Some Guidelines for Introducing Your Students to Using i-Human Patient Encounters On-Line

Allan Hamilton Exec. Director
Arizona Simulation Technology & Education Center
HSIB, UAHS
ASTEC is committed to filling the “practice gap” presented by COVID-19

We are using and evaluating on-line resources available to ASTEC that could help fill the gap and help students to better fulfill practicum hours and gain clinical experience during the COVID-19 crisis. We will be rolling these out for our faculty and students in a serial fashion as we evaluate and test them. We are committed to seeing healthcare education continue through the crisis. We will get you the tools. We will get through this together.
To meet the current unavailability of patient encounters for our students...

- As a first phase, ASTEC has arranged to purchase individual licenses for all of our COM students currently scheduled for clinical rotations and electives to have on-line access to i-Human for the next four months.
Students will have access to hundreds of cases organized by specialty and diagnoses...

- Cases and assignments will be selected and organized by your clinical clerkship directors and assigned teaching faculty.

Source: iHuman
Yes, i-Human is new to many of you...

- These are tough times.
- We need to improvise and adapt to meet the clinical educational gap.
- ASTEC pilot-tested i-Human last year with COM
- There are abundant on-line tutorials on i-Human to help get you and your students oriented to how to use this resource.
- The i-Human Help Desk is currently open 7 days a week for both educational and technical support.
What does i-Human provide?

• Hundreds of cases submitted and formatted by academic physicians across the case.

• It provides a full patient encounter.

• In teaching mode, it will generate key questions, findings, and reasoning.

Source: iHuman
Each case provides...

- History: History of present illness (HPI), past medical history (PMHx) and review of systems (ROS)
- Interactive physical examination (PE)
- Diagnostic assessment & reasoning
- Differential diagnosis
- Labs
- Assessment & plan
Cases come in 2 modes: teaching (educational) mode and assessment

- In last year’s pilot study, most students like the teaching mode because they can ask for “hints” and can see what attending experts believe is important and relevant in the case.
- Students can proceed through case on their own schedule and at their own pace.
- Each case allows students to make notes and generate a full written medical document that can be submitted.
Assessment mode offers no hints or guidance but can be scored as an evaluation tool.
Some tips for using i-Human

- Like any software, it takes time to settle into being able to using the software in a facile way.
- Let students take their time.
- Let students start with easier cases.
- Cases can be organized so they can be reviewed as group exercise by faculty facilitator.
Some guidelines

- Cases are saved so you can start a case and come back to it.
- Make sure that students check the *pre-existing* medical record of each patient; some have none but others have extensive chart.
- Focused evaluation uses ~25 questions for HPI while comprehensive usually run 50-65 ?s.
- There is a virtual notepad. Encourage students to jot down key findings as they proceed through case.
- DDx is menu-driven and divides diagnoses into lead diagnosis, alternative diagnosis, and must-not-miss (MNM) diagnosis.
We have the luxury of time for our students

- In pilot testing, we did not find the “efficiency” evaluation was not too important.
- Students should be encouraged to ask questions so can “set” cases so there is no limit to questions asked.
- “Gear head” icon can be very useful to providing additional background info for case (e.g., pathophysiology).
• Tell students to take their time auscultating or “palpating” ~15 secs otherwise the program will not count it as having been completed.

• Students need to listen for heart sounds at least 3 cardiac cycles

• Encourage students to use earbuds and headphones to get highest fidelity for auscultation.

• Students can be frustrated when cases take too long
Diagnostic reasoning and assessment section

• Great section for group discussion
• Compels students to organize findings by significance
• Tests must be organized and justified by DDx
• In pilot testing, faculty found there were tests they felt were less important or more important than the way they were organized in cases so faculty can weight emphasis during group discussion.
• Management plans usually include medical orders
• Many students may have only cursory knowledge to write orders so may need help
• Encourage students to put case aside and come back to review next day and use for self-reflection
• Each student can submit their own electronic medical record for documentation and feedback
iHuman is not perfect....

• It is not the same thing as seeing real patients but that is not an option for the foreseeable future.
• It is a substitute. Try to make the most of this opportunity to learn and interact.
The mannequins are idle. We are not.

• We will keep you informed about other efforts to provide additional on-line or Internet-based resources for all our healthcare students at the University of Arizona Health Sciences.

• The leadership is committed to seeing our way through this crisis
• Be safe
• Come up with solutions
• Stay connected
• Stay focused
• Take care of each other
• Have faith
• We are all in this together