<table>
<thead>
<tr>
<th>Health Reform Goals</th>
<th>Action</th>
<th>2013 Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention/Public Health</td>
<td>Statewide Health Improvement Program, Diabetes Prevention Program (DPP)</td>
<td>Fighting obesity and tobacco – Schools, workplaces, communities, clinics. 2013 legislature 45 million.</td>
</tr>
<tr>
<td>Care Redesign</td>
<td>Health Care Homes / Community Care Teams Quality Incentive Payments Medicaid Integrated Health Partnerships (ACOs)</td>
<td>HCHs serving 3.3 million, Implemented pay for performance for state programs and public employees Medicaid IHPs has contracts with 9 health systems.</td>
</tr>
<tr>
<td>Payment Reform</td>
<td>Statewide Quality Improvement Program, Provider Peer Groups, Health Insurance Exchange</td>
<td>Statewide quality measures, developing provider cost and quality comparisons to be incorporated into the Health Insurance Exchange</td>
</tr>
<tr>
<td>Transparency</td>
<td>Office of Health Information Technology</td>
<td>Implemented common billing/coding and e-prescribing. 80% clinics and 100% hospitals Electronic Health Record.</td>
</tr>
<tr>
<td>Health IT, Administrative Simplification</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Minnesota Health Care Homes

322 certified HCHs, 42% of primary care clinics

3,429 certified clinicians

Serving 3.3 million Minnesotans
Health Care Home Certification Progress

Actual vs. Projected Health Care Homes 2012-2013

Goal: 70% of primary care clinics, 513 clinics by 12/31/2015

- Actual HCH
- Projected HCH
What Is Working for Minnesota?

• Statewide approach, public/private partnership
• Standards for certification all types of clinics can achieve
• Support from a statewide learning collaborative
• Development of a payment methodology
• Integration of community partnerships to the HCH
• Outcomes measurement with accountability
• Statewide HCH Evaluation supported by legislation.

*Focus on patient- and family-centered care concepts*
Health Care Homes Contact Information

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651-201-3626
health.healthcarehomes@state.mn.us

http://www.health.state.mn.us/healthreform/homes/index.html
Evaluation of the State of Minnesota’s Health Care Home Initiative

Evaluation Report for 2010-2012

University of Minnesota School of Public Health
Division of Health Policy and Management

Douglas Wholey, PhD., Michael Finch PhD, Katie M. White PhD, Jon Christianson PhD, Rob Kreiger PhD, Jessica Zeglin MPH, Suhna Lee MPA, Lindsay Grude BS.
HCH Evaluation

• Minnesota Statute §256B.0752 directs the commissioners to complete a comprehensive evaluation report of the HCH model three and five years after implementation (2013 and 2015).

• This 2013 report describes the implementation and outcomes of the HCH initiative from July 2010 – December 2012 for Medicaid enrollees in certified HCH clinics compared to those in non-HCH clinics.
Evaluation Team

Evaluators

• University of Minnesota
  • Douglas R. Wholey, MBA, PhD (PI), Michael Finch, PhD (Co-PI), Katie White, MBA, PhD, Rob Kreiger, PhD, Jon Christianson, PhD, Jessica Zeglin, MPH, Lindsay Grude, BS, Suhna Lee, MPA

Collaborators

• Minnesota Department of Health (funder)
  • Marie Maes-Voreis, RN, MA, Director, Health Care Homes, Monica Hemming, Analyst, Health Care Homes

• Minnesota Department of Human Services
  • Marie Zimmerman, Sarah Bonneville, MS, Heather Petermann, MS
Health Reform in Minnesota

Minnesota’s Three Reform Goals

- Healthier communities
- Better health care
- Lower costs

Institute of Medicine’s Triple Aim
MN Evaluation Preparation

• Health Reform laid a strong foundation for the HCH evaluation
  • State Quality Measurement and Reporting System
    • Assures statewide reporting of primary care clinics on quality and outcomes measures
    • Data collected from clinics by Minnesota Community Measurement
    • Quality data on diabetes and vascular care available from 2009
  • eHealth, ePrescribing, EHR Interoperability standards
  • Development of HCH certification standards and certification process built on strong stakeholder involvement
    • Assures that all HCH certified clinics meet the basic HCH medical home model
Health Care Home

