HealthPartners

The Challenges of Achieving Optimal Diabetes Results: Barriers, Disparities and Strategies for Care Coordination Success

The MCO Diabetes Performance Improvement Collaborative
October 26, 2021

Tammy Chambers
Dr. Tom von Sternberg
Julie Hughes and
Beth Simpson

1

MN Health Plans Collaborative

BlueCross BlueShield Minnesota

HealthPartners

Hennepin Health

Medica

South Country HEALTH ALLIANCE

ucare

2

Introductions

Thomas von Sternberg, MD

- Medical Director of Government Programs and Case Management, HealthPartners.
- Practicing geriatrician with HealthPartners for over 30 years.
- Emphasis on the frail elderly and dual eligible population; oversight includes all services of transitional care, assisted living, nursing home and home-based medicine.

Julie Hughes, RN

- Core Disease Manager at HealthPartners since 2016.
- Over 30 years of nursing experience in orthopedic and medical-surgical nursing, and case management roles including utilization review, complex case management, disability management, and workers compensation management.

Beth Simpson, MSN, EdM, RN, NE-BC

- Education Specialist at HealthPartners.
- Broad clinical experience in medical-surgical, urological, orthopedic, and perianesthesia nursing.
- Background also includes roles in education, development, and leadership/management.

3

Objectives

- Identify the **social and behavioral barriers** to optimal diabetes care impacting the Medicaid/Medicare populations in MSHO or SNBC.
- Describe the impact of **racial disparities** on diabetes outcomes.
- State the top five **interventions** that positively affect diabetes management and the prevention of diabetes-related complications.
- Summarize the **role of the Care Coordinator** in helping members manage their diabetes within the context of their life.
- Identify at least three **individualized care planning strategies** that address potential or real barriers to optimal diabetes self-care.

4

Barriers to Optimal Diabetic Care

5

The D5

1. **CONTROL BLOOD PRESSURE**
   High blood pressure makes your heart work too hard. It can cause a heart attack, stroke or kidney disease.
2. **LOWER BAD CHOLESTEROL**
   LDL or "bad" cholesterol can build up and clog your blood vessels. It can cause a heart attack or stroke. Ask your doctor about taking a statin.
3. **MAINTAIN BLOOD SUGAR**
   High blood glucose levels (too much sugar in your blood) can harm your heart, blood vessels, kidneys, feet and eyes.
4. **BE TOBACCO-FREE**
   Chemicals found in tobacco products, such as nicotine and tar, can narrow the blood vessels and damage your heart
5. **TAKE ASPIRIN AS RECOMMENDED**
   Taking aspirin can prevent harmful blood clots. Ask your doctor if taking aspirin is right for you.

(MN Community Measurement, 2015)

6

QUALITY MEASURES
Minnesota Community Measure

- HbA1c less than 8.0 mg/dL
- Blood pressure less than 140/90 mmHg
- On a statin medication, unless allowed contraindications or exceptions are present
- Non-tobacco user
- Patient with ischemic vascular disease is on daily aspirin or antiplatelets, unless allowed contraindications or exceptions are present

7

Consequences of Optimal Care

- **Blood Sugar Control** can reduce the risk of eye disease, kidney disease, and nerve disease by 40%.[9]
- **Blood Pressure Control** can reduce the risk of heart disease and stroke by 33% to 50%.[10]
- **Improved Cholesterol** Levels can reduce cardiovascular complications by 20% to 50%.[11]
- **Regular eye exams** and timely treatment could prevent up to 90% of diabetes-related blindness.[12]
- Health care services that include **regular foot exams** and patient education could prevent up to 85% of diabetes-related amputations.[13]
- **Detecting and treating early diabetic kidney disease** by using kidney protective medicines that lower blood pressure can reduce decline in kidney function by 33% to 37%.[14]

(NCCDP, 2021)

8

Hierarchy of Elements - What's Most Important
It's Hard to Do It All

- **Smoking** (BIGGEST impact if discontinued)
- Blood Pressure
- Cholesterol
- Sugar

- Renal - check for proteinuria
- Eye and Foot exams - annually

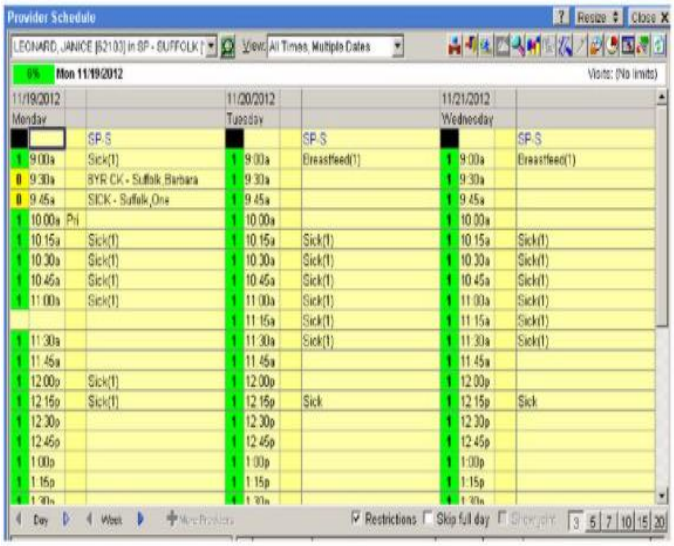
9

Limits in Measurement

- Numbers Game- none of the optimal measures allow for consideration of **challenges of a chaotic life**
- No measurement correction for ***poverty, mental illness or chaotic lives***
- No measure of **what's most important to the patient…**
- Measures DON'T take into account **health literacy**

