A Framework for Addressing Social Determinants of Health (SDH) and Preventing Readmissions

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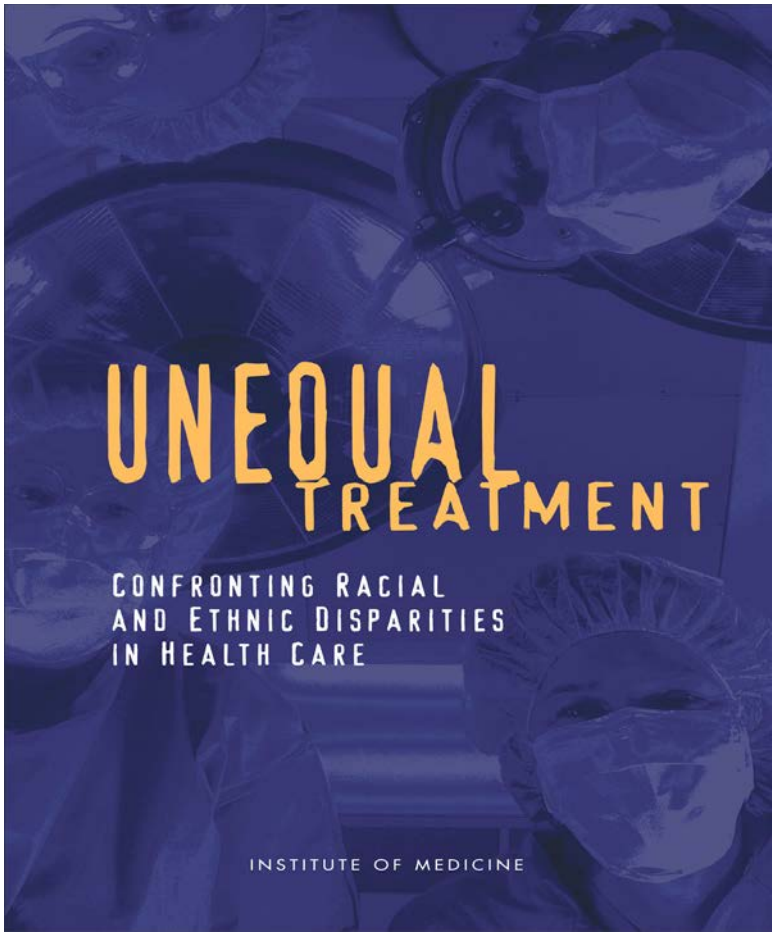
What Are Disparities?

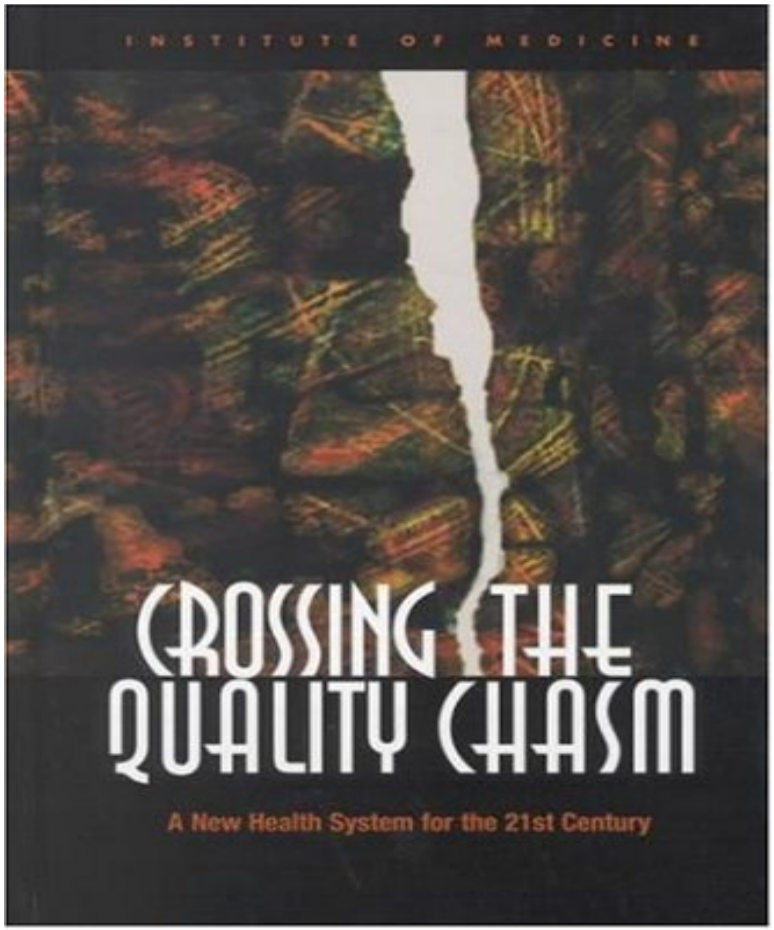
Gaps in quality of health and health care due to differences in race, ethnicity, socioeconomic status, sexual orientation, gender identity, and/or ability

