Scenario #	HS6	Sex	Male
Name	Pediatric	Allergies	Shellfish,
	Asthma/Pneumonia		Eggs, Iodine
Location	Pediatric floor	Immunizations	UTD
<b>Admission Date</b>	Today – from ED	Ethnicity	Asian
Scenario Date/Time	6 hours after admission	Weight	28 kg
Patient Name	Lee, Jung	Height	4'
DOB/Age	08/16/XX Age 7	Religion	Buddhist

#### MDs M. Palmer

#### **Past Medical History**

- RAD x 5 years
- Adenoidectomy at age 5; Pneumonia age 5
- Umbilical cord hernia repair at age 1
- 5 hospitalizations for asthma and RAD over past 2 years

# **Current Medical History**

- Low grade fever x 3 days
- Productive cough yellowish/green sputum
- Intermittent audible wheezing x 1 day

### **Diagnostics**

- CXR – Left peri-hilar infiltrate to lower lobe

# **Social History**

- 2<sup>nd</sup> grade student
- Plays soccer, baseball, basketball
- Likes skateboarding and surfing
- 5 year old brother, 2 year old sister, 9 year old sister
- Mother has primary custody and states that father is "problematic" (optional complexity).

#### **Diagnosis:**

- Reactive Airway Disease (RAD) versus Pneumonia

Scenario #	HS6
Scenario Name	Pediatric Reactive Airway Disease (Asthma)

# Scenario Specific Student Learning Objectives: Status Asthmaticus

Students participating in this simulation experience will:

- 1. Demonstrate assessment skills appropriate/essential for the pediatric patient with a diagnosis of Asthma/Pneumonia.
- 2. Identify patient health problems and effectively prioritize nursing actions.
- 3. Demonstrate medication administration competency.
- 4. Demonstrate competency performing respiratory nursing interventions including oxygen administration.
- 5. Demonstrate appropriate teaching for the pediatric asthmatic patient
- 6. Communicate patient data to physician or other healthcare professional using SBAR.
- 7. Maintain a family centered plan of care.

	HPS Staging	Ready for Student Use
HPS	Lying flat	
Manikin type, high	Talks only in 2-3-word	
or mid fidelity	sentences	
	Street clothes on	
Environment	Quiet concerned parents who	
	do not talk to each other	
Safety	Bed low & rails down.	Armband and Allergy bands
	(Optional: Armband off and	readily available.
	allergy band off).	
Hospital	No supplemental oxygen in	02 n/c & mask
Equipment	place.	02 sat monitor
	O2 sat monitor in place.	Hand Held Nebulizer
IV	Intravenous Fluid: Dextrose	IV pole
	5%, 0.45% NS with 20 mEq	Saline lock (inserted)
	KCl/L to run at 75 mL/h	

Medications	methylprednisolone (Solu-Medrol) 16 mg IV q 12 hour
	azithromycin (Zithromax) 350 mg PO x 1 (10 mg/kg) loading dose; then 175 mg PO Daily x 4 days (5mg/kg)
	budesonide (Pulmicort). 0.3 (mg) via HHN twice daily.
	Montelukast chewable tablet 5 mg (Singulair) PO Daily

albuterol Albuterol 2.5 mg
four times a day by
nebulization, over
approximately 5 to 15 minutes
diluted with 2.5 mL of sterile
normal saline solution

Actors	Mother - quiet, will outburst that this is all dad's fault, forcing		
	the child to play without taking meds		
	Father - knowledge deficit, wants child "back in the game."		

Scenario #	HS6
Scenario Name	Pediatric Reactive Airway Disease (Asthma)

	HPS Actions	<b>Desired Student Actions</b>	Prompts
0-5 mins	T – 100.8 P – 146	√VS √O2 Sat Perform a focused respiratory	
	RR- 30 B/P – 96/72	assessment – should comment on	
	02  sat - 89%	air movement, inspiratory or expiratory wheezing (or both) and	
	Tripoding	work of breathing. Include RR, O2 sat, and BP	
	2-3 word sentences	,	
	Coughing	Recognize the need for increased	
	Wheezing bilateral – worse in L lung	oxygen administration  Demonstrate correct techniques for	
	$\mathcal{S}$	oxygen administration	
		Elevate head of bed.	
		Explain procedures and	
		medications to the patient and	
		family using an appropriate communication framework	
5-10	RR -↑ 44	Increase oxygen flow rate	
mins	02 sat – 87%	Check orders	
	HR - 160	Administer HHN	
	Wheezing gets worse		
	Father very vocal	Start IV Meds (depending on skill	
	Mother starts to soothe	level. These meds may or may not	
		be marked as given on the MAR)	
10-20	HR -↑ 186	Continuous monitoring of patient	
mins	RR - ↓ 34	VS and result of breathing	
		treatment	

Parents fight over who	Explain why heart rate ↑	
helps hold nebulizer (optional focus on family dynamics).	Manage parents Explain MD orders	
Wheezing diminishes 02 sat – 94% if HHN do	Reassure pt and parents	
	Re-assess after HHN tx	

#### Suggestions for Debriefing:

- General feelings of the participants.
- Ask for a summary of the scenario and interventions.
- Respiratory assessment:
- Identification of appropriate health problems and priority actions
- Pathophysiology when appropriate.
- Medication administration safety.
- Use of nebulizer and supplemental oxygen.
- Developmentally appropriate care for 7 year olds.
- Communication of patient data to physician or other healthcare professional (SBAR).
- When to call for additional support (RRT or Code).
- PALS if appropriate.
- Consider the family dynamics in the plan of care.
- Summary/Take home points.