

2016

Title V Needs Assessment



Data Detail Sheets

Since May 2014, staff from the Bureau of Family Health, the Oral Health Center and Child Health Specialty Clinics have been working to conduct the 5-year needs assessment for the Title V Maternal and Child Health block grant.

The Title V block grant is undergoing a transformation to reduce burden, maintain flexibility and improve accountability. As a result, new performance measures have been proposed, which we s lined up against the current national and state performance measures, as well as the Association of Maternal and Child Health Programs' Life Course Metrics. This crosswalk guided the development of broad topic areas used to create Iowa's data detail sheets (DDSs). The DDSs provide insights on the issues that emerged since the last needs assessment was completed. The DDSs will now serve as a springboard for stakeholder input and priority setting.

Data for the DDSs were gathered from a variety of state and national sources, as well as through a series of focus groups conducted with Iowa's MCH agencies. Focus groups were conducted in multiple languages with 39 clients. Information obtained through the focus groups was combined with the quantitative data into the DDSs to provide a more client focused perspective.

Each data detail sheet consists of 6 sections:

- Background;
- Health and/or Cost Impact;
- Current Status;
- What is being done in Iowa?
- Related Performance Measures.

The citations for the DDSs are located in a separate document posted on the IDPH and CHSC websites.



For additional information contact the Bureau of Family Health at the Iowa Department of Public Health at 1-800-383-3826.



2016

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Background

The US Department of Health and Human Services made improved access to comprehensive quality health care services a national priority with the Healthy People 2020 Initiative. Access to care is important for the achievement of health equity and for increasing the quality of life for all people, including women and mothers. Access to health care services requires gaining entry into the health care system, accessing a health care location where needed services are provided, and finding a provider with whom the patient can communicate and trust¹. The most common barriers to accessing health care services are lack of availability, transportation issues, and the high cost and lack of insurance coverage². For maternal health, accessing the health care system to obtain early entry into prenatal care is especially important and leads to improved outcomes for mothers and infants.

Impact

Limited access to health care impacts people's ability to reach their full potential and negatively affects their quality of life. Access to care affects overall physical, social and mental health status, prevention of disease and disability, detection and treatment of health conditions, preventable death and overall life expectancy². Access to prenatal care reduces the likelihood of preterm birth, rehospitalizations, and outpatient care once the child is born³. *For more information on Prenatal Care, please refer to the Prenatal Care Data Detail Sheet.*

A 2006 study found that if 90% of people had access to a package of 20 evidence-based preventive services across the lifetime, more than 2 million people would have been alive that year, with no increase in net cost⁴.

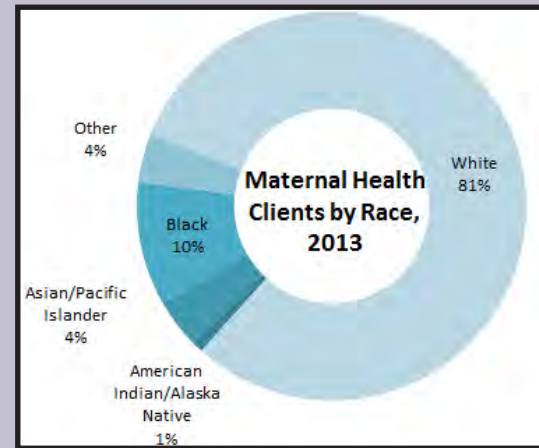
Abundant primary care resources result in a 17% reduction in postneonatal mortality rates in areas with low income, where mortality rates are generally higher⁵. People in low income areas are 33% more likely to report fair or poor health if there are few primary care resources^{5,6}.

An increase of one primary care doctor per 10,000 population is associated, on average, with a 2.5% reduction in infant mortality and a 3.2% reduction in low birth weight⁷.

Current Status

Ninety-two out of 99 Iowa counties listed Access to Health Care as a need in the 2010-2011 Community Needs Assessment.

The most commonly cited challenges were lack of transportation, lack of insurance/underinsured, economic barriers, and lack of general service providers. In 2011, 14% of women of reproductive age in Iowa were uninsured¹.



Iowa is one of 32 states and districts with presumptive eligibility for pregnant women applying to Medicaid. This ensures that pregnant women are presumed Medicaid eligible after completing an online application and self-reporting income and family size, allowing them to access early prenatal care. In Iowa, 3,151 pregnant women were granted presumptive eligibility in FY2013, 29.5% of those women went on some other form of Medicaid.

Medicaid coverage extends 60 days postpartum. Many women report not knowing where to get health coverage after this period. This disruption in coverage can be a barrier to accessing health care services⁸. *For more information on Health Insurance, please refer to the Maternal Health Insurance Data Detail Sheet.*

There are 77 HRSA Designated Primary Care Health Provider Shortage Areas (HPSAs) across Iowa's 99 counties. Iowa has the 5th lowest number of Ob-Gyns per woman of reproductive age, with 4.18 per 10,000 women vs. the national average of 5.39.

Seventy-nine hospitals in Iowa offer maternity care. Thirty-three of these are located in rural counties. All of the Level II-III hospitals offering maternity care are located in micropolitan or metropolitan counties, while approximately 43% of Iowa's population lives in a rural area. In 2013, 70% of women in Iowa reported visiting a doctor for a routine check-up in the previous 12 months.

What is being done in Iowa?

All of the Title V funded local maternal health agencies in Iowa have action plans related to early entry into prenatal care. Agencies' activities include assisting clients with presumptive Medicaid eligibility determinations, collaborating with WIC clinics, medical providers, family planning agencies, and free clinics to reach pregnant women, utilizing new and innovative methods for outreach and education to clients (i.e., social media and text messaging), and facilitating access to prenatal care for all pregnant women by providing care coordination that addresses geographic, cultural, socioeconomic, and organizational or transportation barriers unique to each county in the service area⁹.

Federally Qualified Health Centers (FQHCs) serve as "safety net" providers of primary care in underserved communities. Maternal Health agencies in Iowa refer women to FQHCs for prenatal care if that care cannot be obtained elsewhere¹⁰.

Related Performance Measures

Title V 3.0 Measures

Percent of women of reproductive age who reported a well-woman visit within the last year

Life Course Metrics

Percent of adults reporting racial discrimination in healthcare

Percent of women who experienced discrimination right before or during pregnancy

The proportion of women who receive the appropriate evidence-based clinical preventive services (Pap Smear) for cervical cancer screening.

The proportion of adults with medical insurance

Proportion of births occurring in baby friendly hospitals

Percent of live births born <37 weeks gestation

Previous National & State Performance Measures

Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester

The degree to which the health care system implements evidence based prenatal and perinatal care.

Percent of Medicaid enrolled women receiving preventive dental health services during pregnancy



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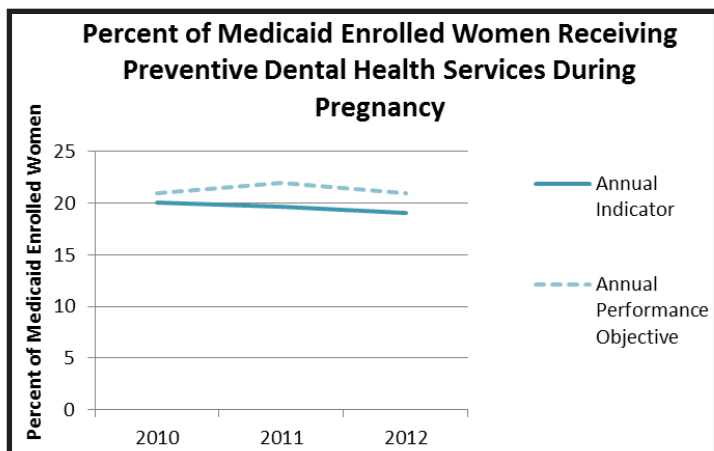
Background

Diseases of the oral cavity – including tooth decay and oral cancers – impact millions of Americans. In addition to potential pain and debilitation, oral diseases can result in inability to chew food properly and speak distinctly. Several chronic diseases, including diabetes, heart disease, and HIV are also linked to oral diseases, particularly periodontal or “gum” disease. Women are especially susceptible to oral health issues as a result of hormonal changes at different life stages, including pregnancy. Tooth decay and periodontal disease may be prevented through regular dental visits, proper nutrition, use of fluorides, and personal oral hygiene¹.

Impact

Evidence suggests gum disease may have an impact on the occurrence of preterm births, resulting in low birth weight babies. Pregnant women with gum disease may be seven times more likely to have a baby born too early and too small. Pregnancy gingivitis is a condition in which a woman’s gums become red, swollen, and bleed easily. Nearly half of women experience it. Because the birth control pill mimics the effects of pregnancy, women on oral contraceptives may experience similar gum tissue changes².

Once a child is born, there is a direct link between a mother’s oral health and the infant’s risk for tooth decay. Mother-to-child transmission of the bacteria that causes tooth decay is well documented³.



Current Status

Many women enrolled in the Title V maternal health agencies in Iowa receive oral screenings, fluoride applications, education, counseling, and dental referrals as an integral component of their comprehensive prenatal health services. They also receive assistance making appointments with dentists for routine and restorative dental care. Yet data continues to show that a very limited number of Medicaid-enrolled MH clients are receiving dental cleanings or treatment for periodontal disease, indicating a lack of access to routine dental care⁴.

Iowa’s Medicaid program provides comprehensive care for adults, yet dentists may choose not to participate in Medicaid or limit their practices regarding the number of Medicaid-enrolled who they will see⁵. Although Iowa benefits from a large number of dentists who are enrolled as Medicaid providers, in 2009, just 331 dentists saw 50 or more Medicaid-enrolled adults in their practices out of 1,867 licensed in the state⁶. Less than 200 dentists saw 100 or more Medicaid-enrolled adults. Low reimbursement is cited as the main reason to not accept patients on Medicaid; Iowa’s reimbursement is less than 50% of commercial insurance rates⁷.

In addition to dentists limiting the number of Medicaid-enrolled patients they will see, many Iowa communities may not have enough dentists available to care for the number of residents in the area. There are 42 Dental Health Professional Shortage Areas (HPSAs) across 40 counties in Iowa⁸.

Nearly one-third of the women who reported not receiving dental care during pregnancy in the 2011 Barriers to Prenatal Care Survey cited not seeing a dentist routinely at any time as a reason⁹.



What is being done in Iowa?

The Iowa Department of Public Health works with Title V maternal and child health contractors to improve access to health services for low-income families. MCH programs develop referral networks with dental offices and provide assistance to clients to help them access dental care. Many provide dental screenings, preventive and educational services, and promote the importance of oral health throughout their communities to ensure good oral health for not only new moms but their children as well¹⁰.

The state's I-Smile™ dental home program for children incorporates activities targeting improved pregnancy outcomes and education for new moms. IDPH provides health promotion funding to MCH programs to expand the understanding of the importance of oral health in pregnancy, infants, and children.

Iowa's insurance marketplace offers a dental insurance option, however it is not a required coverage. It is not yet known whether Medicaid expansion and the marketplace will result in improved access to dental care for women of child-bearing age.

Much of Iowa's population also benefits from a majority of community water systems with optimal levels of fluoride, shown to help prevent tooth decay. In 2013, approximately 2.8 million Iowans, or 90% of the state population, were served by community water systems. Of these, 92% received fluoridated water¹¹.

Related Performance Measures

Title V 3.0 Measures

Percent of women who had a dental visit during pregnancy

Life Course Metrics

Proportion of adults with medical insurance

Proportion of population served by community water systems that receive optimally fluoridated water

Previous National & State Performance Measures

Percent of Medicaid enrolled women receiving preventive dental health services during pregnancy

"I've been told to see a dentist, but I haven't made the decision to go. But [an employee at the Maternal Health agency] has given me the list of dentists in the area that accept Medicaid in the area.... [I haven't gone] because it's been so long since I've gone, so I'm kind of scared and embarrassed."

-Maternal Health Focus Group Participant

Background

Adequate health insurance coverage helps patients get access to the health care services that they need, and helps to promote use of preconception and prenatal health care. According to Healthy People 2020, uninsured Americans are “less likely to receive medical care, more likely to die early, and more likely to have poor health status.” Increasing medical insurance coverage is one of the goals of Healthy People 2020, with a target goal of 100% coverage for all Americans. To achieve this goal, insurance coverage must be affordable, accessible, and provide adequate coverage for the needs of everyone, especially mothers and children.

Impact

Health Impact

The Pregnancy Risk Assessment Monitoring Survey reported that nearly 40% of women who did not start their prenatal care on time said that a lack of money or insurance was one of the reasons for this delay¹. Furthermore, one fifth of Medicaid eligible families reported delaying maternal or child medical care for financial reasons while awaiting coverage.

Without adequate insurance, these women are not getting the care that they need, putting both them and their children at risk. Lack of insurance is an important driver of health inequity, as it prevents people from receiving preventative care services, which help reduce later health concerns and costs by detecting illness early.

Cost Impact

Publically funded family planning centers provide incredible cost-savings for families and tax payers alike. In 2010, the estimated annual cost of providing family planning to the female American population of reproductive age was \$1.6 billion dollars. The estimated cost averted by this family planning including the prenatal care, delivery, and post-partum care for each infant for one year totaled \$7.6 billion dollars – a savings

of approximately \$5.9 billion dollars total. In 2010 in Iowa alone, \$97.9 million dollars are estimated saved using these family planning centers.

Current Status

Iowa is currently the most inclusive state in the US in terms of Medicaid income eligibility for pregnant women. Iowan women that make 375% of the Federal Poverty Limit (FPL) or below are eligible for Medicaid assistance during pregnancy and for 60 days postpartum. Despite this significant investment in maternal health, only 86.6 % of non-elderly, non-pregnant adult women have coverage, falling far short of the Healthy People 2020 goal of 100%.

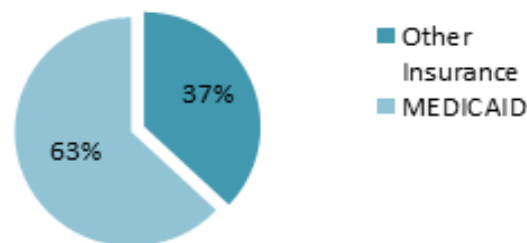
In 2011, 11.6% of surveyed adult Iowan respondents reported that they had no health insurance, with 14.0% of women aged 18-44 lacking health insurance coverage.

Iowa was awarded a Medicaid Family Planning Waiver in 2006 to extend provision of family planning services to low income women who otherwise would not be eligible for such coverage. In addition, family planning services are offered for one year postpartum to women who have delivered within the Medicaid program. This demonstration includes all women at or below 200% poverty who are between 13 and 44 years of age². Over 65,000 women accessed

family planning services using the family planning waiver from 2006 to 2013 resulted in decreases in repeat births, and between 5,999 and 14,850 averted Medicaid-paid births leading to reductions in Medicaid costs for deliveries and birth and first year of life of over \$50 million³.

For every adult woman without health insurance, there are three women that do not have dental insurance. In 2011, 56% of women had a preventive dental visit during their last pregnancy; however, only 19% of Medicaid-enrolled women did⁴. For more information please refer to the Maternal Oral Health Data Detail Sheet.

Primary Payer for Reproductive
Services in Iowa



What is being done in Iowa?

Women with health coverage are more likely to seek out needed preventative and primary care services. The Affordable Care Act (ACA) has several provisions that will significantly improve women's access to healthy choices and care. Insurers must now cover mammograms, cervical cancer screening, prenatal care, flu/pneumonia shots, and regular well-baby/child visits without cost-sharing, which disproportionately affects low-income and minority group women. By eliminating barriers like copayments, co-insurance, and deductibles the ACA increases access to services for everyone, which will in turn improve health outcomes.

All Title V funded local Maternal Agencies assist clients in applying for presumptive eligibility, helping women obtain Medicaid coverage early in pregnancy regardless of legal status. In 2013, Iowa's Title V agencies helped 1,772 women get presumptive eligibility. For more information on presumptive eligibility please refer to the Maternal Health Access Data Detail Sheet.

After 60 days postpartum, Medicaid coverage for pregnant women ends. This leaves many women without health care coverage. One Title V Funded Maternal Health agency has received a Navigator grant from the federal government. Navigators, who are government trained and certified, can help answer Marketplace questions, discuss eligibility and options, and prepare electronic and paper applications to establish eligibility and enroll in coverage through the Marketplace⁵.

Related Performance Measures

Title V 3.0 Measures

Percent of women with a past year preventive visit
Percent of very low birth weight infants born in a hospital with a Level III+ NICU
Percent of women who had a dental visit during pregnancy
Percent of women who smoke during pregnancy

National and State Performance Measures

Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates
Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester
Percent of Medicaid enrolled women receiving preventative dental health services during pregnancy.

Life Course Metrics

Proportion of adults with medical insurance
Proportion of singleton live-born infants whose birth weight is at or below the 10th percentile for a given gestational age
Proportion of births occurring in baby friendly hospitals

"Well, you know, my son is covered, but I'm not. I just got kicked off of Medicaid and it's like, I don't know what to do."

-Maternal Health Focus Group Participant

Background

Paid work is important in the lives of many Iowans, making the quality of working conditions an important issue in the reproductive health of men and women. Poor working conditions and unhealthy and hazardous workplaces can have negative effects on maternal health¹. In addition, the negative impacts from high risk workplaces, disproportionately affect disadvantaged populations, including impoverished and low income families². Workplace breastfeeding policies and access to lactation rooms, exposure to hazardous materials, and employer based insurance coverage are all factors in the work environment that may affect maternal health.

Impact

Health Impact

Women continue to face dismissal and discrimination in hiring on the basis of maternity. Workplace environments can pose hazards (e.g. exposure to pesticides, solvents, heavy metals and other chemicals); requirements of physically demanding work (e.g. heavy lifting, repetitive motion); and irregular or long working hours. All of these can negatively impact the health of pregnant women and their fetuses, including greater risks of preeclampsia and hypertension, complications during pregnancy, miscarriage, stillbirth, fetal growth retardation, premature birth and other problems¹.

Workplace Lactation Support

The American Academy of Pediatrics recommends exclusive breastfeeding for the first 6 months of life. Access to breastfeeding facilities/lactation rooms increases the length of time that women breastfeed their babies³. Formula-fed babies experience more ear infections and diarrhea⁴. Formula-fed babies also have higher risks of necrotizing enterocolitis, lower respiratory infections, Asthma, Obesity, Type 2 diabetes.

Some research shows that breastfeeding can also reduce the risk of Type 1 diabetes, childhood leukemia, and atopic dermatitis (a type of skin rash) in babies.

Breastfeeding has also been shown to lower the risk of SIDS (sudden infant death syndrome)⁴.

Breastfeeding is linked to a lower risk of these health problems in women: Type 2 diabetes, breast cancer, ovarian cancer, postpartum depression⁴. Breastfeeding also contributes to greater postpartum weight loss.

Exposure to Hazardous Materials

Exposure to chemicals in the workplace can affect egg quality and increase the risks of birth defects and miscarriage, preterm birth and impact child development/low birth weight, according to CDC⁵. Researchers from CDC and other experts recently called for improved testing, regulation and identification of hazardous chemicals².

Employer Benefits

Most women and men in the U.S are covered by workplace insurance. However, women with employer-based insurance are almost twice as likely as men to be covered as dependents, leaving them vulnerable to losing insurance should they become widowed, divorced or if their husbands lose their jobs. The ACA allows these women to obtain individual insurance plans through the marketplace.

Cost Impact

Workplace Lactation Support

The nation benefits overall when mothers breastfeed. Recent research shows that if 90% of families breastfed exclusively for 6 months, nearly 1,000 deaths among infants could be prevented. The United States would also save \$13 billion per year — medical care costs are lower for fully breastfed infants than never-breastfed infants. Breastfed infants typically need fewer sick care visits, prescriptions, and hospitalizations. Breastfeeding also contributes to a more productive workforce as mothers miss less work to care for sick infants. The U.S. Breastfeeding Committee reports that for every \$1 invested to support breastfeeding, employers realize a cost savings of \$3⁷. Breastfeeding can have a negative impact on earnings for hourly workers because they may not return to work. Workplace policies that support breastfeeding mothers help diminish this cost of breastfeeding⁸.

Exposure to Hazardous Materials

It is estimated that the societal economic burden in the United States is approximately \$51,600 per infant born preterm (2005 dollars)⁹. Hospitalization for birth defects costs the U.S. over \$2.6 billion annually. This cost is higher when including the financial and emotional impact of living with birth defects¹⁰.

Current Status

Workplace Lactation Support

The U.S. Department of Labor reports that by 9 months postpartum, 37% of all mothers are working full time and 22% part-time. Studies show that working mothers experience a shorter duration of breastfeeding compared to mothers who are not working⁷. In Iowa in 2013, 76.5% of infants were ever breastfed, but only 54% of infants were breastfed at 6 months of age. 43% of infants were breastfed exclusively at 3 months of age¹¹.

Exposure to Hazardous Materials

In 2013 there were 111 women identified with elevated blood levels (EBLs) of lead.

39% of these women were of childbearing age (16-44). 96% of the women with EBLs had work-related lead exposure, almost entirely in battery manufacturing.

Between 2008 and 2012, approximately 66 pesticide poisonings were reported to IDPH per year, with 36% occurring in women. Women are more likely to have hazardous exposures to disinfectants and cleaning chemicals¹³.

Employer Benefits

Nationally, women's access to health insurance through their own workplace fell approximately 5% from 2000 to 2009¹⁴. Many women work hourly jobs which may not provide sick-leave and other benefits, making it difficult to work during pregnancy.

What is being done in Iowa?

With implementation of the **Affordable Care Act**, employers are required to provide a place, other than a bathroom, that is shielded from view and free from intrusion from coworkers and the public, which may be used by an employee to express breast milk. In addition, employers with 50 or more employees are required to provide reasonable break time to hourly employees in order to express breast milk for 1 year postpartum each time the employee has need to express milk¹⁵.

In 2009, Iowa was one of 10 states selected by HHS to receive funding to promote breastfeeding in the workplace. **The Iowa Breastfeeding Coalition** used part of that funding to provide 9 businesses throughout the state \$500 grants to create or improve lactation rooms at their workplace. Each of these businesses desired to provide lactation support to breastfeeding employees. Sites were located throughout the state¹⁶.

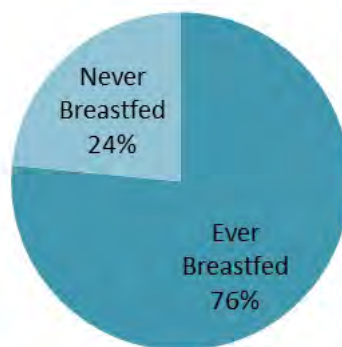
The Family Friendly Business project was developed and initiated in Ames, Iowa in 2014. The goal for the project is to identify businesses in the community that

are supportive of breastfeeding families. Businesses are contacted and asked if they would provide a welcoming environment for nursing mothers. Of the 28 businesses that were invited to participate in Ames, 25 are already on board with the remaining 3 seeking approval from their HR department¹⁷.

In July 2014, the **Equal Employment Opportunity Commission** released new guidance stating that discrimination against female workers on the basis of pregnancy or future plans to become pregnant is against the law. The guidance

clarified policies, such as when businesses may have to provide pregnant workers light duty, and it bans employers from forcing a pregnant worker to take leave. In addition, lactation is considered a pregnancy-related medical condition and therefore has all the protections of the law, including requirements for schedule flexibility and a private place to express milk¹⁸.

**Percent Infants Ever Breastfed in
Iowa, 2013**



Related Performance Measures

Title V 3.0 Measures

Percent of very low birth weight infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)
Percent of infants who are ever breastfed

Life Course Metrics

Proportion of singleton live-born infants whose birth weight is at or below the 10th percentile for a given gestational age
Percent of children exclusively breastfed through 3 months
Percent of women who experienced discrimination right before or during pregnancy

Previous National & State Performance Measures

Percent of mothers who breastfeed their infants at 6 months of age
Percent of very low birth weight infants delivered at facilities for high-risk deliveries and

“I know I worked through my entire pregnancy, and when I first found out, everyone was so excited ‘cause I worked at the mall, so it’s pretty much all women and girls. They were like, ‘You can’t call in sick; we prefer to have you here. But we don’t care if you have to walk around the store with a garbage pail in your hand, like throwing up in the garbage and then talking to customers. We don’t care if you have to do that. You do what you need to do whenever you need to do it. We would just prefer to have you hear doing it. Please don’t call in sick. Just come here and be sick.’”

-Maternal Health Focus Group Participant

Background

There are approximately 580,000 women of reproductive age (years 15-44) in Iowa¹. Given that only 67.3% of pregnancies in Iowa are intended, these women may become pregnant, and preconception health status impacts birth outcomes for mothers and infants. While Title V Maternal Health services primarily focus on pregnant women, experts agree that women of reproductive age need to be healthier, regardless of their intent to become pregnant in the near future². Important aspects of health for all women include immunizations, nutrition and weight management, tobacco and alcohol use, screening for chronic diseases (diabetes, hypertension, high blood pressure) and other health issues, as well as developing a reproductive life plan.

Impact

Immunizations

The U.S. has experienced substantial increases in reported pertussis cases over the past several years. Provisional case counts for 2012 have surpassed the last peak year, 2010, with 41,880 pertussis cases and 14 deaths in infants³. All pregnant women should receive a tetanus, diphtheria, and pertussis (Tdap) vaccine during pregnancy in order to provide antibodies to the infant. Those who will be around infants should also be vaccinated regardless of pregnancy status.

