

Comparing Diabetes Care at Health Care Homes and non-Health Care Home clinics

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Diabetes in Minnesota

- **466,638** Minnesotans living with diabetes (2014)¹
- **\$1.2 billion** in health care spending for diabetes (2014)²
- Both prevalence and cost are **increasing**^{1,2}
- Complications include renal failure, amputations, blindness, and death



1. The Burden of Diabetes in Minnesota (2017), American Diabetes Association, <http://main.diabetes.org/dorg/PDFs/Advocacy/burden-of-diabetes/minnesota.pdf>

2. Treated Chronic Disease Costs in Minnesota – A Look Back and a Look Forward (2017), Minnesota Department of Health, <https://www.health.state.mn.us/data/apcd/docs/chronicdisease.pdf>

Do Health Care Homes provide better diabetes care?

Optimal Diabetes Care quality measure

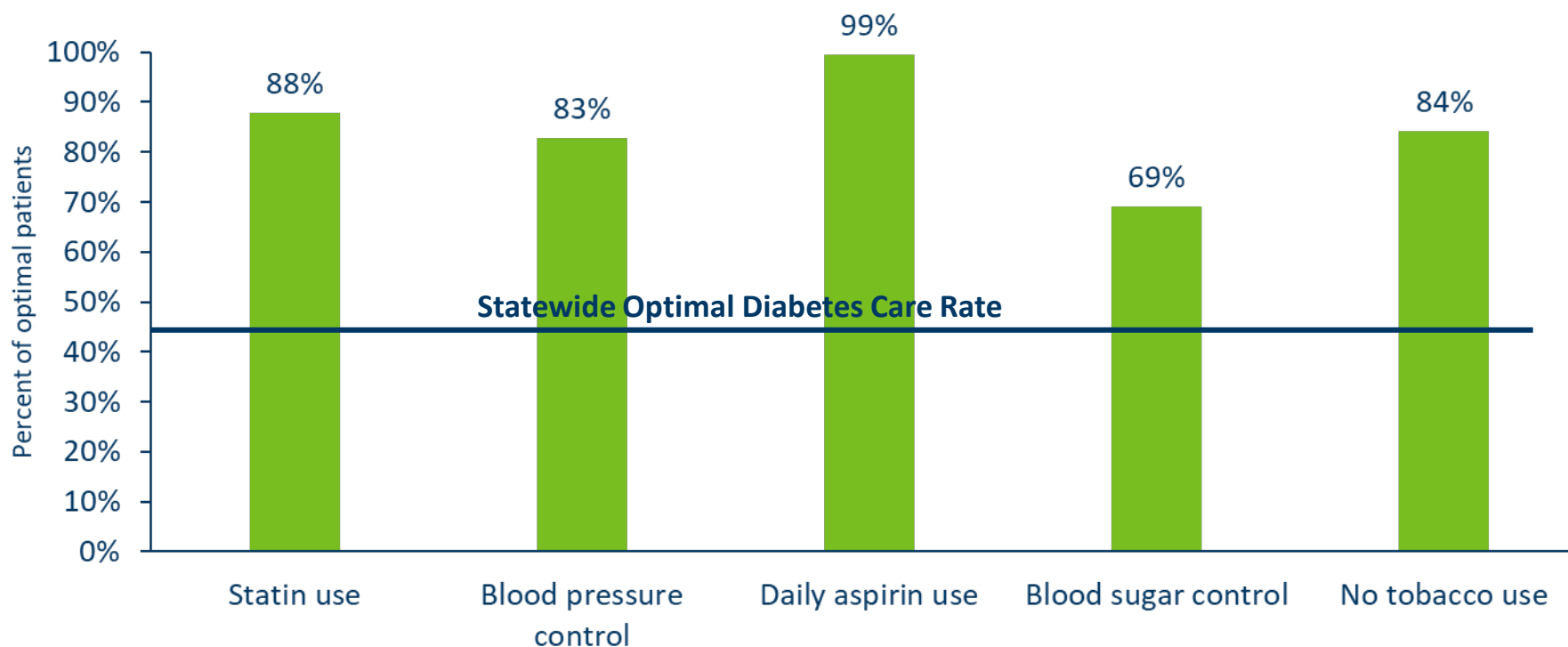
Patients had optimal care if they achieved **ALL** of the following:

