Medical Homes for Children in Iowa

Results from the 2010 Iowa Child and Family Household Health Survey

Peter Damiano
Suzanne Bentler
Ki Park
Jean Willard

Public Policy Center
The University of Iowa

October, 2013
Topics to be covered

2010 IHHS

• Overview
• Methods
• Medical Home (MH) for Children – A Multivariable Analysis
  - MH for children with special health care needs
Study Collaborators

- Joint effort of
  - Iowa Department of Public Health
  - University of Iowa Public Policy Center
  - Iowa Child Health Specialty Clinics
  - Other funding partners for 2010
    - U.S. Department of Health and Human Services Maternal and Child Health Bureau (MCHB)
    - Blank Children’s Hospital
    - American Academy of Pediatrics - Iowa Chapter
    - ARRA funding through Early ACCESS
Health care topics - 2010 IHHS

- Functional health status
  - CYSHCN screener
- Access to/need for care
  - Insurance coverage
- Prescription medications
- Dental care
- Behavioral/emotional health
- Emergency room use
- Medical home - new
Health determinants-2010 IHHS

• Early childhood issues
  - Parental engagement
  - Child care
• Physical activity
• Nutrition
• Substance use problems
• Social determinants of health—new
• Food insecurity—new
Primary purpose of these analyses

To assess the factors related to whether a child in Iowa has a medical home:

• Medical home for all children in Iowa
• Medical home for CSHCN (and non-CSHCN)
Methods-2010 IHHS

- Population-based statewide household survey
- Address-based sampling design- new
- Mixed mode data collection
  - Telephone and Internet survey methods
- AA/Latino oversample
- Data collection by Univ. of Northern Iowa Center for Social and Behavioral Research
Methods - 2010 IHHS

- Screening call identify families with children
- Most knowledgeable adult over 18 asked to complete interview
  - Data collection: Fall 2010, Spring 2011
- 180 questions max.
  - 22 minutes on average
Methods-2010 HHS

- Data weighted to be more representative of state
  - Account for potential biases from
    - Family size (one per household)
    - Targeted vs random sampling
    - Phone bias (income)
    - Age distribution of children in state
  - Used 2010 Census data to estimate age and income distributions of Iowa children
- Results checked against other norms for “face validity”
Participation

- 2386 completed surveys
  - 1859 phone
  - 527 online
- Respondents: 95% parents
  - 80% mothers
  - 15% fathers
Iowa’s children (census data)

<table>
<thead>
<tr>
<th>2000 Census</th>
<th>2010 Census</th>
</tr>
</thead>
<tbody>
<tr>
<td>827,983</td>
<td>820,510</td>
</tr>
</tbody>
</table>

Percent change: 0.01% from 2000 to 2010

- Births leveled in 40,000 per year (+3.7% from 2000)
- School enrollment down 6.3% from 2005

Families-decreased (-8.1%) from 2000
- 377,687 in 2000
- 347,118 in 2010
Results-2010 IHHS

Today:

- Medical Home for children 0-17 y.o.
- Sample size n = 2,365
Medical Home
Background: Medical Home

• In 2002, the American Academy of Pediatrics (AAP) defined a patient centered medical home (PCMH) as a method of care delivery by physicians that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective.
The PCMH, which is also known simply as a medical home, is especially important for children with special health care needs (CSHCNs).
Background - Medical Home (cont.)

- Having a medical home has been associated with
  - increased parent satisfaction,
  - decreased emergency department utilization,
  - lower rates of hospitalization and
  - more preventive care.
Medical Home Identification

• In the IHHS, we used 17 questions from the 2005-2006 National Survey of Children with Special Health Care Needs (NS-CSHCN) and the 2007 National Survey of Children's Health (NSCH) to tap several of the conceptual components of the AAP definition of the medical home.

