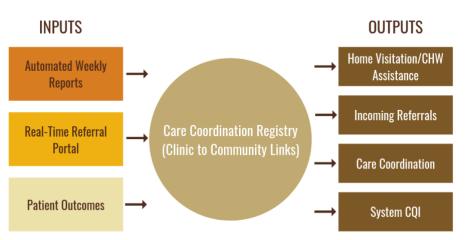# Cradle Kalamazoo Care Coordination Registry (CCR) Module

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1) **Executive Summary of Cradle Kalamazoo Care Coordination Registry (CCR)**

In Kalamazoo County today, poor infants and infants of color die at four times the rate of White, higher-income infants. It is not for lack of resources, given that Kalamazoo has two delivery hospitals, three obstetric clinics, several private practice obstetric offices, and multiple maternal-infant support programs. These resources, though, are not reaching the highest risk families. Care coordination of social, medical, and economic resources through team case reviews and continuous quality improvement metrics, are evidence-based strategies for increasing service reach and effectiveness.

The CCR Process

INPUTS		OUTPUTS
Automated Weekly Reports	→ Care Coordination Registry (Clinic to Community Links) →	Home Visitation/CHW Assistance
Real-Time Referral Portal		Incoming Referrals
Patient Outcomes		Care Coordination
		System CQI

WMed has developed a Care Coordination Registry (CCR) that serves as the data infrastructure for community-based care coordination efforts involving maternal-infant home visitation programs. This is an ongoing up-to-date repository of case records from:
   a. Kalamazoo's maternal-infant home-visitation programs;
   b. Community health worker programs;
   c. Phone hotline referrals;
   d. Vital records birth certificate abstracts;
   e. Clinic and hospital electronic health records; and
   f. Community self-referrals.

The CCR serves dual functions: (1) referral portal into maternal-infant support programs and (2) administrative tracking of perinatal, pregnant and one-year-postpartum, women and their infants across time, programs, and referral sources. Overall the CCR reduces duplication, encourages coordinated case-sharing, provides updated contact information for finding lost-to-contact cases, and maintains case status logs for weekly frontline case review meetings. The CCR incorporates continuous quality improvement metrics by documenting the coordination process from referral to contact

to enrollment through discharge and the associated health outcomes for perinatal women and their infants in Kalamazoo. This information is further stratified by population metrics of socioeconomic status, race/ethnicity, and prior birth outcomes.

The information provided by the CCR is reviewed at weekly frontline case review meetings. The CCR case status logs support timely follow-up of all maternal-infant home-visitation referrals by taking into account case risk status for additional referrals and follow-up. The weekly meetings and CCR logs combined provide uninterrupted support to families by holding programs accountable at each stage of the service process: from outreach, to contact, enrollment, program visits, outgoing referrals, and through discharge or program transfer.

2) Members of the Care Coordination Registry (CCR)

Cradle Kalamazoo community action initiative of local agencies, stakeholders, and community residents. The initiative's primary strategy is to establish a coordinated system of care, integrating Kalamazoo's existing maternal-child services into a continuum of care for perinatal women and their infants. In Kalamazoo, the following types of agency programs provide maternal-infant services:
   a. Children's Health Access Program (CHAP, OB-CHAP)
   b. Community Health Worker, both clinic and community based;
   c. Healthy Babies Healthy Start;
   d. Healthy Families America;
   e. Nurse Family Partnership
   f. State of Michigan Maternal Infant Health Program
   g. Early Childhood Programs
      i. Parents As Teachers
      ii. Great Start Readiness Program
      iii. Head Start
      iv. Early On

Referrals into these programs come from medical, social service and resource-directory agencies.

The Phone Hotline is a part of a statewide resource-directory network of 2-1-1 hotlines, providing 24-hours-a-day, 365-days-a-year access to health and community information and services. The role of the Phone Hotline is to provide enhanced access to pregnancy and infant-parenting related resources and program-specific referrals, modeled upon the statewide MI-CHAP (Michigan Children's Health Access Program)[1]. The Phone Hotline is an easy entryway into resources and questions for pregnant and infant-parenting families in Kalamazoo. In addition to providing information about available resources and services, staff at the Phone Hotline will provide a "warm" hand-off to members of the CCR based on an eligibility algorithm and follow-up to ensure the caller received the resources they needed.