1. **Blood sugar control:** HbA1c less than 8.0 mg/dL
2. **Blood pressure control:** Blood pressure less than 140/90 mmHg
3. **On a statin medication,** unless contraindicated
4. **Non-tobacco user**
5. **Taking daily aspirin** or anti-platelets if needed

Data source: Minnesota Statewide Quality Reporting and Measurement System, 2018 report year, 2017 service dates
Measure steward: MN Community Measurement

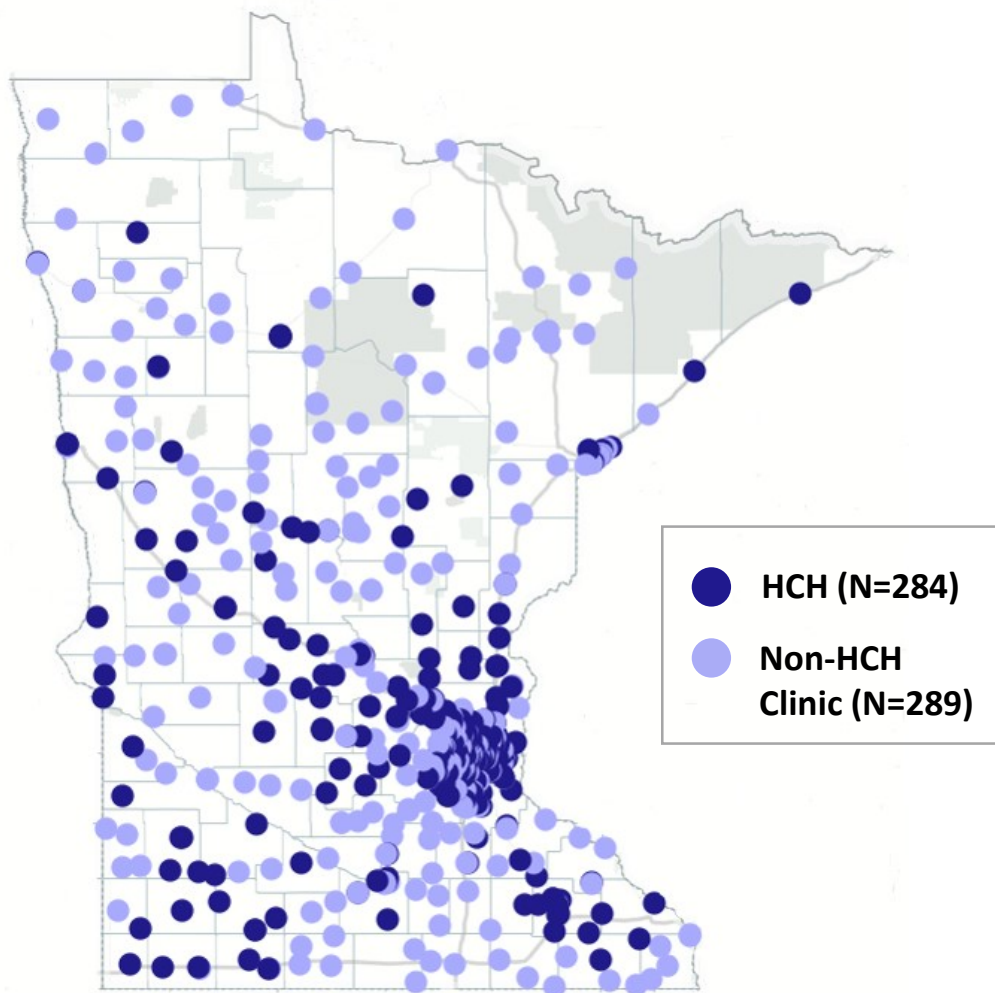
Optimal Diabetes Care Statewide

Statewide, only about 45% of patients met all the Optimal Diabetes Care goals in the 2018 report year. A greater share of patients met individual goals.

