



Iowa MCH2015

Iowa Maternal and Child Health Comprehensive Title V Assets and Needs Assessment

Final Report Submitted to Maternal and Child Health Bureau
Health Resources and Services Administration
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Section 1: Process for Conducting Needs Assessment

Overview

Introduction

The Iowa Department of Public Health Bureau of Family Health and the Child Health Specialty Clinics embarked on a five-year needs assessment in March 2008 with a daylong strategic planning session involving key administrative and staff personnel from both agencies.

As part of the strategic planning, the participants began preparation of a comprehensive assessment to identify the need in Iowa for:

- preventive and primary care services for pregnant women, mothers, and infants;
 - preventive and primary care services for children; and
 - services for children and youth with special health care needs.
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Goals and Vision

Iowa MCH2015 The name, Iowa MCH2015, was chosen for Iowa’s Title V Five-Year Needs Assessment to signify that all activities are aimed at outcomes to be realized at the end of the five-year period. Iowa MCH2015 coordinators envisioned the italicized 2015 to convey forward movement throughout the entire project period.

Goals In concert with the HRSA Maternal and Child Health Bureau, Iowa MCH2015 has two ultimate goals:

- Strengthened partnerships among entities addressing the wellbeing of the MCH populations
- Improved outcomes for Iowa’s MCH populations

Framework Iowa MCH2015 coordinators used the framework included in the Title V Application Guidance to ensure that all steps in the needs assessment were addressed. The following model provides an overview of the needs assessment steps and relationships with planning and monitoring functions.

Needs Assessment, Planning, Implementation & Monitoring Process

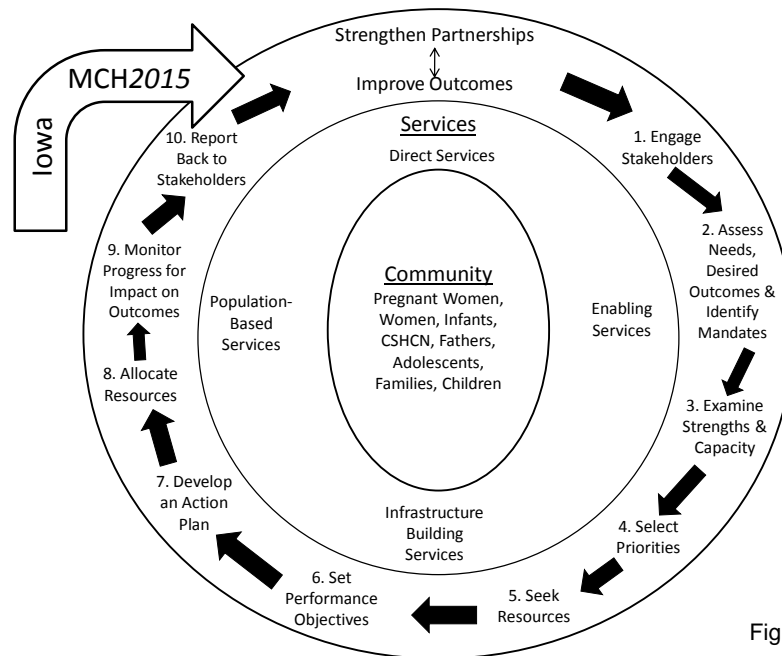


Figure 1

**Goal One:
Strengthened
Partnerships**

In Iowa, MCH partnership is a continuous and ongoing priority. Services for pregnant women, mothers, infants, and children are housed in the Iowa Department of Public Health, Bureau of Family Health (BFH) and Oral Health Bureau (OHB). Services for children and youth with special health care needs are located at the University of Iowa Department of Pediatrics, Child Health Specialty Clinics (CHSC).

Iowa MCH2015 coordinators recognized the value of strong partnerships throughout the needs assessment process. As described in the next section, [Leadership](#), the directors of BFH, CHSC, and OHB jointly led the process. They worked together on the first steps in March 2008 and through to the final product in July 2010.

Building strong partnerships for the needs assessment went far beyond the three pivotal agency directors. During the two-year process the Iowa MCH2015 coordinators maintained close contact with important state and local MCH stakeholders, including families, throughout Iowa. Descriptions of stakeholder involvement are located in this document under the topic [Strategic Planning](#) in this section and [Prioritization Venues](#) in section five. Iowa MCH2015 coordinators will maintain current partnerships through the next five years as priorities identified through the needs assessment process are addressed.

**Goal Two:
Improved
Outcomes**

Throughout the Iowa MCH2015 process, all partners expressed a commitment to improve health outcomes for all Iowa MCH populations. Eight new state performance measures (SPMs) were developed to address identified priority needs.

Four of the new SPMs are designed to directly measure health outcomes. However, in some cases the Iowa MCH2015 partners determined that it was necessary to address process during the next five years, with a subsequent examination of outcomes. As a result, four SPMs will focus on improving the way services are delivered to the MCH population. A complete description of the process leading to the determination of Iowa's new state performance measures is located in [Section Five](#) of this document.

**Guide to Iowa's
Title V
Activities**

As demonstrated in Figure 1, Iowa's Title V activities are guided by ten steps:

1. Engage stakeholders
2. Assess needs, desired outcomes and mandates
3. Examine strengths capacity
4. Select priorities

5. Seek resources
6. Set performance objectives
7. Develop an action plan
8. Allocate resources
9. Monitor progress for impact on outcomes
10. Report back to stakeholders

This framework serves as the guide for Iowa MCH2015 all the way from initial engagement of stakeholders to final report to stakeholders. Though the first six steps were addressed in 2008-2010, work will continue on steps 7-10 over the next five years.

Leadership

-
- Coordinators** The Iowa MCH2015 leadership team includes the individuals listed below:
- M. Jane Borst, Iowa Title V Director
 - Debra Waldron, Director and Chief Medical Officer, Child Health Specialty Clinics
 - Bob Russell, Dental Director, Iowa Department of Public Health
 - Gretchen Hageman, Iowa Title V Coordinator
 - Barbara Khal, Director, Division of Public Health, Child Health Specialty Clinics
 - Lucia Dhooge, Iowa State Systems Development Initiative (SSDI) Director

Each of the coordinators has significant MCH experience at the state and local levels.

M. Jane Borst M. Jane Borst holds a Bachelor’s degree in nursing from Augustana College, Sioux Falls, SD and a Master’s degree in Community Health Administration from the University of Iowa, Iowa City, Iowa.

Ms. Borst is chief of the Bureau of Family Health, Division of Health Promotion and Chronic Disease Prevention, Iowa Department of Public Health. She is the Iowa project director for the Title V MCH Block Grant and Title X Family Planning Grant. She is the principal investigator on the projects listed below.

- Iowa Perinatal Depression Prevention Project
- CDC Early Hearing Detection and Intervention Cooperative Agreement
- Project LAUNCH
- Early Hearing Detection and Intervention

Ms. Borst is an active member of the Association of Maternal Child Health Programs (AMCHP) and is currently co-chair of the AMCHP Emerging Issues Committee. She maintains close ties with the three Iowa state universities and routinely offers internships to students from Iowa and other states.

Debra Waldron Debra Waldron holds an MD degree from New York Medical College, Valhalla, New York, and an MPH degree with MCH emphasis from the University of Minnesota at Minneapolis, Minnesota.

Dr. Waldron is director and chief medical officer of Child Health Specialty

Clinics, Iowa's Title V program for children and youth with special health care needs. She is medical director for the Iowa Department of Public Health, Division of Health Promotion and Chronic Disease Prevention. She is a clinical associate professor of pediatrics at the University of Iowa.

Dr. Waldron is principal investigator on the projects listed below.

- Integrated Services for Children with Special Health Care Needs: Universal Newborn Hearing Screening (HRSA)
- Iowa Family to Family Health Information Center (HRSA)
- Northeast Iowa Children's Mental Health Initiative (SAMHSA; Iowa Department of Human Services)
- Regional Child Health Specialty Clinics (IDPH)
- Regional Autism Services (Iowa Department of Education)
- The Early Periodic Screening, Diagnosis and Treatment Program/Home and Community Based Handicapped Waiver Program (Iowa Department of Human Services)

Dr. Waldron is an active member of the Iowa Chapter of the American Academy of Pediatrics and, in this role, promotes the participation of primary care physicians in the Early Hearing Detection and Intervention system of care, medical homes in the context of Iowa's health care reform legislation, and quality improvement efforts for standards of care for preterm infants. She is a leader in implementing principles from the National Initiative for Children's Healthcare Quality (NICHQ) into all levels of Title V.

Bob Russell

Bob Russell holds a Doctor of Dental Surgery degree from Loyola University in Chicago, Illinois and a Master's of Public Health Curriculum – Health Management and Policy from the University of Michigan School of Public Health in Ann Arbor, Michigan.

Dr. Russell is the public health dental director of the Iowa Department of Public Health. He is chief of the Oral Health Bureau, Division of Health Promotion and Chronic Disease Prevention, Iowa Department of Public Health.

During his IDPH tenure, Dr. Russell has increased state and federal fiscal allocations for Iowa dental public health activities by over three million dollars. He initiated and successfully advocated for new oral health legislation including a statewide oral health school screening policy and a statewide dental home mandate for Medicaid enrolled children. Dr. Russell serves as a HRSA consultant for region VII operations performance reviews and other state and regional programs.

Gretchen Hageman

Gretchen Hageman holds an MA degree from the University of Northern Iowa in Cedar Falls, Iowa, with an emphasis in public health. She has

coordinated Iowa's Title V MCH block grant application since 1999. She is coordinator of Project LAUNCH, a new IDPH initiative funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) and described in [Section Four](#) of this document. Ms. Hageman is also involved in Early Childhood Iowa as the co-chair of Quality Services and Programs and the chair of the Professional Development, Mental Health and Nutrition Work Group.

Barbara Khal Barbara Khal directs the Public Health Division of Child Health Specialty Clinics. She has a Bachelor's degree in special education and a Master's degree in instructional design with an emphasis in organizational development from the University of Iowa, Iowa City, Iowa. She oversees professionals responsible for implementing HRSA grants that promote family-centered initiatives, family support, newborn hearing screening, and care coordination. She has 25 years of experience working with CHSC, including 10 years as liaison with Early ACCESS, Iowa's IDEA, Part C early intervention system. Ms. Khal is a certified quality improvement advisor and supervises multiple efforts within CHSC to promote data-driven decision making.

Lucia Dhooge Lucia Dhooge holds a BSN degree from the University of Iowa in Iowa City, Iowa, and an MBA from Iowa State University in Ames, Iowa. Ms. Dhooge has 36 years of experience working with Iowa MCH populations at the local and state levels. She is project director for the Iowa MCH Data Capacity Project, funded by the 2006-2011 HRSA State Systems Development Initiative (SSDI) grant. The project supports Iowa's Title V Health Systems Capacity Indicator #9(A): the ability of states to assure that the maternal and child program and Title V agency have access to policy and program relevant information and data.

Tenure and Experience The tenure of the Iowa MCH2015 leadership team is a benefit to Iowa's Title V program. Four of the coordinators (Borst, Hageman, Dhooge, and Khal) have worked together through multiple Title V five-year cycles. Russell and Waldron are practitioners that are grounded in the principles of public health.

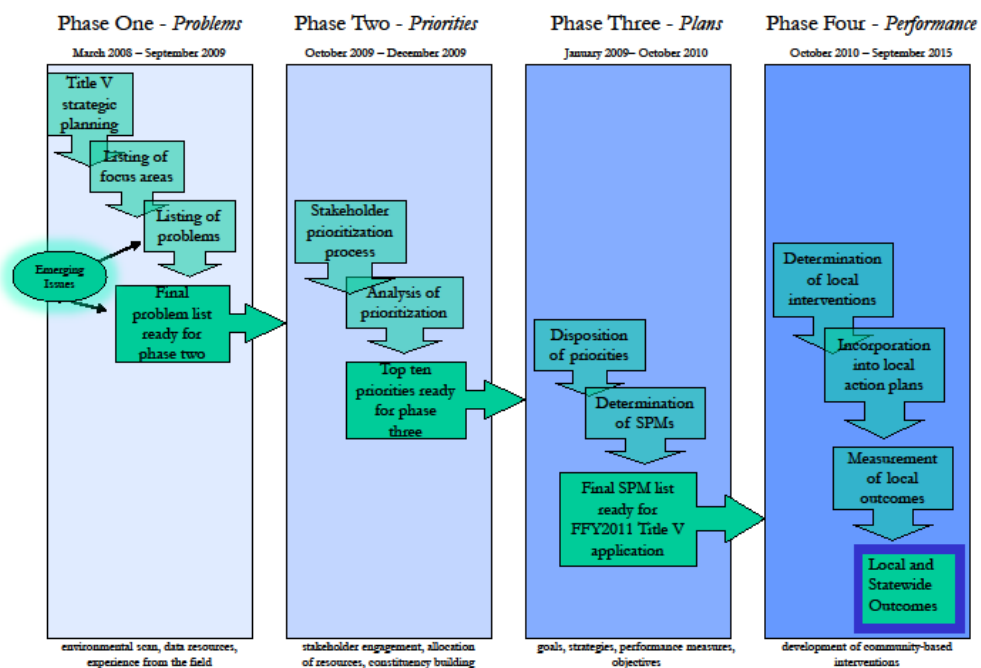
MCH Stakeholder Engagement The Iowa MCH2015 leadership team sought input from stakeholders at all levels of the statewide system of care. Team members made significant efforts to enlist participation from IDPH program staff across multiple bureaus, local MCH contractor staff, families, family advocacy organizations, providers and many more entities in the needs assessment process.

Methodology

Logic Model

Early in the process the Iowa MCH2015 leadership team created a logic model to guide needs assessment activities. The logic model is displayed below and enlarged in [Appendix A](#).

Iowa MCH2015 Needs Assessment Logic Model



Use of Logic Model

Primary team members and additional stakeholders found the logic model to be useful for multiple purposes during the needs assessment process, including the following:

- As a visual depiction of the entire multi-year needs assessment process
- As a guide to the flow and progression of process components
- As a timeline for tracking work to be completed in particular time periods
- As a prompt to moving forward and not rethinking completed steps

Strategic Planning

Preparation for the Iowa MCH2015 began in March 2008 as administrative and program staff from IDPH and Child Health Specialty Clinics met for strategic planning. The group examined state and national data describing the

needs and assets of the MCH populations. The 2005 Iowa Child and Family Household Health Survey (HHS) was a critical data source for the strategic planning discussions. Data from this population-based survey represent a snapshot view of Iowa families. After reviewing the published reports from the 2005 HHS, the group compiled a request to the HHS contractor for cross-tabulations to be used for strategic planning. The topics of the cross-tabulations include those listed below.

- personal doctor or nurse vs. insurance type
- weight of the child vs. income
- weight of the child vs. education of parent
- physical activity vs. income
- physical activity vs. education of parent
- alcohol use vs. emotional status
- drug use vs. emotional status
- marital status vs. emotional status
- quality of relationship vs. emotional status
- parent mental health scale vs. children with special health care needs
- soda intake vs. dental care
- child does things that bother you vs. age
- need dental care vs. age
- kind of dental care vs. age
- need dental care and could not get it vs. age
- never been to a dentist vs. age
- can't concentrate vs. dental visit frequency
- can't concentrate vs. overall dental health
- can't concentrate vs. last checkup
- does poorly at school vs. frequency of dental visits

Identification of Stakeholders

The strategic planning group determined that there were two purposes for engaging stakeholders in the process. First, input from all state and local stakeholders would strengthen the need identification and prioritization process. Additionally, all of Iowa Title V programming would benefit from the strengthening of a constituency among MCH stakeholders. The group included the following in its preliminary listing of MCH stakeholders from whom valuable input could be gained.

- Child health agencies
- CHSC and IDPH staff
- Congenital and inherited disorders group
- Critical access hospitals
- Dentists
- Early Childhood Iowa
- Early Hearing Detection and Intervention Council
- Early Intervention Council
- Families

- Family advocacy organizations
 - Family practice physicians
 - Head Start Association
 - Legislators
 - Local boards of health
 - Local public health agencies
 - Maternal and Child Health Advisory Council
 - Maternal health agencies
 - Medical and dental professional associations
 - Medical staff at hospitals
 - Minority communities
 - Nurse practitioners
 - OB/GYN practitioners
 - Pediatricians
 - Policy organizations
 - Public health advisory committees
 - Public health association
 - Youth
-

**Ongoing
Process**

Members of Iowa’s Title V leadership team consistently champion the interface of the Title V needs assessment with all Title V activities. They ensure that MCH partners throughout the state maintain a commitment to the needs assessment process throughout all cycles of Title V.

Methods for Assessing the Three MCH Populations

Methods	Both quantitative and qualitative methods are used to assess Iowa's three MCH populations. The primary qualitative data sources are available from state and national surveys. Qualitative input is sought from statewide stakeholders at critical points in the process, with an emphasis on participation by families and family organizations.
Guidelines	<p>Early in the needs assessment process the leadership team identified guidelines for choosing and prioritizing health topics related to Iowa women and children. The guidelines are listed below.</p> <ul style="list-style-type: none">– Identify populations with the greatest need– Consider indicators that are measurable– Consider indicators that have an intervention to address them– Consider prevention-focused indicators– Choose indicators with known etiologies– Choose indicators that can be affected in the five-year period– Choose measures that have an existing data source– Consider equity among populations
Iowa Child and Family Household Health Survey	The Iowa Child and Family Household Health Survey (HHS) is the primary quantitative resource for assessing the three MCH populations in Iowa. The HHS is a comprehensive, statewide effort to evaluate the health status, access to health care, and social environment of children and families in Iowa. The first HHS was conducted in 2000 and the second in 2005. A detailed description of the HHS is located in the Data Sources section of this document.
Analysis of National Surveys	<p>Since 2005, Dr. Debra Kane, MCH epidemiologist with the Centers of Disease Control and Prevention, has been assigned to work with Iowa's Title V leadership. Dr. Kane brings to Iowa expertise in analyzing national surveys as described below.</p> <ul style="list-style-type: none">– National Survey of Children with Special Health Care Needs (2001 and 2005/2006)<ul style="list-style-type: none">○ Along with her co-authors, Dr. Kane examined access to routine preventive care among Mississippi CYSHCN and dental care access among CYSHCN in Mississippi, Alabama, and Georgia.○ Along with her co-authors, she examined the factors associated with state performance on the provision of transition services

to CYSHCN.

– National Survey of Children’s Health (2007)

- Dr. Kane is currently working on a CDC sponsored course, being conducted by the University of Illinois – School of Public Health, to analyze data from the 2007 National Survey of Children’s Health. The research question is: What environmental factors influence the level of physical activity of children ages 6-17 years?
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Methods for Assessing State Capacity

Methods	Iowa’s capacity to provide direct health care, enabling, population-based, and infrastructure building services is assessed each year. State Title V staff and local MCH contract agency staff routinely collaborate to identify emerging needs and enhance resources to meet those needs.
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Local Capacity Assessment	Iowa’s local MCH contract agencies conduct a rigorous annual evaluation to determine local capacity to meet the needs of the MCH populations. Documentation of local capacity is included in each contract agency application for funding and in the required reporting throughout each contract year. The local contract agencies are required to submit MCH strategies and budgets by MCH pyramid level.
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Community Health Needs Assessment and Health Improvement Plan	Local capacity to provide care for the MCH populations is assessed through a statewide process facilitated by the Iowa Department of Public Health. Multiple IDPH bureaus are involved in coordinating the assessment process that occurs every five years. The process is called the Community Health Needs Assessment and Health Improvement Plan (CHNA-HIP). During the CHNA-HIP process, the local boards of health in all 99 Iowa counties lead a community-wide discussion with stakeholders about the community's health needs and what might be done about them.
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Family Input	Family input is an important component of the assessment of Iowa capacity to meet the needs of the MCH populations. State and local MCH partners actively seek the contributions of families and family organizations. Section Five of this document describes processes used to obtain family input.
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Early Childhood Planning	The IDPH Bureau of Family Health (BFH) partnered with Iowa Community Empowerment, located in the Iowa Department of Management, to develop a statewide early childhood plan. Iowa Community Empowerment was founded on the premise that communities and state government can work together to improve the well being of the state’s youngest children.
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The Iowa Community Empowerment state team served as the coordinating body of the ECCS grant with BFH staff functioning as grant director and coordinator. The Early Childhood Iowa Stakeholders serve as the advisory body for the grant. Grant Initiatives promote the development of community-based comprehensive systems of services that assure coordinated, family-

centered, and culturally competent care for children.

The following workgroups work to move early childhood system planning forward:

- Quality services and programs
- Public engagement
- Resources and funding
- Results accountability
- Governance and planning
- Professional development

Subsequent to the activities described above, Iowa Community Empowerment was combined with Early Childhood Iowa. More information on the early childhood system-building activities can be found on the Early Childhood Iowa website: <http://www.earlychildhoodiowa.org/>.

Current economic conditions pushed recent legislative sessions to examine efficiencies and accountability in state government. Iowa Community Empowerment became a focal point in conversations during 2009-2010 legislative discussions. These discussions led to questions regarding the efficiencies and effectiveness of Iowa Community Empowerment, both at a state and local level. In June 2009, the Department of Management, Office of Empowerment hosted a weeklong event to examine the current Iowa system and the latest early childhood research. Details of the assessment event are located in [Section Four](#) of this document.

Perinatal Care Planning

The Statewide Perinatal Care Team conducts an annual needs assessment of the obstetric services provided by Iowa birthing hospitals. The purpose of the needs assessment is to identify gaps in service and unmet needs within the population of Iowa pregnant women and infants. Details about the process and results of the perinatal needs assessment are located in [Section Three](#) of this document.

Data Sources

Data Sources

As the Iowa MCH2015 leadership team and statewide stakeholders progressed through the steps of the needs assessment, they used the following sources of information extensively. However, this is not an exhaustive list.

- 2005 Iowa Child and Family Household Health Survey
- Behavior Risk Factor Surveillance Survey
- Child and Adolescent Reporting System (CAREs)
- GE (General Electric) Centricity, formerly known as IDX, University of Iowa Hospitals and Clinics Information Technology
- Healthy Iowans 2010
- IDPH Medicaid Birth Outcomes Report
- IDPH Medical Home System Advisory Council Progress Reports
- IDPH Oral Health Sealant Survey
- Immunization Registry Information System
- Iowa Barriers to Prenatal Care Report
- Iowa Community Health Needs Assessment and Health Improvement Plan (CHNA & HIP)
- Iowa Medicaid Managed Care Enrollees Survey
- Iowa Risk Behavior Survey
- Iowa Vital Records
- Iowa Youth Survey
- National Survey of Children with Special Health Care Needs
- National Survey of Children’s Health
- Part C IDEA Information Management System
- STELLAR (Systematic Tracking of Elevated Lead Levels & Remediation)
- The Center for Medicare and Medicaid Services 416 Report
- Title V Information System
- Women’s Health Information System (WHIS)

2005 Iowa Child and Family Household Health Survey

The Iowa MCH community has a uniquely rich population-based data resource in the Iowa Child and Family Household Health Survey (HHS). Using seed money from the HRSA MCHB State Systems Development Initiative to leverage multiple additional funding sources, the Iowa Department of Public Health fielded the HHS in 2000 and 2005. Plans are currently under way for replication of the survey in 2010.

The Iowa Child and Family Household Health Survey is a collaborative effort of the University of Iowa Public Policy Center, the Iowa Department of Public Health, and Child Health Specialty Clinics. The intent of the study is

to provide information for policymakers and health planners about the status of families with children in Iowa from a social health perspective. The 2005 HHS utilized a telephone interview conducted with a stratified random sample of 3,674 families with children in Iowa. Each interview included approximately 125 questions, depending on the number of questions relevant to the family being interviewed. The survey instrument was developed by the research team after evaluating many existing survey instruments such as the National Survey of American Families (NSAF) and the National Health Interview Survey (NHIS). The screening instrument developed by the Foundation for Accountability (FACCT) was used to identify CYSHCN.

Phone numbers dialed included a combination of random digit dial and targeted phone numbers obtained from a private vendor. The design of the study yielded a representative sample of families with children in Iowa. To ensure that the sample would include enough minority children to allow for comparisons of the results by race/ethnicity, an additional 331 households with minority children were called as part of an oversample after the initial interviews were completed. These calls were targeted to areas of the state with higher proportions of minority families.

The survey process began with a screening question to determine if the residence was home to a family with children. If so, the adult most knowledgeable about the health and health care of a randomly selected child under age 18 years in the household was asked to complete the interview. The telephone interviews were conducted by the Center for Social and Behavioral Research at the University of Northern Iowa. The University of Northern Iowa Human Subjects review board approved the protocol regarding the telephone interview portion of the study.

The 2005 HHS asked questions from a wide range of topic areas encompassing health, overall well-being, and family environment of children in Iowa. The survey included a special emphasis on early childhood issues. Topic areas from the 2005 survey included demographics of Iowa families with children, health insurance coverage of children and parents, health care issues, child care, and family and social environment.

Analysis of the 2005 Iowa Child and Family Household Health Survey produced the five reports listed below.

- Statewide Results
- Early Childhood Results for Children ages 0-5 years
- Health Insurance Coverage of Children in Iowa
- Physical Activity, Weight, and Eating Habits
- Racial and Ethnic Disparities in the Health and Well-being of Iowa Children

Each of these reports can be found at the Iowa Child and Family Household

Healthy People 2020

During the past decade, Healthy People 2010 served as a guide for nearly every planning process from the National Institutes of Health and other federal grant programs to state and local planning efforts. Because of its significant impact, considerable attention has been given to the framework for the next set of objectives and goals in Healthy People 2020.

At its October meeting, the Health and Human Services Secretary's Advisory Committee on Health Promotion and Disease Prevention made its final recommendations on an action model adapted from the Institute of Medicine. This model addresses environmental factors contributing to our collective health and illness by calling for healthy places and supportive public policies. The main focus of Healthy People 2020 will be on determinants of health, with health care as a secondary emphasis.



Linkages between Assessment, Capacity, and Priorities

Planning the Process

The leadership team used experience gained in previous Title V needs assessment cycles to plan the Iowa MCH2015 process. The team addressed linkages between assessment, capacity, and priorities by designing four interconnecting phases:

- Phase One: *Problems*
- Phase Two: *Priorities*
- Phase Three: *Plans*
- Phase Four: *Performance*

The leadership team created a graphic representation of the process. The resulting logic model, displayed in [Appendix A](#), included multiple entry points for consideration of emerging issues and service gaps.

Content Experts

Throughout the process, state and local content experts determined the capacity of the system to respond to evolving and emerging needs of the MCH populations. The strong linkage between assessment, capacity, and priorities was largely due to the content experts' expertise and familiarity with existing capacity of the system.

Maternal health content experts included the state MH coordinator, the state Title X family planning coordinator, IDPH Women's Health Team, and local MH contract agency coordinators. Child health content experts included members of the state CH team and local CH contract agency coordinators. State and local CYSHCN content experts from Child Health Specialty Clinics were full partners throughout the process.

Process Continuity

The Iowa MCH2015 leadership team understood the importance of continuity throughout the process. Within each phase of the logic model (problems, priorities, plans, and performance), stakeholders completed the designed steps and ensured that the required product was ready for the next phase. Detailed descriptions of the process and products are located in [Section Five](#) of this document.

Dissemination

Early Dissemination

Dissemination of Iowa MCH2015 materials began early in the process. MCH problems identified in phase one were incorporated into a series of data detail sheets that were distributed widely. Through this dissemination process, state and local stakeholders had an opportunity to identify emerging needs. In this iterative process, the data detail sheets went through many revisions before they were finalized and ready for phase two. The final data detail sheets are located in [Appendix C](#) of this document.

Venues

The Iowa MCH2015 leadership team used multiple venues for dissemination of materials and solicitation of feedback. Primary stakeholder groups, such as the state advisory council and the local contract agency group, received materials at on-site meetings. Additional stakeholders received materials through electronic means such as email, online survey, and website postings.

Public Input

In June 2010, the draft Iowa MCH2015 document was placed on the IDPH website for public input. MCH stakeholders across Iowa were informed of the two-week comment period. There were 252 hits to the site during the two-week posting. The leadership team incorporated public feedback into the final document.

Strengths and Weaknesses of Process

Overview	The methods and procedures for Iowa MCH2015 were chosen to ensure that the needs assessment was complete and comprehensive. The lengthy schedule, spanning two years, allowed time for careful research and planning for each step as described in the logic model located in Appendix A . Debriefings were held throughout the process to determine strengths and areas for improvement.
Strength: Stakeholder Involvement	A perceived strength of the needs assessment process was the amount of input from all levels of Title V state and local stakeholder agencies. Stakeholders gave input through verbal discussion, written and online surveys, prioritization exercise, and consensus building activity. Staff used both qualitative and quantitative methods to gather input. Different groups, working independently, identified similar issues when ranking the highest priority needs. As priority needs were identified, related program and policy experts were brought into the process to assist with need identification and indicator development.
Strength: Advisory Council Guidance	The MCH Advisory Council, with broad membership representing professionals and families, was advised of the needs assessment activities and actively participated in the prioritization process. In addition, the process, the preliminary results, and the final report were presented and discussed at council meetings.
Strength: Local Contract Agency Input	The MCH local contract agencies were routinely informed of the process and outcomes of the needs assessment. At key points during the process, input was requested from representatives of the local agencies and incorporated into the assessment. In Iowa, the Title V needs assessment is viewed as an ongoing process. The local contract MCH agencies take part in assessment and planning activities every year.
Strength: Family Involvement	Iowa MCH2015 received input from individual families and organizations of family advocates. Parents of children and youth with special health care needs (CYSHCN) played a significant role in the five-year needs assessment. Members of the Parent Consultant Network of Child Health Specialty Clinics carefully considered proposed statements of unmet need. The network employs approximately 35 parents representing perspectives from a broad

array of special health needs and family concerns. The Family to Family Health Information Center (F2F), a HRSA-funded project, also played a key role in providing input, by soliciting feedback from their respective memberships. The F2F represents hundreds of families in Iowa with diverse physical, developmental, behavioral/emotional, social and family support needs.

**Strengths &
Weaknesses:
On-site
Prioritization
Process**

The interactive prioritization process used to obtain input from local MCH program partners was conducted during a two-day seminar. All local MCH contract agencies were invited, as well as additional local entities involved in local MCH programming. A full description of the on-site methodology is given in [Section Five](#) of this document.

The on-site prioritization process was successful from two aspects. First, the two-day process gave state-level Iowa MCH2015 coordinators rich insights into local viewpoints. A secondary strength was the early engagement of the community-based MCH entities in efforts to be planned for the new five-year period.

Most local attendees approved of the process, including one participant who commented that it was a “fun way to accomplish the rankings. Do it again this way in the next 5 years!” State-level staff members also felt that the process was much improved compared to past years, due to the use of a guided, interactive process.

One weakness of the on-site process was that the various table groups displayed wide variation in the length of time taken to prioritize each problem statement. Resulting frustration among the fastest and slowest tables required sensitive management by the facilitation team.

Due to the interactive nature of the process, the on-site voting process was not confidential. Though this might be considered a weakness, the resulting discussion revealed a wealth of local thinking from across Iowa.

Section 2: Partnership Building and Collaboration Efforts

Overview

Introduction

The Iowa Department of Public Health (IDPH) maintains extensive formal and informal partnerships in planning and implementing MCH programming in Iowa. These partnerships span the public and private sectors and include both state and local levels of government. Special attention is given to inclusion of families and family advocacy groups throughout all aspects of MCH programming.

Throughout the Iowa MCH2015 process, MCH partners at all levels expressed alignment with the long-term commitment needed to improve health outcomes of the MCH populations.

Contents

This is the second section of the Iowa Title V Five-Year Needs Assessment Final Report. This section contains the following topics:

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State and Local MCH Programs

Co-location of MH and CH Programs

The IDPH Bureau of Family Health manages services for pregnant women, mothers, infants, and children. Programs addressing family planning, teen pregnancy prevention, early childhood, medical home, early hearing detection and intervention, genetics, child care, and other MCH-related issues are co-located within the bureau. Formal and informal collaboration processes occur on a regular basis. Regular bi-monthly staff meetings include routine reporting from all MCH programs. Close proximity of program managers encourages informal sharing of expertise.

Local MCH Agencies

The IDPH Bureau of Family Health periodically solicits proposals to select the most qualified applicants to provide public health services at the community level for child health and maternal health. This is accomplished through a competitive request for proposal (RFP) for a multi-year project period. Throughout the project period, annual continuation applications are required. Contracts are issued for one-year increments based on a review of the continuation application (RFA), contract agency performance, and compliance with both general and special conditions of the contract.

Local Program Integration

To accomplish program integration at the community level, IDPH and state agency partners elected to integrate the following programs into MCH services through the RFP/RFA process:

- Healthy Child Care Iowa
- Early ACCESS
- EPSDT Outreach, Informing, Care Coordination, and Screening Centers
- Medicaid enhanced services for pregnant women

In addition, local child health programs are expected to integrate with the lead and immunization programs in the service area.

**CYSHCN
Programs**

Child Health Specialty Clinics (CHSC) manages statewide services for children and youth with special health care needs through regional centers in local communities. Multiple formal strategies are maintained to ensure strong collaboration between the state's MH/CH programs and CYSHCN programs.

At the leadership level, Dr. Debra Waldron serves as CHSC director as well as medical director for the IDPH Division of Health Promotion and Chronic Disease Prevention. In this dual role, Dr. Waldron maintains scheduled interaction with the IDPH division director and BFH bureau chief regarding all MCH populations.

At the program level, BFH and CHSC staff members recognize the cross-cutting needs of the MCH populations. Program managers ensure integration across populations whenever appropriate.

**Center for
Congenital and
Inherited
Disorders**

The Center for Congenital and Inherited Disorders (CCID) was established within the IDPH to conduct and supervise genetic investigations and research for the protection and promotion of the health of Iowans. The CCID works in partnership with the University of Iowa and health care providers throughout the state to address all steps of the life cycle: prenatal, neonatal, pediatric and adult. There are seven programs within the Center for Congenital and Inherited Disorders:

- Regional Genetic Consultation Service
 - Iowa Neonatal Metabolic Screening Program
 - Maternal Serum Alpha-fetoprotein Screening Program
 - Iowa Registry for Congenital and Inherited Disorders
 - Neuromuscular and Related Genetic Disorders Program
 - Stillbirth Surveillance Project
 - Family Health History Initiative
-

Other HRSA Programs

Collaboration of Family Support Groups

In 2009, Iowa received two federal grants to promote collaboration between existing family support groups in Iowa. The Iowa Department of Human Services received a grant from the Administration for Children and Families, U.S. Department of Health and Human Services, to create a system of navigators/mentors for children and youth with a broad array of special needs. For this grant, titled the Family 360 Grant, CHSC has been designated as a contractor to provide the project director and navigators to lead the work of this important project. Additionally, the Family to Family Health Information Center (F2F HIC) is uniting fifteen family advocacy groups with the goal that all families will have accurate, timely information to health information and resources.

The two projects have merged resources into one lead stakeholder group to assure that all families have access to supports and services they need to make the best decisions for their child and family. The need for cross-cutting core competencies and assessment tools for care coordinators, navigators, service coordinators, family support workers, and case managers has been identified. By the end of the fifth year of the HRSA grant, agencies will collaborate to assure that 70 navigators have been trained according to standards adopted by the leadership group.

The leadership group has identified that web-based trainings are the preferred method of delivery. In addition, groups are working together to develop validated web-based family resources so that families can access them at times and places that match their individual needs. Technology is being shared between partnering agencies to most efficiently conduct meetings, trainings and ongoing discussions (e.g., Citrix Go-to-Meeting; Go-to-Training).

CHSC is also collaborating with leaders in the Iowa Department of Management, Office of Early Childhood, to explore the potential of parent navigators to become credentialed using the Iowa Family Support Standards.

Primary Health Care

The IDPH Bureau of Health Care Access advocates for quality health care delivery systems for all Iowans and provides information, referrals, education, grant opportunities, technical assistance, and planning for Iowa communities. The bureau is designated as the state entity for addressing rural health and primary care issues and works to improve access to health care for vulnerable populations. The bureau houses the Primary Care Office, the Center for Rural Health and Primary Care, and the Center for Health Care Workforce

Shortages. The Bureau of Health Care Access coordinates several programs to promote and provide health care access to all of Iowa. The programs within the bureau include: Iowa Medicare Rural Hospital Flexibility Program, the PRIMECARE Program, the Volunteer Health Care Provider Program, and the Special Population Access program.

Each year the Bureau of Health Care Access publishes a report identifying the number of maternal/fetal specialists, obstetricians, family practice physicians, certified nurse midwives, and lay midwives providing obstetrical care in Iowa by county. The report, called *Obstetrical and Gynecological Care in Iowa: A Report on Health Care Access* is submitted to the legislature and MCH program managers. The report also includes information on the following:

- the number of deliveries per year by specialty of the provider and county
- the age of the provider performing deliveries
- the number of current-year graduates of the state’s medical colleges entering into residency programs in obstetrics, gynecology, and family practice.

MCH partners recognize that the loss of obstetrical services in a rural community affects all of primary health care access. When a rural hospital discontinues provision of obstetrical services the community’s young families often turn to a larger nearby community for all health care. This situation often leads to the demise of the rural hospital.

**Graduate
Student
Internship
Program**

The IDPH Bureau of Family Health has participated in the HRSA/MCHB Graduate Student Internship Program since 2007. Under the tutelage of CDC assignee and MCH epidemiologist, Dr. Debra Kane, the four participating interns received beneficial training experiences and enhanced the bureau’s data capacity.

Other Programs within the State Department of Health

Chronic Disease Prevention and Health Promotion

The Division of Health Promotion and Chronic Disease Prevention promotes healthy behaviors and communities, the prevention and management of chronic diseases, the development of public health infrastructure, and access to health care/services at local and state levels. The division has eight components:

- Bureau of Chronic Disease Prevention and Management
 - Bureau of Family Health
 - Bureau of Health Care Access
 - Bureau of Local Public Health Services
 - Bureau of Nutrition and Health Promotion
 - Center for Congenital and Inherited Disorders
 - Office of Multicultural Health
 - Oral Health Bureau
-

Health Statistics

Dr. Debra Kane, epidemiologist with the Centers of Disease Control and Prevention was assigned to the Iowa Department of Public Health in January 2005. Dr. Kane's assignment is within the IDPH Bureau of Health Statistics (BHS). Each year, an intradepartmental agreement is written to ensure Dr. Kane's availability to Iowa's Title V leadership and BFH programs.

Information Management

Collaboration between the BFH and the Bureau of Information Management is formalized each year in a written agreement. The agreement sets up formal lines of communication to address MCH information technology needs.

