**Curriculum Submission to STFM’s National Clerkship Curriculum**

**Curricular Focus: Acute, Chronic, Preventive Care**

**I. Title of Curriculum**

Observed Patient Encounter (OPE)

**II. Abstract**

The Observed Patient Encounter focuses on clinical reasoning, encourages self-assessment, and increases direct observation of students during the Family Medicine clerkship. While in their preceptor’s office, students video record a full encounter with a patient who presents with an acute complaint. The student records the history and physical, the precepting encounter, and the delivery of the assessment and plan to the patient. Students may record multiple encounters and choose the encounter that best represents their clinical skills, particularly their clinical reasoning. The recordings are then reviewed in a small group setting with 4-5 students and one faculty member. As the group watches each video, the presenting student leads with a brief self-evaluation and their peers and the tutor offer feedback. The faculty member evaluates the assignment using the Observed Patient Encounter Assessment form (Appendix A) and leads the group in a discussion.

The utility of video feedback is well established. Numerous studies demonstrate the statistically significant, positive effect on interaction skills across multiple disciplines (Fukkink, Trienekens, and Kramer 2010). In medical education, video feedback has proven particularly helpful in teaching history taking skills, from teaching interviewing skills (Maguire *et al*. 1978), to evaluating communication skills (Irwin & Bamber 1984), to actually changing resident interview behavior (Bryson-Brockmann & Fischbein 1995). To date, no studies have endeavored to highlight the benefits of video feedback when teaching and refining clinical reasoning skills.

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**III. Has this Curriculum been published elsewhere?**

NO

**IV. Curricular Focus**

Acute Care

**V. National Clerkship Curriculum Objectives addressed**

Student Learning Objectives for Acute Presentations

At the end of the clerkship, for each common symptom, students should be able to:

• Differentiate among common etiologies based on the presenting symptom.

• Recognize “don’t miss” conditions that may present with a particular symptom.

• Elicit a focused history and perform a focused physical examination.

• Describe the initial management of common and dangerous diagnoses that present with a particular symptom

**VI. Structure of clerkship in which curriculum has been used**

The University of North Carolina School of Medicine Family Medicine clerkship is a 6 week required clerkship that most students complete during their third year. The clerkship is taught in a distributed model with 7 regional campuses. About 170 students complete the clerkship each year. The Observed Patient Encounter is a required assignment that each student must complete once during the clerkship.

**VII. Program Content and Educational Methods**

Description of individual activities, including setting and timing with which activities take place, and pertinent support material used. Please match your educational methods with those listed in the NCC curriculum as indicated below

Experiential Learning-X

Small Group Sessions -X

Simulation/Standardized Patients

Skill Development Sessions

Case-Based Learning-X

Self-Study

Reflection X

Products and Projects

During the clerkship orientation students are presented with the details of the Observed Patient Encounter assignment as well as the assessment tool (Appendix A). We review how to use the FLIP recorder at that time as well as the tips for recording a patient encounter (Appendix C). Students typically begin to record their acute visits during the second week of the rotation and can record as many encounters as they choose. We encourage students to select an encounter that has appropriate complexity and length (appendix B).

During the 4th or 5th week of the clerkship students return to their campus for a small group session to review their videos. Each student presents their video as well as a brief self-assessment. At the close of their video review students are asked to share a teaching pearl with their colleagues (Centor criteria for strep pharyngitis, pre-test probability for cardiac stress testing, decision tree for headache etc). The faculty member uses the OPE Assessment Tool to provide written feedback but also leads the group in a discussion about the patient encounter.

Students typically balk at the idea of reviewing their videos in a group but after the session they are almost unanimous in their strong support of continuing the assignment.

**VIII. Assessment Strategies to achieve outcomes**

Description of assessment methods for each of the targeted objectives. Please match your description with the NCC curriculum. Responses could include: Student assessment and Evaluation (Are your student’s learning?); Overall clerkship evaluation and Improvement (Is your clerkship meeting all of its objectives?); Faculty Development (What evaluation design tools are needed?); Educational Research (Applying research to your educational programs)

The OPE provides a unique opportunity to observe students and assess their skills in several key areas.

Students' ability to differentiate among common etiologies based upon presenting system is assessed by direct observation by a trained family medicine faculty member. Faculty observe not only the final product of students' thinking (presentations to preceptor and plans given to patients) but also the interview and physical that fed into these plans. This yields a much more effective evaluation of their capacity for important symptom differentiation.