• There is no national consensus on a survey-based instrument for defining a medical home.
Criteria for Medical Home

**Base Criteria**
- Have a personal doctor or nurse
- Have a usual source of care (well child and sick)
- Usual source is not an emergency room

**Family Centered**
- Providers spend enough time, listen carefully, are sensitive to family values and customs
- Parents feel like a partner in care, can get information

**Comprehensive**
- Can get referrals if needed

**Coordinated**
- Can get help coordinating care when needed
- Satisfactory communication with school or childcare when needed
Descriptive Results

Child, Household and Parent Characteristics in Medical Home
# Child characteristics

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CSHCN</strong></td>
<td>21%</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>28%</td>
</tr>
<tr>
<td>6-12</td>
<td>37%</td>
</tr>
<tr>
<td>13-17</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>2%</td>
</tr>
<tr>
<td>White</td>
<td>87%</td>
</tr>
<tr>
<td>Hispanic/Latino (all races)</td>
<td>6%</td>
</tr>
<tr>
<td>Other(^a)</td>
<td>2%</td>
</tr>
</tbody>
</table>
Household Characteristics

<table>
<thead>
<tr>
<th>Feature</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Residence</td>
<td>65%</td>
</tr>
<tr>
<td>Insurance Status</td>
<td></td>
</tr>
<tr>
<td>Private Insurance</td>
<td>77%</td>
</tr>
<tr>
<td>Public Insurance</td>
<td>21%</td>
</tr>
<tr>
<td>No Insurance</td>
<td>3%</td>
</tr>
<tr>
<td>FPL Status</td>
<td></td>
</tr>
<tr>
<td>≤ 133%</td>
<td>10%</td>
</tr>
<tr>
<td>134% - 199%</td>
<td>13%</td>
</tr>
<tr>
<td>200% - 299%</td>
<td>23%</td>
</tr>
<tr>
<td>300% or more</td>
<td>54%</td>
</tr>
<tr>
<td>Supportive Neighborhood</td>
<td>87%</td>
</tr>
</tbody>
</table>
## Parent Characteristics

<table>
<thead>
<tr>
<th>Age (years)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25</td>
<td>3%</td>
</tr>
<tr>
<td>26-55</td>
<td>93%</td>
</tr>
<tr>
<td>Over 55</td>
<td>4%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>≤ High School</td>
<td>19%</td>
</tr>
<tr>
<td>Some College</td>
<td>36%</td>
</tr>
<tr>
<td>≥ College Graduate</td>
<td>45%</td>
</tr>
<tr>
<td>Aggravation in Parenting</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>5%</td>
</tr>
<tr>
<td>Moderate</td>
<td>63%</td>
</tr>
<tr>
<td>Low</td>
<td>32%</td>
</tr>
<tr>
<td>Poor Mental Health</td>
<td>11%</td>
</tr>
</tbody>
</table>
Medical Home

- Yes: 80%
- No: 20%
Medical Home

- The vast majority (93%) had a personal doctor or nurse
- 97% had a usual source of wellness and sick care.
- Of the subcomponents,
  - 84%-experienced family centered care
  - 87%-no problem getting referrals when needed
  - Of the relatively few children (n=131) that needed care coordination, only 5% received it
Child Factors Related to MH

<table>
<thead>
<tr>
<th>CSHCN *</th>
<th>MH</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>82%</td>
</tr>
<tr>
<td>Yes</td>
<td>71%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race/Ethnicity *</th>
<th>MH</th>
</tr>
</thead>
<tbody>
<tr>
<td>African-American</td>
<td>51%</td>
</tr>
<tr>
<td>White</td>
<td>81%</td>
</tr>
<tr>
<td>Hispanic/Latino (all races)</td>
<td>69%</td>
</tr>
<tr>
<td>Other</td>
<td>75%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>MH</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>82%</td>
</tr>
<tr>
<td>6-12</td>
<td>78%</td>
</tr>
<tr>
<td>13-17</td>
<td>80%</td>
</tr>
</tbody>
</table>

* Statistically significant difference at p<.05
## Household Characteristics and Medical Home

<table>
<thead>
<tr>
<th>Federal Poverty Status *</th>
<th>MH</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 133%</td>
<td>67%</td>
</tr>
<tr>
<td>134% - 199%</td>
<td>76%</td>
</tr>
<tr>
<td>200% - 299%</td>
<td>81%</td>
</tr>
<tr>
<td>300% or more</td>
<td>83%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Insurance Status *</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Insurance</td>
<td>83%</td>
</tr>
<tr>
<td>Public Insurance</td>
<td>69%</td>
</tr>
<tr>
<td>No Insurance</td>
<td>59%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supportive Neighborhood</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>83%</td>
</tr>
<tr>
<td>No</td>
<td>63%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Urban Rural</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>81%</td>
</tr>
<tr>
<td>Rural</td>
<td>78%</td>
</tr>
</tbody>
</table>

