| **Scenario:** | **Patient:** | **Simulator** |
|---|---|---|
| Case Management – asthma | Sam | Marvin |

| **Case Summary:** | **Participant Briefing:** |
|---|---|
| Sam is a 6 year old boy with previous history of asthma who has been unwell for 3/7 and has had worsening shortness of breath over the last five hours. | BAT CALL<br>6yo known asthmatic<br>RR 38, HR 170,<br>Very wheezy<br>Three lots of ventolin via spacer<br>ETA 2 minutes |

| **Clinical Issues** | **Human factors / Non technical issues** |
|---|---|
| Structured approach to paediatric patient with respiratory distress<br>Management of severe asthma | Team preparation & resource allocation<br>Team communication<br>Communication with child & parent |

**Learning Objectives:**

**Communicate** with child & parent appropriately
**Demonstrate** a structured assessment of a child
**Interpret** findings & manage appropriately
**Communicate effectively in a team**

**Faculty Actors:** Parent

**Patient Moulage:** Pyjamas

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| **Equipment & Props:**<br><br>EdWISE Paediatric Box<br>Marvin Mannikin | | |
|---|---|---|
| **Patient presentation** | **Expected response by participants** | **Faculty /Actors Notes** |
| **Initial Presentation**<br>Team receives BAT CALL | Preparation and Planning<br>Staff – Call for assistance (paediatrician), Allocate roles, Brief team<br>Equipment – appropriate sizes, CPAP<br>Drugs – calculation of doses and pre-emptive medications | Prompt team to begin preparation and planning |
| **Initial Presentation**<br>Child sitting up in bed and anxious<br><br>HR 140,<br>RR 46, nil wheeze, decreased air entry, recession ++, speaking in words only<br>BP 100/60<br>Sats 88% in RA | **Initial assessment**<br><br>Structured approach to assessment and management<br><br>Application of oxygen and nebulisers<br>IV access<br>IV medications/IVF<br>Steroid therapy (IV or po) | Mum tells TL she has given 8 puffs every 2 hours since 4am, not improving.<br><br>**given on request (from mother on arrival with child)**<br>**A**: No allergies.<br>**M**: Seretide, ventolin prn, recent course of amoxicillin, multiple previous courses of prednisone<br>**P:** Severe asthma, multiple admissions one to ICU<br>**L:** Breakfast 0730, then decrease oral intake since.<br>**E:** woke at 4am much worse than when went to bed, spacer at 4, then 6 then 8 then called ambo |

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| | | |
|---|---|---|
| **Progression**<br>Sats to 92% with application of vent neb, but deteriorate again after end of first neb<br>HR increases to 150 | Ongoing assessment and management<br>Consider CXR (hyperinflated)<br><br>Consider appropriate place to care for child – NETS<br>Clinical handover to paediatrician by TL using ISBAR technique or discussion on telephone with NETS | Mother anxious and asking questions<br>Faculty at sim centre to act as NETs on phone and provide appropriate advice for level of team.<br><br>Or local paediatrician to arrive and assist with ongoing management. |

| **Debrief Guide** | |
|---|---|
| **Key clinical issues**<br>Changing priorities with deteriorating child, recognizing lack of improvement (/deterioration)<br>Management of the moderate to severe asthmatic in the emergency department. | **Key non technical issues**<br>Team work and communication.<br>Co-ordination with radiology.<br>Communication with mother & Sam.<br>Handover to paediatrian/NETs |

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