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[1] Michigan Children's Healthcare Access Program is an evidence based model that improves the quality of care and health outcomes for children with Medicaid, through pediatric-based community health workers and 2-1-1 CHAP specialists and care coordination to reduce barriers to medical access (http://www.uwmich.org/michap/).

3) Data Collection Process

The CCR is structured as a relational database housed at WMed, with HIPAA-compliant storage procedures, standardized data elements, and automated quality checks. It is staffed by WMed database specialist(s) and/or external consultants.

The CCR team works closely with each referral partner to automate the data transfer, setting up data reporting procedures, and ensuring compliance with all related regulations, including Health Insurance Portability and Accountability Act (HIPAA) Family Educational Rights and Privacy Act (FERPA), and VOCA (Victims of Crime Act).

Registry inputs include:

a. **Automated Weekly Reports**

Maternal-infant program partners provide on-going data contributions of all incoming referrals and program participants. Secure data procedures are developed for data transfer, data storage, and data linking between the CCR and the maternal-infant program partners. Data collection procedures vary by program, depending upon preference and technical capabilities. Current data export methods including utilizing REDCap referral portal, Excel datasets, administrative records, and electronic health records. Data collected includes: first and last name, date of birth, race/ethnicity, socioeconomic status, prior poor birth outcomes, perinatal status (pregnant or postpartum or both), due/delivery date, referral source, referral date, enrollment date, date of last contact/visit, discharge date, and contact information.

Compiled weekly reports are shared at the frontline case review meetings. Information discussed at this meeting include: referral, contact, enrollment, lost-to-follow-up, and discharge information.

b. **Real-Time Referral Portal**

The Real-Time Referral Portal is a public web-based portal, which allows community members to self-refer into family-support services and resources instead of utilizing the phone hotline or working directly with an agency. Program contact links will be embedded next to each of the maternal-infant programs, along with program descriptions, so that community members can click on the email link to send their own automated referrals. The link to the Real-Time Referral Portal is available on multiple websites including WMed and maternal-infant program partners.

c. **Patient Outcomes**

Patient outcome data for all referred individuals within the CCR will be collected from either the state vital record birth and death certificate abstracts or from hospital electronic medical records. Data collected includes:
   o Demographics such as insurance status at delivery, age, race etc.;
   o Medical care information such as prenatal care (i.e. trimester prenatal care began, number of visits, Kotelchuck Index of prenatal care), postpartum visit, and pediatric well-child visit dates;

- o Medical history information including prior poor birth outcomes (i.e. prior preterm, low birthweight infant, fetal or infant death);
- o Birth outcomes such as weeks' gestation, infant birthweight, and infant death, including the age and cause of death;
- o Identifiers such as address at time of delivery and date of birth.

Summary reports from the CCR allows the frontline case review team to review: (1) outstanding referrals, (2) lost to contact cases, and (3) incomplete transfers. Additionally, each program may, upon request, receive a CCR-generated dataset of the referrals they have contributed to the CCR, along with the accumulated contact information, disposition changes, and dates. This process ensures accountability of programs to assist all of the referrals they receive which in turn helps strengthen care coordination amongst maternal-infant programs. Summarized aggregated counts of program-specific and system processes are shared with community leadership and collaborative partners as part of continuous quality improvement. The system process measures will include: number of incoming referrals, number of referrals reached, number enrolled, number discharged, number lost to contact, and number with completed transfers to another home visitation program. These counts are reported in total as well as broken down by the population parameters: low income, non-White race, and prior poor birth outcome. The counts will also be compared against historical norms, neighborhoods, and the overall county.

CCR outputs include:
a. **Home Visitation/CHW Assistance**
b. **Incoming Referrals**
c. **Care Coordination**
d. **System Continuous Quality Improvement (CQI)**

Results from the CCR help identify emerging trends and system inefficiencies which informs a coordinated response from maternal-infant programs.

Appendix A: Data Sharing Regulatory Obligations Chart

This table describes the data-sharing of programs and their related regulatory obligations.

Program Type	Health Insurance Portability and Accountability Act (HIPAA)	Victims of Crimes Act (VOCA)	Family Educational Rights and Privacy Act (FERPA)
CHW Programs	X	-	-
Early Childhood Programs	-	-	X
Hospitals	X	-	-
Maternal-Infant Home Visitation Programs	X	X*	-
OB Clinics	X	-	-
Phone Hotline	-	-	-
Vital Birth and Death Records	X	-	-

*Home visitation programs that specialize in domestic violence or are a part of a domestic violence program may be regulated by VOCA; however, most home visitation programs are regulated by HIPPA.