10

Clinic Based Care

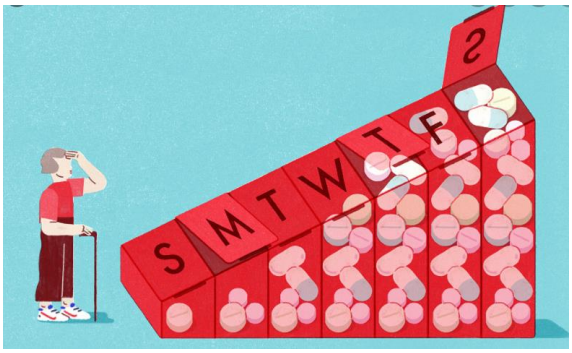


- MD schedule: tyranny of the 20-minute schedule
- Multiple providers / care systems
- Diabetes is ONE of multiple conditions
- In-between visit care is not standardized

11

Complexity Burden of "Optimal " Care

- 1-3 BP meds
- 1-3 oral agents
- Insulin: one or two types
- Coverage, cost, confusion of regimens
- Side Effects: add new Rx to treat the new symptoms….



12

Adherence ***Drops*** When > 1 Pill Daily

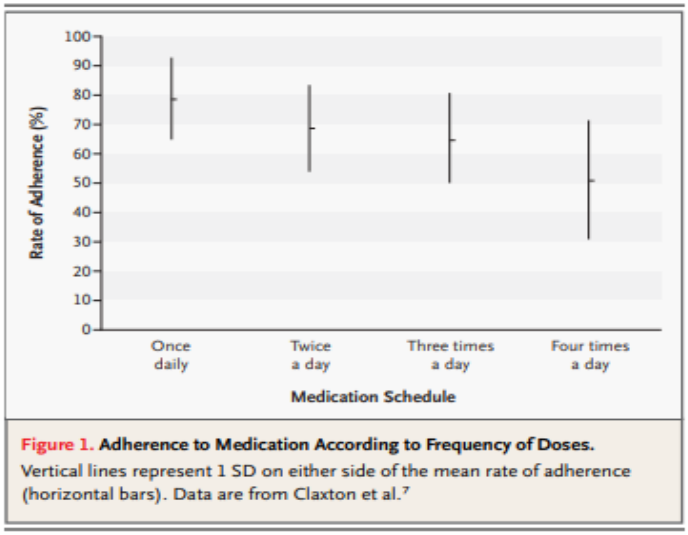


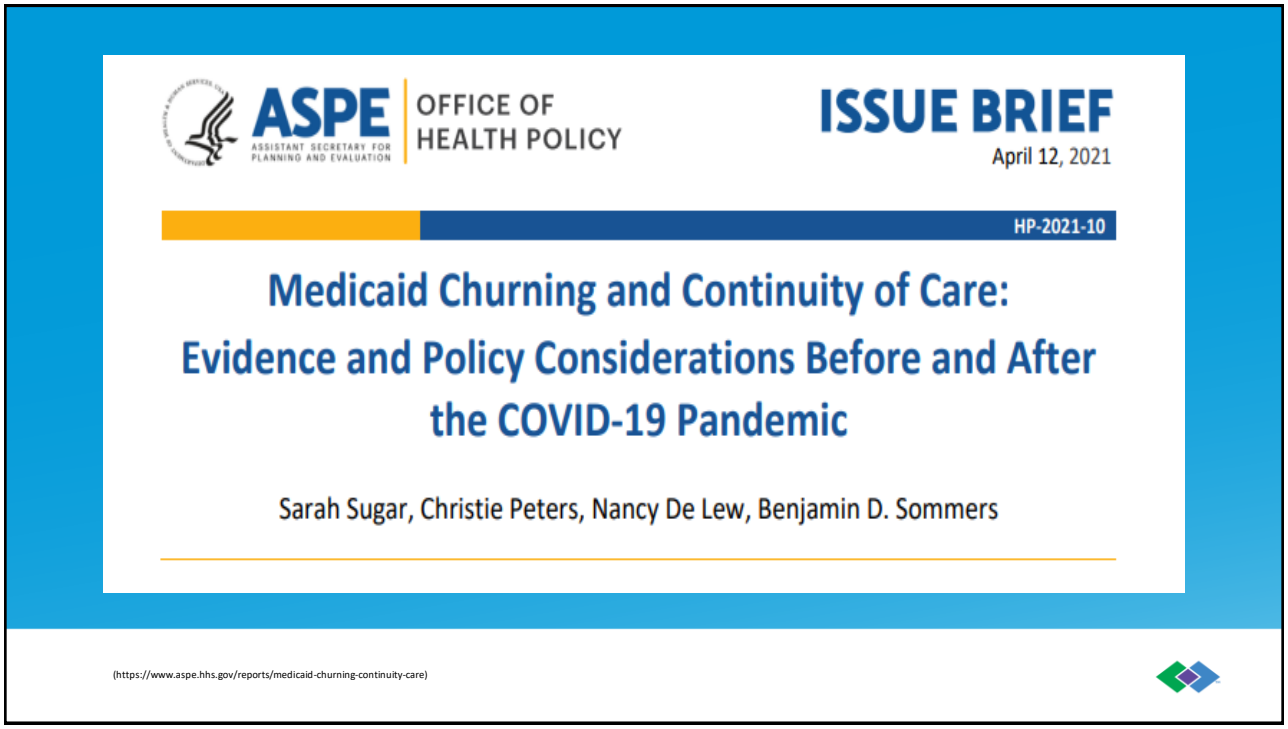
Figure 1. Adherence to Medication According to Frequency of Doses.
Vertical lines represent 1 SD on either side of the mean rate of adherence (horizontal bars). Data are from Claxton et al.[7]