Pregnant women are more likely to develop severe illness from the flu than women who are not pregnant. A woman's unborn baby is also at greater risk for adverse health outcomes, such as premature labor and delivery if she has the flu while pregnant. A flu shot during pregnancy has been shown to protect both the mother and her baby (up to 6 months old) from flu⁴.

Nutrition and Weight Management

Obese women are more likely to have health problems while pregnant and during labor and delivery⁵. Maternal obesity can result in a number of adverse perinatal outcomes including: neural tube defects, preterm delivery, diabetes, cesarean section, hypertension and abnormal blood clotting. Working toward achieving appropriate weight loss and nutritional intake before

pregnancy can help to reduce these risks⁶. Two-thirds of neural tube defects can be reduced with daily use of vitamin supplements containing folic acid. Starting folic acid supplementation at least three months before conception is recommended in order to have an optimal effect on reducing risk of neural tube defects⁶.

Tobacco and Alcohol Use

During the first weeks of pregnancy, exposure to alcohol, tobacco and other drugs can adversely affect fetal development and result in pregnancy complications⁶. Maternal smoking in pregnancy is associated with preterm birth, low birth weight, and other adverse perinatal outcomes, which can be prevented if women stop smoking before or during early pregnancy. Smoking cessation before pregnancy is recommended, as only 20% of women who smoke, successfully control tobacco dependence during pregnancy.

Diabetes and Hypertension

There is a 3-fold increase in the prevalence of birth defects among infants of women with Type I and Type II diabetes. This risk is substantially reduced through proper management of diabetes⁶. The CDC found that for every \$1 spent on preconception care programs for women with diabetes, health costs can be reduced by up to \$5.19 due to preventing costly complications in both mothers and babies⁷. Children of mothers with chronic hypertension are at an increased risk of adverse fetal outcomes, including: preterm birth, intrauterine growth restriction, and have a 2 to 4-fold elevated perinatal mortality rate⁸.

Other Health Issues

Health conditions such as hypothyroidism and maternal phenylketonuria must be identified and managed appropriately in order to ensure positive outcomes for infants⁶. In addition, STIs such as chlamydia and gonorrhea, are strongly associated with ectopic pregnancy, infertility and chronic pelvic pain, and can result in fetal death or substantial physical and developmental disabilities. Early screening and treatment prevents adverse outcomes associated with STIs⁶.

Mental Health

Mental health disorders have a serious impact on physical health and are associated with the prevalence, progression and outcome of chronic diseases including diabetes, heart disease and cancer. People with untreated mental health disorders are also at high risk for unhealthy and unsafe behaviors, such as alcohol and drug abuse, violent or self-destructive behavior and suicide.

Reproductive Life Planning

Creating a reproductive life plan (RLP) may increase the number of planned pregnancies and encourage addressing risky behaviors before conception, reducing the risk for adverse outcomes for both the mother and the infant⁶.

Current Status

Immunizations

In a 2013 survey of women of reproductive age in Iowa, less than half (44%) reported receiving a flu shot in the previous 12 months⁹.

Nutrition and Weight Management

In 2013, 84.3% of women of reproductive age reported eating less than the recommended 5 servings of fruits and vegetables per day⁹. Only 16% of WIC-enrolled women in Iowa consumed a daily multivitamin before becoming pregnant, with White women much more likely (18%) than Black (9.5%) and Hispanic (13%) women to take a daily vitamin¹¹.

In 2013, nearly 60% of Iowan women age 18-44 years met the recommended levels of physical activity for either strength or aerobic exercise. White women were more likely to reach recommended levels, as were women with increasing household incomes⁹.

Tobacco and Alcohol Use

In 2013, 20.4% of women of reproductive age in Iowa reported currently smoking cigarettes, down from 24% in 2011. Non-Hispanic White women are more likely to smoke cigarettes in Iowa than Hispanic women⁹.

In Iowa, 37.4% of WIC-enrolled women smoked in the 3 months prior to becoming pregnant. This is much higher than the national level of 23% for this population¹¹.

According to the Iowa Barriers 2011 survey, about half of women consumed at least one drink per week in the 3 months prior to becoming pregnant¹².

Diabetes and Hypertension

In 2013, 2.6% of women of reproductive age in Iowa reported ever having been diagnosed with diabetes⁹. Diabetes diagnosis decreased with increasing income. In 2013, 9.2% of women of reproductive age reported ever having been diagnosed with high blood pressure.

Well-visits

In 2013, 70% of women age 18-44 reported seeing a doctor in the past 12 months for a routine check-up⁹. In 2012, 78% of women reported having their last Pap Smear within the last three years¹⁰.

STIs

In 2013 there were 7,812 reported cases of Chlamydia among women aged 15-44 years in Iowa¹³. Untreated STDs can lead to serious long-term health consequences, especially for adolescent girls and young women, including: pelvic inflammatory disease, ectopic pregnancy, chronic pelvic pain, and infertility. Based on CDC estimates, undiagnosed and untreated STDs cause at least 24,000 women in the United States each year to become infertile.

Mental Health

In 2013, 24% of women of reproductive age in Iowa reported ever having been diagnosed with depression⁹. Depression was more common among White, non-Hispanic women than Non-White and/or Hispanic women. Almost a quarter of women who reported two or more stressors (e.g. a separation or divorce, homelessness, loss of a job, death of a family member or close friend, etc.) during pregnancy in 2012 and 2013. *For more information, refer to the Maternal Mental Health Data Detail Sheet.*

Reproductive Life Planning

In 2012, 71% of clients seen at a IDPH-supported family planning clinic were counselled on developing a reproductive life plan. *For more information, refer to the Reproductive Life Plan Data Detail Sheet.*

What is being done in Iowa?

Currently, IDPH sponsors the **Iowa Barriers to Prenatal Care project**, a 50 question survey of new mothers before hospital discharge. The survey identifies behaviors and experiences (e.g., nutrition, stress, weight, smoking, etc.) before and during pregnancy, as well as the mother's plans for baby care upon arriving home. This survey helps track preconception health status of women in Iowa¹⁴.

In January 2013, the Iowa Department of Public Health, Bureau of Immunization, completed the administrative rules process to require a **Tdap vaccine** for students enrolling in 7th grade. The change requires a one-time booster dose of Tdap vaccine for applicants in grades 7 and above, if born on or after September 15, 2000, regardless of the interval since the last tetanus/diphtheria containing vaccine¹⁵.

IDPH and Iowa Medicaid Enterprise (IME) collaborated on a **Maternal Health Task Force** to develop strategies to decrease the number of women who smoke during pregnancy. The task force developed a report and focused on reducing tobacco use in women of child bearing age, as well as reducing exposure to second hand smoke¹⁴.

Related Performance Measures

Title V 3.0 Measures

Percent of women with a past year preventive visit
Percent of Caesarean deliveries among low-risk first births

Percent of women who smoke during pregnancy

National and State Performance Measures

Percent of family planning clients (women and men) who are counselled about developing a reproductive life plan
Proposed Problem statement

Life Course Metrics

Number of intimate partner victimizations per 1,000 persons age 12 and older

The proportion of women who receive the appropriate evidence-based clinical preventive services (Pap Smear) for cervical cancer screening

Percent of adult women with diagnosed diabetes during pregnancy, only

Proportion of women using birth control postpartum

Proportion of women reporting two or more stressors during pregnancy



Background

Depression affects 10-20% of women of childbearing age and up to 30% of childbearing women experience depressive symptoms which interfere with functioning¹. Maternal mental health impacts the health of not only mothers but also their children and families.

Impact

Pregnant women or mothers with mental health problems are at increased risk for:

- poor physical health
- high-risk behaviors like alcohol and substance abuse
- obstetric complications
- preterm labor
- inadequate prenatal or postnatal care
- suicide
- diminished emotional involvement
- diminished initiation and/or continuation of breastfeeding^{2, 3, 4, 5}

Infants born to women with poor mental health are at increased risk for:

- Low birth weight
- hospital admission
- reduced completion of recommended immunization schedules
- physical, cognitive, social, behavioral and emotional developmental delays^{2, 3, 4}

Children Living With Mothers with Excellent/Very Good Mental and Emotional Health by Poverty Status



Current Status

Mental health problems are often undiagnosed during pregnancy or post partum because many symptoms, such as fatigue and poor sleep are also associated with motherhood and pregnancy itself.

While depression screening is an easy and inexpensive way to identify women at risk, this does not always translate to entry into treatment. Despite 20-30% of Iowa women of childbearing age being diagnosed with depression, only 30% of these women actually receive treatment.

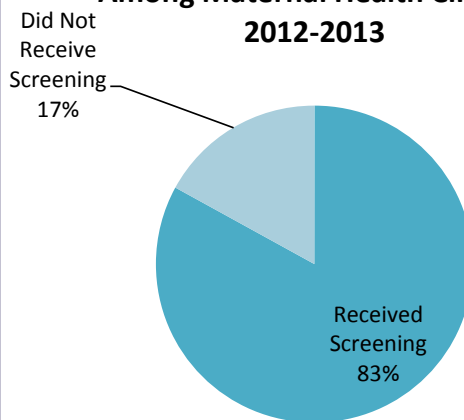
Referrals

Access to mental health services continues to be a problem in Iowa, with 70% of counties containing at least one mental health provider shortage area.

In 2000, Iowa was ranked 47th and 46th, respectively, for psychiatrists and psychologists per 100,000 population, based on HRSA data⁶.

A 2005 study conducted by the Center for Health Workforce Planning examined the ages of providers in 24 health occupations. Mental health providers were found to be at greatest risk of shortage by 2015 with the following occupations having greater than 20% of workers age 55 or older: psychologists (47%), marital/family counselors (38%), psychiatrists (35%), mental health counselors (34%), and social workers (28%)⁶.

Postnatal Depression Screening Among Maternal Health Clients, 2012-2013



From WHIS 10/1/2012-9/30/2013

What is being done in Iowa?

The Iowa Perinatal Depression Project within the Bureau of Family Health has expanded screening, early identification and effective treatment referrals for perinatal depression. The project began in 2006 and continued through 2009 and developed a “train-the-trainer” program and Web-based education. To reduce stigma and increase access to resources, the project developed a consumer information Web site, a directory of mental health providers and a media campaign³. As of 2011, nearly 60 professionals had completed the train-the-trainer curriculum and in turn taught at more than 50 sites². The project also supplied providers with manuals to facilitate developing new perinatal depression support groups. Approximately 60% of births in Iowa occur under the supervision of family practice providers. These health care providers are now able to obtain a free consultation from a mental health provider².

All OB providers in Iowa were provided resources to participant in the nationally recognized **Support and Training to Enhance Primary Care for Postpartum Depression (STEP-PPD)** training. STEP-PPD offers information and resources to improve providers’ ability to recognize and address the symptoms of PPD. The end result is support for primary care providers to manage PPD within primary care settings⁷.

Access to Recovery (ATR) is a four year (ending September 2014) grant funded by the Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Substance Abuse Treatment. ATR - Iowa is a voucher-based system for clients to purchase recovery support services and substance abuse treatment. From 2010-2014, ATR-Iowa enrolled 4,922 women, of which 82% were mothers. Depression and anxiety were common among these women. Overall, individuals enrolled in ATR experienced increased abstinence from alcohol and illegal drugs, employment and education, and stable housing^{8,9}.

Listening visits (LV) are an evidence-based depression intervention with protocols developed for health care providers with little or no prior mental health training. The intervention focuses on exploration of a client’s problems through reflective listening and addressing those problems through collaborative problem solving¹⁰. As of June 2014, four MH agencies in Iowa had implemented LVs, and 11 more have completed training and developed protocols, but had not yet had a LV client.

1st Five is a program administered by IDPH that focuses particularly on children with early signs of social, emotional, or mental health conditions or parental stress. Community-based care coordinators assess and make further care referrals, and feedback loop to primary care, addressing a range of family needs. In 2013, 1,371 children and their families were referred by providers to 1st Five. That brings to over 6,300 the families who have been referred since the initiative’s start in 2007. The top reason for referral is parent or family stress.

Related Performance Measures

Title V 3.0 Measures

Percent of women with a past year preventive visit

National and State Performance Measures

None

Life Course Metrics

Percent of adults with poor mental health

Percent of women who have recently given birth who reported experiencing postpartum depression following a live birth

Suicides per 100,000 population



For additional information contact the Bureau of Family Health at the Iowa Department of Public Health at 1-800-383-3826.



Background

In 2000, 20.9 % of adults in Iowa were obese¹. One year later, the US Surgeon General announced that obesity had reached “epidemic” proportions². Obesity continues to be a major public health burden in the U.S. and Iowa, with Iowa’s obesity rate in 2012 reaching 30.4%. Iowa ranks as the 12th most obese state in the nation¹. While obesity is commonly identified as an issue, food insecurity, low rates of exclusive breastfeeding, gestational weight gain and physical activity should also be addressed, both as their own issues and as contributing factors to the obesity epidemic.

Impact

Food Insecurity and Consumption

Pregnant women who experience food insecurity are more likely to experience birth complications than women who are food secure³.

Breastfeeding

Besides the benefits to the child, breastfeeding promotes weight loss⁴ but also has other benefits for the mother: it lowers the risk of breast and ovarian cancer, decreases the risk for osteoporosis, leads to fewer missed work or school days and saves money^{5,6}.

Gestational Weight Gain

Overweight and obese women with excessive gestational weight gain are at risk for birth defects, stillbirth, preeclampsia, gestational hypertension, gestational diabetes, preterm delivery, C-section and postpartum haemorrhage. Weight loss before pregnancy is known to reduce these risks.

Postpartum weight retention can lead to maternal obesity and complications during subsequent pregnancies. Women who gain one BMI unit (approximately 7 lbs.) are at 20-40% higher risk of developing gestational diabetes, hypertension and having a large for gestational age birth during their next pregnancy⁷.

Current Status

Food Insecurity and Consumption

In 2012, 12.7% of all people in Iowa were food insecure³. Of these, 40% were above the 185% FPL threshold for all nutrition supplementation programs.

In 2013, 84.3% of women age 15-44 years reported consuming fewer than 5 servings of fruits/vegetables per day⁸. There was little variation by race/ethnicity or income.

Breastfeeding

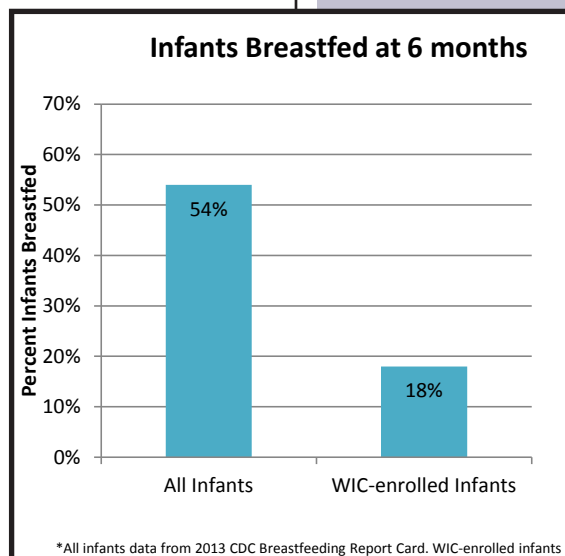
According to the Iowa Newborn Metabolic Screening Profile Feeding Report, Iowa continued to see a steady increase in the number of infants who are breastfed at birth between 2006 and 2013⁹.

Gestational Weight Gain

52% of all women in Iowa experience excessive gestational weight gain. Excessive weight gain is more common among overweight and obese women.

Physical Activity

In 2013, nearly 60% of women met the recommended levels of physical activity for either strength or aerobic exercise. White women were more likely to reach recommended levels, as were women with increasing household incomes⁸.



“Even if you get WIC and Food Stamps, it’s hard ‘cause you have to eat healthy, but a hamburger costs less than a salad.”

-Maternal Health Focus Group Participant

What is being done in Iowa?

The Iowa Special Supplemental Nutrition Program for **Women, Infants, and Children, also known as WIC**, is a nutrition program. WIC is designed to assist low income, nutritionally at risk infants, children under the age of 5, pregnant women, breastfeeding women, and postpartum women up to 6 months after birth by providing healthy foods, nutrition education and referrals to other health care agencies. In Iowa, WIC provides services to over 68,000 participants (women, infants and children) each month¹⁰. All clients enrolled in WIC receive a nutrition assessment, including BMI, and client specific education based on the results, including guidance on appropriate gestational weight gain. The program also completes a food security survey with WIC participants every other year to assess participant needs and concerns. WIC refers participants to additional resources when risks are identified. WIC provides an enhanced food package to breastfeeding mothers, which contains additional foods. When infants turn 6 months of age, they also receive an enhanced food package, compared to formula-fed infants. WIC utilizes peer counsellors to support breastfeeding mothers both before and after delivery.

Local Title V agencies refer eligible women to WIC for nutrition education and support. If the woman is ineligible for WIC, the maternal health agency refers women to WIC dietitians for nutrition assessment and education.

The Cultivate Iowa Project has as its goal to improve the health of Iowans by eating more fruits and vegetables. To do this, the project increases access using social marketing and outreach. The project matches low-income and food insecure Iowans with local food gardeners. WIC has participated in the Cultivate Iowa campaign for the last two years by providing seeds to participants to grow their own gardens. Many participants also preserve some of their produce to use after the growing season is over.

Related Performance Measures

Title V 3.0 Measures

Percent of very low birth weight infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Percent of infants who are ever breastfed

National and State Performance Measures

Percent of mothers who breastfeed their infants at 6 months of age

Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates

Life Course Metrics

Proportion of singleton live-born infants whose birth weight is at or below the 10th percentile for a given gestational age

Proportion of births occurring in baby friendly hospitals

Percent of children exclusively breastfed through 3 months of age

Percent of adults who are currently overweight or obese

Number of households experiencing food insecurity

Percent of live births born < 37 weeks gestation



For additional information contact the Bureau of Family Health at the Iowa Department of Public Health at 1-800-383-3826.



Background

Prenatal care allows health care providers to identify and manage a woman's risk factors and health conditions and to provide relevant education, counseling and treatment to achieve a healthy birth outcome for both mom and baby. Prenatal care has the potential to identify and treat early indicators of preterm birth, leading to healthier pregnancies, moms and babies¹. Areas of interest in prenatal care include entering care in the first trimester, quality of care, reducing early elective deliveries and administration of 17P.

Impact

Early Entry

Initiation of prenatal care in the first trimester allows providers to identify risk factors and begin managing or treating them early in the pregnancy. In addition, early prenatal care allows for more accurate calculation of gestational age.

Quality of Care

To be most effective, prenatal care should begin early in pregnancy and continue throughout. This allows providers to use evidence-based screenings to identify and monitor maternal and fetal risk factors. Health education is another critical piece of quality prenatal care.

Early Elective Delivery

An early elective delivery (EED) is either the induction of labor or a scheduled Caesarean delivery prior to 39 weeks that is not medically necessary. Significant short- and long-term morbidity is associated with births occurring between 34 and 39 weeks gestation. Families should receive education about the physiological benefits of full term (40 weeks) pregnancy.

17P

17-alpha hydroxyprogesterone caproate (17P) is a medication that has been shown to reduce preterm birth by roughly 1/3 in women had a previous spontaneous preterm birth when administered starting at 16-20 weeks, and continued weekly until 37 weeks. The medication is given by weekly injections administered either a physician or a nurse.

Current Status

Early Entry into Prenatal Care

Although we still have work to do to reach the NPM goal of 86% of women receiving care in the first trimester, Iowa had made great strides from 2008-present. Since 2008, the percent has increased almost 10% and surpassed the Healthy People 2020 goal starting in 2011.

Early Elective Deliveries

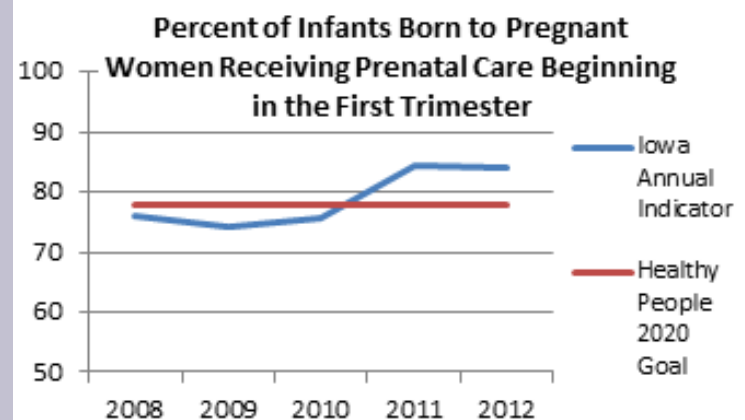
According to the Iowa Health Engagement Network, in September 2013, the EED rate in Iowa was less than one percent (0.71%), down from 11.6% in 2011.

17P

Iowa does not currently have a reliable data source regarding the use of 17P. There are several barriers to women receiving this medication, including the need for weekly injections, supply and billing challenges. However, data around the uptake of 17P will be available by the end of 2015.

The Barriers to Prenatal Care Survey

An optional survey given to all women who deliver in an Iowa hospital prior to discharge. In 2012, over 23,000 women completed the survey. One survey question asks about the content of prenatal care.



What is being done in Iowa?

Title V maternal health agencies target services to low-income and minority women in all 99 counties in Iowa. These agencies provide services to facilitate early entry into prenatal care. The services include presumptive Medicaid eligibility determinations, care coordination, linking families to a medical home, transportation, interpretation, and health education on importance of prenatal care. IDPH monitors each local Title V Maternal Health agency's performance on medical home rate and early entry into prenatal care.

Early Elective Delivery

IDPH partnered with the Iowa Healthcare Collaborative and the Iowa Hospital Engagement Network and the Statewide Perinatal Care Program to implement hard stop policies in all of Iowa's birthing hospitals. All Iowa birthing hospitals now employ an Early Elective Delivery (EED) Hard Stop Policy. This policy ensures that early elective deliveries are not performed, regardless of provider or client wishes. These policies led to a rapid statewide reduction of EED from approximately 7.5% in Spring 2012, to less than 1% in Summer 2013. In 2013, Iowa Medicaid Enterprises released a policy to prevent reimbursement for early elective cesarean deliveries.

17P

IDPH is working through the Infant Mortality CoIIN to address data collection needs regarding the use of this medication. Title V maternal health clinics are working with families to address the barriers to receiving this medication.

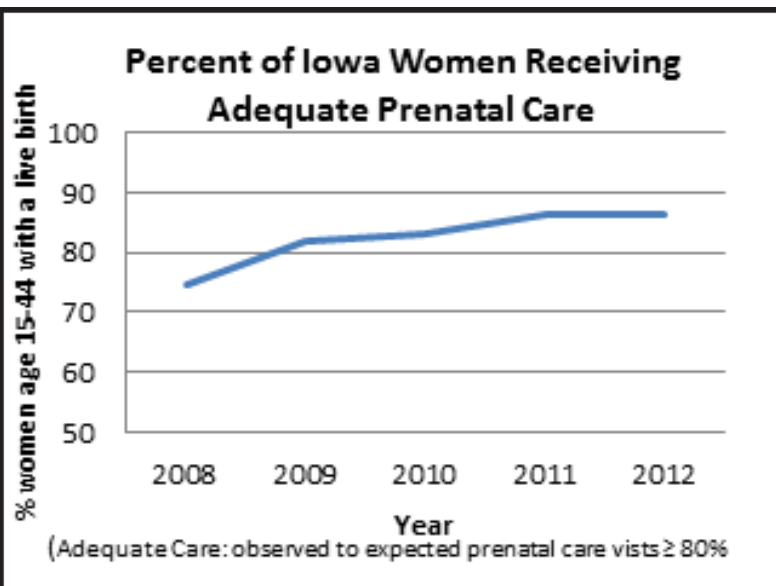
In January 2013, Iowa Medicaid Enterprise distributed an informational letter to Iowa Medicaid Physicians, Advanced Registered Nurse Practitioners, Certified Nurse Midwives, Hospitals, Clinics, Maternal Health Centers, and Family Planning Agencies clarifying the policies associated with 17HP in an attempt to increase its use across the state to prevent preterm births.

Other work to improve birth outcomes

IDPH is working to improve influenza vaccination rates. In 2011, more than one third (37%) of Iowa women who gave birth did not get a seasonal flu shot during pregnancy or in the season prior to becoming pregnant.

To combat rising rates of pertussis, IDPH is working to ensure all pregnant women receive a Tdap booster with each pregnancy. Pertussis is a vaccine-preventable disease that is often deadly to infants too young to receive the vaccination. Maternal vaccination can offer protection to the infant.

The Barriers to Prenatal Survey will continue to seek information on the content and quality prenatal care received by women giving birth at Iowa hospitals.



Related Performance Measures

Title V 3.0 Measures

Percent of Caesarean deliveries among low-risk first births

Percent of very low birth weight infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

Percent of infants placed to sleep on their back

Percent of infants who are ever breastfed

Percent of women who had a dental visit during pregnancy

Percent of women who smoke during pregnancy

National and State Performance Measures

Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates

Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester

Percent of family planning clients (women and men) who are counselled about developing a reproductive life plan

The degree to which the health care system implements evidence based prenatal and perinatal care.

Life Course Metrics

Proportion of singleton live-born infants whose birth weight is at or below the 10th percentile for a given gestational age

Proportion of births occurring in baby friendly hospitals

Percent of children exclusively breastfed through 3 months

Percent of women who experienced discrimination right before or during pregnancy

Percent of adult women with diagnosed diabetes during pregnancy, only

Percent of live births born < 37 weeks gestation

Proportion of women reporting two or more stressors during pregnancy

"...before I was able to put in an application for Medicaid itself, I was able to get it under presumptive care through [name of Maternal Health agency]. So I was covered right away and didn't have to wait. And they made sure to tell me to make sure when [Medicaid] replied to me in the mail that I get back to them as soon as possible 'cause they are very time sensitive. So I did that, went through the whole process and got approved through Medicaid."