Health Care Home is not:

• A nursing home or home health care
• A restrictive network
• A service that only benefits people living with chronic or complex conditions

Health Care Home is:

• Population clinical care redesign
• Transformed services to meet a new set of patient-and family-centered standards to achieve triple aim
• Foundation to new payment models such as ACOs
• Community partnerships that build healthy communities
Consumer Perspective: Better Health Made Easy

- **Welcoming**
  - Anyone can use and benefit from HCH

- **Relationship Based**
  - Providers are aware of your health history and works closely with you to improve your health

- **Organized**
  - HCH coordinates services and shares information to minimize confusion and prevent duplication and gaps in care

- **Unrestricted**
  - HCH can help choose the best provider and specialists and helps work with your team

- **Comprehensive**
  - HCH is designed to help you meet your health care needs, from preventive care and common illnesses, to urgent care and treatment of chronic and complex conditions
HCH Implementation Timeline

**Health Care Home Implementation Timeline**

**Stage 1 Evaluation**
- 2008:
  - Health Care Home Legislation
  - Consumer Family Council Launched
- 2009:
  - HCH Rule Published
  - First Certified HCH
  - Payment Methods Implemented
- 2010:
  - 100th HCH Certified
  - Recertification Year One Begins
  - MAPCP Demo Begins
  - HCH Communications Plan Developed
  - Regional Nurse Capacity Building
- 2011:
  - 200th HCH Certified
  - Benchmarking Measures for Recertification Announced
  - "Health" of HCH Stakeholder Event
  - Employer Engagement Workgroup Events

**Stage 2 Evaluation**
- 2013:
  - HCH Evaluation by U of M Team
  - 300th HCH Certified
  - Benchmarking Methods Implemented
  - Recertification Year Two Begins
- 2014:
- 2015:
  - Final evaluation report
Phase 1 Evaluation

• Responds to specific Minnesota legislative request for evaluation of demographics, quality, use of payment, disparities, and estimated costs

• Shows comparisons between HCH clinics and non-HCH comparison clinics on measures of access, quality, and cost
  • Focuses on a ‘real world’ evaluation of an initiative that is open to all HCH-eligible clinics, primary care clinics
  • Focuses on actual quality experience and dollars spent by Medicaid program for the HCH and non-HCH population from 2010-2012

• What future evaluation phase will add
  • Examine the impact and causal effects of the HCH Initiative on access, quality, and cost
  • Risk adjust cost and quality measures
  • Take into account the changing mix of clinics becoming certified and enrollees served by HCHs
The HCH Initiative: A Stylized Logic Model

Incentives to Participate
- Payment
- Public Reporting
- Reputation
- Outcomes

Existing Capability
- Absorptive Capacity
- Core Capability

Social Networks
- Health System

Transformations
- Fidelity Standards
- Learning Collaboratives
- Coaching

Moderators
- Targeting
- Clinic Culture & Incentives

Outcomes
- Patient Experience
- Population Health
- Cost Savings

Participation reasons include professional identity (improve patient outcomes), professional reputation, and financial and clinic relations.

