Simulation and Clinical Learning
Tillamook Healthcare Simulation Program
Pediatric Asthma

Simulation Objective:
Management of a pediatric asthmatic patient and family

Scenario: Physiologic System

Scenario: Skills
O2 set-up
MDI set-up
Med Neb set-up
Patient Positioning
Airway Assessment
Work with anxious Parents

Learning Objectives:
- Demonstrate set-up of O2
- Demonstrate Medication Administration
- Demonstrate interaction with patient and family

Competencies:

Reference:
Patient Data:

Account Number:
Medical Record Number:
Name:
Birthdate:

Patient Case History (brief past medical history of present illness)
This patient is a twelve-year-old male who is visiting area from Portland and forgot his asthma medication. He is now wheezing and is visibly short of breath. He has been experiencing mild cold-like symptoms for last two days to include productive cough and rhinorrhea. Parents are both smokers.

Usual Medications include Albuterol inhaler and benadryl. His current vital signs are 96.5, HR 111, RR 22, SpO2 95% on room air, and BP 110/80.

Patient drug allergies
NKDA

Lab and other information available to participant upon request
### Scenario Flow (desired course events during scenario: changes in VS and assessments)

<table>
<thead>
<tr>
<th>Notice/Interpret</th>
<th>Expected Student Response</th>
<th>Computer change based on student response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father and son arrive in ED with son short of breath and father anxious</td>
<td>Nurse admits patient and dad</td>
<td>Computer shows no change</td>
</tr>
<tr>
<td>SpO2 95% on room air &lt;br&gt;BP is 110/80 &lt;br&gt;HR is 111 &lt;br&gt;RR is 22 &lt;br&gt;Wheezes are noted throughout</td>
<td>O2 is applied and started at 2 L/NC</td>
<td>Computer increases sat to 95% &lt;br&gt;Decreased SOB &lt;br&gt;Decreased HR &lt;br&gt;Decreased BP</td>
</tr>
<tr>
<td>O2 Sat has decreased to 92% on room air &lt;br&gt;RR increased to 22 &lt;br&gt;BP increased to 120/88 &lt;br&gt;HR increased to 116</td>
<td>O2 is increased to 4 L/NC &lt;br&gt;Call made to physician for the following orders: &lt;br&gt;Combo med neb &lt;br&gt;Prednisone 40 mg &lt;br&gt;Chest x-ray for cough and congestion and shortness of breath</td>
<td>Nurse carries out orders and patient VS improve and patient is more relaxed</td>
</tr>
<tr>
<td>Patient is coughing a lot</td>
<td>Physician discharges patient and dad with the following instructions: &lt;br&gt;Prednisone 40 mg every day for three days &lt;br&gt;Upon discharge order rest and force fluids &lt;br&gt;Upon discharge give albuterol MDI 2 puffs four time a day &lt;br&gt;Discuss with parents education material and to stop smoking – this could be a</td>
<td></td>
</tr>
<tr>
<td>Patient is discharged with instructions for asthma (give printed instructions and conduct teaching about smoking cessation)</td>
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<td>trigger for the asthma.</td>
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**How will participants be introduced to the case (Report)?**
This patient is a twelve-year-old male who is visiting area from Portland and forgot his asthma medication. He is now wheezing and is visibly short of breath. He has been experiencing mild cold-like symptoms for last two days to include productive cough and rhinorrhea. Parents are both smokers.

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**Manikin used and initial computer set-up (v.s. and assessment information for beginning of scenario: SpO2%, temperature, heart rate, blood pressure, heart, lung and bowel sounds)**

SpO2 95% on room air  
BP is 110/80  
HR is 111  
RR is 22  
Wheezes are noted throughout

**Equipment and props needed:**
Oxygen set up  
DC instructions  
Documentation forms  
Medication set up for med neb puffer

**Medications:**
Prednison  
Med Neb of combivent  
Albuterol with spacer

**Paperwork and documentation:**

**Personnel and actors (numbers, roles, and instructions)**
George – plays the dad
Orders (if applicable)
Combo med neb
Prednisone 40 mg, then 40 mg every day for three days
Chest x-ray for cough and congestion and shortness of breath
Upon discharge order rest and force fluids
Upon D/C give albuterol MDI 2 puffs four times a day
Discuss with parents education material and to stop smoking – this could be a trigger for the asthma.

Additional teaching tools needed