(https://www.nejm.org/doi/full/10.1056/nejmra050100)

13

Social and Behavioral Barriers

14



15

Patient Perceptions

Top Diabetes Management Challenges, Solved

- "I'm tired of testing my **blood glucose**"
- "It's difficult to remember to take my **medication**"
- "Finding the time and motivation to **exercise** is impossible"
- "Despite doing all the so-called right things, I don't see any **results**"
- "My **stress** is out of control"

(https://www.managedhealthcareexecutive.com › view)

16

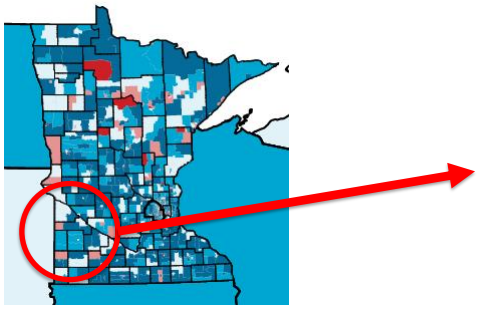
Patient Perceptions

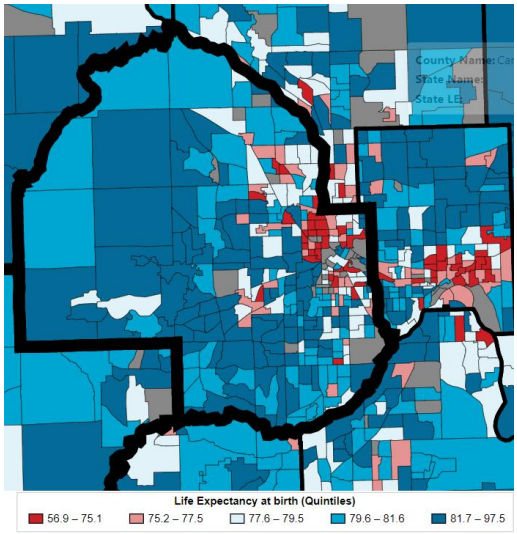
- **The reaction and attitude physicians displayed toward patients** at the point of diagnosis were crucial in influencing attitudes toward perceived seriousness of the disease and consequently compliance.

(Martin et al, 2005)

17

ZIP Code & Neighborhood Determine Outcomes





(https://www.cdc.gov/nchs/data-visualization/life-expectancy/index.html)

18

Transportation Barriers to Access

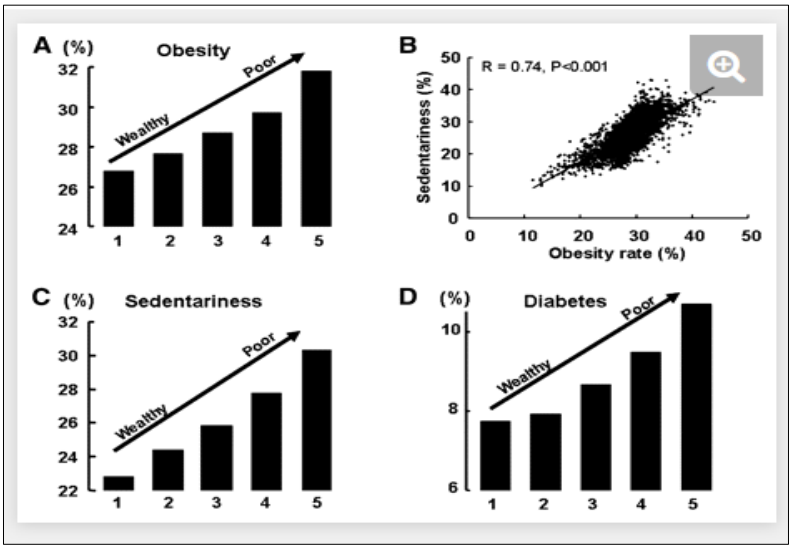
- 1 in 4 appointments missed because of transportation
  - Some studies show up to 50%
- If using public transportation ⇨ rate doubles
- If access to transportation is not easy ⇨ more likely to delay care

