Frequently Asked Questions

- **What is IPSO?**

  The IPSO (Improving Pediatric Sepsis Outcomes) is a quality improvement collaborative of children's hospitals addressing diagnosis and treatment across the hospital. IPSO aims to:
  - Reduce sepsis mortality by 75%
  - Reduce hospital-onset severe sepsis by 75%.

- **What are the benefits of participating?**

  By joining IPSO, your hospital will:
  - Prevent avoidable deaths from sepsis
  - Prevent escalation to severe sepsis in vulnerable patients
  - Prevent avoidable long-term disabilities
  - Create effective sepsis response systems across the hospital
  - Master appropriate and timely diagnosis and treatment of severe sepsis
  - Avoid the high costs of advanced care.

- **How is this collaborative different from the Surviving Sepsis campaign from SCCM?**

  IPSO has broader scope than Surviving Sepsis. IPSO incorporates the SCCM pediatric guidelines, which are based on the SCCM adult guidelines that are the focus of the Surviving Sepsis campaign, but IPSO is the only initiative with these additional elements:
  - IPSO is focused specifically on pediatrics.
  - In addition to improving diagnosis and treatment of severe sepsis, IPSO is breaking new ground by targeting the prevention of hospital-onset severe sepsis in any hospital setting. Preventing escalation to severe sepsis is key to preventing associated avoidable long-term health consequences, as well as reducing sepsis mortality rates.
  - IPSO's interventions cross subspecialty and care setting boundaries: from the ED, to any inpatient unit, and ultimately to pre-hospital and ambulatory settings. To adapt to specific needs the core interventions are extended with components appropriate to the patient population, such as cancer patients. Initially, IPSO will address the ED, PICU, hematology/oncology and BMT units, and general care units. In IPSO's next phase, the NICU and pre-hospital settings will also implement.
- **My hospital is already working on sepsis. What advantage is there to joining this collaborative?**

  Participating hospitals will achieve improvements at lower cost, more efficiently, and faster than any single hospital can achieve working independently. Your team will learn and test effective ways to:
  - Solve small sample size/rare event problems
  - Implement what works and reduce trial and error
  - Reduce costs by sharing infrastructure, avoid design and development costs
  - Physicians earn maintenance of certification credit, nurses earn continuing education credit.

- **How do I sign up to participate?**

  CHA member organizations can enroll now. Your hospital's senior executive will sign a letter of commitment, which outlines the scope of work and timeline. Participating hospitals commit to implement the collaborative’s diagnostic and care bundles and submit monthly data across multiple settings. To achieve IPSO’s ambitious aims, plan to participate for three years.

  Contact Cherie Thomas when you are ready to sign a letter of commitment.

- **What is the fee to participate in the IPSO collaborative program? Is it in addition to CHA annual membership dues?**

  Enrolled hospitals pay an annual fee based on number of operating beds (including NICU, excluding well baby nursery beds) and have access to all program resources to support the work. Annual fees range from $10,000-$45,000 and are in addition to membership dues. Contact Cherie Thomas to verify bed count and get your exact fee.

- **What do we get for the fee?**

  The collaborative provides these services:
  - Leadership from national experts
  - Diagnosis and treatment bundles based on best evidence and practice
  - Standardized data elements to collect on sepsis patient care
  - Flexible data submission via EMR export, local data collection form systems, or web data entry
  - Secure web portal for aggregate and custom reports
  - Monthly data analysis
  - Custom performance reports of sepsis care and outcomes quality measures
  - Monthly aggregate benchmarking
  - Webinars
  - Workshops
  - Bundle training materials
- QI methodology training
- Repository of tools and resources, including trigger tools, evidence tables, and bibliography
- Access to collaborative data assets for analysis, research and publication
- Online discussion group.

**What care settings will be involved?**

Teams in these care settings should plan to participate now:

- ED
- PICU and CICU
- Hematology/Oncology
- Bone marrow transplant units
- General care units

NICU and pre-hospital units will participate in of the next phase of the collaborative.

