

Virtual Near-Peer Clinical Teaching Guide - Peds Case 13

General: Foundations of Clinical Medicine (FCM) students are still constructing their knowledge base for differentials, pathophysiology and management, so it is important to focus more on a broad-strokes approach to these cases and not dwell upon the details. Our goal is to foster discussion and continued development for overall clinical reasoning. Oftentimes, what may be most helpful is to give examples of your experiences (e.g. On my FM/Peds clerkship, we would focus on...).

Objectives for this session:

1. Perform an age-appropriate history and physical exam for a child with chronic cough.
2. Generate an age appropriate differential diagnosis for a child with chronic cough.
3. Describe physical exam maneuvers included in a complete pulmonary examination and discuss the significance of abnormal findings.
4. Write a summary statement including key features of Sunita's presentation
5. Write a well-structured SOAP note that includes a problem focused assessment and plan.
 - a. Open Word doc at beginning, take notes throughout
 - b. Write SOAP note at designated time
 - c. Submit SOAP note to Canvas for participation

Feedback: View the [feedback module](#) to learn the basics of engaging in and eliciting feedback from students. Understand that group feedback is difficult (especially over Zoom) so engaging in the private chat and using positive reinforcement w/redirection may be more effective for these sessions. The Ask-Tell-Ask is a wonderful method which will hopefully spark dialogue over Zoom. Preface with students that you may use this throughout. Aim to give feedback toward the end of the case (i.e. Summary Statement and later) so there is more to comment on for their clinical reasoning and management.

Before the session:

1. Quickly review Aquifer Peds Case 13, a 6-year-old female with cough.
2. Read the Aquifer Case Summary, which has some good teaching points you may want to share.
3. Check out the Zoom features you'll need to use:
 - Share screen
 - Stop Share
 - Leave Meeting. **Remember you will always "leave" rather than "end" meeting!**

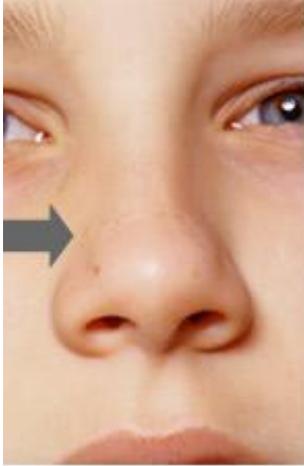
Teaching plan	
Starting off 3-5 min	<ol style="list-style-type: none"> 1. Log on to Zoom a few minutes early - find the link for your group on WeJoinIn. 2. Log in to Aquifer and pull up Peds Case 13. Open up notes section to keep ongoing differential on the side. 3. As students join, their video should be on and preferred name on the screen. 4. Ask students to open a Word document or have paper handy. They can also open their favorite medical reference site. They don't need to log in to Aquifer. 5. Intros – name, Foundations site and if you like, an icebreaker question.
Objectives 2-3 min	<p>Tell students a bit about Aquifer. You'll be focusing on SOAP ordering and initial assessment today, but they are welcome to review the entire case, the Deep Dives, and other cases later.</p> <p>Share objectives for this session:</p> <ol style="list-style-type: none"> 1. Perform an age-appropriate history and physical for a child with chronic cough. 2. Generate an age appropriate differential diagnosis for a child with chronic cough. 3. Describe physical exam maneuvers included in a complete pulmonary examination and discuss the significance of abnormal findings. 4. Write a summary statement including key features of Sunita's presentation 5. Write a well-structured SOAP note that includes a problem focused assessment and plan. <ol style="list-style-type: none"> a. Open Word doc at beginning, take notes throughout b. Write SOAP note at designated time c. Submit SOAP note to Canvas for participation
Chart review 5-7 min	<p>Share Aquifer on your screen</p> <p>Open "Chart Review" and read it out loud. Ask students to independently jot down their answers to two questions, then elicit answers from the group & fill in gaps.</p> <p style="padding-left: 40px;">What important features have you already learned about Sunita? <i>Cough is chronic (> 4 weeks), school aged, new to practice, on no meds, growth parameters and vital signs are reassuring.</i></p> <p style="padding-left: 40px;">What is your initial differential – before going into the room? <i>As students suggest diagnoses, put them in Aquifer "notes" or on the Zoom whiteboard.</i></p>
Presenting concern 10-12 min	<p>This section starts with a teaching point about assessment of respiratory distress – quickly review signs of distress, which would dictate immediate management of symptoms.</p> <p>Ask students different ways they've heard a cough described and how that informs their differential</p>