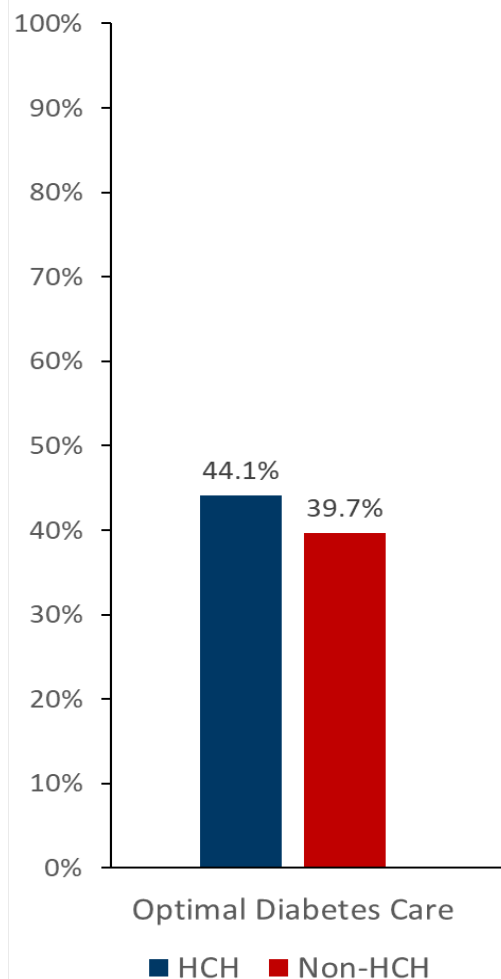


Source: MDH Health Economics Program analysis of Quality Reporting System data from 2017 service dates.

Comparing HCH and non-HCH clinics



- Adjusted by insurance type mix
 - Commercial
 - Medicare
 - Minnesota Health Care Programs
 - Self-Pay/Uninsured
- Compared performance on Optimal Diabetes Care and all five sub-goals
- Compared performance within rural and urban areas



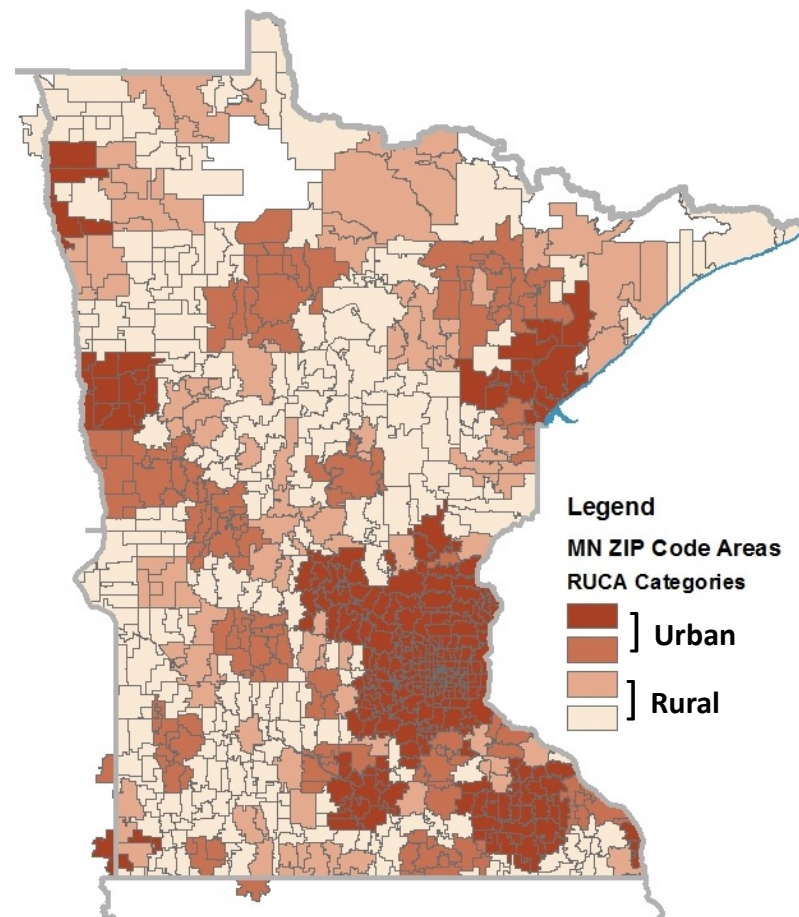
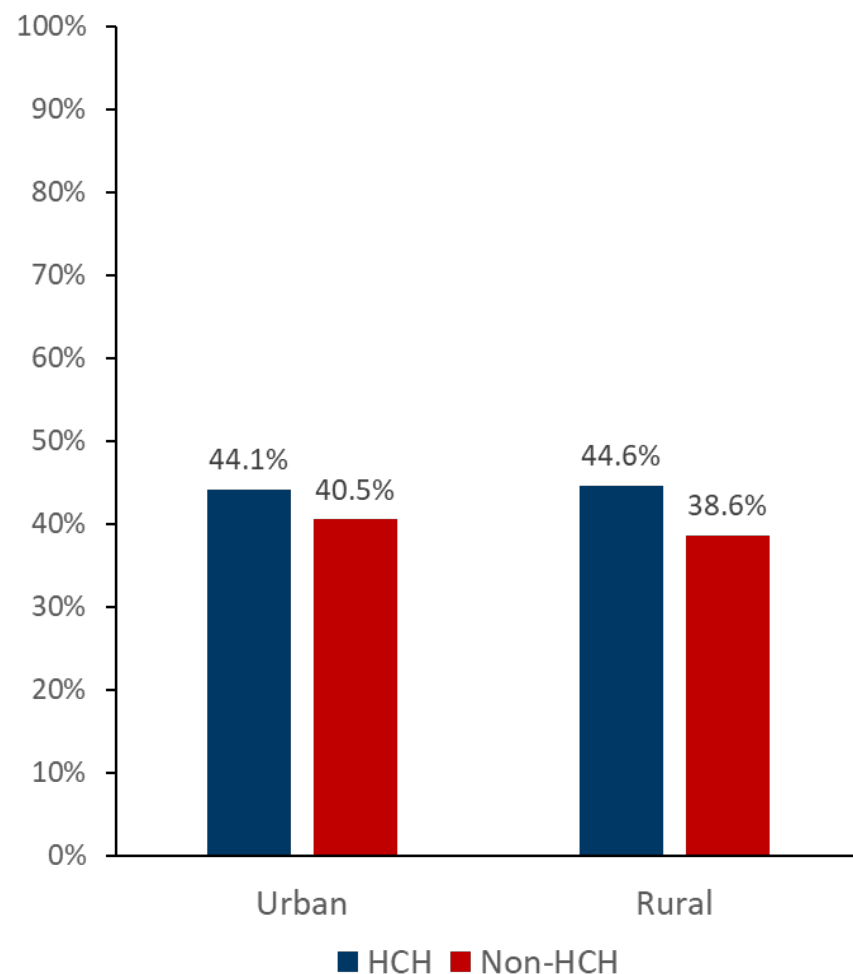
- **HCH had significantly better performance on Optimal Diabetes Care**