WIC

The IDPH Bureau of Nutrition and Health Promotion (BNHP) administers the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Food Stamp Nutrition Education Plan, the Cardiovascular Risk Reduction grants, the 5 Plus 5 Nutrition and Physical Activity program, and the Iowans Fit for Life program. The BNHP collaborates with the Bureau of Family Health in the planning and implementing nutrition services within the Maternal and Child Health programs. The bureau also coordinates with Child Health Specialty Clinics and other nutrition service providers.

Multicultural Health

Iowa's MCH programs collaborate closely with the IDPH Office of Multicultural Health to address minority and multicultural population health issues. Technical assistance is provided in outreach, content area, awareness, resources, and program development.

Immunization

The IDPH Immunization Program manages the state’s Vaccines for Children Program. The Vaccines for Children (VFC) program was created to help raise childhood immunization levels, especially among infants and young children. The program supplies federally purchased vaccine at no cost to public and private health-care providers throughout the state. The VFC Program covers the vaccination needs of children from birth through 18 years of age.

State staff of the IDPH Immunization Program and MCH programs collaborate regularly to ensure integration of services at the local level. All of Iowa’s local MCH contract agencies are expected to ensure that families have access to the VFC provider.

Lead Poisoning Prevention

In Iowa, all children must show proof of a blood lead test when entering kindergarten. The IDPH Bureau of Lead Poisoning Prevention partners with the Bureau of Family Health to ensure access to blood lead testing for children age twelve months to six years of age. Details of this partnership are located in [Section Four](#) of this document.

HIV/STD

The IDPH Bureau of Family Health partners with the IDPH Bureau of HIV/STD and Hepatitis to provide prevention education and screening to MCH clients. To successfully reach clients in a rural state like Iowa, programs must partner with other groups, agencies, and organizations for the delivery of information and services. The STD prevention program, family planning program, and University Hygienic Laboratory work together on the Iowa Infertility Prevention Program (IIPP). IIPP is a shared effort sponsored by Centers for Disease Control and Prevention and the HRSA Office of Population Affairs.

Iowa law allows a minor to be tested and treated for a sexually transmitted disease without parental consent. However, the law requires notification of the parent or guardian if the minor receives a positive STD test result.

In 2008, Iowa became an “opt out” state for the purposes of HIV screening. Providers are required to test a pregnant woman for HIV unless she refuses. Information about HIV prevention, risk reduction, and how treatment can reduce the risk of transmission of HIV to the fetus must be made available and pregnant woman must be notified that HIV testing is recommended for all prenatal patients.

**Iowa Public
Health
Modernization**

Stakeholders in Iowa's Title V Program recognize that a strong public health system is vital to the good health of all Iowans. In recent years Iowa MCH state and local partners joined forces with representatives of all aspects of public health to examine the state's public health system.

Each county in Iowa provides public health services, however the services vary from county to county. In 2004, a group of local and state public health practitioners determined that standards were needed to define what every Iowan should expect from public health. Over 150 Iowans, including MCH state staff and local agency representatives, participated in the process. Following many multi-level group processes and three public comment periods the Iowa Public Health Standards were finalized in December 2007.

The Iowa Public Health Modernization Act was passed by the Iowa legislature and signed by the governor in March 2010. The law establishes a voluntary accreditation system for Iowa's local and state public health departments and enhances organizational capacity to assure a basic level of public health service delivery in each of Iowa's counties. The law helps increase system capacity and promotes equitable public health service delivery by creating a Governmental Public Health Advisory Council. The council will set policies and procedures on the implementation and administration of standards at the state and local level.

Information about the Iowa Public Health Standards and the Iowa Public Health Modernization Act are located on the IDPH website at <http://www.idph.state.ia.us/mphi>.

Other Governmental Agencies

Medicaid

Iowa's MCH populations benefit from a long-term positive relationship between the Iowa Department of Public Health and the Iowa Medicaid Enterprise located within the Iowa Department of Human Services.

Since 1988, the Iowa Department of Human Services (DHS) has contracted with IDPH to conduct an annual data linkage of Medicaid pregnancy/birth claims (residing at DHS) with birth certificate files (residing at IDPH). Fiscal resources for this annual data linkage are provided by DHS. The linking of data and analysis of results is completed by Dr. Debra Kane, MCH epidemiologist at IDPH. The annual data match process has allowed the two state departments to evaluate the effect of Medicaid program eligibility and service benefit changes. Findings of the 2009 Medicaid/Birth Certificate match are located in [Section Four](#) of this document.

IDPH explored expanded Medicaid coverage for 6-12 months following birth for women with a diagnosis of depression to ensure coverage of medication and treatment. Discussion between IDPH and the Iowa Medicaid Enterprise resulted in serious consideration of the proposal. The Medicaid expansion was not implemented due to lack of adequate funding, however IDPH intends to continue advocacy for the proposal.

Early Intervention

Early ACCESS, Iowa's IDEA, Part C early intervention system, is a partnership of the four signatory governmental agencies listed below.

- Iowa Department of Public Health
- Child Health Specialty Clinics
- Iowa Department of Education
- Iowa Department of Human Services

The lead agency, the Iowa Department of Education, subcontracts with CHSC and IDPH to provide technical assistance to the state and partnering stakeholders. One of CHSC's roles is to assure the needs of infants and toddlers with special health care needs are included in all aspects of the system. IDPH assures that infants and toddlers appropriately screened for high lead levels are enrolled in Early ACCESS. A complete description of Iowa's Early ACCESS system is located in [Section Four](#) of this document.

**Early Periodic Screening
Diagnosis and
Treatment**

In Iowa, the Medicaid Early Periodic Screening Diagnosis and Treatment (EPSDT) program is a collaborative effort of two state departments. The Iowa Department of Human Services maintains an interagency agreement with the Iowa Department of Public Health to identify EPSDT responsibilities. Guidelines in the agreement direct Iowa's Title V local contract agencies to provide enabling services to assure that children ages 0-21 years have access to regular and periodic well child screening services. Core child health enabling services include informing and care coordination services.

**Community
Empowerment**

The Iowa Department of Management, Office of Community Empowerment collaborates with various IDPH programs related to early childhood issues. 2010 Iowa legislative action resulted in the combining of Early Childhood Iowa and the Office of Community Empowerment on July 1, 2010. Additional details about this merger are located in [Section Four](#) of this document.

Foster Care

CHSC and IDPH are available to assist the Iowa Department of Human Services Foster Care Division in planning efforts for assuring that the health needs of children served in the foster care system are met. Community-based projects in Davenport and Cedar Rapids, as well as state-level work teams, target various levels of service needs.

Other State and Local Public and Private Organizations

Child and Family Policy Center

The Child and Family Policy Center (CFPC) is a Des Moines based non-profit organization whose purpose is to link children/family research and policy and to advocate for outcome-based policies to improve child well-being. CFPC partners with CHSC to conduct a project funded by American Recovery and Reinvestment Act funds. The project goal is to strengthen early child development through addressing the social determinants of health. The project activities include those listed below.

- Review literature on social determinants of health
- Apply the literature to conduct an assessment of social determinants of health for infants and toddlers in selected Iowa communities
- Share the results of the assessments with Early ACCESS policymakers and stakeholders
- Make policy recommendations to practice based on results

CFPC partners with the IDPH Bureau of Family Health on the Early Childhood Iowa initiative. CFPC staff members serve as co-chairs on various component groups and provide leadership for the project's diversity task force.

Prevent Child Abuse Iowa

IDPH collaborated with Prevent Child Abuse (PCA) Iowa, Blank Children's Hospital, and the Office of Early Childhood to develop a statewide plan to prevent Shaken Baby Syndrome (SBS). In the fall of 2008, a team consisting of one staff member from each agency traveled to North Carolina to participate in the PREVENT Child Maltreatment Institute. Relying on the advice and technical assistance of the country's leading prevention experts, the team selected the evidence-based *Period of Purple Crying* curriculum as the program to be delivered to Iowa families. Additional information about the *Period of Purple Crying* curriculum is located in [Section Four](#) of this document. Members of the team, as well as other partners throughout the state, advocated for legislation establishing a statewide SBS prevention program. During the 2009 legislative session their efforts were successful. On March 4, 2009, Governor Chet Culver signed Senate File 101 into law, instructing IDPH to develop such a program. Although state funding was not allocated, members of the team effectively pursued other funding opportunities to establish a pilot program in central Iowa. It is anticipated that future state allocations will allow this program to be implemented in hospitals throughout the state.

**Genetic
Alliance**

The Genetic Alliance is the world's leading nonprofit advocacy organization committed to transforming health through genetics. The IDPH Center for Congenital and Inherited Disorders (CCID) works with the Genetic Alliance to provide accurate, up-to-date resources for families, advocates and health care providers who deal with a congenital or inherited disorder. Examples include presentations and documents promoting family health history. Materials addressing the family health history can be found at the CCID website http://www.idph.state.ia.us/genetics/family_history.asp .

**State
Universities**

There are three state universities in Iowa:

- University of Iowa (UI), Iowa City
- Iowa State University (ISU), Ames
- University of Northern Iowa (UNI), Cedar Falls

The Iowa Title V program draws upon the expertise of all three academic institutions for assistance with mutually-beneficial initiatives. Examples of priority collaborations are listed in the table below.

Initiative	Partner University	Description
Iowa Child and Family Household Health Survey	UI Public Policy Center (methodology, survey tool) and UNI Center for Social and Behavioral Research	<ul style="list-style-type: none">– Population based survey of children’s health– Full description located in Section One of this document
Barriers to Prenatal Care Survey	UNI Center for Social and Behavioral Research	<ul style="list-style-type: none">– Survey of birthing mothers– Full description located in Section Four of this document
Healthy Families Line	ISU Extension	<ul style="list-style-type: none">– Toll-free hotline for health information and referral– Full description located in Section Four of this document
Unintentional Injury	UI College of Public Health	<ul style="list-style-type: none">– Research on unintentional injury in children 0-14– Full description located in Section Three of this document

**Off to a Good
Start Coalition**

The Off to a Good to a Good Start Coalition (OTGS) is comprised of approximately 20 Iowa programs and partners interested in developing a comprehensive child health system. OTGS develops evidence-based policy recommendations that demonstrate successful health outcomes for children if implemented. In 2009, the OTGS sponsored a conference on social

determinants of health and life course health development. The intent of the conference was to bring these important concepts to the forefront of Iowa's early childhood stakeholders. The goal was to increase awareness, to begin meaningful conversations, to identify policy implications, and to identify opportunities for future program planning.

Recommendations from the conference included:

- Renew Iowa's commitment to establish medical homes for children as a top priority in health care reform
- Adopt emerging models of human development that recognize a life course perspective for promoting the health of all Iowans
- Advance development of care coordination models that assure access to care for all children regardless of health care coverage plans
- Support collaborative system-level inter-agency strategies to advance coordinated care for children that address social determinants of health. At a minimum, these strategies include, but are not limited to, evidence-based family support services, dental home, healthy mental development, and emerging health concerns
- Focus on evidence-based interventions for family support
- Implement creative strategies that will ensure availability of dental services for at-risk Iowa children ages 0-5 years, that may include new provider types or scope of practice changes
- Sustain the I-Smile™ program and its focus on building systems of early and regular dental care, focused on preventive services and starting by the age of one year.

**American
Academy of
Pediatrics,
Iowa Chapter**

The Iowa Chapter of the American Academy of Pediatrics (IA-AAP) partners with the state Title V agency on many initiatives concerning Iowa's pediatric population. There has been specific attention devoted to efforts for improving health outcomes for CYSHCN. These efforts center on promoting and strengthening the medical home as the venue for care delivery. Specific projects address the universal newborn hearing program, preterm infant network, children in foster care, early childhood, and children with asthma.

Members of IA-AAP play important advisory roles in the Iowa Medical Home Systems Advisory Council (MHSAC), the Prevention and Chronic Care Management Council, and the Project LAUNCH Council. The chapter, in conjunction with MHSAC, is developing the standards for a pediatric focused medical home for the Iowa Medicaid Enterprise.

Contributions to the Early Hearing Detection and Intervention system include a chapter champion to promote medical homes for families of children who are deaf or hard of hearing, to support the adoption of evidence-based guidelines on universal hearing screening by birthing hospitals, and to act as a resource to the state's pediatric primary care personnel.

IA-AAP is the leader in a recently created interagency collaborative effort to create a system of care for preterm infants in Iowa. This effort will promote the use of the science of improvement to enhance health quality outcomes, by embedding evidence-based practice and strengthening the continuum of care for premature infants and their families. The new Iowa based improvement partnership is part of the National Improvement Partnership Network (NIPN). As Iowa develops its framework for life course health development, its key public health leaders recognize the importance of influencing the life trajectory as early as possible. The improvement in preemie outcomes will focus on increasing protective factors and reducing risk factors.

The IA-AAP is also a partner on the Department of Human Services task group developing the state's plan for the "Fostering Connections" federal act. The newly appointed asthma chapter champion will be coordinating efforts with the Department of Public Health and American Lung Association on creating the state's new Asthma Plan. The chapter is also playing a role in the state's efforts to promote healthy eating and activity, Iowans Fit for Life described further in [Section Four](#), to incorporate concepts from the national "Let's Move" campaign.

**Iowa Academy
of Family
Physicians**

The Iowa Academy of Family Physicians (IAFP) is a statewide professional association comprised of more than 86 percent of Iowa's doctors who specialize in the practice of family medicine. The total IAFP membership includes 1,800 family doctors, medical residents and students. Forty six percent of IAFP members practice in towns with populations of less than 10,000 individuals.

IAFP is very interested in legislation that affects the quality of care, including the patient centered medical home and developing best practices for care provided to children and youth. IAFP members serve in a leadership capacity on the Medical Home System Advisory Council and work closely in developing policy for state health reform including medical home, health information technology, prevention and chronic care management and access to health care coverage and health care for the uninsured and underserved. IAFP members serve on the Project LAUNCH Council and work closely with Project LAUNCH staff to identify needed system changes related to social, emotional, and behavioral health.

**March of
Dimes**

The Iowa Chapter of the March of Dimes is a collaborator in the newly formed state workgroup to improve the system of care for preterm infants, as described in the preceding section of this document.

**National
Prematurity
Network**

The National Prematurity Network is also a key partner in the preterm infants workgroup. CHSC and other stakeholders are collaborating with the central regional network. Prematurity networks are catalysts currently helping to create advocacy networks focused on premature infant health. Networks bring together interested parties (focused on the health and well-being of premature babies) around common areas of concern such as continuity of care, education and resources, access issues, disparities and public policy.

**Iowa
Commission on
the Status of
Women**

The Iowa Commission on the Status of Women (ICSW) is a state agency that serves in a direct advocacy role for women and girls. ICSW is made up of nine commissioners appointed by the governor and maintains a website at www.women.iowa.gov. In collaboration with other state and local agencies and the private sector, the ICSW staff leverage and coordinate state investments in women and girls for maximum results. The ICSW vision is to grow Iowa's opportunities so that every woman and girl can reach her full potential.

**Eyes Open
Iowa**

The mission of Eyes Open Iowa is to support Iowa communities in ensuring the sexual health of all adolescents through advocacy, education and collaboration. A current initiative, called the WISE Iowa Project, strives to increase Iowa school districts' sustainable implementation of effective comprehensive sex education. Eyes Open Iowa was able to obtain funding for the WISE Iowa Project through the efforts of The Iowa Initiative to Reduce Unintended Pregnancies and the Iowa Departments of Public Health, Human Services and Education. More information about Eyes Open Iowa can be obtained from the website www.eyesopeniowa.org.

**The Iowa
Initiative**

The Iowa Initiative to Reduce Unintended Pregnancies is a program that aims to reduce the high rate of unintended pregnancies among Iowa women ages 18-30 through networking, research and public outreach. Headed by Iowa's former First Lady Christie Vilsack, the Iowa Initiative hopes to serve as a model to reduce unintended pregnancies nationwide. The IDPH family planning coordinator actively participates in Iowa Initiative activities.

The Iowa Initiative Research Program, conducted in conjunction with the University of Northern Iowa, University of Iowa, and University of Alabama-Birmingham, includes five studies designed to increase knowledge, persuade adult women to seek and access contraception if they wish to delay or prevent pregnancy, and improve contraceptive behaviors. The five studies focus on

- Salon Intervention - Salon professionals are trained to provide basic messages to clients and messages are reinforced with posters and flyers in the shops.

- Pharmacy Intervention - Intensive training about over-the-counter and prescription contraceptives is provided to participating pharmacists and displays are modified to increase visibility and reduce stigma associated with the purchase of family planning products.
 - Social Marketing - Students in Iowa's three public universities, two largest community college systems and two residential colleges are given intensive educational messages and periodic provision of free condoms. Information channels include the heavily-utilized Internet social networking sites and other websites, local events, bars, and student activity information provided by the institutions where possible.
 - General Statewide Social Marketing - The broad social marketing approach targets wider audiences and includes print, electronic media, radio and TV.
 - “Edutainment” - This approach involves imbedded public health messages in radio serials produced by and directed toward minority populations.
-

Iowa Public Health Association

IDPH collaborates with the Iowa Public Health Association (IPHA) in planning the annual Iowa Governor’s Conference on Public Health. Representatives from Child Health Specialty Clinics and six IDPH bureaus work with representatives from IPHA in a yearlong effort to plan the conference. Additional partners include the Iowa Environmental Health Association, the Iowa Counties Public Health Association, University of Iowa College of Public Health, and State Hygienic Laboratory. The most recent conference was held on the Iowa State University campus on April 13-14, 2010.

Iowa Child Care Resource and Referral

Iowa Child Care Resource and Referral (CCR&R) is a network of five regional offices that provide resources, education and advocacy to support quality child care. Funding is provided by the Iowa Department of Human Services through the Child Care Development Fund.

As part of the IDPH Healthy Child Care Iowa (HCCI) program, child care nurse consultants located throughout the state advocate for quality child care. A description of HCCI activities is located in [Section Four](#) of this document.

State-level HCCI staff serves on the Iowa CCR&R State Network Team and collaborates on statewide training projects, data collection, resource materials, information dissemination and technical assistance. Many HCCI child care nurse consultants are co-located with CCR&R agencies.

Additional HCCI / CCR&R partners include those listed below.

- Consumer Product Safety Commission
- National Resource Center for Child Care Health Consultation
- Iowa’s Office of Head Start

- Iowa State University Extension Service
 - Iowa Department of Education
 - Early Childhood Iowa
-

Delta Dental

Delta Dental Plans Association is a not-for-profit organization with some for-profit affiliates as member companies. The organization offers national dental coverage for employers and individuals. Delta Dental's independent member companies administer programs and reporting systems that cover dental benefits programs and services

In 2010, the IDPH Oral Health Bureau partnered with Delta Dental of Iowa Foundation (DDIF) to purchase children's oral health books to be sent to primary care and pediatric medical offices in the state. The books will include an I-Smile™ social marketing message. Additional information about the IDPH I-Smile™ program is located in [Section Four](#) of this document. Through its work with I-Smile™ health promotion, DDIF has expressed an interest in working with IDPH on other state prevention efforts, which may include funding for school-based sealant programs and/or purchase of fluoride varnish to be used in public health settings.

Iowa / Nebraska Primary Care Association

Established in 1988, the Iowa/Nebraska Primary Care Association (IA/NEPCA) is a bi-state non-profit membership association comprised of community health centers and other safety net providers in Iowa and Nebraska. IA/NEPCA's mission is to provide leadership by promoting, supporting, and developing quality health care for underserved populations in Iowa and Nebraska.

The Iowa Department of Public Health has a long-standing relationship with IA/NEPCA and its members. IDPH serves as a strong partner in the Iowa Collaborative Safety Net Provider Network (Network) led by IA/NEPCA. The Network is comprised of community health centers, free clinics, rural health clinics, family planning agencies, local boards of health, and maternal/child health centers, among other safety net providers. Monetary awards have been given to a variety of providers since the inception of the Network. Additionally, access to pharmaceuticals, specialty care, and health professional recruitment were identified as the first three areas for collaboration. Advancing the medical home was most recently added as a priority area.

In 2008, the Iowa legislature allocated funding for three grants to local boards of public health and three grants to maternal/child health centers to work toward building capacity to establish medical homes for patients. The grants were awarded through the Network. By continuing funding to the same grantees in 2009, the Network allowed for communities across Iowa to

elevate the level of awareness and commitment to medical homes and increased access to needed services for underserved populations. IDPH staff members serve as leadership on the Safety Net Collaborative Leadership Council and as a resource and reviewer in identifying funded MCH and local public health agencies through a competitive award process.

**Iowa
Healthcare
Collaborative**

The Iowa Healthcare Collaborative (IHC) is a provider-led, patient-focused nonprofit organization. IHC promotes a culture of continuous improvement in healthcare through providing data analysis, training, learning collaboratives and partnering with other provider-led initiatives.

IHC and IDPH partner together with physician leaders across the state to lead in spreading the patient-centered medical home concept and in developing and framing policy for state health care reform initiatives. The IHC president serves as the chair of the Medical Home System Advisory Council staffed by the Bureau of Family Health.

**Iowa Coalition
Against
Domestic
Violence and
Iowa Coalition
Against Sexual
Assault**

Iowa has two state coalitions representing programs that serve victims of domestic and sexual violence. These organizations – the Iowa Coalition Against Domestic Violence (ICADV) and the Iowa Coalition Against Sexual Assault (IowaCASA) – have strong histories of advocacy and policy change at both the state and federal level.

ICADV’s mission statement is to “seek to engage all people in a movement to change the social and political systems that perpetuate violence against women. We do this through education, advocacy and quality victim services.”

IowaCASA’s mission is “to unite people and organizations to promote a society free from sexual violence and to meet the diverse needs of survivors.” Both of these organizations have instituted innovative programming, especially in the area of specialized services to women of color and immigrant women.

IDPH has a strong history of collaboration with the coalitions, partnering with ICADV to implement the National Standards Campaign, and with IowaCASA to implement Rape Prevention Education grant activities.

CityMatCH

CityMatCH is a freestanding national membership organization of city and county health departments' maternal and child health (MCH) programs and leaders representing urban communities in the United States. CityMatCH and the IDPH Bureau of Family Health (BFH) have a long history of professional collaboration. Both organizations are committed to enhancing MCH capacity

through workforce development and aggressively recruit interns and fellows to the nation's heartland. In the past, few interns and fellows expressed an interest in coming to Iowa or Nebraska. However, BFH and CityMatCH staff collaborated to create proposals that have attracted interns from the HRSA/MCHB Graduate Student Internship Program to Iowa since 2007.

Iowa's CDC MCH Epidemiology assignee has collaborated with CityMatCH staff to conduct an analysis of Nebraska PRAMS data. The Nebraska analysis was a helpful resource in the analysis of Iowa PRAMS pilot data.

A number of BFH professionals have participated in the CityMatCH Data Institute and the CDC MCH Epidemiology assignee has served as faculty for the Data Institute. In 2009, Early Childhood Iowa state and local staff were invited to participate in the CityMatCH Early Childhood Summit. The summit gathered national leaders to develop a work plan and best practices for urban public health agencies and their roles in early childhood services.

Section 3: Strengths and Needs of the Maternal and Child Health Population Groups and Desired Outcomes

Overview

Introduction

Using quantitative and qualitative methods, the Iowa Department of Public Health assessed the strengths and needs of all MCH population groups in Iowa.

To aid the Iowa MCH2015 process, data detail sheets were disseminated widely to MCH stakeholders as graphic reminders of the current status of the MCH populations. The data detail sheets, included as [Appendix C](#) of this document, provided data highlighting the current status of each MCH population.

Contents

This is the third section of the Iowa Title V Five-Year Needs Assessment Final Report. This section contains the following topics:

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Strengths and Needs of Pregnant Women, Mothers, and Infants in Iowa

Statewide Perinatal Care Program Needs Assessment

The Statewide Perinatal Care Team (SPCT) conducts an annual needs assessment of the obstetric services provided by Iowa birthing hospitals to identify gaps in service and unmet needs within the population of Iowa pregnant women and infants. Important parameters of the needs assessment include the following:

- Number of hospitals providing OB services
- Rate of unintended pregnancies
- Elective cesarean sections and inductions performed prior to 39 weeks of gestational age
- Infant and neonatal mortality
- Percent of very low birth weight infants delivered at facilities designed to handle high-risk deliveries

The SPCT includes a neonatologist, maternal fetal medicine specialist, obstetrical nurse specialist, neonatal nurse specialist, and nutrition consultant. The team members are on the faculty of the University of Iowa College of Medicine. The November 2009 report of the needs assessment, includes the following identified needs:

- Prevention of prematurity
- Need to decrease the elective cesarean sections and inductions performed prior to 39 weeks of gestational age
- Loss of hospitals in Iowa that provide obstetrical services
- Need to decrease the rate of unintended pregnancies

All four of these needs are discussed in the next sections of this document.

Prevention of Prematurity

In 2006, 11.6 percent of live births in Iowa resulted in a preterm infant. There is much that is not known about factors that result in prematurity, however a number of associated factors are known. One of these is the maternal use of tobacco during pregnancy. Within Iowa there is a high incidence of smoking among pregnant women whose health care is covered by Medicaid.

According to a 2005 report, Iowa Medicaid recipients reported a higher rate of cigarette smoking during pregnancy than did non-Medicaid recipients (30% vs. 9.3%). Information about tobacco cessation efforts for Iowa women of childbearing age is located in [Section Four](#) of this document.

Another important factor proven to prevent preterm delivery is the use of 17-hydroxy-progesterone during pregnancy for women with a history of prior preterm delivery. The SPCT has educated health care providers regarding this intervention, however barriers related to access to the medication and Medicaid reimbursement exist.

**Elective
Cesarean
Sections and
Inductions**

In recent years the rates of premature delivery (currently 12.5% of all live births) are increasing in the United States . The Iowa preterm delivery rate was 11.6% of all live births in 2006. The March of Dimes has demonstrated that 75% of all preterm deliveries occur in infants of 34-36 weeks gestation. It is this cohort of infants that has contributed most to the overall increased incidence of preterm deliveries in the U.S. The 34-36 week cohort (late preterm) contributes significantly to intensive care admissions and many require prolonged stays in well newborn nurseries thereby contributing greatly to the overall expense of newborn care. In Iowa, between 1996 and 2006, the rate of infants born late preterm in increased 17 percent.

It has been demonstrated that infants born by elective cesarean section at 37-38 weeks are 120 times more likely to require ventilatory support for respiratory distress than infants born at 39-41 weeks gestation. The American College of Obstetrics and Gynecology (ACOG) made recommendations in 1999 against elective deliveries prior to 39 weeks of gestation. This recommendation was reiterated in the 5th edition of *The Perinatal Guidelines for Care*, jointly published in 2002 by the American Academy of Pediatrics and ACOG.

These recommendations and the recognition that there is significant morbidity associated with elective delivery of infants prior to 39 weeks gestation has prompted the Iowa Statewide Perinatal Care Program to encourage physicians and hospitals to adopt a “zero tolerance approach” to early inductions or cesarean sections prior to 39 weeks gestation without a solid medical indication.

**Loss of
Hospitals and
Services**

In the last ten years, fifteen Iowa hospitals have ceased providing obstetrical care. This loss of service is resulting in significant distance for families to travel in order to obtain obstetrical services. Some factors include the relatively limited number of family physicians willing to provide obstetrical care, the high cost for malpractice insurance, the risk of medical/legal liability in the provision of obstetrical care, and the loss of surgical services at rural hospitals.

**Unintended
Pregnancy**

Respondents to the 2007 Iowa Barriers to Prenatal Care survey indicated that over 60 percent of the women with unintended pregnancies were not using any form of birth control at the time of conception, regardless of marital status. When pregnancies are unplanned, mothers are likely to receive little or no preconception and prenatal assessment and preventive care. Babies born to mothers who are not intending to become pregnant are at increased risk for exposure to harmful substances such as tobacco and alcohol.

Additional data from the Iowa Barriers to Prenatal Care survey indicate age and income are significantly linked to intendedness of pregnancy. Eighty percent of mothers under age 18 did not intend to become pregnant. In contrast, about 20 percent of women ages 31-35 did not intend to become pregnant. Seven in ten mothers with household incomes under \$10,000 per year indicated they did not intend to become pregnant. Less than two in ten mothers with household incomes over \$50,000 per year reported unintended pregnancies. (Mary L. Aquilino and Mary E. Losch, *Across the Fertility Lifespan; Desire for Pregnancy at Conception*, Maternal Child Nursing, Vol 30, No 4, July-August 2005.)

**Infant
Mortality**

Provisional data for 2009 point to a decrease in the rate of infant mortality for Iowa's population as a whole over the previous year. The infant mortality rate per 1,000 births to all races decreased from 5.6 in 2008 to 4.4 in 2009. Provisional 2009 data indicate that the White infant mortality rate per 1,000 births was 4.4. Provisional 2009 data indicate that the Black infant mortality rate per 1,000 births decreased from 15 in 2008 to 11.9 in 2009. This makes the ratio of the Black infant mortality rate to White infant mortality 2.7.

Oral Health

Iowa MCH2015 identified access to dental services for low-income pregnant women as a priority. At this time, there are limitations for offering preventive dental services to low-income pregnant women if they are not enrolled in the Title V maternal health (MH) program. Due to limited funding for the MH program, many local MH contractors do not have resources to provide direct dental services or assist women with payment for referred dental services. IDPH Oral Health Bureau staff is investigating ways to improve this vulnerable population's ability to receive dental care.

Strengths and Needs of Children in Iowa

Children's Health Insurance

Iowa ranks second in the nation (tied with Hawaii and New Jersey) in having the lowest number of uninsured children at 5.1 percent. Massachusetts ranks first at 3.2 percent. (Source: "Weathering the Storm" Georgetown University Center for Children and Families Report, September 2009).

According to the 2009 *hawk-i* Annual Report to the Governor, General Assembly and Council on Human Services, a total of 39,097 children were enrolled in both components of Iowa's Children's Health Insurance Program (CHIP) as of October 31, 2009. Of the total number enrolled, 14,810 children were enrolled in the Medicaid Expansion program and 24,287 in the *hawk-i* program. With expanded outreach efforts and expanded coverage of children in families with countable income up to 300 percent of the Federal Poverty Level (FPL), current enrollment is expected to grow.

The September 2009 U.S. Census Bureau Current Population Survey provided the following information, based on three-year survey averages (2006-2008):

- Total uninsured children (age 0-18) in Iowa: 41,078
- Breakdown:
 - Uninsured children at or below 300% FPL: 30,706
 - Uninsured children between 200% and 300% FPL 8,302
 - At or below 200% FPL 22,404
 - 41,078

Cultural Disparity

There are disproportions in minority cultures' experience with the child welfare and juvenile justice systems. Such disproportions are significant considerations with respect to family health information needs. For example, African American youth in Dubuque County, Iowa are more than seven times as likely as White youth to be arrested, and more than nine times as likely to be referred to juvenile court (Iowa Disproportionate Minority Contact Resource Center at The National Resource Center for Family-Centered Practice, University of Iowa, 2005). Statewide, the arrest rate for Hispanic youth is 39 percent more than that of White youth and 67 percent more for confinement in secure detention facilities, both statistically significant differences. While the overall numbers are low, the statewide disparity rates in arrests and secure detention of Native American youth are both elevated 2-3 times that of the statewide rates for White youth.

An association between minority population membership and child welfare system involvement is also well established. For example, in Iowa, African American children are placed out-of-home at four times the rate of their White counterparts.

Oral Health

In 2009, 83 percent more children received dental services from child health programs than from dentists. Just six percent of children saw a dentist for care before they turned two years old. Iowa has a high number of dentists enrolled as Medicaid providers, but child health programs report that few will take new Medicaid-enrolled clients. In addition, 70 Iowa counties are likely to be designated as dental health professional shortage areas during the next year. Because of this, the IDPH Oral Health Bureau encourages child health contract agencies to continue to provide these gap-filling preventive services, particularly for very young children.

The Iowa MCH community recognizes that adult oral health is predicted by not only childhood socioeconomic advantage or disadvantage, but also by oral health in childhood. Changes in socioeconomic advantage or disadvantage are associated with differing levels of oral health in adulthood. The life-course approach appears to be a useful paradigm for understanding oral health disparities throughout individuals' lives. Additional information about life course health development is located in the [Cross-Cutting Needs Section](#) of this document.

Childhood Obesity

There is growing interest in nutrition and exercise in Iowa, especially as they relate to childhood obesity. The 2005 Iowa Child and Family Household Health Survey asked parents about the eating and exercise practices of their children. Almost 9 out of 10 children usually or always eat breakfast (86%). Younger children were more likely to eat breakfast every day than older children. Just over two-thirds of children (69%) don't drink soda on an average day. About another quarter (23%) drink one serving per day and 9 percent drink two or more servings per day. Older children drink more soda than younger children.

Sedentary activities such as watching television or videos, playing video games, and using computers have been raised as a factor affecting childhood obesity, as these prevent children from doing physical activities. Among the 90% of children who watch some television daily, 2 hours was the average time spent watching daily. Over half of children watch over 2 hours of television, videos, or movies each day. Fifty-eight percent of children use the computer or play video games daily, with an average time of 1.5 hours. Almost 20 percent of children in Iowa play video games or use computers for at least two hours daily.

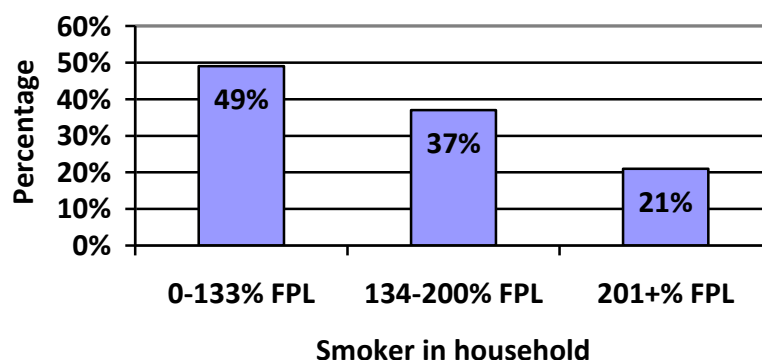
Environmental Toxins

In Iowa, as in other states, the MCH community is concerned about the effect of environmental toxins, including tobacco smoke, on children's development. Child Health Specialty Clinics received ARRA funds through IDEA, Part C to conduct a two-year study on the impact of prenatal and early infancy exposure to environmental toxins on neurological cognitive development.

Tobacco Use

According to the 2005 Iowa Child and Family Household Health Survey (HHS), 29 percent of Iowa children live in a household where cigarettes are smoked. Of those households with at least one smoker, 35 percent of the children had parents who reported that tobacco use had some effect on their child. The rate of children living in households with a smoker varied by income level.

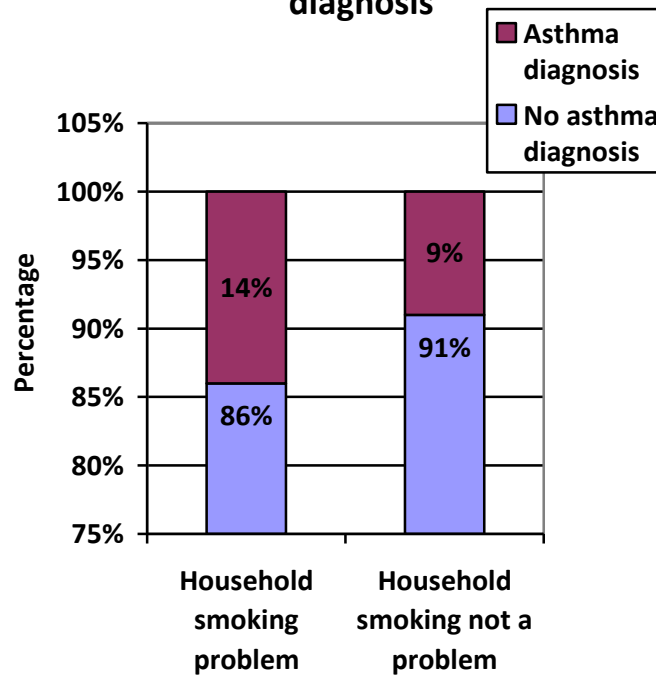
**Percent of Iowa children living in a house
with a smoker, by income status**



Source: 2005 Iowa Child and Family Household Health Survey

In the 2005 HHS, asthma was chosen as a chronic health condition of emphasis. About 10 percent of children had been diagnosed with asthma at some time in their lives. Of those diagnosed with asthma, 68 percent still had this condition at the time of the survey. Nationally, about 13 percent of children have asthma. Additional analyses showed that children diagnosed with asthma were more likely to live in a household where smoking was reported to be a problem

Relationship between living in a household with a reported smoking problem and children with an asthma diagnosis



Source: 2005 Iowa Child and Family Household Health Survey

Alcohol Use

In the 2005 HHS, six percent of children lived in households where alcohol use was reported to be a problem. Four percent of children lived in a household where alcohol use was reported to be a “small” problem, and for the remaining children, alcohol use was reported to be a “moderate” or “big” problem. Eighty-three percent of children living in a household where alcohol use was a problem had parents who reported that there was some effect on the child resulting from alcohol use. Problems primarily stemmed from family stress and financial burden.

Prescription and Illegal Drug Use

In the 2005 HHS, two percent of children lived in households with a reported drug-use problem. Among these children, 54 percent were in a household where a problem was caused by illegal drugs, 34 percent prescription medications, and 13 percent both illegal and prescription drugs. When rating the effect of the problem, one-third of the parents reporting that the drug use had no effect on their child; almost one-third of children had parents reporting the “highest” effect on their child. Problems stemmed primarily from family stress and financial burden.

**Mental Health
of Children and
Youth**

Serious mental health issues are prevalent in Iowa youth. The Iowa Youth Survey reported in 2008 that 18 percent of 8th grade girls and 26 percent of 11th grade girls surveyed in northeast Iowa had thought of a suicide plan. In the same report, nearly 50 percent of 11th graders reported using alcohol within 30 days of responding to the survey, while 30 percent reported using illegal substances within 30 days of responding. In addition, respondents indicated significant numbers of students have low self esteem, aggressive behaviors, and significant pressure from peers to engage in risky behaviors.

The Community Circle of Care (CCC), described in [Section Four](#) of this document, is an initiative for children and youth, birth to age 21 years, who struggle with emotional/ behavioral challenges. The CCC has worked in partnership with the University of Iowa Department of Psychiatry to increase psychiatric services to rural Iowa youth through the use of telemedicine.

The Iowa Department of Public Health has multiple initiatives focused on mental health issues of Iowa youth. Iowa Project LAUNCH is funded by the federal Substance Abuse and Mental Health Services Administration (SAMHSA) to develop a sustainable, systemic community-approach to promoting social, emotional and behavioral health for young children and their families. Goals and objectives of Project LAUNCH are described in [Section Four](#) of this document.

