

Development and Implementation of Interventions for the Improving Pediatric Sepsis Outcomes (IPSO) Collaborative

Huskins, W. Charles¹; Auletta, Jeffery²; Balamuth, Frances³; Depinet, Holly⁴; Paul, Raina⁵; Razaqi, Faisal⁶; Schafer, Melissa⁷; Scott, Halden⁸; Silver, Peter⁹; Wathen, Beth⁸; Brilli, Richard²; Macias, Charles¹⁰; Niedner, Matthew¹¹; Lukasiewicz, Gloria¹¹; Riggs, Ruth¹¹; Ward, Lowrie¹¹; Stuart, Jayne¹¹; Larsen, Gitte¹²

Background

Guidelines for the identification and treatment of pediatric severe sepsis and septic shock (SS/SS) have been published by various groups.

While single-center, multi-center, and state-level quality improvement (QI) initiatives have demonstrated increased adherence with guideline recommendations and improved patient outcomes, gains have been modest and persistent gaps remain.

Improving Pediatric Sepsis Outcomes (IPSO) is a Children's Hospital Association improvement collaborative formed in 2016 to reduce mortality from sepsis and improve survivor outcomes by identifying sepsis earlier and initiating more timely treatment.

Objective

To develop interventions for early identification and appropriate and timely treatment of children with or at risk for SS/SS to be used in the IPSO collaborative.

Results

IPSO has measurable improvement in outcome and process measures both in aggregate and at site levels. Hospitals have structured teams across the organization, with average team size of 35. Data submission is above 90% and data sets comprise 150,000+ sepsis episodes. Collaborative activities are well attended, and the collaborative library averages 1,000 accesses monthly.

Conclusion

IPSO is a comprehensive QI collaborative project whose overall goal is to reduce the impact of SS/SS in hospitalized children. Hospital teams' engagement in developing and implementing the interventions has been robust.

Design/Methods

IPSO is the first improvement initiative to address the full continuum of sepsis and the first to implement across the emergency department, pediatric intensive care unit, general care and cancer/transplant care settings, where there is risk of unrecognized and rapidly progressive sepsis. IPSO SMART aims for mortality and hospital-onset sepsis, originally based on best available evidence, can now be revised based on IPSO's large national data sets.

