Part 2: The Next Step Take your SDOH Data and do Something With it

Presented By:

Lindsay Dornfeld, *Senior Manager Product Management* – **Pulse8**

Jenna Ross, *Senior Solutions Manager* – **Pulse8**

RISE

THE RISE ASSOCIATION

We are a network of health care professionals addressing the challenges posed by the emerging landscape of value-based care and government health care reform.

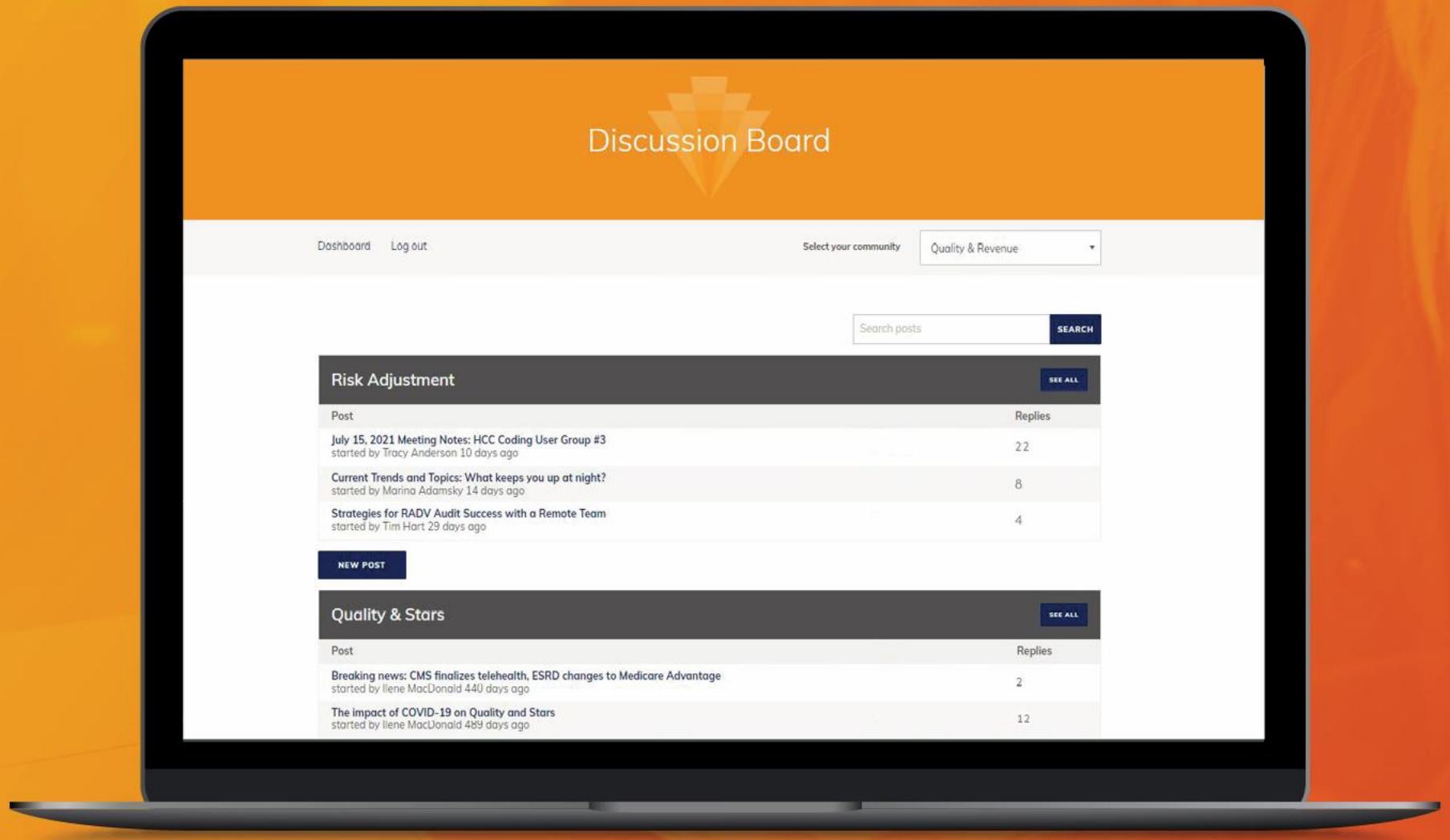
OUR MISSION

Our mission is to provide a community for like-minded professionals to come together for networking, education, and industry collaboration to stay ahead and advance their careers.

ONE ASSOCIATION

THREE COMMUNITIES

LEARN MORE AT THE RISEHEALTH.ORG/MEMBERSHIP



ASK YOUR QUESTIONS IN OUR DISCUSSION BOARD

Hosts

Lindsay Dornfeld
Sr. Manager, Product Management
Quality Solutions
St. Paul, MN
Lindsay.Dornfeld@pulse8.com

Jenna Ross
Sr. Solutions Manager
Quality Solutions