Despite these efforts there remain large gaps, both in the shortage of those who can provide the needed psychiatric care and in the care being accessible to all who need it. A recent study estimated a national need for 30,000 child psychiatrists, but found only 6,300 in practice. Iowa is no exception as the study, with data from 2001, recorded a total of 35 youth/child psychiatrists in the state of Iowa, or 4.8 psychiatrists for every 100,000 youth. Efforts are underway to increase the psychiatric workforce through enhanced recruitment and expansion of training for psychiatric subspecialty care.

**Parenting
Stress**

Mental health status of parents is an important issue for all young children. Regardless of income, children will be at greater risk if they are raised in an environment where parents are having difficulties coping with the challenges of parenthood.

The 2005 Iowa Child and Family Household Health Survey included a series of questions designed to measure parenting stress or aggravation. Parenting stress was defined using a series of four questions asking how much time in the past month the parent felt:

- My child is much harder to care for than most
- My child does things that really bother me a lot
- I am giving up more of my life to meet my child's needs than I ever

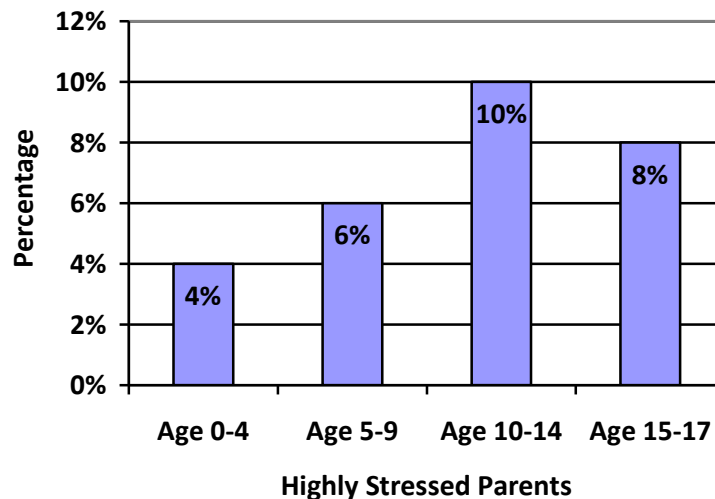
expected

– Angry with my child

These items were scaled and the results were calculated using a standardized cut-off for symptoms suggesting levels of parenting stress. Parents of most children (71 percent) report moderate stress related to parenting. About seven percent of children were living in households with a highly stressed parent.

There were no statistically significant differences by income level but the measure demonstrated a difference by the age of the child as shown in the table below.

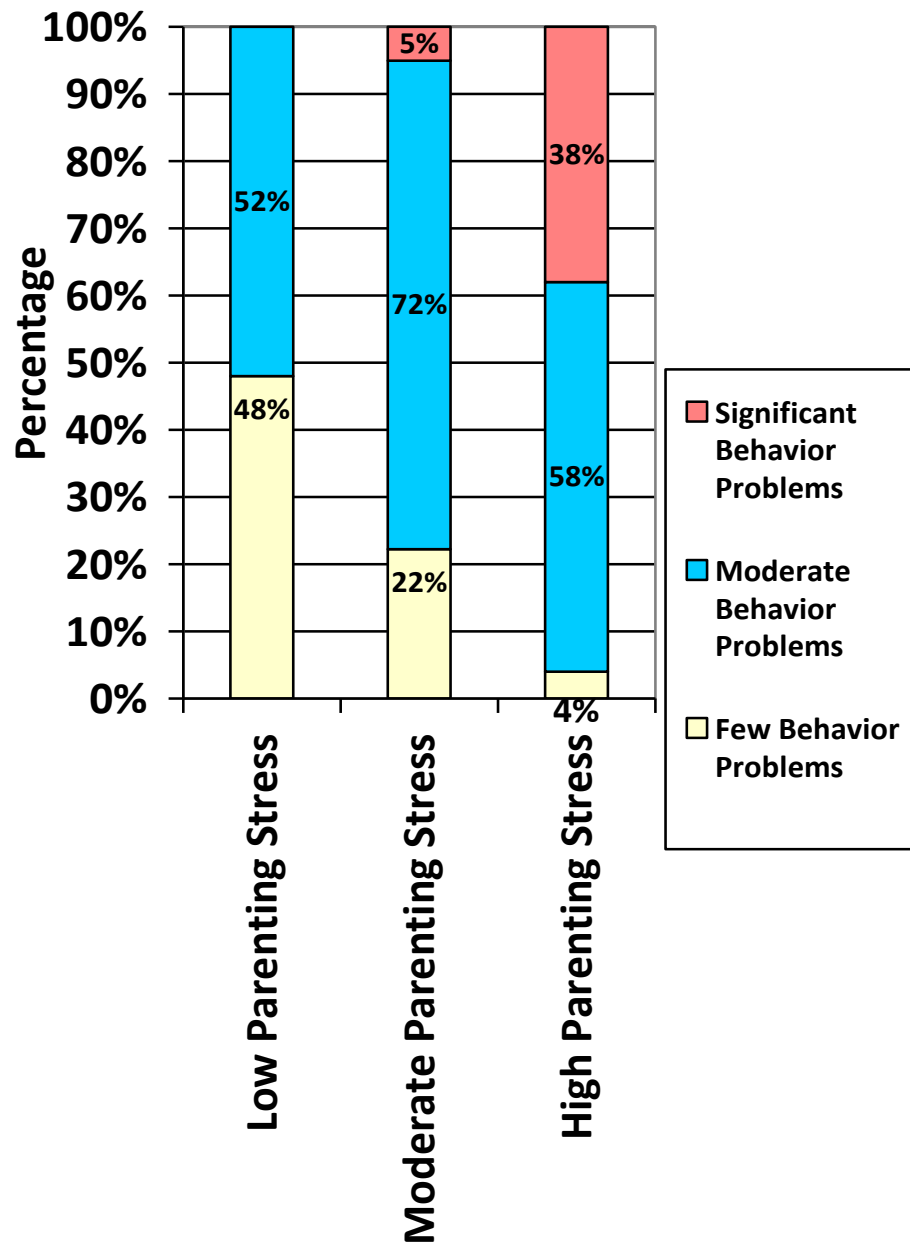
Percent of Iowa children with "highly stressed" parents by age group



Source: 2005 Iowa Child and Family Household Health Survey

Data from the survey showed evidence of a link between reported parenting stress and reported child behavior problems. Parents who reported high levels of stress in parenting were far more likely to have reported significant problems with child behavioral and emotional health status as shown in the table below.

**Parenting stress level by behavior
problem rating of Iowa children ages 6-
18**



Source: 2005 Iowa Child and Family Household Health Survey

The link between the mental health of parents and healthy childhood development is discussed further under the title [Life Course Health Development](#) in this document.

Unintentional Injury

Unintentional injury was identified as a need for Iowa's MCH populations through the Title V needs assessment process. In partnership with IDPH Title V staff, the instructor of a University of Iowa course offered graduate students the opportunity to undertake research on unintentional injury among children ages 0-14 years. The graduate students completed the Maternal, Child, and Family Health course and summarized their findings in a report to IDPH in May 2010.

The rate of hospitalizations due to unintentional injuries among children ages 0-14 years was established as Iowa's SPM for unintentional injury. Data from the 2008 Iowa Hospital Association inpatient and outpatient report were evaluated. Unintentional injuries were tabulated by cause for children ages 0-1, 1-4, 5-9, and 10-14 years. The following tables summarize findings obtained from 2008 inpatient hospitalization data.

2008 Hospitalization Rates Due to Unintentional Injury by Age Group

Age Group	Rate per 100,000
0-1 yr	135.00
1-4 yr	140.77
5-9 yr	83.52
10-14 yr	143.43

Source: Iowa Hospital Association; 2008 Hospital Inpatient Data

2008 Hospitalization Rates by Leading Cause of Unintentional Injury (All Ages)

Unintentional Injury by Cause	Rate per 100,000
Scalding	38.01
Drowning	16.53
Fire/Flame	15.51

Source: Iowa Hospital Association; 2008 Hospital Inpatient Data

Numerous strategies and resources for addressing a variety of causes of unintentional injury were researched by the graduate students. The following list includes examples of best practices to address unintentional injury resulting from the class research project.

- Annual surveillance of statewide injury trends
- Legislative initiatives such as establishing manufacturer's specifications on maximum water heater temperatures to avert scalding and passage of the Flammable Fabrics Act requiring flame retardant sleepwear
- Regulation and enforcement of flammability standards for carpets,

- mattresses, upholstered furniture
- Enforcement of fire safe cigarettes, less likely to ignite if left unattended
 - Product modification of coffee cups, kitchen stoves, and microwaves to avoid burns
 - Strategic planning to increase households with functional smoke detectors
 - Educational campaigns for children and families on developing a home fire escape plan, burn safety, and fire prevention
 - Partnering with Safe Kids Campaigns/Coalitions
 - Education for parents on poison control
 - Promoting awareness of poison control centers
 - Requirements for fencing and self-closing gates around pools
 - Requirements for CPR certification for pool owners
 - Education to promote swimming lessons, use of personal flotation devices and adult supervision of child swimmers, and arm-length proximity to children in bathtubs
 - Safety measures pertaining to proximity to animals in public settings
 - Use of helmets and appropriate footwear when near or riding a horse
 - Safety measures related to horse-drawn buggy use among certain religious groups such as the Amish, Mennonites, and the Brethren
 - Child labor laws that restrict youth under age 16 years from working on a farm or in a yard/pen/stall occupied by a bull, boar, stud horse, sow with baby pigs, or cow with a newborn calf
 - Education on farm safety related to animals and machinery
 - Safety system engineering and technology solutions for machinery and equipment; related safety legislation/regulation/enforcement
-

Strengths and Needs of Children with Special Health Care Needs in Iowa

Number of Iowa Children with Special Health Care Needs

Prevalence

Information from the 2005 Iowa Child and Family Household Health Survey revealed that the number of CYSHCN is increasing in Iowa. Over one in five children in Iowa reported to have a special health care need as defined by the Child and Adolescent Health Measurement Initiative (CAMHI) children with special health care needs screening instrument. This was an increase from 2000 when 17 percent of Iowa children had a special health care need. Nationally, about 18 percent of children have special health care needs. Of the 21 percent of children in Iowa identified as having a special health care need, 57 percent had parents who reported that their child had been diagnosed with a chronic health condition.

The 2005-2006 National Survey of Children with Special Health Care Needs reports that an estimated 14.2 percent of Iowa children ages 0-18 years have a special health care need. Applying this percentage to the estimated number of children ages 0-18 years in Iowa (735,637 according to the American Community Survey, 2005 or 764,860 according to the Current Population Estimate, 2005) results in an estimate of Iowa CYSHCN between 104,460 and 108,610.

Prevalence by Race/Ethnicity

The following table shows the numbers and percentages of Iowa CYSHCN age 18 years and younger by race and ethnicity.

**Iowa Children and Youth with Special Health Care Needs
Race/Ethnicity Breakdown**

Race/Ethnicity	Number of Children	Percentage
White	616,246	82%
Black	25,664	3%
Hispanic	73,016	10%
Other	34,733	5%
Total	749,660	100%

Source: Kaiser Family Foundation State Health Facts, 2007

With respect to race and ethnicity of Iowa's CYSHCN, estimates from the 2006 National CYSHCN Survey suggest that 14 percent of White non-Hispanic children, 20.9 percent of Black non-Hispanic children, 8.2 percent of Hispanic children, and 24.1 percent of multiple race children have special health care needs. State-specific CYSHCN percentages were not reported for Asian, American Indian/Alaska Native, or Native Hawaiian/Pacific Islander groups.

Prevalence by Family Income

Generally, the prevalence of CYSHCN decreases as total family income

increases. From the 2005 Iowa Child and Family Household Health Survey, CYSHCN prevalence rates are 29 percent for families at 0-133% FPL; 24 percent for families at 134-200% FPL; and 19 percent for families at or above 201% FPL. Although CYSHCN prevalence rate estimates from the 2006 National CYSHCN Survey are lower, the trend is similar. They are 15.1 percent for families at 0-99% FPL; 15.7 percent for families at 100-199% FPL; 14.1 percent for families at 200-399% FPL; and 12.6 percent for families at or above 400% FPL.

Health Care Coverage

In Iowa, 5.6 percent of CYSHCN were without insurance at some point during the year before the data were collected for the 2006 National Survey of Children with Special Health Care Needs. Perhaps more significant, 28.2 percent of CYSHCN who are currently insured have insurance that survey respondents felt to be inadequate.

Cultural Disparity

A telling culturally-related data element is “parenting stress” associated with having a CYSHCN. This was studied as part of the 2000 Iowa Child and Family Household Health Survey. Stress was assessed using items adopted from the National Survey of the American Family Aggravation and Parenting Scale. White parents, at 6 percent, had half the “high stress parenting” levels of African American, Hispanic, and Asian parents – all at 12 percent. Whites also report the most prevalent “low stress parenting” rate (20%) versus 15 percent, 17 percent, and 9 percent for African Americans, Hispanic, and Asians, respectively.

Parenting Stress by race/ethnicity

	Hispanic	White, not Hispanic	African American, not Hispanic	Asian/Pacific Islander
High stress	12%	6%	12%	12%
Moderate	71%	74%	73%	79%
Low stress	17%	20%	15%	9%

Source: 2000 Iowa Child and Family Household Health Survey

Chronic Conditions

In *Dynamics of Obesity and Chronic Health Conditions Among Children and Youth*, authors VanCleave, Gortmaker and Perrin examined four chronic conditions: asthma, obesity, other physical conditions, and behavior/learning problems. They concluded that “prevalence of chronic conditions among children and youth increased from 1988 to 2006. The prevalence of any chronic health condition has increased from 12.8 percent in 1994 to 26.6 percent in 2006. However, presence of these conditions was dynamic over each 6-year cohort.” Implications of the study were that “chronic conditions

in childhood are common and dynamic, underscoring the benefits of continuous, comprehensive health services for all children to adjust treatment of chronic conditions, promote remission, and prevent onset of new conditions.” (JAMA, February 17, 2010 – Vol. 303 No 7, pages 623-630) The study gathered national data and provides insights for Title V CYSHCN program planning.

Asthma

In the 2005 Iowa Child and Family Household Health Survey, asthma was chosen as a chronic health condition of emphasis. About 10 percent of children had been diagnosed with asthma at some time in their life. Of those diagnosed with asthma, 68 percent still had this condition at the time of the survey. Nationally, about 13 percent of children have asthma.

**CYSHCN
Obesity**

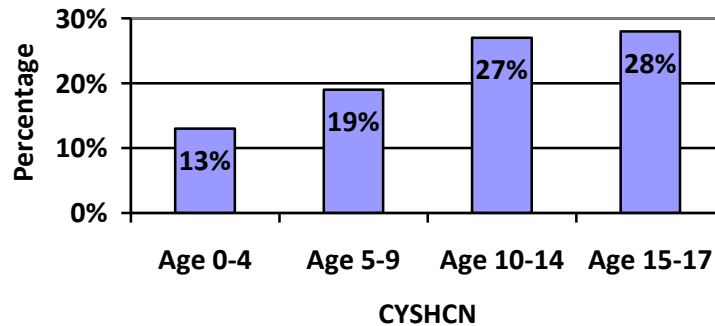
Obesity is a condition of co-morbidity for many Iowa CYSHCN and its presence may contribute to well-children becoming CYSHCN. A recent national research article concluded: Substantial geographic disparities in childhood obesity and overweight exist, with an apparent shift toward higher prevalence in 2007 for several states. Marked geographic disparities indicate the potential for considerable reduction in US childhood obesity. Individual, household, and neighborhood social and built environmental characteristics accounted for 45 percent and 42 percent of the state variance in childhood obesity and overweight, respectively.

Iowa data show gender disparities in overweight and obesity prevalence. In 2007, children and adolescents ages 10-17 years had an overall obesity rate of 11.2 percent. Males had an 11.3 percent rate and females 11.0 percent. In 2003 the overall obesity rate for the same group was 12.5 percent, males 15.3 percent and females 9.5 percent, for a decrease in prevalence in 2007 for males of 25.9 percent and an increase in prevalence of females of 15.9 percent. Overweight prevalence showed similar gender disparities. Over 26 percent of children and adolescents ages 10-17 years were overweight, with 26.1 percent males and 26.9 females. This was an overall 3.7 percent increase in prevalence since 2003, -7.6 percent for males and 19.2 percent for females. (Gopal K.Singh, Michael D. Kogan, Peter C. van Dyck, *Changes in State-Specific Childhood Obesity and Overweight Prevalence in the United States from 2003 to 2007*, Archives of Pediatrics and Adolescent Medicine, Volume 164 (No. 7), published online May 3, 2010)

**Transition to
Adulthood**

According to the 2005 Iowa Child and Family Household Health Survey, older children were more likely to have a special health care need, as shown in the graph below.

Percent of Iowa children with special health care need, by age category



Source: 2005 Iowa Child and Family Household Health Survey

As reported in the 2005-2006 National Survey of Children with Special Health Care Needs, only 47.3 percent of youth with special health care needs received the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence.

In some rural areas of Iowa there are no pediatricians so many children receive their health care from family practice physicians and advanced practice nurses. Conversations between CHSC regional clinic staff and community family practice physicians have revealed that some of these physicians are uncomfortable treating certain conditions of CYSHCN, and when youth with special health care needs transition to adult care, medical providers with appropriate skills are even less available. In addition, there is difficulty connecting children and youth to specialists. Some of Iowa's young adults with special needs continue to be followed by pediatric providers or specialists who typically treat children, well into adulthood.

Youth requiring services from a variety of specialists also need adequate care coordination and support to learn skills of self-advocacy and self-management. This complements the growing insistence among Iowa parents of CYSHCN that their children have options for real jobs in the community as they grow into adulthood. Stated another way, parents are increasingly concerned about what will happen to their children "when the school bus no longer comes." Fortunately, significant efforts are underway involving many Iowa stakeholders to establish an "employment first" focus to policy and programs where competitive employment is the expected and preferred outcome of employment-related services. CHSC is an important player in these discussions.

**Access to
Subspecialty
Services**

Data from the National Survey of Children with Special Health Care Needs showed that 10.7 percent of Iowa CYSHCN still have an unmet need for specific health care services compared to 16.1 percent nationally. Twelve percent of CYSHCN needing a referral had difficulty getting it, compared to 21.1 percent nationally.

Telemedicine

CHSC has been involved with providing psychiatric services to children and youth in communities with limited access to child psychiatrists. In its role of assuring the system of care for CYSHCN, activities in CHSC's regional centers support a consultative model for remote psychiatric consultations. Patients and their families receive clinical evaluations through telemedicine, and care coordination and family support by CHSC's community based staff. CHSC has expanded its telemedicine consultation services to pediatric neurology and is exploring it for other subspecialties.

Pediatric Psychiatry

A recent study estimated a national need for 30,000 child psychiatrists, but found only 6,300 in practice. The state of Iowa is no exception as the study, with data from 2001, recorded a total of 35 youth/child psychiatrists in the state of Iowa, or 4.8 psychiatrists for every 100,000 youth. Efforts are underway to increase the psychiatric workforce through enhanced recruitment and expansion of training for psychiatric subspecialty care. CHSC is collaborating with University of Iowa's division of child and adolescent psychiatry on a project that will enhance primary care physicians' knowledge and skills to care for children and youth with behavioral and emotional challenges in the medical home setting.

Pediatric Audiology

Iowa has an inadequate number of pediatric audiologists who are well-trained to provide all the pediatric audiology services needed in Iowa's EHDI system of care. K. R. White surveyed state EHDI coordinators to determine the primary barriers to full implementation of early identification of congenital hearing loss and timely intervention. The most frequently cited barrier was the lack of qualified pediatric audiologists, followed by inadequate reimbursement and lack of knowledge by primary care providers. (K. R. White, *The current status of EHDI programs in the United States*, Mental Retardation and Developmental Disabilities Research Reviews, 9, 79-88)

Over the past 10 years, pediatric audiologists have increasingly been asked to serve children younger than they have ever served before. Many practicing audiologists did not learn about infant electrophysiological diagnostic methods or hearing-aid fitting methods appropriate for infants in their graduate programs. Accurate diagnosis and appropriate amplification are important for the hearing-impaired infant to be exposed to an audible speech signal. The Iowa EHDI family resource guide lists only seven audiology

centers in Iowa at which a family can get a diagnostic auditory brainstem response (ABR) test and some of these do not offer sedation services.

Nutrition

Each year CHSC serves nearly 200 infants and toddlers (ages 0-3 years) with special health care needs who have nutrition concerns. These services are provided by three 0.5 FTE registered dietitians using telemedicine techniques. This number includes those screened using a nutrition assessment tool.

The number served does not come close to the projected need as illustrated by research. According to the 2005-2006 National Survey of Children with Special Health Care Needs, approximately 10.2 million children ages 0-17 years, in the United States (13.9%) have special health care needs, in Iowa that number is approximately 100,000.

Infants and children with special health care needs are at increased risk for nutrition related problems. Studies point out that between 50 to 90 percent of infants and children with developmental delays or special health care needs have nutritional risk factors that indicate a need for nutrition referral to a registered dietitian. In Iowa this would mean approximately 50,000 to 90,000 of children ages 0-21 years could potentially have a need for a nutrition referral. (*Position papers: J Am Diet Assoc. 2010;110:296-307 and J Am Diet Assoc, 104:97-107, 2004*)

There is also a lack of capacity to provide nutrition services in the home (natural environment) of all children served by Early ACCESS. Services are primarily provided from two service sites connecting families through telemedicine to program-based sites throughout Iowa.

Behavioral / Emotional Care

CHSC has traditionally addressed the behavioral health needs of children and youth in its target population and this need has increased dramatically in recent years. The 2005 Iowa Child and Family Household Health Survey revealed that ten percent of children in Iowa were reported to have needed care for a behavioral or emotional problem in the previous 12 months, with most of the need occurring in children over age five years. This was an increase from eight percent for all Iowa children in 2000. Need varied by income with 18 percent of lower income children needing behavioral/emotional care as compared to seven percent of higher income children. Seven percent of children with needs were unable to receive care at some point in the year, about half because of cost issues. This was most common for adolescents (14% of those with need).

Autism Spectrum Disorder

The estimated national rate of autism spectrum disorder (ASD) was approximately 1:150 in 2002 according to a Centers for Disease Control and Prevention (CDC) prevalence estimate. Assuming that Iowa has the same rate

and using the 2000 Iowa population census, this translates to an estimated 5,834 individuals under age 21 years with ASD in Iowa. ASD prevalence rates are four times greater in boys than girls. There are no prevalence differences among races or socioeconomic status groups.

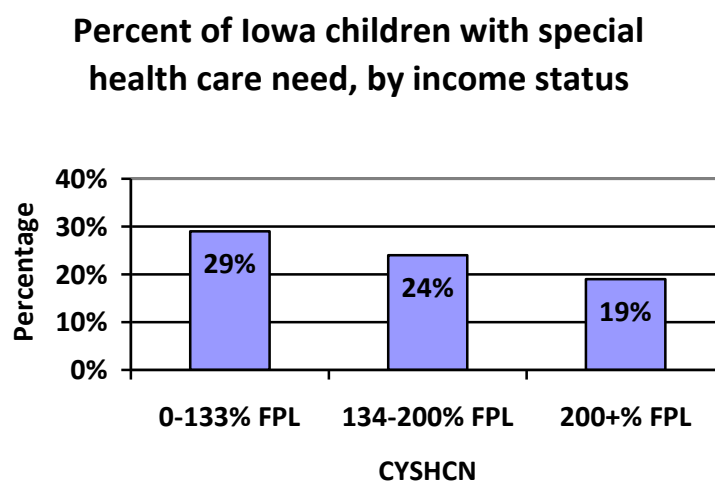
According to the coordinator of the Iowa Regional Autism Services Program, approximately 3,800 children under age 21 years with ASD were known to the service system in 2008. Based on these data, it is reasonable to estimate that about 35 percent of Iowa children under age 21 years with ASD are not known to the service system and may not be benefiting from evidence-based interventions.

A 2006 CDC study that was released in 2009 showed about one percent of 8-year-olds in the United States have an autism spectrum disorder. Using the 2000 Iowa population census, this translates into an estimated 6,500 individuals under age 21 years with ASD. Similar to previous studies, in 2006, boys were four times as likely to be affected as girls. The study also showed that while children are being diagnosed slightly earlier than in 2002, the majority of children are not diagnosed until age 3 ½ to 5 years. This is a significant delay considering that most had concerns about their development documented in their records before their third birthday.

Additional discussion of this issue appears in [Section Four](#) of this document.

Social Determinants of Health

The 2005 Iowa Child and Family Household Health Survey revealed that children living in households with lower incomes were more likely to have a special health care need as shown in the graph below.



Source: 2005 Iowa Child and Family Household Health Survey

In addition, the rate of behavioral and emotional health problems varied by

incomes status: 13 percent of children in the under 133% FPL group had higher scores on the behavior and emotional health status scale, compared to about 9 percent in the 134-200% FPL group, and 6 percent of the 200+% FPL group.

[Section Two](#) of this document includes a discussion of the Off to a Good Start Coalition commitment to include social determinants of health principles into the coalition's policy recommendations.

**Need for
Medical Home**

The 2005-2006 National Survey of Children with Special Health Care Needs showed evidence that components of a medical home are not in place for Iowa's CYSHCN:

- 3.9 percent of Iowa CYSHCN do not have a personal doctor or nurse, compared to 6.5 percent nationally
- 12.7 percent of Iowa's families of CYSHCN reported their child or youth needed a referral and they had difficulty getting it, as compared to 21.1 percent nationally.
- 64.7 percent of Iowa's families of CYSHCN reported they are partners in decision-making at all levels, and are satisfied with the services they receive, as compared to 57.4 percent nationally.
- 92.9 percent of Iowa's families of CYSHCN reported that services are organized in ways that families can use them easily as compared to 89.1 percent nationally.

Medical home is discussed in [Section Four](#) of this document.

Preterm Infants

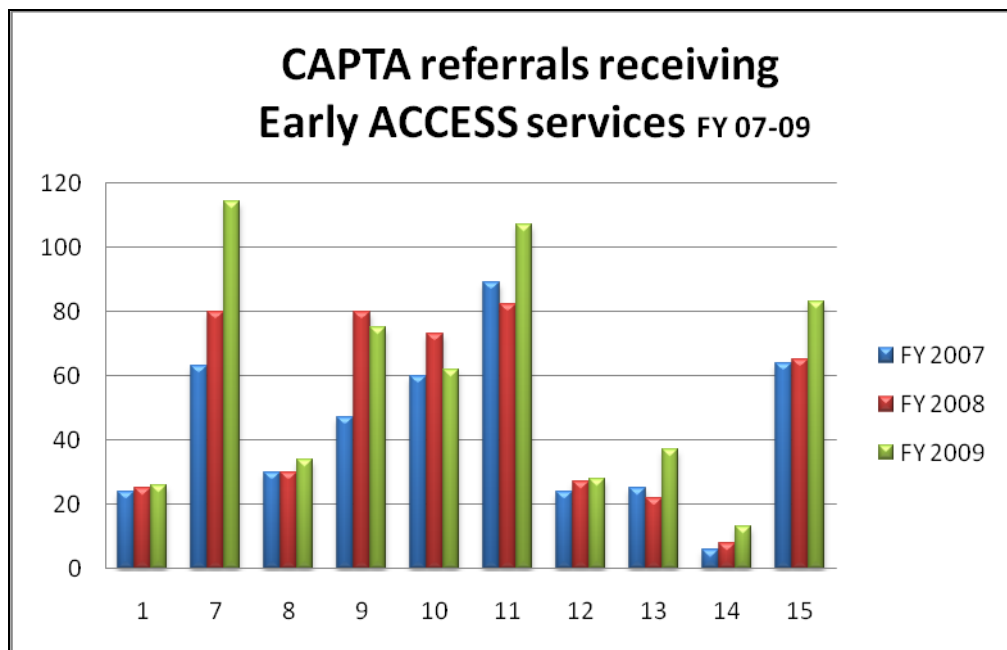
In 2009, the incidence of premature births in Iowa was 17.1 percent. In real numbers 6,772 of 39,570 babies born in Iowa during calendar year 2009 were born at 37 weeks gestation or less. Premature infants have a higher risk of conditions that affect their health status, such as cognitive delays and respiratory illnesses. There are multiple factors that affect the likelihood of a pregnancy resulting in a preterm delivery. In Iowa, the primary factor is identified as smoking by the mother during pregnancy.

From a system perspective, there is a need to improve the coordination and continuum of intense care and services available after hospital discharge. From a family perspective, there is a need to improve dissemination of information and resources. From a policy perspective there is a need to address access and advocacy. These services include surveillance for developmental delays, assessments for growth and physical development, and appropriate and timely referrals to the educational, human service, or medical systems.

Foster Care

CHSC and IDPH are signatory partners in Early ACCESS and assist with notifying families and making referrals. Children in Iowa's foster care system are automatically eligible to receive Early ACCESS services, but significant numbers are not being served. Starting in 2005 federal legislation (Child Abuse Prevention and Treatment Act – CAPTA) required the state's child welfare system to work with IDEA, Part C (Early ACCESS) to identify children who have been abused or neglected who would be eligible for early intervention services. In the last state fiscal year (2009) the number of abused children identified by the Iowa Department of Human Services declined while the number served by Early ACCESS increased. The number of CAPTA referrals served by Early ACCESS was 581 (16.1 percent of abuse victims below the age of three years).

The chart below shows the number of abuse victims served by Early ACCESS in each of Iowa's area education agency (AEA) regions over the past three years. Each number on the x-axis indicates an AEA region.



Source: Iowa DHS Early ACCESS Data System, 2007-2009

In Iowa in 2009 the foster care system served approximately 10,000 children and youth. Approximately 6,000 were registered in foster care at any given one-day count in the year. Children in foster care are considered children with special health care needs by AAP. These special health care needs may often be a result of family disruption. As these children enter and exit the foster care system at vulnerable points in their development, multiple protective and risk factors may be strengthened or ameliorated by adequate attention to specific health needs.

Cross-cutting Strengths and Needs Across all MCH Populations in Iowa

Social Determinants of Health

Similar to other states, Iowa children and families are impacted by the social determinants of health. Although health practitioners in Iowa have long been generally aware of some of the social determinants of health on an individual's health status, Title V in Iowa is beginning to formally recognize their impact and to develop policies and standards that will direct everyday practice.

The social determinants of young children's health and development include family economic stability, social supports available to the child and family, parental stress and resilience, and a supportive and safe community environment. Key indicators of these social determinants on the family side are child poverty rates, family structure, and maternal education level – which themselves are highly correlated. In addition, such measures as smoking during pregnancy and early entry into prenatal care not only directly impact health, but also are indicators of social determinants. Key indicators of these social determinants on the community side include overall poverty and crime rates, adult employment and education levels, and quality and affordability of housing.

On the family side, poverty rates among families with children, and particularly families with young children, have remained consistently higher than for other age groups in society, in both Iowa and the United States, indicating the particular importance of addressing social determinants of health early in life. While adolescent birth rates have declined, the proportion of all births to adolescents and to single mothers has continued to grow, with over one-third of births in Iowa now to single mothers, with much higher rates and younger childbearing among less-educated women. (C. Bruner and A. Discher. *Women, work and poverty*. Child and Family Policy Center. Des Moines, Iowa) While Iowa ranks well among states in terms of early entry into prenatal care, Iowa also has among the highest rates in the country of women who report smoking during pregnancy.

Social determinants of health that are grounds for attention from a health prevention and promotion perspective likely initially involve at least two-fifths of all very young children and their families. Health prevention and promotion programs can never precisely target just those families who are most vulnerable to experiencing specific poor health outcomes – any prevention program will at least focus some attention on families who would not experience future poor health outcomes and will miss some families who will. The two-fifths figure is consistent, however, with estimates that at least one-fifth of all children have some special physical, developmental, or behavioral condition to which social determinants of health contribute.

On the community side, Iowa neighborhoods and communities differ in terms of their economic, social, educational, and housing structures. Census tracts in Iowa with high rates of poverty, single parenting, low adult educational status, limited home ownership, and low employment and wealth, are concentrated in Iowa's larger urban communities, particularly in Waterloo, Sioux City, Des Moines, Davenport, and Council Bluffs. These neighborhoods also have high rates of reported crime, older housing stock and elevated blood lead levels among young children tested, and schools that struggle to meet No Child Left Behind educational standards. While a relatively small proportion of all census tracts in Iowa (5%), they include a greater proportion of very young children and a disproportionate share of Iowa's minority population. (Child and Family Policy Center. *Place Matters*. Kids Count Reports. Des Moines, Iowa, 2005.)

**Life Course
Health
Development**

One of the principles of life course theory is that lives are interdependent and connected on many levels. Individual experiences are linked thorough the family and its network of shared relationships. Stressful events can trigger patterns of stress and vulnerability or, conversely, promote adaptive behaviors and family resilience. Personality attributes of individual family members can affect coping styles, functioning, and well-being of other family members.

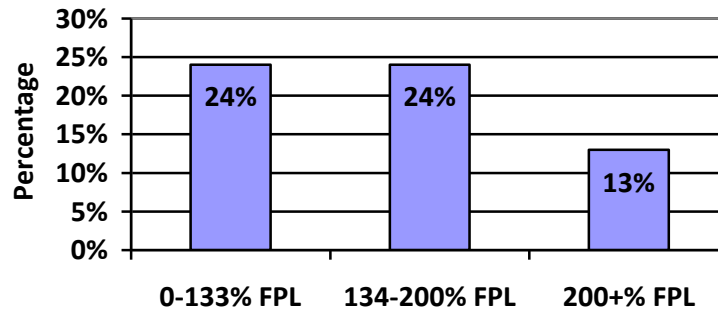
The 2005 Iowa Child and Family Household Health Survey revealed that lower income children were more likely to have been in a challenging home environment. Parents of lower income children were more likely to report a low score on a mental health scale, and a high level of parenting stress.

Mental health of parents was calculated using a series of five items derived from the Medical Outcomes Study Mental Health Inventory short form (MHI-5). Questions included how frequently parents have:

- Been a very nervous person
- Felt calm or peaceful
- Felt downhearted and blue
- Been a happy person
- Felt so down in the dumps that nothing could cheer you up

Children in lower income households were more likely to have a parent with symptoms of lower mental health status, as shown in the table below.

Children in households with a primary caregiver who may be depressed or anxious, by FPL status



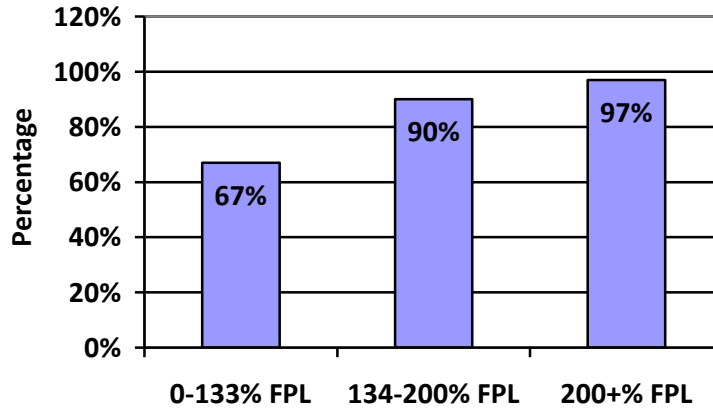
Source: 2005 Iowa Child and Family Household Health Survey

Iowa MCH partners monitor such indicators and look for opportunities to expand research and develop a policy agenda based on the life course model. Iowa initiatives to address life course health development issues are addressed in [Section Four](#) of this document.

**Family Health
Care Coverage**

As previously discussed, Iowa's rate of uninsured children is quite low by national standards at 5.1 percent. Enrollment of children in Medicaid and *hawk-i* is expected to grow as a result of expanded outreach efforts and expanded coverage. However, parents of young children were less likely than their children to have health care coverage according to the 2005 Iowa Child and Family Household Health Survey. The following graph shows this discrepancy by income level.

Percent of children with insured parents, by Federal Poverty Level



Source: 2005 Iowa Child and Family Household Health Survey

Homelessness

In a 2005-2006 report, the National Center on Family Homelessness reported that there were 10,033 homeless children in Iowa. A breakdown of these data by age group can be found on the center's website (www.FamilyHomelessness.org). Families represent approximately 40 percent of the total homeless population and continue to be the fastest growing subpopulation. Within this subpopulation, the overwhelming majority of families consist of a single mother and her children.

Substance abuse and mental illness are often conditions identified among homeless adults. Homeless women may lack prenatal care, and infants born into homelessness are often of low birth weight. Children affected by homelessness experience negative effects on their development and are more likely to experience hunger, suffer chronic health problems, repeat a grade in school, and/or drop out of high school. Factors such as lack of sanitation, lack of refrigeration, lack of daily routine, and maternal stress can result in adverse effects on a child's development. In the process of many moves, families often become isolated from informal supports.

Statewide data are lacking for homeless children who have not entered elementary school and is absent for children birth to three years of age. Policies and procedures need to be implemented that ensure timely assessment, appropriate services, and continuity of services for children, youth, and families who are homeless.

Food Security

The U.S. Household Food Security Survey is conducted annually by the U.S. Department of Agriculture. In 2008, the Iowa WIC Program assessed the extent of food security among Iowa WIC participants using six validated items from the federal survey. Food security for a household means that all household members have access at all times to enough food for an active, healthy life. Food security is a foundation for a healthy, well-nourished population.

Approximately 57 percent of the Iowa survey respondents were food secure. Of the 43 percent of the respondents who were food insecure, 28 percent had low food security and just over 15 percent had very low food security. The food security status of White, Hispanic or Latino, and Black or African American respondents was compared and 41-42 percent of respondents in all groups were found to be food insecure. Almost 25 percent of White respondents reported low food security and 17 percent had very low food security. Over 30 percent of Hispanic or Latino respondents had low food security and 12 percent having very low food security. Low food security was present for 27 percent of Black or African American respondents with 14 percent having very low food security. Almost 42 percent of American Indian or Alaskan Natives and 38 percent of Asian respondents were food insecure; both of these groups had less than 100 respondents.

Section 4: MCH Program Capacity by Pyramid Levels

Overview

Introduction Iowa has a long history of strong Title V leadership and braided programming. This section demonstrates the state's capacity to meet the needs of the MCH population. To the degree possible, the evidence of capacity is categorized by pyramid level. However, some components fall into two or more pyramid levels.