Has Covid given new creative ways to do care?

(Silver, Blustein, & Weitzman, 2012)

19

Poverty and Obesity in the U.S.



(Levine, 2012)

20

(Kanka, 2020)

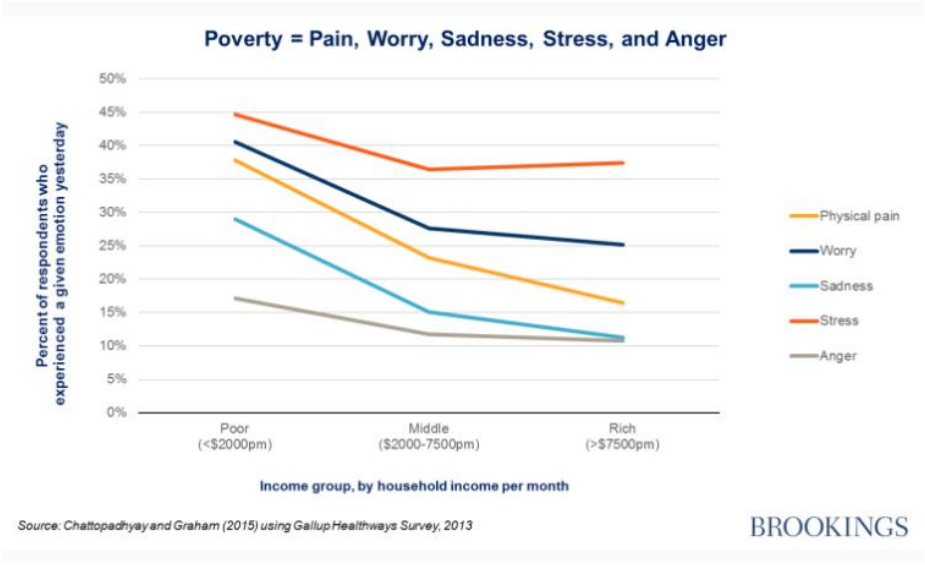
21

Access to Quality Food

- Challenge: balance between what the patient needs in diet vs. the rest of family
- Affordability of better-quality food
  - Less of an issue than access
- Cultural/ community norms of diet
  - May conflict with "diabetic diet"

22

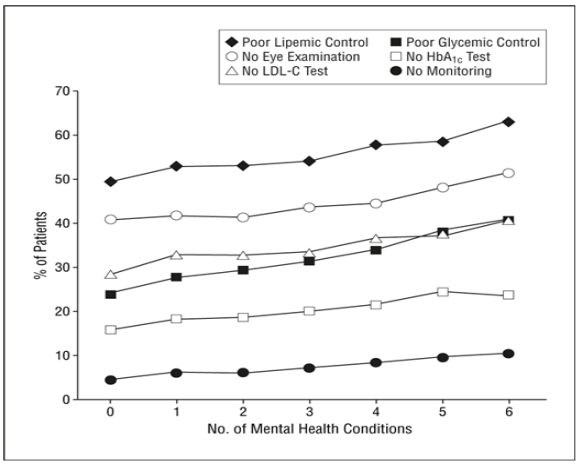
Additional Barriers: Stress of Being Poor



(Graham, 2015)

