Strategic Planning for PeriData.Net®: The Next Decade

WAPC Wisconsin Association for Perinatal Care

A non profit multidisciplinary organization formed in 1970 dedicated to improving perinatal health

Executive Summary

PeriData.Net® has experienced greater success than imagined when it was designed a decade ago. It has enjoyed a continuous evolution and has become a cornerstone of perinatal information for clinical quality improvement statewide. To continue to thrive, PeriData.Net® must evolve.

A group of 37 internal (WAPC Perinatal Data Committee) and external stakeholders met on March 1, 2013, for a day-long session to celebrate the past decade of success with PeriData.Net® and plan for the next decade. The meeting provided time to brainstorm, talk, and interact to envision the possibilities and plan for the future.

The day was organized by presentations about the history of PeriData.Net®, a SWOT analysis of PeriData.Net®, the business case for PeriData.Net®, and community health partnerships built on PeriData.Net®. Following the presentations, leaders provided an overview of five topics that became the center of discussion during the forenoon-building interfaces, partnerships, knowledge, and sustaining value to hospitals.

At the end of the day, participants agreed to the following actions:

* Update all definitions—This is a critical first step for almost all other system enhancements.
* Secure adequate funding for expansion and maintenance.
* Provide electronic interface to other data, including the electronic health record.
* Advance perinatal health by promoting the use of PeriData.Net® data to researchers.
* Expand partnerships to other states, organizations, and community health partners to improve perinatal health.
* Establish on demand electronic basic and advanced training modules to accommodate hospital staff turnover and assure knowledgeable data users.

PeriData.Net®: 2003-2013

Marianne Weiss, DNSc, RN, and chair of the WAPC Perinatal Data Committee opened the day with the "Power of PeriData.Net®, Part V." Over the last 10 years, WAPC hosted other meetings, the first being in December 2003. This session was dubbed "The Power of Perinatal Data, Part 1." Subsequently, WAPC hosted three meetings about the power of PeriData.Net® in 2005, 2008, and 2010.

WAPC has a long history in establishing and maintaining a perinatal database. In 1988, WAPC launched a DOS-based program called PC-LOG. It was a joint initiative of 60 birth hospitals, a developer, WAPC, and the State Vital Records Office (SVRO). The purposes of PC-LOG were support of electronic submission of vital records data and internal reporting and quality efforts at hospitals. As technology and the health care environment changed, PC-LOG became obsolete.

The need for a contemporary perinatal data platform was evident. The WAPC Board of Directors and the WAPC Perinatal Data Committee took the bold step to envision that system and find partners willing to work on it. Those partners were Wisconsin's birth hospitals, the Center for Urban Population Health at the University of Wisconsin Milwaukee, the Department of Health Service Bureau for Health Information, and the Rural Wisconsin Health Cooperative. Through a competitive process, CUPH became the developer of PeriData.Net®.

PeriData.Net® was launched in April 2006 as a Web-based application with over 600 fields. It has information about the clinical course of care throughout the antenatal, intrapartum, and postpartum periods. In addition, it has information about the clinical course of the newborn. *Most significantly, it links mother and baby data, the only data set to do that.*

Other features include:

* PeriData.Net® provides hospitals ownership and control of their data with immediate access.
* Data are transferred from SVRO on a real-time basis.
* Data outputs are available as standard and customized reports.
* Hospitals can use the data for internal and external reporting and quality measurement and improvement.
* Updates are timely, and the Web-based system allows updates to be made centrally to meet professional standards.

(PeriData.Net®: 2003-2013 continued from page one)

Currently, over 90 Wisconsin birth hospitals are enrolled and over 92% of Wisconsin births are in PeriData.Net®. To date, there are over 400,000 records in PeriData.Net®, accruing at a rate of approximately 60,000 records annually.

Accomplishments over the last 10 years include:
- Refinement and expansion of data fields and data definitions
- More than 10 standard reports
- Extensive custom reporting training
- Conversion to a link from the DHS vital record system to PeriData.Net®
- Support of public health efforts, such as perinatal HIV surveillance and child abuse and neglect prevention
- Publicly reported perinatal measures

In summary, Wisconsin is at the forefront of perinatal care and perinatal data. PeriData.Net® is a unique collaboration, a powerful tool, a comprehensive database, and a platform for interconnectivity. However, PeriData.Net® is not a vital records substitute, nor an electronic health record or Joint Commission vendor.

