EVOLVE Clinic:

Use of a Virtual Patient Panel as a Longitudinal Teaching Strategy

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Session Objectives

• Describe how EVOLVE Clinic is structured
• Differentiate EVOLVE Clinic from static case studies traditionally used in medical education
• Demonstrate what students do during a typical EVOLVE Clinic session
• Identify impact of EVOLVE Clinic on student satisfaction and learning outcomes
Literature Review

• ↑Med student acceptance
• Better received year 1 & 2
• Cases presented later must challenge advancing learner skills/knowledge
• Some publications indicate VP = SP for ↑dx skills
• Students prefer branching over linear cases
• Novices prefer paper copy of case details
Literature Review

• Students value opportunity to learn the consequences of their decisions over time
• Life size virtual image (avatar, etc.) adds to realism and immersion
• VPs better for some med knowledge and decision-making
• Confidence-competence gap
Many medical schools are developing VP cases.
Our Patient Panel
More than a case study

- Traditional case studies encompass an already known diagnosis, connected to sx and tx.
- EVOLVE patients present with their signs and symptoms and the students must discern what to ask; how to put the info together and only then moving into dx and tx.
Why is EVOLVE Different

• Same ‘patients’ longitudinally over 4 yr curriculum
• Provides continuity of care experience - - knowing a specific group of patients in depth over time
• Models IPE/team approach to care
• Illustrates progression over time for patients with certain risk factors or specific health conditions
• Safe environment for practicing professionalism and critical thinking skills
• Chance to practice documentation skills
Major Benefits

• Opportunity for repeated practice with key content areas within the curriculum

• Helps students learn and hone critical thinking skills

• Provides multiple opportunities to practice behaviors associated with professionalism
Goals of the EVOLVE Clinics

• The first goal is to provide an active learning experience that occurs longitudinally across the curriculum. Each interaction with your clinic patients will have a purpose that is in concert with specific learning goals in various courses.

• The second goal is to guide the development of professional behaviors. It will be important to have the ability to function in health care teams. This will take different forms for each of you but the specific behaviors are a common thread in professional development.

• The third goal is to provide an opportunity for integration and synthesis of knowledge in practical applications. As you progress through the curriculum, the situations and scenarios will get progressively more complex and encompass clinical, social, ethical, cultural and personal elements as well as basic professional behaviors.

• The final and most important goal is to develop critical thinking skills. The process of critical thinking is central to the practice of medicine. You will deal with complex patient encounters that require both problem solving and more in-depth critical thinking.
Professional Behaviors

- Core knowledge & technical skills
- Communication
- Delivering/receiving feedback
- Standards of conduct
- Problem solving/critical thinking
- Active participation in decision-making
- Leadership
Sample A – Mildred Murphy

ER visit - wrist fracture

Objectives:
- Review bones of adult wrist
- Recognize fractured wrist bone
- ID bone density variations from normal
Sample B – Mildred Murphy

FM visit for fatigue, ankle swelling and PND

Possible Resources:
- .wav files: S3 gallop & rales
- CXR with ht. enlargement and pulmonary congestion
- .jpeg image of ankle edema
- Office visit EMR note with VS
Summer 2012
Anatomy, Radiology & OPC

John Fenmore
45 y.o. Auto Mechanic
“My back hurts”
Back & Thorax Unit

Keemo Nguyen
21 y.o. College Student
Bike Injury (H/A & Scalp Laceration)
Head and Neck Unit

Susan Neuman
51 y.o. Accountant
“My stomach is bothering me”
Abdomen Unit

Charles Williams
65 y.o. Television Producer
“Frequent nosebleeds”
Head and Neck Unit

Nathan Winters
Active 6 y.o. Child
Skateboard Fall (Wrist Injury)
Upper Limb Unit

Emily Rosenbaum
16 y.o. High School Student
Immunizations pre Lacrosse Try-outs
Upper Limb Unit
Structure of EVOLVE Clinic
Expectations of EVOLVE

- Designed to emulate clinical experiences
- Faculty act as preceptors/guides***
- Emphasis on applying recently covered basic science and clinical content
- First clinical interactions as student physicians
- Working individually and in small groups
Guidelines

• RESPECTFUL of all opinions, roles, ideas
• Safe learning environment; questions are expected and encouraged
• Not just one correct answer
• Faculty give formative feedback on critical thinking as well as professional behaviors
• Maintaining CONFIDENTIALITY
Additional Requirements

• White coats and professional attire
• i>Clicker
• EVOLVE portfolios and boxes
• Course materials
• Laptop/pad per small group
• Clinical exam equipment as applicable
Each EVOLVE Clinic experience is MANDATORY.

Attendance is taken
Impact on Student Satisfaction
Student Comments

• “This was great!”
• “It was very helpful to relate content of my current courses to clinical situations.”
• “This reinforced what I was learning from the course lectures.”
• Students prefer local-only EVOLVE clinics.
• “Does this have to be 8 am on a Friday?”
Impact on Learning Outcomes

• Only Kirkpatrick level 1 data during this pilot year

• AY 13-14 plans include comparative analysis of test item scores in summer anatomy course to assess impact of content reinforced via EVOLVE clinics

• Future studies to assess impact on behaviors associated with professionalism
Questions?

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References