



**Linking Pregnancy Risk
Assessment Monitoring System
(PRAMS) and Medicaid Data:
Preliminary Findings**

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Outline

- Background
- Methods
- Preliminary results
- Conclusions
- Future possibilities



Background

- The Office of Health Informatics links records across four data systems to create the Linked Birth Outcomes Surveillance System (LBOSS).
- The intended uses of the LBOSS are:
 - To examine respondents' perceptions and experiences of services by patterns of eligibility and by the nature and timing of actual services received.
 - To assess validity and reliability of public health, clinical, and administrative measures across systems.



Background: Preliminary Analysis

Purpose

- Explore and demonstrate the potential utility of the linkages created by the LBOSS.
- Describe the prenatal experiences, barriers, and services received by mothers eligible for full Medicaid benefits during the prenatal period.
- Make recommendations to Medicaid about improvements in messaging with patients and providers.

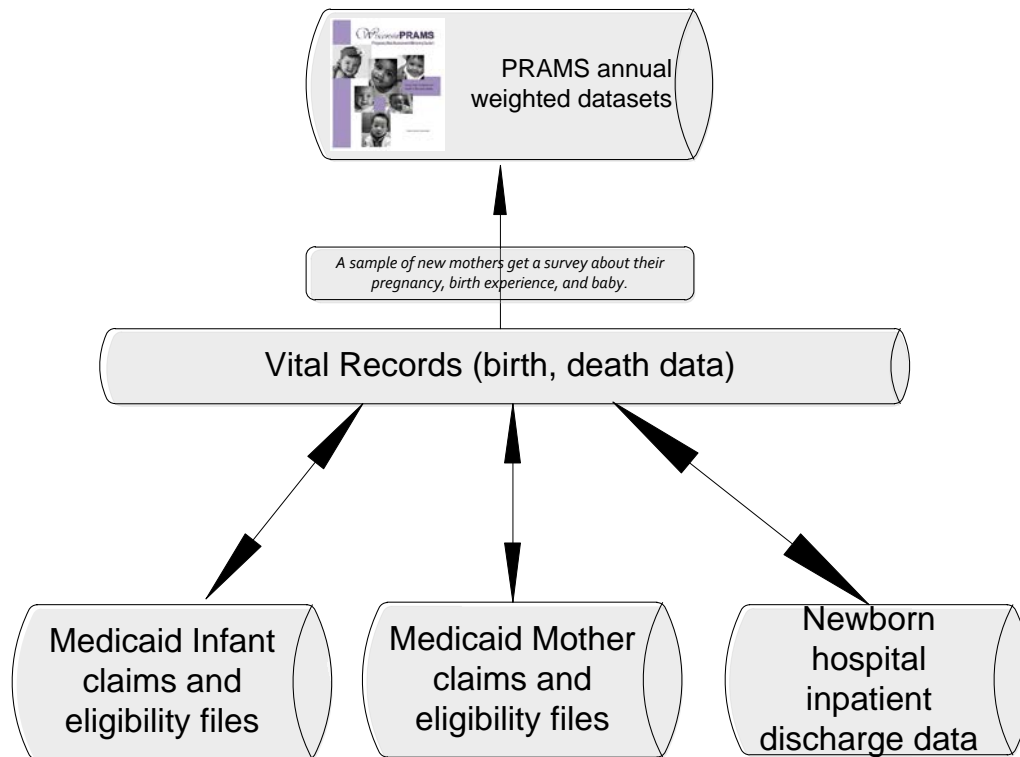


Data Sources for the LBOSS

Source		Available data
VR	Vital Records (1989--present)	Statewide birth registration information that includes: clinical and health behavior data about prenatal visits, mother's health, smoking status, pregnancy complications, delivery, program participation (Medicaid and WIC), race/ethnicity.
MA	Medicaid Infant and Mother Eligibility and Claims Files (1989--present)	Medicaid eligibility data and prenatal, delivery, and postnatal care related claims for mothers and infants that include: HMO enrollment, diagnosis, provider, number and type of visits, and prescription drug information.
INPT	Inpatient Hospital Discharge Data (1989--present)	Statewide inpatient hospital discharge information that includes: diagnoses, dates, demographics and charges. Records can be linked to other hospital stays and emergency department visits for same patient.
PRAMS	Pregnancy Risk Assessment Monitoring System (2009--2011)	Survey data system that includes information on mothers' perceptions and experiences of their social and physical environments, health conditions, health behaviors, and health care before, during, and shortly after pregnancy.

Methods: Matching

Iterative deterministic matching across systems





Methods: Preliminary Analysis

- Data sources:
 - PRAMS weighted data set 2009–2011
 - Medicaid eligibility files matched to PRAMS mothers from 6 months before pregnancy through 6 months after delivery
- Population:
 - Those with Medicaid eligibility at some point during the first trimester and continuously through the rest of pregnancy
- Linkage and weighted analysis performed with SAS 9.4



Results

- Approximately 75,000 women giving live birth in 2009–2011 were enrolled in Medicaid at some point during the first trimester, then continuously throughout pregnancy.
- This group constitutes nearly 40% of the 2009–2011 Wisconsin birth population (n=206,932).