Contents This is the fourth section of the Iowa Title V Five-Year Needs Assessment Final Report. This section contains the following topics:

Topic	See Page
Capacity to Provide Direct Health Care Services	71
Capacity to Provide Enabling Services	76
Capacity for Population Based Services and Programs	85
Capacity to Promote Infrastructure Building	103

Capacity to Provide Direct Health Care Services

Maternal Health Services

Iowa's 24 maternal health agencies provide prenatal and postpartum care to Medicaid eligible and other low income women in all 99 Iowa counties. Services include medical and dental assessment, health and nutrition education, psychosocial screening and referral, care coordination, assistance with plans for delivery, and postpartum home visiting. Modes of service delivery include traditional clinic settings and purchase of medical service models with active public health nursing participation. All of Iowa's 99 counties have access to publicly funded maternal health services. Funds are allocated per county based on a formula that reflects the level of need.

Two of the maternal health agencies provide direct antepartum and postpartum medical care. Both agencies provide service in areas that lack perinatal healthcare providers willing to serve Medicaid eligible or uninsured women. Crittenton Center in Sioux City subcontracts with Siouxland Family Practice Residency Program and Edgerton Women's Health Center in Davenport employs advanced practice nurses (ARNPs) with supervision from an obstetrician. Both of these agencies provide prenatal, labor and delivery care and the postpartum follow-up visits for women in their service area. The remaining 22 maternal health agencies assure access to direct care service for pregnant women. They promote linking clients to a medical home, a regular source of prenatal care by a physician or midwife, and provide at least one postpartum home visit based on client need. Maternal health contract agencies focus on entry into care within the first trimester, as well as, assisting with access to oral health services.

A competitive bid process conducted every five years by the IDPH determines selection of local maternal health contract agencies. The IDPH Bureau of Family Health (BFH) monitors the contractual arrangements. Medical services provided by the maternal health centers follow the standards of the American College of Obstetrics and Gynecology (ACOG) for ambulatory obstetric care. The BFH maintains a Title V funded contract with the University of Iowa, College of Medicine, Department of Obstetrics and Gynecology for consultation.

Child Health Services

Iowa's 22 child health contract agencies assure availability of direct care services. Most agencies provide services such as developmental screenings, immunizations, blood lead testing, evaluation and management. When services are not otherwise available, agencies provide direct care preventive screening services based on EPSDT recommendations.

**Family
Planning
Services**

In 2009, the Guttmacher Institute published 2006 data estimating that 73,231 females within the IDPH family planning service area were in need of publicly supported contraceptive services. In 2009, the IDPH Family Planning Program served approximately 25 percent of those females. It is projected that the 2009 loss of the state funded family planning program, the economy, and increasing numbers of Hispanic females of reproductive age will increase the need for publically funded contraceptive services in Iowa. IDPH is collaborating with contractors and other state agencies to secure additional sources of funding to meet the growing need for publically funded contraceptive services.

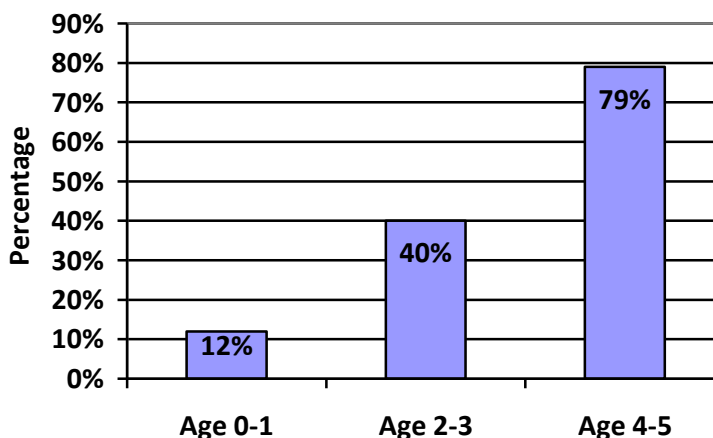
In 2009 the IDPH Title X local contract agencies saw an overall increase of 9.3 percent in unduplicated clients from 2008. In 2009, IDPH-funded Title X local contract agencies served 1,314 more unduplicated clients (18,190) than in 2008 (16,876). There was an increase of 3,643 overall client visits to IDPH funded Title X agencies in 2009.

Title X local contract agencies will be asked to work with clients on inter-conception planning. They will document reproductive life plan counseling in yearly encounters with clients. Women who have had unexpected pregnancy outcomes will receive preconception counseling about timing and spacing of pregnancies for optimal outcome.

Oral Health Services

Data for the I-Smile™ dental home initiative indicate improvements in the number of Iowa children receiving dental services (a 39 % increase for Medicaid-enrolled children ages 1-20 years since 2005). However, much of the improvement is due to services provided within the Title V child health program. Services provided by dentists, particularly for children younger than age 3 years, continue to be very limited. There is great variation by age in the time since the child's last dental check-up. Older children are much more likely to have had a dental visit in the previous year as shown in the graph below.

Child had a dental check-up in the last year, by age



Source: 2005 Iowa Child and Family Household Health Survey

Some Iowa families may qualify and enroll in the state's new *hawk-i* dental-only plan, which will help more working families seek and pay for regular dental care provided by dentists. If successful, there is the potential for Title V local contract agencies to use fewer Title V funds to pay for child health dental services provided in dental offices. This would make more funds available for infrastructure-building activities or preventive dental services.

Services for Children with Special Health Care Needs

There is a demonstrated need in Iowa for CHSC to provide direct clinical services to CYSHCN. Of the estimated 100,000 CYSHCN in Iowa, in state fiscal year 2010 CHSC provided gap-filling direct clinical services to an estimated 6,000 children and youth ages 0-21 years.

Staff time of CHSC's Advanced Registered Nurse Practitioners has been reduced from 10.6 FTE in 2007 to 7.15 FTE in 2010, a reduction of 32.5 percent. Efforts are now focusing on partnering with primary care practices whenever possible to provide direct clinical care to CYSHCN. Registered nurses and medical assistants will be trained to provide care coordination services whenever possible in order to maximize cost efficiencies.

CHSC has recently converted from multiple categories of direct clinical services to one overarching category, *CHSC Clinical Services*. In September 2008 CHSC conducted an internal review of the delivery of CHSC's clinical services. This internal review was conducted by CHSC clinical staff, administrators and key community stakeholders. Prior to this, CHSC had designated three primary clinical service types: 1) Integrated Planning and Evaluation Clinic (IEPC) Services, 2) Pediatric Behavioral Health Care Services, and 3) Birth to Five Services. In the Summer of 2009, based on the results of the review, all clinic types were united into *CHSC Clinical Services*. This term now includes any type of direct clinical service provided during a CHSC clinic visit. Data collection for the newly defined direct clinical services will align more effectively as one of the four components of the Iowa system of care for CYSHCN.

There continues to be a need in Iowa to assure evidence-based screening tools are used by all practitioners to identify CYSHCN. A quality improvement effort will assure competencies of CHSC clinical staff and other key stakeholders (e.g., primary care physicians, early interventionists) to implement evidence-based screening tools such as those listed below.

- Modified Checklist for Autism in Toddlers (M-CHAT)
- Ages and Stages Questionnaire (ASQ)
- Ages and Stages Questionnaire-Social/Emotional (ASQ-SE)

CHSC currently contracts with University of Iowa Hospitals and Clinics child psychiatrists and child psychologists to provide telemedicine through the use of web cameras connected to the CHSC regional center. In 2009 over 1,000 visits were conducted using this technology. The current effort is an evolution from a project conducted in 2005-2008 called the Magellan Behavioral Health Project, which piloted the use of telemedicine for the delivery of behavioral health services. Magellan Behavioral Care of Iowa is the fiscal intermediary to Medicaid for patients with mental health needs. Family satisfaction exit surveys revealed that the use of the technology was an acceptable medium to provide additional access to areas of the state that lack coverage. There is continued financial support for psychiatric telemedicine and care coordination services by Magellan.

CHSC has the equivalent of 2.0 FTE registered dietitians on staff including one dietitian who is primarily responsible to assure a statewide system of nutrition services for CYSHCN. The primary focus for the delivery of

nutrition services is currently on children ages 0-3 years, as funded by Part C IDEA funds. Resources to hire or contract registered dietitians to serve the remaining CYSHCN ages 3-21 years are not adequately available. Although dietitians are available through programs such as WIC, WIC staff does not typically have the specialized skills to appropriately serve feeding and nutrition concerns specific to CYSHCN.

**Sudden Infant
Death
Syndrome
(SIDS)**

IDPH administers a contract with the Iowa SIDS Foundation to provide statewide training on SIDS issues and provide information to families of SIDS cases. On behalf of the IDPH, the Iowa SIDS Foundation plans and completes regional training to teach professionals about SIDS, ways to reduce the risks for SIDS and how to assist families in their grief.

The SIDS Foundation assigns a trained peer contact to call on each new SIDS family within one week of notification of the SIDS death, including providing an approved set of materials to 100 percent of families of identified SIDS cases within five days of notification of each SIDS death.

Newsletters for SIDS family members are posted on the Iowa SIDS Foundation website <http://www.iowasids.org/> .
The Iowa SIDS Foundation is an affiliate of the First Candle organization.

Capacity to Provide Enabling Services

Maternal Health Services

Local Title V enabling services include care coordination to link women to community based services, health education, Medicaid risk assessment, care planning, screening for depression, tobacco, alcohol and other drugs, psychosocial assessment, nutrition assessment, and oral health assessment referrals.

The Healthy Families Line links clients seeking care to the community based maternal health agencies. Other common referral sources are Title X Family Planning agencies and the WIC programs.

Local Title V contract agencies are also responsible for assisting clients in applying for health care insurance coverage, either Medicaid or another source. MH contract agencies enroll clients in Medicaid through presumptive eligibility. While the application is being processed, the woman is “presumed” eligible for Title XIX and can receive ambulatory Medicaid reimbursable health care services.

Local MH contract agencies use the Women’s Health Information System (WHIS) to document and monitor client services. Data is transmitted to the state at the end of every month, and the state compiles the information into a state-level database with records from all 24 agencies.

Child Health Services

Under contract with IDPH, Iowa’s Title V local contract agencies provide enabling services to assure that children ages 0-21 years have access to regular and periodic well child screening services, preferably through medical and dental homes. Core child health enabling services include informing and care coordination services under the Early and Periodic Screening Diagnosis and Treatment (EPSDT) program. Guidelines and fee-for-service reimbursements for these services are established through an interagency agreement between IDPH and the Iowa Medicaid Enterprise.

Through the informing process, families of newly Medicaid eligible children are advised of the services available through the EPSDT program. Informing services include the following:

- Explaining the benefits of preventive medical and dental care
- Explaining the screening services available under EPDST
- Explaining what to expect in a medical or dental exam
- Encouraging families to establish medical and dental homes
- Providing information as to where community resources are located
- Assuring freedom of choice in selection of health care providers

Care coordination services assist families by linking children to quality community-based preventive health services for screening, diagnosis, and/or treatment. Care coordination services are available to both Medicaid and non-Medicaid clients. These services assist families to access needed community resources, overcome barriers within the health care system, and monitor the child's progress. Care coordination services may include the following.

- Contacting families to remind them of their child's next periodic medical and dental exam
- Scheduling appointments
- Reminding of upcoming appointments
- Arranging transportation to medical, dental, or mental health appointments
- Arranging for interpreter services
- Providing referral and follow-up activities.

Surveillance for children's healthy mental development is strongly encouraged. Service coordinators under the Early ACCESS program provide care coordination services for children with blood lead levels of 20 µg/dL or higher.

Iowa DHS is developing guidelines for implementing presumptive Medicaid eligibility for children. This will allow a child to immediately access health care services pending a formal eligibility determination for either Medicaid or *hawk-i* health care coverage. It is anticipated that Title V local contract agencies will participate in providing presumptive Medicaid eligibility as an additional enabling service.

Oral Health Services

Iowa's I-Smile™ initiative is enhancing dental care coordination services provided for child health clients. All Iowa counties are served by regional I-Smile™ coordinators, who play significant roles in developing agency protocols and providing oral health expertise within care coordination processes, as well as developing relationships with dental office staff to streamline referral systems. Since implementation of I-Smile™, there has been a 37 percent increase in Medicaid-enrolled children receiving a service from dentists. Yet, there are only very slight improvements (5%) in the number of dentists seeing Medicaid-enrolled children. It appears that dentists already willing to see Medicaid-enrolled clients as patients are seeing more patients, perhaps due to enhanced care coordination efforts through I-Smile™. Linkages will continue with medical providers, schools, Head Start, and WIC agencies to identify unmet needs and promote services and referrals.

In addition, Iowa MCH2015 indicates the need for improvements in ensuring low-income pregnant women receive dental services. OHB staff will work

with Bureau of Family Health (BFH) staff to determine methods that would boost the oral health element of existing care coordination services provided to pregnant women. OHB staff and I-Smile™ coordinators will also work with the state and local *hawk-i* outreach coordinators to promote Iowa's new dental-only option for working families.

Children's Mental Health Services

Since 2006, the 1st Five Healthy Mental Development Initiative (1st Five) has teamed up with community providers and physicians to improve developmental screening for young children (ages 0-5 years). The goal of 1st Five is to develop the infrastructure to assess and improve the emotional, behavioral, and social developmental skills of young children. More information about the 1st Five model is located in the [Infrastructure Building Section](#) of this document.

The first three pilot sites served approximately 22,000 children ages 0-5 years. In 2009, three additional pilot sites were added. The new sites engaged 38 medical practices and impacted approximately 20,000 more children.

The six 1st Five sites now span 17 Iowa counties and include 70 participating medical practices. An average of 25-30 referrals to community-based services are made per month on behalf of young children and families with social-emotional concerns.

Toll-free Hotline

Iowa State University Extension and the Iowa Departments of Public Health and Human Services collaboratively sponsor a toll-free health information and referral phone line called the Healthy Families Line. The confidential phone line is answered 24 hours each day and offers TDD (Telecommunications Device for Deaf Persons) service.

Healthy Families Line staff members receive special training and have access to an electronic community resources database. While the phone line serves many functions, its primary purpose is to link families with community-based preventive health care and support services. In particular, the service links callers with local Title V MCH contractors.

In FFY2009, there were 7,181 calls to the Healthy Families Line. The following table lists the primary topics of the calls.

Topic	Number of Calls
EPSDT	2,780
<i>hawk-i</i>	1,125
Women's health issues	1,057

(including prenatal/preconception care)	
Cancer issues	808
Child care	259
Family planning	137
Perinatal depression	4
Other	1,011
Total 2009 Calls	7,181

Of the 7,181 callers, 2,966 (67 percent) were covered by Medicaid and 1,186 (27 percent) had no health insurance.

Outreach to Uninsured Children

In Iowa, the state children's health insurance program, called *Healthy and Well Kids in Iowa (hawk-i)* is administered by the Iowa Department of Human Services (DHS). Since 2006, DHS has contracted with IDPH to provide infrastructure and oversight of the statewide *hawk-i* grassroots outreach program. Each Title V local child health agency is required by contract to provide outreach to schools, the faith based community, medical providers, and diverse ethnic populations.

The interactive website, http://www.hawk-i.org/en_US/index.html, contains information about *hawk-i* eligibility and services as well as grassroots outreach activities.

In 2009, The Iowa General Assembly passed Senate File (SF) 389 directing DHS to implement several initiatives that would expand health insurance coverage to children and reduce barriers to enrollment and retention. The provisions of SF 389 are listed below.

- Allow earned income to be verified using a single pay stub if it is a good indicator of future income
- Expand *hawk-i* income limits from a maximum of 200% of the federal poverty level to 300% of the federal poverty level
- Cover all eligible and lawfully residing children in *hawk-i* for whom Federal Financial Participation (FFP) under Medicaid is available
- Add a question to the state income tax form about dependent child health insurance coverage.
- Implement a supplemental dental only program
- Design a presumptive eligibility program that will allow 'qualified entities' to become certified to make presumptive determinations. All presumptively eligible children will be enrolled in Medicaid until a formal eligibility determination is made.
- Design an Express Lane Eligibility (ELE) process that will enroll children who receive Food Assistance, but not Medicaid, into the Medicaid program

- Design joint application / supplemental forms and same application and renewal verification processes for both Medicaid and *hawk-i*

DHS continues to effectively partner with IDPH and 22 local child health contract agencies for *hawk-i* grassroots outreach across the state. IDPH has established the infrastructure for the statewide *hawk-i* grassroots outreach program by requiring each Title V child health agency to employ a *hawk-i* outreach coordinator and implement outreach strategies within the child health program. As a result of SF 389, all *hawk-i* outreach coordinators will be trained and certified as qualified entities by Iowa Medicaid Enterprise to conduct Medicaid Presumptive Eligibility determinations for children in Iowa through a web-based provider portal.

Presumptive eligibility will allow families the opportunity receive instant health insurance coverage until a formal Medicaid eligibility determination is made. The family will receive a Notice of Decision onsite from the qualified entity. For those families deemed eligible, they are given a valid state identification number and can begin receiving medical care immediately. For families deemed ineligible due to a higher income status, their presumptive application will be automatically referred to the *hawk-i* program for eligibility determination.

**Care
Coordination
Services for
CYSHCN**

CHSC has traditionally offered care coordination as part of its services to all families. Each year CHSC provides care coordination to approximately 6,000 children and families. Though not well-defined in the past, standards of care are now being developed for the various levels of staff that provide care coordination (ARNP, RN, parent consultant, and dietitian). Training in core competencies for the delivery of effective care coordination, data entry into medical records, appropriate data tracking tools, and consumer satisfaction and child outcomes factors are all being considered. Collaborative efforts with primary care practices are being explored where CHSC staff can provide care coordination when the patient is not receiving clinical care from CHSC. Emphasis is on developing the most effective model of care coordination for families that is still cost effective. Exploration will occur regarding future reimbursement mechanisms in light of health care reform. Data are collected quarterly for program planning.

CHSC employs a network of approximately 35-40 parent consultants, persons who are parents of a child or youth with special health care needs. Parent consultants provide care coordination and specialize in connecting families to local resources. Specialized types of care coordination delivered by CHSC parent consultants include:

- CHSC Clinical Services: support for families of children with complex medical needs

- Health and Disease Management: support for children on the Ill and Handicapped Waiver
- Early ACCESS: service coordination for children ages 0-3 years with or at-risk for developmental delay
- Community Circle of Care: wrap-around services for children with behavioral/emotional/mental health needs
- Guide By Your Side: support for young children with hearing loss
- Title V Maternal Child Health: assistance in accessing health services
- Applied Behavioral Analysis: assessment and treatment support for young children with autism spectrum disorders
- Family 360 Navigators: support for families needing a wide array of services.

In addition to care coordination delivered by parent consultants, RNs, ARNPs, and dietitians play an important role in coordinating care between subspecialists and primary care physicians. From the National Survey of Children with Special Health Care Needs, Iowa CYSHCN needing a referral who have difficulty getting it is 12.7 percent, lower than the national average of 21.1 percent, but the Iowa percentage still represents approximately 12,000 families in need.

**Service
Coordination
for Children
with
Developmental
Delay**

Assuring that infants and young children with health needs that could potentially impact their development are enrolled in Early ACCESS, Iowa's IDEA, Part C early intervention program. CHSC and IDPH are Early ACCESS signatory partners. Each program provides service coordination to specific populations of children. CHSC's primary responsibility is to provide service coordination for premature infants, those exposed to drugs, and those with complex medical needs. IDPH's primary responsibility is to provide service coordination for infants and toddlers with elevated lead levels.

CHSC employs parents of CYSHCN to provide service coordination, each working between 10-20 hours per week. Approximately 200 families are served by CHSC service coordinators annually. Funds from Early ACCESS support these efforts. ARNPs that are partially funded by Title V block grant partner with the service coordinators to discuss health issues for patients receiving CHSC clinical services.

Twenty-four Title V Child Health agencies provides service coordination and developmental evaluation and assessment for the target population of lead poisoned children with a venous blood lead level of 20 µg/dL or greater. All Title V service coordinators are nurses or hold a four-year degree. Approximately 55 families are served by IDPH Title V Service Coordinators annually.

Service coordinators report difficulty in assuring that complete health

information is available on Individualized Family Service Plans (IFSP). Some service coordinators report difficulty in accessing health and social service records between interagency partners and private providers due to confidentiality restrictions. As Iowa develops an assessment tool for identifying the social determinants that affect health outcomes, it will be increasingly important to eliminate the barriers to data sharing.

**Family Support
for CYSHCN**

Data from the 2005-2006 National Survey of Children With Special Health Care Needs reported that 3.2 percent of CYSHCN had an unmet need for family support services. Family-centered care is emphasized throughout CHSC's programs and services but national data show that Iowa is still in need of improvement. Data from the NS-CSHCN survey showed that 25.3 percent of Iowa's CYSHCN did not receive family-centered care, compared to 34.4 percent nationally. It is noted that the availability of an interpreter during health care visits was added in 2005-2006. Nationally, 1.5 percent of children needed interpreter services during health care visits. Availability of interpreter services is a component of the process measurement tool for the direct clinical care component of Iowa's new state performance measure #2 regarding a system of care for CYSHCN.

Family to Family (F2F) Iowa was created in 2009, through federal grants and contracts to CHSC. F2F Iowa is comprised of over 15 family advocacy groups for CYSHCN and combines funds from the HRSA-funded Family to Family Health Information Center with funds from the HHS Administration for Children and Families' Family 360 Navigation projects. F2F Iowa serves as a platform for Iowa families of CYSHCN to connect with a broad variety of health and developmental disability information, family support services, and peer mentoring that best meets their child and family needs. In preparing the 2009 HRSA application, several data sources illustrated the need for various aspects of family support as described below.

Iowa COMPASS

Iowa COMPASS is a web-based resource for people with disabilities seeking a broad spectrum of information related to their own or their family member's disability, including health information. This resource is not, however, designed to promote or broker family to family sharing. In 2007, Iowa COMPASS received 1,197 requests for disability-related information for individuals ages 0-21 years. Calls to Iowa COMPASS were for the following information types:

- 281 for individual or family support
- 140 for medical insurance
- 203 for SSI/SSDI
- 104 for in-home services
- 39 for mental health providers
- 62 for health care providers

- 116 for assessment and evaluation
- 211 for general information about disability
- 97 for education needs

Disability Resource Library

The Disability Resource Library (DRL) at the University of Iowa Center for Excellence in Developmental Disabilities responds to health information requests from providers, advocates, and individuals with special needs and their families. Cumulatively, over the last five years, DRL has received 2,965 contacts directly from families seeking health-related information. This represents 18.8 percent of the 15,761 total contacts – by families, consumers, service agencies, students, clinic staff, and educators – to the DRL over the same five-year period.

More recently, the percentage of all DRL information-related contacts made by families has increased to 25.8 percent in 2007 and 24.6 percent through the end of November 2008. The DRL also performs individual consultations for users, mainly to research specific individual questions or interests. Family-initiated research requests comprise about 30 percent of the total requests. The actual number of research questions grew from 112 in 1998/1999 to 457 in fiscal year 2008. Thus, in 2008, there were about 140 questions from families, the heavy majority of which were medical in nature and highly involved.

Family Voices of Iowa

Family Voices of Iowa based at the ASK Resource Center also receives numerous calls from families for health information. In 2008, there were approximately 3,000 calls for health information and resources. In addition, the ASK Resource Center also runs the FIND (Families of Iowa Network for Disabilities) program. FIND has 370 families registered and willing to talk with other families about issues they want addressed.

University of Iowa Center for Excellence in Developmental Disabilities (UCEDD)

A Community Partners Advisory Committee (CPAC) provides much of the assessment data through focus groups and surveys. A report by The Lewin Group also collected needs-related information for the UCEDD. Relevant findings include:

- Children with disabilities and their families need information to help them understand their disability, and they need knowledge about current and new interventions to help them develop and implement treatment plans.
- Children with disabilities and their families require information to make informed choices about resources to meet their health care needs.
- Fragmented service systems with disparate funding streams and ineffective mechanisms to inform consumers and family members of their options are major barriers. This is an area where technology offers the potential for significant improvement, through web-based, interactive information dissemination.

- There is a continuing need to facilitate dissemination of educational and research products, and information about resources, training opportunities and other events of interest to Iowa’s disability community and the professionals who serve them

Children’s Oversight Committee

The Iowa Department of Human Services convened a Children’s Oversight Committee for children’s mental health services. This group collected information and used other reports to identify a number of systemic issues relevant to family information needs and published them in a report, Report of the Children’s SED/MR/DD/BI Oversight Committee (submitted to the MH/MR/DD/BI Commission; July 20, 2006). For example:

- Difficulty finding and navigating existing services are major barriers to children receiving needed care.
- Families strongly endorse the creation of a system that recognizes their unique situations and honors the principle that decisions are driven by the child, youth, and family’s needs and assets. They are seeking information about services of which they are unaware. Families want to be able to make informed decisions based on the full scope of options available to them.
- The study further supported the notion that improving access to information stimulates the development of community support services for individuals with brain injury. (Conners, S.; Resource Facilitation: A Consensus of Principles and Best Practices To Guide Program Development and Operation in Brain Injury. BIA Inc. Alexandria VA, 2001)

[Section Four](#) of this document provides further discussion about linking statewide family support groups into a coordinated network.

Capacity for Population Based Services and Programs

Early Identification and Intervention

In 2009, Early ACCESS, Iowa's IDEA, Part C early intervention program, served 3.05 percent of infants and toddlers ages 0-3 years. Although Iowa has made significant progress in recent years in its child find efforts, Title V continues to recognize that some infants and toddlers are not identified as early as possible.

In 2009 a statewide effort was implemented to train providers in the use of evidence-based screening tools for developmental delay. The training was based on the following tools published by Brookes Publishing of Baltimore, Maryland:

- Ages and Stages Questionnaire, 3rd Edition (ASQ-3)
- Ages and Stages Questionnaire: Social-Emotional (ASQ:SE)

Infants and toddlers ages 0-3 years in Early ACCESS are offered screening for nutrition needs using the Parent Eating and Nutrition Assessment for Children with Special Health Needs (PEACH) tool, yet not all families accept the screening. In addition to not reaching all Early ACCESS children, there is also a gap in the ability to screen and serve children beyond age 3 years due to lack of resources. CHSC's state nutrition services coordinator stated in a report to Early ACCESS in June 2009, "the gap of nutrition services statewide is becoming more apparent." As children transition out of Early ACCESS services with a registered dietitian, CHSC attempts to find nutrition services for families within their community. We consistently find little to no nutrition service access for families once a child transitions to a preschool setting. Nutritional needs often continue past the age of 3 years and yet without ongoing services, children are left without the input and interventions of an expert trained to work with the school meal and snack programs.

The use of evidence-based tools in Iowa for screening children for autism spectrum disorder is not adequate. Screening tools for early identification of youngsters at risk for autism can be accurately used to predict the need for further medical evaluation as early as 18 months of age. The most valid and reliable evidence-based tool, Modified Checklist for Autism in Toddlers (M-CHAT) is being used by a very limited number of state agencies. Child Health Specialty Clinics is the only universal screening provider in the state. CHSC has screened all youngsters entering their doors using this tool since 2007. The M-CHAT is used sporadically at various pediatric and educational service centers throughout Iowa.

I-PRAMS

The Pregnancy Risk Assessment Monitoring System (PRAMS), sponsored by the Centers for Disease Control and Prevention, is the gold standard for surveillance and data-driven public health action on behalf of women of

childbearing age and their infants. In 2007 and 2008, IDPH secured funding to conduct a pilot project called Iowa Pregnancy Risk Assessment Monitoring System (I-PRAMS). I-PRAMS provided valuable information to the Title V program and developed the capacity of IDPH to conduct an ongoing surveillance project.

I-PRAMS surveyed 1,796 women within two to six months after the births of their infants. Of the women surveyed, 1,226 responded for a weighted respond rate of 68.3 percent. The women were asked about the topics that their prenatal care provider had discussed with them during their prenatal care visits, with the following report:

- 69 percent reported that their provider discussed how smoking could affect their baby
- 82.5 percent reported that their provider discussed breastfeeding
- 71.0 percent reported that their provider discussed how drinking alcohol could affect their baby
- 61.7 percent reported that their provider discussed how using illegal drugs could affect their baby
- 46 percent reported that their provider discussed intimate partner violence

Respondents were asked about the types of stressors that they had in the 12 months prior to their pregnancies with the following report:

- 27 percent reported experiencing partner-related stress (became separated or divorced, increased arguments, or husband or partner didn't want pregnancy)
- 49.7 percent reported experiencing financial stress (became unemployed, partner or husband lost job, or problems paying bills)
- 49 percent reported experiencing traumatic stress (became homeless, in a physical fight, or someone close to them had a drinking problem).

The women were asked a series of questions regarding post-partum depression. Ten percent of respondents reported that they were at risk to develop post-partum depression.

Through the I-PRAMS process and analysis IDPH has increased its capacity to understand and meet the needs of Iowa's women of childbearing age and their infants. Additionally, IDPH is better positioned to obtain funding for ongoing PRAMS surveillance.

Oral Health

A Targeted Oral Health Service Systems (TOHSS) grant from HRSA is being used to promote oral health and the I-Smile™ dental home initiative. Promotion efforts occur at the state and local levels. IDPH Oral Health Bureau (OHB) staff provide education and promotion tools to assist I-Smile™ coordinators with local outreach.

A public-private partnership with Delta Dental of Iowa Foundation is being pursued to replicate a successful media campaign from 2009. The 2010 campaign takes place within the central Iowa television market and includes two public service announcements, newspaper advertisements, and coordinated outreach by I-Smile™ coordinators to dentists and physicians. The media campaign would build awareness about children's oral health by focusing on early preventive care, good oral health habits, and the I-Smile™ initiative.

OHB staff participates in several state conferences, including those for school nurses, public health practitioners, health care providers, and early childhood stakeholders. Participation includes presentations, displays, and handout materials. OHB staff also provides regular submissions to electronic newsletters, such as the Iowa Public Health Association's *Public Health Matters*, to create widespread understanding of the importance of oral health, particularly for Iowa's underserved women and children.

OHB is very involved with the state's requirement that children have proof of receiving a dental exam or screening prior to school enrollment. The requirement is another method of not only promoting the importance of good oral health, but also ensuring that Iowa children are ready to learn in school. OHB staff assists schools, health care providers, local boards of health, and I-Smile™ coordinators to guarantee screenings are received, schools are audited, and results are collected and analyzed.

Additional activities include oversight of a limited number of school-based sealant programs and the statewide school fluoride mouth rinse program. Preliminary 2009 data for Iowa-licensed dental hygienists working under public health supervision show that over 24,700 children and adults received oral health education services; nearly 8,000 of those services occurred in a population-based setting.

Hearing

Iowa's Early Hearing Detection and Intervention (EHDI) program is a collaborative effort of two projects, one funded by the Centers for Disease Control and Prevention (CDC) and one funded by the Health Resources and Services Administration (HRSA). The two projects work together to achieve a comprehensive and coordinated statewide EHDI system.

The CDC EHDI project is co-located with Iowa's Title V MCH program in the IDPH Bureau of Family Health. Under Iowa Universal Newborn Hearing Screening legislation, IDPH is designated as the entity responsible for collection of hearing screening and diagnostic information. The information is received from all birthing facilities, audiologists and other healthcare providers that screen, re-screen or conduct a diagnostic hearing assessment for children from birth to age three years.

The HRSA EHDI project is co-located with Iowa's Title V Children and Youth with Special Health Care Needs program at Child Health Specialty Clinics. The CHSC EHDI project focuses on assuring that all infants and toddlers that are deaf or hard-of-hearing, or at-risk for future hearing loss, receive timely and appropriate follow-up services. The CHSC EHDI project also provides family support.

The IDPH cooperative agreement with CDC and CHSC's grant award with HRSA are central to Iowa's substantial progress in developing a comprehensive EHDI system for Iowa's children. Both programs continue to make significant accomplishments in the following areas:

- state legislation regarding universal newborn hearing screening
- collaborative relationships with key partners
- an established advisory committee
- statewide implementation of a web-based data system
- reporting protocols that guide program development
- screening and diagnostic assessment follow-up program
- an established family support program
- a quality assurance plan that promotes program consistency and accuracy
- a program evaluation that incorporates process and outcome objectives
- a preliminary sustainability plan addressing the future of Iowa EHDI

Vision

IDPH administers grant funding for vision programs to the three Iowa organizations described below.

Iowa KidSight

Iowa KidSight is a state-wide preschool vision-screening program offered by participating Lions Clubs. The program is administered through the University of Iowa, Department of Ophthalmology and Visual Sciences. Children living in Iowa are eligible for the service at no cost. Screening sessions are scheduled in local childcare facilities, public health settings, or other public locations. Lions Club volunteers are trained to use a camera that takes special instant pictures of the eyes. University of Iowa staff interpret the photographs and send the results to families. If a possible vision problem is detected, a referral letter and list of local optometrists and ophthalmologists

are sent to the family. More information is available at the project website www.IowaKidSight.org.

Prevent Blindness Iowa

Prevent Blindness Iowa, an affiliate of *Prevent Blindness America*, offers sight-saving programs for children, adults and older citizens in Iowa communities. *Prevent Blindness Iowa* is a leading volunteer eye health and safety organization dedicated to preventing blindness and preserving sight through public and professional education, early detection, patient services and research. Program details can be found at the project website www.preventblindness.org/iowa.

InfantSEE

InfantSEE, managed by a foundation of the American Optometric Association (AOA), is designed to ensure that eye and vision care becomes an integral part of infant wellness care to improve a child's quality of life. Under this program, AOA optometrists provide comprehensive eye and vision assessments for infants within the first year of life regardless of a family's income or access to insurance coverage. Iowa families can find an optometrist in their area that participates in *InfantSEE* by using the doctor locator feature of the program website, www.infantsee.org.

Immunization

The goal of the IDPH Immunization Program is to reduce and ultimately eliminate the incidence of vaccine preventable diseases by working in conjunction with public and private health care providers throughout the state.

Data from the 2008 National Immunization Survey indicates that 67.2 percent of Iowa's children ages 19-35 months have received the 4:3:1:3:3:1:4 (4 DTaP, 3 Polio, 1 MMR, 3 Hepatitis B, 3 Hib, 1 varicella, and 4 PCV) vaccine series.

The National Immunization Survey Teens reports on adolescents ages 13-17 years. Iowa's 2008 data includes the following:

- 2 MMR - 86.4 percent
- 3 Hepatitis B - 79.2 percent
- 1 Varicella - 68.4 percent
- 1 Td or Tdap - 65.9 percent
- Tdap only - 43.5 percent
- Meningococcal - 31.9 percent
- At least 1 HPV - 41.9 percent

In December 2009, Iowa's Immunization Registry Information System (IRIS) had 929 providers enrolled with 2,006,691 patient records and 16,746,153 immunization records. There were 232,846 records of children less than six years of age with records in IRIS.

In December 2009, there were 591 public and private sites enrolled in the Vaccine for Children program.

In mid-January, 2010, Behavioral Risk Factor Surveillance System (BRFSS) data indicate the following:

- 40.2 percent of children 6 months through 17 years of age received the H1N1 vaccine.
- 42.7 percent of Iowa's children 6 months through 17 years of age received the seasonal vaccine for the 2009/ 2010 flu season.

Lead Poisoning Prevention

The IDPH Bureau of Family Health (BFH) works closely with the IDPH Bureau of Lead Poisoning Prevention to promote blood lead testing for Iowa children prior to the age of six. Due to potential exposure to lead based paint sources in older housing and other product-based exposures, all Iowa children are considered to be at risk for blood lead poisoning. The BFH Child Health Advocacy Team supports universal blood lead testing for all Iowa children under age six.

The BFH works with local Title V Child Health agencies to promote access to blood lead testing services. Ideally, these services are provided in the child's medical home. However, many Title V agencies provide gap-filling lead testing services to help assure that children are tested. BFH continues to provide training and technical assistance pertaining to blood lead testing. Child Health/EPSTD trainings emphasize the importance of blood lead testing for all children according to Medicaid guidelines per the *Iowa Recommendations for Scheduling Care for Kids Screenings*. Agencies also provide care coordination and follow-up services for children with elevated lead levels.

Local CH contract agencies identify blood lead testing as a priority. Proposed activities in annual applications to BFH include data collection and analysis; enhanced outreach initiatives; conducting blood lead tests and/or analysis; coordination of care and follow-up services; public education efforts; coalition building; and working with local practitioners to promote blood lead testing.

Local Title V Child Health agencies also provide service coordination under the Early ACCESS (Part C) program for children with venous blood lead levels equal to or greater than 20 µg/dL. All service coordinators complete a Lead Orientation developed by the Bureau of Lead Poisoning Prevention. There is a statewide referral system for developmental evaluation and monitoring between local lead programs and Early ACCESS coordinators.

BFH also shares blood lead testing data with each local Child Health contract

agency. The Bureau of Lead Poisoning Prevention conducts a data match with Medicaid enrolled children in STELLAR (Systemic Tracking of Elevated Lead Levels and Remediation). This match results in data by county for:

- children ages 9-35 months receiving blood lead tests (all children, those on Medicaid, and non-Medicaid children)
- children under age 6 years receiving blood lead tests (all children, those on Medicaid, and non-Medicaid children)

Current data demonstrate that 94.9 percent of Iowa children under age 6 (2003 birth cohort) and 80.9 percent of Iowa children ages 9-35 months (2007 birth cohort) have received a blood lead test.

The 2008 Iowa General Assembly enacted a mandatory lead testing requirement for children entering school by age six. This state law has brought heightened awareness to the importance of blood lead testing and has resulted in dramatic increases in testing rates.

The Centers for Disease Control and Prevention (CDC) is developing a web-based data system for tracking blood lead test results. Implementation of the data system will improve the quality of the data transmitted to IDPH as well as the timeliness of receipt and reporting. Upon implementation, training and access to the system will be provided to local CH contract agencies.

Injury Prevention

The University of Iowa Injury Prevention Research Center conducted the 2009 Iowa Child Passenger Restraint Survey. At locations across the state, 3,027 children age 11 years and under were observed in motor vehicles.

The survey results indicate that Iowans understand the importance of securing infants in child safety seats; 98.7 percent of children age one year and under appear to be properly restrained. It is also clear that older children are less likely to be restrained in the motor vehicle. Survey results indicate that 96 percent of toddlers were restrained and 90 percent of youth were restrained. Overall, 93.4 percent of all children observed were restrained. The 2009 survey results indicate that 94 percent of the children were placed in the back seat of the vehicle. This is important as the back seat is always the safest location for passengers.

In 2010, the Iowa legislature passed new restrictions on cell phone use while driving. Drivers under age 18 years will be banned entirely from using cell phones and other electronic devices while driving, while older drivers are no longer allowed to read or send text messages or emails. In the first year of enforcement, violators will receive a warning but no fine. Fines will be implemented in the second year of enforcement.

Teens will be required to wear seatbelts in the back seats of cars under new

Iowa laws passed in the 2010 legislative session. A number of fatal accidents involving teen passengers prompted legislators to make the change to Iowa law.

