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The 2010 Iowa Child and Family Household Health Survey

The Maternal, Infant, Early Childhood Home Visiting Program: Population-based baseline information

Third report in a series

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The MIECHV program sends trained visitors to connect at-risk families with child health, development and learning resources

BACKGROUND

Maternal, Infant, Early Childhood Home Visiting Program (MIECHV)

The Maternal, Infant, Early Childhood Home Visiting Program (MIECHV) was authorized by the 2010 federal Affordable Care Act. This program is designed to improve Title V programs by strengthening activities for at-risk communities. Through Home Visiting, trained visitors meet with at-risk families at home to evaluate circumstances and connect families to services beneficial to child health, development, and ability to learn. Outcome measures are categorized into 6 benchmark domains.

Specific MIECHV benchmark domains include:

- Benchmark 1. Maternal and Newborn health
- Benchmark 2. Child Injuries, Abuse, Neglect, Maltreatment
- Benchmark 3. School Readiness
- Benchmark 4. Domestic Violence¹
- Benchmark 5. Family Economic Self-Sufficiency
- Benchmark 6. Coordination and Referrals

The Iowa MIECHV targets at-risk families in 18 high-need counties in Iowa (see list below). The program aims to improve outcomes for families from the prenatal period through the child's start of school. This report provides population-based baseline data corresponding to 5 of the 6 benchmark outcome domains in Iowa's MIECHV plan, and focuses on health and well-being of children ages 0 – 5 years in these target counties (Figure 1): (See appendix 2 for a complete listing of benchmark outcomes)

The 18 high-need Iowa counties targeted by MIECHV are:

- | | |
|----------------|-------------------|
| 1. Appanoose | 10. Marshall |
| 2. Black Hawk | 11. Montgomery |
| 3. Buena Vista | 12. Muscatine |
| 4. Cerro Gordo | 13. Page |
| 5. Clinton | 14. Pottawattamie |
| 6. Des Moines | 15. Scott |
| 7. Hamilton | 16. Wapello |
| 8. Jefferson | 17. Webster |
| 9. Lee | 18. Woodbury |

¹ The 2010 IHHS contains no data corresponding to the Domestic Violence benchmark

The 2010 IHHS was designed to provide data about health, well-being, health care coverage, and insurance status of children and families in Iowa

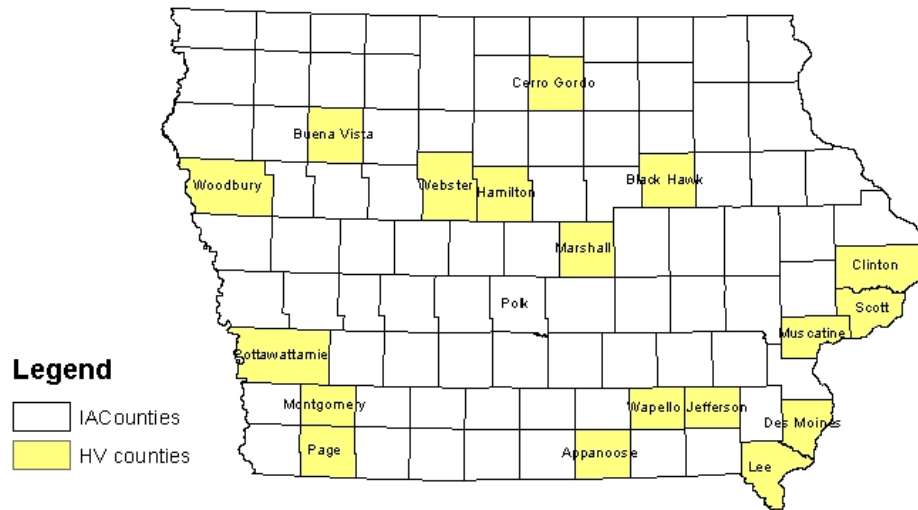


Figure 1. Distribution of counties in the MIECHV

2010 Iowa Child and Family Household Health Survey (IHHS)

These data are derived from questions in the 2010 Iowa Child and Family Household Health Survey (IHHS). The 2010 IHHS is the third comprehensive, statewide study to evaluate the health status, access to health care, and social environment of children in families in Iowa. Previous IHHS surveys were conducted in 2000 and 2005. This report of baseline data for the Iowa MIECHV program is the third in a series of reports presenting results from the 2010 IHHS.