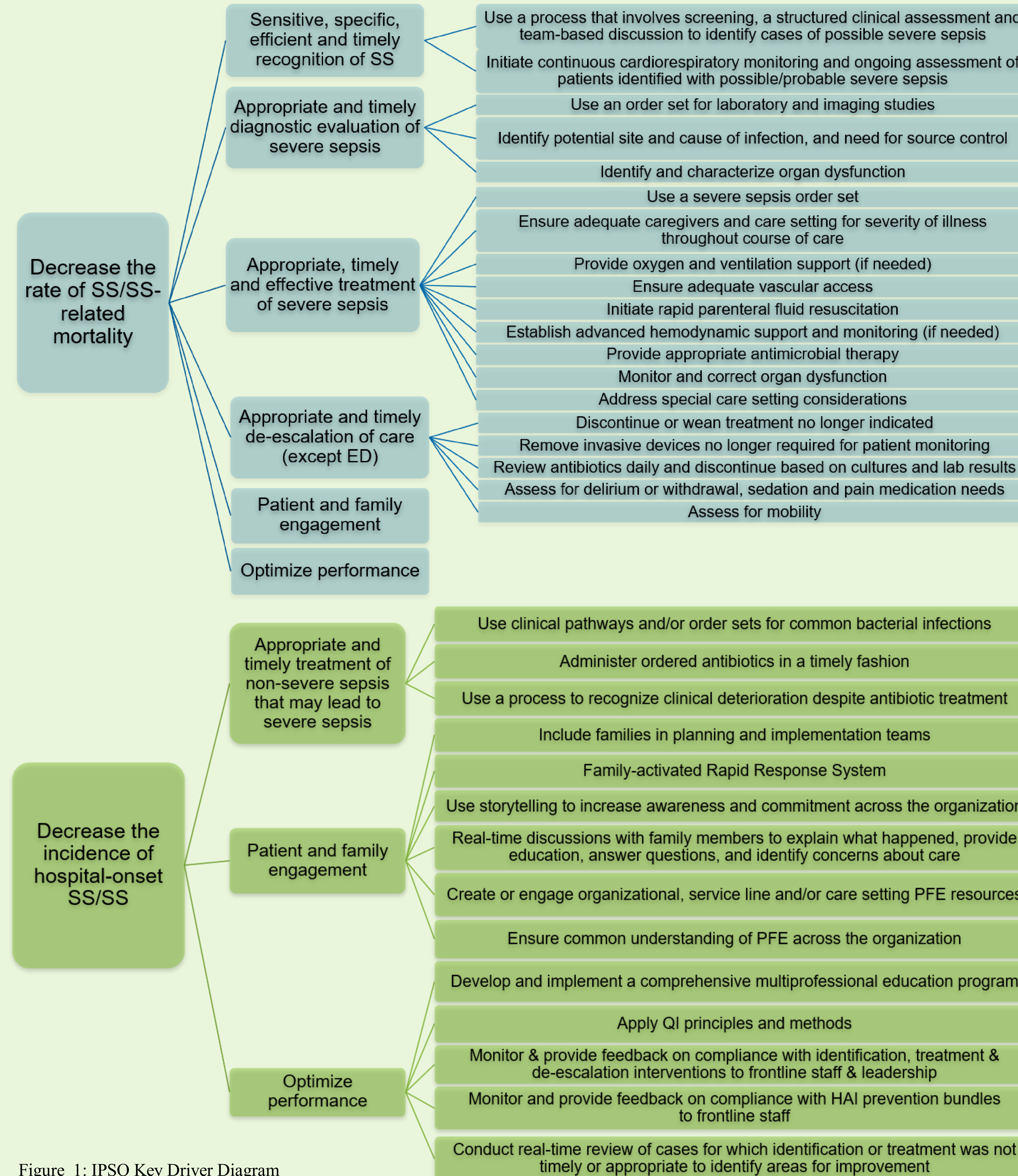


Figure 1: IPSO Key Driver Diagram

Contact:
W. Charles Huskins (huskins.charles@mayo.edu) or
Jayne Stuart (jayne.stuart@childrenshospitals.org)

Figure 2: IPSO activities and services accelerate improvement and enable all hospitals to succeed.