Appendix B: Care Coordination Registry Program Eligibility and Consent Form

Cradle Kalamazoo Eligibility

1. Are you pregnant or have you delivered an infant within the last year?
   ☐ **Yes** → refer to flowchart
   ☐ No → refer to flowchart

Contact information
1. Last name: _____First name: _____
2. Date of birth: ____/____/_____
3. Address: _____
City: _____ Zip Code: _____
4. Phone: _____-_____-_____
Alternate phone: _____-_____-_____
5. Email: _____
6. Facebook: _____
7. Other form of social media: _____
8. Person to contact in case of emergency: _____
Phone: _____-_____-_____
9. Person to contact if we cannot get a hold of you:_____
Phone: _____-_____-_____

2. **CONSENT.** You may be eligible for a program called Cradle Kalamazoo. This is a new program in Kalamazoo County that helps get pregnant and parenting women connected with community resources that can help their pregnancy and their baby. Is it OK to share your information with them; the information will include your name, contact information and the answers to the screening questions. Do I have your consent to share this information?　　☐ **Yes** ☐ No

3. Do you give us permission to contact you if we are disconnected?　　☐ **Yes** ☐ No

CRADLE ELIGIBILITY CRITERIA:

4. How would you describe yourself? (check all that apply)
   ☐ Non-Hispanic White/Caucasian　　　　☐ Asian Pacific Islander or Alaska Native
   ☐ Non-Hispanic Black/African American　☐ Person of Middle-Eastern Descent
   ☐ Hispanic or Latino/Latina　　　　　　☐ Other, specific: _____

5. Have you ever had a baby born 3 weeks too early (37 week)?　　☐ **Yes** ☐ No

6. Have you ever had a baby born with a low birth weight?　　☐ **Yes** ☐ No
   (2500grams or 5lbs 8ounces)

7. Have you ever lost a pregnancy or a baby before he/she turned 1?　☐ **Yes** ☐ No

8. Are you Medicaid eligible or enrolled?   ☐ **Yes** ☐ No ☐ DNK

   a. *If you do not know, what is approximately your household income (combine all adult income)?** $_____*

   b. *How many people live in your household? _____*

<u>Referral information</u>

9. Agency: _____
   Date: _____/_____/_____IMID#: _____

*See Referral Algorithm to determine Cradle Kalamazoo eligibility **Check Federal Poverty Level Table to assess preliminary Medicaid eligibility

2016 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA

Persons in family/household	Poverty guideline
1	$11,880
2	16,020
3	20,160
4	24,300
5	28,440
6	32,580
7	36,730
8	40,890

For families/households with more than 8 persons, add $4,160 for each additional person.

Source: https://www.federalregister.gov/documents/2016/01/25/2016-01450/annual-update-of-the-hhs-poverty-guidelines

Maternal Infant Home Visiting Program Eligibility

Name:_____Date:_____/_____/_____
IMID#: _____

Home Visiting Program Eligibility

1. Are you currently pregnant?   ☐ Yes ☐ No
    IF YES, are you less than 27 weeks pregnant?   ☐ Yes ☐ No ☐ DNK

2. Are you a first time mom?   ☐ Yes ☐ No

3. Do you currently have a child less than 1 year old? ☐ Yes ☐ No

4. Are you Medicaid enrolled or eligible?   ☐ Yes ☐ No ☐ DNK

5. Zip code of residence? 49001 49006 49007 49048   ☐ Yes ☐ No

6. Which languages do you speak fluently?
☐ English
☐ Spanish
☐ Arabic
☐ Other, specify: _____

Home visiting program selection
According to your profile, you are eligible to receive free services from the following Family Health Support programs. Which program do you prefer to receive services from? Please know that we may have to refer you to an alternative Program if the one you choose does not have an availability at this moment.

☐ Healthy Baby Healthy Start
☐ Nurse Family Partnership
☐ Healthy Families America
☐ Maternal Infant Health Program
☐ Community Health Worker Program
☐ Children's Health Access Program (CHAP, OB-CHAP)
☐ Parents As Teachers Program
☐ Great Start Readiness Preschool
☐ HeadStart
☐ Early On

Appendix C: Care Coordination Registry Referral Flowchart