Similarly, students' capacity to recognize "don't miss" conditions is also evaluated by direct observation by a trained faculty member. Again, watching the entire encounter and the evolution of their thought processes allows the faculty member to see if students paid adequate heed to signs and symptoms described by the patient in a manner that just hearing the final plan does not allow.

Direct observation is also the means of assessment for students' capacity to perform a focused history and physical examination as well as their ability to describe the initial management of common and dangerous diagnoses. Beyond simply knowing if they 'got it right', direct observation allows us to see if students gathered the information and delivered the final plan in a patient centered manner.

The OPE is more than an effective means of assessment. Students consistently rate it as one of the most valuable elements of their clerkship experience. A recent student completing the clerkship late in her fourth year stated that it was the most valuable activity of her clinical rotations.

To ensure a consistent experience across all sites, the observing faculty are trained together in conducting the OPE and the use of the evaluation form. Additionally, the activity and the evaluation form itself are re-evaluated on a bi-annual basis for consistency and possible improvements.

IX. Lessons Learned

The availability of acute visits varies among preceptor offices. In order to find and record an acute visit, students are encouraged to start looking for an acute patient visit during week 2 of the block. Preceptors are engaged in helping students select appropriate visits as well as obtaining patient permission (form is Appendix B). Allowing students to use encounters with other members of the provider team (other physicians as well as nurse practitioners) helps increase the patient options. Preceptors should be aware that the student must be recorded giving the assessment and plan to the patient. Preceptors frequently need to be reminded of this element of the assignment (Appendix C).

We currently use FLIP cameras which were purchased online for approximately $100 each. We have between 25-27 students per clerkship block and we purchased 30 cameras. Currently there are several types of small handheld camcorders available that range in price from $20 to $300 each. We chose the FLIP cameras due to low cost and durability as well as the USB drive function. The students are oriented to the FLIP cameras on the first day of the clerkship and provided new lithium batteries, a small tripod and a carrying case for each camera. Students sign out their camera during orientation and are responsible for returning it during their final exam. Between clerkships the cameras are stored in a locked cabinet. After three years we have not had any lost, stolen or broken cameras.

We specifically tell students that they must use the FLIP camcorders and not their own personal recording devices (phones etc) due to patient confidentiality issues. Students ask permission from patients prior to recording and we use a standard consent form that is used in other clerkships as well as in our residency program. After the student records the interview they plug the USB into their laptop (which is provided by the school, encrypted and password protected) and erase the video from the recorder. At the end of the rotation we quickly open each recorder and verify that the video has been erased. We also ask that they erase the video from their laptop at the end of our session.

Most students do very well with this assignment. Even so, it provides rich opportunity for them to learn, not only from their own performance, but from that of their peers as well. Though most students do well, this assignment is an excellent tool for identifying those students who are struggling with their history taking, physical exam, differential making, presentation, or patient communication skills. Because the interview ***and*** the presentation are recorded, the OPE provides a unique opportunity to assess how students make sense of the information they gathered.

X. Explanation of Appendices

Appendix A: OPE Assessment Tool

Appendix B: Patient Video Consent Form

Appendix C: How to Record a Patient Encounter

Appendix D: OPE Overview for Preceptors and Students

XI. References

None

Appendix A – OPE Assessment Tool

See separate assessment tool form.

Appendix B – Patient Video Consent Form



**Consent to be Video Recorded for Educational Purposes**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (name of practice) helps educate medical students from the University of North Carolina School of Medicine. It is important for these students to learn how to effectively communicate with patients. Videotaping interviews is one effective way to teach this communication skill. I would like to help them improve as future physicians

I consent to having the medical student videotape our interview today. The student will only review the videotape with a medical school teacher and a small group of other medical students. The review will focus on how the student can improve interview skills. This review will happen in the next several weeks. The videotape will be erased after this one educational review. The students and teacher are bound by confidentiality rules and will not reveal my name or any other identifying information outside of that one session.

I have had the opportunity to review and understand the content of this authorization. I understand that this authorization is voluntary. Refusal to participate will not affect my care. I understand that I have the right to retract this authorization at any time. If I retract the authorization, the videotape will be erased and not reviewed further.

I give my permission for the session to be videotaped for educational purposes.

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Patient signature Date

(Parent or guardian must sign for a minor 17 years or younger)

Appendix C – How to Record a Patient Encounter:

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| **IMPORTANT: Bring your laptop to your office on the day you plan to record your patient interview. Transfer and encrypt recording onto your laptop and delete it off the Flip recorder before leaving the office for the day.** |

After getting consent from the patient, place the Flip Recorder about 4 feet from you and the patient.  Using an adjustable suture tray as a platform for the recorder works well. Make sure battery is on by checking light in front of Flip Recorder.