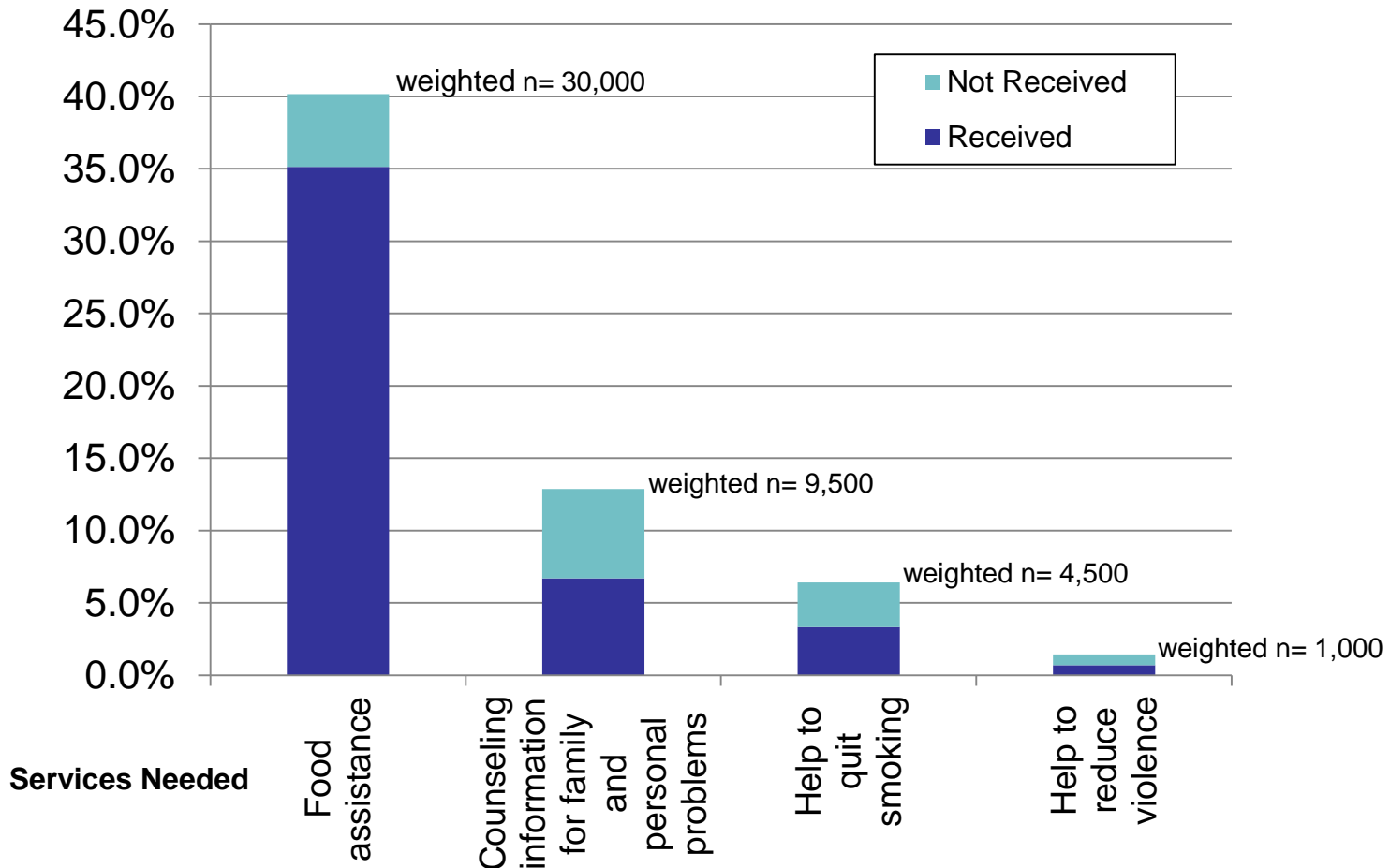


Results: Prenatal Care

- Eighty-two percent of Medicaid moms received prenatal care (PNC) in first trimester.
- Of those who had PNC at any point, 11.9% did not receive care as early as they wanted.
- The most commonly cited barriers to early care were:
 - Didn't know they were pregnant: 42%
 - Couldn't get an appointment: 36%
 - Doctor wouldn't start care as early as wanted: 28%
 - Didn't have enough money for an appointment: 25%



Results: Services Needed and Received by Medicaid Mothers





Conclusions

- This linkage could provide important information to the Wisconsin Medicaid program.
- There may be misperceptions among the Medicaid population about costs associated with prenatal care that may keep members from accessing care as early as wanted.
- There may be gaps in receipt of needed services among the Medicaid population. Only half of women who reported needing counseling and smoking cessation services reported receiving them.



Future Directions

- Further assessments of quality and perceptions of clinical care
- Validity and reliability studies of elements common across systems for which there is a gold standard
- Predictive modeling of adverse health outcomes



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