WAPC's role is unique: It is to coordinate the PeriData.Net® effort on behalf of its membership. WAPC does not serve as the data warehouse. WAPC's main goal is to improve perinatal outcomes through use of perinatal data by building partnerships across birth hospitals and statewide partners in perinatal care.

The Business Case for PeriData.Net®

Lisa Robinson, RHIA, CTR
Director, Clinical Data Registries
Aurora Health Care, Milwaukee

Ms. Robinson presented reasons why PeriData.Net® supports not only the clinical functions, but also the business functions of birth hospitals.

Reason #1: PeriData.Net® provides a Standardized Birth Log
PeriData.Net® serves as an electronic birth log for a facility and is standardized for all users, including a standardized data dictionary. It serves as a longitudinal record over time (years/decades.)

Reason #2: PeriData.Net® links mother and infant data
PeriData.Net® is the only database that appropriately links a mother with her infant's record. This linkage has many advantages, including the ability to find a mother's patient medical record number by using the infant's number.

Reason #3: PeriData.Net® clarifies naming standard for infants
Conventional naming is no longer conventional, with mothers and infants often having different last names, leading to confusion. However, PeriData.Net® can validate and reconcile names from multiple systems.

Reason #4: PeriData.Net® can capture information from multiple sources
PeriData.Net® includes information in dictated and written documents, such as autopsy reports, which cannot be extrapolated from the electronic health record. PeriData.Net® includes complete information necessary to understand infant and maternal mortality and morbidity and to implement effective interventions.

Reason # 5: PeriData.Net® is a check on accuracy of other data sources
Electronic health record documentation is not perfect. There are inaccuracies, omissions, and contradictions. However, PeriData.Net® can serve as a check and balance for clinical documentation, while producing solid statistics to compare with the electronic health record and billing data.

Reason #6: PeriData.Net® provides quality data in usable reports
One of the features that hospitals created in PeriData.Net® was easy-to-use standard reports, custom reports, and aggregate reports. There is also the ability to share custom-built reports with other hospitals and agencies and to retrieve information for one, some, or all hospitals in a network. In addition, there are multiple audit tools to assure complete data.

Caveats--PeriData.Net® is not a coding database, nor does it include every detail about the course of perinatal care, delivery, and outcomes. It does provide important information about clinical care, including categories of medications, risk factors, and labor and delivery and newborn care.

The following presentations framed discussion questions for small group work. There were three presentations about some of the strengths of and opportunities for PeriData.Net®. The following describes those three presentations.

Public Health Implications: A Case Study

Bonnie Teuteberg, RN
Director, Women's Services Birthing Center and Genetics
St. Vincent Hospital, Green Bay

The Community Partnership for Children (CPC) in Brown County Wisconsin is a prevention-focused early childhood initiative that brings together many partners. Its vision is for all of the county's children to be safe, healthy, and ready for kindergarten. There are four birth hospitals in the county, all of which use PeriData.Net® and screen parents for risk factors contributing to child abuse/neglect. Each month each hospital runs a custom report from its data in PeriData.Net® and meets to share the results with the other hospitals and community agencies. The data elements mimic the screening tool used by other providers to identify families at risk. Risk factors include late prenatal care, history of depression, low family income, unstable housing, and low educational achievement. Without a common database, the four county hospitals would not be able to share identical data elements and create a seamless community program.

Every parent receives a Welcome Baby Visit from a CPC Family Resource Specialist. However, for families with identified risks, the resource specialist assesses parents further and connects them to resources based on their circumstances, eligibility for services, and available program openings.