Child Care

Iowa ranks 44th in the nation by the National Association of Child Care Resource and Referral Agencies (*NACCRRRA*) 2009 *Ranking of State Child Care Center Regulation and Oversight*. Iowa is in the bottom tier of states ranking for the level of regulation that protects child health and safety and the level of oversight required by the child care regulatory authority.

The Healthy Child Care Iowa campaign maintains a network of 65 child care nurse consultants (CCNC). The CCNCs conduct on-site assessments at child care businesses, health and safety trainings, and topic-specific consultations with child care businesses. The consultants served 3007 child care businesses during fiscal year 2009 (1,074 licensed centers and 1,751 homes) with over 27,000 encounters. The most common topics for consultation are infectious disease and injury prevention.

In 2009, the Iowa Department of Public Health commissioned an evaluation of the Healthy Child Care Iowa (HCCI) system by an independent consultant. The evaluation findings are documented in a February 2010 report, called *Advancement of Strategies for Health and Safety in Child Care*.

The evaluation identified system strengths including the following:

- Standardization of the HCCI curriculum has resulted in well-trained nurse consultants.
- The relationship between nurse consultants and child care providers has improved as the providers learned to trust in the services and information provided.
- Progress has been made toward identifying and addressing safety and health care issues with children in child care.
- The services provided by HCCI have helped increase the professionalism of child care providers.

The evaluation identified the following areas that are in need of improvement:

- The system has grown beyond its existing means, structure and resources.
- There is high turnover of local nurse consultants and a need for clerical support staff.
- Communication and networking among the child care nurse consultants is limited.
- Gaps exist between the various components of the HCCI system and other local and state stakeholders.

The evaluation provided the following recommendations:

- Staffing -- Create child care nurse consultant positions of at least .5 FTE

dedicated to the HCCI job duties as well as clerical support through collaboration among agencies and funding sources.

- Funding -- Develop an accurate and complete funding chart that also delineates lines of authority in the system.
 - Data Collection / Results -- Develop a statewide system of data collection and analysis based on agreed-upon measurable outcomes.
 - Interagency Communication -- Convene a committee of HCCI partners to develop a comprehensive coordinated agenda addressing administrative and funding challenges that must be dealt with at the department level.
-

Childhood Obesity

In Iowa, local and state entities are increasingly concerned about childhood obesity and have searched for the best way to learn the extent of the problem, as well as where and among whom it exists. From 2008 to 2010, staff from the IDPH Bureau of Nutrition and Health Promotion collaborated with the IDPH Oral Health Bureau to measure the height and weight of Iowa's elementary schoolchildren at the same time as they were screened for oral health issues. In this innovative partnership, each program contributed monetary and other resources to purchase data collection equipment, train local public health staff on data collection protocol, and disseminate health promotion materials to schools and families. 2009 data from the collaborative surveillance is located on the IDPH website at

http://www.idph.state.ia.us/iowansfitforlife/common/pdf/overweight_obesity.pdf.

The Iowa social marketing campaign, Pick a Better Snack™ & ACT, encourages fruit and vegetable choices for snacks and promotes the importance of daily physical activity. Iowa Nutrition Network partners developed the campaign so that multiple state agencies and local partners throughout Iowa could use common messages and education materials. The campaign serves as a unique education program in over 130 low-income schools and 80 congregate meal sites. A community toolkit is available to assist communities in implementing the campaign. More information is available on the program website,

<http://www.idph.state.ia.us/pickabetersnack/default.asp>.

Perinatal Depression

According to a May 2005 report from the Agency for Healthcare Research and Quality, roughly 1 in 20 American women who are pregnant or have given birth in the past 12 months are suffering from major depression. When episodes of major and minor depression are combined, as many as 13 percent of women experience depression. The report defines perinatal depression as occurring during pregnancy and up to 12 months after childbirth.

In Iowa, local Title V agencies have incorporated perinatal depression screening into programming for both the maternal health and child health populations. Title V local contract agencies serving the maternal health

population provide universal screening of women during pregnancy and postpartum using the Edinburgh Postpartum Depression Scale. Recognizing that postpartum depression affects the entire family, including the children, Iowa Title V encourages local child health agencies to include perinatal depression screening as part of each well child exam. When needed, care coordinators link family members with the primary care physician or mental health professional, and follow up to ensure the referral occurred.

In March 2010, the IDPH Primary Care Office reported that 89 of Iowa's 99 counties are designated as mental health professional shortage areas. This results in a critical need to provide support for obstetricians, family practice physicians, and nurse midwives who are providing gap-filling mental health care to pregnant and postpartum women.

IDPH developed the website www.beyondtheblues.info with funding from a HRSA perinatal depression and infant mental health grant. The website provides education for the public and health care professionals regarding perinatal depression. The public track offers resources for fathers and children, including definitions of perinatal depression and postpartum psychosis.

The website's health professional track contains a link to free consultation with psychiatrists at the University of Iowa Hospitals and Clinics to assist obstetrical providers with medication management or other mental health management. Other resources for health care professionals include current research, information about children's mental health, and a mental health resource contact list by county.

In 2009, IDPH mailed out a pocket guide to all Iowa health care professionals that deliver babies. The pocket guide, called *STEP - Support and Training to Enhance Primary Care for Postpartum Depression* provides education on assessment, diagnosis, and treatment of depression during pregnancy and the postpartum period. A letter accompanying the pocket guide described a link to free web-based training for health care professionals at www.step-ppd.com. These resources were developed with funding from the National Institutes of Health in collaboration with MCH partners at the University of Iowa.

**Barriers to
Prenatal Care**

The purpose of the Iowa Barriers to Prenatal Care Project is to obtain brief, accurate information about women delivering babies in Iowa hospitals. Specifically, the project seeks to learn if women had problems getting prenatal or delivery care during their pregnancy. Other information is included that may be pertinent to health planners or those concerned with the systematic development of health care services.

The project is a cooperative venture of Iowa's maternity hospitals, the

Statewide Perinatal Care Program, the University of Northern Iowa Center for Social and Behavioral Research, and the Iowa Department of Public Health.

The questionnaire is distributed to all birthing hospitals in Iowa. Nursing staff or those responsible for obtaining birth certificate information in the obstetrics unit are responsible for approaching all birth mothers prior to dismissal and requesting their participation in the study. The questionnaire takes approximately ten minutes to complete. All new mothers are recruited for participation except those that are too ill to complete the questionnaire. Completed questionnaires are returned to the University of Northern Iowa Center for Social and Behavioral Research for data entry and analysis.

The 2008 report, including a trend analysis of the previous six years, is published on the IDPH website at http://www.idph.state.ia.us/common/pdf/publications/prenatal_barriers_2008.pdf

County level results are also published on the IDPH website at http://www.idph.state.ia.us/hpcdp/prenatal_care_barriers.asp. The county level data sheets include side-by-side comparisons to statewide data for the following indicators:

- Demographic indicators such as mother’s age, ethnicity and marital status
- Socioeconomic indicators such as mother’s education, mother’s employment status, and family income
- Behavioral indicators such as cigarette smoking, and alcohol use
- Other indicators such as ability to get prenatal care and satisfaction with prenatal care.

Nutrition & Food Security

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is designed to improve the health of low-income, nutritionally at-risk pregnant, breastfeeding, and postpartum women, infants, and children to the age of five years. WIC is a central component of Iowa’s food assistance system. WIC services are provided to almost 75,000 Iowa women, infants, and children every month, representing more than 50 percent of all infants born in Iowa and accounting for nearly one in five children (ages 1 to 5 years) in the state.

In 2008, the Iowa WIC Program assessed the extent of food security among WIC participants using six validated items from the U.S. Household Food Security Survey. Results of the survey are reported in [Section Three](#) of this document. Staff of the Iowa WIC program is actively seeking funding for inclusion of the six validated questions in the 2010 Iowa Child and Family Household Health Survey (HHS). The 2010 HHS will provide participating programs with rich population-based data about children living in Iowa families. Additional details can be found in [Section One](#) of this document.

**Health
Promotion**

The IDPH Health Promotion Unit at IDPH coordinates the activities of nutrition and physical activity programs, funded by both state and local resources.

Iowans Fit for Life

The initiatives of the Iowans Fit for Life Partnership are guided by a statewide comprehensive plan for nutrition and physical activity. Activities are completed through the Iowans Fit for Life work groups organized in the areas of early childhood, educational settings, worksite wellness, older adults, health care, community, and agriculture and food systems. In 2010, the Iowans Fit for Life Partnership includes the projects listed below.

- Provides statewide trainings including: 1) Nutrition Environment Measurement Survey for restaurants, stores and vending; 2) Family Support Worker Nutrition and Physical Activity; 3) Family Support Worker Breastfeeding Support; and 4) Resources for Collegiate Wellness Coordinators.
- Develops toolkits focusing on: 1) Worksite Wellness; 2) Health Care Provider Toolkit addressing pediatric obesity; and 3) Pick a Better Snack & ACT School and Community resources.
- Develops and distributes resources including “Low-Cost Ways to Make Your Community Healthier” and “Walking With A Purpose: Walkability Audit.”

Iowa Nutrition Network

The Iowa Nutrition Network coordinates the BASICS program that assists community projects with funding and resources to provide Pick a Better Snack & ACT classroom nutrition education in schools with $\geq 50\%$ Free and Reduced Lunch participation. Funding is provided by the Supplemental Nutrition Assistance Program.

Communities Putting Prevention to Work

Communities Putting Prevention to Work provides funding for two initiatives, listed below. Both are supported by the work of the Iowans Fit for Life Early Childhood Work Group.

- Provides training to birthing hospitals to establish improved breastfeeding policy using Baby Friendly Hospital Initiative policy recommendations.
- Develops trainings and resources for child care providers to encourage a television viewing policy limiting screen time and increasing physical activity.

Iowa Governor’s Council on Physical Fitness and Nutrition

The Iowa Governor’s Council on Physical Fitness and Nutrition promotes three initiatives, listed below, to work towards its vision of making Iowa “the healthiest state in the nation.”

- Promotes Live Healthy Iowa Kids/Governors Challenge where teams track their physical activity, television time, and fruit, vegetable, low-fat

milk and water intake.

- Supports the criteria of the USDA's HealthierUS School Challenge
- Partners with the Wellness Council of Iowa to provide Healthy Iowa awards for communities, schools, colleges, and visionaries.

Iowa Healthy Communities

The Iowa Healthy Communities Initiative blends state and federal funds to provide wellness grants to Iowa communities. The grants are used for health promotion initiatives focusing on improved nutrition, increased physical activity, reduction and prevention of tobacco use, chronic disease prevention, oral health care, and promotion of mental health well-being.

Nutrition During Pregnancy

The CDC Pregnancy Nutrition Surveillance System (PNSS) monitors behavioral and nutritional risk factors among low-income pregnant women participating in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) in Iowa. In general, low-income women enrolled in WIC experience better dietary intake, gain appropriate prenatal weight, and receive earlier prenatal care than women who are not enrolled. Benefits are most apparent for women who enroll early in pregnancy. Data show their infants are less likely to be premature or have a low birth weight.

In 2007, PNSS data was collected from more than 20,700 women. Of the participating women:

- 49.6 percent had a pre-pregnancy BMI greater than 26.0. This included 34.4 percent who were obese (BMI >29.0) prior to becoming pregnant.
- 45.6 percent had a greater than ideal weight gain during the pregnancy.
- 86.5 percent received prenatal care in the first trimester of the pregnancy.
- 42.8 percent smoked prior to their pregnancy and 27.3 percent continued to smoke during their pregnancy.
- 16.5 percent drank alcohol three months before their pregnancy. Less than one percent drank alcohol during the last months of pregnancy.
- 7.8 percent delivered a very low or low birth weight baby.
- 10.8 percent delivered at or before 37 weeks gestation.

Child Health Surveillance

Population based services have a rich data source called the Iowa Child and Family Household Health Survey (HHS). As described in [Section One](#), the HHS provides insight into the health and well-being of children living in Iowa families. The survey was fielded in 2000 and 2005 and is scheduled for replication in 2010.

The 2000 HHS included questions about children's functional health status including the identification of children with special health care needs, children's access to and utilization of health care services, health insurance

coverage of the child and parent, school performance, child care, and socialization and self-esteem of the child. Topic areas from the 2005 survey included demographics of Iowa families with children, health insurance coverage of children and parents, health care issues, child care, and family and social environment.

The reports of the 2000 and 2005 Iowa Child and Family Household Health Survey can be found at the website: <http://ppc.uiowa.edu/pages.php?id=31>

**Behavior Risk
Factor
Surveillance**

For more than 20 years, CDC's Behavioral Risk Factor Surveillance System (BRFSS) has helped states survey U.S. adults to gather information about a wide range of behaviors that affect their health. The primary focus of these surveys has been on behaviors that are linked with the leading causes of death—heart disease, cancer, stroke, diabetes, and injury—and other important health issues. These behaviors include:

- general health status
- health care coverage
- cigarette smoking
- alcohol consumption
- body weight
- physical activity
- various types of cancer screening
- diabetes
- asthma
- HIV/AIDS awareness.

In 2008, a total of 6,012 Iowans participated in BRFSS. The following list summarizes some of the findings related to the health of Iowans.

- Health Care Coverage: In 2008, nine percent of the survey respondents reported they had no health insurance. This was a decline from the 10.5 percent the previous year. Until 2008, the rate of uninsured Iowans was nearly unchanged for several years.
- Physical Activity: In 2008, 75 percent of respondents reported they had engaged in some sort of physical activity for exercise during the past month other than their regular job. This was a bit lower than the 77.9 percent found in 2007.
- In 2008, 37.6 percent of Iowans were overweight and 26.7 percent were obese, based on BMI. The combined percentage of individuals who were overweight or obese was 64.3 percent.
- Cigarette Smoking: Of all respondents surveyed in 2008, 18.8 percent reported being a current smoker. This was a decrease from the 19.8 percent found in 2007 and is the lowest prevalence ever reported in for Iowa in the BRFSS survey.
- Gambling: In 2008, 35.8 percent of all respondents reported they had gambled in the last 12 months. This is higher than the 28.5 percent figure

found in 2007. However, the gambling questions have been changed from the ones used in 2007 and previously so a trend should be observed cautiously.

- Colorectal Cancer Screening: In 2008, 45.5 percent of Iowans age 50 years and over reported ever using a home blood-stool testing kit. This was a small increase from the 44.3 percent found in 2007, ending a decline that was seen for the previous five years.
- Immunization: In 2008, 76.5 percent of Iowans age 65 years and over reported having a flu shot in the past 12 months. This was higher than the 74.6 percent found in 2007 and is the second highest rate that this survey has ever recorded.
- HIV/AIDS: In 2008 29.2 percent of respondents reported ever being tested for HIV, not including as part of a blood donation. This was higher than the 2007 finding of 28.5 percent.
- Oral Health: In 2008, 73.4 percent of Iowans surveyed reported visiting a dentist within the past year. However, 10.1 percent reported never having a dental visit or having their last dental visit more than five years ago.

Stillbirth Surveillance

In response to legislative action in 2004, a work group was formed to bring together Iowa MCH leaders with an interest in and capacity to impact the incidence of stillbirth. The Stillbirth Work Group developed comprehensive guidelines and a fetal death evaluation form to evaluate stillbirths as they occur. An appropriation to the CDC for "Pilot Projects for the Expansion of Birth Defects Surveillance Systems to Include Fetal Deaths" was earmarked for Iowa and metropolitan Atlanta, GA. These funds allowed for the creation of the Iowa Stillbirth Surveillance Project (ISSP). The information from each fetal death evaluation form, fetal death certificate, and records review at hospital site visits is forwarded to the Iowa Registry for Congenital and Inherited Disorders. The registry staff abstracts the information and compiles the data into the registry.

When an intrauterine fetal death has occurred, a careful evaluation of the mother, stillborn infant, umbilical cord and placenta is essential to develop an understanding of the cause. An evaluation of the stillbirth occurrence assists in discussions with the parents, assists in the planning of any future pregnancy and perinatal care, and contributes to the understanding of the causes of fetal disease and death. The terms stillbirth and fetal death are used interchangeably. For the activities of the ISSP, a stillbirth is defined by Iowa House File 2362 as "an unintended fetal death occurring after a gestational period of twenty completed weeks, or an unintended fetal death of a fetus with a weight of 350 or more grams." In Iowa, there are approximately 200 documented fetal deaths each year. Many of these deaths are "unexplained."

Most birthing hospitals are submitting completed fetal death evaluation forms to the state genetics coordinator. The exception is two of Iowa's largest birthing hospitals, significantly impacting the comprehensive data collection

for Iowa stillbirths. Since submission of these forms is voluntary, the state genetics coordinator makes phone calls and site visits to the facilities to encourage form submission.

In 2010, stillbirth surveillance activities continue, with an emphasis on producing replicable process outcomes. Over 1,100 stillbirth records have been abstracted and entered into the registry. Stillbirths from 2005 forward are in the dataset. Manuscripts and poster presentations have been prepared in cooperation with the CDC and the Metropolitan Atlanta stillbirth surveillance project; and the project director has partnered with a group of stillbirth parents to provide presentations to birthing hospital staff and health care providers about stillbirth surveillance. The fetal death evaluation protocol has been revised to assure consistency with the American College of Obstetricians and Gynecologists (ACOG) practice bulletin on the clinical management of stillbirths.

**Registry of
Birth Defects**

The IDPH administers an agreement with the University of Iowa College of Public Health Iowa Registry for Congenital and Inherited Disorders (IRCID) to conduct public health surveillance activities for birth defects, stillbirths, and confirmed newborn screening cases. Iowa Code Chapter 136A authorizes this surveillance activity. The IRCID conducts active surveillance to identify information about congenital and inherited disorders that occur to Iowa residents. Active surveillance entails the use of field staff, who collect information by reviewing medical records in hospitals and clinics in Iowa and in neighboring states that serve Iowa residents. IRCID is one of eight states awarded as the CDC's Birth Defects Prevention Network "Centers of Excellence in Research and Prevention of Birth Defects."

The mission of IRCID is to:

- maintain statewide surveillance for collecting information on selected congenital and inherited disorders in Iowa
- monitor annual trends in occurrence and mortality of these disorders
- provide data for research studies and educational activities for the prevention and treatment of these disorders

The IRCID has collected information for over 40,000 children with various congenital and inherited disorders. This information has been used by health care providers and educators to provide treatment and support services, and by researchers to study risk factors for heritable disorders and birth defects, and to evaluate treatments for birth defects.

**Newborn
Metabolic
Screening**

The Iowa Neonatal Metabolic Screening Program (INMSP) is mandated by Iowa law to provide screening for heritable disorders for Iowa newborns. The Iowa screening panel consists of over 40 conditions, including cystic fibrosis, fatty oxidation disorders, amino acid disorders, organic acid disorders, galactosemia, congenital adrenal hyperplasia, congenital hypothyroidism, biotinidase deficiency, and hemoglobinopathies.

If a baby has a positive test (meaning an abnormal result), nurses on the short-term follow up staff contact the newborn's medical home provider and arrange for re-screening and make recommendations for care. Short-term follow up staff provide care coordination for the baby and family until the baby has a normal screen or is diagnosed with an inherited condition; at that point a referral is made to long-term follow up with subspecialty health care providers. Case management is provided by long-term follow up staff throughout the child's life. One hundred percent of Iowa's newborns with a positive screening result receive follow-up.

The State Hygienic Laboratory at the University of Iowa is designated as the central testing laboratory for newborn dried blood spot screening, and serves as the third party administrator of the newborn screening fees. The newborn screening fee covers a courier service (picks up the screening specimens and delivers to the lab on the same day), laboratory staff and supplies, follow up staff, medical consultant time, a portion of medical food and metabolic formula, a percent of the state genetic coordinator's effort, and 10 percent of each fee goes into a "developmental fund" account that funds pilot testing of new disorders or testing methods, expansion of data systems, or new technology.

The Congenital and Inherited Disorders Advisory Committee (CIDAC) provides guidance and advice to the IDPH regarding the INMSP. CIDAC membership includes newborn screening program staff, maternal prenatal screening staff, Iowa Registry for Congenital and Inherited Disorders staff, State Hygienic Laboratory staff, University of Iowa Department of Pediatrics Division of Medical Genetics staff, a bioethicist, an attorney, a social worker, two Iowa legislators, representatives from the Iowa Chapter of the March of Dimes, an Iowa Clinical Laboratory Managers Association member, American Academy of Pediatrics Iowa Chapter, the Iowa Section of the Academy of Obstetricians and Gynecologists, Iowa Academy of Family Physicians and Iowa Academy of Osteopathic Physicians members, and six parents of children with an inherited condition.

A survey was conducted in early 2010 to determine emerging issues to be addressed in the annual Center for Congenital and Inherited Disorders (CCID) plan for 2011. The survey was sent to all CCID advisory committee members, family participants, hemophilia advisory committee members, and

appropriate program staff. Issues include, among others, additional disorders for the newborn metabolic screening panel, screening guidelines for premature infants, funding, accessibility to treatments for clotting disorder patients, and integration with newborn hearing screening programming.

**Genetic
Counseling**

The Regional Genetic Consultation Service (RGCS) provides comprehensive, family-centered, genetic health care to individuals and families throughout Iowa with statewide outreach clinics. RGCS has been in existence since 1976. The primary purpose of the RGCS is to provide this structure as an integral component of the state's health-care system. The secondary purpose is to assure the provision of statewide genetics education to promote health and prevent disease.

Services include:

- Diagnostic evaluations
- Confirmatory testing
- Medical management
- Provision of non-directive counseling to individuals and families
- Case management
- Individual and family support
- Education
- Consultation
- Referral

These services are provided to over 700 clients and 1,800 family members at 80 clinics in 12 communities annually.

Capacity to Promote Infrastructure Building

Oral Health

Surveillance and I-Smile™ evaluation data indicate that although more at-risk children are receiving preventive care within the Title V child health system, the number of dentists providing services is not increasing and there has been a dramatic rise in untreated decay in third graders (from 13% in 2006 to 22% in 2009). OHB staff will review workforce and dental delivery system issues within the state and seek stakeholder assistance to consider alternatives, which may include new training opportunities for health care providers, scope of practice changes, and introduction of new dental provider types.

OHB staff maintains close working relationships with Iowa Medicaid Enterprise staff to monitor existing policies and pursue any needed changes to the Medicaid program. Ensuring the oral health linkage within the state medical home initiative, as well as all health care reform, will be an ongoing activity for OHB staff, as a way to build referral systems for pregnant women and children. OHB is also working with the University of Iowa College of Dentistry on a grant to support oral health workforce activities. This will expand use of dental students in underserved areas and implement a state dental workforce needs assessment.

Several new resources are available to assist in analyzing program results in order to guide future oral health policy. These include enhancements to the Child and Adolescent Reporting System (CAREs) database, school dental screening audit data, early childhood oral health surveillance (developed through the HRSA TOHSS grant), enhancements to the Women's Health Information System (WHIS), new Medicaid reporting of dental services provided in community health centers, as well as availability of specific data queries through Iowa Medicaid Enterprise. In addition, a special project conducted by the IDPH MCH epidemiologist within the BFH matches birth certificate information with Medicaid paid claims to determine the prevalence of women who access preventive dental services while pregnant. The findings of this data matching project are located under the topic, [Medicaid - Birth Certificate Match](#), located below in the same section of this document.

OHB staff works closely with I-Smile™ coordinators, providing program guidance and regular face-to-face trainings to ensure program development and standardization of the I-Smile™ dental home initiative throughout the state. Efforts to better address oral health issues within the MH population and the MH service delivery system will be pursued by OHB staff through partnership with the BFH. The I-Smile™ initiative has been instrumental in improving access to early, regular, and preventive care for children.

Medical Home

In 2008, the Iowa General Assembly enacted HF 2539, the Health Care Reform Act. The Health Care Reform Act included a plan to assure a patient-centered medical home (PCMH) for all Iowans, and outlined implementation phases starting with children enrolled in Medicaid. A medical home is an approach to health care that provides accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective care. The Medical Home System Advisory Council (MHSAC) was created to make recommendations to IDPH on the plan for implementation of the statewide PCMH system.

The MHSAC Initial Progress Report was completed in March 2009 and was designed to provide background information on development of a PCMH system, describe the current PCMH-building efforts in Iowa, and recommend pertinent building blocks to a PCMH system that meets the needs of all Iowans. The following building block recommendations are considered top priority by the MHSAC:

- Continue to develop and sustain the Iowa Medical Home System Advisory Council to promote the PCMH concept as a standard of care for all Iowans.
- Encourage and support the identification and implementation of a multi-payer reimbursement model that supports the PCMH.
- Support the current efforts to implement and expand the PCMH through existing infrastructures that educate providers and demonstrate best practices.
- Support health reform initiatives that address health care workforce needs, health care information technology, prevention, and chronic care management.

The MHSAC Progress Report #2 was released in May 2010. Throughout 2010, the MHSAC will develop issue briefs on a variety of important topics related to the spread of the PCMH in Iowa. The issue briefs will distill the complex information on the topic so that the reader can easily understand the heart of the issue. They will educate stakeholders on Iowa specific information and data and may include recommendations from the Council related to the topic.

The first issue brief is entitled “*Patient-Centered: What Does it Look Like?*” and is available on the IDPH website at

www.idph.state.ia.us/hcr_committees/common/pdf/medical_home/mhsac_issue_brief.pdf. It summarizes what patient-centered care encompasses and how it can be achieved. The concept of patient-centered care is gaining political attention and has become a central aim for the nation’s health system. Yet despite growing recognition of the importance of patient-centered care, as well as evidence of its effectiveness, the nation’s health care system falls short of achieving it. The issue brief lays out improvement strategies at a

practice and system level to help leverage widespread implementation of patient-centered care.

The Iowa Department of Human Services and IDPH collaborated on submission of an application for the Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Grant funded by the Centers for Medicare and Medicaid Services. Iowa's application was titled *Navigating the Neighborhood: Improving Child Health Quality in Iowa* and was focused on a medical neighborhood model of care. The goal of the grant was to establish and evaluate a national quality system for children's health care which encompassed care provided through the Medicaid program and the Children's Health Insurance Program. Iowa did not receive funding for the CHIPRA Quality Demonstration Grant. However, the partnerships that were formed when writing the grant and the medical home implementation plan that was created will be used to develop plans for building medical homes for children and youth in Iowa.

IDPH received state funds through an agreement with the Department of Management's Office of Community Empowerment to implement a medical home pilot project. The project seeks to develop a model for a community based model that will comprehensively serve children ages 0-5 years to address their specific needs by providing a PCMH. A Title V child health agency in Iowa that operates 1st Five Healthy Mental Development implementation project will partner with a (pediatric) primary care practice to provide care to children ages 0-5 years. Emphasis will be placed on providing an enhanced level of care coordination both within the primary care setting and within the community through partnership with the Title V child health agency. The four key concepts of the pilot to build an optimum health care system for children are:

- The importance of local control and physician leadership in building sustained community care systems
- A primary focus on improving quality of care through population management
- The necessity of creating a true public/private partnership that brings together all the key local health care and social service providers
- A shared state/local responsibility to develop tools needed to manage well child/child health services including a system of new incentives that better align state and community goals with desired outcomes

**Family
Participation
in Newborn
Screening**

The Iowa Family Participation Project (IFPP) is provided through a Health Resources Services Administration, Maternal Child Health Bureau, Genetic Services Branch cooperative agreement. The IFPP aims to address the following problem statements:

- Attitudes and beliefs of parents are not consistently addressed by newborn screening programs.

- Family and provider participation in planning, implementation and evaluation of newborn screening programs is minimal.
- Newborn screening program information to parents and providers is not provided in a manner that meets their needs.

In order to address these issues, the IFPP attempts to ascertain parent and health care provider perceptions of newborn screening. The project conducted work group meetings of representatives from eight different communities, including Sudanese refugees, adoptive parents, parents of children with an abnormal screening result (positive, false positive, carrier), Amish families, parents of children with a hearing loss, and families associated with a college of chiropractic medicine; and have learned about their perceptions of newborn screening programs. The IFPP also conducted telephone interviews with a sample of health care providers representing the American Academy of Pediatrics, the American College of Obstetrics and Gynecology, the American Academy of Family Physicians, nurse practitioners, birthing hospitals, audiologists, and midwives to determine their perceptions of newborn screening programs.

The IFPP developed a framework to encourage family and provider participation in planning, implementation, and evaluation of newborn screening programs. The project also developed a communication model that links the medical home provider, family, and newborn screening program staff. The IFPP activities have resulted in significant beneficial resources, including those listed below.

- A pictograph of the newborn dried blood spot screening process has been developed for families who cannot read.
- Amish communities are now receiving newborn hearing screening in their communities.
- Four new parent positions have been added to the Congenital and Inherited Disorders Advisory Committee.
- A systematic literature review of articles on perceptions of newborn screening programs has been conducted, and will be promoted as a manuscript for publication.
- Contacts made with individuals from the participating communities have been maintained and used in other programming.

Child Health

The IDPH Child Health Advocacy Team (CHAT) routinely addresses statewide child and adolescent health issues. CHAT members have extensive child health experience and are committed to ongoing assessment of the state's child health infrastructure. There are two CHAT subdivisions: a core group of MCH program consultants and a broad-based forum for interbureau collaboration.

The core CHAT group of program consultants from the IDPH Bureau of

Family Health and Oral Health Bureau provide direction and oversight to community-based child health contract agencies serving all Iowa counties. This group addresses policy and practice to promote access to preventive health care services for children within child health agencies. Training and technical assistance is provided to local contractors, key data are tracked and shared with contract agencies, and quality assurance initiatives are conducted.

The broad-based CHAT forum is a vehicle for communication and collaboration across IDPH programs that impact children. Representatives include consultants from the Oral Health Bureau, Bureau of Disease Prevention and Immunization, Bureau of Lead Poisoning Prevention, Bureau of Nutrition and Health Promotion, Center for Congenital and Inherited Disorders, Early ACCESS (IDEA, Part C), Early Hearing Detection and Intervention, Early Childhood Iowa, Early Periodic Screening, Diagnosis and Treatment (EPSDT), Adolescent Health, Healthy Child Care Iowa, 1st Five Children's Healthy Mental Development, *hawk-i* Outreach, Early Childhood Comprehensive Systems, and Head Start. Consultation is also available from the IDPH Office of Multicultural Health.

Recent CHAT team initiatives included research and planning related to unintentional injury for children. This involved analysis of data trends and review of best practices to address the most frequent causes of unintentional injury. The condition of homelessness among Iowa families was also examined, with particular focus on the impact on children. The definition of homelessness, data compiled by the National Center on Family Homelessness, and negative effects on children's growth, development, and educational achievement were reviewed.

The Iowa child health system of services is strengthened by an important statewide data source, the Iowa Child and Family Household Health Survey (HHS). As described in [Section One](#), the HHS provides Iowa's child health services infrastructure with important data about children living in Iowa families. Upon completion of the 2010 survey, the HHS will include three sets of trend data (2000, 2005, and 2010) to be used for program planning and public policy development.

The five reports of the 2005 Iowa Child and Family Household Health Survey can be found at the website: <http://ppc.uiowa.edu/pages.php?id=31>

**Regionalized
System of
Perinatal Care**

Iowa has a regionalized system of perinatal health care to define the purpose and function of birthing centers. There are five levels of birthing centers as defined in the following list.

- Level I Hospitals provide basic inpatient care for pregnant women and newborns without complications.
- Level II Hospitals provide the same care as level I hospitals and manage

high-risk pregnancies and provide services for newborns with selected complications. These hospitals have an obstetrician and pediatrician on staff and manage neonates 34 weeks and greater gestation.

- Level II Regional Centers provide the same care as level I and II hospitals and have a neonatal intensive care unit (NICU) with a defined referral area, three pediatricians and three obstetricians on staff.
- Level II Regional Neonatology Centers have all the attributes of the level II regional centers with the capability to provide a higher level of neonatology care, including management of neonates under 34 weeks gestation. A minimum of two board-certified neonatal/perinatal subspecialist and a pediatric cardiologist on staff and neonatal care is available 24/7.
- Level III Centers provide the highest level of care including caring for the most high-risk pregnancies and neonates. Additional anesthesia, surgical, and subspecialty staff are required.

Women's Health

The IDPH Women's Health Team functions as a department-wide communications vehicle. The functions of this team are to:

- Assure coordination of primary care, preventive services, and mental health services for Iowa women
- Improve women's knowledge about health so they can make good choices about health
- Improve access to women's health information by making existing resources better
- Create a complete list of IDPH women's health-related programs

The IDPH Women's Health Team coordinator has regular communication with the Department of Health and Human Services Region VII Office on Women's Health. Annually the team does the following:

- Updates the IDPH Women's Health Related Programs document and posts it to the IDPH website (www.idph.state.ia.us)
- Sponsors at least four health fair displays
- Applies to the Region VII Office on Women's Health for funds to support the annual Iowa public health conference
- Sponsors the Iowa Women's Health Information Center website at www.womenshealthiowa.info
- Serves as the advisory body for a federal grant focused on reducing violence against women during their reproductive years

The website www.womenshealthiowa.info provides free, objective, medically accurate health information for women in Iowa. The site provides web links to state and national resources. It offers a live chat feature and lists multiple toll-free help lines, including the Healthy Iowans Line maintained with Title V funding. There were 4,338 visitors to the Iowa women's health information website between October 1, 2008 and September 30, 2009.

**Family
Planning**

The Iowa Department of Public Health (IDPH) is one of two Title X grantees in Iowa. The IDPH family planning service area includes 45 of Iowa's 99 counties. Of the 45 counties served by the IDPH Family Planning Program, 18 counties have full service clinics that are available at least once per week. Twenty-seven counties have periodic full service satellite clinics. Education and counseling clinics are offered in 15 counties with referral to local providers for clinical services. Only four rural counties have no family planning services available. Of the 45 IDPH family planning counties, 25 have either a portion of the county or the whole county designated as medically underserved. There are 32 counties with health professional shortage areas, either a portion of the county or the whole county being included in this designation.

The Iowa Family Planning Network (IFPN) is a program that expands Medicaid coverage for family planning services in Iowa to improve the spacing between births, improve future birth outcomes, and reduce the number of unintended pregnancies and births. The IFPN enables many women to receive high quality, confidential services and focus on reaching their personal goals.

The IFPN expands Medicaid-covered family planning services for an additional 12 months to women whose pregnancies and deliveries were covered by Medicaid; women, ages 13-44, who are legal residents with income up to 200 percent of poverty; and women enrolled in IowaCare. The IFPN pays for contraceptive supplies that the IowaCare program does not. A bill was passed in the 2010 Iowa legislative session directing DHS to reapply to Medicaid for a renewal of the IFPN waiver. The bill also expanded IFPN coverage to women who have a credible insurance that does not pay for family planning services or supplies, and to women ages 13-55.

Federal reform also brought another option for states to expand Medicaid family planning services through a state plan amendment. Instead of completing the waiver process, states can choose to file an amendment to their state plan to expand family planning services. Iowa is in the process of writing the renewal application, but a final decision has not been made about whether to file a state plan amendment, complete the waiver application, or do both.

If approved by CMS, the changes would increase the income eligibility to 300% FPL (Iowa would be the first state to go this high), as well as expanding IFPN coverage to women who have a credible insurance that does not pay for family planning services or supplies, and to women ages 13-55. The changes also prevent the director of DHS from electing not to budget for this coverage.

**Unintended
Pregnancy**

IDPH Title X local contract agencies contract directly with a private foundation (Iowa Initiative to Reduce Unintended Pregnancies) for funding to provide increased access to long acting reversible contraceptives for low-income women in Iowa. In 2009, IDPH agencies provided 782 intrauterine devices, an increase of 187 over 2008 and 1,313 Implanons to clients requesting long acting reversible contraceptives, an increase of 421.

**Infertility
Prevention**

IDPH partners with family planning and Sexually Transmitted Disease (STD) clinics around the state to implement the Iowa Infertility Prevention Project, part of a CDC sponsored program that works to promote innovative, high quality and cost-effective approaches in the prevention of STD-related infertility in women and men. The screening, testing, treatment and risk reduction counseling are done in 70 sites across the state including family planning and STD clinics, student health departments, correctional facilities, and other women's health centers. The Iowa Department of Public Health provides the treatment medications for those clients testing positive along with their partners.

**Adolescent
Pregnancy
Prevention**

Leading academicians and researchers emphasize the importance of the life course perspective in MCH programming. The life course perspective suggests that a complex interplay of biological, behavioral, psychological, and social protective and risk factors contributes to health outcomes across the span of a person's life.

Disparities in birth outcomes, such as low birth weight and infant mortality, are often explained by the quality and frequency of prenatal care. In contrast, the life course perspective suggests that these disparities result from differences in protective and risk factors between groups of women over the course of their lives. As a result, the health and socioeconomic status of one generation directly affects the health status of the next one. Understanding the life course perspective creates opportunities to build upon protective factors and reduce risk factors.

Iowa's Title X program has increased attention to strengthening the state's infrastructure to address the reproductive potential of the adolescent population. Reproductive potential describes how one's health status at any given age may influence reproductive health and future birth outcomes. One of the ways Iowa's Title X program has addressed this is by requiring that all clients served at Title X agencies (including adolescents) be counseled about establishing a reproductive life plan. A reproductive life plan is a set of goals about having or not having children. It includes how many children an individual wants to have, and when he or she wants to have them.

In 2010, the newly formed Office of Adolescent Health within the US Department of Health and Human Services announced funding for a two tiered approach to promote effective and promising teen pregnancy prevention programming. The IDPH has partnered with the Iowa Department of Human Services, the Iowa Department of Education and several community based organizations to support an application to replicate or expand programs that have been rigorously evaluated and have the strongest evidence of success.

Iowa already has several formally evaluated curricula in place. Capacity exists within the MCH and Title X program to replicate or expand the programming with others, including non-traditional partners. One priority will include focus on Latino youth, promoting consistent and correct contraceptive use to prevent an unplanned teen pregnancy, improve access to care and encourage responsible decision making behaviors.

**Tobacco Use
during
Childbearing
Years**

Iowa Title V partners recognize that women of reproductive age who smoke are at increased risk for multiple adverse pregnancy-related outcomes, including:

- Difficulty conceiving
- Infertility
- Spontaneous abortion
- Premature rupture of membranes
- Low birth weight
- Neonatal mortality
- Stillbirth
- Preterm delivery
- Sudden infant death syndrome (SIDS)

In addition, women who smoke are at increased risk for adverse health outcomes, including lung and other cancers, chronic obstructive pulmonary disease, and heart disease. Parents who smoke often expose their children to secondhand smoke, with associated adverse health consequences and economic costs. Parents also model smoking behavior to their children, potentially increasing the likelihood that their children will become smokers.