* Statistically significant difference at p<.05
## Parent Characteristics and Medical Home

<table>
<thead>
<tr>
<th></th>
<th>MH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>69%</td>
</tr>
<tr>
<td>26-55</td>
<td>80%</td>
</tr>
<tr>
<td>Over 55</td>
<td>75%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>High School or Less</td>
<td>71%</td>
</tr>
<tr>
<td>Some College</td>
<td>80%</td>
</tr>
<tr>
<td>4 or More Years of College</td>
<td>83%</td>
</tr>
<tr>
<td><strong>Aggravation Parenting</strong></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>60%</td>
</tr>
<tr>
<td>Moderate</td>
<td>79%</td>
</tr>
<tr>
<td>Low</td>
<td>86%</td>
</tr>
<tr>
<td><strong>Mental Health Status</strong></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>63%</td>
</tr>
<tr>
<td>Normal</td>
<td>82%</td>
</tr>
</tbody>
</table>

* Statistically significant difference at p<.05
What Are the Most Important Factors?

Multivariable Logistic Regression predicting the Odds of Having a Medical Home (n=2,008)
## Multivariable Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSHCN</td>
<td>0.72*</td>
</tr>
<tr>
<td>Race of Child (compared White)</td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>0.42 *</td>
</tr>
<tr>
<td>Hispanic/Latino (all races)</td>
<td>0.81</td>
</tr>
<tr>
<td>Other(^b)</td>
<td>0.78</td>
</tr>
<tr>
<td>Insurance (compared to Private)</td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td>0.36 †</td>
</tr>
<tr>
<td>Public</td>
<td>0.62 †</td>
</tr>
<tr>
<td>Less supportive neighborhood</td>
<td>0.51 ‡</td>
</tr>
<tr>
<td>Parent Age (comp 26-55 years)</td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>0.53 *</td>
</tr>
<tr>
<td>Over 55</td>
<td>1.40</td>
</tr>
<tr>
<td>Parenting Aggravation (comp Low)</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>0.48 †</td>
</tr>
<tr>
<td>Moderate</td>
<td>0.68 †</td>
</tr>
<tr>
<td>Poor Mental Health Status</td>
<td>0.65 †</td>
</tr>
</tbody>
</table>

\(^* p < 0.05\)
\(^† p < 0.01\)
\(^‡ p < 0.001\)
## Subset of Children WITH SHCN (n = 429)

<table>
<thead>
<tr>
<th>Category</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race of Child (comp. White)</td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>0.21 *</td>
</tr>
<tr>
<td>Hispanic/Latino (all races)</td>
<td>0.73</td>
</tr>
<tr>
<td>Other&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.78</td>
</tr>
<tr>
<td>Less supportive neighborhood</td>
<td>0.53 *</td>
</tr>
<tr>
<td>Aggravation in Parenting (comp. Low)</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>0.19 ‡</td>
</tr>
<tr>
<td>Moderate</td>
<td>0.38 *</td>
</tr>
</tbody>
</table>

* p < 0.05 (significant)  
† p < 0.01 (highly significant)  
‡ p < 0.001 (very highly significant)
Subset of Children WITHOUT SHCN (n = 1,579)

<table>
<thead>
<tr>
<th>Factor</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male Child</td>
<td>0.73 *</td>
</tr>
<tr>
<td>Insurance (comp. Private)</td>
<td></td>
</tr>
<tr>
<td>Uninsured</td>
<td>0.30 †</td>
</tr>
<tr>
<td>Public</td>
<td>0.53 †</td>
</tr>
<tr>
<td>Less supportive neighborhood</td>
<td>0.50 ‡</td>
</tr>
<tr>
<td>Parent Ed. (comp 4+College)</td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>0.57 †</td>
</tr>
<tr>
<td>Over 55</td>
<td>0.73</td>
</tr>
<tr>
<td>Poor Mental Health Status</td>
<td>0.64 *</td>
</tr>
</tbody>
</table>

* p < 0.05 (significant)
† p < 0.01 (highly significant)
‡ p < 0.001 (very highly significant)
Summary and Discussion
Summary and Discussion

- The medical home status of children in Iowa are fairly consistent with other reports. Overall, the majority of children (80%) receive care in settings that provide the main components of a medical home.
Summary and Discussion

• Vulnerable children and families were less likely to be seen in a medical home environment
  - CSHCN
  - African American children
  - Public insurance or uninsured children
  - Less supportive neighborhood
  - Lower mental health status parents
  - Younger parents
  - Higher parenting anxiety
Summary and Discussion

• Few parents reported receiving adequate care coordination among the relatively small number who needed it.