23

Chronic Mental Health and Diabetes

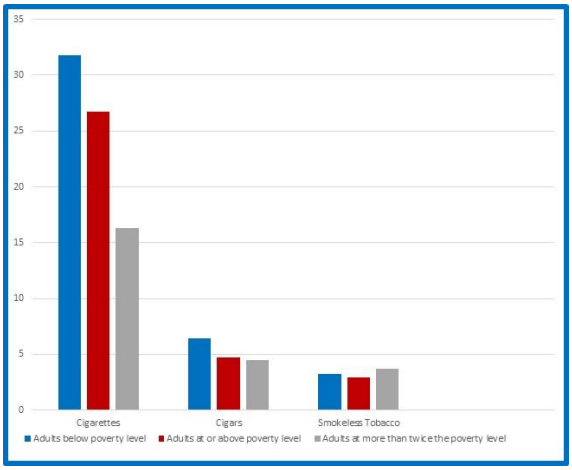


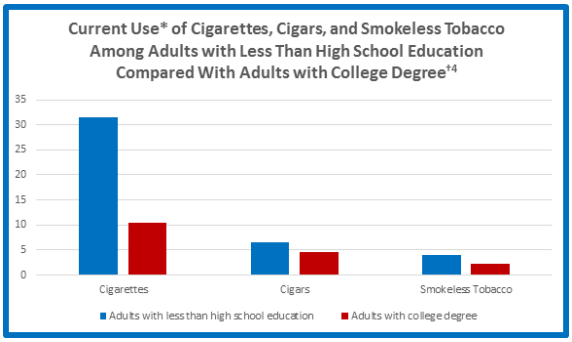
Percentage of patients with poor diabetes measures as a function of the number of mental health conditions. HbA_{1c} indicates hemoglobin A_{1c}; LDL-C, low-density lipoprotein cholesterol.

(Frayne, S. et al, 2005)

24

Smoking and Low Income

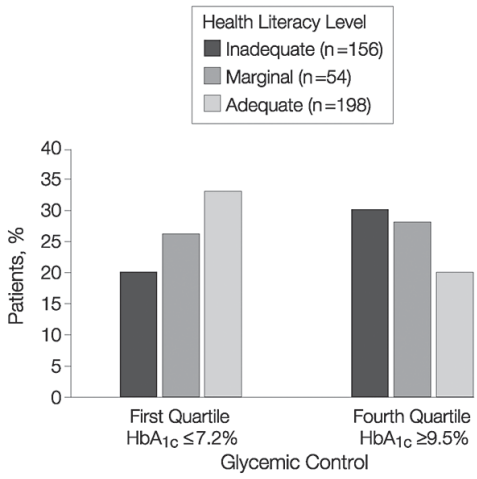




(Centers for Disease Control and Prevention, 2019)

25

Health Literacy

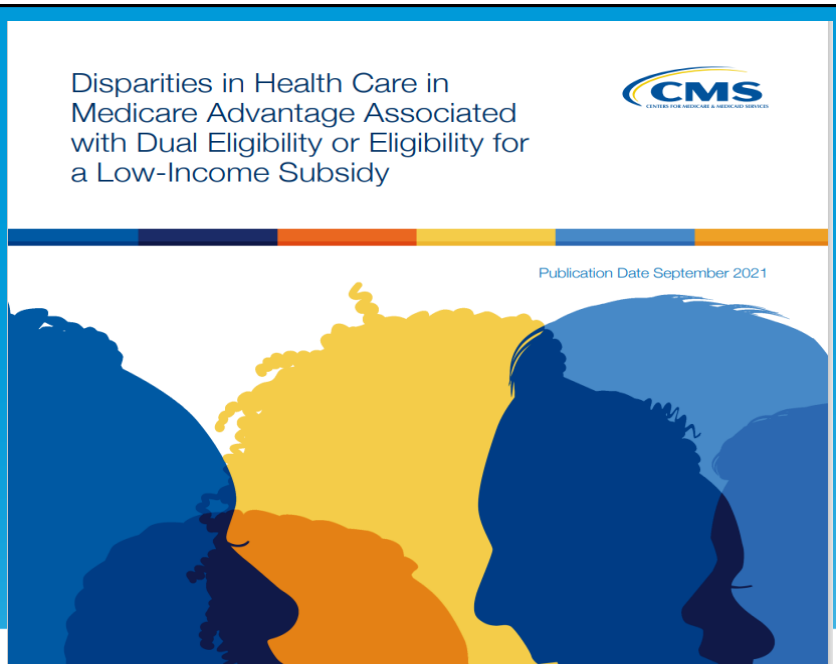


(Schillinger, D. et al, 2002)

- Literacy (TOFHLA Score)
- Educational level
- English language skill

- Lower health literacy ⇨more self-reporting of diabetic complications

26

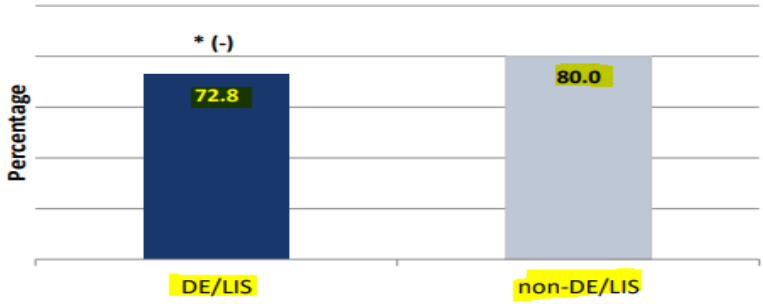


27

Blood Pressure Control by Income

Diabetes Care—Blood Pressure Controlled

Percentage of MA beneficiaries aged 18 to 75 years with diabetes (type 1 and type 2) whose most recent blood pressure was less than 140/90, by DE/LIS status, Reporting Year 2019



SOURCE: Clinical quality data were collected in 2018 from MA plans nationwide.
NOTES: DE/LIS beneficiaries are beneficiaries who are dually eligible for Medicare and Medicaid or eligible for an LIS. Non-DE/LIS beneficiaries are neither DE nor eligible for an LIS.