This study represents a collaboration between the Iowa Department of Public Health (IDPH), the University of Iowa Public Policy Center (PPC), and Child Health Specialty Clinics (CHSC). Funding for the 2010 survey was provided by the IDPH, with additional funding from: the U.S. Department of Health and Human Services Maternal and Child Health Bureau (MCHB), Blank Children's Hospital; American Academy of Pediatrics – Iowa Chapter; Child Health Specialty Clinics; and ARRA funding through Early ACCESS.

The primary goals of the 2010 IHHS were to: 1) assess the health and well-being of children and families in Iowa, 2) assess a set of early childhood issues, 3) evaluate the health insurance coverage of children in Iowa and features of the uninsured, and 4) assess the health and well-being of racial and ethnic minority children in Iowa. Questions in the 2010 survey included a wide range of topic areas encompassing the health, overall well-being, and family environment of children in Iowa with a special emphasis on early childhood issues.

*Over 2300 families
with children in Iowa
were surveyed
through telephone –
based and online
surveys*

Topic areas in the 2010 survey include:

- Functional health status
- Access/need
- Medical home
- Prescription medication
- Dental care
- Emergency room use
- Behavioral and emotional health
- Early childhood
- Child care
- Social determinants of health
- Nutrition, physical activity, food insecurity
- Parent health status/family health
- Substance use and gambling
- Demographics

A complete list of MIECHV benchmark outcomes, as well as results for individual questions from the survey relevant to MIECHV, can be found in the appendices of this report. These items compare results from the MIECHV target counties with data from the rest of the state.

Methods

The 2010 Iowa Household Health Survey was a population-based statewide survey using a mixed-mode approach to data collection; it included an oversample of African-American and Latino children. The survey was conducted with parents of children in Iowa using an address-based sampling design. Data collection was completed using a combination of telephone and Internet survey methods. The University of Northern Iowa Center for Social and Behavioral Research coordinated the data collection efforts.

For the survey process: 1) A packet was mailed to a statewide random sample of addresses drawn from the United States Postal Service (USPS) Delivery Sequence File (DSF). The packet included an information letter with instructions for completing a web-based questionnaire; 2) The USPS DSF included telephone numbers for about 60% of addresses. Non-respondents for whom a phone number was available were called if they did not complete the web survey within the first week.

During the core data collection period, 2,386 participated: 1,859 phone and 527 online interviews took place with the parent or guardian of one randomly selected child age 0-17 years living in the household. The data were weighted to account for family size and post-stratified to reflect the 2010 child population in Iowa. As the 2010 Census had just been completed at the time of the 2010 Iowa Household Health Survey, a relatively precise count of children in Iowa was obtained. This was used to determine if the characteristics of the population who completed the survey varied significantly from the total population as identified in the census data.

Children ages 0 – 5 years in MIECHV counties were more likely to live in a household where cigarette smoking is reported to be a problem

A weight related to the design effect was added to the analysis in order to make statistical testing more accurate. Weights for individual cases range from .28 to 3.84, with a mean weight of .7629.

Respondents were primarily mothers (78%), although 16% were fathers. The remaining 6% were other types of guardians, primarily relatives of the child. There were almost equal numbers of boys (51%) and girls (49%) represented in the sample.