St. Paul, MN
Jenna.Ross@pulse8.com

Examples of SDOH Domains

- Social Determinants of Health Basic Concepts
- Community Level Risk
- Individual Level Risk
- Tangible Results
- Member Use Cases
- Q & A

Social Determinants of Health Basic Concepts

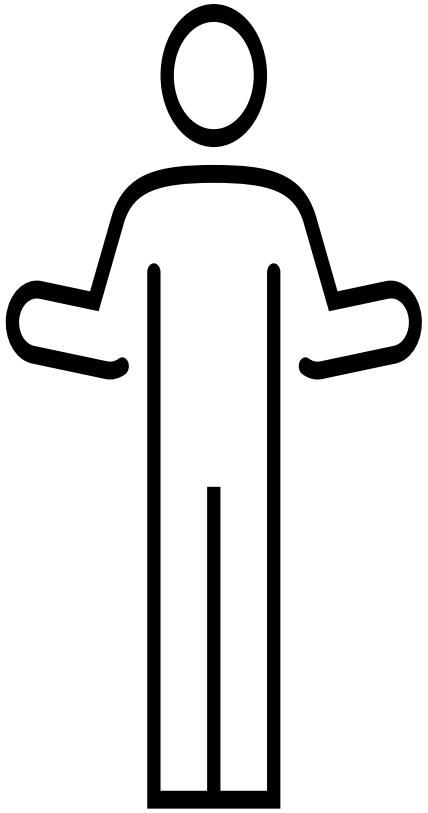
RISE

Social Determinants of Health (SDOH)

Conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. – *World Health Organization*

Source: https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1

What Determines your Health



40% **Socioeconomic Factors**

Education, Job Status, Family Support, Income

10% **Physical Environment**

Housing

30% **Health Behaviors**

Tobacco Use, Alcohol Use, Exercise

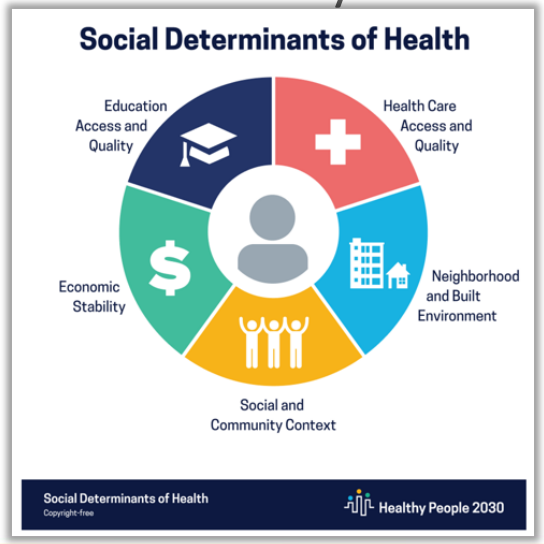
20% **Health Care**

Access & Quality of Care

Source: National Academy of Medicine: https://nam.edu/social-determinants-of-health-101-for-health-care-five-plus-five/