- **HCHs' higher ODC rate was driven by:**

- **Better statin use rates**
- **Better tobacco-free rates**

- We compared the mean ranks of HCH and non-HCH clinics using Mann-Whitney U tests.
- HCH had significantly higher ODC rates ($U=31810$, $p=.000$) (mean rank=319.5, rate=44.1%) compared to non-Health Care Homes (mean rank=255.07, rate=39.7%).
- HCH had significantly higher rates of recommended statin use ($U=33795$, $p=.000$) (HCH mean rank=312.5, rate=87.3%; non-HCH mean rank=261.9, rate=84.5%), and significantly higher rates of tobacco-free patients ($U=34021$, $p=.000$) (mean rank=311.7, HCH rate=82.7; non-HCH mean rank=262.7, rate=80.7).

Urban and rural results



2010 Rural-Urban Commuting Area (RUCA) codes retrieved from
<https://www.ers.usda.gov/data-products/rural-urban-commuting-area-codes.aspx>

Conclusions

- HCHs are providing better care to diabetes patients across the state
- HCHs may have a special advantage with aspects of care that depend on patient engagement
- Future research:
 - More clinic, system, and patient characteristics
 - Other chronic conditions and care processes



Thank you!

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Statewide Quality Reporting and Measurement System www.health.state.mn.us/data/hcquality

- Contact: health.sqrms@state.mn.us

Minnesota Health Care Markets Chartbook Section 9

www.health.state.mn.us/data/economics/chartbook

- This chartbook section provides an overview of summary results for selected physician clinic and hospital quality measures. It includes trends over time, stratified results by health insurance product, and measure specifications.

Quality Reporting System Public Use Files www.health.state.mn.us/data/hcquality/pufs

- **NEW!** MDH has created a first set of Quality Reporting System public use files that focus on geographic, health insurance type, and gender breakdowns of the data.

MN Community Measurement HealthScores

www.mnhealthscores.org