A maternal health task force with representatives from the Iowa Medicaid Enterprise, IDPH Oral Health Bureau, and IDPH Bureau of Family Health meets quarterly to frame joint quality improvement interventions. Data are reviewed, policy changes discussed, and national best practice strategies reviewed. Key focus areas of the taskforce are:

- Barriers to accessing dental care for pregnant women on Medicaid
- Promoting smoking cessation in pregnant and postpartum women
- Identifying depression during pregnancy and postpartum.

Current initiatives of the maternal health task force include those listed below.

- Training Title X family planning providers in the *Ask Advise Refer* strategy. More information about *Ask Advise Refer* is located at <http://www.askadviserefer.org>
- Informing callers to Quitline Iowa that Medicaid pays for nicotine replacement therapy (NRT). Maternal health agencies also inform clients of the availability of this benefit
- Working with the Iowa Medicaid Enterprise to identify pregnant Quitline Iowa callers who are Medicaid clients and eligible for intensive follow-up
- Reaching out to women’s health providers through an existing provider outreach contract with the Iowa Tobacco Research Center at the University of Iowa
- Adding payable codes for local maternal health agencies that allow oral hygienists to provide tobacco cessation counseling to prevent oral health disease
- Collaborating with the Division of Tobacco Use, Prevention and Control to provide education to maternal health center staff at four locations throughout the state on *Ask Advise Refer*
- Training maternal health center staff and dental hygienists on motivational intervention by Mayo Clinic staff. This is a form of motivational interview to assist patients in making progress toward readiness to quit smoking.
- Developing a relapse prevention program through Quitline Iowa for pregnant women who have quit smoking during pregnancy.

**Termination of
Pregnancy**

Termination of pregnancy surveillance is used to determine if there are areas of the state with higher than expected rates of spontaneous pregnancy loss. The data can also be used to address issues related to family planning, maternal, and child health access to health care, quality of care, and sexuality education. The data are collected using the 25 maternal and child health regions as geographic identifiers. The Iowa Termination of Pregnancy Reports are published on the IDPH website at <http://www.idph.state.ia.us/common/pdf/publications/itoprept02.pdf>.

The total number of pregnancy terminations in Iowa for 2008 was 7,151, a decrease of 319 from 2007. The number of spontaneous terminations decreased from 821 in 2007 to 667 in 2008, representing nine percent of total terminations of pregnancy. Overall, 3,719 (57%) of induced terminations of pregnancy were surgically induced and 2768 (43%) were medically induced.

**Children's
Mental Health**

Significant federal and state resources are devoted to Iowa projects addressing issues related to children's mental health.

Project LAUNCH

Iowa's Project LAUNCH seeks to develop the necessary infrastructure and system integration to assure that Iowa children are thriving in safe, supportive environments and entering school ready to learn and able to succeed. Project LAUNCH targets children ages 0-8 years and their families in a seven-zip-code area in inner city Des Moines, Polk County, Iowa. The project focus is on low-income and minority populations who are traditionally underserved. Outreach, recruitment, and retention efforts target African American, Hispanic, Asian, non- or limited-English speaking immigrants/refugees and low-income populations.

The purpose of Project LAUNCH is to develop a sustainable, systemic community-approach to promoting social, emotional and behavioral health for young children and their families. Project goals are:

- Build state and local infrastructure to increase the capacity and integration of the children's mental health system into a comprehensive early childhood system of care to promote positive development for Polk County children ages 0-8 years and their families
- Deliver family-centered, fully integrated evidenced-based services for children living in a targeted community and are at risk for poor social emotional outcomes
- Promote sustainability and statewide spread of best practices for system development.

Overall objectives are:

- Establish state and local Councils on Young Child Wellness
- Implement evidence-based practices including standardized developmental screening in primary care and other settings, Nurse Family Partnership, Positive Behavior Supports, and mental consultation in schools and child care serving a minimum of 410 children ages 0-8 years annually.

Implementation of Project LAUNCH at the local level is coordinated through a partnership between the Polk County Health Department and Visiting Nurse Services of Iowa, the local Title V maternal and child health agency.

Iowa's Project LAUNCH was built around the Early Childhood Iowa framework for the Council and for the Quality Services and Programs (QSP) Component Group. Project LAUNCH staff will be directly involved in the work of the new Early Childhood Iowa Stakeholder Alliance and QSP

Component Group. Project LAUNCH also collaborates with the 1st Five Healthy Mental Development Initiative.

1st Five Healthy Mental Development Initiative

The 1st Five Healthy Mental Development Initiative (1st Five) received legislative appropriations in July 2006 to partner with community providers and physicians to improve developmental screening for young children (ages 0-5 years). The goal of 1st Five is to develop the structure and supports needed to assess and improve the emotional, behavioral, and social developmental skills of young children and to eventually expand the model statewide.

The following list includes key activities of the 1st Five Healthy Mental Development initiative:

- IDPH developed and distributed a competitive bid to local Title V maternal and child health community agencies to implement effective strategies with health providers, local community-based agencies, and referral sources to support children’s healthy mental development during well-child visits.
- Three local community sites were chosen and began implementation strategies in September 2006.
- All three sites worked with local medical practices to identify screening tools to be used during well-child visits.
- The three sites established referral systems between public and private providers who offer healthy mental development services to children and families.
- Title V maternal and child health care coordinators at the 1st Five sites developed protocols on integrating children’s healthy mental development principles into their work with families.

1st Five partnered with the Iowa Child Healthy Development Collaborative centered at the University of Iowa Center for Disabilities and Development. Additional efforts include working with learning collaboratives from the Iowa Medical Home Initiative coordinated by Child Health Specialty Clinics and Early ACCESS.

In 2009, the 1st Five initiative focused on moving toward statewide spread by building effective community systems of care between public and private providers. A 1st Five website is under development to serve health care professionals, legislators, and parents.

In 2010, two 1st Five community planning grantees successfully became implementation sites after a competitive application process. These new sites added a combined seven additional medical practices committed to integrating enhanced surveillance and assessment into well child exams.

Three of the four implementation sites are now considered sustainability sites, working to sustain the public-private partnerships and 1st Five model of improved patient care.

1st Five is part of several state level infrastructure building efforts focusing on young children's social-emotional development. These efforts include representation on the Early Childhood Iowa Quality Services and Programming component group and the Project LAUNCH State Wellness Council (a SAMHSA funded initiative).

Community Circle of Care

Community Circle of Care (CCC) is a system of care initiative for children and youth, birth to age 21 years, who struggle with emotional/ behavioral challenges. The goal of the CCC initiative is to build local resources, services, and supports to keep children in their own homes, with their families, and in their own communities, avoiding costly and inefficient out of home treatment or hospital placements.

CCC is a partnership of Child Health Specialty Clinics, the Iowa Department of Human Services, the Center for Disabilities and Development and many local community partners. The CCC initiative began to serve families in January 2008.

The CCC serves more than 550 newly enrolled youth in clinical services annually, providing medical assessment, treatment planning, care coordination, and medication management services to stabilize the youth. Once stable, the youth is transitioned back to their medical home, while continuing needed supports and care coordination if needed to keep the family successful. The CCC also provides parent to parent support, leadership and advocacy opportunities and group supports for youth and families.

The accessibility of sub specialty psychiatric care required by this complex population is limited in the state of Iowa, particularly in rural Iowa. The CCC initiative has worked to increase psychiatric services to rural Iowans through the use of telemedicine in partnership with the University of Iowa Department of Psychiatry. Despite these efforts there remain large gaps, as described in [Section Two](#) of this document. Efforts are underway to increase the psychiatric workforce through enhanced recruitment and expansion of training for psychiatric subspecialty care.

For a number of years, children's primary care providers have been the most frequent prescribers of psychotropic medications, accounting for 85 percent of all such medications prescribed to children in 1997. Despite their critical role in identifying and treating psychosocial and mental health problems, most primary care providers have relatively little preparation for such concerns. CHSC, in partnership with the University of Iowa Department of

Psychiatry, plans to develop a psychiatric access and consultation program to assist pediatricians in building their capacity to serve youth with mild to moderate psychiatric conditions through the use of real time consultation with a child psychiatrist, and web-based resources.

Early Childhood

Early Childhood Iowa

Early Childhood Iowa (ECI) was codified in administrative rules in May 2009. The process was completed with input from the Early Childhood Iowa Council and six component groups. The ECI governance structure was placed within IDPH. The structure of ECI started with a Smart Start Technical Assistance grant in 2002 and continues through the Early Childhood Comprehensive System structure. The ECI structure collaborated and integrated with the structure of Iowa Community Empowerment.

In June 2009, the Department of Management, Office of Community Empowerment hosted a continuous quality improvement event using the LEAN model, designed to maximize value while minimizing waste. The LEAN event gave early childhood leaders the opportunity to reflect and build on what works in Iowa, while developing new models and strategies based on the latest early childhood research. The LEAN event included a diverse representation of state and local early childhood stakeholders who came together to develop a scope and objectives for the week-long event.

The purpose of the LEAN event was to define Empowerment's role in the early care, health and education system at a state and local level, helping young children and their families be successful. Legislation was passed in March of 2010 that combines the work of Early Childhood Iowa and Iowa Community Empowerment and houses the system building efforts in the Department of Management. However, based on new legislation from the 2010 legislative session, Early Childhood Iowa and the Office of Community Empowerment will be combined into one Early Childhood Iowa infrastructure and housed in the Department of Management (DOM). Early Childhood Iowa and Iowa Community Empowerment staff are working together to begin implementation of the combined efforts on July 1, 2010. A subcommittee of the two groups will be working on administrative rules.

Diversity Taskforce

Early Childhood Iowa formed a Diversity Taskforce to serve as the advisory structure for diversity issues across the early childhood system. The taskforce formed a comprehensive plan and activities and continues with implementation. The taskforce includes a diverse group of early childhood stakeholders including governmental and non-governmental representatives.

Parent Summit and Parent Advisory Council

Another early childhood collaboration is the development of a Parent Summit and the creation of a Parent Advisory Council spearheaded by Early

Childhood Iowa (ECI) and the Governance Component Group. The Parent Summit will be held in the fall of 2010 and the Parent Advisory Council will convene shortly thereafter. The Parent Advisory Council will serve in an advisory role to the ECI structure and other state early childhood boards and councils.

Maternal Mortality

The Maternal Mortality Study Committee of the Iowa Medical Society is responsible for reviewing deaths of women occurring during pregnancy and within twelve months of giving birth. The committee examines medical records to determine:

- The cause of death
- Whether the death was directly or indirectly related to the pregnancy
- Whether the death was preventable
- What educational efforts would assure greater prevention

The IDPH Bureau of Family Health and Bureau of Health Statistics collaborate to identify maternal deaths. The review committee is appointed and staffed by the Iowa Medical Society in collaboration with the IDPH and the University of Iowa College Of Medicine. The committee meets at least every three years or more often if needed. Committee membership includes a pathologist, an anesthesiologist, obstetricians and family practice physicians who deliver babies.

The role of IDPH was expanded through enhanced identification of maternal deaths. In addition to matching the death certificate of the mother with the infant's birth certificate, the vital records staff at IDPH also searches for maternal deaths using International Classification of Diseases Tenth Revision (ICD – 10) codes to improve identification of maternal deaths. The authority of IDPH administrative rules can be used to enforce the provision of records.

The Maternal Mortality Study Committee identifies which case studies should be highlighted for educational purposes and published in the *Iowa Perinatal Letter*. This newsletter is published on the IDPH website, http://www.idph.state.ia.us/hpcdp/perinatal_newsletters.asp, and distributed to all health care providers in Iowa that deliver babies. Additionally, Dr. Stephen Hunter, University of Iowa obstetrician and chair of the Maternal Mortality Study Committee, discusses prevention of maternal mortality with health care providers across the state during site visits by the Statewide Perinatal Care Team.

The Maternal Mortality Study Committee last met on February 22, 2008 to review 14 maternal mortality cases that occurred over the previous three years. Of the 14 deaths reviewed, one was classified as an unknown cause of death, five were determined to not be obstetrically related, five were classified as indirectly related to an obstetrical cause, and three were directly related to

an obstetrical cause. Of the cases classified as directly related to obstetrics, two were related to pre-eclampsia/eclampsia, and one to post-delivery hemorrhage. The five cases classified as indirectly related to obstetrics included deaths from anticoagulation complications, diabetes complications, suicide, pulmonary embolism and cardiac complications. The next meeting of the Maternal Mortality Study Committee is scheduled for February 2011.

**Black/White
Disparity:
Infant
Mortality**

Data recorded in [Section Three](#) of this document indicate that the Black/White disparity in infant mortality decreased from 2008 to 2009. Differences in rates of low birth weight account for the majority of Black/White disparities in infant mortality in Iowa. Less adequate use of prenatal care, unaddressed maternal health problems, and lower levels of social support may be contributing factors. Many of the infant mortality related determinants are amenable to change by existing public health programs and the disparity is being directly targeted with intervention strategies already in place.

**Medicaid
Claims/Birth
Certificate Data
Match**

Each year, IPDH and the Iowa Department of Human Services partner to conduct a data linkage of Medicaid pregnancy/birth claims with birth certificate files. Results of the annual data match have allowed the two state departments to evaluate the effect of Medicaid program eligibility and service benefit changes. Comparisons of health equity factors across segments of the population is of particular interest to the MCH community.

2009 Data

During calendar year 2009, approximately 39.7 percent of Iowa live births were reimbursed by Medicaid. Racial and ethnic minorities were disproportionately represented among Medicaid reimbursed live births. Specifically, although non-Hispanic Blacks (NHB) represent 4.7 percent of live births, over three-fourths of live births to NHB (76.6%) were reimbursed by Medicaid. The same pattern exists for non-Hispanic others of all races (NHO) and Hispanics. Non-Hispanic others represent 3.1 percent of live births; 35.5 percent of live births to NHO were reimbursed by Medicaid. Hispanics represent 8.1 percent of live births; 68.5 percent of live births to Hispanics were reimbursed by Medicaid.

Prenatal care (PNC) initiation also varies by Medicaid status and race. Overall, 73.6 percent of women who delivered a live birth in calendar year 2009 started PNC in their first trimester. Among non-Medicaid non-Hispanic Whites (NHW) 81.4 percent began PNC in their first trimester compared to 67.3 percent of Medicaid NHW. Among non-Medicaid non-Hispanic Blacks (NHB) 63.7 percent began PNC in their first trimester compared to 53.3 percent of Medicaid NHB. Among non-Medicaid non-Hispanic of other races (NHO) 75.7 percent began PNC in their first trimester compared to 47.9 percent of Medicaid NHO. Among non-Medicaid Hispanics 64.7 percent

began PNC in their first trimester compared to 55.6 percent of Medicaid NHO.

Although Medicaid recipients of racial and ethnic minorities started PNC in their first trimester at a lower proportion than non-Medicaid recipients, they did not experience a greater proportion of adverse birth outcomes. The overall proportion of infants born with low birth weight (LBW) in calendar year 2009 was 6.6 percent; the overall proportion of infants born prematurely was 17.1 percent. Among NHW, the proportion of infants born with LBW was the same regardless of Medicaid status (non-Medicaid-6.5% vs. Medicaid-6.2%). Among NHB, the proportion of infants born with LBW was lower among Medicaid recipients than non-Medicaid recipients (non-Medicaid-14.6% vs. Medicaid-11.2%). Among NHO, the proportion of infants born with LBW was lower among Medicaid recipients than non-Medicaid recipients (non-Medicaid-8.1% vs. Medicaid-5.4%). Among Hispanics, the proportion of infants born with LBW was lower among Medicaid recipients than non-Medicaid recipients (non-Medicaid-6.3% vs. Medicaid-5.5%). A similar pattern can be shown for preterm births among Medicaid recipients of racial and ethnic minorities.

2005-2008 Trend Data

In partnership with staff of the IDPH Oral Health Bureau, the IDPH MCH epidemiologist conducted a special project to determine the prevalence of women who access preventive dental services while pregnant. The project involved matched Medicaid claims and birth certificate (BC) files for 2005 through 2008 (n=54,841). The match rate was ≥ 95 percent for each year.

The proportion of Medicaid recipients who received preventive dental services during pregnancy increased from 9.4 percent (2005) to 21.2 percent (2008). After adjustment for maternal characteristics and year, non-Hispanic Black and Hispanic women were less likely to receive preventive dental services than non-Hispanic white women. Women ages 20-29 and 30 or older were less likely to receive preventive dental services than women under 20 years old.

Shaken Baby Syndrome

Shaken Baby Syndrome is a highly preventable form of child abuse that occurs when an infant or young child is violently shaken or slammed. It is usually triggered by inconsolable infant crying. An infant's neck muscles are very weak and its head is disproportionately large for its body, so when shaken, the head will violently rotate in a figure eight pattern, causing blood vessels to tear and brain damage to occur.

From 1995-2007, fifty-one Iowa infants died from Shaken Baby Syndrome (SBS). Many more survived with injuries, some of them life-altering. Immediate effects of SBS may include vomiting, seizures, breathing difficulties, lethargy, limpness or stiffness of arms and legs, and bleeding in

the eye. Long-term effects may include cognitive and learning disabilities, paralysis, speech impairments, hearing loss, vision problems, and behavior disorders. In approximately 20 percent of cases the victim dies.

The Iowa Prevent SBS Team – comprised of representatives from Iowa Department of Public Health, Prevent Child Abuse Iowa, Iowa Department of Management, and Blank Children’s Hospital – worked collaboratively to plan and implement a statewide program to prevent Shaken Baby Syndrome. Through a scholarship opportunity, the team attended the PREVENT Institute for Child Maltreatment at University of North Carolina to receive six days of education by national experts in the field, and coaching toward the development of a five-year plan for Shaken Baby Prevention in Iowa.

Efforts by child abuse prevention advocates and victims’ families led to the passage and signing of a bill during the 2009 legislative session, directing the Iowa Department of Public Health to develop and implement a statewide SBS prevention plan. With work from the PREVENT Institute as a foundation, the plan was developed and is currently in a pilot implementation phase. Funds received through the Heartland Area Education Agency have allowed this pilot to serve birthing hospitals in a 12-county region in central Iowa. Additional hospitals throughout the state, including University of Iowa Children’s Hospital and St. Luke’s Hospital in Cedar Rapids, have located independent funding and implemented the program as well.

The educational program selected for use is the *Period of PURPLE Crying*, the only SBS prevention program having undergone randomized, clinical trials to measure its effectiveness. Program development drew from more than 25 years of research on normal infant crying. Using a child development education approach, the *Period of PURPLE Crying* program helps parents and caregivers understand the features of crying in normal infants that can lead to shaking or abuse. The program teaches these crying characteristics in a 10-minute DVD which is available in ten languages. The word PURPLE is an acronym representing the prominent characteristics of inconsolable infant crying: **P**eaks at 2 months; **U**nexpected; **R**esists soothing; **P**ain-like face; **L**ong lasting; **E**vening (baby may cry more in late afternoon or evening). Education is provided to new parents by nurses at the time of discharge from the hospital. For more information on the *Period of PURPLE Crying*, visit www.purplecrying.info.

**Statewide
Perinatal Care
Program**

In May of 2008, The Commonwealth Fund ranked Iowa as the state with “the best overall health care system for children”. One of the several programs cited as instrumental to this achievement was the Iowa Statewide Perinatal Care Program. Perinatal care is care provided to pregnant women, their fetuses, and their newborns (neonates) in community programs, hospitals and medical centers.

Members of the Statewide Perinatal Care Team include the following:

- Michael Acarregui, MD – Neonatologist
- Stephen Hunter, MD, PhD- Maternal- Fetal Medicine Specialist
- Penny Smith, RNC – Neonatal Nurse Consultant
- Amy Sanborn, RNC- Obstetrical Nurse Consultant
- Susan Carlson, RD – Neonatal Dietician
- Katherine Brogden – Secretary and Program Coordinator.

All team members are employed at University of Iowa Hospitals and Clinics and are involved in the care of complicated obstetrical and neonatal patients.

The program is in its 36th year of operation and is responsible for maintaining Iowa's Regionalized System of Perinatal Care. This is Iowa's system of referral for progressively complex patients to higher levels of care. This system results in excellent obstetrical and neonatal outcomes with an infant mortality rate among the lowest in the United States (< 5.0 / 1000 live births) and a remarkably low neonatal death rate in Iowa's rural hospitals (1.48 / 1000 live births).

Due to these outcomes there is interest from other states in modeling the program to improve their perinatal outcomes. The program promotes quality and safety in patient care through:

- Direct critical peer review of medical records with visits to all Iowa hospitals. Level I hospitals with obstetrical services are visited on a biennial basis and Level II and III centers are visited annually. Review of adverse events including all maternal, neonatal and fetal deaths is performed with a focus on issues of possible preventability.
- Dissemination of current, evidence-based guidelines to hospitals, administrators, nurses and physicians via:
 - On site delivery – face-to-face education and discussion.
 - Quarterly publication of the newsletters, *The Iowa Perinatal Letter* and *Progeny*.
 - Generation of the *Iowa Guidelines for Perinatal Services*.

These activities and publications promote current standards for safety and quality in patient care that serve to standardize perinatal care across Iowa. The team along with IDPH staff presents the Annual Iowa Conference on Perinatal Medicine; over 220 physicians, nurses, public health officials and hospital administrators attend annually. Nationally known experts in perinatal care speak at this two-day conference in Des Moines. This is an unusual educational opportunity since it is designed to meet the needs of all perinatal healthcare providers. This year's topics include "Perinatal Safety 2010: 5 Simple Steps" and "Simulation: Not your Mentor's Education". This professional conference is self-sustaining and funded primarily through the registration fees of the attendees.

The Iowa Statewide Perinatal Care Team is instrumental in generating and updating the *Iowa Perinatal Guidelines for Services* every few years. The guidelines are then reviewed and approved by a multidisciplinary committee. The most recent guideline was published and distributed in 2008. Recent changes in the guidelines included recommendations for screening of mothers and babies for exposure to toxic substances during pregnancy, safe guidelines for labor induction and the use of Pitocin, and a new regionalized designation for hospitals with increased neonatology services.

Domestic and Sexual Violence Prevention

Iowa is enhancing efforts to integrate domestic and sexual violence prevention and response into IDPH programs and services. Through a federal grant from the Office on Women's Health of the U.S. Department of Health and Human Services and The Family Violence Prevention Fund, Iowa became one of ten national sites to receive \$200,000 for a groundbreaking two-year violence prevention initiative. Known as Iowa's *Project Connect: A Coordinated Public Health Initiative to Prevent Violence against Women*, it is designed to find new ways to identify, respond to, and prevent domestic and sexual violence; and promote an improved public health response to abuse.

Project Connect will work with family planning and maternal child health and perinatal programs to develop education opportunities, policy, and protocols to improve public health responses to domestic and sexual violence. *Project Connect* grantees will also provide basic health and reproductive health services in domestic and sexual violence programs.

Efforts will specifically include provider and policy assessments and analysis within Title V, Title X and STI program contractors to identify barriers to intimate partner and sexual violence screening, referral linkages and referral options for services to victims of domestic and sexual violence and coercion. Specific protocols for screening, intervention, and referral will be developed.

Life Course Health Development

The life course health development perspective provides a framework to address social determinants, their effect on individual health, and more importantly, on the health equity of the population. Iowa is looking at opportunities to expand research and develop a policy agenda based on the life course model. Additionally, social determinants of health literature has implications for practice. The 2007 Iowa Profile page from the National Survey of Children's Health revealed the following:

- 51.3 percent of Iowa children live in a neighborhood with a park, sidewalks, a library and a community center as compared to 48.2 percent nationally
- 15.5 percent of Iowa children live in neighborhoods with poorly kept or dilapidated housing as compared to 14.6 percent nationally
- 89.1 percent of Iowa children live in neighborhoods that are supportive as

- compared to 83.2 percent nationally
- 92.2 percent of Iowa children live in a neighborhood that is usually or always safe as compared to 86.1 percent nationally

Another component of all children's health and well being that requires coordinated efforts from multiple service providers and informal supports is the need to promote early literacy by reading to young children. Data from the same survey tell us that only 54.3 percent of Iowa's children ages 0-5 years are read to every day as compared to 47.8 percent nationally. CHSC will be coordinating a Reach Out and Read project with ARRA funds from IDEA, Part C to promote early literacy in Iowa.

This new approach will force Title V agencies to examine closely the way they have assessed care, and to respond to what is needed by an approach that involves a life course approach as well as factors impacted by social determinants of health paradigms. It will be necessary for Iowa to forge new partnerships to meet these needs.

Data Capacity

Iowa MCH Data Integration Project

The Iowa MCH Data Integration Project is funded by a 2006-2011 State Systems Development Initiative (SSDI) grant. The project focuses on Title V Health Systems Capacity Indicator #9(A): the ability of States to assure that the Maternal and Child program and Title V agency have access to policy and program relevant information and data.

The project is designed to strengthen system-level data capacity to support the development of systems of care at the community level. The goals of the project include the following:

- Direct Iowa's ongoing Title V Needs Assessment activities with a focus on the Healthy People 2010 Goal, "Eliminate health disparities for racial and ethnic groups, people with low income, people with disabilities, women, and people in different age groups as compared to the total population"
- Evaluate the ability of Iowa's key MCH data systems to provide the statewide program and local contract agencies with policy and program relevant information and data
- Strengthen Iowa's MCH infrastructure through assurance of the capacity of the MCH data workforce to meet data system development, maintenance, and integration needs

Objectives for goal one relate to the replication of the Iowa Child and Family Household Health Survey in 2010. Objectives for goal two involve formal evaluations of MCH data system utility for statewide and local decision-making. Objectives for goal three focus on strengthening the capacity of the statewide MCH data workforce.

CYSHCN Data

The need for accurate, reliable CYSHCN data is apparent at every level of Child Health Specialty Clinics (CHSC). New collection mechanisms are being developed to capture data for the four components of the system of care model. The University of Iowa's new EPIC electronic medical record system is being implemented for all direct patient care, but an efficient care coordination/case management component has not yet been incorporated.

Interagency partners continue to maintain their own data bases, such as the Early ACCESS web-based IFSP. At this time, the databases do not interact and data entry must be duplicated. Data collection/management has not been adequately funded within CHSC in recent years and no staff have been dedicated to assuring data are integrated to assist with program-wide quality improvement efforts. The Science of Improvement quality improvement methodologies that will be used at CHSC will demand accurate data be available to decision-makers. CHSC will continue to serve on statewide interagency committees examining data-sharing needs.

Child and Adolescent Reporting System (CAREs)

The Child and Adolescent Reporting System (CAREs) is a web-based data system defined as the official clinical record for all Iowa children that receive Title V child health services, regardless of funding source. The services include medical history, physical exam, measurements, nutritional assessment, oral health assessment, developmental and behavioral assessment, sensory screening, immunizations, anticipatory guidance, and other services. The IDPH Bureau of Family Health maintains staffing to assist the local child health contract agencies in use of the CAREs electronic health record.

The CAREs electronic health record is used by each Title V child health contract agency to monitor needs and record provision of services. CAREs serves as both a permanent clinical health record and a statewide data system. According to CAREs, Title V child health contract agencies provided services to 160,286 Iowa children from October 1, 2008 through September 30, 2009. The age breakdown of the children is shown in the table below.

Iowa Children Served By Age, FFY2009

Less than 1 year	27,536
1 to 4 years	51,781
5 to 6 years	17,397
7 to 13 years	35,275
14 to 17 years	14,972
18 to 21 years	13,225
22 & Over years	100
Total All Ages	160,286

Source: Child and Adolescent Reporting System, FFY2009

Women's Health Information System

The Women's Health Information System (WHIS) is used by Iowa's Title V local maternal health contract agencies to document client information, service provision, plans of care, and pregnancy outcomes. Data files are exported from the local agencies to IDPH each month and aggregated data are used for federal reporting, program planning, and quality assurance evaluation. According to WHIS, Title V maternal health contract agencies had 95,234 contacts with Iowa women from October 1, 2008 through September 30, 2009. The breakdown of the contacts is shown in the table below.

Iowa Maternal Health Contacts By Age, FFY2009

Prenatal Contacts	31,296
Nursing Contacts	15,340
Nutrition Contacts	7,658
Social Worker Contacts	8,034
Oral Health Contacts	2,906
Total	95,234

Source: Women's Health Information System, FFY2009

Ahlers

Ahlers Integrated Solutions, developed by Ahlers and Associates of Waco, Texas, is a web-based software system for Title X clinic management and record-keeping. The software tracks patient care from appointment through billing and is customized to satisfy state and local agency reporting requirements. The Ahlers system provides a centralized location for data for the Family Planning Annual Report required by the US Department of Health and Human Services, Office of Population Affairs. Each IDPH Title X local contract agency uses Ahlers data to track and evaluate clinical needs and services.

MCH Epidemiology

Iowa's ability to utilize MCH data received a boost in FFY05 with the assignment of an MCH epidemiologist from the Centers for Disease Control and Prevention. Dr. Debra Kane began her duties in Iowa in January 2005. Throughout the subsequent years, her responsibilities have been carefully planned to coincide with Title V needs and SSDI objectives.

Efficient Use of CYSHCN Resources

CHSC funding from federal and state resources has decreased since 1996 while wages, technology costs and general expenses have risen significantly. This has forced CHSC to redesign its services to more closely align with the new vision statement, *to assure a coordinated system of care for Iowa's CYSHCN* and to partner more effectively with primary care physicians for the delivery of direct clinical services. Care coordination and family support are

playing increased roles as staff time of ARNPs is reduced and appropriate triage of patients is incorporated into CHSC practice. The need for continued staff training, monitoring of program data, and family satisfaction data will be increasingly important. There is a continued need to decrease duplication of services in some areas of the state, which will require more effective partnering. In other areas of the state where there are few resources, use of technology to connect families by remote access will be crucial. Interagency teams and in some cases, interstate teams must effectively partner to maximize their ability to capture discretionary grants necessary for systems-improvement activities. Health care reform legislation must be monitored and program standards revised to reflect new law. The need to maximize reimbursements from payers is a focus area for CHSC quality improvement efforts.

Public/Private Partnerships

CHSC has recognized the importance to reach out to new players who have not traditionally partnered with CHSC. In time of declining resources, more emphasis will be placed on partnering with private entities, reducing duplication of effort, and partnering to secure appropriate resources. Partnerships are needed to effectively share data in order to illustrate the need with policymakers and funders, the need for a comprehensive system of supports and services for CYSHCN.

Quality Assurance and Improvement

Local MCH contract agencies submit quarterly quality assurance reviews to IDPH. The quarterly reviews focus on general record elements, as well as the quality of service documentation found in the electronic records. As part of the fee-for-service billing for informing and care coordination, IDPH staff provide three levels of quality assurance review. BFH staff participate in selected local agency chart audits and review internal chart audit submissions. Quality assurance issues are also addressed through review of the annual Title V application for maternal and child health services and annual reports submitted by contractors.

A MCH Program Guidebook is under development for staff of local MCH contract agencies. The guidebook uses instructional strategies to move users from knowledge of concepts to demonstration of competency. Each chapter includes topic specific narrative and competency checklists. Developers anticipate publishing the guidebook in October 2010. .

In 2009, the Iowa EHDI care team participated in the National Improvement in Child Health Quality (NICHQ) year-long training on improving the system of care for CYSHCN. Selected members of the NICHQ team also enrolled in a private health partner's Science of Improvement course and are now certified quality improvement advisors. Other staff are organizing teams to participate in quality improvement classes at the University of Iowa Hospitals

and Clinics, and skills are being applied to clinical aspects of CHSC programming. Data collection, tracking and trend analysis are being required of all elements of the program. Standards of care are being developed as part of the system of care quality improvement monitoring tools.

**Business Case
for Data
Integration**

Sharing data to create a more comprehensive health record for an individual has become increasingly important in recent years throughout the health care industry. However, the concept of *integrating* health information systems has been hampered because of issues related to data ownership, privacy, and a lack of understanding of costs versus benefits. To address some of these issues and provide plausible data to document the benefits of integration, a business case model was developed by the Public Health Informatics Institute (PHII) of Decatur, Georgia, with the support of a contract with the Health Resources and Services Administration, Maternal and Child Health Bureau (HRSA/MCHB), and a grant from The Robert Wood Johnson Foundation.

In 2009, Iowa MCH programs had the opportunity to work directly with PHII staff to develop the Iowa Business Case Model (BCM) to forecast the business case for integrating child health information systems in Iowa. PHII staff explained the assumptions and theories behind the BCM tool. Iowa MCH staff examined the referenced data and place-holder data in the BCM tool and identified available data that would make the BCM a reliable predictor of the value of integration in Iowa.

PHII and IDPH staff collaborated to develop a scenario on which to run calculations using the BCM. It was determined that the Immunization Registry and the Women, Infants and Children (WIC) Program were currently linked, but not integrated. The proposed integration scenario was to include those two systems along with Vital Records, Newborn Dried Bloodspot Screening (NDBS), Early Hearing Detection and Intervention (EHDI), Lead Screening, Early Periodic Screening, Diagnosis and Treatment (EPSDT), and birth defects surveillance in a centralized data storage system.

The Iowa Business Case Model calculations forecasted positive financial benefits in each of the programs except EPSDT. In general, the financial benefits were due to the increase in the number of children who were *not* lost in the system and who would receive early interventions to prevent complications from disorders that would benefit from improved treatment and follow-up. In addition, the financial savings reflected a decrease in medical and special education costs and an increase in lifetime productivity.

The complete report of the 2009 Iowa Business Case Model can be found on the IDPH website at http://www.idph.state.ia.us/hpcdp/common/pdf/family_health/ia_business_case_model.pdf

**State Employee
Diversity
Training**

In 2009 all Iowa state employees received structured diversity training called *Unleashing the Power of Diversity*. The Iowa Department of Administrative Services Human Resources Enterprise organized the 750 half-day sessions across the state to train more than 22,000 employees.

In compliance with Executive Order Number Four, the highly-interactive sessions were designed to expand all state employees' knowledge and awareness of diversity issues. The objectives of the training are listed below.

- Participants will possess techniques to communicate effectively across cultural lines.
- Participants will be aware of the impact of discrimination on those who have experienced it.
- Participants will know how to foster cooperation and resolve conflict in cross cultural situations.
- Participants will develop an action plan to apply training concepts in the workplace.

The full curriculum of the 2009 diversity training is on the IDPH website at http://learnatpds.iowa.gov/images/pds/pdf/diversity/Revised_EmployeeHO_3_27_2009.pdf

**Early
Intervention**

Early ACCESS, Iowa's IDEA, Part C early intervention program, was described in [Section Two](#) of this document. The state's efforts in building a system of care for infants and toddlers ages 0-3 years are described in the annual report to the Office of Special Education. There are components of this system that still require attention by health providers.

Iowa Department of Education (IDE) subcontracts with IDPH to provide technical assistance to the state and partnering stakeholders regarding health issues, with a targeted emphasis on children with hearing loss and children with elevated lead levels. IDE also subcontracts with CHSC to provide technical assistance to the state and partnering stakeholders to assure the needs of infants and toddlers with special health care needs are included in all aspects of the system. CHSC's ARNPs provide screenings and developmental assessments and serve as experts regarding health issues of infants and toddlers in Early ACCESS. CHSC registered dietitians have established screening procedures for all children in Early ACCESS, and provide nutrition services for children who screen positive. Parent consultants from CHSC are hired as service coordinators for the specific populations of medically complex, drug-exposed, and premature infants. Staff nurses provide care coordination with medical practices and subspecialists as needed. CHSC's focus is to assure the health needs of infants and toddlers are reflected in care plans and that all referring entities

recognize the impact of health on a child’s ability to grow and develop. CHSC parent consultants have a unique skill in connecting families to community resources and other parent groups, since they are all themselves parents of children with special health care needs.

Although significant improvements have occurred in recent years, many needs remain such as: data-sharing mechanism is still not fully functioning, primary care practitioners report difficulty receiving timely information regarding their referrals, children with qualifying health conditions are not reliably being enrolled, and the impact of health conditions on a child’s development are not all yet well-understood by non-health early interventionists.

Family Support CHSC parent consultants are leading a collaborative effort to unite other family support groups as it implements the HRSA-funded Family to Family Health Information Center grant and an Administration on Developmental Disabilities grant that will train a network of 70 family navigators in Iowa during the next five years.

Uniform competencies in the skill set of parent consultant and family support workers is a challenge the state is addressing. CHSC has applied to become a credentialed agency using the Iowa Family Support Standards and is participating in the Family Support Leadership Group of the Early Childhood Iowa Quality Services and Programs Component Group. Core competencies are also being considered for use by stakeholders in parent advocacy groups in the Family to Family and Family 360 Governance Council.

Exposure to Environmental Toxins CHSC received ARRA funds through IDEA, Part C to conduct a two-year study on the impact of prenatal and early infancy exposure to environmental toxins on neurological cognitive development. Data will be available to estimate the increased number of infants and toddlers who would be eligible for Early ACCESS services if selected environmental toxin exposures were added to the list of Early ACCESS eligible conditions. Data will be used for Early ACCESS state level program planning and policy recommendations. Data about Iowa children’s exposure to environmental toxins are located in [Section Three](#) of this document.

Autism Spectrum Disorder As discussed in [Section Three](#) of this document, the Iowa Regional Autism Services Program estimates that 35 percent of Iowa children under age 21 years with autism spectrum disorder (ASD) are not known to the service system. Stakeholders in Iowa’s ASD state systems and services recognize the following capacity limitations.

- Strained resources within educational systems to provide for

- individualized needs and early identification and intervention services
 - Lack of preparedness of general and special education professionals and support service providers in public schools
 - Concerns for equitable and timely access to early screening services, medical diagnostic support and care coordination services.
 - Insufficient financial support systems to meet family needs for crisis management and respite
 - Shortage of professionals to sustain living, learning, and working environments of adults with autism spectrum disorder
 - Need for a comprehensive interagency data tracking system
-

Primary Care Access

In March 2010, the Primary Care Office at the Iowa Department of Public Health reported that the following Health Professional Shortage Area (HPSA) designations existed in Iowa:

- Primary Care HPSAs: 54 of Iowa’s 99 counties have designations for primary care HPSAs. In addition, there are facility-specific designations issued to Federally Qualified Community Health Centers (13), Rural Health Clinics (23), Correctional Facilities (5), and Native American Tribal Populations (1).
 - Dental HPSAs: 62 of Iowa’s 99 counties have designations for dental health HPSAs. All but one designation covers the entire county. 51 of these HPSA designations are based on low-income and Medicaid eligible populations. It is anticipated that more counties will be designated at dental HPSAs in the next year.
 - Mental Health HPSAs: 89 of Iowa’s 99 counties are designated as mental health HPSAs.
 - Governor’s Designated Shortage Area: Of Iowa’s 99 counties, 70 rural counties are designated as Governor’s Shortage Areas. This state designation is for Rural Health Clinic eligibility.
 - Medically Underserved Area and Medically Underserved Population designations exist in 57 counties. Of those, 41 counties are partially designated while 16 counties are entirely designated.
-

Electronic Health Information Exchange

On March 15, 2010 IDPH received notification from the Office of National Coordinator for Health Information Technology that the Iowa eHealth Project was awarded \$8,375,000 over the next four years. The funding, made possible through the American Recovery and Reinvestment Act of 2009, will drive the planning and implementation of Iowa’s statewide health information exchange.

