Health Care Disparities: Using Data to Identify and Act

Stratis Health
Laura Grangaard Johnson, MPH

West Side Community Health Services
Chris Singer, MAN, RN, CPHQ
Dr. Kathie Culhane-Pera, MD

Minnesota Health Care Homes Learning Collaborative
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Objectives

• Explain how race, ethnicity, and language (REL) data can reveal disparities in patient health status and care delivery

• Identify methods to review patient population data

• Suggest interventions to address health care disparities
Presenters

Laura Grangaard Johnson
Senior Research Analyst
Stratis Health

Chris Singer
Chief Operating Officer
West Side Community Health Services

Kathie Culhane-Pera
Medical Director of Quality
West Side Community Health Services
Background on data for health care disparities
Disparities in Minnesota

• When you look at Minnesota overall…. We’re at the top!
• But when you dig in… some huge inequities
Premature deaths: Average number of years of potential life lost prior to age 75 per 100,000 population

<table>
<thead>
<tr>
<th>State</th>
<th>Timeframe</th>
<th>Data Type:</th>
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<tbody>
<tr>
<td>2 Selected</td>
<td>2016</td>
<td>Number</td>
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</tbody>
</table>

- United States: 6,794
- Minnesota: 5,127

SHADAC is a multidisciplinary health policy research center with a focus on state health policy. SHADAC is supported by the Robert Wood Johnson Foundation and is affiliated with the Health Policy and Management Division of the School of Public Health at the University of Minnesota. For more information, visit www.shadac.org.

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Premature deaths: Average number of years of potential life lost prior to age 75 per 100,000 population

<table>
<thead>
<tr>
<th>State:</th>
<th>Race / Ethnicity:</th>
<th>Timeframe</th>
<th>Data Type:</th>
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<tbody>
<tr>
<td>Minnesota</td>
<td>All Selected</td>
<td>2012-2013</td>
<td>Number</td>
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</table>

![Bar chart showing premature deaths by race/ethnicity and state in Minnesota for 2012-2013.](chart.png)

- **Hispanic / Latino:** 3,448
- **White:** 4,692
- **African-American / Black:** 8,023
- **Asian / Pacific Islander:** 3,589
- **American Indian / Alaskan Native:** 15,751

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Disparities in Minnesota

• When you look at Minnesota overall..... We’re at the top!
• But when you dig in... some huge inequities
• How do you dig in, though?
  – Data helps you formulate and answer questions
Importance of collection & use – Why do it?

• Biggest one: Health care disparities – equity!
• “Business case:” Strategic allocation of resources
  – Hiring of new staff, training of existing staff, need for resources (interpreters, etc.)
• Health Care Homes requirement
What sorts of data to consider?

• Race
• Ethnicity
• Preferred language
• Country of origin
• Disability status
• Insurance status
• Sex
• Age
• Sexual orientation, gender identity
• Geography (including rural/urban)
• Education
• Etc.
Example standards for data collection

- OMB Standards: Minimum federal standards (1997) for race and ethnicity
  - Possibility for future revision

- HHS Office of Minority Health Standards: race and ethnicity (more granular than OMB), sex, primary language, disability status
  - In progress – sexual orientation, gender identity
Minnesota data collection

• Minnesota Community Measurement (MDH data collection vendor):
  – Race, Ethnicity – OMB standards (but combined into one field)
  – Preferred Language
  – Country of Origin
  – Insurance Status

  – Plus other fields that might be used (alone or in combination with above) for disparity analysis:
    • Gender
    • Zip code
Sources for data

• EHR case-level data – what you submit as a HCH
• But also consider using and linking to other data…
  – Public health data (MDH, local public health, CDC, etc.)
  – Patient survey results (or others done by agencies in your area)
  – Data you submit as part of other national or state reporting programs
  – Etc.
• Partnerships
  – May be helpful for analysis of data, too!
Several Resources

- Connecting Communities with Data: A practical guide for using electronic health record data to support community health (MDH, 2017)
- The Handbook on the Collection of Race/Ethnicity/Language Data in Medical Groups (MNCM, 2010)
- Health Care Homes Performance Measurement & Evaluation (MDH)
- Culture Care Connection – Diversity in Minnesota Information Sheets (Stratis Health)
A Closer Look at Health Disparities in Clinical Care: Social Determinants

Kathie Culhane-Pera, MD, MA, Medical Director of Quality
Chris Singer, MAN, RN, CPHQ, Chief Operating Officer
West Side Characteristics:

- Large Minnesota FQHC
- Over 36,000 unduplicated patients seen annually
- 38% remain uninsured
- Large percentage of non-English speakers
- Large percentage of low health literacy
- Mostly anecdotal data on social determinants of health: on socioeconomic factors that could be affecting health, health disparities, health care inequities, and health inequities.
Project Overview

Goals:

1. Create a strategy to identify social determinants of health (SDOH) that could be affecting clinical care at West Side.

