Circumference Consulting LLC
Your guide to sustainability

Managing Social Determinants of Health through Home Based Services

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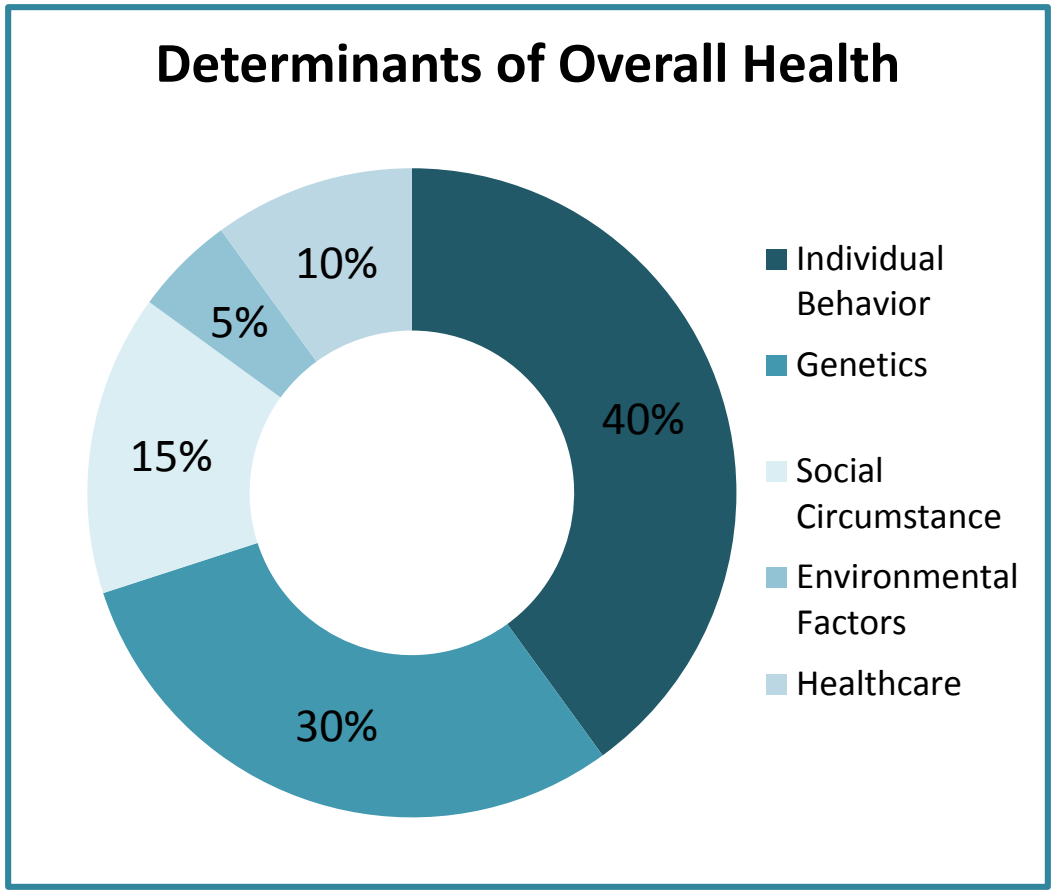
Determinants of Overall Health

Medical care alone has a limited impact on overall population health

Paired with individual behaviors and Social Determinants of Health the impact of medical care could be significantly enhanced



Source: *Beyond Health care: The Role of Social Determinants in Promoting Health and Health Equity*, Kaiser Commission on Medicaid and the Uninsured, November, 2015

Social Determinants of Health

Social determinants of Health result in billions in additional costs annually

Health Related Social Needs

- Housing Instability/Homelessness
- Food insecurity
- Transportation
- Education
- Utility needs
- Interpersonal violence
- Family and social supports
- Employment and Income

Impact on Health Outcomes

- One-third of deaths are directly attributable to SODH
- Twice the rate of depression 60% higher prevalence of diabetes
- > 50% higher prevalence of high cholesterol and elevated hemoglobin A1c, a signal of diabetes
- More than double the rate of ER visits
- More than double the rate of no shows to clinic appointments

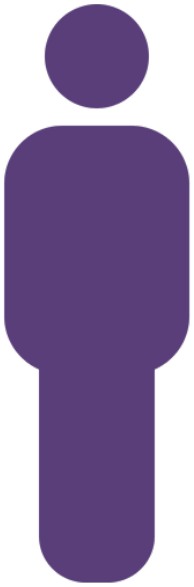
Source: *Social Determinants of Health: How are hospitals and health systems investing in and addressing social needs*, Deloitte, 2017

Where you live matters

Your zip code may be more important than your genetic code in predicting risk

Risk Score: 76 (High Risk)

PATIENT A	
Age:	42
Gender:	M
Race:	Hispanic
Marital Status:	Single
Height:	5'11
Weight:	200 lbs
Address:	Los Angeles, CA 90002
Language:	English, Spanish
Symptoms:	Coughing, fever
Diagnosis:	Pneumonia
Chronic Illness:	Type I Diabetes
Medication:	Humalog