Examples of Racial & Ethnic Disparities in Health Care:

- African Americans and Latinos receiving less pain medication than Whites for long bone fractures in the Emergency Department and for cancer pain on the floors
- African Americans with end-stage renal disease being referred less to the transplant list than Whites
- African Americans being referred less than Whites for cardiac catheterization and bypass grafting

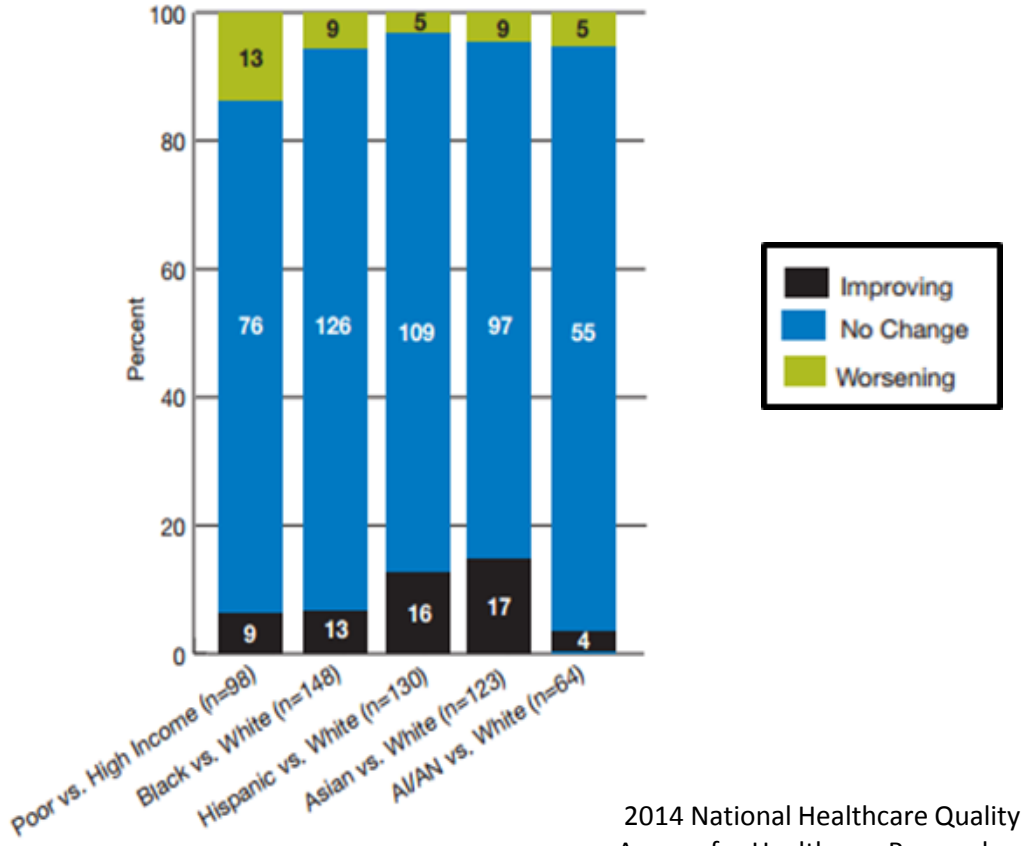
Racial & Ethnic Disparities in Health Care





National Healthcare Disparities Report

Change in Disparities: Number and percentage of quality measures for which disparities related to race, ethnicity, and income were improving, not changing, or worsening, through 2012



2014 National Healthcare Quality & Disparities Report. June 2015. Agency for Healthcare Research and Quality, Rockville, MD.

What are Social Determinants of Health?