• Also lower satisfaction with how their providers communicated their child’s needs to other entities (e.g., schools).
Summary and Discussion

• Among CSHCN
  - the factor most highly associated with whether or not the child had a medical home was the aggravation/stress levels experienced by their parents.
    • Could be parents with a CSHCN were more stressed OR
    • Stressed parents were less able to spend the time finding an appropriate provider
Implications for implementation of health reform
Summary and Discussion

• Care coordination and communication among providers is an essential component of the medical home, especially for children with complex needs.

• The increased emphasis on quality care coordination through ACO development and efforts to establish community care teams across the state could be helpful for children in Iowa.
Summary and Discussion

• Covering uninsured kids may help
• Will still need increased efforts to find medical homes for children in the Medicaid program are needed.
• Targeted outreach by providers through health homes to parents of CSHCN who may be experiencing high stress levels may be one strategy to help CSHCN find medical homes.
Past Reports from IHHS

http://ppc.uiowa.edu/IHHS

- Statewide results
- Early childhood
- Oral health
- Adolescent health
- Insurance coverage report
- Nutrition and physical activity
To get more information about 2010 study

Betsy Richey
Data Integration Coordinator
Iowa Dept of Public Health
(515) 725.2085
betsy.richey@idph.state.ia.us
Iowa Medicaid
Health Home Initiatives

Sandy Swallow
October 4, 2013
Overview of 2 Medicaid Initiatives

• Primary Care Health Home Program
• Integrated Health Home Program for SPMI Population
Authority: ACA Section 2703

• Option to submit State Plan Amendment (SPA) depicting a health home model targeting chronic conditions:
  – Primary Care SPA:
    • Approved June 8, 2012 / Effective July 1, 2012
  – SPMI Population SPA (Mental Health focus):
    • Adults and Kids, SOC approach
    • Effective date July 2013
    • Phased-in by county over the next 12 -18 months
• Draw 90/10 Federal match for 8 Qrts for Health Home Services
Ensure desired outcomes are achieved

PMPM Payment is directed to only practices that commit to providing:

- Comprehensive Care Management
- Care Coordination
- Health Promotion
- Comprehensive Transitional Care
- Individual and Family Support Services
- Referral to Community and Social Support Services
Primary Care
Health Home Statistics for Providers

27 Health Home Entities Enrolled:
– 26 counties
– 66 different clinic locations
– 570 individual practitioners

IME Support of new network:
– Two Implementation TA meetings (1:1)
– Collaborative Learning Network (Monthly)
Click on your county to see if Health Home services are available. Counties in blue currently have Health Homes. Members living in neighboring counties of Health Homes may be able to enroll in the Health Home.

http://www.ime.state.ia.us/Providers/healthhome.html
“Primary Care”

Health Home Statistics for Members

• Member consents to enroll by PCP

• As of Sept. 15:
  – 3,904 members assigned (to 20 HH entities)
    • 46% Tier 1
    • 39% Tier 2
    • 12% Tier 3
    • 3% Tier 4
  – 451 are under age 19 (12%)
Primary Care HH
Payment Methodology

In addition to the standard FFS reimbursement…

Patient Management Payment :

– Per Member Per Month (PMPM) targeted only for members with chronic disease
– Tiered payments increase (levels 1 to 4) depending on the number of chronic conditions
– Performance payment tied to achievement of quality/performance benchmarks
Primary Care Payment Rate

<table>
<thead>
<tr>
<th>Member’s Tier</th>
<th>PMPM Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1 (1-3 chronic conditions)</td>
<td>$12.80</td>
</tr>
<tr>
<td>Tier 2 (4-6 chronic conditions)</td>
<td>$25.60</td>
</tr>
<tr>
<td>Tier 3 (7-9 chronic conditions)</td>
<td>$51.21</td>
</tr>
<tr>
<td>Tier 4 (10 or more chronic conditions)</td>
<td>$76.81</td>
</tr>
</tbody>
</table>

