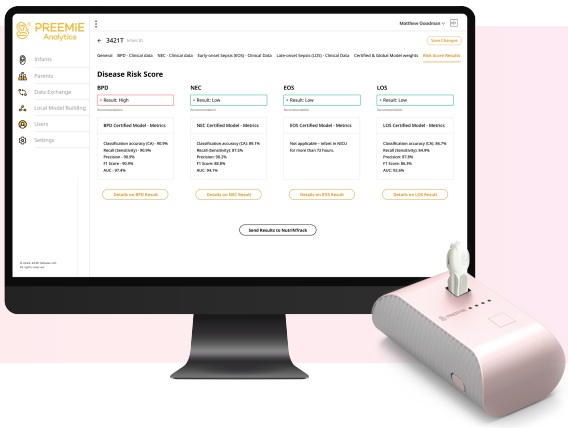
Preemie Health
Collaborative Intelligence, Personalized Preterm Care

Preemie Analytics platform
Neonatal Software

Preemie Analytics is a platform that enables neonatal units and researchers to collaboratively build powerful AI models for predicting preterm infant diseases like BPD, NEC, and neonatal sepsis. It functions as a standalone system or can be integrated with the Preemie Sensor and NutriNTrack.

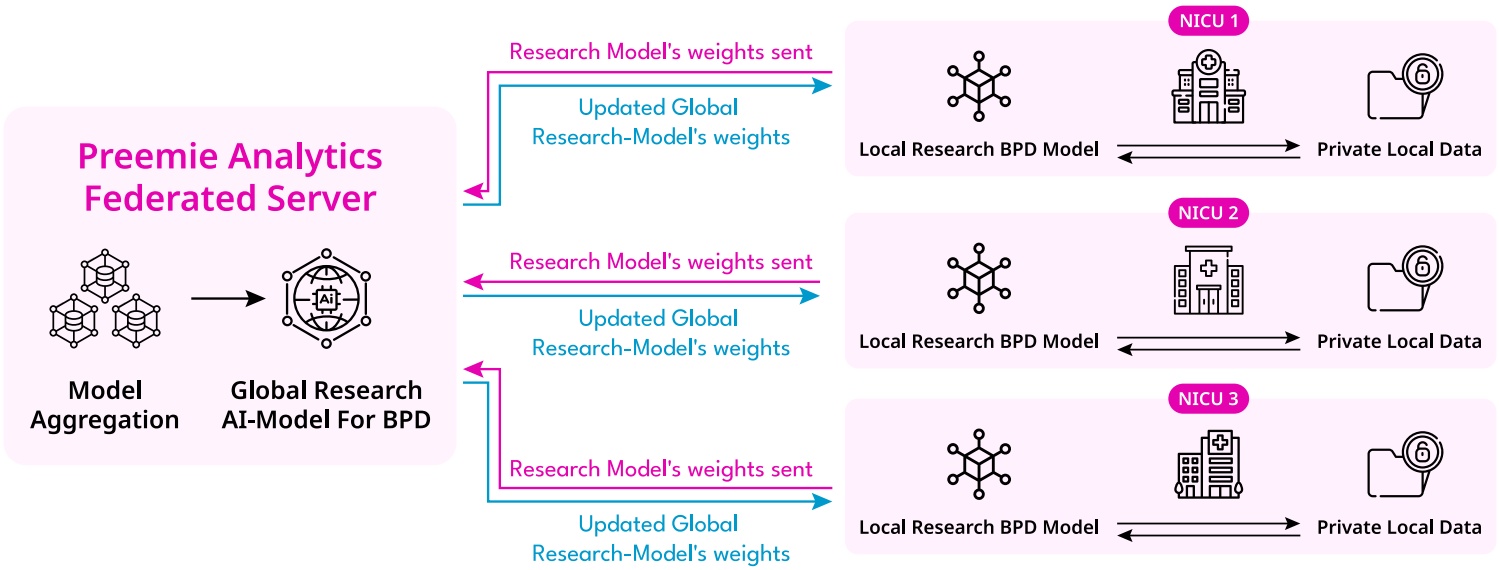


Preemie Analytics is a secure, blockchain-based federated learning network that enables NICUs to collaboratively build powerful AI models for predicting preterm infant diseases. The platform analyzes EMR data without moving sensitive patient information, creating a growing repository of collective intelligence. This provides clinicians with critical, data-driven insights for risk stratification and personalized nutritional management, which integrate directly with our NutriNTrack software for precision fortification.

The system creates a powerful network effect: each participating hospital enhances the model's predictive capabilities for all users, building a scalable ecosystem that accelerates research and improves outcomes across the network. All outputs are advisory and intended to support, not replace, the clinical judgment of qualified healthcare professionals.

Preemie Analytics software features

- The PA software is installed within each hospital's secure IT environment;
- It analyses local, de-identified patient data from the EMR (e.g., Epic, Cerner) to retrain AI models locally;
- Instead of sharing raw data, each hospital's system sends only encrypted mathematical updates (model weights) to the central server;
- The central server receives encrypted model updates from all participating hospitals in the network and aggregates these updates to retrain the Global AI model;
- This model has learned from the diverse experiences of a vast population of infants, making it more accurate and robust than any model trained on a single hospital's data.



For further information reach out to us at: Info@PreemieSensor.com, www.Preemie.Health @PreemieHealth