Figure 1

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				

Health Outcomes

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

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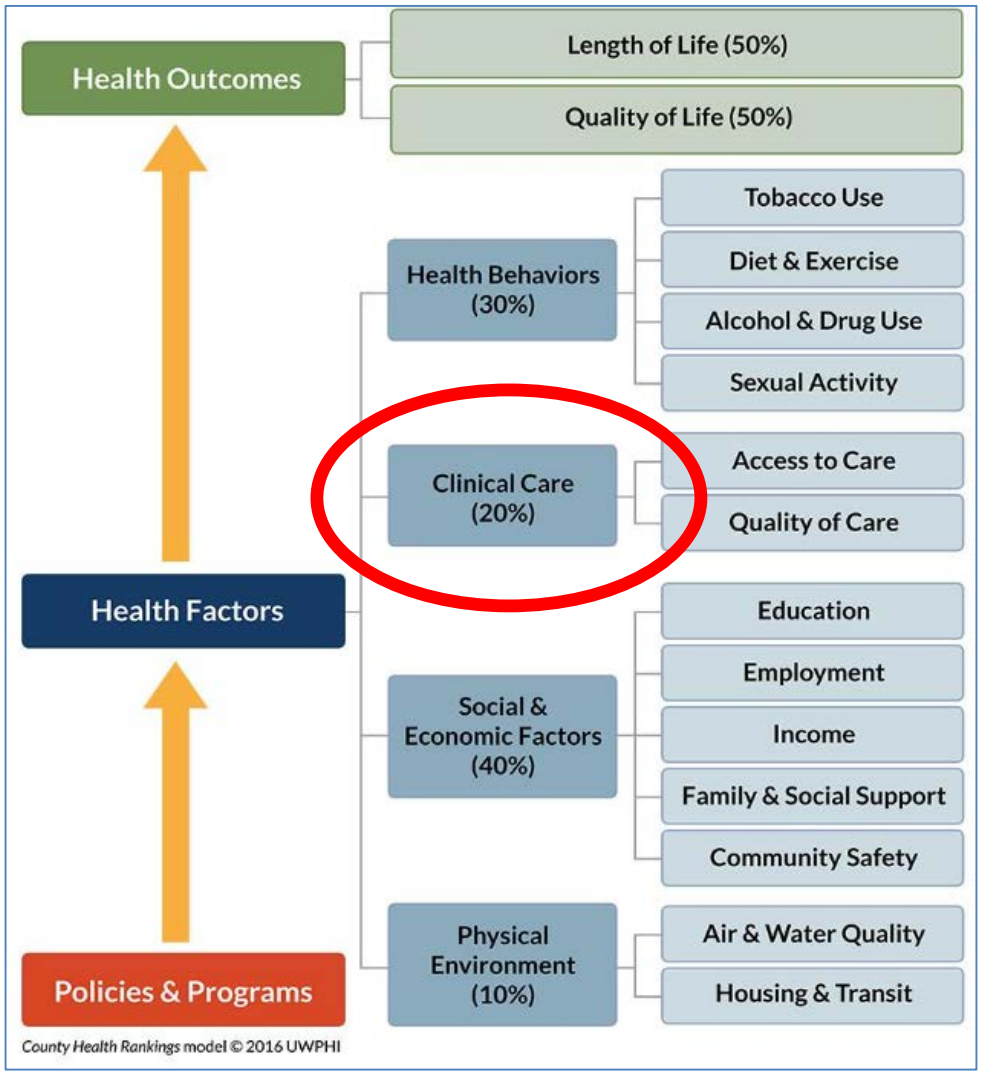

80% of Health Outcomes are due to Social Determinants of Health, while only 20% of Health Outcomes are due to Clinical Care.

Source of graphic: County Health Rankings & Roadmaps http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank
Source of statistic: Hood CM, Gennuso KP, Swain GR, Catlin BB. County health rankings: Relationships between determinant factors and health outcomes. *Am J Prev Med*. 2016;50(2):129-35

Race and Economic Opportunity in the US

Source: Raj C. et al. ***R****ace and Economic Opportunity in the United States: An Intergenerational Perspective*, NBER Working Paper No. 24441, Mar 2018

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES

Guide to Reducing Disparities in Readmissions

MGH 1811

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In collaboration with

NORC at the UNIVERSITY of CHICAGO

"Working to Achieve Health Equity"

Why the Guide Was Developed

The Guide was developed as part of the *CMS Equity Plan for Improving Quality in Medicare* and positions CMS to support key stakeholders with strategies to address avoidable readmissions for diverse populations.

- **Reduce Waste/Unnecessary Cost:** Medicare spending on potentially preventable readmissions was estimated at $12 billion for patients readmitted within 30 days of discharge in 2005.[1]

