**BACKGROUND:**
- Sepsis is a complex medical emergency
- Sepsis can be challenging to diagnose but early recognition is key to survival and in preventing long term complications
- Over 1400 patients a year with a sepsis diagnosis are seen at Shadyside

**PROBLEM:**
- Emergency room patient population not included due to conflicting research study
- 49% in-patient mortality rate for severe sepsis/septic shock
- Signs and symptoms recognized within 4 hours of presentation only 47% of the time

**AIM:** To increase recognition of signs and symptoms of sepsis within four hours of symptom presentation by 90% following implementation of a comprehensive sepsis program for in-patients that develop severe sepsis/septic shock.

**Laying the Framework**

**Development of Sepsis Program**

Education  →  Algorithm  →  Order Set  →  Sepsis Team

- **Education**
  - Focused on identification of sepsis
  - Mandatory classes
  - Sepsis Resource/ Education Binder on every unit
  - Nurses, physicians, and PCTs/Aides

- **Algorithm**
  - Screening tool
  - Clear, concise “next steps”

- **Order Set**
  - Standardized and expedite work-up
  - Order for: Lactate, Labs to assess for organ dysfunction, Blood and urine cultures

- **Sepsis Team**
  - Expedite care
  - Provide much needed resources
  - ICU nurse responding to bedside
  - Pharmacy paged for rapid administration of antibiotics
  - Expeditied ICU transfer

**The Results**

- Increased recognition by 85%
- One Extra Life Saved
- $25,000 saved per patient for decreased ICU stay
- $4,000 nursing salary cost savings a day per patient

**Takeaways**

- **PDMA Cycle**
  - Maintain continuous improvement process
  - Bi-monthly meetings

- **Education**
  - Multiple Formats
  - Every 3 month “refresher”

- **Inconsistent Application of Process**
  - Reminders, follow-ups and positive reinforcement are essential

- **Multidisciplinary Approach**
  - Collaboration is indispensable