Risk Score: 36 (Low Risk)

PATIENT B	
Age:	42
Gender:	M
Race:	Hispanic
Marital Status:	Single
Height:	5'11
Weight:	200 lbs
Address:	Los Angeles, CA 90049
Language:	English, Spanish
Symptoms:	Coughing, fever
Diagnosis:	Pneumonia
Chronic Illness:	Type I Diabetes
Medication:	Lantus

Median income:
90002: **~$15,000**
90049: **~$205,000**
Census data

Nearest RX:
90002: **2.6 miles**
90049: **0.3 Miles**
Google Maps: Public Transit

Grocery Spend
Patient A spend : **$120**
Patient B spend : **$350**
Weekly expenditures

Pharma Adherence
Patient A: **45%**
Patient B: **95%**
Pharma claims

Source: CareCentrix

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Social Risk and VBP Models

Value based purchasing models are driving a new focus on social risk factors which have contributed to reduced revenues and higher costs

Hospital Readmissions

- Dual enrollment was associated with 24-67% higher odds of readmissions across conditions.

Medicare Advantage

- Duals, low income, black, rural and disabled beneficiaries experienced worse outcomes on many to most MA Star ratings.

ACOs

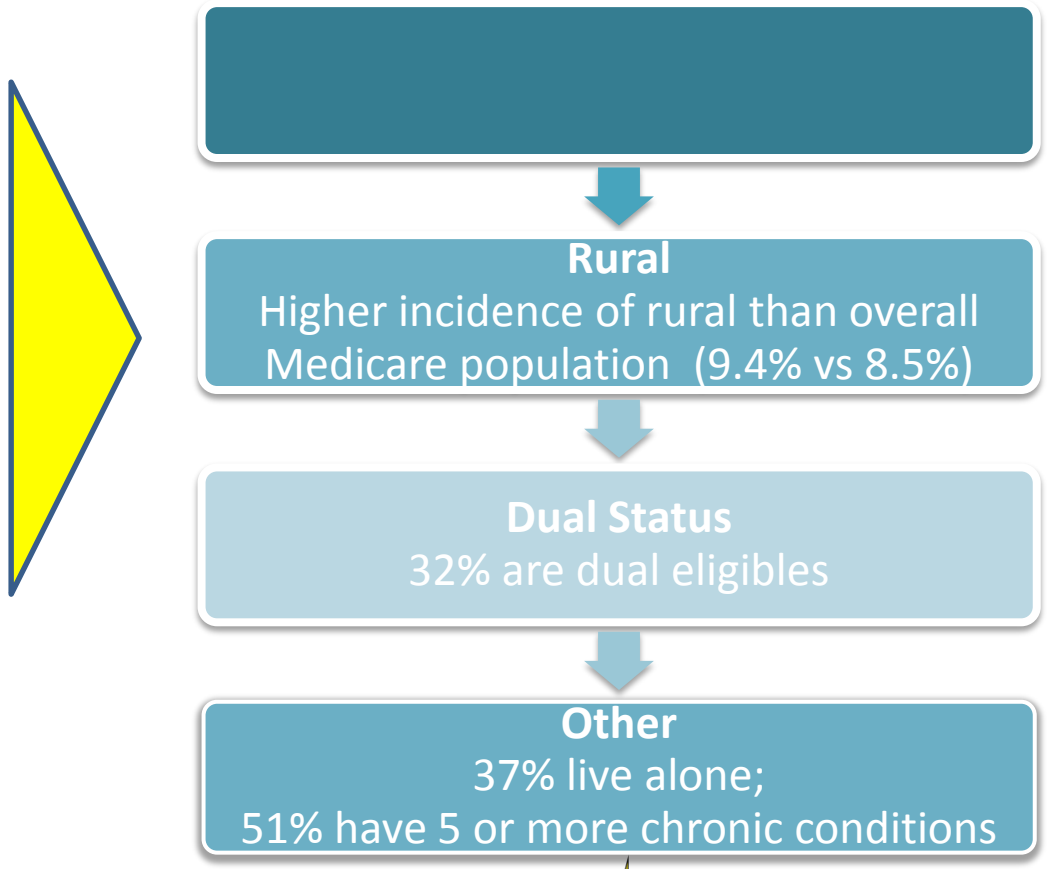
- Dual enrolled, black, and disabled were more likely to be readmitted.
- ACOs in the highest quintile for social risk factors had comparable quality measures but higher cost benchmarks

Source: *Report to Congress: Social Risk Factors and Performance Under Medicare Value Based Purchasing Programs*, HHS, December, 2016

Home Based Care and SDOH

In the battle to ameliorate the effects of SDOH, home based care providers are an underutilized resource