The importance of certification & fidelity: Was HCH really implemented?
2013 HCH Evaluation Report Overview

The 2013 HCH Evaluation includes:

- Key Findings
  - HCH Model
  - Provider & Enrollee Demographics
  - Care Quality
  - Payment
  - Disparities in Care
  - Estimated Costs & Cost Savings

- Limitations
- Next Steps
EVALUATION FINDINGS
HCH Model: Fidelity and Certification

- HCH model includes a rigorous certification process, including direct observation during site visits to assess HCH implementation
  - Follows recommended evaluation standards
  - Assures evaluation reliability
Key Findings: Provider Demographics

Monthly and Cumulative number of clinics certified as HCHs, 2010-2013

- Monthly number of clinics certified
- Total number of clinics certified
Key Findings: Provider Demographics (2)

- Just over 53% of HCHs are in the Minneapolis-St. Paul metropolitan area, but HCHs are represented in many areas of Minnesota.
- Larger clinics, clinics with higher care quality, and clinics serving more MHCP patients are more likely to become certified.
Key Findings: Provider Demographics (3)

- Nearly half of Family Medicine and Pediatrics providers in the state provide care within HCHs.
- Certified HCH providers are largely Family Medicine providers, with Internal Medicine and Pediatric specialties also represented.
Key Findings: Enrollee Demographics

- Number and percent of Medicaid enrollees in certified HCH clinics increases over time.

- HCH clinics tend to care for patients who:
  - Are in higher HCH payment tiers, have higher expenses.
  - Are persons of color, speak a primary language other than English, have lower levels of educational attainment.

- HCHs appear to be serving populations targeted by the initiative, including enrollees from historically disadvantaged populations.
Key Findings: Enrollee Demographics (2)

- HCHs tend to care for greater proportions of patients from racial and ethnic minority populations.

### Enrollee Racial / Ethnic Distribution, 2012

<table>
<thead>
<tr>
<th></th>
<th>HCH</th>
<th>Non-HCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not entered</td>
<td>5.6%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.07%</td>
<td>0.09%</td>
</tr>
<tr>
<td>Asian</td>
<td>7.9%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Native American</td>
<td>2.5%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>10.2%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Black</td>
<td>24.0%</td>
<td>13.6%</td>
</tr>
<tr>
<td>White</td>
<td>49.8%</td>
<td>65.2%</td>
</tr>
</tbody>
</table>
Key Findings: Enrollee Demographics (3)

- HCHs tend to care for greater proportions of patients who speak a primary language other than English.
Assessing Care Quality: Methods

• Assessments of quality of care were based on the Statewide Quality Reporting and Measurement System (SQRMS) quality data collected by Minnesota Community Measurement (MNCM).

• SQRMS requires all physician clinics in Minnesota to submit data on quality measures.

• SQRMS measures include commercial, Medicare, MHCP, uninsured, self-pay patients

• Quality measures included:
  • Optimal and Average Diabetes Care
  • Optimal and Average Vascular Care
  • Depression Remission at 6 months
  • Optimal and Average Asthma Care
  • Colorectal Cancer Screening

Details of SQRMS at: http://www.health.state.mn.us/healthreform/measurement/adoptedrule/
Assessing Care Quality: Methods (2)

- **SQRMS Data Collection**
  - Primary care clinics collect and submit patient data on quality
  - Clinics may submit data on total clinic patient population or a representative sample of the population
  - Data are collected and validated by MNCM

- **SQRMS Quality Population**
  - ~750 HCH eligible clinics included in quality analysis
    - 221 HCH certified clinics
    - Number of clinics included vary by quality measure
Assessing Care Quality: Methods (3)

- Assessed 2 types of measures
- **Optimal Care Measures**
  - Measure is considered ‘met’ when a patient achieves all component measures
  - For example: Diabetes Optimal Care is met when a patient achieves all targets:
    - HbA1c level (<8.0)
    - LDL level (<100 mg/dL)
    - Blood pressure (<140/90 mmHg)
    - No tobacco use
    - Aspirin use (if patient has comorbidity of ischemic vascular disease)
- **Average Care Measures**
  - Determines the percentage of total component measures met
  - Example: Diabetes Average Care is 80% when a patient:
    - Achieves HbA1c level, LDL level, blood pressure level, and aspirin use targets (4/5 achieved)
    - Uses tobacco (1/5 not achieved)
## HCHs Had Better Care Quality