**What is required of my team? What activities are involved?**

Once you sign the enrollment commitment, we will be in touch with your designated point of contact (POC) regarding orientation and mobilization. Initially, your team will receive a mobilization guide that will get you going on all the work needed to be ready for bundle implementation and data collection. Mobilization includes identifying the right people and structure for your team; secure access to collaborative resources; kick-off meeting ideas; legal and regulatory tasks documents, a readiness inventory and suggested outline for an implementation plan.

Your primary point of contact

- Is designated by hospital leadership
- Serves as the key communication channel with CHA
- Receives mobilization package
- Coordinates hospital communication with CHA
- Coordinates the roster of participants
- Need not be the clinical leader of the collaborative
- Examples of people serving as primary contact are project manager, improvement advisor, administrator

Your major activities will be:

- **Implementing the standardized bundles.** The bundles include screening, monitoring and structured assessment; therapeutic interventions tailored for special patient populations; de-escalation; patient and family engagement; and optimizing performance.
- **Collecting and submitting data.** Process and outcomes data are submitted to a shared database each month, and you will get back monthly analyses in charts and reports.
- **Collaborating with peers at other hospitals.** You will be part of an all-teach-all-learn community that convenes via monthly web events and two workshops each year. You also interact with collaborators through a secure web discussion group. There is no additional fee to participate in the workshops; however participants are expected to pay their own travel expenses.

**What data will be collected?**

Each month you’ll collect and submit process data to track bundle implementation to identify and treat sepsis patients and patient outcomes data. There are approximately 40 data elements collected. CHA will analyze submitted data monthly to calculate quality measures across the collaborative and for each hospital.

**Outcome Measures:**
- Mortality from Severe Sepsis
- Incidence of hospital-onset Severe Sepsis

**Process Measures:**
- Sepsis screening
- Antibiotics (timing, appropriateness)
- Fluids (timing)
- Vasoactive agents
- Treatment de-escalation

Data submission methods are flexible to minimize data burden. Hospitals can extract from the electronic medical record, use a web-based data capture system, or export data from REDCap or similar form-based applications. Analyses and reports are available through IPSO’s secure web portal.

The time and resource commitment for collecting and submitting data will depend on the number of sepsis patients and how your organization is obtaining these data. Each patient will be followed through the continuum of care (not just in the ED, the PICU or on general care floors), capturing the patient's hospitalization rather than treatment in just one care area. Clinical expertise will be needed to validate data or obtain data that is not specifically captured in the EMR.

- **Is PHI being collected?**

There is only one element of PHI collected -- date of birth, which is used to calculate age for basic patient stratification in the analyses. The Data Use Agreement for the collaborative covers this as a “limited data set”.
- **Is IRB approval required?**
  A decision about IRB review is up to your local IRB. IPSO is a quality improvement initiative, so your IRB may grant a waiver for quality improvement work. Since IRB review may take time, consult with your IRB as soon as possible after you enroll.

- **Who is participating in IPSO?**
  You can find a list of participating hospitals on the CHA web site.

- **Who is leading this work?**
  IPSO has been designed by a National Expert Advisory Committee of more than 60 individuals from 40 member hospitals, led by our national co-chairs:
  
  - Richard Brilli, MD, FAAP, MCCM, Chief Medical Officer, Nationwide Children’s Hospital
  - Charles Macias, MD, MPH, Chief Clinical Systems Integration Officer, Texas Children’s Hospital
  - Matthew Niedner, MD, Director of Quality and Safety, PICU, University of Michigan C.S. Mott Children’s and Von Voigtlander Women’s Hospital

- **How are you aligned with existing sepsis work locally and nationally?**
  The Improving Pediatric Sepsis Outcomes collaborative builds on a substantial body of research, guidelines, national campaigns, collaboratives, and local implementation efforts
  
  - The IPSO expert committee includes members of the ACCM/PALS writing committee ensuring alignment with the latest pediatric recommendations in the IPSO interventions bundle. The expert committee includes Joe Carcillo, MD, one of the lead authors on the SCCM/PALS pediatric sepsis guidelines
  - IPSO co-chair Charles Macias, MD, MPH, also leads the Pediatric Septic Shock Collaborative sponsored by the American Academy of Pediatrics’ (AAP) Section on Emergency Medicine (SOEM) for the last several years

- **Who do I contact with questions or to enroll?**
  Cherie Thomas cherie.thomas@childrenshospitals.org