Examples of SDOH Domains

- Housing
  - Housing instability
    - Affordability
    - Vacant Unit Availability
  - Homelessness
  - Inadequate Housing
    - Utilities
    - Mold Growth
    - Indoor air quality
    - Crowding
- Food
  - Food insecurity
  - Access to quality food, i.e food deserts
- Education
  - Educational Attainment
  - Health literacy
- Transportation
  - Reliable Vehicle access
  - Public Transportation availability and access
  - Walkability
- Financial health
  - Poverty
  - Debt
  - Savings



Source: Accountable Health Communities Health-Related Social Needs Screening Tool (https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf)
Healthy People 2030, U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Retrieved 11.18.2021, from https://health.gov/healthypeople/objectives-and-data/social-determinants-

Framework & Key Constructs

Construct	Definition	Operational Level	Considerations
 **Social Determinants of Health**	*Conditions in which people are born, grow, live, work, and age*	**Community**	Socio-Cultural & Structural Factors
 **Social Risk Factors**	*Specific adverse conditions associated with poor health*	**Individual**	Community Context & Personal Circumstance
 **Social Needs**	*Immediate individual needs*	**Temporal**	Self-Identified & Time-Specific

Broad

Focused

Source: Socially Determined

Risk and Protective Factors

- Risk factors are attributes in individuals, families and communities that increase the likelihood adverse effects on health and well-being.
- Protective factors are attributes in individuals, families and communities that promote health and well-being.

Operational level	Risk Factors	Protective Factors
Community	• *High poverty rates* • *High rates of low educational attainment* • *Low-levels of vehicle access*	• *High employment rates* • *High rates of high educational attainment* • *Available and accessible Public Transportation*
Individual	• *Less than a high school diploma* • *Housing instability, housed, homelessness in past 12 months*	• *Stable employment* • *Transportation access*

Source: Child Welfare Information Gateway (childwelfare.gov) & Gravity Project (https://confluence.hl7.org/display/PC/The+Gravity+Project+Home)