<table>
<thead>
<tr>
<th></th>
<th>HCH vs. Non-HCH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HCH higher quality</td>
</tr>
<tr>
<td>Colorectal Cancer Screening</td>
<td>✓</td>
</tr>
<tr>
<td>Depression</td>
<td>Remission at 6 months</td>
</tr>
<tr>
<td></td>
<td>Follow-up at 6 months</td>
</tr>
<tr>
<td>Asthma Care</td>
<td>Optimal</td>
</tr>
<tr>
<td></td>
<td>Average</td>
</tr>
<tr>
<td>Diabetes Care</td>
<td>Optimal</td>
</tr>
<tr>
<td></td>
<td>Average</td>
</tr>
<tr>
<td>Vascular Care</td>
<td>Optimal</td>
</tr>
<tr>
<td></td>
<td>Average</td>
</tr>
</tbody>
</table>
Key Findings: Care Quality

Optimal Diabetes Care, 2010-2012

- 2010: 40.2% HCH Certified, 39.4% Not HCH Certified
- 2011: 43.8% HCH Certified, 37.5% Not HCH Certified
- 2012: 40.9% HCH Certified, 37.5% Not HCH Certified

Optimal Vascular Care, 2010-2012

- 2010: 45.4% HCH Certified, 41.8% Not HCH Certified
- 2011: 56.6% HCH Certified, 47.2% Not HCH Certified
- 2012: 53.6% HCH Certified, 48.0% Not HCH Certified
Assessing HCH Payment Experience: Methods

- Administered 3 surveys to all HCH clinics and clinic organizations certified as of December 31, 2012
  - Billing Practices Survey
    - Asked HCHs about decisions and preparations made for clinic billing for monthly care coordination services
  - Financial Practices Survey
    - Asked HCHs about financial analyses conducted prior to becoming certified, financial monitoring processes, and the importance of care coordination payments
  - Patient Tiering Practices Survey
    - Asked HCHs about the tools and processes used to complete the tiering process, how tiering connects with the billing process, and the effectiveness of tiering
Assessing HCH Payment Experience: Methods (2)

Survey response rates

<table>
<thead>
<tr>
<th>Survey</th>
<th># of organizations responding</th>
<th>% of total organizations</th>
<th># of clinics represented</th>
<th>% of total clinics represented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finance</td>
<td>30</td>
<td>85.7%</td>
<td>211</td>
<td>97.2%</td>
</tr>
<tr>
<td>Billing</td>
<td>27</td>
<td>77.1%</td>
<td>199</td>
<td>91.7%</td>
</tr>
<tr>
<td>Tiering</td>
<td>26</td>
<td>74.3%</td>
<td>198</td>
<td>91.2%</td>
</tr>
<tr>
<td>Total sample</td>
<td>35</td>
<td>100%</td>
<td>217</td>
<td>100%</td>
</tr>
</tbody>
</table>
Key Findings: Payment

• Surveys of Health Care Home organizations certified between 2010-2012 indicated that:
  • Financing HCH services, including collecting payment for care coordination services, is important to HCH organizations.
  • Financial incentives do not appear to be a primary driver of HCH participation.
  • HCH organizations were better able to capture payment due to them for care coordination services from Medicaid than from Medicare, managed care, and commercial insurers.
  • Some HCHs report experiencing cost increases associated with operating as a HCH, which appear to be related to start-up expenses of program implementation.
  • Most HCH clinics are using the MN Care Coordination Tier Assignment tool for billing.
    • Tool is adequate for current use.
    • Some modifications may improve usefulness.
Key Findings: Disparities in Care

- Analyses suggest HCHs are serving target populations:
  - Enrollees w/ higher severity medical conditions
  - Disadvantaged populations
Key Findings: Disparities in Care (2)

- Compared to populations of color in non-certified clinics, populations of color in HCH clinics:
  - Used fewer emergency department and ambulatory surgery services
  - Had fewer E&M visits
  - Used more professional services and significantly more hospital outpatient services
Key Findings: Estimated Costs & Cost Savings