2. Evaluate connections between SDOH and clinical care, particularly measures of preventive care and chronic diseases.

3. Implement practice changes to improve health equity, particularly for preventive care and chronic diseases.
The Problem

• Data Collection
  - Registration collected age, race, ethnicity, gender, some housing
  - Inadequate data collection on SDOH, such as insecurities around housing, legal, food, stress, medications, and transportation

• Patient experiences in clinical care indicated that these insecurities impact patient’s ability to access care, receive care, and improve health

• No clinic mechanism to collect SDOH data

• No ability to align SDOH data with quality measures, or patient’s problem list, or resources needed.
Health Disparities and Health Equity as Priorities

- Disparities Leadership Program, Harvard University
  - Challenged us as an organization to evaluate our own progress in cultural humility strategic change
  - Followed the Kotter Model
  - Developed processes to collect data, evaluate data, and report data through an organization-wide Equity and Inclusion Dashboard

- Also, ongoing organizational change in order to reduce health disparities and improve health equity
  - Equity and Inclusion Council
  - Align results with strategic goals
  - Clinic wide trainings on cultural humility and biases
Kotter Model

CREATE
a sense of urgency

INSTITUTE
change

BUILD
a guiding coalition

SUSTAIN
acceleration

FORM
a strategic vision and initiatives

GENERATE
short-term wins

ENLIST
a volunteer army

ENABLE
action by removing barriers
PRAPARE tool

- **PRAPARE**: A NACHC tool to collect SDOH data. We adjusted questions to align with our patients and our clinic and added a question if urgent needs were identified.

- **General information**
  - Migrant work, veteran status, household info, family income, education

- **Resources**
  - Challenges with food, utilities, child care, transportation, clothing, phone, legal services, or medicines

- **Social and emotional health**
  - Stress, social support, stress, corrections, access to care, paying for care

- **Safety**
  - Physical, emotional, domestic concerns

- **Health literacy**

- Do you want to meet with a social worker today?
• Reviewed NACHC best practices for implementation of data collection tool
  • Option A: Interview individual patients (assessment model)
  • Option B: Form completed at time of registration (data collection model)
  • Option C: Hybrid of above two options
• Designed workflow for Option B
• Ensured that tool fit with EMR entry format
• Registration staff gave to patients to complete
• MAs entered into EMR.
Workflow

PRAPARE WORKFLOW

Patient arrives for clinic appt.

Front desk reception asks patient to complete PRAPARE form; assesses need for interpreter.

Patient hands form to MA during rooming. MA reviews form and assesses if resources are needed today.

If resources are needed, MA alerts behavioral health staff or social worker for brief intervention with patient. MA enters data into EMR.

Provider briefly reviews form to ensure urgent needs are met.

If needs are not urgent, flag is sent to integrated behavioral health consultant for future follow up.

FUTURE ENHANCEMENTS
- Data analysis
- Peds implementation
- Health literacy assessment
- Family based assessment
- NOWPOW alignment
Overall information collected

- Given to adult population only at largest clinical sites
- 2,411 people have completed forms
- Aligning SDOH data with quality of care measures
- Analyzing data to inform practices around preventive care, cancer screening, and chronic disease
Overall information: Age, Gender, R/E for PRAPARE

- **Age**
  - 19-28: 18.7%
  - 29-38: 21.8%
  - 39-48: 19.9%
  - 49-58: 17.8%
  - 59-68: 13.9%
  - 69-78: 5.8%
  - 79-88: 1.8%
  - 89-98: 0.3%
  - 99-108: 0.0%

- **Sex**
  - F: 68.5%
  - M: 31.5%

- **Race / Ethnicity**
  - White - Hispanic: 38.4%
  - White - Non Hispanic: 17.7%
  - Black or African American: 16.9%
  - Asian: 16.6%
  - Unknown / Other: 9.4%
  - American Indian or Alaska Native: 0.8%
  - Native Hawaiian or Other Pacific Islander: 0.3%

- **Insurance**
  - Commercial: 21.1%
  - PMAP: 47.2%
  - Sliding Scale: 31.7%
### Overall Information