Poll

Community Level Risk

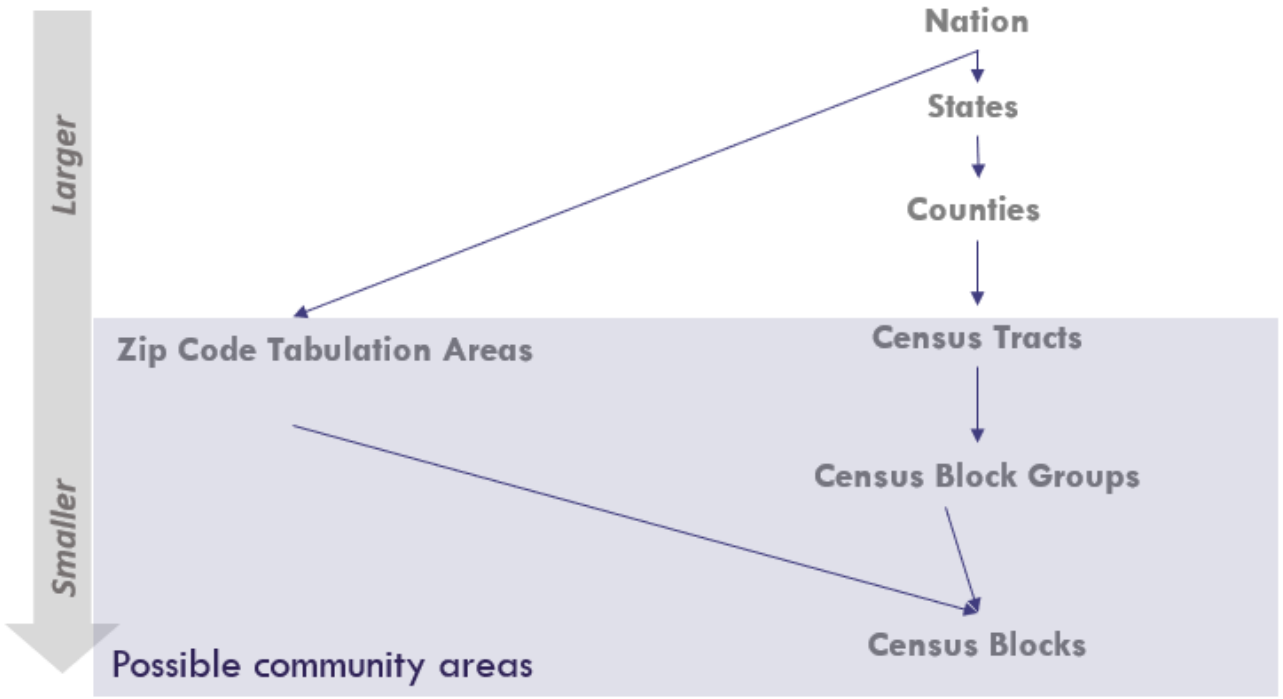
Why Focus on Community Risk

- Prioritize communities that are in most need of social determinants needing to be addressed
- Narrow focus to a certain set of social determinants
- Identify potential partnerships between community providers and community-based organizations
- Take an iterative approach to testing solutions

Source: Healthpayer intelligence (https://healthpayerintelligence.com/news/how-payers-scale-social-determinants-of-health-goals)

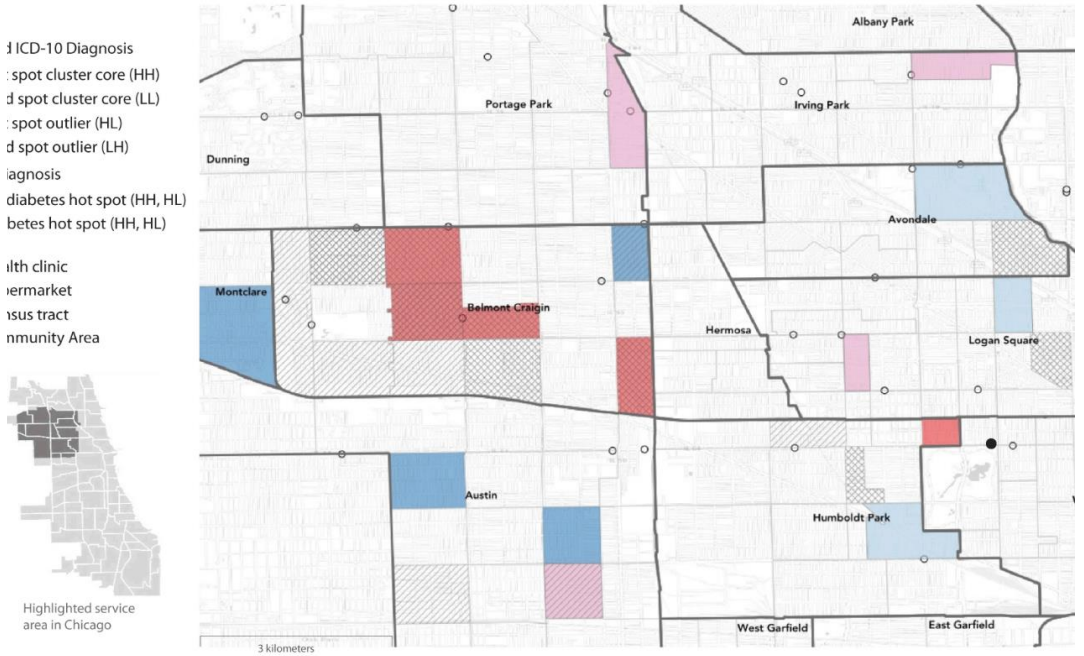
Measuring community

Census Geographies



Source: U.S. Bureau of the Census (https://www2.census.gov/geo/pdfs/reference/geodiagram.pdf)