After recording the interview, plug the Flip Recorder into the USB port of your laptop and open the video by selecting "View and Organize with FlipShare".  The FlipShare software is installed on your computer. Select option "Save to Computer" so that you can later edit the video with the FlipShare software. If you prefer to edit with other software you can locate file under CIM/100video and drag to location of your choice without installing software.

**Move the recording from your Flip Recorder to your laptop as soon as possible and before you leave the office. Delete the recording off the Flip Recorder.** The Flip Recorder has no security associated with it and if accidentally lost patient confidentiality could be breached.

Select Clips that you want to show during the review session. The easiest way to do this is to note the times on the recording bar when each selection starts and simply drag your cursor to that time when you show the clip. There is no need to edit your clips. **Make sure you watch the final product well in advance of your presentation day to assure that there is adequate volume and that you have captured what you want to show.** If you used FlipShare to edit, it is best to show the video using the software as well.

**Encrypt the recording on your laptop.** Right-click on the recording that you copied to your laptop and choose “Properties”. Click on the “Advanced” button under the General tab, this will open the “Advanced Attributes” window. Click the button labeled “Encrypt contents to secure data”. Click “OK” to close the “Advanced Attributes” window. Click “OK” on the “Properties” window. An “Encryption Warning” window may open. If it does, click “Encrypt the file only” and click “OK”. These series of steps will ensure that file is only accessible when you log onto your laptop using your log-on password. No separate password is needed.

**Bring your laptop to the clerkship session where recording will be reviewed**. **Delete the recording from your laptop as soon as the review session is over.**

**Make sure you turn in signed consent to your campus clerkship director.**

Appendix D – OPE Overview for Preceptors and Students

**Observed Patient Encounter – Family Medicine Clerkship**

**Goals of Observed Patient Encounter:**

* Patient Care and Clinical Skills: Elicit focused histories and perform appropriate physical exams. Discuss the relevant diagnostic tests, differential and management plan, including health promotion and prevention.
* Interpersonal and Communication Skills: Deliver succinct oral presentations and improve communication skills with patients and family members.
* Medical knowledge: Strengthen basic medical knowledge in real patient encounters including knowledge of psychosocial and family issues.
* Professionalism: Demonstrate behaviors of integrity and compassion with patients. Give and receive relevant feedback with colleagues.

**Details of Assignment:**

* Students will record multiple patient encounters for **acute complaints** using a Flip recorder. The student has a permission form for the patient to sign.
* Students should record the entire visit:
  + The history and physical (do not record sensitive exams)
  + The precepting encounter
  + Delivering the assessment and plan to the patient
* Students will then review their recordings and choose one video to share with their colleagues. This is the video that will be evaluated by the campus director.
* An ideal encounter would include the following:
  + Good video positioning so the group can see & hear the encounter
  + Timely interview – aim for the entire video to be around 30 min
  + Reasonable complexity of complaint – avoid a very complex patient and a very obvious diagnosis (e.g. simple viral URI)
  + A patient with good clinical teaching points
* To prepare for the video review:
  + Have your video uploaded to your laptop
  + Erase it from the FLIP camera
  + Share 2 elements of your encounter that you think you did well
  + Share 2 areas where you would like feedback from the group regarding your interaction with the patient. (e.g. how could I have asked this question differently, was there a better way to address smoking cessation etc)
  + Share one brief clinical teaching point that you learned from this patient. (e.g. Centor criteria for pharyngitis)
* Attention Preceptors
  + Students MUST give the assessment and plan to the patient. After your precepting encounter, please review the necessary history and physical with the patient and then allow the student to present the plan.

Ruben Georges Fukkink, Noortje Trienekens, and Lisa J. C. Kramer. (2010). Video Feedback in Education and Training: Putting Learning in the Picture. *Educational Psychology Review*. doi:10.1007/s10648-010-9144-5

Maguire G P, Roe O, Goldberg D, Hones S, Hyde C & O'Dowd T (1978) The value of feedback in teaching interviewing skills to medical students. *Psychological Medicine* **8** **,** 695–704.

Irwin W G & Bamber J H (1984) An evaluation of medical student behaviors in communication. *Medical Education* **18** **,** 90–5.

Bryson-Brockmann W A & Fischbein D (1995) Demonstrating the effectiveness of videotape feedback for teaching interviewing skills: A multiple-baseline, single-participant experimental design. *Teaching and Learning in Medicine* **7** **,** 149–54.