Revised Goal: Understand the basic structure of the heart through the use of standard ultrasound.

Revised LO’s:

1. Identify the major structures (ie. Chambers and valves) in ultrasound images of the heart.
2. Properly orient the patient to obtain (or recognize + describe) the standard views of transthoracic cardiac ultrasound and identify the utility of each view.
3. (assumes students are scanning) Demonstrate sensitivity to the patient while performing cardiac u/s .

Potential LO’s for future sessions:

1. Physiology (including introduction to Doppler on u/s)
   1. Correlate events in the cardiac cycle with their appearance on u/s.
2. Physical Diagnosis
   1. Effectively communicate findings to patient, other student, or other healthcare professionals
   2. Relate echocardiographic views to cardiac auscultations
3. Pathology
   1. Understand how valvular dysfunction alters normal Doppler flow on u/s.

Assessment of students:

* Formative assessment of prework
  + Could be a presession quiz, TBL session, clicker quiz, etc based on session structure.
* Summative assessment of comprehension/skill
  + Exam (identify labeled structures, could be short answer, application based, etc)
    - Case vignette of a patient with a problem or complaint and student has to pick which view would show them the structures they need to evaluate/visualize. Can tailor to student level (give them the pathology vs physical exam findings depending on student level/when in curriculum)
    - Description based questions, utilize pathology to apply understanding of the basic structure
    - Identify the plane of the heart visualized by a particular axis/view
    - Could incorporate use of technology resources (ie. Place a line over the heart in the right place for obtaining particular views).
  + Practical skills (standardized patients/peers, evaluate communication skills)
    - Ultrasound portfolio
    - Turn the skills into a game/earn “badges”
  + Can be tailored to structure of the curriculum

Assessment of session:

* Student survey of some sort (written, multiple choice)
* Review student success on related exam questions
* Goal is to obtain information that will help you modify the session to better meet the goals later on. Needs to be timely so the students and faculty still remember the session.
* Potential survey questions:
  + Opened ended questions and scale questions
  + Need to assess each component of the session
  + Did the prework effectively prepare you for the session?
  + At the end of this session, I was able to \_\_\_\_\_\_ (identify a particular chamber, obtain views of the heart, etc. base off LO’s)
  + Did using ultrasound improve your understanding of the heart’s structure?
  + Inclusion of comments sections so students can provide additional feedback