Table



Source: CDC (Mapping Census Tract Clusters of Type 2 Diabetes in a Primary Care Population (cdc.gov)

Measuring Community Risk

Composite Measures: Generalized Risk levels without specific factors

- Area Deprivation Index (HRSA/UW-Maddison)
  - Neighborhood=Census Block Group Level
  - Source U.S. Census, American Community Survey 5-year
  - Identifies deciles ranking neighborhoods from the least disadvantage to the most disadvantaged to inform health delivery and policy
  - Includes factor for the theoretical domains of poverty
    - Income
    - Education
    - Employment
    - Housing quality
- Social Vulnerability Index (CDC)
  - Neighborhood=Census Tract
  - Source U.S. Census, American Community Survey 5-year
  - Identifying communities that will most likely need assistance before, during, after a hazardous event
  - 15 social factors (i.e., poverty, vehicle access, crowded housing)
  - Separate ranking on 4 themes and an overall ranking
    - Socioeconomic Status
    - Household Composition
    - Race/Ethnicity/Language
    - Housing/Transportation

Source: Center for Health Disparities Research (https://www.neighborhoodatlas.medicine.wisc.edu/) and U.S. CDC (https://www.atsdr.cdc.gov/placeandhealth/svi/at-a-glance_svi.html)

Measuring Community Risk

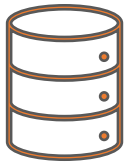
Measure Specific Risk/Protective Factors

- American Community Survey
  - 1-year estimates
    - Areas with Populations 65,000+
      - Not all geographies will have data
    - Current data >precise data
      - Smaller samples, more noise and suppression
  - 5-year estimates
    - Data for all areas
      - Suppression may occur, but rarer than 1-year estimates
    - More reliable, less current
- USDA
  - Food Research Atlas
    - Data on geographical food deserts
- Bureau of Labor Statistics
- Environmental Protection Agency
- Bureau of Transportation Statistics

Source: U.S. Bureau of the Census (https://www.census.gov/programs-surveys/acs/guidance/estimates.html)

Individual Level Risk

Pre-Assessment Data Sources for Individual Risk



Community & Individual Data

TransUnion

LexisNexis

EPSILON

dun & bradstreet

Clinical Data

- Health System
- Health Plan
- Clearinghouse
- Self-Insured Employer

SDOH Clinical Activities

Individual patient risk assessment at the clinical level

- Assessment of Social Risk
  - Accountable Health Communities Health-Related Social Needs Screening Tool (AHC HRSN)
  - Comprehensive Universal Behavior Screen (CUBS)
  - Protocol for Responding to and Assessing Patients Assets, Risks and Experiences (PRAPARE)
  - PROMIS
  - We Care
  - WellRx
  - LOINC Codes
- Coding of Health Concern and Problems
  - ICD-10CM, SNOMED CT
- Patient Driven Goals
  - LOINC code
- Interventions
  - CPT/HCPCS, SNOMED CT
- Procedures Document Results
  - CPT/HCPCS, SNOMED CT
- Outcomes (Quality Measures)

Source: Gravity Project http://hl7.org/fhir/us/sdoh-clinicalcare/STU1/sdoh_clinical_care_scope.html