#### Select PRAPARE Questions

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Social Integration</td>
<td>&gt;3/week: 11%</td>
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<tr>
<td>Stress</td>
<td>None: 23%</td>
</tr>
<tr>
<td>Lack Transportation</td>
<td>No: 88%</td>
</tr>
<tr>
<td>Housing Stability</td>
<td>Stable: 86%</td>
</tr>
<tr>
<td>Education Level</td>
<td>High School+: 76%</td>
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</table>
Prevention Example: Cervical Cancer Screening

Num: Patients Screened
Denom (shown inside bars): eligible screenings per UDS

*Criteria: 23-64 y/o, visit in 2017, no Hx of Treatment

Cervical Cancer Screening

<table>
<thead>
<tr>
<th>Age</th>
<th>20 - 39</th>
<th>40 - 59</th>
<th>60+</th>
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<tbody>
<tr>
<td></td>
<td>4,249</td>
<td>3,803</td>
<td>541</td>
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<table>
<thead>
<tr>
<th>Race / Ethnicity</th>
<th>Asian</th>
<th>Black</th>
<th>Hispanic</th>
<th>White - Non Hispanic</th>
<th>Other / Undetermined</th>
<th>Insured</th>
<th>Sliding / Self Pay Insurance</th>
<th>Unknown / Other</th>
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<tbody>
<tr>
<td></td>
<td>1,067</td>
<td>1,116</td>
<td>4,829</td>
<td>545</td>
<td>1,036</td>
<td>3,169</td>
<td>3,032</td>
<td>2,392</td>
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</tbody>
</table>

%| 57.0% | 56.4% | 39.7% | 47.4% | 46.6% | 65.4% | 38.9% | 35.4% | 63.1% |
Prevention Example: Cervical Cancer Screening

![Cervical Cancer Screening Chart]

- % of Patients Meeting UDS Criteria

<table>
<thead>
<tr>
<th>Social Integration</th>
<th>Stress</th>
<th>A Lot</th>
<th>No</th>
<th>Yes</th>
<th>Stable</th>
<th>Unstable</th>
<th>Homeless</th>
<th>High School+</th>
<th>&lt; High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 3/Week</td>
<td>1-3 Times per week</td>
<td>Less than weekly</td>
<td>None</td>
<td>Some</td>
<td>A Lot</td>
<td>No</td>
<td>Yes</td>
<td>Stable</td>
<td>Unstable</td>
</tr>
<tr>
<td>61%</td>
<td>56%</td>
<td>53%</td>
<td>59%</td>
<td>55%</td>
<td>48%</td>
<td>55%</td>
<td>51%</td>
<td>56%</td>
<td>35%</td>
</tr>
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</table>
Chronic Disease Example: Diabetes mellitus

UDS Diabetes

% Controlled

Num: Controlled Diabetic Patients
Denom (shown inside bars): All Diabetic Patients
*Criteria: HbA1c <= 9 is controlled, 20-75 y/o
*Exclusions: Gestational/steroid induced diabetes

Age
- 20-39: 49.0% 304
- 40-59: 60.7% 1,520
- 60+: 70.1% 856

Gender
- F: 64.4% 1,422
- M: 60.0% 1,262

Race/Ethnicity
- Asian: 64.7% 340
- Black: 62.5% 376
- Hispanic: 62.1% 1,476
- White - Non Hispanic: 64.9% 348
- Unknown/Other: 52.8% 144

Insurance
- Insured: 60.9% 938
- Sliding/Self Pay: 61.2% 956
- Unknown/Other: 65.4% 790
Chronic Disease Example: Diabetes mellitus

Controlled Diabetes (≤ 9)

% of Diabetic patients with HbA1c

- > 3 / Week: 67%
- 1-3 Times per week: 70%
- Less than weekly: 69%
- None: 79%
- Some: 67%
- A Lot: 62%
- No: 70%
- Yes: 60%
- Stable: 70%
- Unstable: 68%
- Homeless: 68%
- High School +: 70%
- < High School: 71%

Social Integration
Stress
Lack Transportation
Housing Stability
Education Level
Next Steps

• #1 Expand data collection:
  Collect data for all populations at all sites
    School based clinics
    Homeless clinics
    Pediatrics

• #2 Identify resources to respond to needs:
  Implement NOWPOW and align with resource data

• #3 Evaluate results to identify clinical interventions
  Will support clinical processes in clinical care redesign
Questions?
Contact

Laura Grangaard Johnson, MPH
Senior Research Analyst
952-853-8544 or 877-787-2847
lgrangaard@stratishealth.org

www.stratishealth.org

Kathie Culhane-Pera, MD, MA
Medical Director of Quality
kpera@westsidechs.org

Chris Singer, MAN, RN, CPHQ
Chief Operating Officer
cjsinger@westsidechs.org

www.westsidechs.org/
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