

*WI Department of Health Services  
Division of Enterprise Services*

## **Illinois Cornerstone System Review**

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# Illinois Cornerstone System Review

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## 1 Issue

How well do Wisconsin Department of Health Services (DHS) systems (specifically those providing support for maternal and child health) support the ability of a client to register once for multiple programs, for program administrators to have access to client data previously captured by other programs, and to manage an automated care plan for clients?

## 2 Executive Summary

The state of Illinois uses an automated system called Cornerstone to provide a centralized, integrated client database and access to non-confidential client care plan data for maternal child and health programs. The Wisconsin Special Committee on Infant Mortality was asked if DHS currently has a system that provides similar functionality.

Wisconsin does not currently have a single, integrated system to perform all of the tasks that the Illinois Cornerstone system does. Wisconsin does have many systems that perform some of the functions outlined in the Cornerstone system (e.g. ACCESSS, CARES and FSIA all provide integration between client demographic and client care data). Note that Illinois decided in 1992 to establish a single client database and spent five years on the first implementation. Illinois' Cornerstone system has evolved for almost 15 years since its 1997 implementation.

Wisconsin continues to move forward with integrating existing and new systems and this effort has a new catalyst in the form of National HealthCare reform. The issues that prevent Wisconsin from moving forward are largely program and policy based, not technical. Challenges that Wisconsin face include: the need for citizen-centric (vs. programmatic) program approaches; statutory and policy limitations on sharing client data; and the lack of a single business driver that could provide large amounts of funding to identify and implement appropriate changes. One could easily expect a double digit million dollar effort to implement these changes at one time.

## 3 Background

The rate of African American infant mortality in Wisconsin is approximately three times greater than the rate of infant mortality for those born to White women. The Wisconsin State Legislature authorized a Special Committee on Infant Mortality that was directed to study: (a) the causes of infant mortality in Wisconsin; (b) evaluation of efforts that have been undertaken to address this problem in both the private and public sectors; (c) coordination of public health and Medicaid funding; (d) evaluation of infant mortality prevention programs that have been successful in other cities and states; (e) evaluation of the public health costs of not addressing the causes of infant mortality in Wisconsin; and (f) developing a strategic proposal, including any necessary legislation, to address infant mortality in Wisconsin, particularly disparities in infant mortality rates in different geographic areas of the state.

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At the 9/22/2010 meeting of that committee, a presentation by Carole M. Johnson, Ph.D., Director, Local and Regional Community Programs, The Johnson Foundation at Wingspread was given. The report concluded with recommendations for connecting data and service systems in the state in order to eliminate redundancy, increase efficiency and effectiveness of service delivery, decrease costs, and decrease stress on those needing assistance. The Illinois Cornerstone system was mentioned as an example of a system meeting these requirements<sup>1</sup>. Based on the testimony of Dr. Johnson, interest was expressed in learning more about the Cornerstone program, and on what it would take to implement a similar system in Wisconsin.

The intent of this paper is to provide an overview of the Cornerstone system, focusing on its integration of data and systems and its use by Illinois and to report on similar functionality found in Wisconsin DHS programs or systems.

## 3.1 Cornerstone

Cornerstone supports these Illinois programs representing four divisions/bureaus from the Illinois Department of Public Health and four divisions/bureaus from the Illinois Department of Human Services<sup>2</sup>:

- Illinois Breast and Cervical Cancer Program (BCCP),
- Early Intervention (EI),
- Family Case Management (FCM),
- Healthy Families Illinois (HFI),
- Healthy Start (HSCM),
- Illinois Diabetes Control Program (IDCP),
- Immunization Program (IMM),
- Pediatric Primary Care (PPC),
- Prenatal Care (PREN),
- Special Supplemental Nutrition Program for Women, Infants and Children (WIC),
- WiseWoman Demonstration Project,
- Adverse Pregnancy Outcomes Reporting System (APORS),
- Closing the Gap,
- Healthy Births for Healthy Communities,
- High Risk Infant Follow-up,
- Targeted Intensive Prenatal Case Management,
- Genetics,
- Referral to Treatment,
- Teen Parent Services.

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<sup>1</sup> From the September 22, 2010 minutes of the Wisconsin State Legislature, Legislative Council, Special Committee on Infant Mortality; <http://www.legis.state.wi.us/lc/committees/study/2010/MORT/index.html>

<sup>2</sup> Information presented here is from the Cornerstone website at <http://www.cstonesupport.info/general/default.htm>

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When a client initially enrolls in a program the local provider captures demographic and eligibility information, along with data related to the specific program. That data is submitted on a nightly basis from the local organization to the Cornerstone system where a batch program updates a shared, centralized client database with the information and assigns the client record a unique identifier that is used internally. Updates received to client information, such as address changes, are submitted in the same manner. The State-level Illinois Department of Health Services (IDHS) uses Cornerstone to analyze data on its programs and their outcomes.