-Title V Maternal Health Focus Group Participant

Background

About two-thirds (67.3%) of pregnancies are intended in Iowa¹. Unintended pregnancies are associated with negative outcomes for both mothers and their infants. Woman may experience fewer unintended pregnancies if they develop a reproductive life plan (RLP). A RLP is a client-centered process through which individuals develop a plan to achieve personal goals about whether or when to have children. A RLP can include plans for educational and career goals, as well as for the number, timing and spacing of children s/he may or may not like to have². An individual's access to contraception, including long-acting reversible contraceptives (LARCs), is an important component to their ability to follow his or her RLP. By following a RLP, an individual can achieve healthier inter-pregnancy intervals and prevent an unintended pregnancy.

Impact

- Women who experience an unintended pregnancy are less likely to obtain timely prenatal care³ and are less likely to take preconception folic acid and more likely to smoke during pregnancy⁴. Women who have experienced an unintended pregnancy and birth are also at increased risk for postpartum depression and closely spaced pregnancies.
- Infants born as the result of an unintended pregnancy are at increased risk for being born early or at a low birth weight.
- Infants born as the result of an unintended pregnancy are also less likely to be breastfed⁵. Researchers have also reported that children born as the result of an unintended pregnancy are in poorer physical and mental health compared to children born as the result of an intended pregnancy⁶.
- There is evidence that preventing unintended pregnancy is cost-effective. Public funding for family planning services helps women maintain their reproductive health and achieve their goals, while also saving state and federal dollars. Contraceptive use alone saves approximately \$19 billion in direct medical costs each year. In a national study of U.S. publicly funded family planning clinics, prevention

of unintended pregnancies led to a total public sector savings of \$4.3 billion dollars. An Iowa-specific study demonstrates a savings of \$3.78 for every \$1 spent on family planning services in one year⁷.

- It is also important for reproductive life planning to be incorporated into men's health visits in order to improve the health of men. While the evidence for preconception health recommendations is less than that for women, men are important players in both preventing and achieving pregnancy, are direct contributors to infant health through genetic factors, and integral in improving the health of women through preventing the spread of STIs⁸. Preconception health services can improve the health of men and women regardless of their childbearing intent.

Current Status

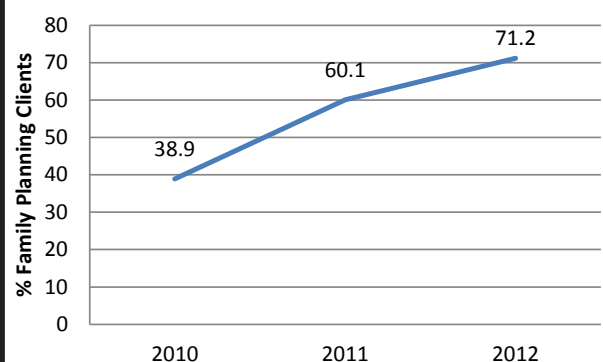
The percent of clients receiving services at IDPH funded family planning clinics has increased by more than 30% between 2010 and 2012, where discussing a RLP is a required element of all client visits.

In 2012, 1/3 of births had an inter-pregnancy interval of less than 18 months⁹.

Since 2008, the number of *intended* pregnancy in Iowa has been increasing. The percent of women reporting an intended pregnancy is above the Healthy People 2020 target of 56%¹.

Effective methods of birth control can help men and women adhere to a RLP. Since FY07, the use of LARCs has been on the increase.

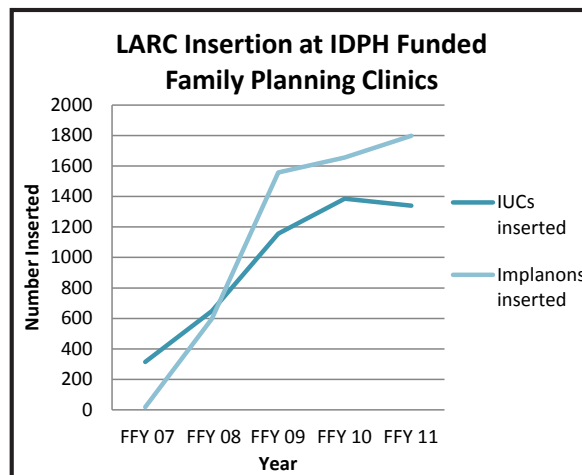
**Percent of Family Planning Clients
Receiving Counseling on Developing
a Reproductive Life Plan**



What is being done in Iowa?

The IDPH Bureau of Family Health (BFH) houses both the Title X Family Planning Program and the Title V MCH program. Title V MCH programs link women to appropriate care following both positive and negative pregnancy tests and refer women to family planning services at Title X clinics at postpartum visits. Currently, five local agencies contract with IDPH to provide both family planning and MCH services⁹. In 2009, the IDPH Title X Program revised its Family Planning Services Manual to include reproductive life planning and preconception care to each initial, annual and postpartum appointment for every patient – men included, regardless of whether the patient is planning to become pregnant. Both the BFH's PREP and Abstinence Education Programs require that RLP be incorporated into the programming done by contractors that serve the teenage population. A toolkit is being developed to help providers incorporate RLP into postpartum visits at maternity centers.

Seven local Maternal Health agencies funded by Title V have action plans related to RPL to address and lengthen inter-pregnancy intervals. Activities include providing care coordination and referrals to women in need of further family planning education and/or counselling; providing education at third trimester and post-partum visits, including education about birth control methods; having birth control kits available at MH clinics, WIC clinics and local public health agencies, and at outreach/education classes; and training bi-lingual interpreters on RLP protocol to avoid potential language barriers due to different terminologies across cultures¹⁰.



Related Performance Measures

Title V 3.0 Measures

Percent of women with a past year preventive visit
Percent of Caesarean deliveries among low-risk first births

Percent of very low birth weight infants born in a hospital with a Level III+ Neonatal Intensive Care Unit (NICU)

National and State Performance Measures

Percent of very low birth weight infants delivered at facilities for high-risk deliveries and neonates
Percent of infants born to pregnant women receiving prenatal care beginning in the first trimester
Percent of family planning clients (women and men) who are counselled about developing a

reproductive life plan

The degree to which the health care system implements evidence based prenatal and perinatal care

Life Course Metrics

Proportion of singleton live-born infants whose birth weight is at or below the 10th percentile for a given gestational age

Percent of adult women with diagnosed diabetes during pregnancy only

Proportion of women using birth control postpartum

Proportion of women reporting two or more stressors during pregnancy

"[We need] more education for more girls and boys, 'cause girls nowadays are having babies at a much younger age. Instead of waiting for Junior High [to start sex education], have Sex Ed earlier. There's a child at my daughter's school that is pregnant. She's in 7th or 8th grade. And my sister was pregnant in 8th grade. Instead of waiting to have [sex education] in Junior High, have it in 5th grade class." --CYC Iowa Teen, CYC Forum

Background

Iowa has historically been among the top five states with the lowest rate of uninsured children (medically)¹, and since 2010 has been one of 19 states with income limits at or above 300% of the Federal Poverty Level (FPL)². Children that do not have access to private insurance may be eligible for Medicaid, which provides full medical and dental coverage, or *hawk-i*, Iowa's Children's Health Insurance Program (CHIP). *hawk-i* provides health care coverage for children (18 & under) whose income is too high to qualify for Medicaid but too low to afford private healthcare coverage. The purpose of *hawk-i* and Medicaid are to increase the number of children with medical and dental care coverage, thereby improving their health and dental outcomes. Since 1998, enrollment in the *hawk-i* program has been instrumental in providing coverage to thousands of uninsured children.

Impact

Health Impact

Health insurance coverage has been shown to greatly affect financial access to healthcare services, and potentially, the quality of health care. Children who have health insurance generally have better health throughout their childhood and into their teens. They are less likely to get sick and more likely to:

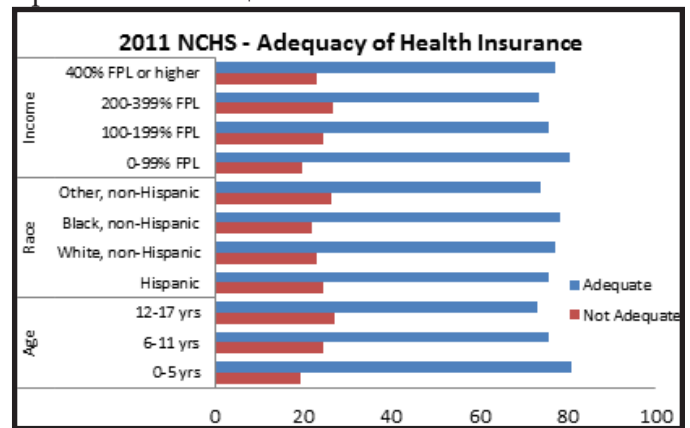
- get preventive care to keep them well;
- receive needed shots that prevent disease;
- get dental care.

Compared to children with insurance, uninsured children are:

- over **five times** more likely to have an unmet need for medical care;
- much less likely to receive preventive services including immunizations, dental and vision care and medical care for conditions such as sore throats, ear infections and asthma
- 30% less likely to receive medical treatment if they are injured³.

Cost Impact

Approximately 33% of Americans have reported difficulty paying medical bills, which can result in damaged credit, loss of home, depleted retirement or savings, other financial deprivation, bankruptcy, and barriers in accessing care. For patients without health insurance, an emergency room visit typically costs from \$150-\$3,000 or more. In 2010, one inpatient day in an Iowa hospital cost, on average, over \$1,200, and one preventable hospitalization cost \$110^{5,6}.



Current Status

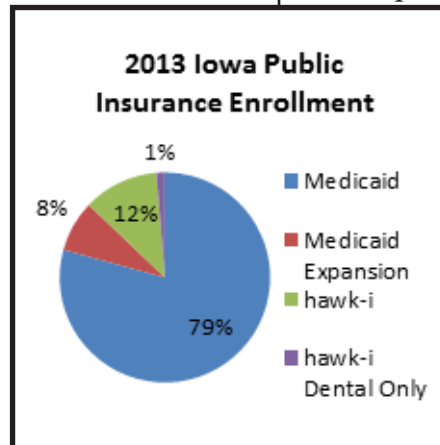
Ninety-seven percent of all children ages 0-18 in Iowa are covered with either private or public health insurance coverage. In 2011, the majority (75%) of Iowa children ages 0-18 were covered by private medical insurance, 22% were on public insurance (i.e. Medicaid or *hawk-i*), and 3% were uninsured. It is estimated that 60% of uninsured children in Iowa are eligible for Medicaid or *hawk-i*. In 2010, 18% of children ages 0-18 did not have dental coverage. While this has decreased since 2005 (25%), it is still significantly higher than the percentage of Iowa children who do not have medical coverage (3%). Most of the children without dental insurance (88%) have medical coverage, and 84% of those children have private medical coverage. Twenty percent of the dentally uninsured children's parents reported an unmet dental need for their child – primarily check-ups and cleaning (95%), with a smaller percentage needing other treatments (24%) or emergency care (3%)⁷.

What is being done in Iowa?

Medical Insurance

Iowa children may be insured by a private insurer such as **Wellmark Blue Cross Blue Shield** or **UnitedHealth care**, or through public insurance such as **CHIP** or **Medicaid**. CHIP has three insurance plans for children under the age of 19:

- **Medicaid expansion**, which provides full Medicaid coverage to children ages 6-18 whose family income is between 122 - 167% of the FPL, and infants whose family income is between 240 - 375% of the FPL.
- **Regular Iowa CHIP**, which is called *hawk-i*, provides medical and dental coverage to children under age 19 in families whose gross income is less than or equal to 302% of the FPL (\$72,027 for a family of four)
- ***hawk-i* Dental Only**, implemented on March 1, 2010, is dental coverage for children who meet the *hawk-i* program's income guidelines but do not qualify for full *hawk-i* coverage because they have private health insurance.



Public insurance has been reported to be more adequate than private insurance in meeting children's health needs^{7,9}. Parents of children on public insurance were more likely to report adequate insurance coverage (82%) than parents of children on private insurance plans (73%)³.

Dental Insurance³

Medicaid offers comprehensive dental benefits for children, although reimbursement rates are estimated to be less than 50% of commercial insurance rates¹⁰. Children enrolled in *hawk-i* have dental coverage provided via Delta Dental of Iowa. Dental can also be provided via a dental rider, *hawk-i* Dental Only, which is for children who have private medical coverage but insufficient dental coverage. Iowa is the only state that offers this program⁷. Eligibility for *hawk-i* and Medicaid

is based on income, age, citizenship, immigration, and residency status. Children must be under the age of 19, be U.S. Citizens or have legal immigration status, and be a lawful permanent resident of the state of Iowa. Federal law requires that citizenship and identity must be verified for all U.S. citizen children participating in Medicaid or CHIP.

Presumptive Eligibility for Children

Since 2010, children eligible for *hawk-i* and Medicaid have been able to obtain immediate, temporary Medicaid coverage through the **Presumptive Eligibility for Children program**. Between 2010 and 2013, over 6,000 children were approved for Presumptive Eligibility¹¹.

Parents' Insurance Coverage⁷

According to the 2010 Iowa Household Health Survey, 31% of uninsured children have parents with health insurance, and 33% of parents of children with public insurance do not have health insurance. The number of children with private insurance whose parents are uninsured is significantly lower (2%). Additionally, Hispanic parents were significantly less likely to have health insurance than White non-Hispanic and African-American non-Hispanic (45% vs. 8% and 13%, respectively).

Beginning in 2014, uninsured parents of children on Medicaid became eligible for the **Iowa Health and Wellness Plan**, which covers adults ages 19-64 up to 133% of the FPL. The Iowa Health and Wellness Plan offers either Medicaid coverage or private insurance through the Health Insurance Marketplace. Private insurance plans on the Iowa Health and Wellness Plan are paid for by the State of Iowa. Those who do not qualify for these plans and whose children are on Medicaid or *hawk-i* may qualify for tax subsidies on the Health Insurance Marketplace. Marketplace subsidies are available to families making up to 400% of the FPL. **Youth** ages 19-21 who are not covered under their parents' insurance may be **eligible for coverage** under the Iowa Health and Wellness Plan.

Related Performance Measures

Title V 3.0 Measures

Percent of adolescents and young adults with a preventive services visit in past year
Percent of children having a medical home, subset analyses for CYSHCN
Percent of the MCH populations that is uninsured and underinsured; subset analyses for CYSHCN

Life Course Metrics

Percent of parents reporting their child was not able to obtain necessary medical care or dental care.
Percent of children who received a preventive dental visit in the past 12 months
Proportion of families who report their child received services in a medical home

Previous National & State Performance Measures

Percent of adolescents with a preventive services visit in the last year
Percent of children 0 through age 17 years who are adequately insured
Percent of infants and children, ages 1 to 6 years, who had a preventive dental visit in the last year
Percent of children with and without special health care needs having a medical home
% of Medicaid-enrolled children ages 0-5 years who receive a dental service.

"I mean, medical is covered. Both my husband and I have the medical through the new health and wellness program, which is pretty easy to understand. We have dental; our kids have dental, and they have Medicaid, so we've really got a good start to a good family."

-Title V Focus Group Participant

Background

A medical home is a family-centered approach to comprehensive primary care that values the whole person, communication with patients and families, and coordination of care. Medical homes provide accessible, compassionate, and culturally competent care. A medical home is important for all children, including children and youth with special health care needs (CYSHCN) who have or are at risk for a physical, emotional, behavioral, or developmental condition that requires them to receive services beyond that of children generally. Families who receive services from multiple service providers benefit from the medical home's coordination of care that keeps all providers informed. The primary care provider (PCP) partners with families to provide a consistent source of care. Specialty providers offer decision-making support¹.

Impact

Children with a medical home are significantly less likely to have an unmet medical or dental need than those without a medical home. They are also more likely to have received preventive medical care in the last year². Children with a medical home are more likely to have improved functional health outcomes and increased family engagement than those without a medical home. Medical homes have also been shown to reduce morbidity and mortality, hospitalizations, readmissions, and emergency room visits.

Co-management is a key component of a medical home. For example, half of CYSHCN need specialty care, which is often more difficult to access than primary care. The medical home supports seamless delivery of care that addresses needs in multiple aspects of the family's life.

Iowa Medicaid Enterprise reports that services for approximately 12% of children account for 46% of costs, with the potential for cost savings as a main driver of the medical home approach³. To yield cost savings for all types of patients and providers, financial incentives for cost containment must be incorporated into any medical home initiative. A medical home can yield significant health improvements that save money over the long

term and also foster family satisfaction. CYSHCN may experience the greatest benefits, with medical homes associated with a 27% decrease in number of hospital stays, a 40% reduction in inpatient costs, and a 55% reduction in visits to emergency departments^{4, 5}.

Current Status

Based upon data from the 2010 Iowa Household Health Survey, eighty percent of Iowa children had a medical home. This did not differ statistically by age. However, children in lower income groups were less likely to meet the definition of having a medical home; 68% of children living below 133% FPL had a medical home, along with 75% of those between 134-199% FPL, and 84% of those over 200% FPL. CYSHCN were less likely to have a Medical Home than children without special health care needs.

Of all children, 29% needed a referral to see other doctors or receive other services. Of those who needed referrals, 86% were able to receive them without a problem. In the lower income group, 46% of children needed a referral, compared with 29% of the 134-199% FPL group. Families between the 100-133% FPL had the most trouble receiving a referral, with 26% reporting having a problem receiving needed referrals⁶.

Access to Dental Care

Like the medical home, a regular source of care through a dental home is critical to maintaining good health. Based upon data from the 2010 Iowa Household Health Survey, nine out of ten children had one main place for receiving dental care. CYSHCN (97%), African American children (95%), and children with dental insurance (93%) were most likely to report a regular source of dental care.

Families of children with Medicaid consistently report difficulties accessing dental services. In 2013, 55 fewer dentists provided care for Medicaid-enrolled children than in 2012. Dentists identify low reimbursement and administrative burden as disincentives to serving patients enrolled in Medicaid. Additionally, only 18% of children younger than 3 years received care from a dentist in 2013, though the percentage of older children seeing a dentist has increased each year⁷.

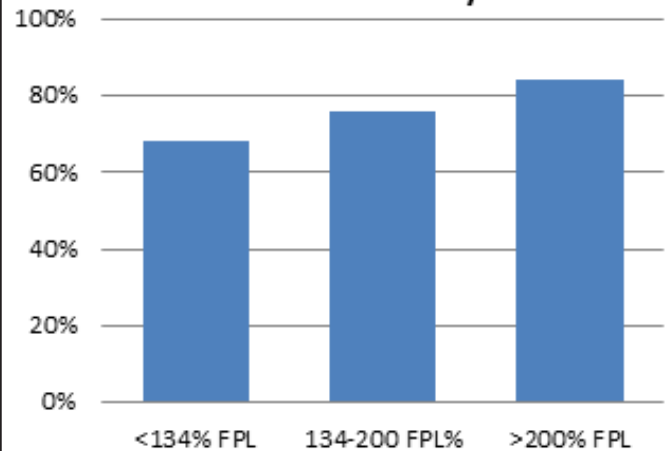
What is being done in Iowa?

Iowa's Patient-Centered Health Advisory Council and Office of Health Care Transformation encourage partnerships and synergy between community health care partners in Iowa working on new system-level models and payment reforms to provide better health care at lower costs by shifting from volume to value-based health care. This approach also reduces silos by building relationships with stakeholders and leaders, while streamlining efforts.

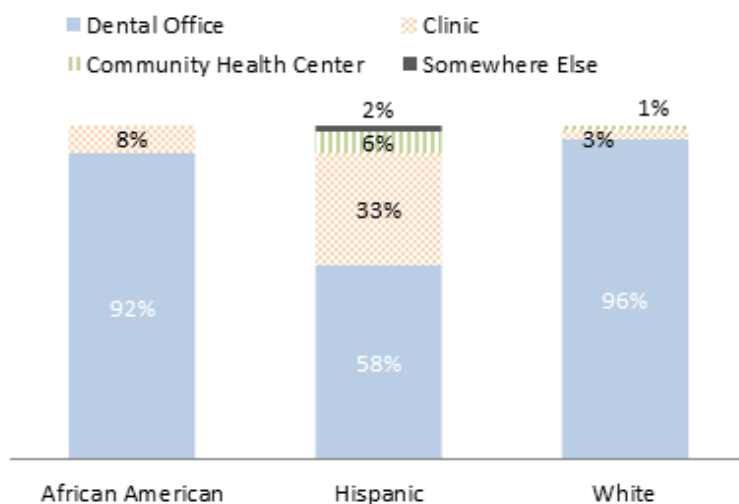
In 2012, a State Plan Amendment allowed Iowa Medicaid Enterprise to enroll fee-for-service Medicaid members (including children) with complex chronic conditions into primary care-based health homes. This program encouraged health care providers to provide care coordination and "whole-person" care, as well as additional support for families. The Iowa Health and Wellness Plan includes the Iowa Dental Plan and encourages practices to adopt a medical home approach. The goal of the PCPs, accountable care organizations, and managed care plans is to ensure that participants receive care coordination to maximize efficiency and improve the quality of individual health care. PCPs may be compensated with a coordinated care fee for managing enrollee care. Managed care plans will receive per member per month capitation³.

The I-Smile™ Dental Home Initiative is a program that uses a team approach to help Iowa's underserved children access dental services. The dental home includes dentists who provide treatment and definitive evaluation and other health professionals who provide oral screenings, education, anticipatory guidance, and preventive services. In 2013, 61% more Medicaid-enrolled children ages 0-12 years saw a dentist than in 2005 (before I-Smile™ began).

Iowa children with a personal doctor or nurse by family income level, Iowa Household Health Survey - 2010



Primary place for dental care by race, 2010



Related Performance Measures

Title V 3.0 Measures

The percent of children having a medical home, with a subset for CYSCHN.

Life Course Metrics

The proportion of families who report their child received services in a medical home.

The percent of children (0-17 years) with a special health care need.

National Performance Measures

Percent of children, ages 9-71 months, receiving a developmental screening using a parent-completed screening too.

Percent of adolescents with a preventive services visit in the last year.

Percent of children 0 through age 17 years who are adequately insured.

Percent of children with and without special health care needs having a medical home.

Percent of children with and without special health care needs who received services necessary to make transitions to adult health care.

Physical Activity and Childhood Obesity

Background

Overweight and obesity are one of the most serious health problems in America today¹. The origin of overweight involves many factors. It reflects inherited, environmental, cultural and socioeconomic traits. Sedentary activities such as watching television, playing video games, and using computers have been raised as a factor affecting childhood obesity, as these prevent children from doing physical activities².

Health Impact

Childhood obesity can have a harmful effect on the body in a variety of ways.

Obese children are more likely to have high blood pressure and high cholesterol, which are risk factors for cardiovascular disease (CVD). They also have an increased risk of developing

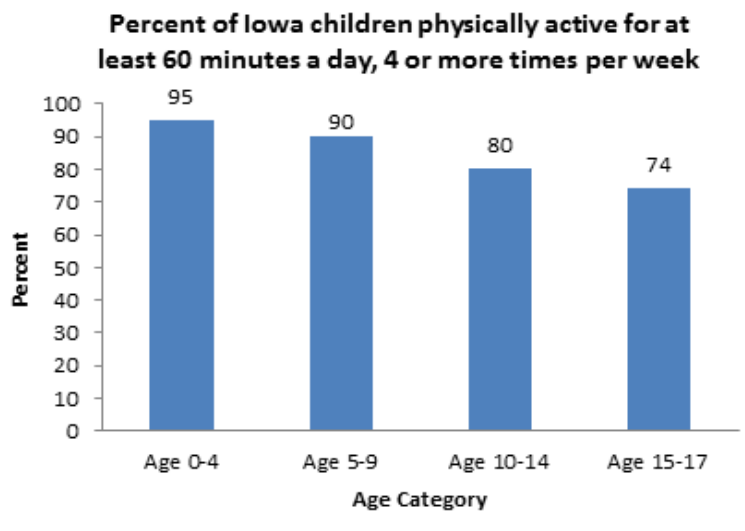
insulin resistance and Type 2 diabetes, sleep apnea, asthma, joint problems, fatty liver disease and social and psychological problems, such as discrimination and poor self-esteem, which can continue into adulthood.

In addition to the harmful effects childhood obesity have on children at their current age there are also great health risks later on in their life such as: obese children are more likely to become obese adults and adult obesity is associated with a number of serious health conditions including heart disease, diabetes, and some cancers and if children are overweight, obesity in adulthood is likely to be more severe³.

**Childhood obesity
life time medical
cost=
\$19,000 per child⁴**

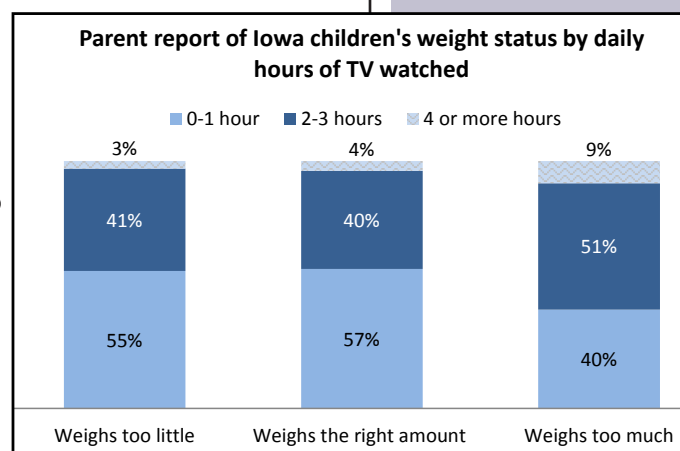
Current Status

Physical Activity: In 2010, almost nine out of ten (85%) children were physically active for at least 60 minutes per day in 2010, 4 or more times per week. Boys (88%) were more likely to be physically active than girls (83%) and younger children were more likely to be active than older 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 activities⁵.