Recent results from the program demonstrate that
- 98% of CPC-enrolled households had no substantiated reports of child abuse or neglect
- 100% of CPC-enrolled families were linked to a primary care provider
- 96% of CPC-enrolled children were developmentally ready for kindergarten
- 100% of CPC-enrolled children were socially and emotionally ready for kindergarten

Operations & Quality: One System's Experience

Lisa Lokken MSN, RNC-OB, C-EFM, CNS-BC, Clinical Nurse Specialist, Wheaton Franciscan Healthcare—St. Joseph Campus, Milwaukee

Margaret Malnory , MS, RN, Clinical Director, Women, Children and Emergency Services, Wheaton Franciscan Healthcare—All Saints, Racine

In one of the largest Wisconsin health care systems, PeriData.Net® is used for each of the following purposes:

- *Administrative/Operational Reporting,* including:
  o Linked data from mother and baby
  o Standard Reports
    ♦ Physician credentialing and department reporting
      • Delivery and Birth Summary
      • Labor Procedures Summary
    ♦ Data entry process changes
      • Certification Log
    ♦ Custom Reports
    ♦ Day of week report
    ♦ BMI and Cesarean Section report
    ♦ Primary Provider report

- *Internal Quality Reporting and Improvement,* including**:**
  o Breastfeeding at discharge WINpqc report
  o Breastfeeding in the NICU
  o Data entry of reason for CS
  o Induction of Labor (IOL)< 39 weeks
  o Late preterm report
  o Evaluation of grant-funded and other projects

- *Physician Quality Review*, including reports by physician, practice, and vacuum extraction rates. In addition, reports are available to support physicians preparing for their board exams to be certified in the specialty of obstetrics/gynecology.

- *External Reporting,* including WHA CheckPoint, The Joint Commission (TJC) pay for performance, HealthGrades, community groups, and WINpqc about the breastfeeding rate at discharge for infants weighing less that 1500 grams.

- *Collaborations* have formed around the
  o Lifecourse Initiative for Healthy Families (LIHF) through the use of the disparities report and the demographic report.
  o Breastfeeding, including the breastfeeding rate for infants in the NICU (state initiative) and the racial distribution of breastfeeding among different racial/ethnic groups.

Positioning PeriData.Net® for Future

Based on detailed SWOT analyses and agreed on strategies for the future, the stakeholders' strategies included building an electronic interface, building partnerships, building perinatal knowledge, and sustaining value to hospitals.

Building an Electronic Interface

Recommended actions:
- Secure adequate funding to support the development of an electronic interface.
- Update all data definitions as soon as possible.
- Build the electronic interface incrementally, perhaps beginning with demographic information.
- Consider engaging vendors of documentation systems, such as a fetal monitoring documentation systems.
- Begin by mapping data fields and possible sources of the data.
- Define the value of PeriData.Net® --how and why to use it--and present it to hospitals.

Building Partnerships

Recommended actions: Expand PeriData.Net® for external uses, with adequate permissions, protections, and releases.

Building Perinatal Knowledge

Recommended actions: In the short-term, convey to researchers how to acquire data, and in the long-term, streamline the process for acquiring data for research.

Sustaining Value to Hospitals

Recommended actions: Continue education and dialogue about the following:
- The greatest strengths of PeriData.Net® are that data are collected in the same way in all hospitals, data are real time and available for whatever hospitals want them, and standard reports are readily available and continue to grow in number.
- Aggregate reports are available to hospitals to compare with other de-identified hospitals of similar size.
- Features that would increase the value of PeriData.Net®, are a forum for issues related to custom reporting, more best practice alerts and interactive mechanisms, and comparison data for the state.
- Communicate regularly with hospital staff about fully utilizing PeriData.Net® for efficiency and quality.

Note: Currently, WAPC has a 10-year contract with the University of Wisconsin-Milwaukee and the Center for Urban Population Health. The purpose of the original contract was to define the relationship between UWM/CUPH and WAPC as to development and ownership of the intellectual property inherent in the perinatal data platform, which became known as PeriData.Net®. The contract will expire on December 31, 2014.

Negotiations are underway with the intent of having a new contract in place by the end of 2013 or very early in 2014.

Epilogue

An expanded meeting summary was available to the WAPC Board of Directors at its meeting on April 21, 2013. In May, the WAPC Perinatal Data Committee reviewed the meeting summary and set priorities for action. Work is underway to update all of the definitions in PeriData.Net®. The meeting summary will be distributed electronically by WAPC.