Pediatrix Medical Group’s Clinical Data Warehouse (CDW)
Fact Sheet

What is the Pediatrix Clinical Data Warehouse?

- Pediatrix Medical Group’s Clinical Data Warehouse (CDW) is a large-scale database that allows the analysis of clinical information collected from physicians using Pediatrix’s electronic health record, BabySteps®, in more than 300 neonatal intensive care units (NICUs) throughout the United States.

- Pediatrix-affiliated physicians use BabySteps® to document the care they provide by capturing a consistent set of information about their patients in the NICU. This digital documentation of care is securely stored in the CDW, where patient information is de-identified and used to assess treatment outcomes, develop strategies to improve care and promote meaningful changes in clinical practices to continuously enhance the quality of neonatal patient care.

What does the CDW bring to neonatal research and improving outcomes?

- With Pediatrix’s use of health information technology systems, the CDW has become the nation’s largest neonatal database, offering outcome reporting capability for more than 800,000 neonatal patients and more than 14 million neonatal patient days.

- With more than 900 neonatologists, Pediatrix physicians provide care for approximately 20 percent of the premature babies born in the United States. As a result, the CDW collects data for approximately 90,000 NICU admissions per year.

What is the value of the CDW to patient care, physicians and hospitals?

- The CDW is a valuable tool used to better understand and assess the care provided by Pediatrix physicians in order to improve patient outcomes. The CDW is used to address clinical questions about neonatal care and to make
novel research observations, such as identifying national or regional trends, analyzing the impact of a specific clinical intervention upon patient care, or in determining the outcomes of a clinical quality improvement project. Furthermore, Pediatrix utilizes the CDW to help provide insight and potential answers for hospitals, payors, and federal and state agencies.

- In fact, due to the extent and depth of the data collected by Pediatrix physicians, the CDW database has been used for research by the FDA, the NIH, and the NICHD, often resulting in study publication in peer-reviewed literature.

**What role does the CDW have in the 100,000 Babies Campaign?**

- Physicians and hospitals participating in the 100,000 Babies Campaign use BabySteps to document the care provided to their patient at each NICU. This digital documentation of care is securely stored in the CDW, where patient information is de-identified and used in clinical research to assess treatment outcomes. In this particular program, the data collected in these five key areas of clinical focus are analyzed and then used to support important changes in the delivery of care provided by the entire NICU healthcare team.

**How has the CDW contributed to improving neonatal care?**

- For many years, Pediatrix physicians have successfully used health information technology to help reshape the delivery of neonatal care and improve patient outcomes. Using information from the CDW, Pediatrix’s quality improvement research studies have resulted in significant wide-scale improvements in neonatal patient outcomes, including:
  
  - Enhanced growth rates: improved weight gain during the first 28 days of life for very low birth weight newborns.
  
  - Significant reduction in the use of medications for which there is little clinical evidence to support their use in premature babies. Following the introduction of clinical evidence that demonstrated significant differences in the safety and effectiveness of certain medications, practice patterns have been changed.
  
  - Optimized use of antibiotic therapy.
  
  - Reduced rates of chronic lung disease
• Contributions to clinical research:
  • More than 50 peer-reviewed research articles have been published in prominent medical journals during the past decade based on data contained in the CDW.
  • Completion of nine multi-center randomized trials and eight more studies currently in progress.