Eighty percent of children watched some television daily, a decline from 90% in 2005. Among those that did watch television, 1.8 hours was the average time spent watching daily, but over half of children (53%) watch over 2 hours of television, videos, or movies each day. Children in lower income households were more likely to watch 2 or

more hours a day than children in higher income households. Also, younger children were more likely to watch 2 or more hours daily than older children. Sixty percent of children use the computer or play video games daily, with an average time of 1.5 hours. Children who watch less television or videos are more likely to have parents reporting their weight to be 'the right amount' or 'too little'.



Physical Activity and Childhood Obesity

Weight Status: According to the National Children's Health Survey in 2011, almost 14% of Iowa 10-17 year olds were obese, with another 15% being overweight. This is lower than the national number for obese (16%) and overweight (16%) children but higher than the Healthy People 2020 goal of 9.6%. Additionally, the highest portion of children who were underweight (16%) were in the lowest income bracket. Disparities were also present by race/ethnicity. Almost 50% of Hispanic 10-17 years were either overweight or obese compared to 25% of Hispanic children and 26% of White, non-Hispanic children.

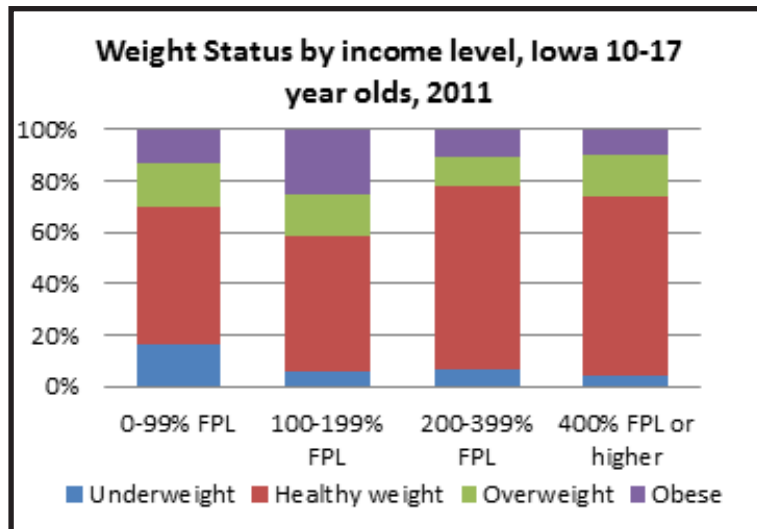
What is being done in Iowa?

Eat & Play the 5-2-1 Way a pediatric health care provider toolkit that includes patient education materials promoting healthy eating and physical activity. The Iowans Fit for Life Health Care Workgroup has provided a one stop shop for patient education materials. The materials were developed based on the 5-2-1 message from the American Academy of Pediatrics (AAP), Healthy Active Living initiative of AAP and the United States Department of Agriculture Food and Nutrition Service core nutrition messages. The 5-2-1 Way teaches children, 5- to eat at least 5 fruits and veggies daily; 2-limit screen time to 2 hours or less per day, 1-get 1 hour or more of physical activity every day and 0-drink fewer sugar sweetened beverages⁶.

Pick a Better Snack™ & ACT, the Iowa social marketing campaign, 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.



For additional information contact the Bureau of Family Health at the Iowa Department of Public Health at 1-800-383-3826.



Related Performance Measures

Title V 3.0 Measures

Percent of women, children, and adolescents who meet recommended amounts of nutrition and physical activities

Life Course Metrics

Percent of children who are currently overweight or obese

Proportion of high school students who are physically active for at least 60 minutes per day on five or more of the past seven days.

Previous National & State Performance Measures

Percent of adolescents with a preventive services visit in the last year

Percent of children ages 6-11 years and adolescent's ages 12-17 years who are physically active at least 60 minutes per day

Background

Adolescence, the period of time between the ages 10 and 24 years old, is a crucial period with marked physical, emotional and intellectual changes, as well as changes in social roles, relationships and expectations¹. The changes that occur during adolescence are influenced by many sectors of society and are important for the development of the individual, as well as provide the foundation for adulthood. Because there are so many influencing factors, multiple partners are needed to address adolescent health, safety, and well-being².

Impact

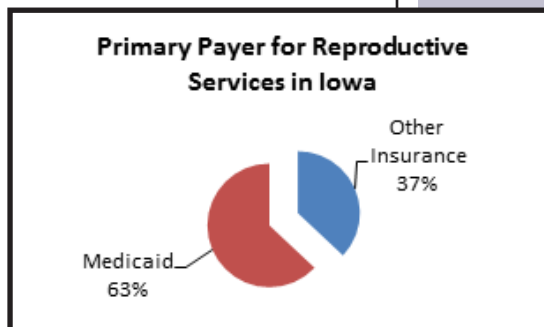
Health Impact

Lifestyle behaviors developed during adolescence have immediate consequences that often continue into adulthood. These behaviors influence short- and long-term prospects for health, educational attainment, risk of chronic disease and quality of life. Along with the long term-prospects there are several public health and social issues that begin to develop or peak during this period¹. Examples include:

- Substance use & abuse
- Teen and unplanned pregnancy
- Sexually transmitted infections
- Smoking

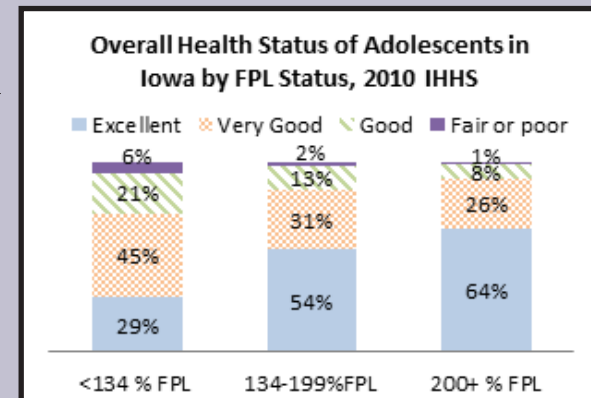
Cost Impact

Between 1991 and 2010, the teen birth rate in Iowa declined 33%. This progress has saved taxpayers an estimated \$58 million in 2010 alone if the rates had not fallen³. The cost of STDs to the U.S. health care system is estimated to be as much as \$15.9 billion. Annually, there are approximately 19 million new STD infections—almost half of them among young people ages 15 to 24.⁴



Current Status

Adolescents (ages 10-17) in Iowa report a lower health status than children in Iowa as a whole. Overall, 66% of children (ages 0-9) in Iowa reported excellent health status, while only 59% of adolescents were reported to be in 'excellent' health. In FFY 2013, only 72% of Medicaid-enrolled children ages 10-14 years received the recommended well-child visit. This is below the federal mandate of 80%. When adolescents were compared by Federal Poverty Level status (FPL), there was a disparity in reported health status, with lower income children reported to be in a significantly lower health state. Minority adolescents were also



less frequently reported to be in excellent health - 66% for White adolescents compared to 43% of African American and 44% of Hispanic youth⁵.

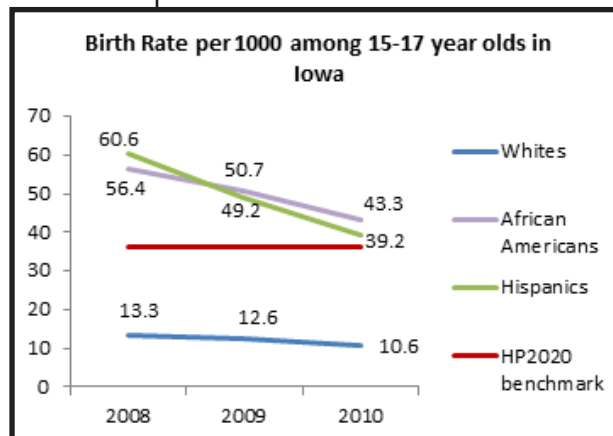
Pregnancy Prevention

In 2011, 2,665 Iowa teens aged 15-19 years gave birth. Adolescent parents are faced with a unique set of challenges compared to older parents⁶. Childbearing during adolescence negatively affects the parents, their children, and society. Compared with their peers who delay childbearing, teen girls who have babies are:

- Less likely to finish high school;
- More likely to rely on public assistance;
- More likely to be poor as adults; and
- More likely to have children who have poorer educational, behavioral and health outcomes over the course of their lives than do kids born to older parents⁷.

"It is important to educate youth on what is healthy and what health actually is. Many people don't have an idea of what health is, or they don't know what working out is."
-CYC Iowa Teen, CYC Forum

practice teen pregnancy prevention programs to youth in their area through a mix of school and community-based settings.



Prevention of Substance Abuse
Alcohol and other drug use among our nation's youth remains a major public health problem^{9, 10}. Substance use and abuse can increase the risk for injuries, violence, HIV infection, and other

What is being done in Iowa?

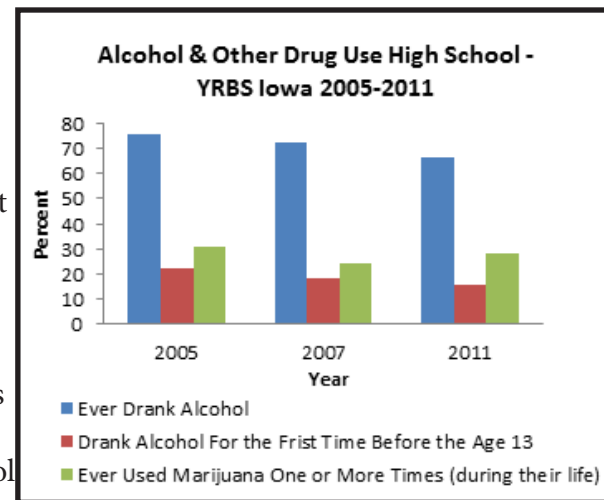
Iowa PREP

Iowa's Personal Responsibility Education Program (PREP) provides sexuality education to adolescents that is medically accurate, culturally and age-appropriate, and evidence-based. Community and school-based programming is implemented in seven Iowa counties with the goal of assisting youth to reduce their risk of unintended pregnancy, HIV/AIDS, and other sexually transmitted infections (STIs). Iowa PREP programs also addresses risk and protective factors to assist teens in making responsible, informed decisions and lead safe and healthy lives. Adult preparation subjects include healthy relationships, adolescent development, and healthy life skills⁸.

Iowa AEGP

The purpose of the Abstinence Education Grant Program is to support decisions to abstain from sexual activity by providing abstinence education, along with mentoring, counseling and adult supervision. The program focuses on those groups that are most likely to bear children out-of-wedlock, such as youth who are in foster care, aftercare or an out of home care setting and youth who reside in a county with a high teen birth rate. The contractors, which consist of local school districts and private non-profits, are implementing evidence-based or promising

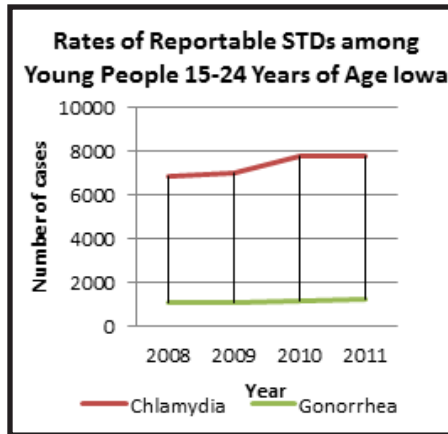
diseases. Adolescent abuse of prescription drugs has continued to rise over the past 5 years. IDPH administers funding provided to community-based organizations to support adolescents through substance abuse prevention and treatment services¹¹. IDPH also supports adolescents through prevention strategies including youth development and youth mentoring. The focus of several IDPH grants is reducing youth alcohol use and



binge drinking. Two award-winning media campaigns were created to build awareness including "What Do You Throw Away" to address underage drinking and "Stay Classy" aimed at reducing binge drinking among 18-24 year olds. IDPH also convenes a youth led tobacco prevention group called I-STEP (Iowa Students for Tobacco Education Prevention), which consists of a 25 member youth executive council. Quitline Iowa offers online and over the phone coaching to 12-17 year olds seeking tobacco cessation services.

STI/HIV

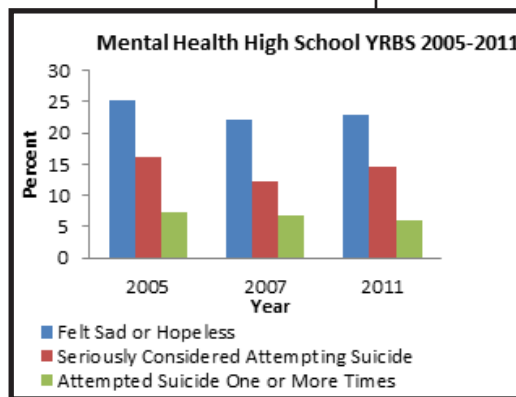
According to the CDC's Division of STD Prevention, regardless of race or gender, sexually active adolescents and young adults are at increased risk for STDs when compared to older adults. Half of all STIs occur in people 25 years of age or younger and one in four new STI cases occur in teenagers¹². IDPH's Sexually Transmitted Disease (STD) Program maintains a condom availability program as part of our cooperative agreement with the CDC. The goals of this program include increasing condom use among sexually active individuals and subsequently reducing the incidence of STDs. The STD Program is focusing its efforts on sexually active adolescents and young adults because the incidence of many STDs is highest among this population.



Mental Health

Late childhood and adolescence is period when many mental health problems emerge¹³. Recent studies have identified depression, as the largest cause of the burden of disease among young people¹⁴. In Iowa, suicide was the second leading cause of death for Iowans ages 15-24 in 2012¹⁵.

Along with depression, bullying is another burden that adolescents experience that could lead to depression and even suicide. IDPH's suicide prevention program screens all youth and young adults who seek substance abuse treatment for suicide risk and implements an evidence-based gatekeeper program for middle and high school educators in all of Iowa's middle/junior high and high schools.



Systems Building

Through partnership with the Association of Maternal and Child Health Programs and the State Adolescent Health Resource Center Iowa was selected to participate in a Comprehensive Adolescent Health Systems Building Collaboration and Innovation Network to explore and enhance existing efforts to build comprehensive adolescent health systems.

IAMincontrol (Iowa Adolescents Making Choices to Control Their Future)

IDPH, in partnership with Iowa State University Extension and Outreach, maintains a blog-style website for Iowa teens focusing on a variety of health issues. The website, www.IAMincontrol.org, includes questions, answers and resources on topics ranging from fitness and nutrition to bullying and suicide specifically for adolescents.

Iowa Collaboration for Youth Development Council (ICYD)

ICYD is a state-led interagency initiative designed to better align policies and programs and to encourage collaboration among multiple state and community agencies on youth-related issues. The goals of the initiative are to promote the use of positive youth development principles in state policies and programs and to facilitate the use of effective youth development practices in communities throughout Iowa¹⁶.

Most people are not aware of the consequences of unprotected sex. It is not discussed in any classes during school. I'm part of a girls' group, but they don't cover the topic much. Most information comes from friends, but they do not know that much about the topic either.

-CYC Iowa Teen, CYC Forum

Related Performance Measures

Title V 3.0 Measures

Percent of adolescents and young adults with a preventive services visit in past year.
Percent of children and adolescents who have completed recommended vaccinations.

Life Course Metrics

Percent of 9th graders who reported being bullied on school property or electronically bullied.
Percent of 9th-12 graders who felt sad or hopeless almost every day for more than 2 weeks during the previous 12 months.
Percent of adults with poor mental health.
Percent of adolescents using alcohol during the past 30 days.
Prevalence of illicit drug use in the past month among population 12 years and older.
Percent of teen births that are repeat teen births.
Number of live births born to women aged 10-19 years per 1,000 women aged 10-19 years.
High school graduation rate (4 year cohort) as measured by the Adjusted Cohort Graduation Rate
Percent of adolescents who smoked cigarettes in the past 30 days
The proportion of adolescents ages 13-17 who receive the evidence-based clinical preventive service HPV vaccine
Initiation of sexual intercourse before age 13 years.

Previous National & State Performance Measures

Percent of adolescents with a preventive services visit in the last year.
Percent of children ages 6-11 years and adolescents ages 12-17 years who are physically active at least 60 minutes per day.
Percent of children with and without special health care needs who received services necessary to make transitions to adult health care.
Rate of hospitalizations due to unintentional injuries among children ages 0-14.

Background

Health status is impacted by the environment in which individuals live. For example, low income neighborhoods in the United States are often characterized by violence and a lack of positive social outcomes. Living in such an environment leads to elevated stress and greater risk for health problems. Neighborhood safety, walkability and ability to access services at a local level are all important community factors that impact the health of children¹.

Impact

Neighborhood Safety

An unsafe neighborhood can harm a child's health in a variety of ways, by preventing her from getting physical activity to risking injury^{2, 3}. Studies have also shown that unsafe neighborhoods are associated with high rates of infant mortality and low birth weight, juvenile delinquency, high school dropout, child abuse and neglect, and poor motor and social development among pre-school children⁴.

Unintentional Injury

In the United States, unintentional injury is the leading cause of death among children aged 19 and younger⁵. The cost of these injuries is massive, at an approaching an estimated \$300 billion annually in the United States⁶.

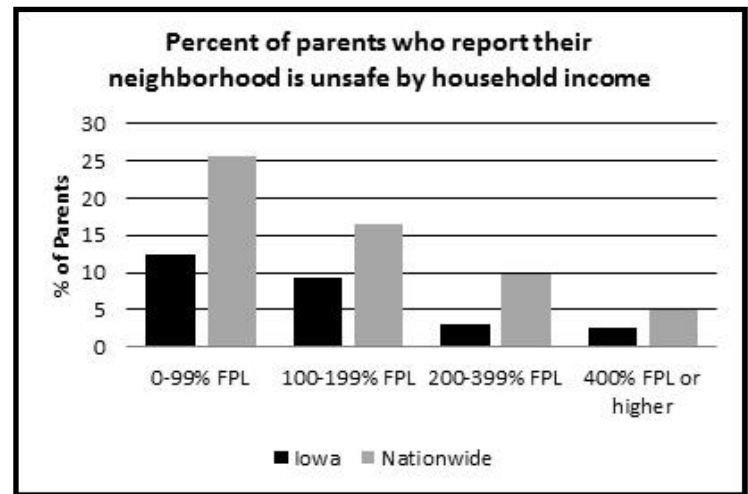
Walkability

Inaccessible or non-existent sidewalks and bicycle or walking paths contribute to sedentary habits. These habits lead to poor health outcomes such as obesity, cardiovascular disease, diabetes, and some types of cancer.

Water Fluoridation

Fluoridation strengthens tooth enamel, making teeth more resistant to decay. The CDC has called community water fluoridation one of the top 10 public health achievements of the 20th century, because of the large number of dental caries avoided by fluoridation, especially in children. Every dollar spent on fluoridation

can save up to \$38 in avoided dental bills. Fluoridation of drinking water is less expensive and more effective than fluoride tablets, rinses and toothpaste used individually⁷.



Current Status

Neighborhood Safety

Iowa is ahead of the national average with over 95% of parents reporting that their neighbourhood is safe. However, over 10% of poorer families do report that their neighbourhood is unsafe.

Unintentional Injury

In 2012, about 14% of children age 0-19 experienced an unintentional injury resulting in either in-patient or out-patient care at an Iowa hospital, down from 19% in 2010.

Walkability

Around 80% of families report that their neighborhoods have sidewalks or walking paths. I-Walk Schools reports that 19% of kids walked or biked to school from 2010-2014⁴.

Water Fluoridation

In 2013, approximately 2.8 million Iowans, or 90% of the state population, were served by community water systems. Of these, 92% received fluoridated water⁸.

Food Security

In 2010, over 10% of Iowa families reported they did not always have enough to eat, the percentage was even higher for low income families: 38%.

What is being done in Iowa?

The University of Iowa's School of Urban and Regional Planning requires all second year students to participate in a **"Field Problems in Planning"** course in which they partner with an Iowa community on a project to improve the community environment. Many of these projects may directly or indirectly improve the health of members of the community⁹.

The Tomorrow Plan is a project initiated in the summer of 2011 to incorporate many stakeholders in the Greater Des Moines area to plan for the region's future development. The project took into account the built environment, including its impact on public health, natural environment, social equity, economic revitalization, and energy and waste. The project's draft report was published in July 2013¹⁰.

Local communities are improving access to healthy foods and opportunities for physical activity by supporting the **Iowa Healthiest State Initiative** through projects like **The Blue Zones Project™**, Community Transformation and other related activities.¹¹.

I-WALK is an Iowa walkability program administered by Iowa Department of Public Health and Iowa State University Extension and Outreach, and implemented by communities across Iowa. The goal of I-WALK is to provide community coalitions with relevant local information to help them continuously update, implement, and evaluate their community walking plan. This is accomplished through a community coalition, a GPS mapping assessment, resident surveys, a walking school bus and the presentation of a final report.

The Iowa Department of Education continues to lead the **Iowa Safe and Supportive Schools (IS3) program** in 21 Iowa high schools. Since implementation in 2011, 90% of the schools experienced an improvement on their overall Safe and Supportive Schools Index which measures School Safety, Student Engagement and the overall Learning Environment¹².

The Bureau of Family Health's **Healthy Child Care Iowa** campaign is publicly funded to improve the health and safety of Iowa children while they are enrolled in child care and early education settings. Healthy Child Care

Iowa supports Child Care Nurse Consultants (registered nurses) who are experts in child health, child care, and child safety. Child Care Nurse Consultants work with child care and early education businesses to help improve child care conditions. Consultants are not evaluators or enforcers, rather resources for child care providers. Businesses may call or send questions to a child care nurse consultant about health and safety policies, health programs, health of personnel, and specific child health or safety issues. There is also a toll-free Talkline for child care providers to ask health related questions¹³.

"[We need] more services for kids, like during the summertime, or even like during the school year, after school. Like with [name of an after school program] unless you have a scholarship or a job, it's like \$75 a week."

-Title V Focus Group Participant

Related Performance Measures

Title V 3.0 Measures

Rate of injury-related hospital admissions per population
ages 0-19 years

Percent of children ages 6-11 years and adolescents ages 12-
17 years who are physically active at least 60 minutes per day

Percent of children with and without special health care
needs who received services necessary to make transitions to
adult health care

Life Course Metrics

Proportion of births occurring in baby friendly hospitals

Proportion of population served by community water system
that received optimally fluoridated water

Proportion on households with high level of concentrated
disadvantage, calculated using 5 Census variables

Prevalence of homelessness among individuals Prevalence of
homelessness among families

Homicide Rate

Household Food Insecurity

Percent of Population living under the Federal Poverty Level

Percent of children who experienced discrimination in the
past year (parent report)

Differential distribution of individuals by race or other social
or income factors (Dissimilarity Index)

Prevalence of unemployment

Percent of children who are currently overweight or obese

Capacity of states to assess lead exposure

Voter Registration

Previous National & State Performance Measures

The rate of deaths to children aged 14 years and younger
caused by motor vehicle crashes per 100,000 children

Rate of hospitalizations due to unintentional injuries among
children ages 0-14



Background

Home environment can be thought of in two ways: the structure of the home itself and the influence of the people who live in the home. Creating a healthy home environment must take into account both aspects. According to the National Center for Healthy Housing, a healthy home is one that is designed, constructed, maintained, or rehabilitated in a manner that supports the health of residents. It also known that a parent's mental health can have a significant influence on a child's development. Given that young children spend the majority of their time at home, parents have many opportunities to protect their children's safety, as well as their mental and physical health^{1,2}.

Impact

Research has linked negative home environments during children's first three years with a host of developmental problems, including:

- poorer language development by age 3;
- deficits in school readiness
- aggression, anxiety, and depression;
- impaired cognitive development at age 3;
- later behavioral problems.

Longer-term effects have also been documented. A child's early home environment and the skills they learn in the first 3 years have been linked to:

- High school graduation rates
- Teen parenthood
- Adult employment and earnings

Brain imaging research suggests that growing up in a disadvantaged environment causes the brain to develop differently. Chaotic living environments can lead to changes in the brain's cortisol stress response, with the potential to increase vulnerability to chronic disease in later life. Studies of very young children have identified distinctive patterns of brain activity associated with

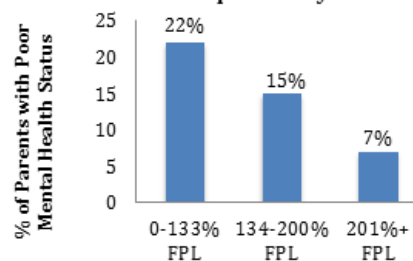
family income and socioeconomic status, especially related to social and emotional development, language ability, learning, and memory³.

Cost Impact

In 2002, researchers estimated that the average decrease in lifetime earnings of a child with measured blood lead level of 10-19 micrograms per deciliter would be at least \$40,000, with an average decrease of at least \$80,000 for a child with a blood lead level of 20 micrograms per deciliter. Unintentional poisonings led to an average of 2,008 hospital visits each year from 2002-2006 with an average cost of care over \$4,650 per visit. Over that same time, 3,200 visits to emergency departments were made with an average cost of more than \$850 per visit¹.