Once the client record has been established in the Cornerstone database, the data is usable by any participating system via a real-time data lookup. This means that one day after a client has enrolled in a program or provided an update to their information, staffs at other programs have access to the demographic information on that client; it is not necessary to re-enter the same information over and over again.

Cornerstone provides a single, automated care plan identifying a comprehensive array of service activities needed to address assessed risks for a client. The plan is based on the client's response to a standardized set of questions assessing prenatal or child health care, nutrition, child safety, and other human service needs. The system also provides a scheduling or referral system which matches the client's service needs with available internal and external providers. A wide-area network allows Cornerstone users to access service history data (for example, immunization history) when clients change their place of service.

The result is a simpler enrollment and updating process for both clients and program staff, and the ability to know all services that a client is receiving. Client demographic and eligibility data is captured once, stored centrally, and therefore available to all systems within Cornerstone. This single point of entry eliminates duplicative data entry, as well as reduces the chances of mistakes or duplicate enrollments.

While Cornerstone provides a single database of client data usable by multiple systems, the client still needs to register separately for each system, which may require physically reporting to several different locations. Additionally, system updates are batch, meaning that information captured is not usable until the next day.

Cornerstone started development in 1992, with system implementation occurring in 1997. The system is currently being updated to become web-accessible.

## 3.2 Wisconsin DHS

Wisconsin DHS does not have any programs or systems that provide the exact functionality as Cornerstone. While no single system at DHS provides the ability to manage client demographic data separately from the program area that initially captured the data, there are some programs and systems at DHS that provide limited data sharing. Those are listed below.

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## Secure Public Health Electronic Records Environment (SPHERE)

SPHERE is a system owned by the Maternal and Child Health program, designed to obtain statewide, standardized data for Title V Block Grant reporting requirements and to assist in the tracking of MCH local, state and federal performance measures.

SPHERE was based on the Minnesota Model of public health intervention, which is a population-based practice model that encompasses three levels of practice (community, systems, and individual/family) achieved through public health intervention types activities, or events, that reinforce defined public health interventions. Activities can be for individuals or households, communities or systems. Every activity is associated to specific program area.

SPHERE supports these programs:

- Well-child visits,
- Wisconsin Association for Perinatal Care,
- Infant Death Center,
- Children's Health Alliance of Wisconsin,
- Genetics, Parent to Parent,
- Postpartum,
- Child Assessment,
- Family Planning,
- Childhood Lead Poisoning Prevention,
- Children and Youth with Special Health Care Needs,
- Home Visitation,
- Prenatal care coordination,
- Early Intervention and Detection of Pregnancy,
- Oral Health,
- Injury Prevention,
- Great Lakes Inter-Tribal Council Honoring Our Children programs.

Client information is entered to SPHERE and, once entered, is usable for any program area or activity being entered to SPHERE within that local organization. SPHERE does not allow users to review data entered by another local organization. For example, if a client receiving services through the Sauk County LPHD moves to Marathon County, staff at the Marathon County LPHD would be able to find the client's personal demographic data, but would not be able to review the records of events and activities attended through Sauk County.

There is limited support for common enrollment through some of the programs accessible in SPHERE, but the system is designed more to provide tracking of activities and events for clients already enrolled in systems and programs.

SPHERE does provide the ability to review a client's care plan, but with two limitations. The first, as noted above, is that the data stored in SPHERE is secured at the local level. The second limitation is that SPHERE use is required only for client activities that are State funded through Title V Block Grant monies. This means that the record for client care activities in SPHERE is not necessary the full record of events and activities for that client.

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## Functional Screen Information Access (FSIA)

Wisconsin's Functional Screen system is a Web-based application that collects information about an individual's status, health and need for assistance for various adult and children's programs. The screen is used to determine functional eligibility for certain mental health services, adult long-term care programs and children's long-term care programs. It is also used for care options counseling and pre-admission counseling. FSIA is used to enter data gathered during an in-person assessment conducted at an Aging and Disability Resource Center (ADRC). The functional screen determines the applicant's eligibility for programs.

Programs supported through FSIA include:

- Family Care suite of programs,
- I Respect, I Self-Direct (IRIS).
- Children's mental health programs.