For this report, data were used only for children ages 0-5. The total number of families with young children for these analyses was 660. In the Home Visiting Intervention counties, there were 166 respondents with children ages 0-5; the rest of the state was represented by 494 children. On some items, we were able to look at differences by urban-rural status using USDA Urban-Rural Continuum codes.² We looked at results comparing rural/mostly rural counties in MIECHV counties vs. rural/mostly rural counties in the rest of the state, and Urban/mostly urban MIECHV counties vs. urban/mostly urban counties in the rest of the state. Appendix 3 shows the breakdown of counties and the number of respondents from each category. For the most part, our numbers were not large enough to show significant differences, but we have highlighted a few areas where differences did occur. Results for individual questions in this study can be found in Appendix 1.

BENCHMARK 1: MATERNAL AND NEWBORN HEALTH

Tobacco, Alcohol, and Drugs

Young children in the MIECHV counties were more likely than those in the rest of the state to have a parent report a problem with cigarettes in the household (12% vs. 7%). This finding did not show a statistically significant difference.

Problems with alcohol use were about equally likely in the MIECHV and non-MIECHV counties (4% and 6%).

Over 99% of responses in both the MIECHV and non-MIECHV counties indicated that there were no problems with drug use in the household

Depressive Symptoms

About 9% of young children in both the MIECHV and non-MIECHV counties had a primary parent with a 'poor mental health' score on the mental health measure (MHI-5). This primarily measures problems with depression and anxiety.

² USDA Rural-Urban Continuum Codes: <http://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx>

About 4 out of 5 children ages 0 – 5 years in Iowa were fed breast milk for at least some period of time

Children in MIECHV counties tended to have been fed breast milk for a shorter period of time

Breastfeeding

About one in five children in both the MIECHV and non-MIECHV counties were never fed breast milk. However, children in rural areas were less likely to have been breastfed, and in Home Visiting rural counties were least likely (Figure 2).

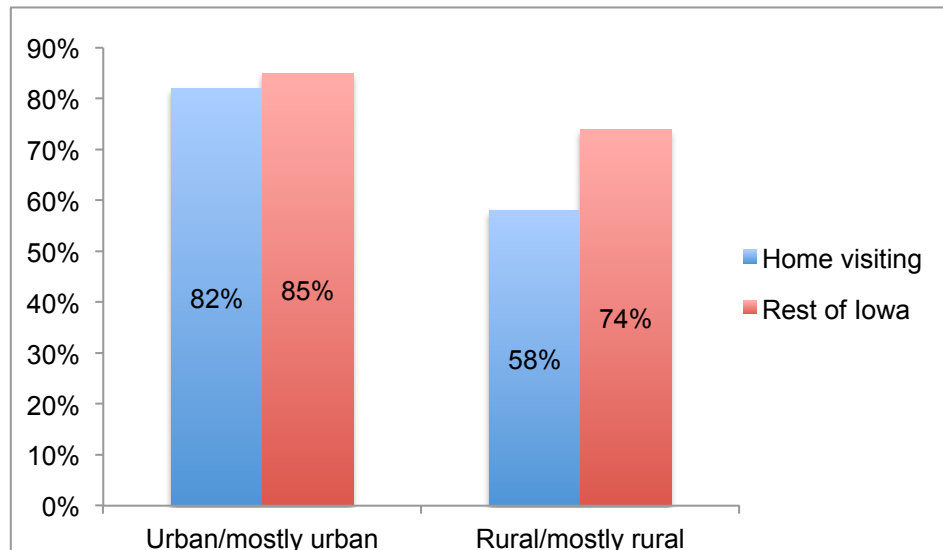


Figure 2. Percent of children ages 0 – 5 who were ever fed breast milk, by urban – rural status and Home Visiting county status

Among those who were ever breastfed, twenty-five percent of children in MIECHV counties stopped being fed breast milk before 6 weeks of age, compared with 13% of children in the rest of the state (Figure 3).