An estimated \$5.6 billion in productivity is lost each year from exposure to second-hand smoke. Second-hand smoke has an incredibly detrimental effect on young children, and if smoking persists at the current rate among youth, 5.6 million Americans under age 18 are projected to die prematurely due to smoking-related illness - more than 1 in 13 Americans aged 17 or younger today⁴.

Mental Health Disparities by FPL



Current Status

Foster Care

Each year up to 5,000 Iowa children are entered into foster care to address child safety or public safety. For most, foster care is a short term placement designed to allow time to address the primary reason for removal from their home, and to receive the support and services necessary for children to return to their family⁵.

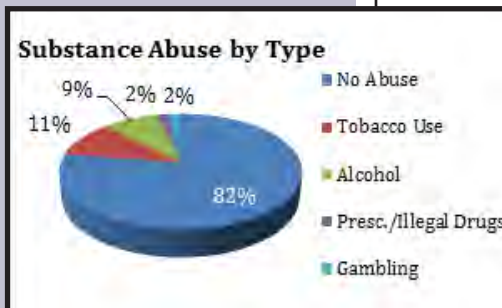
Caregiver Depression

In 2013, over 6,300 families were referred into 1st Five, 4% of those to address caregiver depression. Seven percent of all connections made are mental-health service related, including mothers, children, and other caregivers⁶.

Substance Abuse, Smoking and Gambling

In Iowa, 11% of children live in a household where tobacco was reported as a problem, 9% with alcohol abuse, 2% with prescription or illegal drug abuse, and 2% with gambling addiction⁶.

Although less than the national average (9.4%), 7.5% of Iowa children live in a home where one or both parents smokes in the home. However, there is significant disparity in smoking exposure by Federal Poverty Level (FPL) status in Iowa 18.4% of children in families <100% of the FPL are exposed to smoke in the home. Just 2.3% are exposed to smoke in families at 200-399% of FPL⁷.



Unintentional injury

Unintentional Injury is the leading cause of death among children aged 19 and younger; more than 9,000 children die each year of the estimated 9 million that are unintentionally injured. In Iowa, although unintentional injury of children ages 0-14 has declined over the past few years, it is still a major issue for the state.

Safe Sleep

Sudden Infant Death Syndrome (SIDS) is the leading cause of death among infants, most common between the end of the 1st month and the end of the 4th month of life. In 2011, there were 38 sleep-related deaths in Iowa infants. In a review of sleep-related deaths from 2006-2011, 42% of cases involved blankets and 29% involved co-sleeping with an adult. For cases involving an adult bed, 38% were African-American infants versus 11% of the White infants⁸.

Lead Poisoning

Iowa has a mandatory blood lead testing law, but a large portion of children are not tested until between 3 and 6 years of age (in 2013, 38%). Iowa has a disproportionate number of children with a positive lead test that do not return for follow-up testing. In 2012, Iowa conducted lead tests on 68,673 children younger than age 6. There were 0.41% of children with an unconfirmed test >10 µg/dL; 23.7% of the children had a test >5 µg/dL but did not receive a follow-up test within 12 weeks.

What is being done in Iowa?⁴

HOPES-HFI

The Healthy Opportunities for Parents to Experience Success: Healthy Families Iowa program provides family support through home visits for families. Visits begin during pregnancy or at the birth of a child and can continue until the child is 4 years old. The program works to promote optimal child health and development, improve family coping skills and functioning, promote positive parenting and family interaction, and prevent child abuse and neglect. HOPES-HFI is currently active in nine Iowa counties: Black Hawk, Polk, Woodbury, Scott, Muscatine, Hamilton, Clinton, Buchanan, and Lee⁹.

MIECHV

The Maternal, Infant, and Early Childhood Home Visiting program supports pregnant women and families, helping parents of children from birth to age 5 use available resources and training to develop skills for raising children that are physically, socially, and emotionally healthy and ready to learn. This program is proven to cost-effectively improve child health through voluntary, evidence-based home visiting. It helps to prevent child abuse and neglect, encourage positive parenting, and promote child development and school readiness¹⁰.

Childhood Lead Surveillance Data

In 2014 Iowa launched the Iowa Healthy Homes and Lead Poisoning Surveillance System (HHLPPSS). HHLPPSS data will be used to target primary prevention interventions to at-risk populations and high-risk areas. Reports will assist partner agencies, medical providers and other health care systems in informing parents on follow-up testing and reduction strategies¹¹.

Protect the Ones You Love (CDC)/Injury Prevention (IDPH)

To raise parents' awareness about the leading causes of injury and prevention, the CDC launched the Protect the Ones You Love initiative. This shares information on the steps parents can take to make a positive difference to avoid unintentional injuries for children¹².

The Iowa Department of Health (IDPH) also produces annual statistics on the rate of unintentional injury, used to inform policy makers, communities, health practitioners, and local authorities to help minimize the impact of unintentional childhood injury¹³.

NICHD Safe to Sleep (Formerly “Back to Sleep”)

For 20 years the Safe to Sleep program has focused on reducing SIDS risk, dropping the SIDS rate 50% since 1994 and tripling the number of infants placed on their backs during rest. Yet, the number of sleep-related deaths has risen sharply in the last decade, often resulting from unsafe sleeping environment. As a way to educate parents and providers, the Safe to Sleep Program has created:



- Accredited continuing education activities on ways to reduce risk of SIDS and create safe sleep environment for nurses and pharmacists.
- Outreach materials and training materials to help spread safe sleep messages in American Indian/Alaska Native communities.
- A comprehensive websites with SIDS and Safe Sleep information for parents and providers.
- A revised multi-cultural resource kit so that persons in all communities can learn how to spread their knowledge of safe sleep¹⁴.

Related Performance Measures

Title V 3.0 Measures

Percent of infants placed to sleep on their back
Percent of children, ages 9-71 months receiving a developmental screening using a parent-completed screening tool
Rate of injury-related hospital admissions per population ages 0-19 years
Percent of children ages 6-11 years and adolescents ages 12-17 years who are physically active at least 60 minutes per day
Percent of children who live in households where someone smokes

Life Course Metrics

Percent of children exposed to maltreatment including physical abuse, neglect, deprivation of necessities, medical neglect, sexual abuse, psychological, or emotional abuse
Prevalence of adverse childhood experiences among children
Percent of births by maternal education levels
Percent of children who live in a household with someone who smokes, and smoking occurs inside the home
Capacity of states to assess lead exposure

Background

A child's early years are critical. Having an undiagnosed developmental delay is detrimental to a child's long term success, impacting school readiness and quality of life. Early and continuous screening for developmental delays and caregiver depression yields better immediate and long term health outcomes for children. Early screening facilitates early intervention. A link between early adverse experiences and an increased risk of poor health outcomes later in life has been well-established. Since its inception in 1967, Medicaid's Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program aims to "to discover, as early as possible, the ills that handicap our children" and to provide "continuing follow-up and treatment so that handicaps do not go neglected." Several programs and initiatives across Iowa promote early developmental screening to help identify children at risk for developmental problems to foster healthy growth and development¹.

Impact

Health Impact

As of 2006, the American Academy of Pediatrics recommends the use of standardized developmental screening tests as part of well-child visits at 9-, 18- and 24/30 months. Developmental delays may indicate a medical condition, potential behavioral or developmental disorders. Early diagnosis affects the treatment plan available to the family and allows for timely entry into early childhood services^{2, 3}.

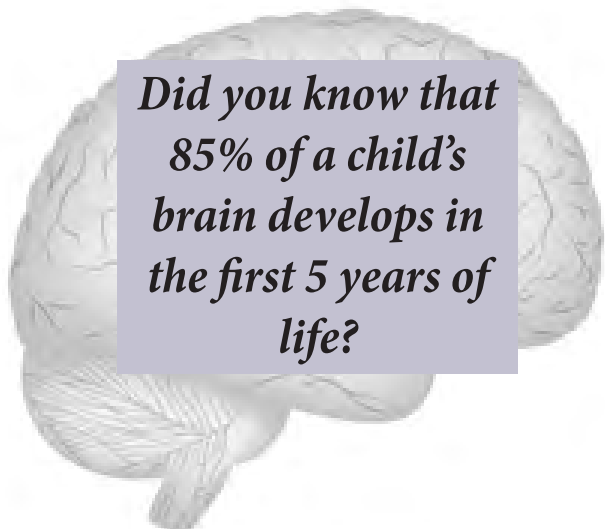
Early experiences strongly influence brain development. Negative experiences can decrease the neural connections adversely affecting a child's capacity for language, reasoning, problem solving, social skills, behavior and emotional health. Chronic childhood stress and caregiver depression is correlated with an increased risk of negative physical and mental health outcomes⁴. A large study of adults found that those who experienced one or multiple adverse childhood experiences (also known as ACEs) in childhood not only have a greater chance of developmental delay compared to those who did not experience these stressors, but also have a higher prevalence of health problems later in life. Health

problems included heart disease, substance abuse and depression⁵. Children exposed to multiple ACEs are more likely to go on to parent children who will also be exposed to those same toxic stressors. Examples of ACEs include parental divorce or incarceration, abuse and abandonment.

Ongoing assessments ensure children receive appropriate care and support for their existing needs and also help prevent secondary conditions. Ongoing assessment also allows each family's strengths to be identified and put to use thus promoting the well-being of not only the individual child but the entire family unit. A concern of many primary care providers is that they do not have the tools, and more importantly, the time to perform routine screening. Currently, there is no universal screening in Iowa.

Cost Impact

Several national studies have demonstrated that every dollar invested in early childhood yields \$3-\$17 in return⁶. From a fiscal standpoint, prevention of secondary conditions that may interfere with a child's health, development, and well-being can result in cost savings for the family and health, educational, and social systems⁷. Early identification and intervention for developmental delays and disabilities result in savings later on in life when cost of treatment for chronic conditions can be astronomical⁸.



***Did you know that
85% of a child's
brain develops in
the first 5 years of
life?***

Current Status

Prevalence of Developmental Delay

According to the 2012, National Survey of Children's Health, there were over 25,000 Iowa children, ages 2-17, currently experiencing a developmental delay, and nearly 15,000 who had previously had experienced a delay. Of those children with a developmental delay, African-American children were disproportionately affected (12.6%) compared to Hispanic (4.8%) and non-Hispanic white (3.4%) children^{9, 10}.

At Risk for a Developmental, Behavioral or Social Delay

According to the 2012, National Survey of Children's Health, Iowa's minority children are at a higher risk for developmental delays than white, Non-Hispanic children, as are those children whose families make less \$20,000 a year¹⁰.

Concerns about Developmental Delays

According to the 2012, National Survey of Children's Health, compared to the US, Iowa's minority parents have more concerns regarding their children's physical, behavioral or social development. For example, 83% of African-American parents in Iowa had concerns, versus 45% of African-American parents nationwide. Additionally, Iowa parents in lower-income brackets were also more concerned about their children's development compared to parents nationwide¹⁰.

Received Screening

Nationally, only 78.6% of children with special health care needs (CSHCN), ages 0-17 years, receive early and continuous screening, with states ranging from 64.9% - 89.1%, as measured in the 2009/10 National Survey-CSHCN. In 2011-2012, only 30% of children under the age of 6 in Iowa received a developmental screening, compared to the national average of 36%¹⁰.

Early Intervention Services Program

Iowa is slightly below the national average of children receiving these services. 77.5% of Iowa children did not receive these types of services compared to 73% nationwide. Those who needed services but had problems receiving them vary by CSHCN or non-CSHCN.

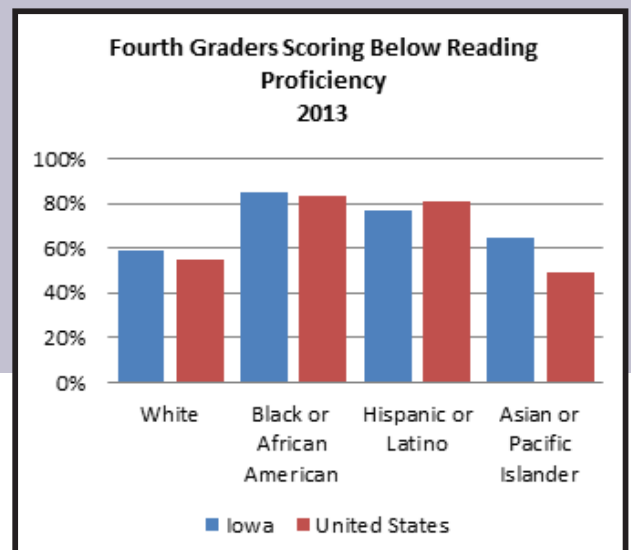
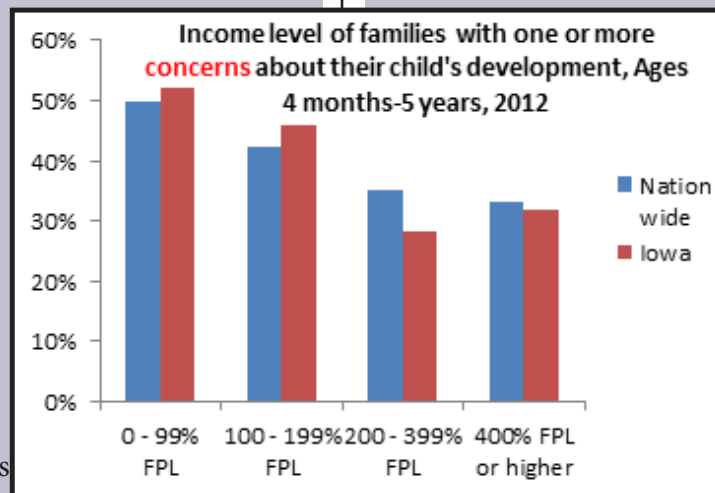
In Iowa, 4.7% of CSHCN and 0.7% non-CSHCN had problems receiving needed services, compared to 7.9% nationwide and 2.4%, respectively¹⁰.

Adverse Childhood Experiences

While Iowa has a greater percentage of the population experiencing no ACEs than the general US population (45% vs. 36%), more Iowans are experiencing 4 or more ACEs compared to the US (14% vs. 12%)¹¹.

School Readiness

Late identification of developmental delays means children may not be ready to start school¹². In 2013, minority fourth graders were less likely to be reading at the fourth grade level. Additionally, 77% of 4th graders eligible for a reduced/free lunch level were not reading at their grade level, compared to 52% who were not eligible¹³.



What is being done in Iowa?

1st Five, Healthy Mental Development Initiative is a public-private partnership that promotes the use of developmental surveillance and screening tools by primary care providers with children ages birth to five years old. Based on screening results, local coordinators connect the child and his/her family to appropriate community resources. Needs identified range from hearing and speech issues to social and behavioral concerns⁶. 1st Five serves 49 Iowa counties and works to partner with community resources and local physician practices.

Early Childhood Iowa (ECI) serves 39 areas throughout the state that develop local level plans to serve 52,003 Iowa children¹⁴. In 2013, 86% of families served had incomes at 200% of FPL or lower. Of the families served, 71.9% of children 0-5 years old were screened for developmental delays and 8.9% of those were referred to early intervention services¹⁵.

The Iowa Family Support Network (IFSN) is a statewide intake and referral system that supplies resources to families and professionals working with newborns and toddlers. The IFSN is a collaboration between Maternal, Infant, Early Childhood Home Visitation (MIECHV) and Early ACCESS and is operated by VNS of Iowa. One program IFSN refers families to Early ACCESS¹⁶.

Early ACCESS (IDEA Part C) is Iowa's early intervention system for families of children, birth to three years old, who have developmental delays or conditions known to impact development. Early ACCESS is a partnership with the IDPH, Child Health Specialty Clinics (CHSC), the Iowa Department of Education and the Department of Human Services. In FY13, the Early ACCESS served 5,931 children. Each child has all areas of their development evaluated and assessed, including nutrition and health. Only 36% of children who exited the program transitioned to special education services at age 3 years. Future work includes expanding the use of health professionals in screening through Early ACCESS.

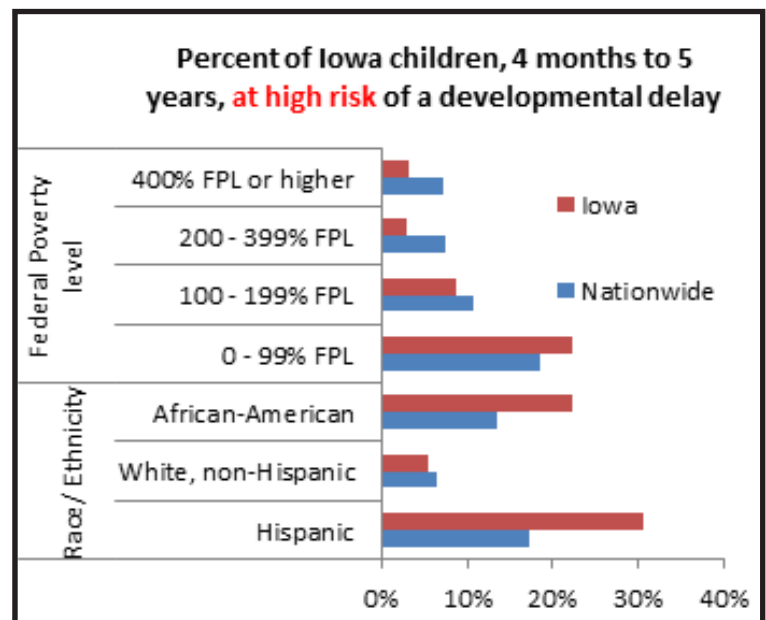
Iowa Medicaid's EPSDT program is collaboration between the Iowa Department of Human Services and the IDPH. Iowa's Title V local contract agencies provide enabling services for the 0-21 age group to have access to regular and periodic well-child screening services.

Early Identification and Intervention

In an effort to improve screening rates, in 2009 and 2014, statewide endeavors were implemented to train providers to use evidence-based screening tools for developmental delays. The training was based on the Ages and Stages Questionnaire, 3rd Edition (ASQ-3) and Ages and Stages Questionnaire: Social-Emotional (ASQ:SE)¹⁷.

CHSC universally administers developmental screens for all child patients and has been doing so since 2007¹⁷.

Early identification of children at risk for autism can be accurately determined as early as 18 months of age. The Modified Checklist for Autism in Toddlers-Revised (MCHAT-R) is an evidence-based screening tool that is used by all 13 CHSC regional centers and a limited number of state agencies. In 2014, CHSC Advanced Registered Nurse Practitioners began using a secondary screening tool, the Screening Tool for Autism in Toddlers and Young Children (STAT-MD). This tool identifies individuals who score in the moderate to severe range of the M-CHAT-R who require more comprehensive medical assessment for Autism Spectrum Disorder.



Related Performance Measures

Title V 3.0 Measures

Percent of children, ages 9-71 months, receiving a developmental screening using a parent-completed screening tool

Life Course Metrics

Proportion of children aged 0-3 years who received EI services

Percent of 4th graders scoring proficient or above on math and reading

Prevalence of adverse childhood experiences among children

Percent of Medicaid-enrolled children who received at least one initial or periodic screen in past calendar year

State Performance Measures

The degree to which a coordinated system of care for children and youth with special health care needs is implemented

Background

Oral health is a key component to overall health and well-being for children. Although it is preventable, tooth decay is the most common chronic childhood disease in the U.S., five times more common than asthma. If left untreated, decay can lead to serious health issues that include malnourishment, bacterial infections, and even surgery or hospitalization. Fortunately, using fluoride and dental sealants when combined with good oral hygiene, nutrition, and regular dental care can keep most mouths healthy. Oral health status and access to dental care for many children in Iowa is mostly very good. However, disparities exist for certain populations in the state such as low-income families, children in rural counties, and racial and ethnic minorities¹.

Impact

Children need good oral health to chew food effectively which helps them to grow and thrive, speak properly, and to be free from pain in order to concentrate on learning new skills². Throughout the lifetime, oral diseases, can lead to physical and psychological disabilities as well as significant morbidity in adulthood¹.

A 2004 study found that access to early preventive dental care for children on Medicaid can actually reduce five-year costs of care when compared to children who do not receive early preventive care³. Delta Dental reports that the average cost to maintain just one restored cavity for a 10-year-old can reach to nearly \$2,200 by the time he/she is 79 years old⁴. When very young children have extensive decay, it is often treated in a hospital using general anesthesia, increasing costs exponentially¹. Yet the costs to prevent decay through methods like topical fluoride application and community water fluoridation are minimal⁵. Dental sealants, which prevent decay on newly erupted permanent molars for children ages 6-12, are also inexpensive. Medicaid reimburses \$14 for a fluoride varnish and \$20 for a dental sealant⁶.

Current Status

Parents/guardians of Iowa children believe that their children have mostly good oral health, yet they also believe that it is not as good as their children's physical health. Disparities are reported for Iowa children from lower income families, with parents/guardians at >134% of the Federal Poverty Level (FPL) more likely to report poorer oral health status. The 2010 Iowa Household Health Survey found that nine out of ten children had one main place where they receive dental care. Children from low-income families also indicated that they were more likely to receive care in public health settings such as WIC clinics or at Head Start centers. The survey also found that although African American and Hispanic children were more likely to experience delays accessing dental care⁷.

Data for Iowa's I-Smile™ dental home initiative indicate improvements in the number of Medicaid-enrolled children seeing a dentist since the program began (61% increase for children ages birth-12 years since 2005)⁸. Yet the number of children younger than 3 years of age who see a dentist is still lagging; just 18% of Medicaid-enrolled younger than 3 saw a dentist in 2013.

The IDPH school-based sealant program data (children in grades 2-8) finds that 18% of children have untreated decay. The rate is even higher for children on Medicaid (21%).

Insurance Coverage

Many Iowa children, although likely to have medical insurance coverage, do not have dental insurance coverage⁸. I-Smile™ data shows a 45% increase in the number of children receiving Medicaid coverage since 2005, a benefit since Medicaid provides comprehensive dental coverage. This benefit is weakened, however, due to the low reimbursement rate and its impact on dentists' willingness to accept Medicaid-enrolled patients. Iowa's *hawk-i* program offers a dental-only option for qualifying families who may have medical insurance but not dental coverage. Over 3,300 children are currently enrolled.

Availability of Providers

In 2013, 55 fewer dentists saw Medicaid-enrolled children than in the previous year. This trend is of particular concern due to the chance that those who will accept Medicaid-enrolled patients are seeing a disproportionate number which can result in provider weariness and potentially choosing to stop seeing Medicaid-enrolled altogether⁸. The I-Smile™/Title V program provides preventive services for many at-risk children, particularly those younger than age 5. Services are often provided by dental hygienists, as well as some registered nurses. Over 28,000 Medicaid-enrolled children (ages 0-12) received preventive services in 2013.

Data for Iowa's school dental screening requirement for kindergarten and 9th grade students shows a need for additional providers in order for all children to meet the requirement. In 2012-2013, dentists provided 64% of the exams, dental hygienists provided 30% (screenings) and nurses 6% (screenings)⁹.

What is being done in Iowa?⁴

Low-income children in Iowa receive assistance accessing dental care through the **I-Smile™ dental home initiative**, within Title V programs. I-Smile™ is enhancing dental care coordination services provided for child health clients, building referral networks with dentists, providing gap-filling preventive care for children at risk, and promoting oral health within communities. All Iowa counties are served by regional I-Smile™ coordinators, who are liaisons between families and dental offices, medical offices, schools, businesses, and community organizations⁸.

Children with private medical insurance but insufficient dental may enroll with **hawk-i** for the dental-only coverage. Iowa is the only state that has the dental-only SHIP option. Iowa's insurance marketplace includes a stand-alone dental plan, so selecting dental coverage must be separately from selecting medical coverage. As

a result, fewer children may become enrolled on dental insurance although it is considered an essential health benefit.

Iowa has expanded **school-based sealant programs** from 27 counties to 59 counties, in an effort to reach more school-age children who are at greatest risk of tooth decay. During the 2013-2014 school year, more than 9,400 children were seen and nearly 33,000 sealants were applied.

Related Performance Measures

Title V 3.0 Measures

Percent of children under age 6 who had a cavity or toothache in the last 6 months

Life Course Metrics

Percent of children who received a preventive dental visit in the past 12 months

Percent of parents reporting their child was not able to obtain necessary medical care or dental care.

Proportion of population served by community water systems that received optimally fluoridated water.

Previous National & State Performance Measures

Percent of adolescents with a preventive services visit in the last year

Percent of children 0 through age 17 years who are adequately insured

Percent of infants and children, ages 1 to 6 years, who had a preventive dental visit in the last year

Percent of children with and without special health care needs having a medical home

Percent of children with and without special health care needs who received services necessary to make transitions to adult health care

Percent of Medicaid-enrolled children ages 0-5 years who receive a dental service



For additional information contact the Bureau of Family Health at the Iowa Department of Public Health at 1-800-383-3826.



Background

Healthcare access is a major barrier to achieving health equity in Iowa and prevents many from living a healthy life¹. Disparities in access to health services harm both individuals as well as the communities around them. Iowa's Title V local contract agencies provide enabling services to assure that children under 21 years old have access to regular and periodic well-child screening services, preferably through medical and dental homes².

Impact

Limited access to health care impacts people's ability to reach their full potential and negatively affects their quality of life. Many important preventative services, like vaccinations and medical guidance, are important to healthy child development. Many conditions can be treated more effectively, appropriately, and more economically if caught early by routine screenings. Lack of access to healthcare, which deprives children of these services, can lead to preventable disease, disability, and even death.