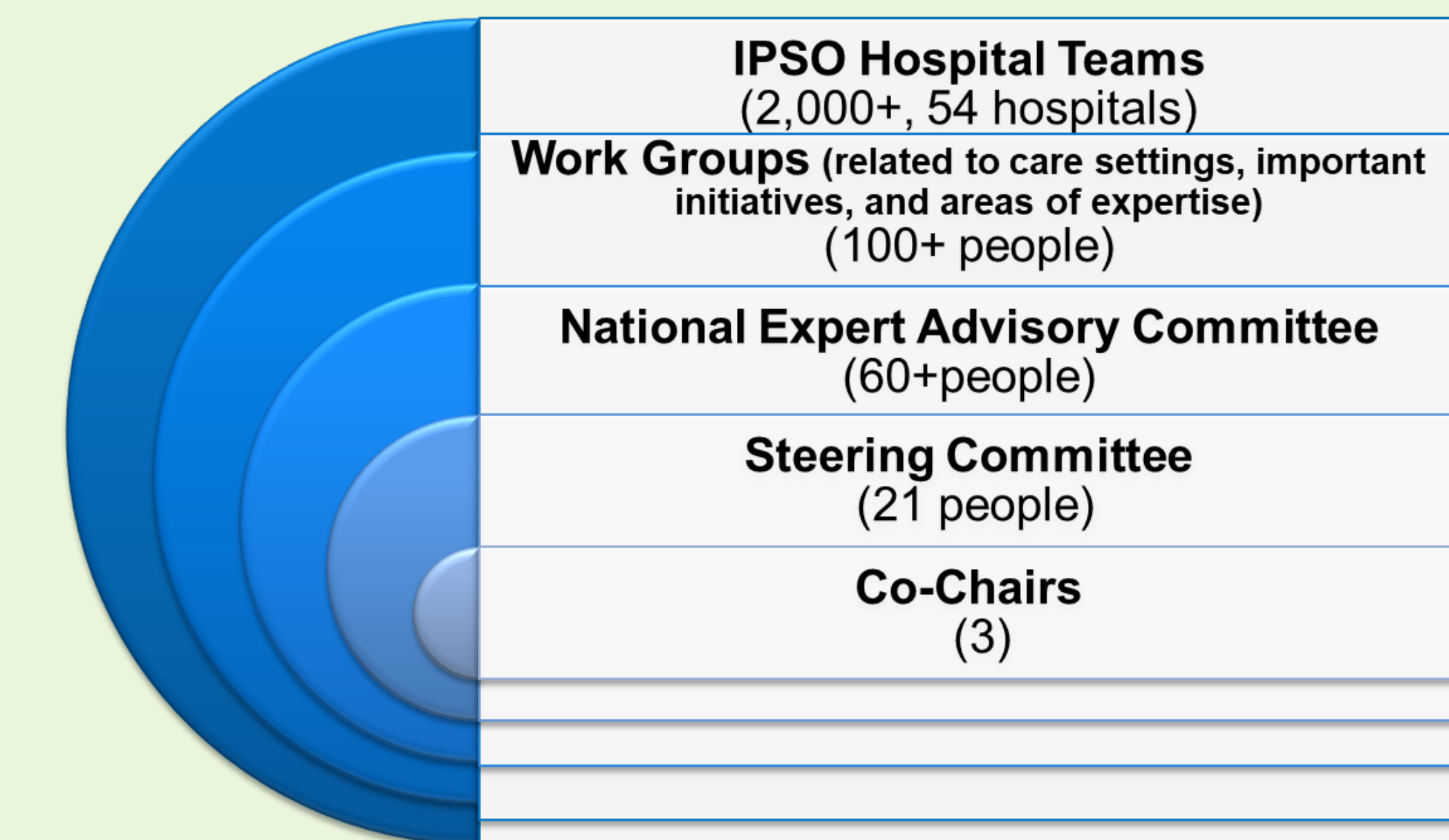
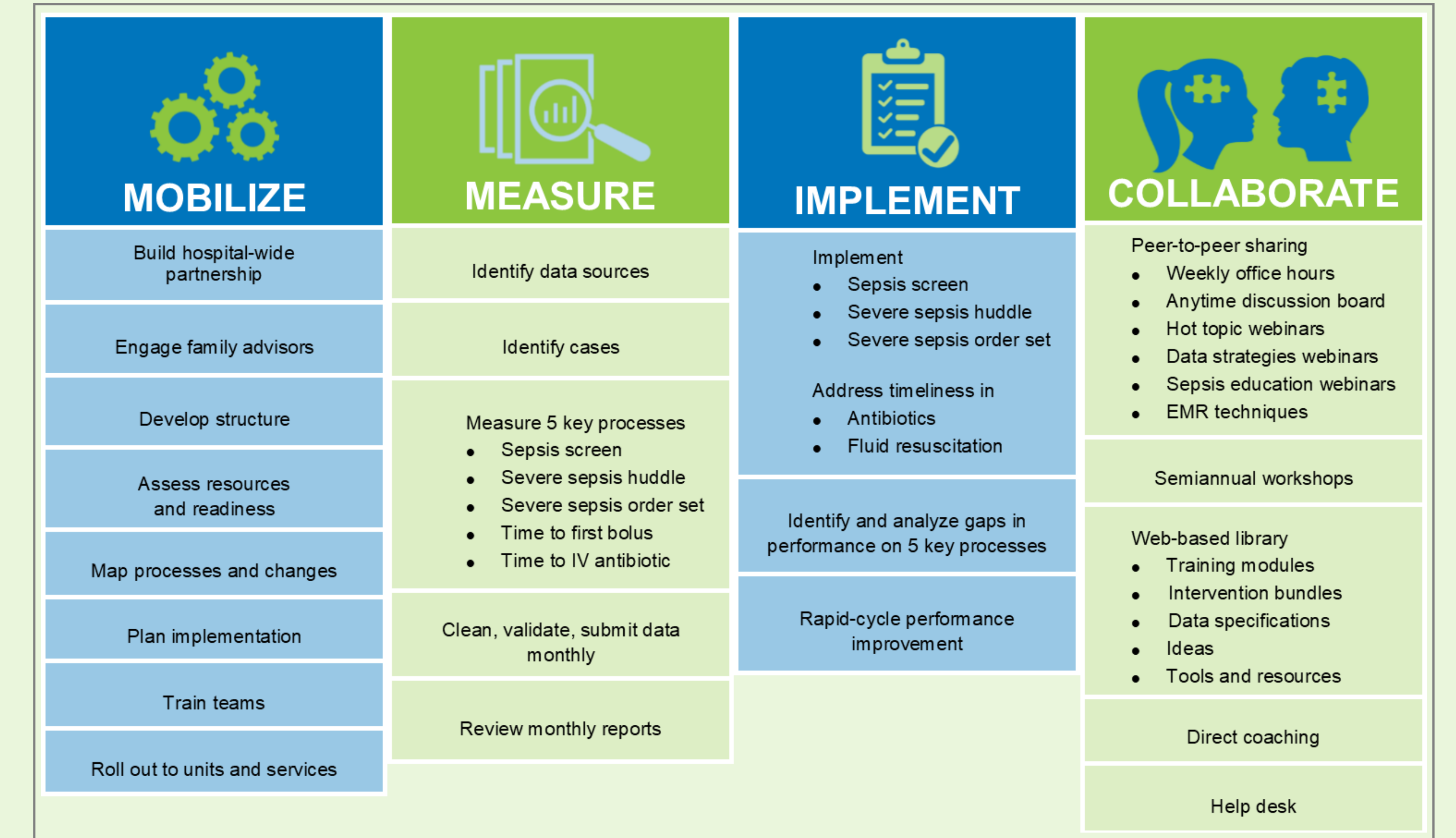