Tangible Results

Patient Care Experience – Health Literacy

Education level by Census Tract

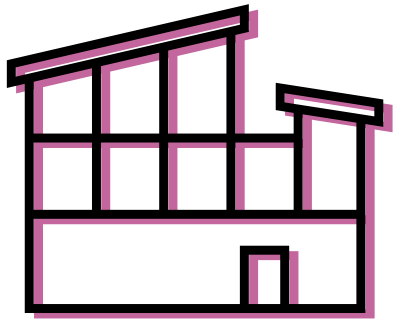
Community-Level Risk

+

New Member to Health Plan

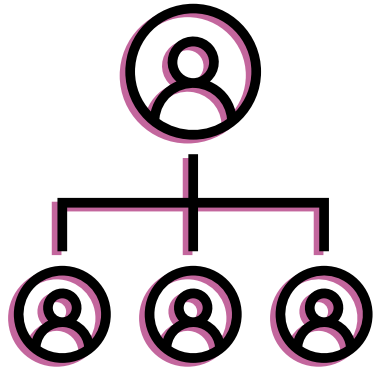
Member-Level Factor

Provide Health Plan Center information in Welcome Packet



=

Representative matches member to resources



Z-Codes Entered

30-day check-in: Assess & Monitor

Opportunity to improve CAHPS score

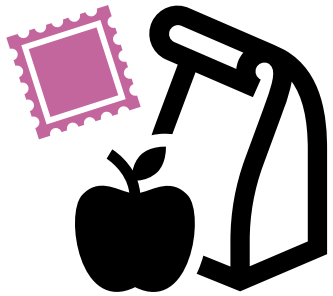
Patient Care Experience – Food Insecurity

Food Access

Community-Level Risk

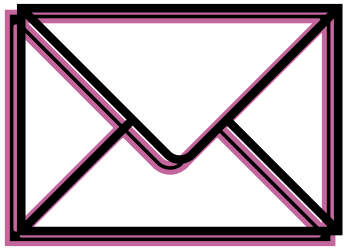
+

Member has SNAP benefits (food stamps)



Member-Level Factor

Mail information about Fresh Food Pharmacy



=

Care Management team coordinates application

Z-Codes Entered

30-day check-in: Assess & Monitor

Opportunity to improve CAHPS score

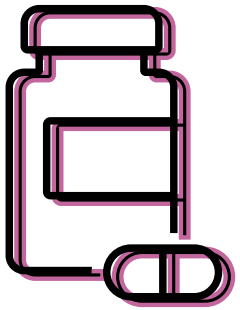
Patient Care Experience – Transportation

Distance to Pharmacy

Community-Level Risk

+

Missed Prescription Refill

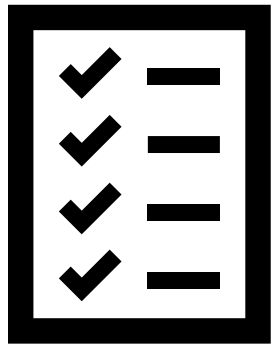


Member-Level Factor

Automated reminder phone call with option to speak to representative about barriers (side effects, transportation, cost)

=

Contact Center documents barrier



Z-Codes Entered

30-day check-in: Assess & Monitor

Opportunity to improve CAHPS score

Member Use Cases

Identify the social determinants that impact the population being served, then **act** by designing a care model and interventions that address those disparities at the right place in the care continuum

- ✓ Partner with rideshare programs
- ✓ Utilize mobile clinics
- ✓ Provide "Fresh Food Pharmacy"
- ✓ Leverage community health workers and care management team to go to the home
- ✓ Expand network to include more urgent cares
- ✓ Update health education material so its easily understandable

RISE

Member Example

Food Insecurities

Member	Provider	Health Plan	Vendor Partner/Internal

Annual Wellness Visit

January →

SDOH Screening Assessment

Food Insecurities Identified

Z code entered → Data Exchange → Dashboard Monitoring

February

Community level risk (fresh food > 10 miles) + *Individual level risk* (food insecurities)

Outreach Campaign *(member direct, provider workflow)*

March

90 day fill

Fresh food credit/delivery

Adherence to medications

Source: Healthpayer intelligence (U.S. emergency departments visits resulting from poor medication adherence: 2005-07 - PubMed (nih.gov)

"More than 20% of emergency department visits related to medication nonadherence resulted in hospital admission, whereas only 12.7% of visits unrelated to nonadherence resulted in hospital admission (P < 0.0001)."