Current Status

In the 2012 National Survey of Children's health, 71% of Iowan children ages 1-17 reported that they received both a routine medical and dental care visits in the year prior, and 95% reported that they had no unmet medical needs over that period. Of those who did have an unmet medical need, many reported that lack of insurance or money were the primary reason for not seeking care³. *See the Health Insurance Data Detail Sheet for more information.*

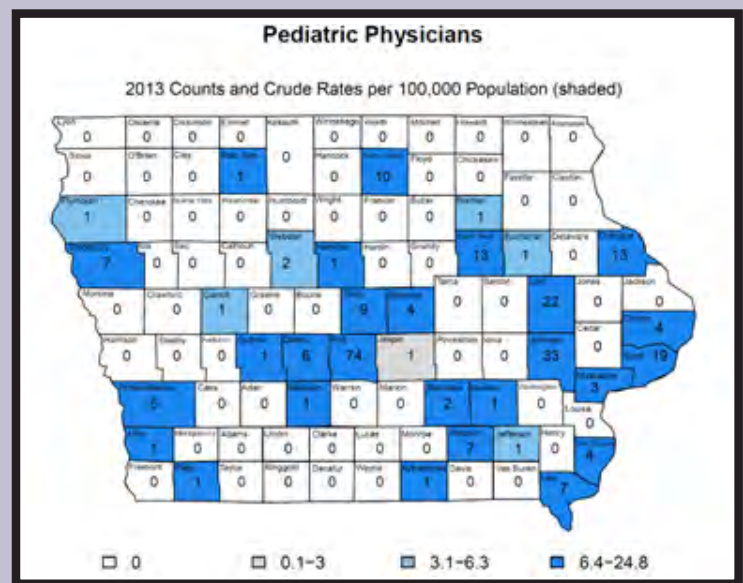
In the Title V needs assessment Focus Groups, many parents reported that lack of transportation, difficulties finding a doctor, and scheduling visits were barriers preventing their children from getting healthcare.

When parents were asked if they had a main place they usually go for care when their child is sick, almost all parents (98%) said yes³. However, 16% reported being frustrated at least some of the time when trying to meet their child's healthcare needs.

It is also important for children to have a medical home. *See the Medical Home Data Detail Sheet for more information.*

More parents report difficulties getting needed specialty care, one-fifth of all parents report **trouble** getting specialty care for their children. This may be due to fewer medical specialists in many areas of the state, or difficulties may arise in making appointments or having trouble paying for services.

There are about 8 pediatricians per 100,000 people in Iowa, however, these doctors are not spread evenly throughout the state⁴. There is also a shortage of specialty doctors that focus on children, such as psychiatrists, audiologists and dietitians. There were 243 psychiatrists in Iowa in 2013, of which only 43 accepted children, most are located in Iowa City, Des Moines, and Cedar Rapids. That year, there 12 unfilled openings for child psychiatrists, showing significant need⁵.



Many health care providers don't recognize the implication of a family's ethnicity and culture on how best to treat their children.

-Key Informant Interviewee

What is being done in Iowa?

Since 2006, the **1st Five Healthy Mental Development Initiative (1st Five)** has teamed up with community providers and physicians to encourage the use of developmental screening and surveillance tools 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 through early identification methods and referral coordination.

Availability of **transportation and interpretation services** can be a very large barrier for healthcare access. To decrease of this barrier, Iowa's Title V agencies provide transportation and interpretation services. From 2008-2013 over 11,000 transportation services and over 1,800 interpretation services were provided to clients ⁶.

Related Performance Measures

Title V 3.0 Measures

Percent of children receiving a developmental screening using a parent-completed screening tool

Percent of adolescents with a preventive services visit in past year

Life Course Metrics

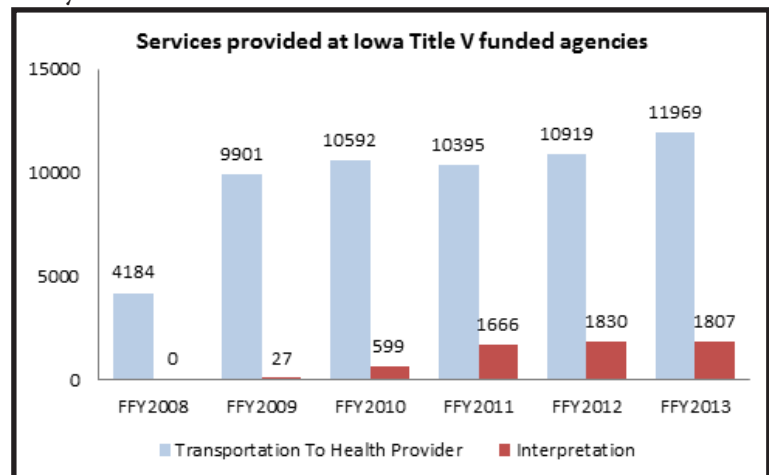
Percent of Medicaid enrolled children who received at least one initial or periodic screen in past calendar year
Percent of children ages 19-35 months receiving age appropriate immunizations according to the Advisory Committee for Immunization Practices (ACIP) guidelines and HP 2020 Goal

Proportion of persons on Medicaid with asthma having an asthma emergency department visit

Percent of parents reporting their child was not able to obtain necessary medical or dental care

In FY13, 13% of clients seen had a primary language other than English. There were 66 different languages, with the top 3 being Spanish, Bosnian and Bermese.

Iowa's new **Health and Wellness Plan** offers insurance to children ages 19-21, in order to fill the gap in insurance coverage that many adolescents faced when they became too old for the **Children's Health Insurance Plan** when they turn 19.



Previous National & State Performance Measures

The percent of screen positive newborns who received timely follow up to definitive diagnosis and clinical management for condition(s) mandated by their State-sponsored newborn screening programs

Percent of 19 to 35 month olds who have received full schedule of age appropriate immunizations against Measles, Mumps, Rubella, Polio, Diphtheria, Tetanus, Pertussis, Haemophilus Influenza, and Hepatitis B

Percent of Medicaid-enrolled children ages 0-5 years who receive a dental service.

Background

Since 1980 in the United States, the percentage of children who are overweight has more than doubled, while rates among adolescents have more than tripled¹. In 2001, the US Surgeon General announced that obesity had reached “epidemic” proportions. Obesity continues to be a major public health burden in the U.S. and Iowa, where about 1 in 4 adults and nearly 1 in 5 youth are obese. Due to the negative consequences of obesity, preventing its onset in childhood is an important public health goal. While obesity is commonly identified as an issue, food insecurity and low rates of exclusive breastfeeding should also be addressed, both as their own issues and as factors contributing to the obesity epidemic².

Impact

Obesity

Preventing obesity during childhood is critical as habits formed during youth frequently carry into adulthood; an obese 4-year-old has a 20% chance of being obese as an adult, and an obese teenager has up to an 80% chance of being an obese adult. If this epidemic is not reversed, we are in danger of raising the first generation of American children who will have a shorter life span due to health concerns than the generation before them³.

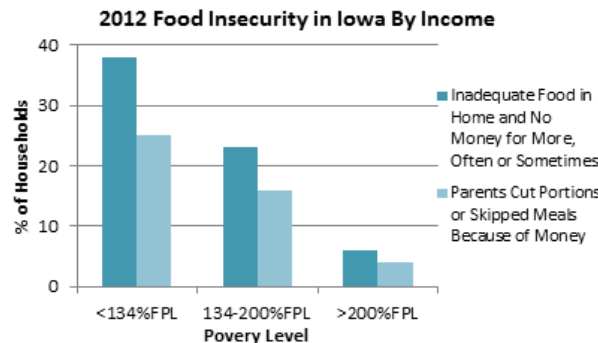
Breastfeeding

The longer the duration of breastfeeding, the lower the odds of the child being overweight. The benefits of breastfeeding to the baby include breast milk is easy to digest, fewer ear and respiratory infections, straighter teeth, protects against SIDS, fewer allergies, and protects against cancer and diabetes in the long-term^{2, 4, 5, 6}.

Obesity increases the risk for:

- Hypertension
- Type II Diabetes
- Coronary Heart Disease
- Stroke
- Certain cancers
- Respiratory problems
- Gallbladder disease
- Sleep apnea
- Osteoarthritis
- Osteoporosis

The longer people are overweight and the more overweight they are, the greater their risk of Type II diabetes.



Food Insecurity

Studies have found that food insecurity has been associated with health problems for children that may hinder their ability to function normally and participate fully in school and other activities. Some issues children who are food insecure face are:

- more likely to require hospitalization.
- at higher risk for chronic health conditions, such as anemia, and asthma.
- have more frequent instances of oral health problems;
- be less active, which is associated with a poorer physical quality of life, which may prevent them from fully engaging in daily activities such as school and social interaction with peers⁷.

Current Status

Obesity

Rates of obesity have been on the decline recently. However, the rate of obese children (14%) remains well above the Healthy People 2020 Goal of 9.6%. Consumption of fruits and vegetables is also inadequate to support a healthy diet, particularly for 12-17 year olds⁷.

Breastfeeding

Breastfeeding rates in Iowa follow a similar pattern to those of the US but are below that of the US overall. There is a steep decline after 1-month post-partum in the number of babies being breastfed⁸.

Food Insecurity

According to a 2010 survey, 13% of children lived in a household where it was sometimes (11%) or often (2%) true that purchased food did not last and there was not enough money to buy more. In both the Iowa Household Health Survey and according to Feeding America, food insecurity was less prevalent with increasing household income.

What is being done in Iowa?

Obesity

The Iowa State WIC

Program offers access to www.wichealth.org for low risk nutrition education contacts where modules discuss nutrition and physical activity to decrease the risk of obesity. The **WIC Farmers Market**

Program provides vouchers to eligible participants to purchase locally grown fruits and vegetables. Partnerships with other programs such as ISU Extension increases access to information concerning selection, preparation, and storage.

Iowa Nutrition Network (INN) School Grant Program serves low-resource Iowa schools with contractors to provide monthly Pick a Better Snack nutrition education to over 20,000 elementary students in 89 low resource schools⁹.

Iowa's Community Transformation Grant

collaborates with the Department of Education to promote health food procurement opportunities and physical activities in schools and child care facilities. Three local Child Health agencies have activities related to reducing the percent of children with a BMI at or above the 85th percentile. Activities include utilizing IDPH Family Support Nutrition Training Resource Manual and Iowans Fit For Life resources to promote physical activity and nutrition at clinics in their service areas⁹.

Breastfeeding

The Iowa WIC Program and UnityPoint Des Moines collaborate to provide the **Annual Breastfeeding Conference**. Title V MCH agency staff are able to depend on this conference to gain yearly updates concerning breastfeeding.

Local Maternal Health agencies collaborate with WIC agencies to provide education to WIC clients, counsel clients about infant feeding methods and give education about the benefits of breastfeeding.



Agencies promote “**World Breastfeeding Week**” and offer breastfeeding support groups. WIC breastfeeding peer counselors receive training including the relationship of breastfeeding to reduced childhood obesity⁹.

Food Insecurity

A national study showed that SNAP participation decreases the percentage of households in which children are food insecure by 8 to 10 points¹⁰.

Northeast Iowa Food Bank runs a program called Kids Café. Locally, Kids Cafe welcomes any child who is in need of a nutritious meal. Last fiscal year, Kids Cafe provided more than 40,000 meals and snacks to children in Black Hawk County¹¹.

The **Summer Food Service Program**, administered by the Iowa Department of Education, provides nutritious meals and snacks to children in low-income areas during the summer months. There are many summer food service program feedings sites across the state of Iowa, however the program is still vastly under-utilized. The biggest barrier to children participating in the Summer Food Service Program is knowledge that feedings sites exist¹².

Through outreach and community engagement, **Cultivate Iowa** aims to inspire Iowans to grow some of their own produce and live healthier lifestyles. In addition, Cultivate Iowa focuses on empowering gardeners and community members to donate fresh produce to their local food pantries or other community organizations.

Governor Branstad has named June ‘**National Dairy month**’ in Iowa and announced a challenge for Iowans. The governor is teaming up with food bank leaders across the state to ask people to donate to the Great American Milk Drive. According to Feeding America, milk is one of the most requested items by food bank clients, but is rarely given out due to a lack of donations. The Great American Milk Drive encourages people to make cash donations which then allows food banks to provide people in need with coupons to go buy milk at their local grocery stores¹³.

Related Performance Measures

Title V 3.0 Measures

Percent of adolescents with preventive services visit in the last year

Percent of infants who were ever breastfed

Life Course Metrics

Proportion of children aged 2-5 years receiving WIC services compared to proportion of children <185% FPL.

Percent of children exclusively breastfed through 3 months

Number of households experiencing food insecurity

Previous State and National Measures

The percent of mothers who breastfeed their infants at 6 months of age

Percentage of children, ages 2 to 5 years, receiving WIC services with a Body Mass index (BMI) at or above the 85th percentile

Background

Mental health is a state of psychological and emotional well-being that allows an individual to realize his or her abilities, cope with the normal stress of life, work productively, and contribute to his or her community. Mental health challenges are significant health burdens for many Iowans. The Adverse Childhood Experiences (ACEs) study linked certain early adverse experiences during childhood to an increased risk of unhealthy behaviors as adults, as well as an association with poor quality life, chronic conditions, and early death. Mental health is a priority for the Healthy People 2020 initiative, including identification of risk and protective factors. Pertinent objectives include: the proportion of children and youth with mental health problems who receive screening and treatment; and a reduction in suicide attempts. Early identification of risk and protective factors, along with ongoing screening and assessment over the life course reduces the burden of mental health challenges^{1, 2}.

Impact

Mental health is essential to the wellbeing of individuals and families, relationships, and their ability to contribute to a community or society. Furthermore, it also plays a large role in a person's ability to maintain good physical health³. Findings show that those with negative early childhood experiences are more likely to be depressed, attempt suicide and experience overall worse health outcomes. Caregiver depression and family stress can have an adverse effect on a young child's developing brain, and increase the likelihood of mental illness.

Children and teens suffering from depression may have frequent absences from school, feel worthless and isolated, and have low self-esteem and overall poor concentration⁴. Depression is also a risk factor for suicide.

Children and youth with Attention Deficit Hyperactivity Disorder (ADHD) may have difficulty staying focused and paying attention, difficulty controlling behavior, and hyperactivity². ADHD can impact academic achievement and pose difficulties for children and youth at school⁵.

Children and youth with anxiety disorders may experience excessive and unrealistic worry about everyday tasks or events, or possibly about certain objects or rituals. Obsessive-compulsive disorder (OCD) falls into this category of disorders and is characterized by an obsession (i.e. a recurrent thought or sensation), along with a compulsion such as checking, avoiding, or counting⁶. Anxiety disorders can impact daily functioning and may pose challenges to emotional and social well-being.

Suicide affects Iowa's families, schools, businesses and communities. Conservative estimates indicate that there are at least six family members and friends intimately affected for every one person who has attempted or completed suicide - equivalent to about 12,000 Iowans affected from 2002-2007⁷.

National health care costs reflect the burden of mental health challenges. Between 2009 and 2011, an average annual total of \$10.9 billion dollars was spent on treating of mental health disorders among children and youth ages 5-17 years. Roughly 44% of those expenses were for prescription medicines, and 35% were for visits to a medical clinic or a mental health service provider⁸.

Current Status

Mental Health

Mental illness is among the most common causes of disability nationally (HP2020). In 2011 in Iowa, 28% of girls and 18% of boys, in grades 9-12 reported feeling sad or hopeless every day for 2 or more weeks in row⁹. During 2009 to 2010, 8% of 12-17 years olds in Iowa had a major depressive episode in the previous 12 months, which is comparable to the national average.

According to the 2011/12 National Survey of Children's Health, 10% of children in Iowa ages 2-17 currently have ADD/ADHD, compared to 7.9% nationally¹⁰. 8% of those with ADD/ADHD in Iowa take medication for this condition, compared to 2.5% of children nationally who have ADD/ADHD but do not taking medication. Out of all Iowa children and youth with special health care needs, 35.9% currently have ADD or ADHD. This makes ADD/ADHD the most prevalent emotional health challenge faced by youth in Iowa.

The National Survey of Children with Special Health Care Needs (NS-CSHCN) 2009/10 showed that anxiety problems are prevalent among children and youth with special health care needs, as 21.6 % of CYSHCN in Iowa currently have an anxiety disorder, which is higher than the national average (17.1%)¹¹.

Suicide

Suicide is the second leading cause of death for Iowans ages 15-24 years old¹². IDPH reports that from 2002-2007, a total of 1,998 suicide attempts resulted in death, of which 332 were youth ages 10 to 24 years old⁷. The suicide rate in teenagers reached a low in 2010 of 9.5 per 100,000 but increased slightly to 11 per 100,000 in 2011 and 2012¹².

Service Provision

In 2011-2012, Iowa parents reported 85% of children had received a preventive medical visit in the previous year which is comparable to the national average of 84%. However, 34% of Iowa children who needed counseling did not receive appropriate mental health services, compared to 39% of children nationwide¹³.

The 2010 Iowa Child and Family Household Health Survey indicated that about one in ten (9%) of Iowa children and youth ages 0-17 years were reported to need behavioral or emotional care in the past 12 months. Among children and youth who needed behavioral or emotional care, this report indicated that about one in six (15%) could not get this care in the previous 12 months¹⁴.

According to the 2009/10 NS-CSHCN, 31% of Iowa children and youth with special health care needs needed mental health care or counseling in the last year. This survey also showed that during the last 12 months, 4.5% of Iowa children with special healthcare needs did not receive all the mental health care or counseling they needed¹⁰.

What is being done in Iowa?

In 2013, Iowa made great strides in redesigning the children's mental health and development disabilities system. As of July 1, 2014, **Pediatric Integrated Health Homes (PIHH)** are established in all 99 counties to serve as a single point of entry for children and youth eligible for Medicaid to the mental health system. PIHH helps families connect to mental health services, receive care coordination with medical homes, and access family-to-family support.

With funding received during the 2012 legislative session, the IDPH implemented **Your Life Iowa** (www.yourlifeiowa.org) to address bullying and suicide prevention. This website includes information for teens and offers resources and support also extending to parents and professionals.

The Personal Responsibility Education Program (PREP) grantees delivered the **Signs of Suicide Prevention (SOS) Program** to Iowa youth. In 2012, together with Iowa State University Extension, IDPH also launched www.iamincontrol.org which continues to offer great resources for adolescents⁷.

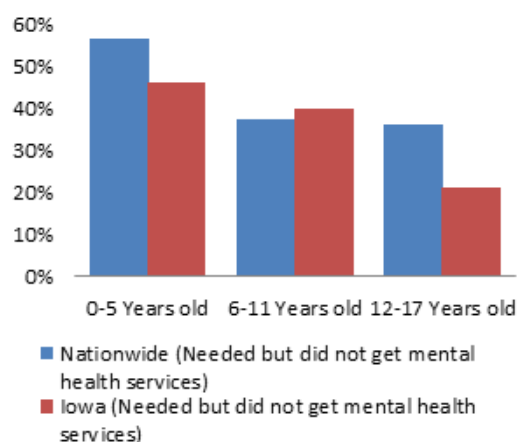
The Iowa Plan for Suicide Prevention, 2011 to 2014, guided by the IDPH and Iowa's Suicide Prevention

Strategy Steering Committee, also has plans for suicide prevention and awareness. By utilizing evidence-based programs, and collaborating with the private sector, IDPH looks to build on past programs to expand suicide prevention efforts statewide⁷.

Recognizing the impact and importance of early identification of ACEs in children and their families, the Child Health Specialty Clinics (CHSC) advocacy committee has established this as a main focus of action for the coming year. An action plan will be developed for all staff members to recognize potential ACEs and then identify

their role in helping the family learn to cope, overcome challenges and build resiliency. CHSC is developing an ACEs screening tool.

Youth who needed but did not receive mental health services, 2011-2012



Related Performance Measures

Title V 3.0 Measures

Percent of adolescents with a preventive service visit in the last year

Life Course Metrics

Percent of 9th -12th graders who felt sad or hopeless almost every day for more than 2 weeks during the previous 12 months

Previous National & State Performance Measures

None

“80% of psychiatrists in our state are located in the three biggest cities and even if people can travel to these centers, some are not willing to see Medicaid children because they have large caseloads, waiting lists, and Medicaid reimbursement is low.”
-Key informant interviewee

It is almost like you are not supposed to talk about mental health. Mental health affects all other problems; it all ties back to mental health. Our society does not provide a space to talk about mental health even though it is the root issue for all other issues.

-CYC Forum Participant

Bullying Among Children and Youth

Background

Bullying, either in-person or through social media, has a negative effect on mental health, with social media, can occur anywhere at anytime. Harassment and bullying can contribute to development of mental health disorders and, in severe cases, suicide. A person is bullied when he or she is exposed, repeatedly and over time, to negative actions on the part of another or others, and he or she has difficulty defending him or herself. Efforts to prevent or reduce bullying among children and youth may help to promote mental health later in life.

Impact

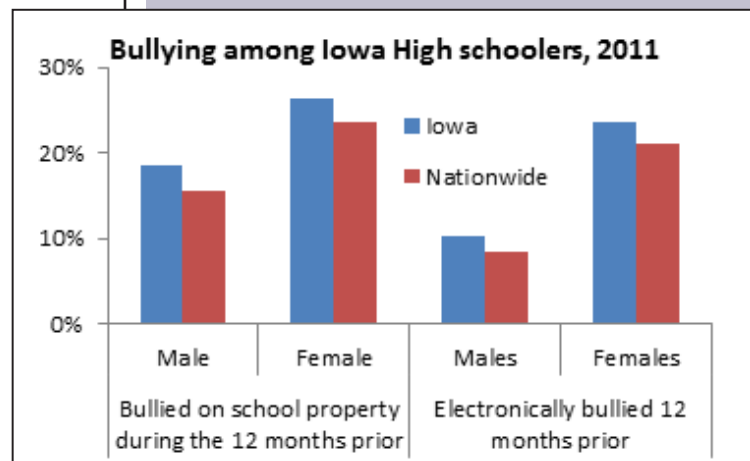
Bullying is also a significant contributor to mental illness in youth, with cyberbullying being especially worrisome. The use of social media makes it easier for a bully to harass his or her victim. Victims and witnesses of bullying are more likely to suffer depression, suicidal ideation, attempt suicide and in general have poor physical and mental health¹. Children and youth with disabilities are two to three times more likely to be victims of bullying than their non-disabled peers. Children with visible physical conditions or disabilities are more likely to be called names or aggressively excluded from social activities². Stress associated with being bullied can add to the health burden these children and youth with complex conditions already experience³.

Bullying has financial implications on society. A 2013 study looked at the impact of bullying in childhood on adult health, wealth, crime, and social outcomes. The researchers found that childhood bullies, victims, and those who were both bullies and victims (bully-victims) all had poorer financial-educational outcomes. For instance, those who were involved in bullying in any capacity were more likely to experience poverty as an adult, and bullies were more likely to lack a college degree and have poor financial management skills⁴.

Current Status

Iowa is above the national average in bullying incidence both on school property and electronic bullying. According to the Youth Behavioral Risk Survey in 2011, approximately one-quarter of high school girls experienced either bullying at school or electronically. Similarly, for boys, 18% were bullied on school property and 10% electronically⁵.

Looking at the Iowa Youth Survey from 2008, 2010 and 2012, Iowa has not experienced a decline in bullying. The percent of youth reporting bullying in 2008 was the same as 2012 (56% and 57%). The survey also showed that bullying is more common in younger grades⁶. This is consistent with a 2013 report from Community Youth Concepts where both in-person and cyber-bullying were described by high school students as something they experienced in middle school⁷.



“The anti-bullying movements are making a big deal about bullying awareness. I don’t see physical fights. I do see girls and boys bullying in the forms of gossiping and saying bad things indirectly about one another.”

Iowa CYC Forum Participant

What is being done in Iowa?

Since 2004, HRSA and its Stop Bullying Now! Campaign (SBN!)⁸ has been a key player in raising awareness of bullying through nationwide partnerships, one of them being the US Department of Education (DOE)⁹. Iowa Code 280.12 and 280.28 were legislated in 2007. Accredited, public and private schools are required to have an anti-bullying/anti-harassment policy which prohibits harassment and bullying by school employees, volunteers, and students in Iowa schools as of September 1, 2007. Contingent on the availability of resources, schools are encouraged to provide training and to establish programs to eliminate harassment and bullying. The IDOE started a new data collection system in the fall of 2013 to record bullying and harassment incidents for all accredited public and nonpublic schools¹⁰.

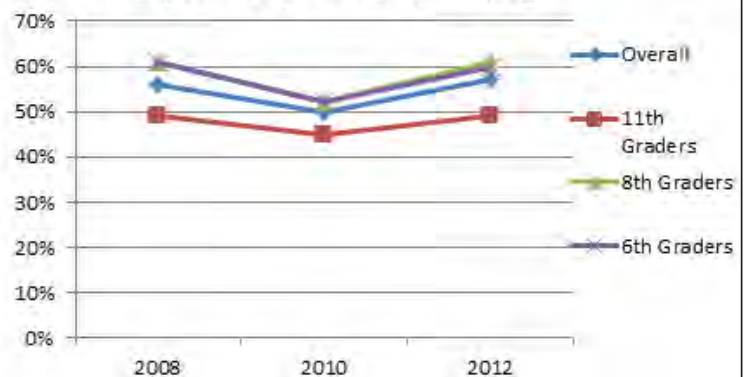
The IDOE leads the federal Safe and Supportive Schools grant in Iowa (IS³) and partners with regional Area Education Agencies (AEAs), Iowa State University Extension and Outreach-4H Youth Development, the National School Climate Center, and Iowa Safe School Certification, who provide technical assistance to improve school safety, student engagement and the overall learning environment. In Iowa, 21 high schools received funding to improve these conditions for learning. Since the beginning of this grant, 13 of these schools experienced a decrease in bullying and harassment¹¹.