<p>History 15-17 min</p>	<p>Before clicking this section open, ask MS1s what focused questions would be important to ask now? Open the section and let students read the ROS. Ask “How does this information change your differential?”</p> <p>Teaching Point:</p> <ul style="list-style-type: none"> - Clarifying terminology: Important to clarifying what patients mean when they use regular or medical terminology. - Difficulty of triadic interviewing with pediatrics patients at all different ages.
<p>Past Medical, Surgical, Social Hx 5-7 min</p>	<p>Open section, read through content and ask if any of the information changes their current differential. Did anything move up or down the list? Would they add anything new? Why vs why not?</p> <p>If students bring up tuberculosis, give brief mention to risk factors, but overall reassurance that this is lower on the differential.</p>
<p>Summary Statement 15-20 min</p>	<p>This is an opportunity to see how MS1s use transformative language and qualifying adjectives from subjective/objective data to demonstrate their clinical reasoning.</p> <ul style="list-style-type: none"> - Epidemiology - FH - Pertinent features of hx <p>Have them take 3-5 minutes to compile a summary statement, send it to you privately in the chat, then ask if any would like to present. Preface that many will seem similar. Provide feedback in chat on length, appropriate detail, format, etc. Review Aquifer summary statement with them on screen.</p> <p>Reflect on how challenging but rewarding this was during your clinical year, especially in clinic when you have only a few minutes to create a summary statement, and that it’s one of our greatest skills as clinicians.</p>
<p>Exam 5-7 min</p>	<p>Before opening section, ask students to enter into chat what exam findings would support or argue against diagnoses on their differentials. Emphasize that the PE is about both positive and negative findings.</p> <p>Teaching Points:</p> <ul style="list-style-type: none"> - Discuss how to approach exam w/child (calm vs upset, “Do you want me to listen to your heart or lungs first,” putting on stuffed animal or caregiver first) - Unforced wheezing supports asthma if present, does not argue against if absent. - Clubbing argues against simple asthma and suggests chronic inflammation (like CF) or shunt. - Aquifer significant resp findings - Allergic shiners, allergic salute, Dennie-Morgan lines, clubbing. (scroll to bottom of guide to display photos)

<p>Differential Diagnosis 10-15 min</p>	<p>Having compiled a differential in the notes section, ask students to type in their top 3 most likely into the chat.</p> <p>Building mental framework: acute or chronic? what are “can’t misses” for this age group? Big sick or little sick? What organ systems can cause cough? Justification: what is the history telling you? What is the physical exam telling you?</p> <p>Asthma is most likely</p>
<p>SOAP Note 20-25 min</p>	<p>Have students spend 10-15 minutes writing a SOAP note for the patient using their notes throughout the session. Focus on the structure and ordering of the S/O (goal of PCP-skills are to data collect and order properly) with a thoughtful Assessment and initial Plan. Send them link to view Dr. Cawse-Lucas’ SOAP Note to compare.</p> <p>Remind students they’ll submit their notes to Canvas to document completion of this activity, but they’ll be graded as ‘complete’ rather than getting feedback from their mentor. What questions do they have after comparing their own note with the example?</p> <p>Have students reflect on what elements of their SOAP note went well vs what could be improved in next note.</p>
<p>Encourage a student to present, and after they put forth their initial plan, expand with teaching points below.</p>	
<p>Diagnosis and Classification 5-7 min</p>	<p>Ask students what initial testing options would be for a patient with asthma? What would they expect to see on spirometry (FEV1/FVC ratio, TLC, pre/post-bronchodilator therapy, etc.)? If enough time, review the spirometry curves with them in “Testing” section.</p> <p>Classification was covered in CPR block, remind them that this dictates medical management. Ask students to type in what her severity is. Don’t spend much time on this.</p> <p>Can have them reference on their own: https://getastmahelp.org/asthma-classification-children-five-to-eleven.aspx</p>
<p>Management 5-7 min</p>	<p>Overall point of case is structure of SOAP and initial plan, so don’t spend much time on these. Discuss points below and overall broad use of SABA/LABA +/- ICS</p> <p>Discuss metered-dose inhalers then ask what students would think of if initial therapy wasn’t working? Sometimes this is attributable to poor adherence from ineffective use. RT/nurses can provide education in hospital and clinic and review use of SPACER. Consider discussing how they work. Mention that spacers are key in all age groups.</p> <p>Ask students what they’d recommend if patient has asthma attacks at home or school? Asthma Action plans are very useful to guide therapy for patient and healthcare providers around them.</p>

Ask students what her allergic risk factors were? **Allergens** can trigger asthma exacerbations and include animal dander, house dust mites, indoor mold, outdoor mold, smoke, strong odors, sprays.

Physical Exam Photos:



Transverse nasal crease



Allergic salute



Allergic shiners



Dennie-Morgan Lines