Building a web-based clinical evaluation program...

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......the stumbling blocks along the way to the creation of an online standardized clinical scenario evaluation tool

Objectives

1. Participants will obtain the building blocks for the development of standardized adult clinical scenarios into a web-based platform.
2. Participants will appreciate the challenges and setbacks in the development of a web-based online clinical evaluation tool.
Description of Problem

• Evaluation of clinical competence in distanced-based NP programs.
• Objective Structured Clinical Evaluation (OSCE): time, expense, organization.
• Intersection of computerized virtual patients and OSCEs.
• Nurse educator limited experience in development of web-based programs.

Process of Project Development

• Identify key stakeholders
  Administration, Catalyst Program, Faculty
• Institutional support: Catalyst Program
• Project Team Assembly
• Collaborators at Duke
  • Catalyst Program director
  • “E-Learning” expert
  • Instructional designer
  • Evaluations expert

Process of Project Development

• Identify Resources needed
  – Appropriate platform, programmer, financial, faculty and student input
• Timeline development

2014 Aug Sept Oct Nov Dec 2015 Jan Feb Mar April May June July Aug
Choosing a Clinical Scenario

- 2339 - 401 - ESSENTIAL HYPERTENSION
- 1233 - 250 - DIABETES MELLITUS
- 1366 - 373 - DISORDERS OF LIPOID METABOLISM
- 518 - 770 - GENERAL MEDICAL EXAMINATION
- 495 - 530 - DISEASES OF ESOPHAGUS
- 417 - 278 - OVERWEIGHT AND OBESITY
- 406 - 780 - GENERAL SYMPTOMS
- 563 - 800 - NEUROTIC DISORDERS
- 537 - 901 - ACUTE SINUSITIS

Mind Mapping Tool

First Draft Example
Stumbling Blocks

Communication between clinical experts & technology expert
# Second Draft Example

## Homework

1. Have you had any head trauma?  
   a. **Answer:** This is not contributory for this case
2. Do you have any pain in your eyes?  
   a. **Answer:** No
3. Do you have any tooth pain?  
   a. **Answer:** No
4. Do you have any blood in your mouth?  
   a. **Answer:** No
5. Do you have any vision in your face?  
   a. **Answer:** None
6. Do you have any numbness in your face?  
   a. **Answer:** No
7. Do you have a headache?  
   a. **Answer:** Yes
   b. **Explanation:** This is not contributory for this case
8. Do you have any facial pain?  
   a. **Answer:** Yes
   b. **Explanation:** This is not contributory for this case

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## Feedback

1. Do you have any direction from your doctor?  
   a. **Answer:** No
Pilot Project

• Final revision of storyboard product
• Evaluation of product by "key stakeholders"
  Review and input via survey & focus groups
• Pilot project on a select group of NP students in 1st adult clinical course
  Upon completion the team will receive performance feedback

Testing the Tool

• Measurements of interest
  Advance clinical knowledge & competencies
  Decision making vs skills
  Feasibility
  Validity
  Reliability
  Inter-rater reliability

Evaluation

• Be flexible with timeline
• Keep good notes!
• Foster creativity
• Develop plan for rapid development & evaluation of the tool
• Perform an extensive review of literature & commercially available tools presently in marketplace
Future Plans

- Refinement of product
- Expand case scenarios
- Develop additional case scenarios
- Provide for immediate performance feedback
- Develop tutorial for students, faculty & preceptors

Project Timeline:
- Start-Up
- Build Program
- Program Build & Development
- Finishing touches
- Implement
- Pilot
- Implement with PC students

Thank you!

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