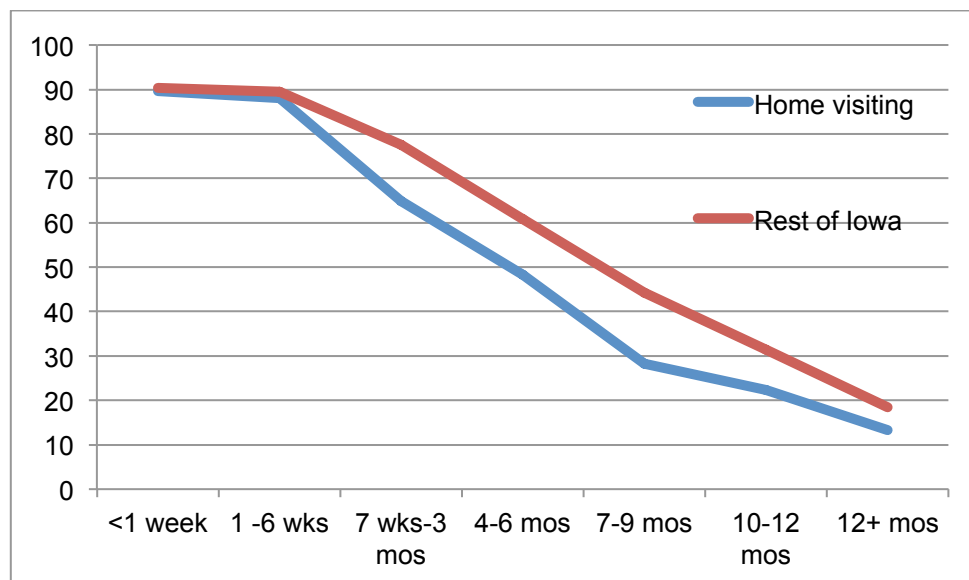


Figure 3. Age of child when stopped breastfeeding, by percent; Home Visiting and the rest of Iowa

Children in MIECHV counties were less likely to have parents who reported receiving anticipatory guidance from a health care professional

Preventive Care/Guidance

Parents in MIECHV counties were statistically significantly less likely to report receiving anticipatory guidance from a health care professional. Fifty-eight percent of MIECHV parents reported this guidance, while 71% reported it in the rest of the state.

Health Insurance

Children

Although it was rare in Iowa for young children to lack insurance, children in the MIECHV counties were statistically significantly more likely to have insurance than those in the non-MIECHV counties (<1% MIECHV vs. 2% non-MIECHV counties). Young children in MIECHV counties were more likely to be covered by Medicaid or hawk-I (Figure 4).

Parents

Parents in both MIECHV and non-MIECHV counties were more likely to be uninsured than their children, and less likely to be covered by public insurance (Figure 4).

Parents statewide were far less likely than their children to have health care coverage

