**Approach to Hypoxemia**

- **Sat < 90% or PaO2 < 60 mmHg**
  - Give supplemental O2

**Hypoventilation**

- Slow/shallow or sonorous/stridulous breathing?
  - No targeted therapy, or therapy ineffective?
    - NIPPV or Intubate
  - Give targeted therapy (e.g. naloxone)

**Delivery/Uptake Mismatch**

- Findings c/w decreased delivery? Severe anemia, impaired O2 binding (e.g. CN, COHgb, MetHgb), etc.
  - Findings c/w increased uptake? Fever/hyperthermia, thyrotoxicosis, etc.
  - V/Q Mismatch*
    - Consider alternative strategies for oxygenation
      - Positive pressure ventilation (NIPPV, intubation, etc.)
      - Thrombolysis
      - ECMO

*V/Q mismatch can be close to zero (perfusion without ventilation, or shunt physiology) or approaching infinity (ventilation without perfusion, or dead space). Patients rarely have pure shunt or dead space physiology, so supplemental O2 can be helpful in many cases. Be wary of treating only the SaO2, however, as toxic oxygen metabolites produced by hyperoxygenation can impair recovery.