**QEP – Phase II Assignment**

**RTH 112 – Cardiopulmonary Pathophysiology**

You have been called to the bedside of a 12-year-old male (36 Kg) with a known history of asthma. He is currently complaining of an increase in his shortness of breath over the past 3 days. He has an albuterol inhaler he uses as needed. You note diminished with faint expiratory wheezes on auscultation and he is in the tripod position. His admission vital signs are as follows: HR -149, BP 129/75, SpO2 90%, Temp 37° C. The mother states he has been using his inhaler about once an hour for the past 6 hours without any relief. The mother states his normal expiratory peak flow measurement is 425 mL.

Here is his past 6 Peak Flow Measurements:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **8:00am** | **9:00am** | **10:00am** | **11:00am** | **12:00pm** | **1:00pm** |
| **398 mL** | **338 mL** | **299 mL** | **278 mL** | **243 mL** | **211 mL** |

Based off the patient’s initial assessment and serial peak flow measurements, what would your analysis be of this patient’s initial diagnosis and where would the patient fall on the Asthma Zone Scale?

* **Acute Exacerbation of Asthma**
* **Red Zone on the Asthma Zone Scale (Peak Flow <50% of baseline)**

Based off your initial analysis of this patient’s diagnosis and placement on the Asthma Zone Scale what would your assumptions be on the appropriate therapy would you recommend to the physician?

* **Oxygen Therapy – Nasal Cannula at 2lpm**
* **Bronchodilators – Albuterol (Q15 mins x4 or Continuous Neb)**
* **IV Corticosteroids – (20mg Solumedrol)**
* ***(Optional)* Subcutaneous Epinephrine – (0.3mg)**