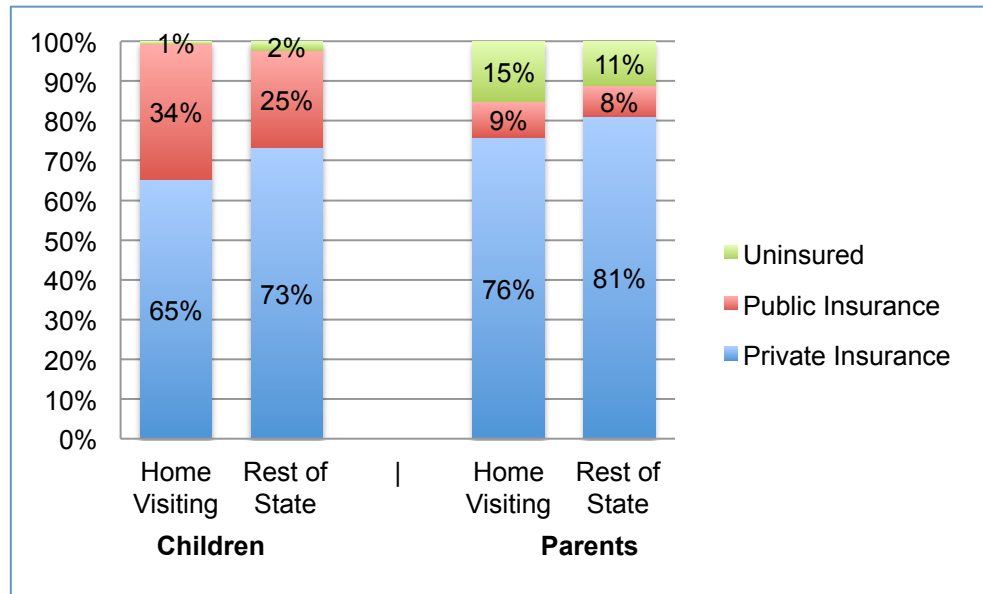


Figure 4. Insurance status of Iowa children ages 5 and under and their parents, by Home Visiting Intervention county status

BENCHMARK 2: CHILD INJURIES, ABUSE, NEGLECT, MALTREATMENT

Emergency Room

About 30% of young children in Iowa had at least one emergency room visit in the past year. Children in MEICHV counties were not significantly more likely to have a visit to the ER than those who were not in MIECHV counties.

Primary reasons for ER visits for young children in Iowa were: trauma, broken bones, or stitches (30%), high fever (12%), and ear infections (9%).

A health care provider had suggested that the child be seen in the ER for 40% of children with an ER visit.

About three-quarters of respondents believed that the care they received could have been provided in a doctor's office or clinic if one had been available.

Care could have been received in a doctor's office or clinic if one had been available for about three-quarters of children who visited the ER

BENCHMARK 3: SCHOOL READINESS

Child Development Activities

There were no significant differences between children in the MIECHV counties and the rest of the state on school readiness issues

95% of children in both MIECHV counties and the rest of Iowa had parents who did NOT have concerns about their young child's learning, development, or behavior.

However, 3% of parents had concerns about how their child makes speech sounds; 2% were concerned that their child did not understand what they say; and 1% had concerns about how their child uses hands and fingers, and arms and legs. Figure 5 shows specific issues among Iowa parents.

Most parents of children ages 0 – 5 years in Iowa did not have concerns about their child's learning, development, or behavior

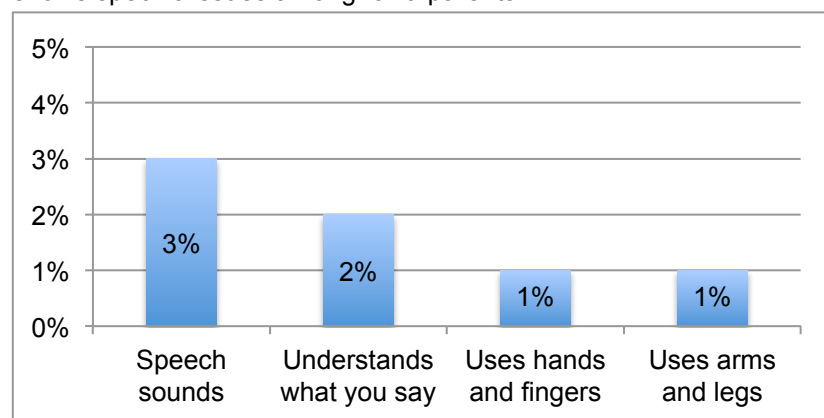


Figure 5. Specific issues among the 5% of Iowa parents of young children who had concerns about child development

About one-third of children ages 0 – 5 statewide had parents who reported being asked by a health care provider to fill out a developmental screening

Among all young children in Iowa, 48% had parents who were asked by health care providers if they had concerns about their child’s learning, development, or behavior, and 35% were asked by a health care provider to fill out a developmental screening questionnaire. Three percent of children in Iowa ages 4 months – 5 years had parents who reported their child to have an IEP, or were enrolled in Early Access or Early Intervention.