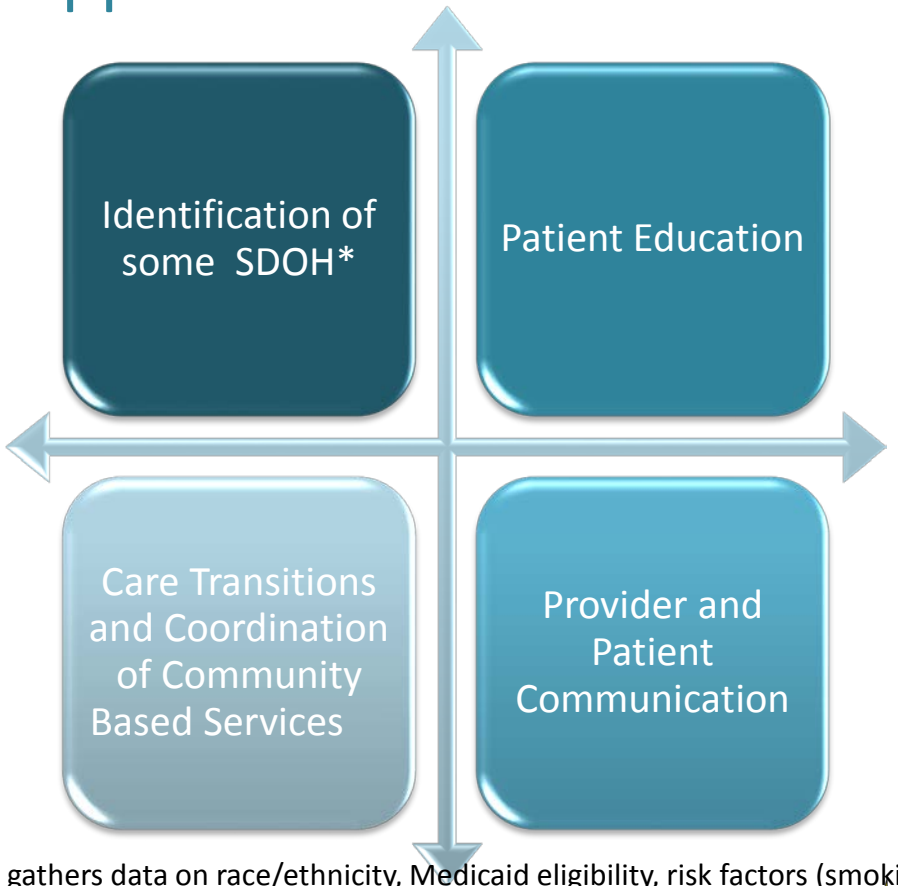
Medicare home health utilizers are at a higher risk of suffering the adverse effects of SDOH than the general Medicare population



Source: *Home Health Chart Book, 2017*, Avalere Health

Home Based Care and SDOH

Home health providers currently provide a number of services which support SDOH initiatives



- OASIS gathers data on race/ethnicity, Medicaid eligibility, risk factors (smoking, drugs, alcohol, living situation). More can be acquired through observation and interviews.

The Home Care Transformation

New market entrants are redefining the home care industry

Connecting Families and Caregivers

- Companies like CareLinx, Honor, Home Team are offering discounted rates by selling direct to consumers through on-line portals

Predictive Analytic Solutions

- Companies like Medalogix, Vivify and CareCentrix are using analytics to predict outcomes and provide the right care at the right time to manage value

Creating a Hospital at Home

- Numerous firms are offering in-home technology to monitor patients 24/7 improving care management and reducing costs

Where Home Care and SDOH Converge

The shift from facility based care to the evolving home care model creates greater opportunity to manage the impact of SDOH for at-risk populations and to improve outcomes

- Providing less costly alternatives to facility based care
- Improving accessibility to care for at-risk populations
- Increasing the availability of aids to help with ADLs to improve quality of life
- Reducing hospital readmissions
- Improving Medication Adherence
- Improving the management of chronic conditions

Enabling the Home Care Response

Future public policy initiatives can effectuate the role of home care in responding to SDOHs

- **Integrate SDOH measures into Home Health Comprehensive Assessment:**
  - transportation,
  - food insecurity,
  - education,
  - utility needs,
  - interpersonal violence,
  - income,
  - family and social supports
- **Incorporate SDOH outcomes measures into Home Health Stars reporting**
- **Incorporate incentives for SDOH service identification and coordination into home health payments**

Enabling the Home Care Response

Payers and new entrants can further enable the role of home care in managing SDOH

- **Payers**
  - Encourage home care providers to gather further data on SDOH and create mechanisms to incorporate into EHRs
  - Create processes to enable and coordinate with home health providers to arrange transportation, meals, and other SDOH services
  - Provide financial incentives to agencies to provide these services
- **New Entrants**
  - Incorporate SDOH data into Home Health predictive analytic solutions
  - Enhance interoperability between SDOH providers, home care providers, other providers and payers
  - Create consortiums of SDOH and home care providers to contract with payers and direct to consumers