## <u>Project REVISE: A Novel Approach to Pediatric Fever</u> Orhay Mirzapolos, DO Midwestern University Emergency Medicine Residency

- Project REVISE: Reducing Excessive Variability in Infant Sepsis Evaluation is an ongoing study organized by the Value in Pediatrics network (VIP), a subset of the American Academy of Pediatrics.
- No change in the management of well appearing infants >29 days.
  - Partial septic work up with a respiratory viral panel and CXR only if respiratory symptoms are present and +/- an LP.
  - With a benign work up, these patients can be discharged home with follow up in 24 hours and no empiric antibiotics.
- Infants <7 days old, have a greater than 10% incidence of bacterial infections.
  - Obtain a full septic work up including CBC, Blood culture, UA, respiratory panel, CXR and LP (including a PCR for HSV).
  - Admission and empiric antibiotics are indicated.
- *THE CHANGE:* Well appearing infants 7-28 days old.
  - Only 10% febrile infants in this age group will have bacterial infection. Most have UTI, only 1% have meningitis.
  - Obtain UA, CBC, Blood culture, respiratory panel, CRP or procalcitonin, and CXR if respiratory symptoms are present.
  - Determine if child meets Low Risk Criteria:
    - Born full-term, or >37 weeks gestation
    - No prior hospitalizations
    - No prolonged newborn nursery course
    - WBC 5-15,000
    - <15 bands</p>
    - UA negative for leukesterase and nitrites with <5 WBCs on the micro
    - Negative CRP or procalcitonin
    - No chronic illnesses
    - No prior antibiotics
    - No unexplained hyperbilirubinemia

- If all of these criteria are met, the infant is low risk and the incidence of meningitis is <0.5% so no LP is indicated.</li>
  - Admit with no empiric antibiotics until cultures are negative.
  - If they test positive for a respiratory virus, discharged after 24 hours of negative cultures.
  - If the respiratory panel is negative, discharged after 24-36 hours of negative cultures.
  - If empiric antibiotics are started, then an LP should be performed prior to the administration of antibiotics.
- A free mobile app from Children's Mercy Hospital called CMPeds is available and walks you through this algorithm in a step by step approach.