Child Health Specialty Clinics (CHSC) conducts various initiatives surrounding bullying. These include training CHSC staff members in how to discuss and address bullying with children and youth with special health care needs (CYSHCN) and their families; CYSHCN may be either the bully or the victim. CHSC added questions on bullying to intake forms, and developed lists of community resources for families of CYSHCN who experience bullying.



The Iowa Department of Public Health (IDPH) addresses bullying and bullying prevention through several of its websites. With funding received during the 2012 legislative session, the IDPH implemented Your Life Iowa (www.yourlifeiowa.org) to address bullying and suicide prevention. This website includes information for teens and offers resources and support also extending to parents and professionals. Personal Responsibility Education Program (PREP) grantees delivered the Signs of Suicide Prevention (SOS) Program to Iowa youth. In 2012, together with ISU Extension, IDPH also launched www.iamincontrol.org which continues to offer great resources for adolescents¹².

Iowa youth experiencing bullying



Related Performance Measures

Title V 3.0 Measures

Percent of adolescents, ages 12-17 years, who are bullied

National and State Performance Measures

None

Life Course Metrics

Percent of 9-12th graders who reported being bullied on school property or electronically bullied



For additional information contact the Bureau of Family Health at the Iowa Department of Public Health at 1-800-383-3826.



Introduction

Children and youth with special health care needs (CYSHCN) are defined as children birth to 21 years of age who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally (Maternal Child Health Bureau). These children include anyone who needs a prescription medication, extra medical care, has functional limitations, or needs extra therapies or mental health services for a chronic condition.

Less than 20 % of CYSHCN have access to a high quality system of care as measured by the Maternal and Child Health Bureau.^{1,2,3} Therefore, the large majority of CYSHCN experience significant gaps in the quality of health care they receive.

Demographics

There are approximately 105,000 CYSHCN in Iowa. This represents 15% of all children below 18 years of age in the state.⁴ The prevalence of Iowa's children with special health care needs increases as children grow older. Of Iowa's total child population, 8.5% of all young children 0-5 years have a special health care need (SHCN), compared to 17.2% for those 6-11 years, and 19% of those 12-17 years. Gender differences also exist, as 17.5% of Iowa boys have a SHCN, compared to 12.3% of girls. This is consistent with nationwide statistics. According to the National Survey of Children with Special Health Care Needs, approximately 58% have 1-2 conditions, 11% have 3 conditions, and 18% have 4 or more conditions. 13% of children had a condition(s) that were not listed on the survey. Disparities related to Iowa CYSHCN are noted below:

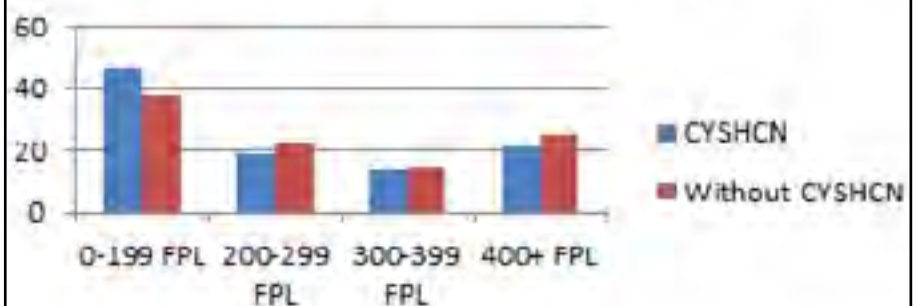
- CYSHCN living in rural areas may have less

access to services. Of Iowa's 99 counties, 79 are designated rural. Geographic distance from health care services and lack of transportation contribute to this disparity.⁵

- Although Iowa is less racially diverse than some states, its diversity is increasing rapidly. Over 50% of Iowa's children ages 0-5 years have a racially diverse background.⁶ Racial disparities are especially evident in the prevalence of CYSHCN, with 21% of Black children and 20.8% of other non-Hispanic minority children identified as having a SHCN. This is compared to 14.7% of non-Hispanic white children and 10.2% of Hispanic children. Concurrent with racial demographic changes, the percentage of Iowans that speak a language other than English and who are not fluent in English has more than doubled since 1990.⁷ Families whose preferred language is not English may experience many challenges interacting with Iowa's current system of care.

- Poverty is a major issue among Iowa CYSHCN, with 46% of all children living below 200%

Household Income of Families With and Without CYSHCN



Federal Poverty Level.⁸ Poverty is associated with poorer health outcomes, and when many CYSHCN have chronic conditions requiring ongoing provider visits, this compounds the problems families face.⁹

Types of Special Health Care Needs

CYSHCN are a diverse group ranging from children with chronic conditions such as asthma or diabetes, to children with autism, to those with more medically complex health issues such as spina bifida or other congenital disorders, to children and youth with behavioral or emotional conditions.

Common Conditions of Iowa CYSHCN ⁸	
Health Issue	CYSHCN with condition
Attention Deficit Hyperactivity Disorder or ADD	40%
Anxiety	22%
Asthma	35%
Autism Spectrum Disorder	10%
Behavioral or Conduct Issues	17%
Brain Injury	7%
Cerebral Palsy	0.7%
Depression	19%
Diabetes	2.1%
Down Syndrome	0.3%
Intellectual Disability	6%
Muscular Dystrophy	0.2%
Seizure Disorder	3.1%

These CYSHCN and their families typically receive services and supports from multiple systems: health care, public health, education, mental health, social services, and respite to name a few. CYSHCN may be served by multiple providers and community-based agencies. Many CYSHCN require extra coordination between the fragmented medical and mental health care system and outside entities such as education/schools, and social service agencies. Navigating these complex and fragmented systems of care can be difficult for families, and are exacerbated by socioeconomic factors such as cultural issues, poverty, lack of insurance, and lower parental education.^{10,11} There is no doubt that the need for services and supports among CYSHCN presents

significant challenges for developing coordinated systems of care among health care and other child-serving systems.

Although Iowa has many programs to support healthy development of young children, this support drops off as they enter middle childhood and adolescence. This hole in the system is critical and has the potential to reverse the positive effects of support received earlier in life.

CYSHCN Over the Life Course

Like all individuals, CYSHCN go through a variety of life stages and must manage several domains as they strive to lead full and meaningful lives. Life course perspective emphasizes that a person's experiences during childhood and other stages can affect their health over the entire lifespan.

As the child ages, the family is still involved in their life, but takes on a different role. Youth and young adults start taking a larger role in making their own decisions about their lives.

Iowa's Maternal and Health Advisory Council has identified the need to build a system of care that incorporates a life course approach. Life course perspective strategies should be oriented towards the optimal health of all children, youth, and families at every stage of development, and also must address children across a range of needs, including CYSHCN. Applying life course perspective to the care for children with or at risk of chronic conditions can result in positive outcomes both and short and long term. These outcomes include "enhanced health and wellbeing and reduced impact and severity of chronic conditions in children and in the adults they will become."¹² Iowa's current system of care does not include a life course approach.

Iowa cannot afford to ignore the rapid increase in CYSHCN and its impact on individual children, families, school districts, neighborhoods and the workforce; furthermore, we must recognize how social and environmental factors can shape the capacity of CYSHCN—by either marginalizing them and leaving needs largely unmet, or by promoting resilience and helping them thrive.

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For additional information the Bureau of Family Health at the
Iowa Department of Public Health at 1-800-383-3826.



Background

The United States Department of Health and Human Services prioritized increasing the proportion of children and youth with special health care needs (CYSHCN) who receive their care in family-centered, comprehensive, coordinated systems in its Healthy People 2020 Initiative. Achieving the best outcomes for children and youth, especially those with special health care needs, requires interactions between multiple persons and care systems, including medical, social and behavioral professionals; the education system; payers; medical equipment providers; home care agencies; advocacy groups; needed supportive therapies/services; and families. 'Care coordination' is the process of facilitating this communication and interaction between multiple systems of care. It centers on linking children and their families with appropriate services and resources in a coordinated effort to achieve good health¹. Care coordination is an essential element of the patient-centered medical home, which is the standard of care for all children and adults.

Impact

If properly integrated into the system of care for CYSHCN, care coordination is a tool that can help in the achievement of the Triple Aim: better care, better health, and cost efficiency.² Care coordination should be a team- and family-driven process that improves family and health care practitioner satisfaction, facilitates children's and youth's access to services, improves health care outcomes, and reduces costs associated with health care fragmentation.³ Families report greater access to needed resources and that their CYSHCN have better self-care skills than before receiving care coordination.⁴



Current Status

According to the 2009-2010 National Survey of Children with Special Health Care Needs, 61.8% of CYSHCN who needed it received all needed direct help with care coordination, compared to 57.8%, nationally. Among CYSHCN receiving two or more types of services, 57.3% received effective care coordination when needed, which is higher than the national average (56.0%). However, stakeholders from health care systems and pediatricians and family practitioners serving CYSHCN report *limited knowledge about what kind of health care and support services are available for these children and their families and when to refer them.*

"When we talk to our social workers about discharge planning, we often hear, 'there is no one to coordinate care with for many of these families.'"

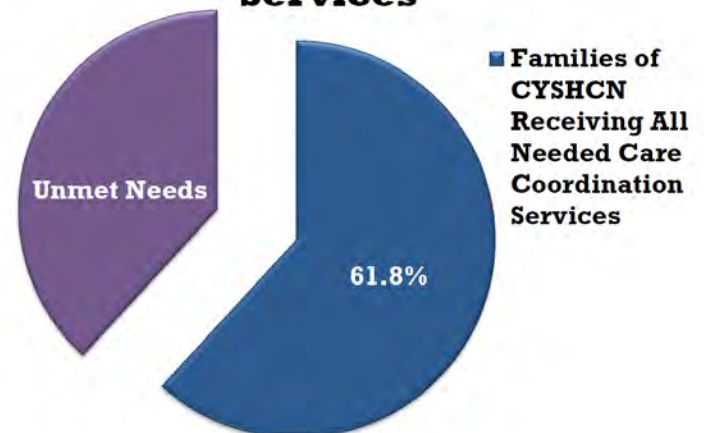
- Hospital official

In Iowa, greater than 10% of families of CYSHCN spend eleven hours or more each week coordinating or providing health care for their child.⁵

Gaps exist in...

- data on health outcomes for children and families after receiving care coordination services.
- ability to bill insurance/Medicaid for some of the care coordination services provided.

**Iowa
Care Coordination
Services**



What is being done in Iowa?

Child Health Specialty Clinics (CHSC) administers Iowa's Title V Program for CYSHCN. CHSC provides care coordination, family-to-family support, and gap-filling direct clinical services to CYSHCN. In federal fiscal year 2012, CHSC provided care coordination, family-to-family support, or gap-filling direct clinical services to roughly 4,200 children ages 0-21 years through 13 regional centers.

All Iowa CYSHCN ages 0-21 years are eligible for care coordination from CHSC Regional Centers also employ Family Navigators who are parents or caregivers of CYSHCN to provide family-to-family support along with care coordination from Advanced Registered Nurse Practitioners, Social Workers, Registered Nurses, or dietitians.

CHSC Regional Centers provide Care Coordination for CYSHCN in partnerships with primary care physicians

Family-centered

Community-based

Care Coordination Plan

Is developed by care coordinator with the family

Includes natural supports

Coordinates services between multiple systems (medical, education, social services, insurance)

CHSC special programs providing care coordination

Regional Autism Assistance Program

Uses standardized screening tools to identify children at-risk for Autism Spectrum Disorder

Explores payment options for Applied Behavioral Analysis therapy

Pediatric Integrated Health Homes

Provides wraparound services for Medicaid-eligible children and youth with a Serious Emotional Disturbance

Health and Disease Management

Provides care coordination for CYSHCN in Health and Disability Home & Community Based waiver program and recipients of Early and Periodic Screening, Diagnosis and Treatment (EPSDT) programs

Early ACCESS (Part C, IDEA)

Provides service coordination in the family's natural environment for children ages 0-3 years that have a known condition that leads to a developmental delay, or have a 25% delay in any one area of development

Other Care Coordination Activities in Iowa

Iowa Enhanced Care Coordination Tool to be piloted with 1st Five healthy development program, expanding to all Maternal and Child Health agencies in the future to determine when a child with complex needs should be referred to CHSC for enhanced care coordination.

Iowa Primary Care Association deploys a team of care coordinators to support primary care providers and link highest need patients to community resources.

Iowa Family Support Network provides a coordinated intake and referral system to assist families, providers and other professionals with information and support.

Iowa COMPASS is an online disability resource database that provides information and referral for disability services state-wide across the life course.

MCHB-supported Technical Assistance from Missouri held in October 2014 for CHSC staff on use of standards for care coordination.

Collaboration with the UI Center for Child Health Improvement and Innovation to analyze and collect child outcome data.

The Continuity of Care Program at the University of Iowa Children's Hospital helps coordinate and obtain services for patients and families of CYSHCN in-hospital and when they return home. CHSC is exploring how to aid in this community-based coordination to enhance the system of care.

CHSC has also developed **Care Coordination Standards** in accordance with the Standards for Systems of Care Serving CYSHCN developed by the Association of Maternal and Child Health Programs and the Lucille Packard Foundation. These standards have been integrated into program operations and quality improvement activities.

Related Performance Measures

National Performance Measures: #3 – Percent of families of children and youth with special health care needs who receive coordinated, ongoing, comprehensive care within a medical home. (Data Source: National Survey of Children with Special Health Care Needs)

Health Status/Outcome Measures: #18- Percent of children with special health care needs receiving care in a well-functioning system. (Data Source: National Survey of Children's Health)

State Performance Measures: #2 - The degree to which components of a coordinated statewide system of care for children and youth with special health care needs are implemented. (Data Source: CHSC Title V Program Index, Fiscal Year 2015 Title V Block Grant Application)

Life Course Indicators: #37- Proportion of families who report their child received services in a medical home (Data Source: National Survey of Children's Health)



For additional information the Bureau of Family Health at the
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Background

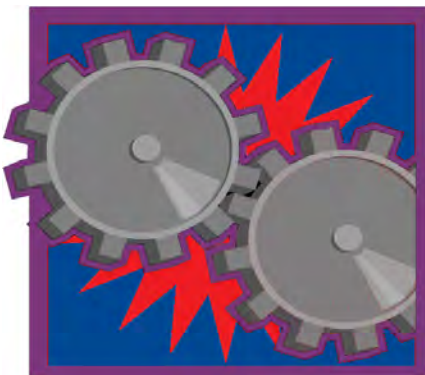
The Association of Maternal and Child Health Programs (AMCHP), along with the Lucile Packard Foundation for Children's Health, published a national set of Standards for Systems of Care for Children and Youth with Special Health Care Needs (CYSHCN) in March 2014. These standards are intended for use by national, state, and local stakeholder groups including Title V CYSHCN programs, health plans, state Medicaid and CHIP agencies, pediatric providers and health services, and others. This report includes 'Easy to Use Services and Supports,' an overall system outcome for CYSHCN, and incorporates data sharing across systems as an essential part of a coordinated system of care. Examples of standards related to data sharing include:

"Agreements are in place between health systems and various community agencies and programs serving CYSHCN and are structured to...establish systems for timely communications and appropriate data sharing."

"To promote care coordination across providers and systems serving children, electronic health information should be accessible, retrievable, and available and use a documented process for exchanging health information across care settings..."¹

Impact

Data sharing across systems allows for collaboration among providers, educators, public health professionals and families to deliver coordinated and comprehensive care for CYSHCN. Sharing data and care plans for families across systems provides a holistic view of a child and family's needs and a better opportunity to fully meet those needs.



Current Status

- Iowa's System of Care for CYSHCN lacks coordinated data sources between systems and within community and state levels of care.
- Because of this, Iowa does not have a clear understanding of how many CYSHCN would benefit from enhanced services and how families interact with education and other systems.
- Iowa needs statewide implementation of Health Information Technology (HIT) and policies toward uniform data collection.
- Officials from the Iowa Department of Education report *a need for coordinated data systems that improve information exchange between special education and health care and care coordination providers to help them better accommodate the needs of CYSHCN.*
- Health Information Exchange needs a focus on CYSHCN because despite expanded use of Electronic Medical Records (EMR) there remains a disconnect between the electronic systems of health plans, institutions, and payers for the child.

"As part of our state healthcare innovation, there is a need for a registry of CYSHCN across payers that gives us the ability to track what we are doing in all systems to support their physical, mental, social and emotional, and other needs."

-Hospital official

- Data sharing includes assuring families and providers have access to information. In 2014, ASK Resource Center conducted focus groups to identify families' experiences with the system of care: Findings include:
- Providers do not communicate well with one another and need to.
- Families would like charts describing how natural and formal supports or services work together in their communities, ideally as part of a resource directory.
- Resource directories must be updated annually for state, regional, and local resources. It should explain what the resource is, where it is located, and how to sign up.³

What is being done in Iowa?

The Iowa Department of Public Health (IDPH) is leading an e-health collaboration that brings consumers, healthcare providers, insurers, state government, and health care purchasers together to build the Iowa Health Information Network (IHIN) and encourage Iowa providers to use electronic health records. IHIN will be a “hub” that facilitates the sharing of secure electronic patient health information between authorized users.

Data sharing among these partners will allow for improved communication and management of complex conditions.

Iowa is pursuing a statewide Medicaid ACO model and recognizes the need for robust information system capacity between providers, health plans, families, and the state. Iowa’s State Healthcare Innovation Plan (SHIP) builds on the e-Health initiative to promote statewide Health Information Technology adoption and development of a Health Information Exchange.⁴

The IDEA - Part C early intervention system, known as Early ACCESS in Iowa, has four signatory agencies: Iowa Department of Education (lead agency), Iowa Department of Public Health, Iowa Department of Human Services (DHS), and Child Health Specialty Clinics. These agencies share data and use a coordinated intake and referral system.

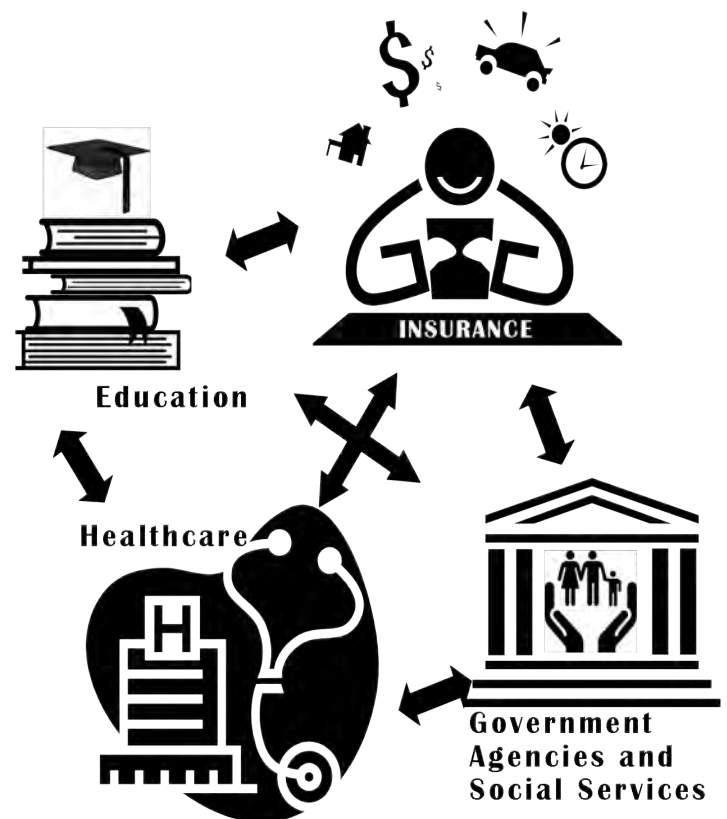
The Iowa Department of Education is developing a coordinated early childhood data system to retrieve and report data between state departments including Education, Human Services, Public Health, and Management. This will be a shared resource for real-time data.

The IDPH Bureau of Family Health is integrating program data and producing an electronic data management system that includes case management, referral management, risk assessment, billing, and client and population-level reporting. This will replace existing separate systems with these functions.

The statewide Individualized Services Information System (ISIS) is maintained by the Iowa DHS. Income maintenance workers, case managers, and services

workers use it to authorize payment of facility, waiver, and enhanced services, like Targeted Case Management.

- Pediatric Integrated Health Homes (PIHH) care coordinators are trained in ISIS so they can process prior authorization for payment of Home and Community Based Services, see members’ dates of eligibility for services and program enrollment.
- PIHH care coordinators and Magellan use an online portal to access and share information such as child eligibility, caregiver surveys, care plans, and contact information for providers. With family consent, PIHH shares information with outside providers to enhance collaborative care. While it is a self-contained system, ISIS does not yet interface with electronic medical records, and duplicate entry is necessary.



Related Performance Measures

National Performance Measures: #5 - Percent of families of children and youth with special health care needs report that the system is organized so they can use it easily. (Data Source: National Survey of Children with Special Health Care Needs)

Health Status/Outcome Measures: #18 - Percent of children with special health care needs receiving care in a well-functioning system. (Data Source: National Survey of Children's Health)

State Performance Measures: #2 - The degree to which components of a coordinated statewide system of care for children and youth with special health care needs are implemented. (Data Source: CHSC Title V Program Index, Fiscal Year 2015 Title V Block Grant Application)

Life Course Indicators: None

For more information on Data Sharing Across Systems for Children and Youth with Special Health Care Needs, please refer to the Integrated Care Systems Data Detail Sheet.



For additional information the Bureau of Family Health at the
Iowa Department of Public Health at 1-800-383-3826.



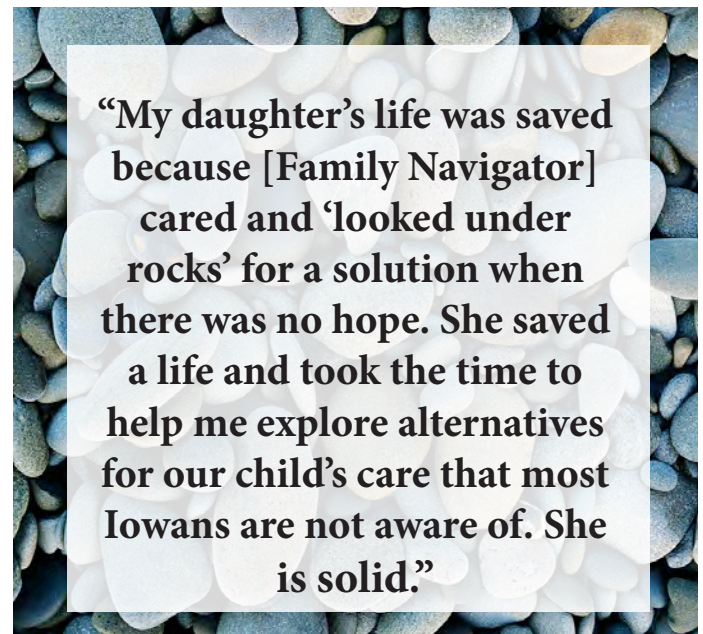
Background

Of Iowa's children, 20.3% have special health care needs.¹ In the world of CYSHCN, the family is the constant, while health and service providers change. Families must be involved to assure quality of health care across the health, education, and community systems. Family Involvement refers not only to family-centered care, but also to peer support, which helps families navigate complex systems and encourages self-advocacy. It also refers to activities that include families in the planning, development, implementation and evaluation of programs and policies. Family leadership initiatives keep families informed about new and changing programs and engaging with policymakers.

Impact

Families, agencies that serve CYSHCN, and policymakers all benefit from family involvement. Studies note the following outcomes of family professional partnerships:

- More efficient, cost effective, culturally appropriate services
- Increased family satisfaction and likelihood of better outcomes for CYSHCN
- Positive family outcomes are more likely
- Increased responsiveness
- Better access to services
- Enhanced family skill building and healthier communities



Current Status

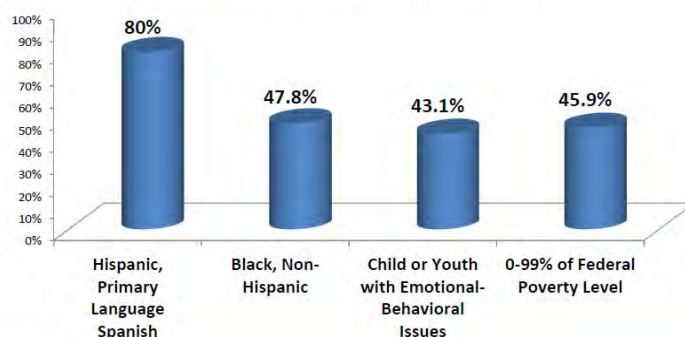
Health care providers practicing family-centered care recognize that shared decision making, strengths-based services, culturally sensitive care, and health literacy improve outcomes for their patients. Unfortunately, 32.4% of Iowa families of CYSHCN feel that they do not receive family-centered care. Racial and ethnic minorities, families of youth with emotional or behavioral issues, and very poor families are more likely to feel this way.

