation:
Adult 85.7% (n=140) Peds 83.9% (n=56)
 - Online Module: 94.6% (n=167)
 - Online Module easy navigation 95.6% (n=274)
 - References
 - Likelihood to return to the Online module in the future 86.4% (n=272)
 - Using C-Tools resource 45.2% (n=221)

Results

- 6 months Post Survey (n=47)
 - Learner Confidence in
 - Developing the knowledge and skills required to provide care for moderately complex patients in the clinical setting (92%)
 - Assessing the needs of their patients, interpret the findings, develop a care plan, and have the skills to deliver the planned care (100%)
 - Communicating and collaborating with the team (98%)
- 97.7% completed orientation on time (n=481)

Conclusion

- The redesigned CCO is efficient and effective in preparing nurses to provide excellent care to moderately complex patients
- The multi-method, flexible approach to learning accommodates individual learning style and needs
- Nurses were given the opportunity to assess their learning needs and to evaluate competency in a simulated and clinical setting
- Nurses increased their knowledge, skills, critical thinking, and confidence through the evidence-based, multi-method orientation



Thank You!