(CMS, 2021)

28

Impact of Racial Disparities

29

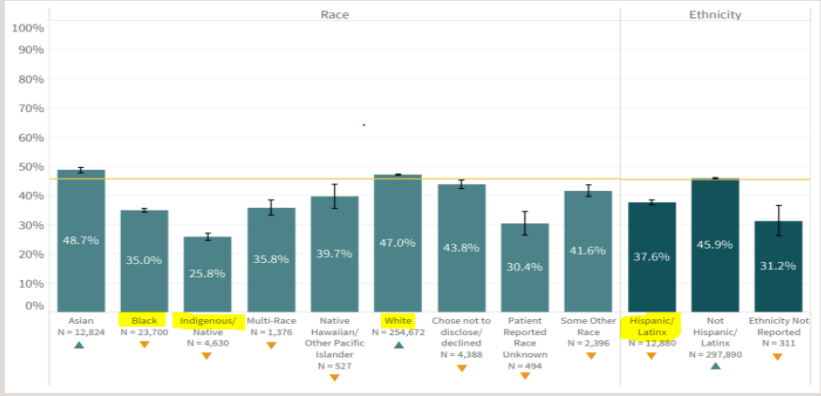
OPTIMAL DIABETES CARE

(Minnesota State Demographic Center, 2021)

Race/Ethnicity Summary

2020 Report Year (2019 dates of service)

Optimal Diabetes Care
By Race/Ethnicity



Statewide average for patients with race/ethnicity information available
Race average = 45.7% **Ethnicity average = 45.5%**

▼ Significantly lower than average
▲ Significantly higher than average

Patients who are Black, Indigenous/Native, Native Hawaiian, Multi-Race or Hispanic/Latinx are among those with significantly lower rates of optimal diabetes care compared to the race/ethnicity averages.

Black, White, Hispanic/Latinx and not Hispanic/Latinx females have significantly higher rates of optimal diabetes care compared to males within the respective races/ethnicities.

30

Racial Disparities

2020 National Diabetes Statistics Report:

- Indigenous populations were **3 times more likely** to die from diabetes
- Non-Hispanic Black Americans were **2.3 times more likely** to die from diabetes
- Hispanic Americans were **1.5 times more likely** to die from diabetes

(Centers for Disease Control and Prevention, 2020)

31

Diabetes Quality Results

HealthPartners HEDIS Scores

Comprehensive Diabetes Care (CDC)
Members 18–75 years of age with diabetes (type 1 and type 2) who had Hemoglobin A1c (HbA1c) testing
Admin Rates

		HEDIS MY 2020 2020 DOS		
PRODUCT	RACE	DENOM	NUMER	RATE
PMAP/MnCare	American Indian or Alaskan Native	132	91	68.9%
PMAP/MnCare	Asian or Pacific Islander	621	530	85.3%
PMAP/MnCare	Black or African American	1,281	1,049	81.9%
PMAP/MnCare	Hispanic or Latino	285	235	82.5%
PMAP/MnCare	Other Race	78	67	85.9%
PMAP/MnCare	Unknown	258	212	82.2%
PMAP/MnCare	White	2,287	1,915	83.7%
	Total	**4,942**	**4,099**	**82.9%**

		HEDIS MY 2020 2020 DOS		
PRODUCT	RACE	DENOM	NUMER	RATE
SNBC	American Indian or Alaskan Native	75	51	68.0%
SNBC	Asian or Pacific Islander	52	45	85%
SNBC	Black or African American	287	234	81.5%
SNBC	Hispanic or Latino	23	17	73.9%
SNBC	Unknown	8	8	100.0%
SNBC	White	790	679	85.9%
	Total	**1,235**	**1,034**	**83.7%**

32

BP Control with Diabetes

HealthPartners HEDIS Scores

BLOOD PRESSURE CONTROL (140/90) RATES FOR MEMBERS WITH DIABETES				
DHS PIP				
RESULTS FOR 2019 DOS				
PRODUCT	RACE	DENOM	NUMER	BP14090_RT
SNBC	WHITE	247	191	77.3%
	TOTAL	743	569	76.6%
SNBC	AMERICAN INDIAN OR ALASKAN NATIVE	10	7	70.0%
SNBC	ASIAN OR PACIFIC ISLANDER	25	19	76.0%
SNBC	BLACK OR AFRICAN AMERICAN	143	105	73.4%
SNBC	MISSING	286	218	76.2%
SNBC	NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER	1	1	100.0%
SNBC	TWO OR MORE RACES	21	19	90.5%
SNBC	UNKNOWN	10	9	90.0%
SNBC	WHITE	247	191	77.3%
	TOTAL	743	569	76.6%

