Video Recorded Versus Instructor Proctored Evaluation For Student Check-offs: Second Pilot

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Learning Objectives

• Verbalize possible methods for implementing alternate evaluation methods into fundamentals skill check-offs within individual academic structures

• Examine possible strengths and weaknesses of alternate evaluation methods
Purpose

- Expand on a previous pilot study
- Alternate method of evaluating intervention skills check-offs compared to the traditional method of instructor proctored evaluation
- Previous pilot deemed physical examination videos less effective
- Student & faculty perspective of effectiveness and preferences
Background

- Utilization of self-evaluation/ self-awareness in through psychomotor skills validation exists is SON
  (Houghton, 2012; Yoo, 2008; Yoo, 2010)

- Observation and reflection of student’s own performances enhances motivation and learning
  (Houghton, 2012; Yoo, 2010)
Background

- Review of audiovisual recordings of students’ own performances improved competency ($p < 0.001$) and communication skills ($p < 0.001$) (Yoo, 2008)
- Video-based self-assessment aids in developing awareness of strengths and weaknesses, and communication skills (Yoo, 2008)
Sample

- Fundamentals of Clinical Nursing
- 3 clinical groups
  - 18 students total
- Pre-licensure students
- Accelerated MSN program
Methods

- IRB approval and informed consent
- Completed three intervention skills
  - Gown and gloving
  - Sterile dressing change
  - Indwelling catheter placement
  - NTG placement
  - G-tube feeding
  - Enema
Methods

• Self-assigned into groups of 2-3
  – Hands-on
  – Videographer
  – Observer
Methods

- Rubric in hand
- Self recorded using personal recording device
- Recorded without interruption
- Not to exceed a total time period of 10 minutes
Methods

- Independently review, self-evaluate, and re-record if desired
- Immediate peer feedback
- Review with faculty for final evaluation
- Pass/fail per rubric
5115 – Gowning and Gloving

<table>
<thead>
<tr>
<th>Student Name</th>
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1. **HI 5**
   a. Read provider orders and know the procedure
   b. Wash hands
   c. Gather equipment
   d. ID client
   e. Explain procedure
   f. Assess safety

2. Choose barrier protection (PPE) appropriate for the type of isolation used and institutional policy

3. **Don gown**
   a. Ensure that it covers all outer garments
   b. Do not allow it to touch the floor.
   c. Pull sleeves down to the wrist.
   d. Tie the gown securely at the neck and waist

4. **If needed apply other PPE such as Fitted Respirator, surgical mask, protective eyewear or goggles.**

5. **Don gloves. Bring glove cuffs over the edge of gown sleeves.**

6. **Enter patient room fully dressed with appropriate PPE’s.**
   a. Bring appropriate supplies and equipment to minimize the need to go in and out of the room.

7. **Before you exit from the isolation Room:**
   a. Tell the patient you are leaving and when you plan to return.
   b. Ask if patient needs any personal care items.
   c. Be sure to review room for safety. – E.g. bed in lowest position, side rails up, call light within reach.

8. **Removal of protective equipment:**
   a. Remove gloves – grasp the cuff and pull glove inside out over the hand. Slide fingers of ungloved hand under the remaining glove at the wrist. Peel the glove off over the first glove. Discard in proper container.
   b. Perform hand hygiene
   c. Untie waist ties
   d. Untie gown’s neck strings.
   e. Allow gown to fall from the shoulders; touch the inside of the gown only.
   f. Remove hands from sleeves without touching the outside of the gown
   g. Hold the gown inside at the shoulder seams and fold inside out into a bundle. Discard in appropriate container
   h. Remove mask
   i. Perform hand hygiene.

9. **Bye 5**
   a. Wash hands
   b. Put away equipment
   c. Teach
   d. Assess safety
   e. Chart

**SKILL WAS PERFORMED ACCURATELY AND SAFELY**

**SKILL WAS ORGANIZED**

**SKILL WAS PERFORMED WITHIN 5 MINUTES**

**PRIVACY WAS MAINTAINED THROUGHOUT PROCEDURE**

**COMMENTS:**

Reviewed 7/2013
Evaluation Method

- Course rubric to determine successful completion
- Open-ended questionnaire
- Likes, dislikes, and perceived benefits
Questionnaire

• Describe feelings of anxiety
• How anxiety changed after watching video
• Describe confidence before viewing video
• How did feelings of confidence change
• How did confidence and self-efficacy change throughout process
• Fears conquered & still exist
• Impact on future patient care
• Future benefit to students
Results
Describe feelings of anxiety

- Didn’t feel prepared
- Concerned about timeframe
- Mild: less than having an instructor watch
- Fear of the unknown
How anxiety changed after watching video

• Lower due to feeling competent
• Relieved to not look as nervous as was felt
• Like immediate feedback from peer
• Relieved after immediate self-evaluation
Describe confidence before viewing video

• Semi-confident; could redo if needed
• Less prepared than if in front of an instructor
• Confident though anxious about remembering steps
How did feelings of confidence change

- Doubt was unnecessary
- Unhappy nervousness could be seen
- “I looked so professional”
- Trusted my peers and didn’t watch the video
How did confidence and self-efficacy change throughout process

- Filming peers benefited myself
- Talking through skill before I did it helped
- Just as confident as when I started
- Improved since I could redeem myself
Fears conquered

- Fear of making mistakes in front of others
- Depending on others isn’t so bad
- Fear of safely performing skills
Fears still exist

- Hurting a patient
- Unable to “redo” in the hospital
- None since instructor will be by my side
Impact on future patient care

- Watching self is a great way to learn
- No perceived benefit
- Achieve technical excellence
- Continued fears until completed more than once on a patient
Future benefit to students

- Helpful to watch self
- Limit to the number of time to do over
- Real world demonstration
- Like group collaboration
Advantages

- Feeling less fear and stress
- Being able to think more clearly
- Immediate peer feedback
- Luxury of re-doing the performance
Disadvantages

• Camera phobic students
• Decreased practice time
• Variable devices
• No permanent record of video
• Student resistance
Faculty Feedback

- Increased flexibility
- Decreased anxiety on “testing day”
- No impact on faculty time commitment
- Dedicated lab improved recording environment
- Video allows for humor and “outtakes”
Conclusion

- Dramatic improvement in confidence
- Alternate teaching strategy with incorporated technology component
- Meet the student’s needs based on fear, stress, objectivity, and peer versus faculty feedback

• Houghton, C.E., Casey, D., Shaw, D., & Murphy, K. (2012). *Staff and students' perceptions and experiences of teaching and assessment in clinical skills laboratories: Interview findings from a multiple case study.* Nurse Education Today, 32(6), e29-e34.

Questions???