Figure 3: IPSO Structure

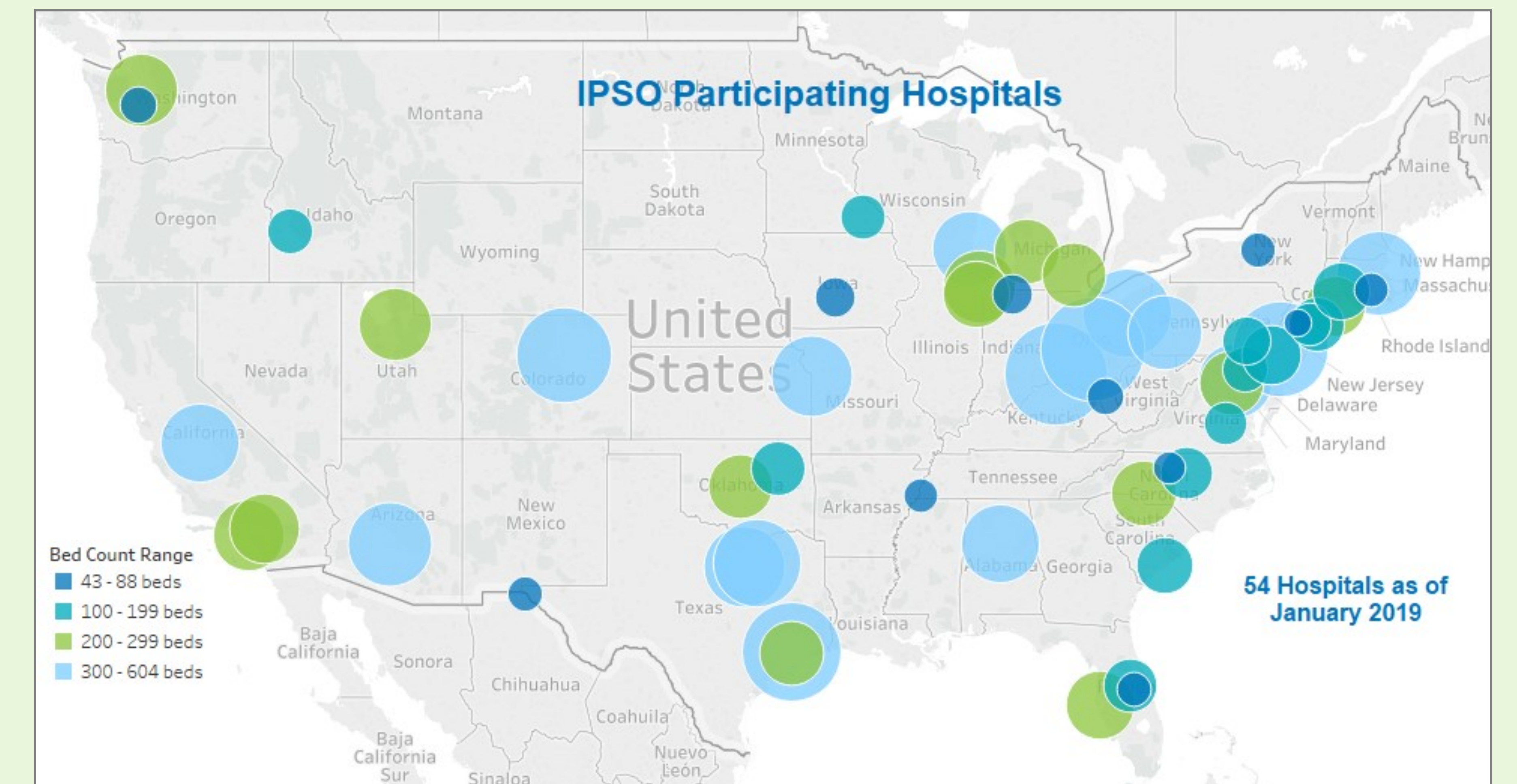


Figure 4: IPSO hospitals are varied in size and location.