

Name: \_\_\_\_\_ Team: \_\_\_\_\_ Team Members: \_\_\_\_\_

## PBL Case #5: A Typical Cold?

**Part 1:** Use the information from the following pages to analyze Subjective & Objective information. Instead of organizing this information in a SOAP Note format, you must thoroughly MARK up the text. Use these strategies:

- For paragraphs of text, write concise summary notes on the most important information.
- For new terms, look up definitions and briefly notate
- For symptoms, vitals, test results, comment on whether they're normal or what they could mean
- For new information you look up on possible diseases, document short notes in the extra space. Be sure you cite your web source!

MINICASE PBL OBJECTIVES	Tool Assessed (Med)	4	2	0
5) Compile & analyze data that has quantitative and qualitative components	Background research	--Info is organized, re-written, or annotated by student (not copy-pasted)	--Info is sparse or appears to be disorganized or documented/printed with no thought	--Info is clearly copy-pasted or no visible thinking is present

<u>S</u> ubjective		<u>O</u> bjective
<b>SAMPLE history</b> Signs & Symptoms Allergies Medications Past History (Social, Family) Last oral intake Events leading to injury/illness	<b>Symptom Assessment</b> (often for pain) Frequency Associated symptoms Radiation Character Location Duration Exacerbating factors Relieving factors	<ul style="list-style-type: none"> <li>• Measurements (ex: age and weight)</li> <li>• Vital signs (ex: heart rate, blood pressure, respiratory rate, temperature)</li> <li>• Physical exam results (ex: bruising)</li> <li>• Results from labs (ex: X-ray, MRI, blood analysis)</li> </ul>

### Scenario

Mary and Bill adopted a three-year-old toddler named Sam two weeks ago. Sam is good-natured and very inquisitive. Typically, before the finalization of an adoption, children are required to undergo a routine examination by a physician. However, the required examination is not meant to be a complete health screening, and many conditions are not even checked. Therefore, Mary and Bill are bringing Sam to Trinity Medical Center for a standard physical examination by a pediatrician to assess his health status.

### Patient History

Very little information was known about Sam's parents. However, it was known that they died in an automobile accident when Sam's father suffered a massive heart attack. In the past two weeks Sam has done very well adjusting to his new environment. Moreover, he has had all the proper immunizations for his age.

Sam's adoptive parents, Mary and Bill, have noticed some greasy/oily stools in his diaper. In addition, they are concerned about his wheezing (when breathing).

## ***Physical Examination***

### Vital Signs

- Age: 3 yrs., 1 month
- Weight: 28 lbs. (lower 10%-tile)
- Height: 3 ft. 1 inch
- Pulse: 115 beats/minute
- Respirations: 30 breaths/minute
- Blood Pressure: 95/60 (systolic/diastolic) mmHg

### General Appearance

- Happy, energetic child

### Head and Neck

- Runny nose but his ears are clear of fluid

### Lungs

- Cracking sounds are present
- Coughing and wheezing are noticeable

### Cardiovascular

- Normal

### Abdominal

- No swelling is present

### Genitourinary

- Not assessed

### Extremities

- Full mobility is present
- Pulse found in arms and legs

### Neurological

- Normal reflexes

### Physician Comments

- Have a complete blood count and chest x-ray done. Also, schedule a follow-up appointment for tomorrow to review the lab results and chest x-ray.

## Part II—The Follow-up Visit



### *Scenario*

Today is Sam's follow-up medical appointment. The weather is very hot and humid, which makes it almost unbearable to be outside. Sam's parents parked their car in the parking lot of Trinity Medical Center and went into the air-conditioned comfort of the pediatric clinic.

They were immediately seen by the pediatrician, and Mary expressed her concern over the color of Sam's sputum. Mary was upset that she had forgotten to tell the pediatrician the other day about this fact. The sputum Sam had been coughing up was green and viscid.

While talking with Mary and Bill about Sam's sputum, the pediatrician looked over at Sam and noticed a white "frosting" on his face (the "frosting" is an indication of salty build-up on the drying edge of sweat). The pediatrician asked Mary and Bill if they had noticed this salty build-up before.

"That must be why his skin tastes a bit salty when I kiss him on his cheek," Mary replied.

The pediatrician then went over the blood count and chest x-ray results (described below) with Mary and Bill.

After describing the chest x-ray results to them, the pediatrician had a hypothesis about Sam's chest x-ray results. To test her hypothesis the pediatrician ordered a sweat chloride test (the result is listed below).

### *Blood Lab Results*

- White blood cell count: values within normal limits.
- White blood cell differential: lymphocytes, monocytes, eosinophils, and basophils are within normal limits. There is a slight elevation in neutrophils.
- Red blood cell count: values within normal limits.
- Hematocrit: values within normal limits.
- Platelet count: values within normal limits.

### *Chest x-ray Results*

- Some hyperinflation and bronchial wall thickening is apparent.



**Part 3: Finalize your diagnosis, and answer the questions below as your final report.**

MINICASE PBL OBJECTIVES	Tool Assessed (Med)	4	2	0
6)Generate an evidence-based conclusion that explains the patient's condition OR diagnoses the public health threat	A in SOAP	--Summary of patient (or population) condition is clear & concise --Final diagnosis (or intervention) is clearly indicated --Supporting evidence (quant & qual) is clear & aligned	--Summary of patient (or population) condition is unclear or long & wordy --Final diagnosis (or intervention) is unclear --Supporting evidence is weak or not aligned	--No summary, final diagnosis/intervention, & supporting evidence

1. What type of disease or condition is Sam suffering from? Include 2-4 supporting facts.

Sam has \_\_\_\_\_

which is:

because:

- 
- 
- 
- 

MINICASE PBL OBJECTIVES	Tool Assessed (Med)	4	2	0
3) Choose appropriate tests to gather information on a patient (OR population-level health threat)	A in SOAP	--At least one aligned test or data collection methods are requested (ex: Medicine: x-ray or urine drug test // PH: relative risk, survey, water quality tests)	--A misaligned test or data collection method is requested (ex: student cannot give rationale for why they would need the information or how it would help)	--No tests/data collection requested

2. Name 1 additional test or diagnostic tool you would order to confirm your diagnosis? Why?

We would order a(n): \_\_\_\_\_

which is:

because:

MINICASE PBL OBJECTIVES	Tool Assessed (Med)	4	2	0
7)Establish a clear and appropriate plan for treatment OR population-level intervention	P in SOAP	--Plan indicates at least 2 remedies to ameliorate the problem	--Plan indicates only 1 remedy to ameliorate the problem	--No plan is present

3. Name & explain TWO treatment options, giving the reasoning behind each.

#1:

#2:

## MD-PhD Challenges:

Note: To earn any extra credit points, you MUST have achieved a 4/4 on each section of the rubric above.

**BONUS #1:** Prepare a 90 second overview of Sam's condition, supporting evidence for his diagnosis, lab or diagnostic tests needed to confirm, and treatment options. Record and email! (+3 pts)

**BONUS #2:** List at least 2 parts of Sam's body that are affected? (Be sure to consider the ORGAN, TISSUE, and CELLULAR level). What dysfunction is occurring in each? You may want to use a diagram! (+2 pts)

**BONUS #3:** Describe the appearance of Sam's sputum. WHY did it appear this way? (+1 pt)