Common enrollment is available for PPS, Family Care and IRIS. FSIA may indicate other programs where the client is eligible for enrollment, but actual enrollment in those programs requires a separate submission of information, similar to Cornerstone.

## ACCESS

ACCESS is a self service web application and includes functionality to check benefits, apply or renew benefits, report a change, and screening. ACCESS was designed as an entry point for clients applying for Medicaid services that would enable them to receive information about all relevant services at one time.

Programs supported through Access include:

- Badger Care Plus,
- Supports Badger Care Plus,
- Benefits & Income Resources,
- Blind & Visually Impaired Service,
- Deaf & Hard of Hearing Services,
- Developmental Disabilities Services,
- Elderly Services,
- Emergency Food Assistance Program,
- Family Care, Partnership & PACE,
- Family Planning Waiver,
- FoodShare Wisconsin,
- Health Care Information,
- Healthy Birth Outcomes,
- Medicaid Purchase Plan (MAPP),
- Nutrition Resources, SeniorCare,
- State Health Insurance Plan (SHIP),
- Wisconsin Medicaid,
- Wisconsin Partnership Program,
- WIC.

ACCESS is used by trained service providers when registering a client. Part of the registration process is to capture information that may point to other programs for the client. The data

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entered to ACCESS is shared with the CARES system. ACCESS supports common enrollment in Badger Care Plus, FoodShare, and Family Planning Waiver, meaning that the client can enroll in these systems at one time. There is a limited interface and data sharing with WIC. Other programs for which the client may be eligible can be discussed, but the client will still need to register separately for those programs, and program staffs will need to re-enter client data.

## **CARES**

The CARES system is used to determine financial eligibility by County staff. CARES is used to determine a client's financial eligibility for various programs. CARES is interfaced with InterChange and FSIA, meaning that client demographic information is shared between those systems

CARES Worker-Web is a web-based front-end data entry screens used by Income Maintenance staff when registering clients. Data is shared among CARES Worker-Web, Wisconsin WellWoman, Chronic Diseases, Badger Care Plus, and the Family Planning Waiver Programs.

## **Prenatal Care Coordination Program (PNCC)**

Prenatal Care Coordination is a program that helps pregnant women and their families receive medical, social, educational, and other services related to pregnancy, with the goal of improving the birth outcome. Services are available to Medicaid-eligible pregnant women who are at risk for poor birth outcomes such as a premature or low birth weight baby. Women receive an initial assessment to determine needs, strengths, and eligibility for the PNCC program. Services are available during pregnancy and for the first 60 days following delivery. PNCC services are available in all Wisconsin counties and are provided by local public health departments, clinics, and community-based agencies.

PNCC does not use a single, centralized client database interacting with other systems, but does provide a manually created and managed integrated care plan.

## **Program Data Collection System (PDCS)**

PDCS is currently in the design phase, with an estimate go-live date in 2012. This new system is intended to do for Wisconsin much of what Cornerstone is doing for Illinois. The system will create a single, centralized and shared database used to manage client data for Family Care systems. This data, once collected, will be usable by all programs currently accessed via FSIA, including Family Care.



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## 4 Analysis

Providing a centralized client database and a single, automated care plan for clients are important goals for DHS that have been identified at enterprise-wide planning efforts. During the Medicaid Information Technology Architecture (MITA) executive vision session, held in early 2010, creation of a DHS-wide master customer index was one of four themes identified as top priorities.

Wisconsin has major projects underway that will provide many of the functions that a system like Cornerstone requires, such as the PCDS project. In addition, Health Care Reform, Electronic Health Record, and other major initiatives will most likely result in establishing a single client record usable by multiple programs.

While Wisconsin is doing a good job in notifying clients of services and programs that may be of assistance, currently there is no true single point of entry or management for multiple programs. There are instances where client data is shared between programs, especially within the Medicaid Enterprise systems. Limited capability to track an integrated care plan is provided through SPHERE, PNCC and FamilyCare.

Determining the requirements for a system to provide a single client database and to enable creating a unified care record, would be a complex project. In fact, the Cornerstone website states that it took 5 years from project initiation to implementation.

The difficulty is not technology based, but in the decisions that need to be made by participating programs and agencies, Federal, State and Local. Standards for identifying participants vary by program area; one program may require a birth certificate for enrollment, while another does not. Data sharing decisions need to be made on how updates to client information can be made and shared. Wisconsin is working towards these goals and has started efforts to reach decisions that will, in the future, enable it to identify clients and their care plans.