Families of CYSHCN face significant stressors, with studies showing:

- 24.3% paid \$1,000 or more out of pocket for health care in the past 12 months
- 10.9% devoted more than 11 hours a week providing care to their CYSHCN
- 17.6% have cut back on work hours and/or have stopped working³

Care coordination and peer support have been shown to be effective in reducing stressors on families.⁴ However, **67.3%** of Iowa families of CYSHCN report that they sometimes or never received extra help with care coordination when they needed it.⁵ Barriers may include a lack of access to care and a lack of provider awareness of resources or time available for care coordination.

Families of CYSHCN Most Likely to Feel They Do Not Receive Patient-Centered Care³



What is being done in Iowa?

Several organizations in Iowa are pursuing initiatives to involve families in decision-making at all levels. Although the following efforts are underway to assure family involvement in all aspects of Iowa's system of care for CYSHCN, there are still gaps. For example, there is a lack of involvement of diverse minority populations and a lack of youth voice. All families deserve a place at the table to develop and improve Iowa's system of care.

- The Iowa Chapter of the American Academy of Pediatrics engages parents/caregivers and teens through social media and presentations.⁶
- In Iowa's Title V agency for CYSHCN (Child Health Specialty Clinics) family members participate on advisory committees and Title V Block Grant review teams. They receive training, mentoring and reimbursement for time and travel expenses. Each Family Navigator employed in Child Health Specialty Clinics' (CHSC) 13 Regional Centers or UI Health Care Clinics is a family member of a child with a special health care need.
- About 70 Family Navigators provide emotional support, training, and care coordination to Iowa families of CYSHCN. The Iowa Department of Human Services, the Iowa Department of Education, the Iowa Autism Support Program, the Title V Block Grant, ASK Resource Center, and other agencies provide financial and programmatic support.
- ASK Resource Center, CHSC, the UI Center for Child Health Improvement and Innovation, National Alliance of Mental Illness Iowa and the National Resource Center for Family-Centered Care developed a robust seven-day training for Family Navigators. This program prepares Family Navigators to serve families of those with severe emotional disturbances.
- Family members serve on state boards and family advisory councils. CHSC created a Family Advisory

Council with youth members to advise program activities for families.

- Officials report that *parent engagement is a core part of the Department of Education's programming for CYSHCN with peer education and on advisory committees.*
- For the first time, a Family Navigator employed by CHSC serves as an instructor for the Iowa Leadership Education in Neurodevelopmental and Related Disabilities (ILEND) Project. ILEND is an interdisciplinary leadership training program for graduate students committed to providing culturally competent, family-centered, coordinated systems of health care and related services for CYSHCN and their families.
- A family member serves as Iowa's Title V Family Delegate to the Association of Maternal and Child Health Programs.

Related Performance Measures

National Performance Measures: #2 – Percent of families of children and youth with special health care needs who partner with providers at all levels and are satisfied with the services they receive. (Data Source: National Survey of Children with Special Health Care Needs)

Health Status/Outcome Measures: #18 - Percent of children with special health care needs receiving care in a well-functioning system.

State Performance Measures: #2 - The degree to which components of a coordinated statewide system of care for children and youth with special health care needs are implemented. (Data Source: CHSC Title V Program Index, Fiscal Year 2015 Title V Block Grant Application)

Life Course Indicators: None

For more information on Family Involvement, please refer to the Integrated Care Systems, Care Coordination, and Transition to Adulthood Data Detail Sheets.



For additional information the Bureau of Family Health at the
Iowa Department of Public Health at 1-800-383-3826.



Background

Many families of children and youth with special health care needs (CYSHCN) have problems accessing services. Eligibility requirements, policies and procedures, and communicating with multiple agencies may leave families feeling overwhelmed. Gaps in services can occur due to geographic location, the child's age, or income level of the family. Services may be duplicated between agencies or not provided at all.

An integrated system of care (SOC) is an approach to service delivery that builds partnerships between organizations to create a broad, integrated process to meet the unique needs of children and families at all developmental stages. It is family-driven, focusing on the family's strengths and identifying natural supports. It is community based, with cultural and linguistic competence woven into all aspects of service delivery. It is data driven, with measurable outcomes. It recognizes that any child may develop a special health care need and that their needs may change over time.

Impact

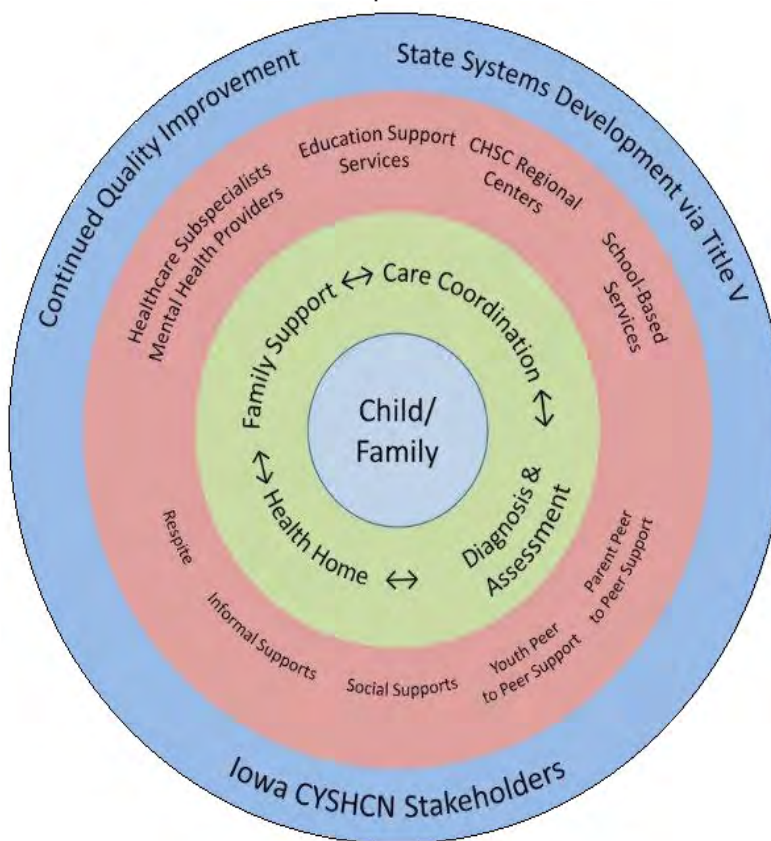
CYSHCN have conditions that may become more severe in adulthood, depending on how well their needs are addressed during childhood. They may have multiple care coordinators that coordinate care in the clinical setting, but do not coordinate with one another. 17.6% of Iowa families either reduced or stopped working to care for their CYSHCN (MCHB, 2013).

Families may lose insurance coverage and other benefits from their employer, which can strain family finances.

For CYSHCN, coordinated comprehensive care, early intervention, and social determinants of health have many benefits. It reduces the impact and severity of the condition, health complications, cost of care, and family caregiver strain.

Current Status

Although there are many efforts to improve Iowa's SOC, these efforts are disjointed and siloed between systems. Programs have strict eligibility criteria and limited funding that does not allow for crossover, as well as confidentiality protocols that restrict information sharing. Programs are limited by geographic area, age of child, income level, and type of condition. Only 68% (U.S. 65%) of Iowa's families report that community-based



services are organized so they can use them easily.

A needs assessment done as part of a Systems of Care Planning Grant noted a lack of defined entry points into mental health services. Family focus groups and community forums emphasized that families must be included in all decisions about their children and considered valuable members of the team. Families desired more educational options, since mainstream and special education classrooms may not meet the needs of each child. Families also requested more informal social support activities, such as a support group.

Child Health Specialty Clinics (CHSC) offers gap-filling services for CYSHCN through 13 Regional Centers. Teams of Advanced Registered Nurse Practitioners, Registered Nurses, Family Navigators, Social Workers, and Registered Dietitians work together to provide coordinated and comprehensive care.

School nurses serve as important links between schools and health care settings, but many of Iowa's districts face a critical shortage that puts CYSHCN at risk. Iowa's ratio of school nurses to students is 1:840, while the National Association of School Nurses recommends 1:750 for students without special health care needs, and 1:125 for students with complex health needs. Additionally, the Iowa Department of Education does not classify students by type of disability, so it is unknown how many Iowa children have Autism Spectrum Disorders (ASD) and are served by the schools. CHSC estimates that 35% of children with ASD under 21 years are unknown to the service system and do not receive needed services.

*Only 20% of
CYSHCN were
served by a well-
functioning
system of care
that met all age-
relevant core
outcomes.*

What is being done in Iowa?

The Division of Child and Community Health in the Stead Family Department of Pediatrics at the University of Iowa College of Medicine administers Iowa's Title V program for CYSHCN - Child Health Specialty Clinics (CHSC). CHSC has played a strong role for over sixty years in forming and strengthening inter-agency and inter-organizational partnerships to address the evolving needs of Iowa's CYSHCN and their families. The Division of Child and Community Health also administers many of the state's programs that holistically address the needs of CYSHCN and their families. Systems building projects include robust workforce development, quality improvement, and metric development programs. Other

projects include:

- CHSC and Iowa Department of Public Health received a three-year grant beginning in September 2014 from the Health Resources and Services Administration to use a public health model to achieve a comprehensive, coordinated, and integrated system of state and community services and supports for CYSHCN in an evolving health care environment. The primary outcome is to increase the percentage of CYSHCN who receive integrated care through a family-centered medical/health home approach.
- Four state agencies partnered to form the IDEA – Part C early intervention system, known as Early ACCESS. These agencies provide collaborative services and supports to CYSHCN age 0-3 years and their families. Maternal and Infant Early Childhood Home Visiting (MIECHV) partnered with Early ACCESS to fund a statewide coordinated intake process.
- 1st Five Healthy Development educates primary care providers on the early detection of social-emotional and developmental delays birth to five years and connects families to local resources.
- Project LAUNCH (Linking Actions for Unmet Needs in Children's Health) was undertaken from 2009-2014 and created the state and local Council on Young Children Wellness. The council engaged high-level decision makers to influence child health policy.
- The Regional Autism Assistance Program provides care coordination, family-to-family support, and access to funding for Applied Behavioral Analysis therapy for families of children that would not otherwise have access.
- Community Circle of Care was a grant-funded program from 2006-2012 serving a 10 county area in Northeast Iowa. Its model of care is sustained through state appropriations. It uses a SOC approach with wraparound services, care coordination and family-to-family support for children with a serious emotional disturbance (SED) regardless of payment

source. Pediatric Integrated Health Homes (PIHH) began in 2012 and uses this approach as well, allowing CYSHCN under age 19 years and with an SED who have Medicaid to receive coordinated, whole-person care that addresses their needs in their own communities. The PIHH program will serve approximately 15,000 children in all 99 counties.

Although these programs have helped many families, all CYSHCN deserve this type of comprehensive, whole person care regardless of payment source, home location, or diagnosis. The Division of Child and Community Health will continue to work toward this goal at the state and community levels.

Related Performance Measures

National Performance Measures: # 5 - Percent of families of children and youth with special health care needs report that the system is organized so they can use it easily. (Data Source: National Survey of Children with Special Health Care Needs)

Health Status/Outcome Measures: #18 - Percent of children with special health care needs receiving care in a well-functioning system.

State Performance Measures: #2 - The degree to which components of a coordinated statewide system of care for children and youth with special health care needs are implemented. (Data Source: CHSC Title V Program Index, Fiscal Year 2015 Title V Block Grant Application)

Life Course Indicators: None



For additional information the Bureau of Family Health at the
Iowa Department of Public Health at 1-800-383-3826.



Background

Although children and youth with special health care needs (CYSHCN) often require care from multiple providers and service systems, they do not always receive the comprehensive, coordinated, family-centered care needed to assure their health and well-being. Many initiatives use performance and financial incentives to encourage systems to adopt measures that improve the overall health and well-being of CYSHCN, improve the patient experience, and reduce costs. Examples include transforming primary care practices into medical homes and the development of Accountable Care Organizations (ACO) as part of the Affordable Care Act.

Impact

Addressing children's health, education, and other socio-economic factors holistically is critical to achieving long-term positive health outcomes and reducing health care costs. CYSHCN that do not have adequate financial resources or insurance are more likely to delay or forego care, which can lead to devastating and long term consequences. Long waitlists for waivers or appointments can delay services for CYSHCN and in turn negatively impact health and development. CYSHCN also have more frequent problems that may alter growth, feeding and eating, behaviors and other nutritional issues. Without nutritional intervention, children are more susceptible to infections, illness, hospitalizations, higher rates of absenteeism, and need more ancillary therapies and treatments. Delaying or declining care also increases health care costs increase for families.

Current Status

Iowa's health care system ranks among the top five states in the nation for cost effectiveness and quality. Despite these rankings, commercial premiums for families and employers, and the state's funding obligations for Medicaid, continue to rise at unsustainable levels and there is concern about workforce issues. Iowa's fragmented system of care has

historically encouraged agencies to have specialized and sometimes competing incentives to serve children. In Iowa, 92.3% of families of CYSHCN had insurance for the entire past year, and of those 68.7% reported their insurance is adequate. However, over one third of families *with insurance* still do not have access to the care they need. Iowa Medicaid and Wellmark Blue Cross Blue Shield cover 70% of all Iowans, including most CYSHCN. Iowa is exploring the potential to use this 'critical mass' of covered individuals to develop value-based payment methods to support integration across systems through Iowa's State Health Improvement Plan (SHIP). Aligning this with the federally funded State Innovation Model (SIM) will transform Iowa's health care system.

"The time is ripe to develop a consensus on performance monitoring with metrics for this population (CYSHCN) that cuts across providers, institutions and health plans seeing the same children."
-Health plan representative

At the individual level, Iowa families incur higher out of pocket costs for health care than the national average.^{1,2} As medical costs continue to rise and consume an increasing share of income, more people may delay or not seek needed care. For example, the American Dietetic Association states that a barrier to providing nutrition services to CYSHCN is lack of payment for services by insurance companies.³ Coverage for nutrition services is limited to those with diabetes or chronic renal insufficiency, though CYSHCN with several other conditions could benefit as well. In another example, Applied Behavioral Analysis therapy is an evidence-based service for people with Autism Spectrum Disorders, however it is expensive and financial assistance in Iowa is only available to children under age 9 years. If families must bear the full cost of these services, some may deem them too expensive and forego services that will improve their child's long-term outcomes.

**Iowa families
face higher
out of pocket
costs for health
care than
the national
average.**

What is being done in Iowa?

- The Iowa SIM focuses on achieving the Institute for Healthcare Improvement's Triple Aim: (1) reducing the per capita cost of health care; (2) improving the health of populations; and (3) improving the patient experience of care (including quality and satisfaction).³
- The Iowa SHIP provides a framework for ACOs in the public and private sectors that are using financial incentives to encourage high-value health care, though few initiatives focus on CYSHCN.
- Iowa's Patient-Centered Health Advisory Council and the Office of Health Care Transformation encourages partnerships between community health care partners working on system-level models to provide better health care at lower costs by shifting from volume to value based health care. This approach also reduces silos and streamlines efforts.
- In 2012, a State Plan Amendment allowed Iowa Medicaid Enterprise to enroll CYSHCN with Medicaid into primary care health homes. This program offered financial incentives to providers who provide coordinated, whole-person care and referral to community resources.
- Child Health Specialty Clinics (CHSC) provides care coordination and family-to-family support for approximately 2,700 of the most medically complex CYSHCN who qualify for the Health and Disability Waiver or Children's Mental Health Waiver. Children on these waivers automatically qualify for Medicaid and additional services. Nearly 2,620 CYSHCN are on the waitlist for these and other Home and Community Based Waivers, though Iowa Department of Human Services

will release an additional 2,350 waiver slots by July 2015. CHSC will continue to educate policymakers on the importance of allowing all families the choice to receive family-to-family support.

- The Pediatric Integrated Health Home (PIHH) program uses a System of Care approach, allowing CYSHCN under 19 years with a serious emotional disturbance who have Medicaid to receive coordinated, whole-person care in their communities. Wraparound funding pays for services that prevent entry into more intensive services and are unavailable through other payers, such as in-home skill building. Magellan provides quarterly financial incentives to guide PIHH agencies in their development. Each financial incentive focuses on an element of high quality care, such as preventive care, dental services, and medication compliance. The PIHH program will serve approximately 15,000 children in all 99 counties.
- CHSC and the Iowa Department of Public Health received a three-year grant beginning in September 2014 from the Health Resources and Services Administration to use a public health model to achieve a comprehensive, coordinated, and integrated state and community system of services and supports for CYSHCN in an evolving health care environment. The primary outcome is to increase the percentage of CYSHCN who receive integrated care through a family-centered medical/health home approach.

Related Performance Measures

National Performance Measures: #9 - Percent of children 0 through age 17 years who are adequately insured.

Health Status/Outcome Measures: #18 - Percent of children with special health care needs receiving care in a well-functioning system.

#20 - Percent of children with a mental/behavioral condition who receive treatment.

State Performance Measures: #2 – The degree to which components of a coordinated system of care for children and youth with special health care needs are implemented. (Data Source: Title V Program Index, Fiscal Year 2015 Title V Block Grant Application)

Life Course Indicators: #37 - Proportion of families who report their child received services in a medical home.

#39 - Percent of parents reporting their child was not able to obtain necessary medical or dental care.

For more information on Performance and Financial Incentives to Assure a High Quality, Comprehensive System of Care for Children and Youth with Special Health Care Needs, refer to the Medical Home Data Detail Sheet.



For additional information the Bureau of Family Health at the
Iowa Department of Public Health at 1-800-383-3826.



Background

Youth with special health care needs (YSHCN) have or are at risk for a chronic physical, developmental, behavioral, or emotional condition and require health or related services beyond what children generally require. All teens need guidance and support as they transition to adulthood and assume responsibility for their own well-being. YSHCN and their families are particularly vulnerable during this time, as youth must learn how to navigate a complex health care system, understand their condition and how to stay healthy, and manage their medications. Success in these areas has a major impact on the housing, employment, and education choices that are available to them. Transition to adulthood is a process that ideally begins early and occurs over time. Youth and their family should be involved in all decisions. Care coordination between providers and services is essential.

Percent of Iowa YSHCN Receiving All Needed Transition Services

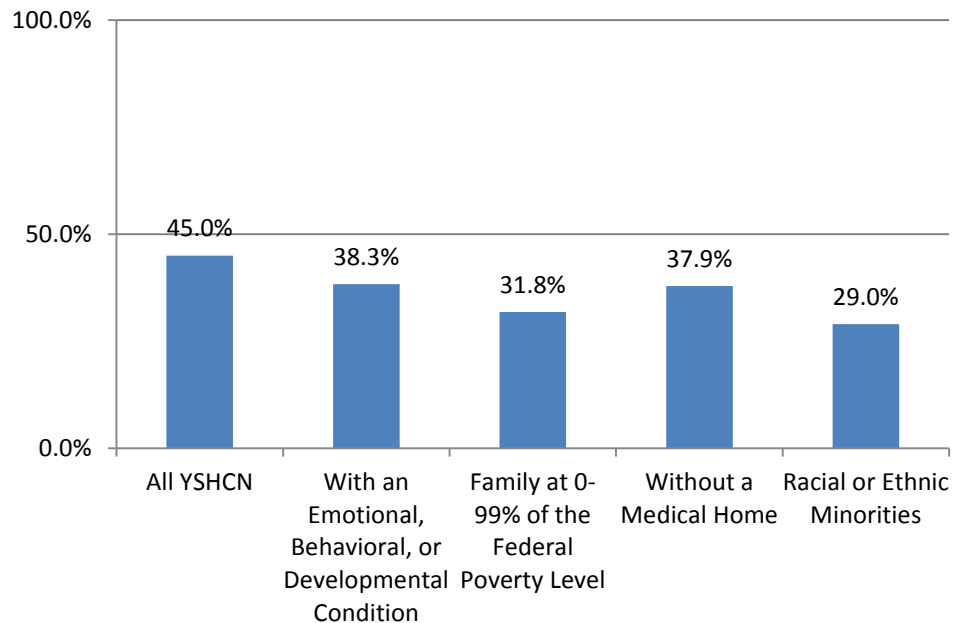


Fig. 1

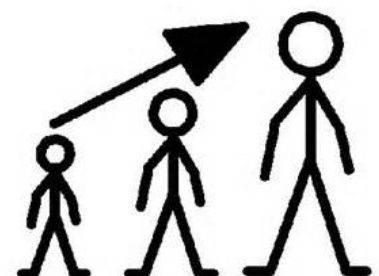
Impact

Due to their reliance on health care systems to maintain health and quality of life, YSHCN are susceptible to gaps in access to health services. They tend to fall through the cracks during the transition to adulthood, with long-term consequences. YSHCN who do not receive transition services are more likely to have poor outcomes and unmet health needs as adults. This includes higher rates of hospitalization and advanced care, as well as not achieving adult social roles.¹

The transition to adulthood is a particularly isolating and vulnerable time for youth in the foster care system. YSHCN are more likely to enter the child welfare system and those with serious health

conditions remain in care longer. Older youth are more likely to stay in group home settings, have multiple foster care placements, and are less likely to be reunified with their biological families. Existing health problems become more complex with new stressors such as poverty, homelessness, unemployment, and lack of education.²

*What is going to
happen when my
child is an adult?*



Current Status

The National Survey of Children's Health Maternal and Child Health Bureau defines a set of services YSHCN must have for a successful transition to adult health care. To meet this outcome, parents or caregivers surveyed must respond that the youth's primary care provider (PCP) discussed three topics with the family: transitioning to providers who treat adults; changing health needs; and how to maintain insurance as an adult. In addition, the PCP must also encourage the youth to take age-appropriate responsibility for managing his or her own health care needs. Only 45% of Iowa YSHCN received all services needed for transition to adult health care, with disparities relating to type of condition, insurance, medical home, and racial or ethnic minorities (see Fig. 1)^{3,4}.

Special health care needs and how well they are managed can influence housing, educational, and employment choices available to young people. In a statewide needs assessment conducted 2013, families of youth with Autism Spectrum Disorders (ASD) noted an overall lack of resources for transition services and vocational resources. For youth with ASD, the quality of transition planning is inconsistent between school districts and health care organizations, and it is rarely comprehensive.⁵

"I am glad we are talking about transition [at a well pediatric visit]. We have lots of things to think about before my son turns 18, and this is a good way to get the discussion started." - Mother of a teenage patient

What is being done in Iowa?

Although there are several organizations addressing the transition to adulthood, these efforts often serve a specific population or only address certain aspects of transition to adulthood. Child Health Specialty Clinics (CHSC) and the Early Periodic Screening and Diagnostic and Treatment (EPSDT) program are partnering to coordinate these disjointed efforts and assure all YSHCN have access to comprehensive transition planning by age 14 years. CHSC/EPSDT developed tools and resources that assist youth, families and practitioners during the transition process. In 2014-15, EPSDT will analyze the results of the pilot project and submit recommendations to Iowa Medicaid Enterprise on how to facilitate transition planning among YSHCN.

Other Iowa programs include:

- Realizing Educational and Career Hopes (REACH) is a two-year certificate program through the University of Iowa that allows students with intellectual disabilities to learn transition skills as a college student.
- I Have a Plan Iowa was developed by the Iowa College Student Aid Commission and the Iowa Department of Education to help students transition to middle and high school, college and beyond.
- Iowa's Area Educations Agencies provide transition workshops and tools for YSHCN and their families on topics relevant to education and life skills.
- Several of Iowa's large school districts offer transition programs that provide community-based instruction on essential skills for living and working to students ages 18-21 years who receive special education services.

What is being done in Iowa? *(continued)*

- Universities and community colleges may provide support for students with an Individualized Education Plan that have completed all academic requirements, but have unmet vocational training goals. Support includes personal tutoring and counseling, test reading, tape-recorded textbooks, note takers and job placement services.
- The Focused Skill Training program is a free, voluntary program through Kirkwood Community College for students with ASD. Youth receive individual assistance in areas such as social skills, coping with anxiety, time management, and accessing community services.
- Achieving Maximum Potential (AMP) is a statewide youth-driven program for youth in foster or adoptive homes. AMP helps youth develop self-sufficiency skills and offers leadership opportunities.
- UI Healthcare Pediatric Specialty Clinics and CHSC provide care coordination and family-to-family support for YSHCN and their families.
- UI Healthcare Intellectual Disabilities Transition Clinic provides specialized mental health care for persons ages 18-21 years with intellectual disabilities.
- The Adolescent Clinic at Blank Children's Hospital in Des Moines conducts transition assessments.
- Iowa's Family-to-Family Health Information Center provides one-on-one information and training for parents of CYSHCN to assure transition planning and referrals to adult care.

Related Performance Measures

National Performance Measures: #14 - Percent of children with and without special health care needs who received services necessary to make transitions to adult health care. (Data Source: National Survey of Children's Health)

Health Status/Outcome Measures: #18 - Percent of children with special health care needs receiving care in a well-functioning system. (Data Source: National Survey of Children's Health)

State Performance Measures: #2 - The degree to which components of a coordinated statewide system of care for children and youth with special health care needs are implemented. (Data Source: CHSC Title V Program Index, Fiscal Year 2015 Title V Block Grant Application)

Life Course Indicators: None

For more information on Transition to Adulthood for Children and Youth with Special Health Care Needs, refer to the Medical Home and Developmental Screening Data Detail Sheets.

"Iowa's Family-to-Family Health Information Center is [helping]...parents learn how to ask the questions they need to ask pediatricians to help assure their child gets the transition planning and referrals to adult health care when needed."

-Community organization
representative



For additional information the Bureau of Family Health at the
Iowa Department of Public Health at 1-800-383-3826.