Parenting Stress

Aggravation in parenting of young children in the MIECHV counties was about the same as the rest of the state. About 3% of parents of young children indicated that they had high levels of stress related to parenting their child, using a 4-question composite scale.³

Child Behavioral Health

About 3% of young children had parents who had concerns about their child’s behavior. Two percent had concerns about how their child gets along with others. Additionally, about 2% of young children had parents with concerns about independence, and 1% had concerns about how their child is learning preschool skills (Figure 6).

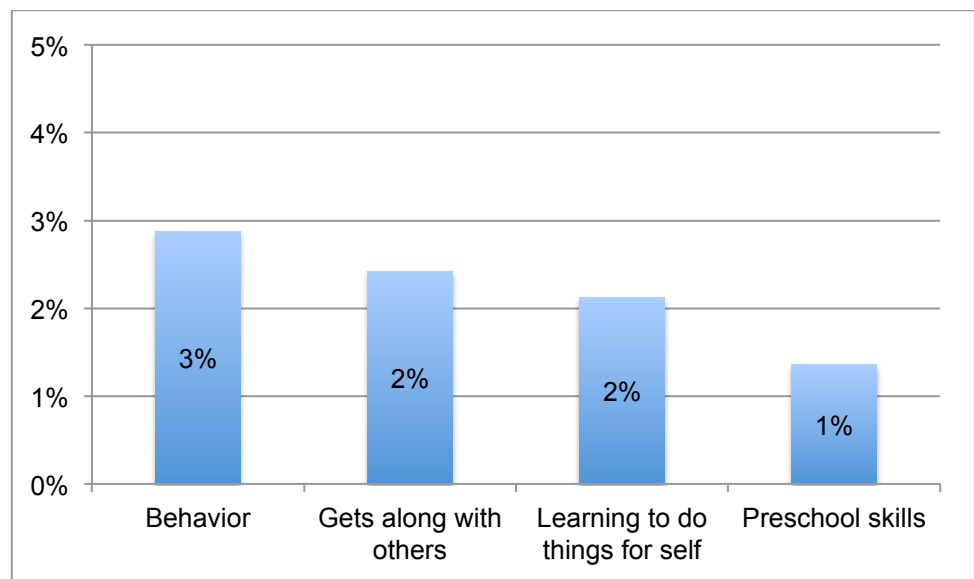


Figure 6. Percent of children with parents who had concerns about behavior and learning of young children in Iowa

³ Aggravation in parenting scale.

Children ages 0 – 5 years in MIECHV counties were almost twice as likely to have special health care needs

Overall Health Status

Ninety-six percent of young children in the MIECHV counties were reported to be in good, very good, or excellent health, while only 1% were reported to be in fair or poor health. This was comparable to the rest of the state.

Young children in the MIECHV counties were statistically significantly more likely to have a special health care need. Fifteen percent in the MIECHV counties were CSHCN, compared with 8% in the rest of the state (Figure 7).