- Practice uses Patient Tier Assessment Tool to identify correct tier
- Health Home submits monthly HCFA claim with diagnosis codes that support the tier
- Payments are verified retrospectively through claims data, using the normal IME verification process.
PMPM Payments Made as of 9/13/13: $732,024

- 28,069 paid claims
- 17 Health Homes successfully paid:
  - Tier 1 = $186,675
  - Tier 2 = $300,288
  - Tier 3 = $188,094
  - Tier 4 = $54,048
Integrated Health Home
Definition of an “Integrated Health Home”

A team of professionals working together to provide whole-person, patient-centered, coordinated care for all situations in life and transitions of care to adults with SMI and children with SED.
Definition of Serious Mental Illness (SMI)

- Psychotic Disorders,
- Schizophrenia,
- Schizoaffective disorder,
- Major Depression,
- Bipolar Disorder,
- Delusional Disorder,
- Obsessive-Compulsive Disorder.

*Consideration also given for members with a Global Assessment Functioning (GAF) score of 50 or less*
Definition of Serious Emotional Disturbance (SED)

A diagnosable mental, behavioral or emotional disorder of sufficient duration to meet diagnostic criteria specified within the most current Diagnostic and Statistical Manual of mental disorders (DSM) published by the American Psychiatric Association or its most recent International Classification of Diseases (ICD) equivalent that result in functional impairment.

SED may co-occur with substance use disorders, learning disorders, or intellectual disorders that may be a focus of clinical attention.
DHS Activities for the IHH

2011 and 2012
Children’s MH Redesign Workgroup Sessions

August 2012
Began Consultation with CMS

November 2012
Consultation with SAMSHA

December 2012
Complete draft to CMS, Tribal Notice

March 2013
Official Submission of SPA to CMS

February/March 2013
Submit Rules Package

Public Notice in April 2013

Target Effective Date:
- July 2013
- Phase One = Five Counties

2014
Roll out to remaining counties
In two phases
Why phase-in the IHH implementation?

- CMS allows the State to claim the 90/10 FMAP for each geographical phase
- Maximize the incentive, more effective implementation
- Build off current pilots existing in the first five counties
  - IHH for Adults with SMI
  - System of Care for Kids with SED
Team of Healthcare Professionals: IHH Phase One

Lead Entity:
Magellan Behavioral Services

- IHHs (Dubuque)
  Uof I - CHSC

- IHHs (Linn)
  Four Oaks, Tanager Place, Abbe CMHC

- IHHs (Polk)
  Eyerly Ball MHC, Broadlawns

- IHHs (Warren)
  Eyerly Ball MHC, Broadlawns

- IHHs (Woodbury)
  Siouxland MHC

NOTE: This is not an all inclusive final list, other centers are still under consideration.
Team of Healthcare Professionals
(partnership between the Lead Entity & IHH Offices)

- Physicians
- Nurse Care Coordinators
- Social Workers
- Behavioral Health Professionals
- Peer Support/Family Support Specialist

Team is engaged with Primary Care clinics, Specialist clinics, hospitals, etc…
Health Home Services

A PMPM shared within the Team of healthcare Professionals for:

- Comprehensive Care Management
- Care Coordination
- Health Promotion
- Comprehensive Transitional Care
- Individual and Family Support Services
- Referral to Community and Social Support Services
IHH Statistics

- Members automatically enrolled
  - Member can request to be disenrolled
  - Can not participate in both programs
- Enrollment Statistics
  - September 2013:
    - 12,899 members enrolled
      - 6314 children
      - 49% enrolled are children

http://www.magellanofiowa.com/for-providers-ia/integrated-health-home.aspx
Questions?

Sandy Swallow
Clinical Project Manager
Iowa Department of Human Services

sswallo@dhs.state.ia.us
515-256-4655

http://www.ime.state.ia.us/Providers/healthhome.html
For more information

http://ppc.uiowa.edu/IHHS

Betsy Richey
Data Integration Coordination
Betsy.richey@idph.iowa.gov
515-725-2085