33

Special Considerations for MSHO Frail Elders

- Tight control ⇨ WORSE outcomes
- Medication burden ⇨ increased side effects
- **Goals of care** are more important
- Care delivery “lumps in “ frail elders to be treated like adults (numbers game)
- BP monitoring at home

➢ *We actually want to SLOW down and not be so aggressive*

34

Care Coordination

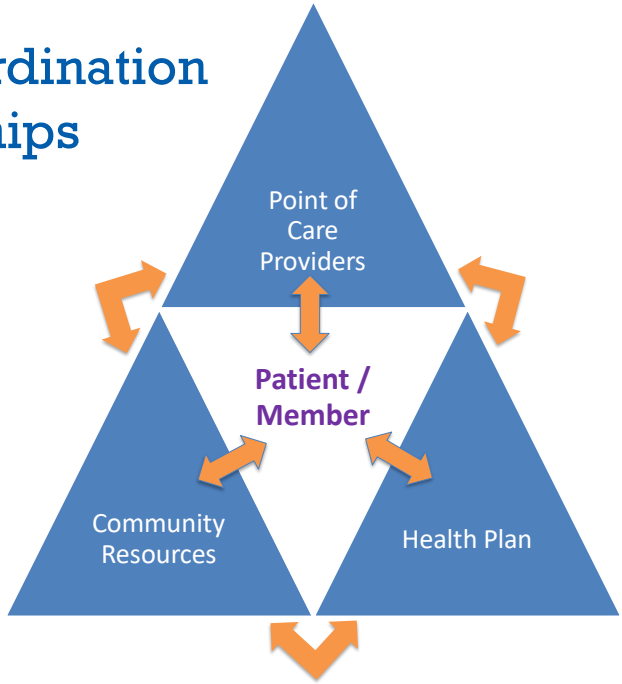
35

Educate – Support – Advocate

- ⇨ Identify barriers and gaps
- ⇨ Assist to achieve health goals
- ⇨ Empower towards self-efficacy

36

Care Coordination Relationships



37

Context:

When SODH are addressed ➔ health improved & disparities reduced

Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved 8/13/21, from https://health.gov/healthypeople/objectives-and-data/social-determinants-health

38

Assessment

- Open-ended questions
- Create trust
- Open dialogue

Assessment is ongoing to discover the individual's healthcare status, barriers, values, beliefs, and personal goals

39

Assessment: Potential or Real Barriers

- Financial
- Healthy Eating
- Safety and Environment
- Housing
- Medications
- Physical and Lifestyle
- Literacy/Language
- Social and Mental Health
- Transportation

40

Care Planning

- Member-centered
- Collaboration
- Based on:
  - Evidence-based guidelines
  - Best-practice standards
  - Accreditation and regulatory requirements

Individualized care to align with member's values and address gaps/barriers

41

Individualized Care Planning Strategies

42

Strategies: General Principles

Healthcare team approach to patient-centered care:

- Partnership with provider and other team members
- Support provider's care plan and inform of gaps discovered
- Communicate care coordination plan, member progress
- Communication channels
- Documentation
- Emphasize/remind member that care navigator is part of the team
- Ensure member is seeing provider regularly

43

Strategies: General Principles

Motivational interviewing techniques

- Creates trust
- Supports empowerment and self-efficacy
- Focuses on the person
- Leads to individualized care planning
- Includes using **O-A-R-S:**
  - Open-ended questions
  - Affirmations
  - Reflections
  - Summaries

(Rowe, 2015)

44

Strategies: General Principles

Additional important considerations:

- Literacy assessments: functional and numeracy
- Plain language
- Teach-Back method
- Cultural sensitivity, competence, and humility
- Health technology
- Diabetes-specific language and sensitivity

(ADCES, 2019; Rowe, 2019)

45

Open-Ended Assessment Questions

- ***Who is your primary provider for your diabetes? When did you see them last? When is your next appointment with them?***
  - Access to healthcare, transportation
- ***What medications are you taking? Tell me about when you take them.***
  - Affordability of and access to medications, health literacy
- ***What was your last A1C? Tell me about how you check and keep track of your blood glucose***
  - Health literacy, access to healthcare
- ***What has your blood pressure been?***
- ***What do typically eat for each meal?***
  - Food security, access, health literacy
- ***What activities do you do for exercise?***
  - Physical environment, ability, safety
- Consider other topics: tobacco use, the D5 topics, etc.