The Iowa eHealth Executive Committee and Advisory Council draw from a large pool of volunteers throughout the state with expertise in health information technology. Workgroups and subcommittees of the Iowa eHealth

Project include those listed below.

- Assessment
- Communication and Outreach
- Continuity of Care and Interoperable Electronic Health Records
- Governance and Finance
- Health Information Exchange Infrastructure and Networks
- Provider Adoption of Electronic Health Records
- Safeguard Privacy and Security
- Workforce and Education

Members of Iowa’s MCH community monitor the progress of the Iowa eHealth Project closely for opportunities to provide input to meet the needs of the MCH populations.

**Home Visiting
Needs
Assessment**

On March 23, 2010, the federal Patient Protection and Affordable Care Act became law. Included in this new law is a provision for the creation of a Maternal, Infant, and Early Childhood Home Visiting Program. The purpose of this program is to fund states to provide evidence-based home visitation services to improve outcomes for children and families who reside in at-risk communities. As a first step, Iowa Title V partners are conducting a needs assessment to identify the at-risk communities and which communities could benefit most from a maternal, infant, and early childhood home visiting program. A work group linking public and private partners is assisting with the development of the needs assessment. The goal of the collaborators is to strengthen and improve the currently existing home visiting programs and improve coordination of services in order to improve outcomes for families who reside in at-risk communities.

**Health
Planning**

At the state level, a five-year health improvement plan, called *Healthy Iowans*, is under development. Building blocks for the plan are such current department program plans as *Iowa’s Family Health Plan 2010*, the Title V Maternal and Child Health State Plan; linkage with Healthy People 2020; and local health priorities identified in Iowa’s 99 county Community Needs Assessment and Health Improvement Plan (CHNA & HIP) reports. *Healthy Iowans* will reflect priority public health concerns in the state with input from advisory groups including the Maternal and Child Health Advisory Committee.

At the local level, the Community Health Needs Assessment and Health Improvement Plan (CHNA-HIP) process is underway. Every five years, local boards of health lead a community-wide discussion about their community’s health needs and what can be done about them. A fundamental tenet of the effort is community participation in making decisions about improving the public’s health and mobilizing support for agreed-upon initiatives. The

maternal and child health request for proposals (RFP) in the Bureau of Family Health highlights the involvement of agencies in local health planning by including the following statement: “Applicants will be expected to participate in the 2011 CHNA-HIP process in each county served.”

Strategic Planning

Title V leaders across the nation recognize the difficulty in meeting increasing needs of MCH populations with decreasing fiscal and human resources. Iowa joins other states in experiencing state funding restrictions and reduced personnel. In 2010, the IDPH Bureau of Family Health embarked on a strategic planning process to determine strategies to address the disparity.

The strategic planning process, called *Getting to the Core*, was an attempt to identify the most important functions of the bureau and design strategies to maintain the strength of those functions. From the beginning, there was the realization that less important functions might receive reduced resources in the future. The unofficial motto was “We have been doing more with less for several years. It might be time to do less with less.”

The BFH bureau chief recruited a nucleus of experienced MCH program managers to assist in the process. After cataloguing and grouping all activities of the bureau, the participants classified each grouping into one of the following:

- Category 1: High importance/high performance
- Category 2: Low importance/high performance
- Category 3: High importance/low performance
- Category 4: Low importance/low performance

As the process continues through 2010, participants will develop short-term and long-term strategies to

- Sustain category 1 activities
- Refocus category 2 activities
- Improve category 3 activities
- Decline category 4 activities

One of the eight priority areas identified in this year’s Title V needs assessment was lack of a coordinated statewide system of care for CYSHCN. A new state performance measure (SPM) was developed: *The degree to which components of a statewide coordinated system of care for CYSHCN are implemented*. In defining components of the system, CHSC identified four components: direct clinical services, care coordination, family support and infrastructure. Each component is equally valuable to the system. This new SPM will guide the work of CHSC staff for the next five years. The Title V Index developed by the National Initiative for Children’s Healthcare quality will be the evaluation tool to monitor CHSC’s progress on developing its infrastructure-building capacity. The Title V Index examines six domains: 1)

Strategic leadership; 2) Partnerships across public and private sectors; 3) Quality improvement; 4) Use of available resources; 5) Coordination of service delivery; and 6) Data infrastructure.

Key leaders in Title V were described in the [Leadership](#) section of this document. There is a renewed effort within CHSC to develop new leaders at all program levels to assure continued competency, capacity, and succession planning as staff reach retirement age. Four teams have been assigned to implement quality improvement regarding the four components of a statewide coordinated system of care for CYSHCN.

Section 5: Selection of State Priority Needs

Overview

Introduction The priority needs and state performance measures identified for the Iowa MCH2015 Title V Five-Year Needs Assessment were developed with input from many MCH stakeholders across the state. The MCH2015 leadership team created a list of priority needs which were then prioritized by stakeholders. New state performance measures were developed from the ranked needs.

Contents This is the fifth section of the Iowa Title V Five-Year Needs Assessment Final Report. This section contains the following topics:

Topic	See Page
<u>List of Potential Priorities</u>	136
<u>Methodologies for Ranking / Selecting Priorities</u>	139
<u>Priorities Compared with Prior Needs Assessment</u>	143
<u>Priority Needs and Capacity</u>	145
<u>MCH Population Groups</u>	147
<u>Priority Needs and State Performance Measures</u>	148

List of Potential Priorities

Process

Using the primary focus areas developed during the strategic planning process described in [Section One](#), stakeholders set about creating a list of potential priorities. Each primary focus area was opened for input by those most knowledgeable about the issue. For example, the focus area *Children's Oral Health* was addressed by staff from the IDPH Bureau of Oral Health in consultation with the local child health contract agencies.

During this phase of the needs assessment, the MCH stakeholders repeatedly turned to the 2005 Iowa Child and Family Household Health Survey as the primary data resource. Additional important data were obtained from the sources listed in [Section One](#) of this document.

Stakeholders created a list of issues to be considered for inclusion as state priority needs. This list included priorities from the previous needs assessment, needs that could not be addressed during the previous needs assessment, and emerging needs.

**Potential
Priority
Needs**

This table lists the twenty-four issues considered for inclusion as priority needs of Iowa's Title V population.

Table X – Primary Focus Areas and Related Potential Priority Needs

Focus Area	Potential Priority Need
Medical Home	<ol style="list-style-type: none"> 1. Lack of systems of care to assure that children and adolescents receive quality, comprehensive, coordinated health services 2. Limited availability of family-centered medical homes for CYSHCN 3. Lack of family-driven access to health information for CYSHCN
Quality of Care	<ol style="list-style-type: none"> 4. Lack of a coordinated health care delivery system (i.e. medical, dental, mental, developmental) for children in foster care 5. Lack of adoption of quality improvement methods within maternal and child health practice 6. Lack of standardized system of care coordination for CYSHCN
Reproductive Health	<ol style="list-style-type: none"> 7. Lack of coordinated systems of care for preconception and interconception care for high-risk and low income women 8. Barriers to access to health care, mental health care and dental care for low-income pregnant women
Children's Oral Health	<ol style="list-style-type: none"> 9. Insufficient early and regular preventive dental care for children ages 0-5 years 10. Lack of providers to do restorative dental treatment for children ages 0-5 years
Women's Oral Health	<ol style="list-style-type: none"> 11. Lack of access to preventive and restorative dental care for low-income pregnant women
Healthy Mental Development	<ol style="list-style-type: none"> 12. Lack of access to mental health providers for children ages 0-5 years 13. Lack of a coordinated system of healthcare provider training regarding early screening and early identification of autism
Mental Health of Parents	<ol style="list-style-type: none"> 14. Lack of coordinated system to screen, identify and refer for maternal depression and family stress
Racial and Ethnic Disparities	<ol style="list-style-type: none"> 15. Racial disparities in maternal and child health outcomes 16. Higher rates of infant mortality and prematurity for African American women
Rural Disparities	<ol style="list-style-type: none"> 17. Lack of access to health services, including mental health providers, for women and children in rural areas
Injury Prevention – Early Childhood	<ol style="list-style-type: none"> 18. High proportion of children ages 0-14 years experiencing unintentional injuries
Injury Prevention – Adolescent	<ol style="list-style-type: none"> 19. Lack of system level strategies to address youth risk-taking behaviors that result in intentional and unintentional injuries for adolescents ages 15-19 years
Specialty Care	<ol style="list-style-type: none"> 20. Lack of access to specialty care for low income adolescents and children
Preventive Care	<ol style="list-style-type: none"> 21. Limited comprehensive systems of age-appropriate screening, referral and follow-up for children ages 0-21 years 22. Lack of statewide monitoring system for the impact of social determinants of health (e.g. environmental, economic, prenatal exposure to toxins, exposure to drugs/alcohol)
Physical Health and Nutrition	<ol style="list-style-type: none"> 23. High proportion of overweight and physically inactive MCH population 24. Lack of coordinated system of care for nutrition services for CYSHCN

Data Detail Sheets

To assist stakeholders in their prioritizing efforts, data detail sheets were prepared for the potential priority needs under each primary focus area.

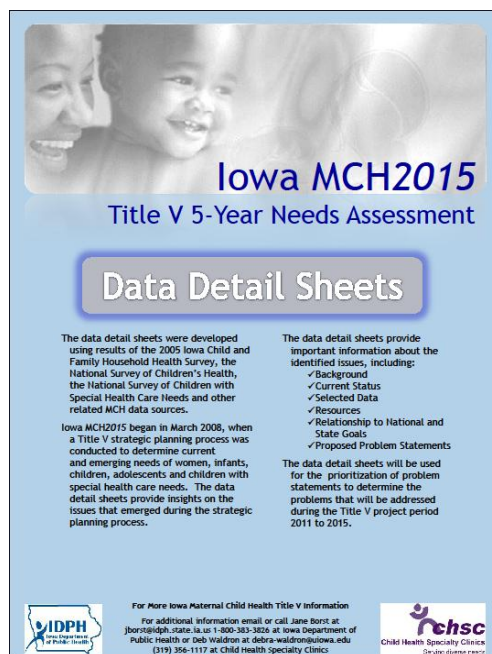
Resources for the data detail sheets included the 2005 Iowa Child and Family Household Health Survey, the National Survey of Children's Health, the National Survey of Children with Special Health Care Needs, and additional MCH data sources. Taking into account all data from these sources, the leadership team identified those data pieces that concisely illustrated the current state of each focus area to include in the data detail sheets.

For each primary focus area, the data detail sheet provided the following information:

- Background
- Current Status
- Selected Data
- Resources
- Relationship to National and State Goals
- Proposed Problem Statements

View Data Detail Sheets

The cover of the Iowa MCH2015 Data Detail Sheets appears below.



[Appendix C](#) contains the data detail sheets for all primary focus areas and potential priority needs.

Methodologies for Ranking / Selecting Priorities

Prioritization Method

Once the listing of potential priority needs was complete, the MCH stakeholders began the process of determining which of them would be included in the 7-10 state priority needs. The prioritization method chosen for the Iowa MCH2015 process replicated that used in the previous two cycles. The method was adapted from materials included in the Family Health Outcomes Project at the University of California San Francisco.

Scoring Criteria

The scoring criteria and their definitions are listed below. These four criteria were identified by the leadership team and definitions were developed to help with the interpretation by stakeholders for each criterion. Based on feedback from the previous prioritization process, the number of criteria was kept to a minimum in order to simplify the prioritization.

- Number of individuals affected
 - The number of individuals impacted by the problem
 - Scored 5, 3, or 1 with 5 indicating large impact and 1 indicating small impact
 - Seriousness of issue
 - The extent to which this problem affects the health and well being of a population
 - Scored 5, 3, or 1 with 5 indicating large impact and 1 indicating small impact
 - Economic impact
 - The extent to which addressing the problem could reduce the financial burden on the community/state
 - Scored 5, 3, or 1 with 5 indicating large impact and 1 indicating small impact
 - Degree of demographic disparity
 - The degree of disparity among different populations as it relates to the problem
 - Scored 5, 3, or 1 with 5 indicating large impact and 1 indicating small impact
-

Prioritization Venues

Multiple survey venues were employed in an effort to engage as many stakeholders as possible in the prioritization process. Groups of stakeholders with regularly scheduled meetings were given the opportunity to provide input via an on-site interactive process or on-site paper process. An online venue gave additional stakeholders the chance to participate.

**On-site
Interactive
Venue**

The Iowa MCH local contract agencies routinely come together for an annual conference each October. During the 2009 fall conference, representatives of the local contract agencies had the opportunity to participate in a highly interactive prioritization of the twenty-four problem statements.

The room was organized so stakeholders were seated together at round tables to facilitate group discussion about the problem statements. Each participant received a list of the 24 problem statements, data detail sheets, and scoring criteria definitions.

The scoring criteria were printed on different colored paper ballots distributed at each table. Each table had a collection bag to collect the ballots for each problem statement. The facilitator of the process took each problem statement one at a time and led the group to vote on the four criteria. For the first problem statement, the group went through each criterion individually to help guide them through the process and answer any questions that arose. After this first problem statement, each table went at their own pace to score each criterion, going through one problem statement at a time.

Time was allowed for discussion of each problem statement before the vote was called. Staff members from the IDPH Bureau of Family Health and Oral Health Bureau monitored each table to guide the process and record comments and questions. The resulting comments were helpful in learning how stakeholders evaluated the interactive process.

**On-site Paper
Venue**

When possible, the Title V leadership team requested time on the agendas of meetings of stakeholder groups. After receiving an introductory explanation and a set of data detail sheets for reference, group members voted using a paper ballot that incorporated all 24 problem statements and the scoring criteria. The graphic below illustrates the layout of the paper ballot.

Problem	No. of Individuals Affected	Economic Impact	Degree of Demographic Disparity	Seriousness of Issue
	5=high 3=medium 1=low	5=high 3=medium 1=low	5=high 3=medium 1=low	5=high 3=medium 1=low
1. Lack of systems of care to assure that children and adolescents receive quality, comprehensive, coordinated health services				
2. Limited availability of family-centered medical homes for CSHCN				
3. Lack of family-driven access to health information for CSHCN				
4. Lack of a coordinated health care delivery system (i.e. medical, dental, mental, developmental) for children in foster care				
5. Lack of adoption of quality improvement methods within maternal and child health practice				
6. Lack of standardized system of care coordination for CSHCN				
7. Lack of coordinated systems of care for preconceptional and interconceptual care for high-risk and low income women				
8. Barriers to access to health care, mental health care, and dental care for low-income pregnant women				
9. Insufficient early and regular preventive dental care for children ages 0-5				
10. Lack of providers to do restorative dental treatment for children ages 0-5				
11. Lack of access to preventive and restorative dental care for low-income pregnant women				
12. Lack of access to mental health providers for children ages 0-5				
13. Lack of a coordinated system of healthcare provider training regarding early screening and early identification of autism				
14. Lack of coordinated system to screen, identify and refer for maternal depression and family stress				
15. Racial disparities in maternal and child health outcomes				
16. Higher rates of infant mortality and prematurity for African American women				
17. Lack of access to health services, including mental health providers, for women and children in rural areas				
18. High proportion of children ages 0-14 experiencing unintentional injuries				
19. Lack of system level strategies to address youth risk-taking behaviors that result in intentional and unintentional injuries for adolescents ages 15-19				
20. Lack of access to specialty care for low income adolescents and children				
21. Limited comprehensive systems of age-appropriate screening, referral, and follow-up for children ages 0-21				
22. Lack of statewide monitoring system for the impact of social determinants of health (e.g. environmental, economic, prenatal exposure to toxins, exposure to drugs/alcohol)				
23. High proportion of overweight and physically inactive MCH population				
24. Lack of coordinated system of care for nutrition services for CSHCN				

Online Venue

Individuals and members of organizations throughout the state were invited to contribute to the prioritization process via the online venue. The invitations were extended through IDPH and CHSC relationships with professional associations such as the American Academy of Pediatrics (Iowa Chapter), the Iowa Academy of Family Physicians, and the Iowa Association of Nurse Practitioners. Feedback from Iowa family advocacy agencies was sought using the Family to Family Health Information Center (F2F) network,

representing hundreds of families in Iowa with diverse physical, developmental, behavioral/emotional, social and family support needs. The web-based strategy provided input from parents, family practice physicians, pediatricians, OB/GYN physicians, nurses, pediatric nurse practitioners, dietitians, dental hygienists, social workers, and others interested in the health of Iowa children and families.

Stakeholders utilizing the online venue were given access to the data detail sheets for reference. Through the use of SurveyMonkey, a survey was developed that allowed stakeholders to vote for each of the 24 problem statements based on the scoring criteria that were also included.

Analysis

After compiling the results from each venue, the four criteria were summed together to create a total score for each problem statement. An average score and average rank were then computed. The average rank took into consideration the variability in the number of responses for each problem statement. The top thirteen needs were then brought to the leadership team for final discussion and development of state performance measures.

Additional Considerations

Although the quantitative prioritization process resulted in an ordinal ranking of needs, the Iowa MCH2015 leadership group reassembled for debriefing discussions before finalizing the selection of priority needs. This step allowed expression of any previously withheld reservations or concerns. It also allowed final discussion of newly emerging considerations before closing out the prioritization process. During this discussion high priority needs were eliminated from consideration if they closely matched existing Title V national priority needs.

Priorities Compared with Prior Needs Assessment

Priorities

Using the methodologies described in the previous section, the Iowa MCH community chose the 13 priorities listed in the table below. The need statements are listed by rank order according to the aggregated scoring from all prioritization venues.

Rank	Need Statement
1	Racial disparities in maternal and child health outcomes
2	Lack of access to preventive and restorative dental care for low-income pregnant women
3	Higher rates of infant mortality and prematurity for African American women
4	High proportion of children ages 0-14 years experiencing unintentional injuries
5	Lack of coordinated system to screen, identify and refer for maternal depression and family stress
6	Lack of providers to do restorative dental treatment for children ages 0-5 years
7	Lack of coordinated system of care for nutrition services for CSHCN
8	Lack of adoption of quality improvement methods within maternal and child health practice
9	Lack of system level strategies to address youth risk-taking behaviors that result in intentional and unintentional injuries for adolescents ages 15-19 years
10	Barriers to access to health care, mental health care, and dental care for low-income pregnant women
11	Lack of a coordinated system of healthcare provider training regarding early screening and early identification of autism
12	Insufficient early and regular preventive dental care for children ages 0-5 years
13	Lack of coordinated systems of care for preconception and interconception care for high-risk and low income women

A graph displaying the aggregate score received by each of the top thirteen need statements is located in [Appendix B](#) of this document.

**Comparison to
Previous
Priorities**

The priorities from the previous five-year needs assessment were not continued as a result of the Iowa MCH2015 process. As mentioned in the earlier section, the needs included for prioritization were inclusive of both previous and emerging needs of our MCH populations. Stakeholders were asked to think broadly about Iowa's MCH populations as they exist now while prioritizing the need statements during this needs assessment process. The priorities that emerged were not the same as the priorities addressed during the last five-year needs assessment. The end result was a replacement of the 2005 SPMs for the new SPMs which will be addressed beginning in 2011.

**Significance of
New Priorities**

Iowa MCH stakeholders carefully considered why each new priority should be added to the state's Title V plan for the upcoming five-year period. The data detail sheets, located in [Appendix C](#) of this document, describe the significance of the new priorities.

Priority Needs and Capacity

Need Statements by Pyramid Level

All four MCH pyramid levels were considered during the prioritization process. The table below displays the thirteen Iowa priority needs as they relate to the four MCH pyramid levels.

Need Statement	Pyramid Level
Racial disparities in maternal and child health outcomes	Infrastructure Building
Lack of access to preventive and restorative dental care for low-income pregnant women	Direct Care Enabling Infrastructure Building
Higher rates of infant mortality and prematurity for African American women	Infrastructure Building
High proportion of children ages 0-14 years experiencing unintentional injuries	Infrastructure Building
Lack of coordinated system to screen, identify and refer for maternal depression and family stress	Infrastructure Building Population Based
Lack of providers to do restorative dental treatment for children ages 0-5 years	Direct Care Enabling Infrastructure Building
Lack of coordinated system of care for nutrition services for CSHCN	Infrastructure Building
Lack of adoption of quality improvement methods within maternal and child health practice	Infrastructure Building
Lack of system level strategies to address youth risk-taking behaviors that result in intentional and unintentional injuries for adolescents ages 15-19 years	Infrastructure Building
Barriers to access to health care, mental health care, and dental care for low-income pregnant women	Infrastructure Building
Lack of a coordinated system of healthcare provider training regarding early screening and early identification of autism	Infrastructure Building
Insufficient early and regular preventive dental care for children ages 0-5 years	Direct Population Based
Lack of coordinated systems of care for preconception and interconception care for high-risk and low income women	Infrastructure Building

**Capacity to
Address
Priority Needs**

Iowa's MCH program is well equipped to address the state priority needs. Through the local Title V and Title X contract agencies, other state agencies as well as statewide partnerships, Iowa's MCH program is able to provide direct care services, enabling services, population based services, and infrastructure building to Iowa's MCH population. Reference [Section Four](#), for additional information regarding the program's capacity to address the MCH population.

MCH Population Groups

MCH Populations Addressed

- The priority needs adequately cover the three major MCH population groups:
- preventive and primary care services for pregnant women, mothers and infants (MH)
 - preventive and primary care services for children (CH)
 - services for children and youth with special health care needs (CYSHCN)

The table below displays the need statements and the MCH population groups they cover.

Need Statement	MCH Population
Racial disparities in maternal and child health outcomes	MH, CH, CYSHCN
Lack of access to preventive and restorative dental care for low-income pregnant women	MH
Higher rates of infant mortality and prematurity for African American women	MH
High proportion of children ages 0-14 years experiencing unintentional injuries	CH, CYSHCN
Lack of coordinated system to screen, identify and refer for maternal depression and family stress	MH, CH, CYSHCN
Lack of providers to do restorative dental treatment for children ages 0-5 years	CH, CYSHCN
Lack of coordinated system of care for nutrition services for CYSHCN	CYSHCN
Lack of adoption of quality improvement methods within maternal and child health practice	MH, CH, CYSHCN
Lack of system level strategies to address youth risk-taking behaviors that result in intentional and unintentional injuries for adolescents ages 15-19 years	CH, CYSHCN
Barriers to access to health care, mental health care, and dental care for low-income pregnant women	MH
Lack of a coordinated system of healthcare provider training regarding early screening and early identification of autism	CH, CYSHCN
Insufficient early and regular preventive dental care for children ages 0-5 years	CH
Lack of coordinated systems of care for preconception and interconception care for high-risk and low income women	MH

Priority Needs and State Performance Measures

Guiding Principles

The guiding principles listed below were observed throughout the selection of performance measures.

- All performance measures will indicate consideration of health equity, social determinants of health, and life course perspective.
- If a national performance measure (NPM) or outcome measure (OM) is sufficient to measure progress on the issue, preference will be given to using that NPM instead of creating a new state performance measure.
- Unless specifically excluded, special populations such as CYSHCN and pregnant women will be assumed to be included in each newly created state performance measure.
- Data that are currently available will be selected to measure progress on performance measures unless there is compelling evidence that new data are needed.
- New SPMs measuring outcomes will be used when appropriate data are anticipated to be available during the subsequent five year period.
- New SPMs measuring process may be used with clearly defined measuring tools.
- In all cases, partnerships with existing programs will be considered during the development of performance measures. When possible, performance measures will provide motivation to enhance existing partnerships.

Linking Needs to Measures

The Iowa MCH2015 leadership team and selected subject matter experts developed state performance measures linked to the selected priority needs. Staff from the Iowa Department of Public Health and Child Health Specialty Clinics nominated, deliberated, and selected a performance measure by which the priority need would be monitored over the five-year period. In selecting performance measures, consideration was given to data availability and quality, relationship of performance measures to the larger priority need areas, and ability of the measures to facilitate partnerships to address needs.

Disposition of Priority Needs

Need Statement	Disposition
Racial disparities in maternal and child health outcomes	New SPM #3: The degree to which Iowa's state MCH Title V program addresses health equity in MCH programs
Lack of access to preventive and	New SPM #6: Percent of

restorative dental care for low-income pregnant women	Medicaid enrolled women receiving preventive dental health services during pregnancy
Higher rates of infant mortality and prematurity for African American women	New SPM #3: The degree to which Iowa's state MCH Title V program addresses health equity in MCH programs
High proportion of children age 14 years and under experiencing unintentional injuries	New SPM #8: Rate of hospitalizations due to unintentional injuries among children ages 0-14 years
Lack of coordinated system to screen, identify and refer for maternal depression and family stress	New SPM #5: The degree to which the health care system implements evidence-based prenatal and perinatal care
Lack of providers to do restorative dental treatment for children age 5 years and younger	New SPM #7: Percent of Medicaid enrolled children ages 0-5 years who receive a dental service
Lack of coordinated system of care for nutrition services for CSHCN	New SPM #2: The degree to which components of a coordinated statewide system of care for CYSHCN are implemented
Lack of adoption of quality improvement methods within maternal and child health practice	New SPM #1: The degree to which the state MCH Title V program improves the system of care for mothers and children in Iowa
Lack of system level strategies to address youth risk-taking behaviors that result in intentional and unintentional injuries for adolescents ages 15-19 years	New SPM #8: Rate of hospitalizations due to unintentional injuries among children ages 0-14 years (Intentional and unintentional injuries among adolescents ages 15-19 years deferred to next 5-year needs assessment.)
Barriers to access to health care, mental health care, and dental care for low-income pregnant women	New SPM #5: The degree to which the health care system implements evidence-based prenatal and perinatal care
Lack of a coordinated system of healthcare provider training regarding early screening and early identification of autism	New SPM #2: The degree to which components of a coordinated statewide system of care for CYSHCN are implemented
Insufficient early and regular	New SPM #7: Percent of Medicaid

preventive dental care for children ages 0-5 years	enrolled children 0-5 years who receive a dental service
Lack of coordinated systems of care for preconception and interconception care for high-risk and low income women	New SPM #4: Percent of family planning clients (women and men) who are counseled about developing a reproductive life plan

Scope of New SPM #8 – Unintentional Injuries

There were two need statements concerning unintentional injuries. One need statement addressed children age 14 years and under; the other need statement addressed adolescents ages 15-19 years. After deliberation, the Iowa MCH2015 stakeholders determined the need should be addressed for younger children first, within the upcoming five-year process. The need, “intentional and unintentional injuries among adolescents ages 15-19 years”, was deferred for consideration during the next 5-year needs assessment.

Final Priority Need Statements

The following were selected as the final priority need statements.

1. Lack of adoption of quality improvement methods within maternal and child health practice
2. The degree to which components of a coordinated statewide system of care for CYSHCN are implemented
3. Racial disparities in maternal and child health outcomes
4. Lack of coordinated systems of care for preconception and interconception care for high-risk and low income women
5. Barriers to access to health care, mental health care, and dental care for low-income pregnant women
6. Lack of access to preventive and restorative dental care for low-income pregnant women
7. Lack of providers to do restorative dental treatment for children age 5 years and younger
8. High proportion of children age 14 years and under experiencing unintentional injuries

The eight new state performance measures will be evaluated each year by either process indicators or outcome indicators.

The new SPMs that will be evaluated by process indicators are:

- SPM #1: The degree to which the state MCH Title V program improves the system of care for mothers and children in Iowa
- SPM #2: The degree to which components of a coordinated statewide system of care for CYSHCN are implemented
- SPM #3: The degree to which Iowa’s state MCH Title V program addresses health equity in MCH programs
- SPM #5: The degree to which the health care system implements evidence-based prenatal and perinatal care

The SPMs that will be evaluated by outcome indicators are:

- SPM #4: Percent of family planning clients (women and men) who are counseled about developing a reproductive life plan
- SPM #6: Percent of Medicaid enrolled women receiving preventive dental health services during pregnancy
- SPM #7: Percent of Medicaid enrolled children 0-5 who receive a dental service
- SPM #8: Rate of hospitalizations due to unintentional injuries among children ages 0-14 years

**Process
Indicators**

Iowa MCH2015 stakeholders intend that all the new SPMs will lead to positive outcomes for Iowa’s MCH populations. However, in some cases the stakeholders determined that it was necessary to address process during the next five years, with a subsequent examination of outcomes. The new SPMs #1, #2, #3, and #5 will focus on improving the way services are delivered to the MCH population.

By focusing on quality improvement, SPM #1 will help improve the Title V system in Iowa. Through system level improvements, outcomes for Iowa’s MCH population will ultimately be better addressed.

While discussing the two need statements related to CYSHCN, it was determined that one state performance measure could be developed that would be more inclusive of the broad CYSHCN community rather than limit the scope solely to those providers working with autism and focusing on nutrition services. As a result, SPM #2 will address the entire CYSHCN population with a focus on direct clinical service, care coordination, family support, and infrastructure building.

Two need statements addressed racial difference in maternal and child health outcomes. SPM #3 was meant to create one broad measure that would be inclusive of both racial disparities and infant mortality and prematurity.

SPM #5 was developed to include both need statements that focus on a medical home for pregnant women. This SPM will insure improved outcomes for women prior to and following their pregnancies.

**Outcome
Indicators**

SPMs #4, #6, #7, and #8 will focus on improving the outcomes of the MCH populations. In order to affect family planning as a whole, all involved parties should be included. Due to this, the population focus for SPM #4 was expanded to include both men and women in order to better align with overall Title X goals. State performance measures #6 and #7 focused on the Medicaid populations of women and children respectively given these populations have the greatest need and data are available to track their health outcomes. By using hospitalization rates, SPM #8 will be able to measure the changes in the proportion of unintentional injuries among children.

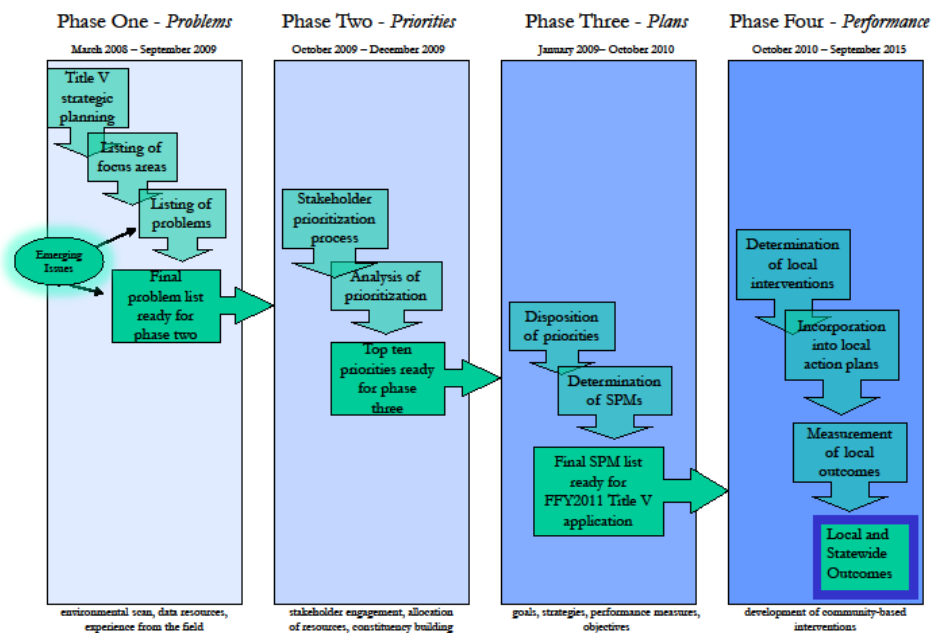
Section 6: Outcome Measures – Federal and State

Overview

Introduction

From 2008 to 2010, the Iowa MCH2015 leadership team has managed the determination of *problems, plans, and priorities*. As depicted in the Iowa MCH2015 logic model (displayed below and enlarged in [Appendix A](#), the next step is *performance*.

Iowa MCH2015 Needs Assessment Logic Model



Contents

This is the sixth section of the Iowa Title V Five-Year Needs Assessment Final Report. This section contains the following topics:

Topic	See Page
National Outcome Measures	151
New State Outcome Measures (optional)	154
Collective Positive Impact for the Title V Population	155

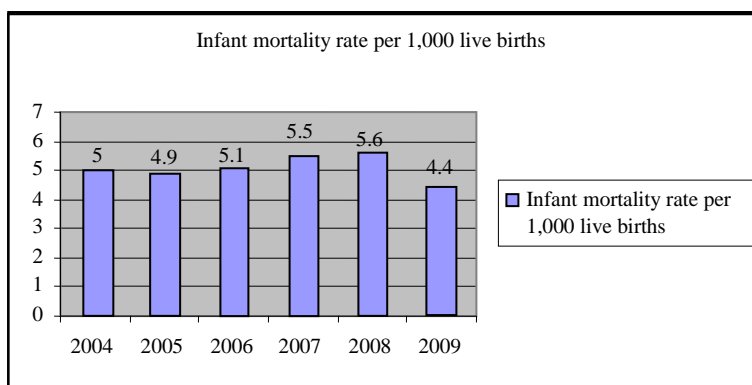
National Outcome Measures

Introduction

The following sections provide an overview of Iowa's progress toward the six Title V national outcome measures. The report discusses relationships between state program activities, National Performance Measures, and State Performance Measure to the Outcome Measures.

Outcome Measure #1

The infant mortality rate per 1,000 live births. (FFY09 target= 5.5)



Provisional data for 2009 show a rate of 4.4. This rate shows a decrease from 5.6 in 2008.

National Performance measures 1, 7, 10, 14, 15, 17,

18 and State Performance Measure 9 contributes to achieving this Outcome Measure.

Outcome Measure #2

The ratio of the Black infant mortality rate to the White infant mortality rate. (FFY09 target= 2.5)

The ratio of Black infant mortality rate to White infant mortality rate increased from 2.6 in 2008 to 2.7 in 2009 provisional data. The Black infant mortality rate was 11.9 and the White infant mortality was 4.4. The activities of the Infant Mortality Prevention Center and Healthy Start of Visiting Nurse Services of Iowa focus specifically on reducing infant mortality in minority populations. However, similar programs are not available outside of Polk County. Small numbers for minority populations continue to present challenges for effective monitoring of this objective. State Performance Measure #9 contributed to achieve this outcome measure.

**Outcome
Measure #3**

The neonatal mortality rate per 1,000 live births. (FFY09 target=3.3)

The neonatal mortality rate per 1,000 live births decreased from 3.5 in 2008 to 2.6 in 2009 provisional data. Strategies and recommendations developed by the Iowa Child Death Review Team will be used to address neonatal mortality. The CDRT recommendations can be found at http://www.idph.state.ia.us/hpcdp/medical_examiner_cdrt.asp.

**Outcome
Measure #4**

The postneonatal mortality rate per 1,000 live births. (FFY09 target=1.6)

The number of postneonatal deaths per 1,000 live births decreased from 2.1 in 2008 to 1.8 in 2009 provisional data. Performance measures as identified in Outcome Measure #1 apply.

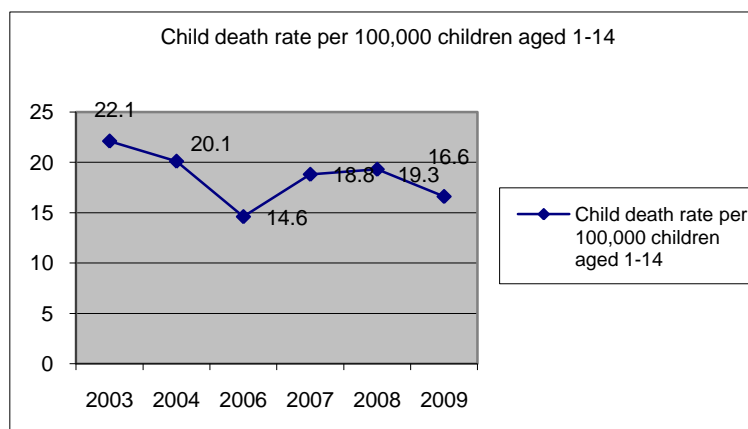
**Outcome
Measure #5**

The perinatal mortality rate per 1,000 live births. (FFY09 target=9.0)

The perinatal mortality rate decreased from 9.2 in 2008 to 7.6 in 2009 provisional data.

**Outcome
Measure #6**

The child death rate per 100,000 children aged 1-14. (FFY2009 target=16.8)



The total number of child deaths decreased based on 2009 provisional data, and the rate decreased from 19.3 in 2008 to 16.6 in 2009. Efforts to prevent unintentional

injury of children and adolescents are currently concentrated in the IDPH Bureau of Disability and Injury Prevention.

Activities of the Child Death Review Team continue to identify causes and recommendations for the reduction of child deaths throughout the state. The

CDRT Report can be found at
http://www.idph.state.ia.us/hpcdp/medical_examiner_cdr.asp.

National Performance Measures 1, 7, 10, 13, and 14 and State Performance Measure 9 contribute to achieve this Outcome Measure.

New State Outcome Measures (optional)

No State Outcome Measures

After careful review, Iowa elects not to adopt outcome measures at this time. The newly established state performance measures are primarily process measures targeting system development. The option to establish state outcome measures will be reviewed annually as part of the state plan development.

Building Iowa's Infrastructure

The Iowa MCH community intends to devote significant resources to statewide system changes during the next five-year project period. Iowa MCH2015 identified gaps in the service systems for Iowa's MCH populations. Efforts will now turn to building the infrastructure to meet the needs of all Iowa MCH populations.

Leadership

The directors of Child Health Specialty Clinics, IDPH Oral Health Bureau, and IDPH Bureau of Family Health have a shared commitment to monitoring growth of Iowa's MCH infrastructure. They understand that integration of programming across all levels of service and across all MCH populations is crucial.

Collective Positive Impact for the Title V Population

Changes in Programming

Through the next five-year project period, Iowa's MCH populations will benefit from major changes in Title V programming. Activities have been designed to fully support all national performance measures (NPMs) and new state performance measures (SPMs).

Emerging Issues

Special emphasis will be placed on emerging issues identified during the Iowa MCH2015 process. These issues include, but are not limited to the following:

- Adolescent health
 - Family support
 - Health equity
 - Life course health development
 - Mental health of parents
 - Reproductive life planning
 - Social determinants of health
 - Teen pregnancy prevention
 - Unintended pregnancy prevention
-

Indicators of Progress

Attention to the NPM and SPM indicators will guide Iowa's MCH program planners in identifying progress or lack of progress. Iowa will devote significant analytical effort to measuring indicators.