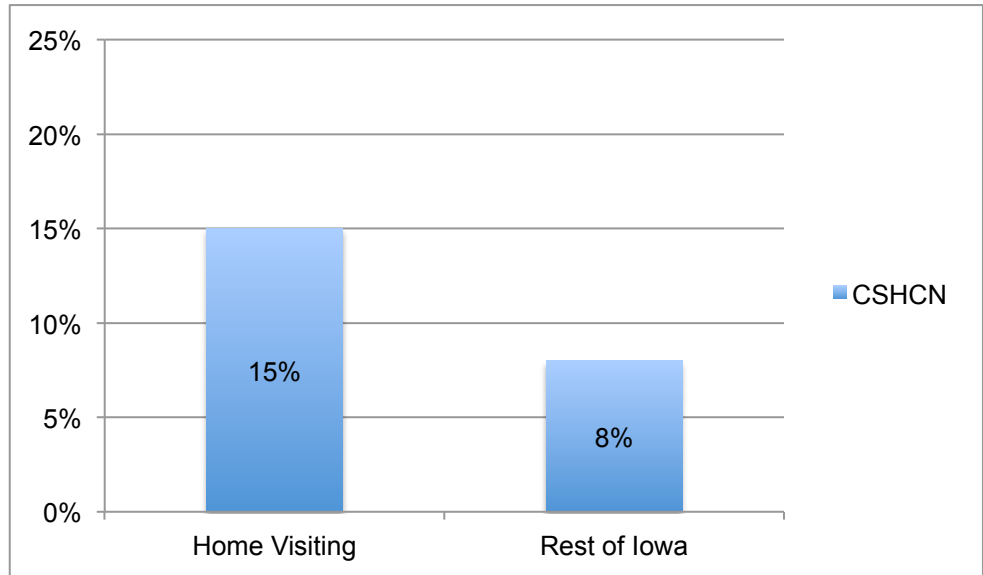


Figure 7. CSHCN: Percent of young children in Iowa with a special health care need by home visiting county status

Note: The 2010 IHHS contains no data corresponding to MIECHV Benchmark 4: Domestic Violence.

BENCHMARK 5: FAMILY ECONOMIC SELF-SUFFICIENCY

Income and Federal Poverty Level Status

Young children in MIECHV counties had lower incomes than those in the rest of Iowa. Nineteen percent of children in MIECHV counties had incomes below 134% of the Federal Poverty Level (FPL), while 10% of children in the rest of the state fell into this category. This difference in income levels was statistically significant (Figure 8).

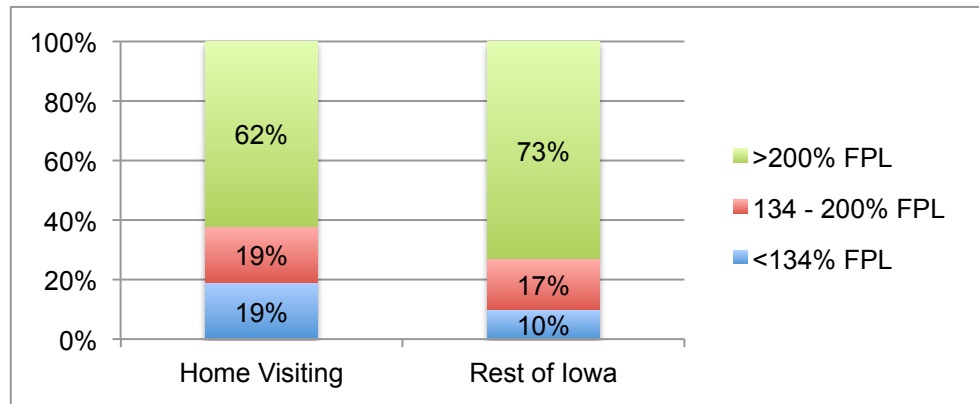


Figure 8. Percent of young children living in FPL categories, by MIECHV county status

Parent Education

Children in MIECHV counties were more likely to have a primary parent who did not complete high school (9% vs. 3%), or who did not go on to college (16% vs. 12%) than children in the rest of Iowa (Fig 9). Parents in non-home visiting counties were much more likely to have a 4-year degree or higher (38% MIECHV vs. 53% non-MIECHV).