Questions are included in the Resource Documents

46

Specific Strategies: Potential or Real Barriers

- Financial
- Healthy Eating
- Safety and Environment
- Housing
- Medications
- Physical and Lifestyle
- Literacy/Language
- Social and Mental Health
- Transportation

47

Discussion Questions

*Considering the potential or real barriers to optimal diabetes care, what **solutions** have you discovered?*

*What are your **best-practice approaches** in supporting the person with diabetes for:*

- Healthy Eating
- Regular Exercise
- Medication Adherence

48

References

- American Medical Association. (2021, March 16*). Addressing social determinants of health (SDOH) with Rush University Medical Center.* https://www.youtube.com/watch?v=TlMyayOm77M
- Artiga, S., & Hinton, E. (2018). *Beyond health care: The role of social determinants in promoting health and health equity.* https://www.kff.org/racial-equity-and-health-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/
- ASPE. (2021). *Medicaid churning and continuity of care*. https://www.aspe.hhs.gov/reports/medicaid-churning-continuity-care
- Association of Diabetes Care and Education Specialists (ADCES). (2019). *Cultural and health literacy considerations with diabetes.* https://www.diabeteseducator.org/docs/default-source/practice/practice-documents/practice-papers/adces-cultural-and-health-literacy-considerations-with-diabetes-final-4-1-20.pdf?sfvrsn=4
- Centers for Disease Control and Prevention. (2019). *Cigarette smoking and tobacco use among people of low socioeconomic status.* https://www.cdc.gov/tobacco/disparities/low-ses/index.htm
- Centers For Medicare and Medicaid Services (CMS). (2021). *Disparities in health care in Medicare Advantage associated with dual eligibility or eligibly for a low-income subsidy.* https://www.cms.gov/files/document/2021-delis-national-disparities-stratified-report.pdf
- Centers for Disease Control and Prevention. (2020). *Life expectancy at birth for US states and census tracts, 2010-2015*. https://www.cdc.gov/nchs/data-visualization/life-expectancy/index.html
- Centers for Disease Control and Prevention. (2020). *National diabetes statistics report, 2020.* https://www.cdc.gov/diabetes/library/features/diabetes-stat-report.html
- Frayne, S., Halanych, J., & Miller, D. (2005). Disparities in diabetes care: Impact of mental illness. *Archives of Internal Medicine, 165*(22), 2631-2638. https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/766873
- Graham, C. (2015). *The high costs of being poor in America: Stress, pain, and worry.* https://www.brookings.edu/blog/social-mobility-memos/2015/02/19/the-high-costs-of-being-poor-in-america-stress-pain-and-worry/

49

References

- HCPLive. (2019). *Health disparities: Impact on diabetes and CVD*. https://youtu.be/ldB9Kqg7q8w
- Kanka, J. (2020, August 18). *Food is the first medicine: How food deserts affect healthcare.* https://www.everseat.com/blog/food-is-the-first-medicine-how-food-deserts-affect-healthcare/
- Levine, J. A. (2011). Poverty and obesity in the US. *Diabetes, 60*(11), 2667-2668.
- Martin, L. R., Williams, S. L., Haskard, K. B., & Dimatteo, M. R. (2005). The challenge of patient adherence. *Therapeutics and Clinical Risk Management*, *1*(3), 189–199.
- MN Community Measurement. (2015). *The D5 for diabetes.* https://mncm.org/measurement-resources/
- Minnesota State Demographic Center. (2021). *Age, race, & ethnicity.* https://mn.gov/admin/demography/data-by-topic/age-race-ethnicity/
- National Center for Chronic Disease Prevention (NCCDP). (2021). *Cost-effectiveness of diabetes interventions.* https://www.cdc.gov/chronicdisease/programs-impact/pop/diabetes.htm
- NCQA. (2020). *Social determinants of health: Resource guide.* https://www.ncqa.org/
- Osterberg, L., & Blaschke, T. (2005). *Adherence to medication.* https://www.nejm.org/doi/full/10.1056/nejmra050100
- Rosenberg, J. (2016). *Four biggest challenges in diabetes health management.* https://www.managedhealthcareexecutive.com/view/four-biggest-challenges-diabetes-health-management
- Rowe, D.S. (2015).Barriers to the prevention and treatment of geriatric diabetes. *Federal Practitioner,* 16S-20S. https://www.fedprac.com
- Schillinger, D., Grumback, K., Piette, J., Wang, F., Osmond, D., Daher, C., Palacios, J., Diaz-Sullivan, G., & Bindman, A. (2002). Association of health literacy with diabetes outcomes. *JAMA, 288*(4), 475-482. doi:10.1001/jama.288.4.475
- Silver D, Blustein J, Weitzman BC. Transportation to clinic: Findings from a pilot clinic-based survey of low-income suburbanites. *Journal of Immigrant and Minority Health/Center for Minority Public Health.* 2012;14(2):350–355.
- Walker, R.J., Garacci, E., Palatnik, A., Ozieh, M., & Egede, L. (2020). The longitudinal influence of social determinants of health on glycemic control in elderly adults with diabetes. *Diabetes Care, 43*(4), 759-766. https://doi.org/10.2337/dc19-1586

50

Thank You!

Evaluation Link

Certificate of Participation –upon completion of Evaluation

Recording - Recording can be found at the Performance Improvement Project - Diabetes Page on the Stratis Health Website

51