Program Guidance

Cohort Description	IP Count Current Year	Unplanned IP Readmit	ED Count Current Year	Total Payer Costs	T C P
Chronic Pancreatitis	0	0	0	$1.78K	
Coronary Artery Disease	0	0	0	$1.78K	
Intestinal Obstruction/Perforation	0	0	0	$1.78K	
Disorders of Immunity	0	0	3	$11.47K	
Pulmonary Disorders	0	0	0	$1.97K	
Psychological Disorders	0	0	0	2.55K	
Morbid Obesity	0	0	2	3.02K	
Seizure Disorders and Convulsions	0	0			
Congestive Heart Failure	1	0			
Morbid Obesity	1	0			
Specified Heart Arrhythmias	1	0			
Multiple Sclerosis	0	0			
Coronary Artery Disease	0	0			
Cancer	0	0	0	3.94K	
Kidney Disease	0	0	1	2.77K	
Peripheral Arterial Disease	0	0	1	$2.77K	
Pneumonia	0	0	1	$2.77K	
Peripheral Arterial Disease	0	0	0	$4.31K	
Diabetes	2	1	1	$25.70K	
Kidney Disease	2	1	1	$25.70K	
Myasthenia Gravis/Myoneural Disorders and Guilla...	2	1	1	$25.70K	
Multiple Sclerosis	0	0	0	$1.33K	
Other Significant Endocrine and Metabolic Disorders	0	0	0	$1.33K	
Peripheral Arterial Disease	1	0	0	$21.07K	
Pulmonary Disorders	1	0	0	$21.07K	

Develop programs for home meal deliveries and nutritional interventions guided by disease cohorts

Source: Evalu8 Product (Pulse8/Veradigm)

Member Example

Transportation Barrier

Member	Provider	Health Plan	Vendor Partner/Internal

Emergency Dept. Visit

June

SDOH Screening Assessment

Transportation Barrier Identified

Z code entered → Data Exchange → Dashboard Monitoring

Community level risk (in-network clinic > 10 miles) + *Individual level risk* (transportation barrier)

July

August

Outreach Campaign

(member direct, provider workflow)