- HCH Medicaid enrollees were more expensive during start-up year but became less expensive than non-HCH enrollees by 2012.
Key Findings: Estimated Costs & Cost Savings (2)

- Overall, HCH enrollees had 9.2% less Medicaid expenditures than non-HCH enrollees

| Calculation of Medicaid Cost Savings over 3 years of Health Care Homes Initiative |
|-------------------------------------------------|---------------------------------|---------------------------------|---------------------------------|
| HCH clinics | 203,071 | $525,626,946 | $2,588 | 9.2% |
| Non-HCH clinics | 264,523 | $753,975,197 | $2,850 | |

*Note: The above table shows the estimated cost savings for HCH and non-HCH enrollees over a three-year period.*
Summary

- Health Care Homes are associated with greater access to care, greater quality of care, and lower health care costs over the evaluation period (2010-2012) as compared to similar primary care clinics not certified as Health Care Homes.
Limitations of Initial Evaluation

- HCH initiative is in beginning phase
  - While clinic and enrollee participation is increasing over time, the participation rates in initial phases made initial evaluation difficult
  - HCH effects may take a while to emerge because transformation to the HCH model may take time for refinement

- Measurement of costs and resource use
  - Resource use analysis depends on attributing enrollees to clinics
  - Attribution is improving over time because of improved data associating providers with clinics and patients with providers
Next Steps

• Interim evaluation to MDH in 2014, final evaluation to MN State Legislature in 2015

• Next steps to continue and deepen evaluation:
  • Including more data as it becomes available (e.g. Medicare)
  • Estimating effect of HCH initiative on clinic transformation (and therefore changes in access, cost, and quality)
  • Estimating effect of HCH initiative on patient experience
  • Examining how HCH effects differ across enrollee populations (such as by socio-economic status, race/ethnicity, urban/rural)
  • Improving evaluation methods, such as attribution, risk adjustment, and causal modelling
  • Determining causal relationship between HCH Initiative and impacts on access, quality, disparities, and cost
Recent JAMA article on Medical Homes

  - Population Studied: 32 intervention clinics compared to 29 matched clinics over 3-year period from 2008-2011
  - Model: Pilot practices received disease registries and technical assistance to facilitate transformation to National Committee for Quality Assurance (NCQA) Patient-Centered Medical Home (PCMH) recognition
  - Outcomes: Limited improvements in quality (1 of 11 assessed measures was higher for PCMH) and no reductions in health care utilizations or total costs over 3 years

- Phase 1 MN HCH Evaluation
  - Population Studied: 224 HCH certified clinics compared to approximately 500 similar HCH eligible clinics over 3-year period from 2010-2012
  - Model: Transformation to MN Health Care Home including site visits to ensure that participating practices meet a suite of HCH standards including population health management focus, team based care, electronic searchable registries, care plans, continuous access to all enrollees, coordinated care processes, and patient engagement.
  - Outcomes: HCHs associated with improved access for disadvantaged populations, higher quality than non-HCHs in 8 of 9 quality measures, lower cost than non-HCHs of 9.2% less in total health care costs over 3 years
Comparison to HCH Phase 1 Evaluation

• HCH evaluation includes much larger HCH clinic and comparison population
• MN HCH standards guarantee that HCH clinics meet basic criteria for performing as medical homes compared to NCQA model which may not assure that clinics act as a ‘true’ medical home
  • For example, NCQA recognized practices in the pilot did not offer weekend or evening care
  • HCH recognized practices must provide 24/7 access to care
• SQRMS/MNCM quality data
  • Strongly linked to clinics and does not rely on using claims data to attribute patients to clinics
  • Measures intermediate clinical outcomes compared to clinical process measures used in Freidberg, et al. evaluation
• To address further issues, Phase 2 HCH evaluation will conduct full analyses to examine impact and causal effects of the HCH Initiative on access, quality, and costs
Report available at:

http://www.health.state.mn.us/healthreform/homes/outcomes/evaluationreport.html

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