Strong Partners

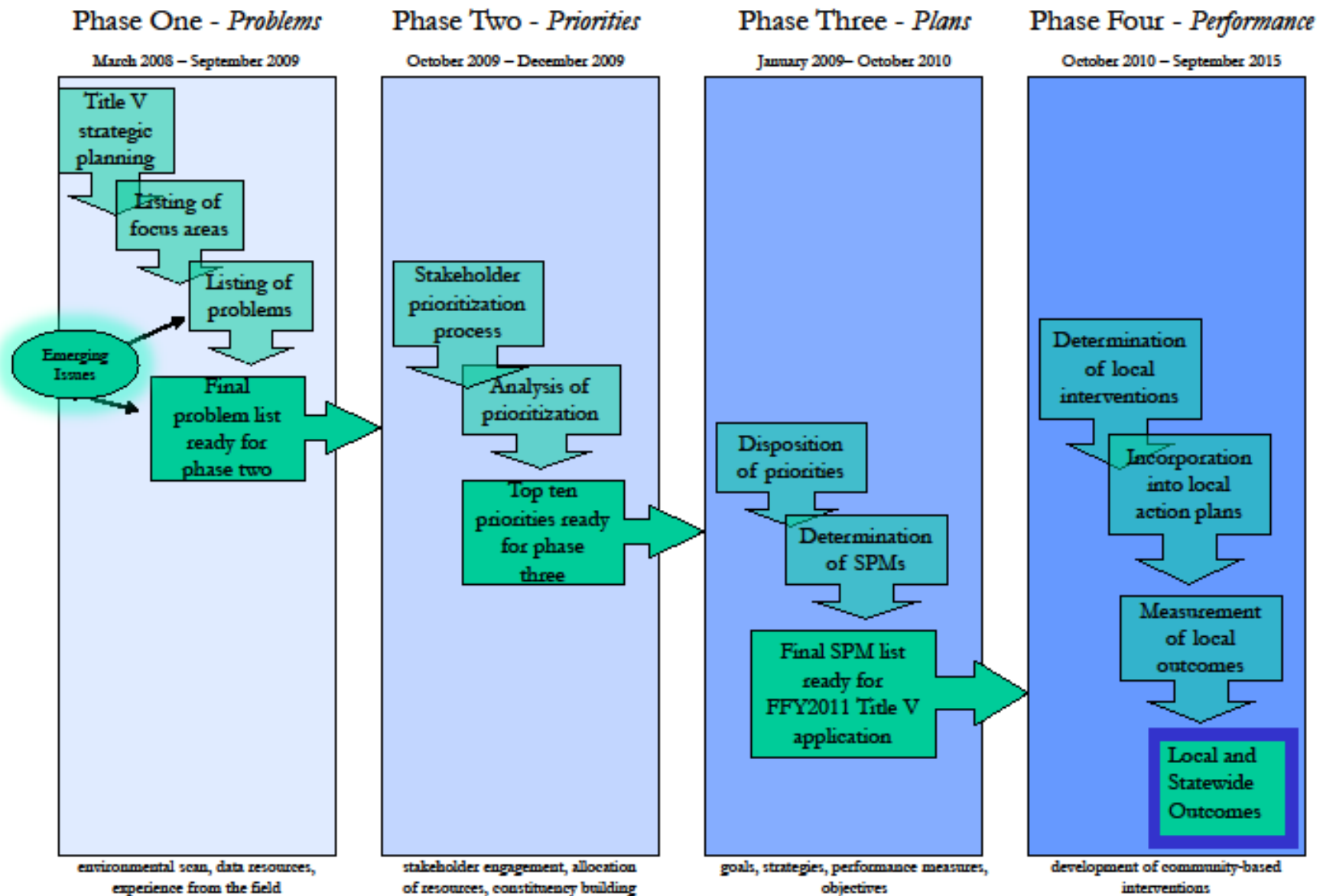
In Iowa, MCH partnership is a continuous and ongoing priority. From the beginning of Iowa MCH2015, partners understood the long-term nature of the commitment. Efforts toward goal one of Iowa MCH2015, *strengthened partnerships among entities addressing the wellbeing of the MCH populations*, will continue throughout the five-year project period.

Improved Outcomes

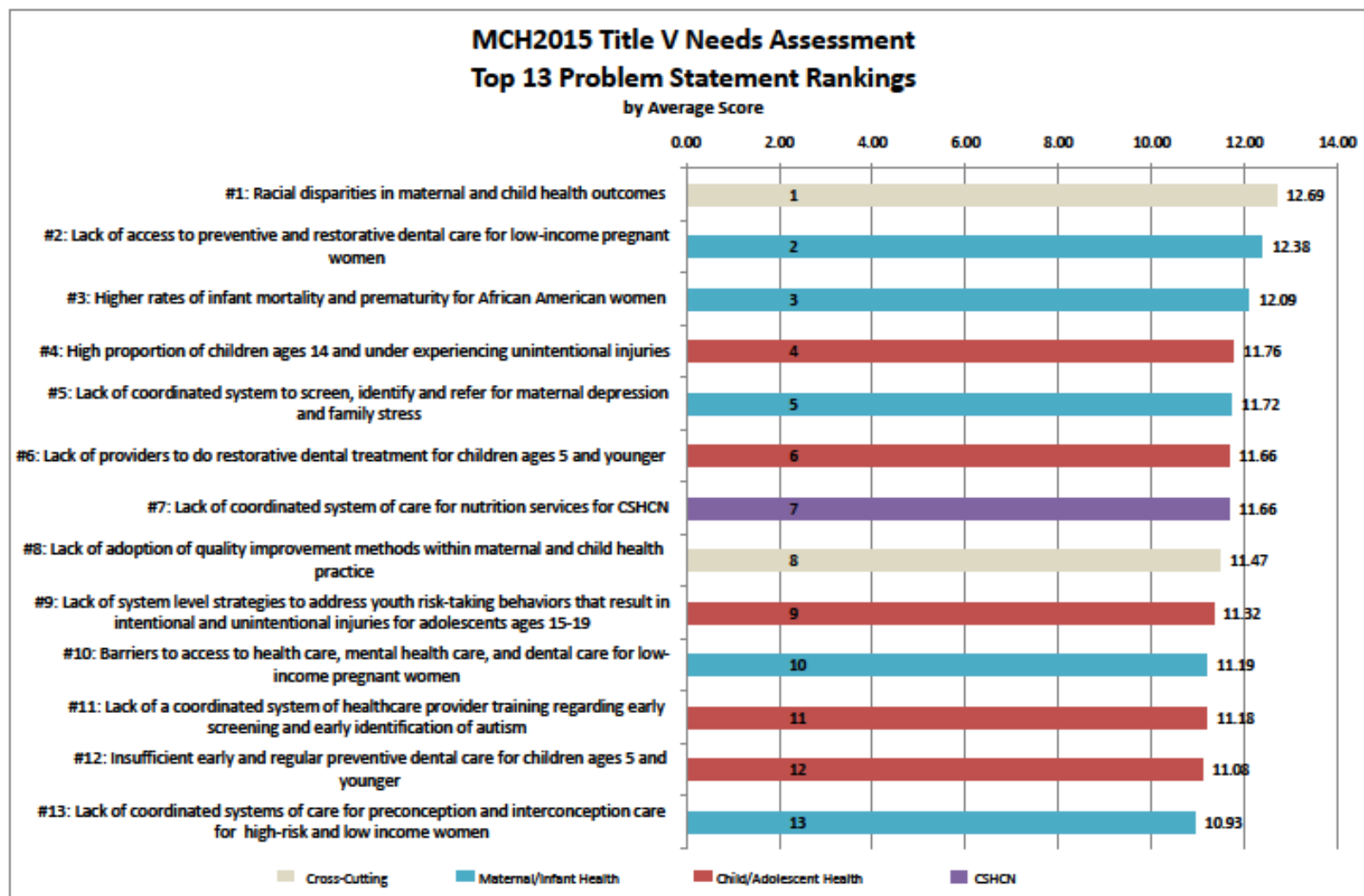
Iowa MCH partners have pledged their collective resources to attainment of goal two of Iowa MCH2015, *improved outcomes for Iowa's MCH populations*.

Appendix A: Logic Model

Iowa MCH2015 Needs Assessment Logic Model



Appendix B: Top 13 Problem Statement Rankings



Appendix C: Data Details Sheets



Iowa MCH2015

Title V 5-Year Needs Assessment

Data Detail Sheets

The data detail sheets were developed using results of the 2005 Iowa Child and Family Household Health Survey, the National Survey of Children's Health, the National Survey of Children with Special Health Care Needs and other related MCH data sources.

Iowa MCH2015 began in March 2008, when a Title V strategic planning process was conducted to determine current and emerging needs of women, infants, children, adolescents and children with special health care needs. The data detail sheets provide insights on the issues that emerged during the strategic planning process.

The data detail sheets provide important information about the identified issues, including:

- ✓Background
- ✓Current Status
- ✓Selected Data
- ✓Resources
- ✓Relationship to National and State Goals
- ✓Proposed Problem Statements

The data detail sheets will be used for the prioritization of problem statements to determine the problems that will be addressed during the Title V project period 2011 to 2015.



For More Iowa Maternal Child Health Title V Information

For additional information email or call Jane Borst at jborst@idph.state.ia.us 1-800-383-3826 at Iowa Department of Public Health or Deb Waldron at debra-waldron@uiowa.edu (319) 356-1117 at Child Health Specialty Clinics





Medical Home

Background

*"a team approach to providing health care that: originates in a primary care setting; fosters a partnership among the patient, provider, other health professionals and patient's family; maintains a centralized, comprehensive record of all health-related services; and includes: a personal provider; a provider-directed medical practice; whole person orientation; coordination and integration of care; quality and safety; enhanced access to health care; and payment."*³

Current Status

Those who have a usual source of care are more likely to use the health care system and obtain needed services.

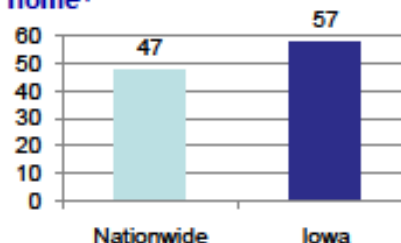
Researchers have shown that for every \$1 invested in early and adequate health and preventive care, Iowa will see an economic return of \$17 per child.

34% of young children visited the emergency room in the previous 12 months²:

- Of these, 68% of care could have been provided in a doctor's office had one been available.
- Of these, 86% went to the emergency room because the doctor's office was not open.

11% of parents with Medicaid enrolled children reported that it was "never or sometimes" easy to get their child needed care. 8% reported that care was "never or sometimes" received quickly.¹

Figure 1. Percent of CSHCN who receive care within a medical home¹



Resources

¹ 2005/2006 National Survey of Children with Special Health Care Needs
www.cshcndata.org

² The Iowa Child and Family Household Health Survey 2005
<http://ppc.uiowa.edu/health/ICHHS/iowachild2005/ichhs2005.htm>

³ IDPH Medical Home System Advisory Council Progress Report Summary, 2009

Relationship to National and State Goals

NPM #3: The percent of children with special health care needs (CSHCN) who receive coordinated, ongoing, comprehensive care within a medical home

Proposed Problem Statements

1. Lack of systems of care to assure that children and adolescents receive quality, comprehensive, coordinated health services
2. Limited availability of family-centered medical homes for CSHCN
3. Lack of family-driven access to health information for CSHCN



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Quality of Care

Background

*"The degree to which health care services increase the likelihood of desired health outcomes and are consistent with current professional knowledge."*⁵

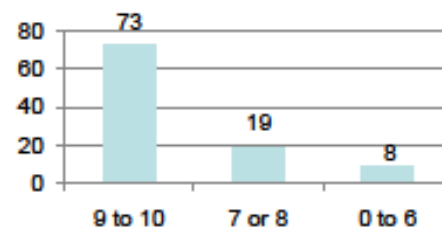
Current Status

The primary purpose of children's health care is to help children grow and develop. Well-child care encompasses health supervision, developmental surveillance and screening, psychosocial assessment, immunizations and care coordination. However, there is clear evidence that the quality of children's preventive care is lacking.¹

One-quarter of families felt they were not always treated with respect.¹ Only half (46%) of parents of young children in Iowa reported remembering having received preventive counseling about subjects such as seatbelts and nutrition.²

Only 31% of children ages 0-3 in foster care receive Early ACCESS services.³

Figure 1. Rating of child's personal doctor, 10 is high and 0 is low⁴



Resources

¹ Scholle, et al, 2009. Quality of Child Health Care: Expanding the Scope and Flexibility of Measurement Approaches. The Commonwealth Fund Issue Brief. Commonwealth Fund pub. 1276 vol. 54.

² The Iowa Child and Family Household Health Survey 2005
<http://ppc.uiowa.edu/health/ICHHS/iowa-child2005/ichhs2005.htm>

³ Department of Human Services data, 2009

Relationship to National and State Goals

NPM #2: The percent of children with special health care needs (CSHCN) whose families partner in decision-making at all levels and are satisfied with the services they receive

NPM #5: Percent of CSHCN whose families report the community-based service systems are organized so they can use them easily

SPM #3: Percent of Medicaid enrolled children ages 0 to 5 who receive developmental evaluations

Proposed Problem Statements

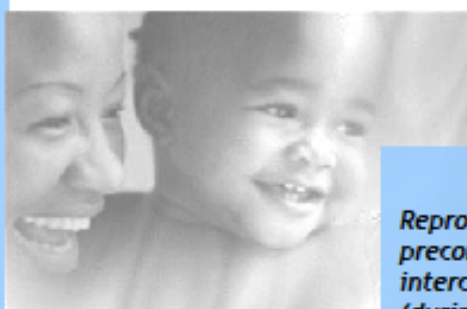
4. Lack of a coordinated health care delivery system (i.e. medical, dental, mental, developmental) for children in foster care
5. Lack of adoption of quality improvement methods within maternal and child health practice
6. Lack of standardized system of care coordination for CSHCN



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Reproductive Health

Background

Reproductive care addresses a woman's health during preconception (prior to becoming pregnant), interconception (between pregnancies) and the prenatal (during pregnancy) period. Care during these periods improves a woman's chances of having a healthy baby.

Current Status

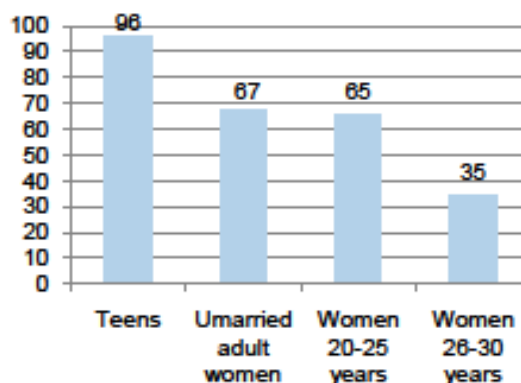
According to the 2000 US Census, Iowa has 353,129 women of childbearing age (15-44 years). Nationally, nearly half of pregnancies are unintended. Further, critical organ development begins just 17 days after conception, often before prenatal care has started. Preconception care encourages mothers to take folic acid daily to prevent spinal cord defects, adopting healthy lifestyle habits like avoidance of alcohol, tobacco cessation, and a nutritious diet and get information about the importance of prenatal care.

Adequate prenatal care was received by 83.1% of pregnant women, including 77.5% on Medicaid.¹

6.7% of babies born are considered low birth weight (<2,500 grams).¹

The birth rate for 15-17 year olds is 15.6 per 1,000.¹

Figure 1. Percent of Iowa Pregnancies that are Unintended²



Resources

¹ Iowa Vital Statistics, 2007

² Iowa Barriers to Prenatal Care Project data, 2007

Relationship to National and State Goals

NPM #8: The rate of birth (per 1,000) for teenagers aged 15 through 17 years

NPM #18: Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester

Proposed Problem Statements

7. Lack of coordinated systems of care for preconceptional and interconceptional care for high-risk and low income women
8. Barriers to access to health care, mental health care and dental care for low-income pregnant women



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Children's Oral Health

Background

Children's oral health is addressed through the I-Smile™ dental home initiative. A dental home is a network of individualized care based on risk assessment which includes oral health education, dental screenings, preventive services, diagnostic services, treatment services and emergency services.

Current Status

Children need healthy teeth to eat food to nourish their bodies, speak properly, and build confidence. Cavities can develop as soon as teeth erupt (at around 6 months old) and can limit children's ability to eat and thrive, as well as their ability to concentrate and learn. Cavities can be prevented, but not enough children receive early preventive care.

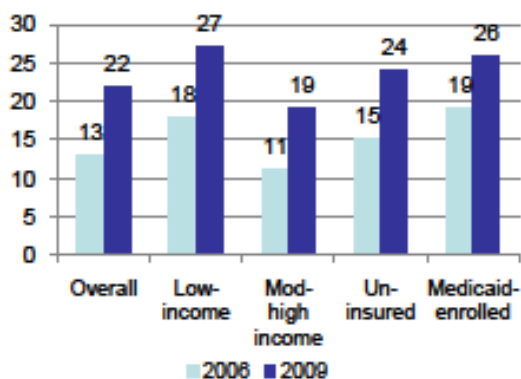
55% of Medicaid-enrolled children ages 1-5 do not receive dental services.¹

In 2008, 99.6% of Medicaid-enrolled children did not receive an exam from a dentist prior to the age of 1. The ADA recommends children have a dental exam by their first birthday.^{2,3}

49% of Iowa's general dentists always refer children younger than 3 to pediatric practices - there are 39 private-practice pediatric dentists in the state.^{4,5}

22% of Iowa third graders have untreated decay, an increase from 13% in 2006.⁶

Figure 1. Increases in untreated tooth decay for 3rd graders⁴



Resources

¹ CMS 416 report, 2008

² Iowa Medicaid data, 2008

³ Journal of the American Dental Association, Vol 133, pg 255. Feb 2002.

⁴ McQuistan et al. Pediatr Dent 2005 Jul-Aug;27(4):277-83

⁵ Iowa Dental Board records, 2009

⁶ IDPH Oral Health Surveys, 2006 and 2009

Relationship to National and State Goals

NPM #9: Percent of third grade children who have received protective sealants on at least one permanent molar tooth

Proposed Problem Statements

9. Insufficient early and regular preventive dental care for children ages 0-5
10. Lack of providers to do restorative dental treatment for children ages 0-5



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Women's Oral Health

Background

Oral health for pregnant women is addressed through education, assessment, prevention, and care coordination within the Title V health system.

Current Status

A woman's oral health impacts pregnancy outcomes as well as the oral health of her infant.

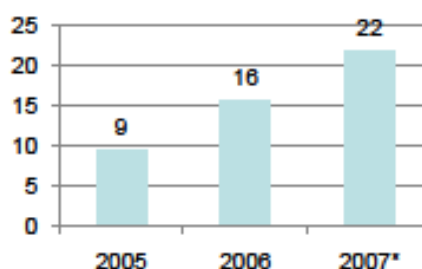
Diet and hormonal changes during pregnancy may increase a woman's risk for developing tooth decay and gum disease. Bacteria associated gum disease can spread to the body, triggering premature labor.

Women who participate in Medicaid are significantly less likely to visit the dentist before, during and after pregnancy, compared to those with private insurance.¹

Bacteria that cause cavities can pass from a mother's mouth to her baby's mouth, increasing the risk of cavities for that infant. Children whose mothers have poor oral health are 5 times more likely to have oral health problems than children whose mothers have good oral health.²

In Iowa, although there have been marginal gains in the past few years, less than one in four Medicaid-enrolled women received important preventive dental care in 2007.³

Figure 1. Iowa Medicaid-enrolled pregnant women receiving preventive dental care³



*Preliminary data

Resources

¹ D'Angelo et al, 2007. Preconception and interconception health status of women who recently gave birth to a live-born infant—Pregnancy Risk Assessment Monitoring System (PRAMS), United States, 26 Reporting Areas, 2004. *Morbidity and Mortality Weekly Report Surveillance Summaries* 56(SS-10):1-35.

² Clothier et al, 2007. Periodontal disease and pregnancy outcomes: Exposure, risk and intervention. *Best Practice and Clinical Research. Obstetrics and Gynaecology* 21(3):451-466.

³ IDPH Medicaid report, 2007.

Proposed Problem Statement

11. Lack of access to preventive and restorative dental care for low-income pregnant women



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Healthy Mental Development

Background

Children develop social and emotional capacities early in life. A child with healthy mental development is able to appropriately regulate and express emotions; form relationships with others; and explore and learn from their environments.

Current Status

Iowa's 1st Five Healthy Mental Development Initiative is a state-local collaboration to positively impact the quality of life for young children. It improves developmental screening for young children; addresses the emotional, behavioral, and social skills; ensures that providers screen for emotional health; and refers children for follow-up care when needed.

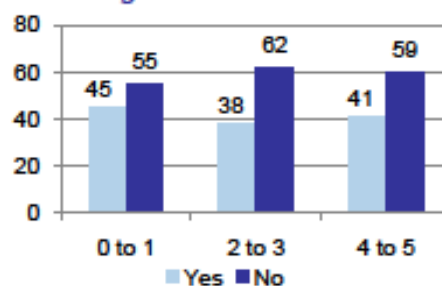
One in ten young Iowans report needing care for a behavioral or emotional problem.¹

12% of children enrolled in Medicaid had an unmet need for mental health care some time during the previous six months.²

2.3% of Medicaid enrolled children ages 0-5 received developmental evaluations.³

18.7% of children ages 10 months - 5 years received a standardized screening for developmental or behavioral problems.⁴

Figure 1. Children, by age, who received a developmental screening⁵



Resources

¹ The Commonwealth Fund report, 2006.

² Iowa Medicaid Managed Care Enrollees Survey, 2007

³ CMS 416 report, 2008

⁴ National Survey of Children's Health <http://nschdata.org/>

⁵ The Iowa Child and Family Household Health Survey, 2005 <http://ppc.uiowa.edu/health/ICHHS/iowachild2005/ichhs2005.htm>

Relationship to National and State Goals

NPM #1: Percent of screen positive newborns who received timely follow up by their state-sponsored newborn screening programs

SPM #3: Percent of Medicaid enrolled children ages 0 to 5 who receive developmental evaluations

SPM #5: Percent of children 0-3 years served by Early ACCESS (IDEA, Part C)

Proposed Problem Statement

12. Lack of access to mental health providers for children 0-5

13. Lack of a coordinated system of healthcare provider training regarding early screening and early identification of autism



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Mental Health of Parents

Background

Providing a safe, stable home environment, developing parenting skills, reducing environmental stressors and supporting children's resilience can improve outcomes for parents and children.

Current Status

Iowa's Assuring Better Child Health and Development II data showed that only 53% of urban pediatric practices screened for parental depression.¹ Children of depressed mothers are at risk for delays in cognitive, motor and language development in infancy and aggressive behaviors in childhood.

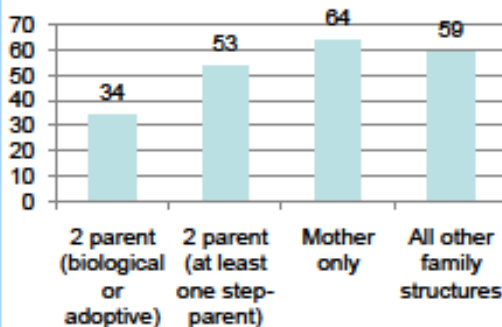
Substance use in the home continues to hinder child well being. Reported levels of behavioral and emotional difficulties depended on parental alcohol and drug use.

Young children with special health care needs (CSHCN) are more likely to have parents of lower mental health status (19%) than higher mental status (13%).²

Postpartum depression affects 18 out of every 100 women who give birth and can happen anytime within the first year after childbirth.³

In homes where drug use is a big problem, 22% of children have severe behavioral and emotional difficulties compared to 7% of children in homes where drugs are not a problem.²

Figure 1. Percent of children whose mother's overall physical health or emotional status is not very good, by household structure²



Resources

¹ Iowa ABCD II Project Final Report, 2007

² The Iowa Child and Family Household Health Survey, 2005
<http://ppc.uiowa.edu/health/ICHHS/iowachild2005/ichhs2005.htm>

³ Iowa Dept of Public Health. Beyond The Blues.
<http://www.beyondtheblues.info/about.htm#depression>

Relationship to National and State Goals

SPM #10: Number of professionals trained on the use of appropriate maternal depression screening tools and the available referral resources

Proposed Problem Statement

14. Lack of coordinated system to screen, identify and refer for maternal depression and family stress



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Disparities Issues- Racial & Ethnic

Background

Disparity is the condition or fact of being unequal. Health disparities are differences in health care services or outcomes related to race, ethnicity, gender, income, disability and living in rural communities.

Current Status

Disparities related to lack of health care access or prevention services are associated with higher morbidity and mortality rates among racial minorities¹

Addressing health differences involves understanding social and economic circumstances experienced by minority families. Social determinants of health include job and food insecurity, inadequate housing and poor family environments. Barriers to care such as cost, lack of transportation, limited hourly access, lack of information about the system and language difficulties also contribute to disparities.

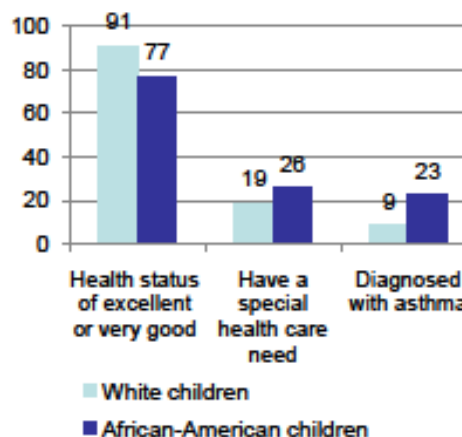
African-American children were most likely to be in a household with high parenting stress and most likely to not weigh the right amount for their height.²

Hispanic children of families taking the survey in Spanish had the lowest overall health and were the least likely to be insured.²

African-Americans have nearly twice the occurrence of low birth weight babies compared to whites.³

36% of African-American women were 10 or more pounds overweight a year after delivery, compared to only 29% of Whites.²

Figure 1. Disparities Among Health Indicators for Children¹



Resources

¹ Smedley et al, 2002. Unequal Treatment. Confronting Racial and Ethnic Disparities in Health Care. The National Academies Press. Washington, DC.

² The Iowa Child and Family Household Health Survey, 2005
<http://ppc.uiowa.edu/health/ICHHS/iowachild2005/ichhs2005.htm>

³ Iowa Vital Statistics, 2007

Proposed Problem Statements

15. Racial disparities in maternal and child health outcomes
16. Higher rates of infant mortality and prematurity for African American women



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 (319) 356-1117 at Child Health Specialty Clinics.





Rural Disparities

Background

Rural health disparities are avoidable differences in the prevalence, mortality, and burden of diseases and adverse health conditions that exist between residents in rural and urban areas.

Current Status

Rural areas may pose different challenges than urban areas in addressing public health objectives. There are rural-urban disparities in health conditions, infrastructure and access to health care providers. The particular geographic, demographic and cultural conditions in rural areas present obstacles to residents seeking services and providers who deliver care.¹

60% of Iowa children do not live in an urban area.²

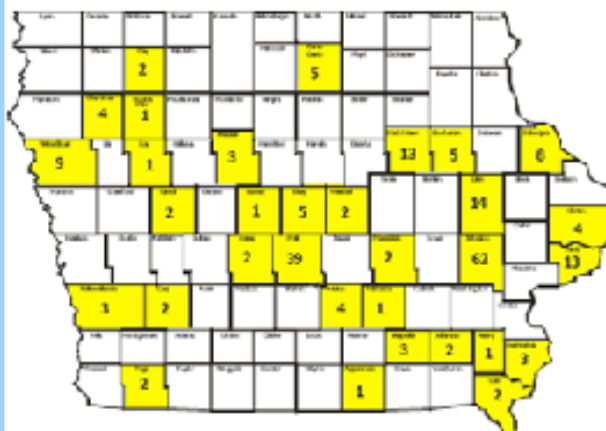
27% of adolescents with special health care needs residing in suburban areas met all six core outcomes compared to 9% living in large towns.¹

Discrepancy in average income per job for rural areas was \$33,953 compared to \$42,558 for urban areas.³

About 75% of respondents to the Rural Healthy People 2010 survey said that access to quality health services was the top ranking Rural Health priority.¹

Only 32 of Iowa's 99 counties are home to at least one psychiatrist.⁴

Figure 1. Distribution of Psychiatrists⁴



Resources

- ¹ Rural Healthy People 2010
<http://srph.tamhsc.edu/centers/rhp2010>
- ² 2005/2006 National Survey of Children with Special Health Care Needs
www.cshcndata.org
- ³ Economic Research Service
<http://www.ers.usda.gov/StateFacts/IA.htm>
- ⁴ UI Carver College of Medicine, University of Iowa Hospitals and Clinics, Report of the Task Force on: The Iowa Physician Workforce, 2007.
<http://www.healthcare.uiowa.edu/CCOM/Administration/IowaPhysicianWorkforce.pdf>

Proposed Problem Statement

17. Lack of access to health services, including mental health providers, for women and children in rural areas



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Injury Prevention- Early Childhood

Background

Injury is physical damage to the body. Unintentional injuries are sometimes called accidents while homicides are intentional injuries. Prevention is possible and can reduce the number of children who suffer the temporary or long term effects of injuries.

Current Status

Injuries are a major public health concern in Iowa due to the large number of Iowans affected by them. Unintentional injuries are one of the leading causes of death for youth. Injuries can have long-term effects on quality of life due to physical impairment, memory troubles, emotional difficulties or learning disabilities and loss of ability to perform daily activities.

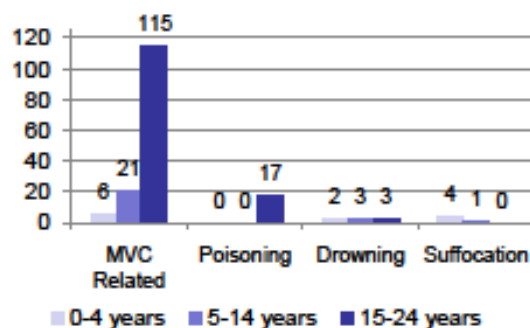
56,715 unintentional injuries occurred in children ages 14 years and under.¹

Motor vehicle crashes accounted for the deaths of 4.6 children per 100,000.²

5% of children ages 0-5 had an injury requiring medical attention within the past year.³

From 1995-2007, 112 Iowa children under age 7 were victims of fatal child abuse with 49% of those dying from being shaken or slammed.⁴

Figure 1. Number of deaths due to unintentional injuries²



Resources

¹ IDPH, The Burden of Injury in Iowa data, 2002-06

http://www.idph.state.ia.us/bh/common/pdf/injury_prevention/burden_of_injury_full_report.pdf

² Iowa Vital Statistics, 2007

³ National Survey of Children's Health 2007
<http://nschdata.org/>

⁴ Iowa Department of Public Health Child Death Review Team, 2007

Relationship to National and State Goals

NPM #10: The rate of deaths to children aged 14 years and younger caused by motor vehicle crashes including passenger and pedestrian, per 100,000 children

Proposed Problem Statement

18. High proportion of children ages 0-14 experiencing unintentional injuries



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Injury Prevention- Adolescent

Background

According to the World Health Organization, as children grow their degree of dependence, the activities they undertake and their risk behaviors change substantially. Often it is these factors that are associated with the incidence of injury and death.

Current Status

Suicide is the second leading cause of death for adolescents. In 2007, the suicide rate was 10.1 per 100,000 15-19 years olds. A far greater number of youth attempt suicide each year. Of 6th, 8th and 11th grade students, 10% had attempted suicide and 9% had made a suicide plan.¹

The rates of alcohol and substance use among adolescents remains problematic. Being impaired is associated with risky behaviors and motor vehicle collisions. According to the CDC, alcohol is involved in nearly 35% of adolescent (15 to 20 years) driver fatalities.

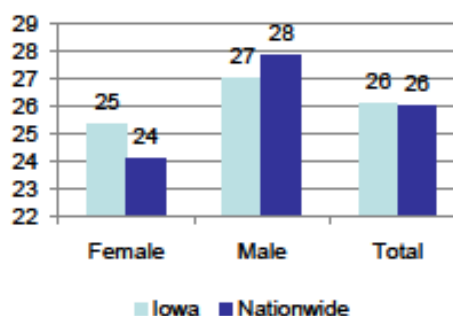
From 2002-2006, an averaged 17% of fatally-injured drivers aged 16-20 were legally intoxicated.²

6.8% of high school students rarely or never wore a seat belt as a passenger.³

26.5% of high school students have ridden with a driver who had been drinking alcohol.³

Unintentional injuries are the leading cause of death for youth.⁴

Figure 1. Percentage of students who had had five or more drinks of alcohol in a row, that is, within a couple of hours at least once in the last month²



Resources

¹ Iowa Youth Survey, 2008

² IDPH The Burden of Injury in Iowa, Comprehensive Injury Report, 2002-2006, 2008.

³ Youth Risk Behavior Survey (YRBS), 2007

⁴ Iowa Vital Statistics, 2007

Relationship to National and State Goals

NPM #16: The rate (per 100,000) of suicide deaths among youths aged 15 through 19

Proposed Problem Statement

19. Lack of system level strategies to address youth risk-taking behaviors that result in intentional and unintentional injuries for adolescents ages 15-19



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Specialty Care

Background

Specialty care provides needed services within the comprehensive care system. Specialty care providers have extensive training in their field of medicine and are able to focus on specific medical issues.

Current Status

It has been estimated that as many as 30% of all children at some time will have a need for specialty care. Main barriers are geographical inaccessibility and higher cost of specialty care.

Technology is being used to ameliorate geographic inaccessibility to providers. Access to subspecialty physical and behavioral health services to children can occur through telehealth. However, few sites have capabilities to perform telehealth functions.

One-third of all children were reported to have needed care from a specialist in the previous 12 months.¹

25% of children enrolled in Medicaid had visited a specialist in the past six months.²

Adolescents (42%) and lower income children (39%) were most likely to need specialty care.¹

12.7% of children with special health care needs (CSHCN) had difficulty getting a needed referral.³

Figure 1. Percentage of children who needed specialty care but could not receive it¹

	133% FPL	134- 199% FPL	200+% FPL	Total %
Yes	11	8	3	5
No	89	92	97	95

Resources

¹ The Iowa Child and Family Household Health Survey, 2005
<http://ppc.uiowa.edu/health/ICHHS/iowa-child2005/ichhs2005.htm>

² Iowa Medicaid Managed Care Enrollees Survey, 2007

³ National Survey of Children with Special Health Care Needs, 2005/2006
www.cshcndata.org

Relationship to National and State Goals

NPM #1: Percent of screen positive newborns who received timely follow up by their state-sponsored newborn screening programs

SPM #4: Percent of children who needed care from a specialist who received the care

Proposed Problem Statement

20. Lack of access to specialty care for low income adolescents and children



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Preventive Care

Background

Preventive care focuses on health promotion, disease prevention, and developmental services to prepare children for success in school and later in life. Comprehensive well-child care ensures that problems are identified and treated early.

Current Status

EPSDT is the Early Periodic Screening, Diagnosis, and Treatment program for children who are enrolled in Medicaid. The EPSDT periodicity schedule specifies when children should receive well-child check-ups.

Only 72% of Medicaid enrolled children who should receive at least one initial or periodic screening service actually receive the service.¹

44% of children receiving Medicaid had a preventative health visit in the previous 6 months and 75% in the last year.²

2.3% of Medicaid enrolled children ages 0-5 received developmental evaluations.³

Figure 1. Percent of parents who received preventive counseling, by income status⁴



Resources

¹ CMS 416 report, 2008

² Iowa Medicaid Managed Care Enrollees Survey, 2007

³ Institute of Medicine, Crossing the Quality Chasm: The IOM Health Care Quality Initiative. 1996. <http://www.iom.edu>

⁴ The Iowa Child and Family Household Health Survey, 2005 <http://ppc.uiowa.edu/health/ICHHS/iowachild2005/ichhs2005.htm>

Relationship to National and State Goals

NPM #1: Percent of screen positive newborns who received timely follow up by their state-sponsored newborn screening programs

NPM #7: Percent of 19-35 month olds who received the full schedule of age appropriate immunizations

Proposed Problem Statement

21. Limited comprehensive systems of age-appropriate screening, referral and follow-up for children ages 0-21

22. Lack of statewide monitoring system for the impact of social determinants of health (e.g. environmental, economic, prenatal exposure to toxins, exposure to drugs/alcohol)



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Physical Health/ Nutrition

Background

The Iowa WIC Program recognizes BMI greater than the 85th percentile (at risk for overweight) and BMI greater than the 95th percentile (overweight) as indicators of a population-based problem, which has been termed an epidemic of poor nutrition and inactivity.

Current Status

Being physically active has numerous physiological and psychological benefits including lowering the risk of type 2 diabetes, maintaining optimal weight and body fat, increasing overall fitness level, and enhancing self-esteem.

The importance of preventing childhood obesity cannot be overstated. Overweight children are more likely to become overweight adults, and healthy behaviors are likely to be continued into adulthood.

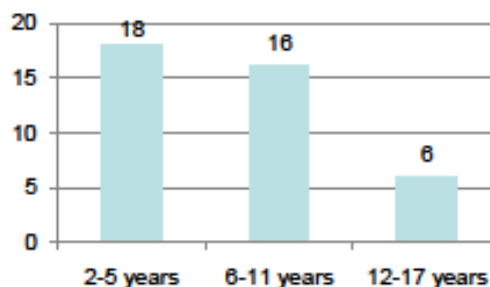
32.6% of 2-5 year old children receiving WIC services have a BMI at or above the 85th percentile.¹

Just over one-third of children do moderate activities at least 30 minutes every day.²

71% of students reported eating 2 or fewer fruits per day and 27% consume no vegetables on an average day.²

Three recent meta-analyses suggest breastfeeding reduces the odds of overweight anywhere from 15-30%.⁴

Figure 1. Percent of Iowa children who met healthy eating guidelines³



Resources

¹ Iowa WIC Clinic data, 2008

² The Iowa Child and Family Household Health Survey, 2005

<http://ppc.uiowa.edu/health/ICHHS/iowachild2005/ichhs2005.htm>

³ National Survey of Children's Health, 2007 <http://nschdata.org/2007>

⁴ National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition and Physical Activity. Research to Practice Series, No. 4, 2007.

Relationship to National and State Goals

NPM #14: Decrease the percentage of 2-5 year olds receiving WIC services with a (BMI) at or above the 85th percentile

Proposed Problem Statement

23. High proportion of overweight and physically inactive MCH population

24. Lack of coordinated system of care for nutrition services for CSHCN



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