September +

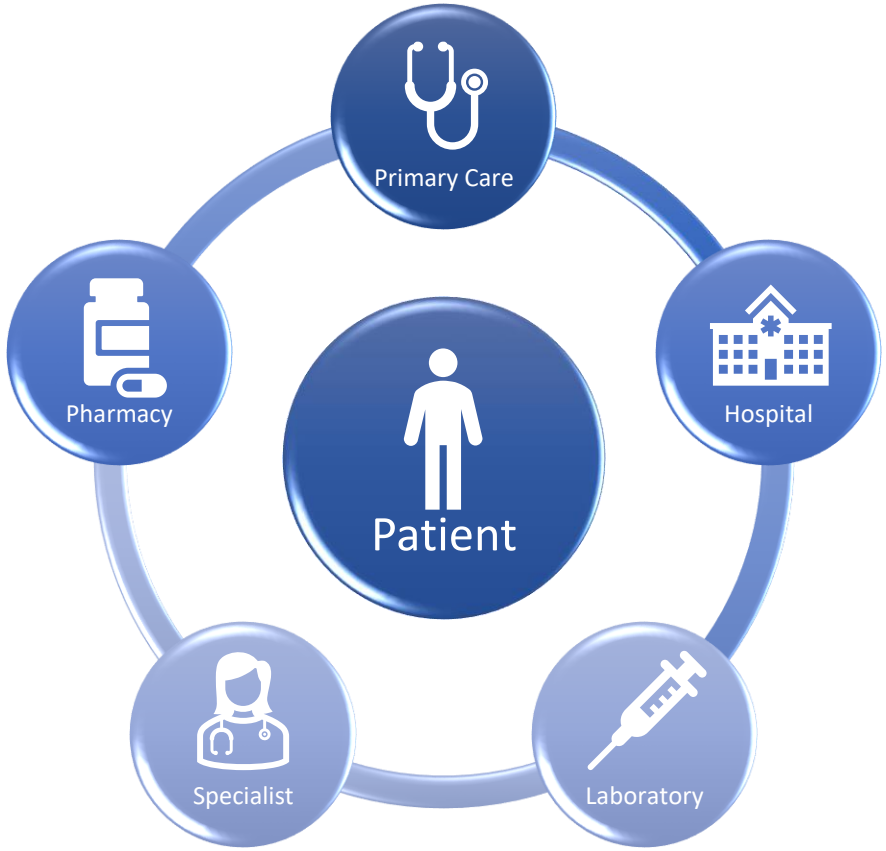
Uber/Lyft Credits

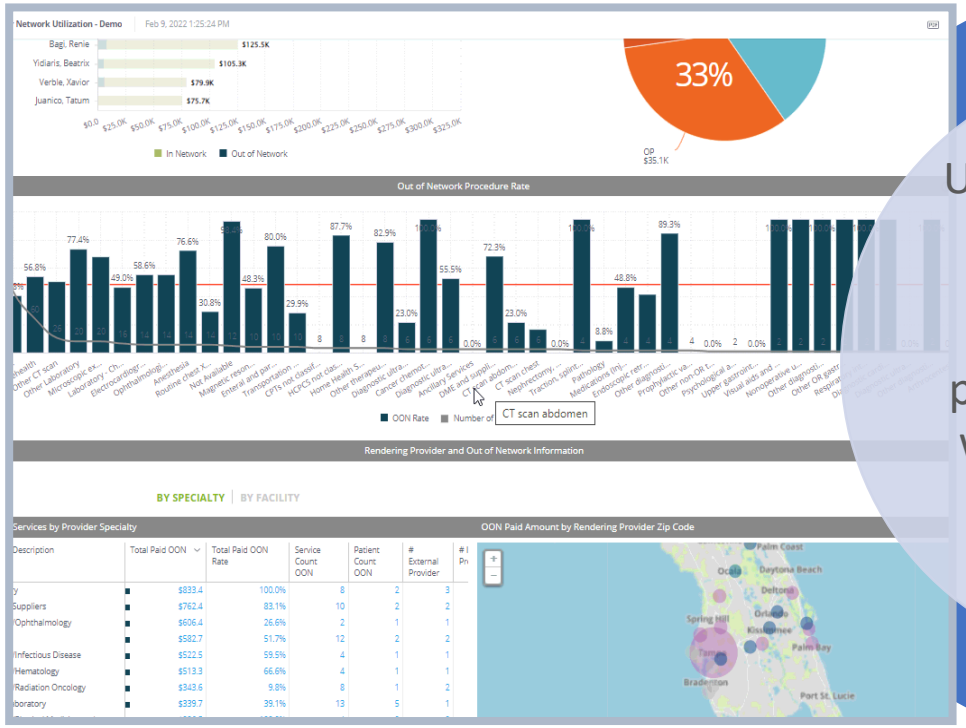
Decrease need for ED visit

Source: Healthpayer intelligence (IJERPH | Free Full-Text | Non-Emergency Medical Transportation Needs of Middle-Aged and Older Adults: A Rural-Urban Comparison in Delaware, USA (mdpi.com)

"Older adults in rural areas have unique transportation barriers to accessing medical care, which include a lack of mass transit options and considerable distances to health-related services"

Address care coordination gaps that are a result of the transportation gap





Update the provider workflow to help refer to the appropriate providers and assist with ensuring they can get help with transportation

Source: Evalu8 Product (Pulse8/Veradigm)

Questions?

THANK YOU