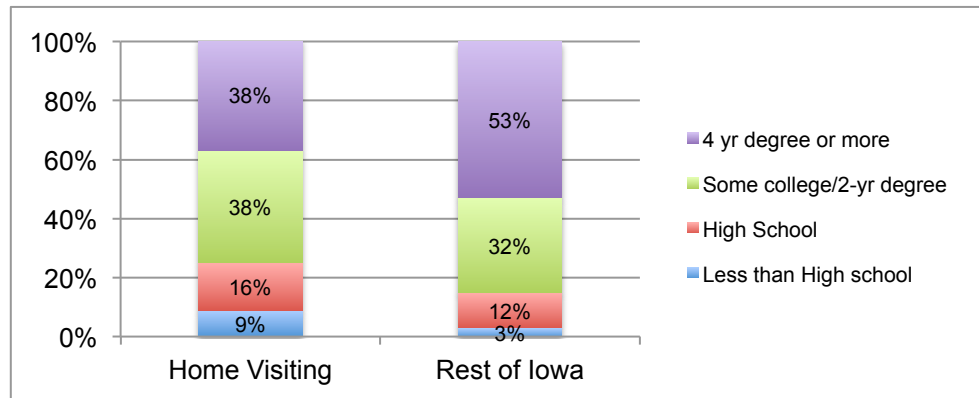


Figure 9. Educational attainment by parents

About one in five children ages 0 – 5 years in MIECHV counties were living below 134% FPL. This is almost twice as likely as children in the rest of Iowa

Children in MIECHV tended to live in households with parents who had lower educational attainment

Over 80% of children in MIECHV counties had a medical home, comparable to the rest of the state

Educational Expectation for Child

Most children in Iowa have parents who would like their children to achieve a 4-year college degree or more. There were not statistically significant differences in parental expectations for MIECHV counties compared with non-MIECHV counties. About 50% of children were expected to complete a 4-year degree, and another 34% were expected to go to school beyond a 4-year degree. It is interesting to note that children living in rural counties were less likely to have parents with lower educational expectations.

BENCHMARK 6: COORDINATION AND REFERRALS

Medical Home

Young children in MIECHV and non-MIECHV counties were equally likely to have a medical home, based on parent report using a combined series of questions. More details about the methods used for determining medical home can be found in Appendix 4 of this report. Using this medical home measure, about 82% of young children in Iowa had a medical home.

Referrals


About 28% of children in MIECHV-counties were reported to have need for a referral to a medical specialist. Among those children, 11% had a small problem getting a needed referral. No children were reported to have a big problem getting such referrals. There were not statistically significant differences by MIECHV county status.

Care Coordination

Most children in the state had parents who did not wish to have extra help with care coordination; however, about 7% of children statewide had parents who said they could use extra help arranging or coordinating care among health care providers or services. Of those, 59% said they never or only sometimes got the care coordination they needed. There were not statistically significant differences in MIECHV-counties compared with the rest of the state.

CONCLUSIONS

These analyses from the 2010 Iowa and Family Household Health Survey were designed to provide a baseline overview of the health and well being of young children age 0-5 in the state, with special consideration given to the children and families in MIECHV counties. The MIECHV program seeks to serve some of the most vulnerable families in these counties.



Overall, children ages 0 – 5 years in Iowa are very healthy and likely to have health insurance, and the counties in the MIECHV are no exception. However young children living in MIECHV counties have less positive outcomes than the rest of the state in a few key areas. For example, the prevalence and length of time breastfeeding is an area that could be improved upon, and will be directly addressed by the MIECHV.

Children in MIECHV counties were more likely to live in a household where smoking was reported to be a problem. Children were more likely to live in low-income households, and to have a parent who did not complete high school. MIECHV interventions that focus on family issues such as poverty, smoking, and educational attainment have the potential to provide a healthier environment for children in MIECHV counties.

Another area of concern is a higher rate of Children with Special Health Care Needs in the MIECHV counties. The MIECHV program can address this by making sure children and their families have adequate access to services and support. One positive factor in this direction is that children are more likely in MIECHV counties to have health care coverage. The primary difference appears to be higher enrollment in Medicaid and *hawk-i*.

The MIECHV program in Iowa has the potential to assist families in a number of key areas that will affect the health and well-being of children in Iowa. The program is well-positioned to help families in some of the most vulnerable areas of the state to improve outcomes for children who may be at-risk for health and developmental issues.