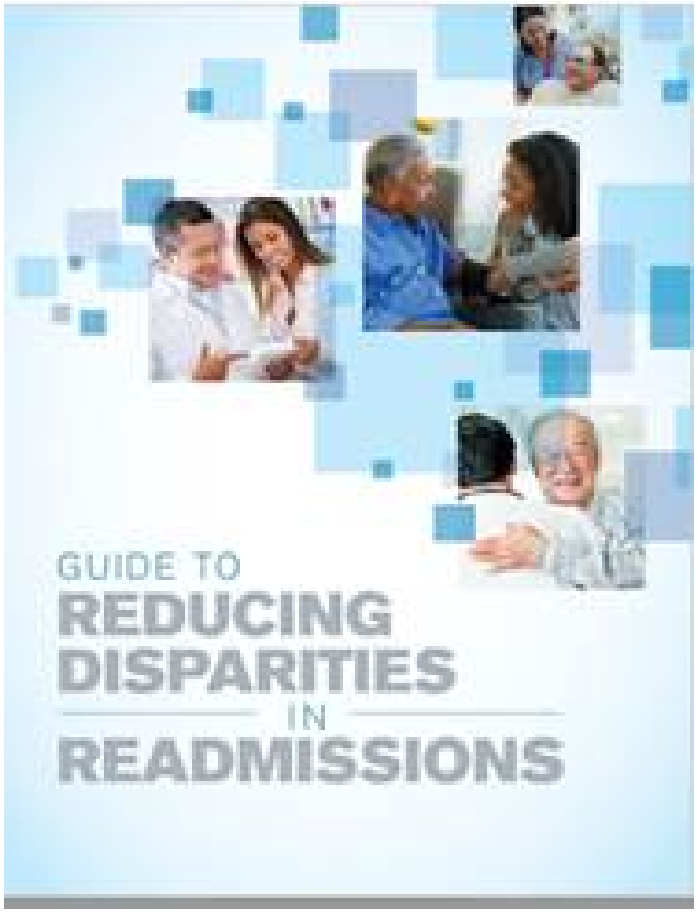
- **Address Diverse Populations:** Racial and ethnic minority populations are more likely than their white counterparts to be readmitted within 30 days of discharge. [2]

- **Support Hospital Organizations:** The Guide provides concise, actionable guidance for addressing avoidable readmissions for minority populations.

1. Report to Congress: Promoting greater efficiency in Medicare. Washington, DC: Medicare Payment Advisory Commission. http://www.medpac.gov/documents/reports/Jun07_EntireReport.pdf. Published 2007. Accessed December 21, 2015.
2. Joynt KE, Orav EJ, Jha AK. Thirty-day readmission rates for Medicare beneficiaries by race and site of care. *JAMA. Feb 16 2011;305(7):675-681.*

Contents

- **Background** on readmissions and racial and ethnic minorities
- **Overview of key issues** and strategies related to readmissions for diverse populations
- **High level recommendations** for addressing readmissions for diverse populations
- **Case studies** that illustrate how organizations are addressing avoidable readmissions for vulnerable populations in hospital and home-based settings



Readmission Rates

- CHF
  - Higher readmission rates for African American patients
  - Among Medicare beneficiaries higher readmission rates for Hispanic patients
  - Higher risk of readmission for foreign born patients w/LEP
- AMI
  - Higher readmission rates for African American patients
  - Among Medicare beneficiaries higher readmission rates for Hispanic patients
- Pneumonia
  - Higher readmission rates for African American patients
- COPD
  - Among Medicare beneficiaries higher readmission rates for African American patients
- THA/TKA
  - Among Medicare beneficiaries higher readmission rates for African American patients.

Key Issues for Racially and Ethnically Diverse Patients

- Several factors contribute to disparities in readmission rates for racially and ethnically diverse Medicare beneficiaries including:

- **Discharge and care transitions**: less likely to follow up with primary care or specialist
- **Low linkage to Primary Care/Usual Source of Care:** less likely to be linked
- **Language barriers and access to interpreter services:** lower rates of follow up and use of preventive services, med adherence and understanding instructions
- **Low Health Literacy**: limited knowledge, non-adherence, poor management of meds
- **Lack of culturally competent patient education:** cultural beliefs influence health behaviors, perceptions of care and interpretation of med info/advice
- **Social Determinants**
- **Mental Health**: disproportionally impacts minority groups, impacts follow up and self care
- **Co-Morbidities**: minorities have multiple co-morbidities, need for treating full spectrum

Key Recommendations for Preventing Readmissions Addressed in the Guide

1. **Create a strong radar** that collects key patient demographic data, including race, ethnicity, language, education, social determinants, disability, and linkage to primary care/usual source of care.

2. **Identify the root causes** by determining patients, populations, and characteristics that are linked to readmissions.

3. **Start from the start** by developing preemptive efforts to prevent readmissions that span the duration of pre-admission to post-discharge.

4. **Deploy a team** that is multi-disciplinary and includes allied health professional as well as “non-traditional” team members such as health coaches, navigators, and community health workers.

Key Recommendations (Cont.)

5. Create **systems that are responsive** to the needs of diverse populations and address the **social determinants** that put them at risk of bouncing back.

6. Develop **culturally competent** strategies for addressing **communication-sensitive, high-risk scenarios** such as medication reconciliation and discharge instructions.

7. Foster **community partnerships** to promote **continuity of care**.

Recommendation #5:

Create **systems that are responsive** to the needs of diverse populations and address the **social determinants** that put them at risk of bouncing back.

- Patients' ability to engage in their care is influenced by their clinical, physical, and emotional status; the support system available to them; and their capacity to overcome the social obstacles present in their lives and environment.

- Assuring that patients have the social supports they need to manage their condition is critical and can be addressed by social workers and community health workers.

Health Connections

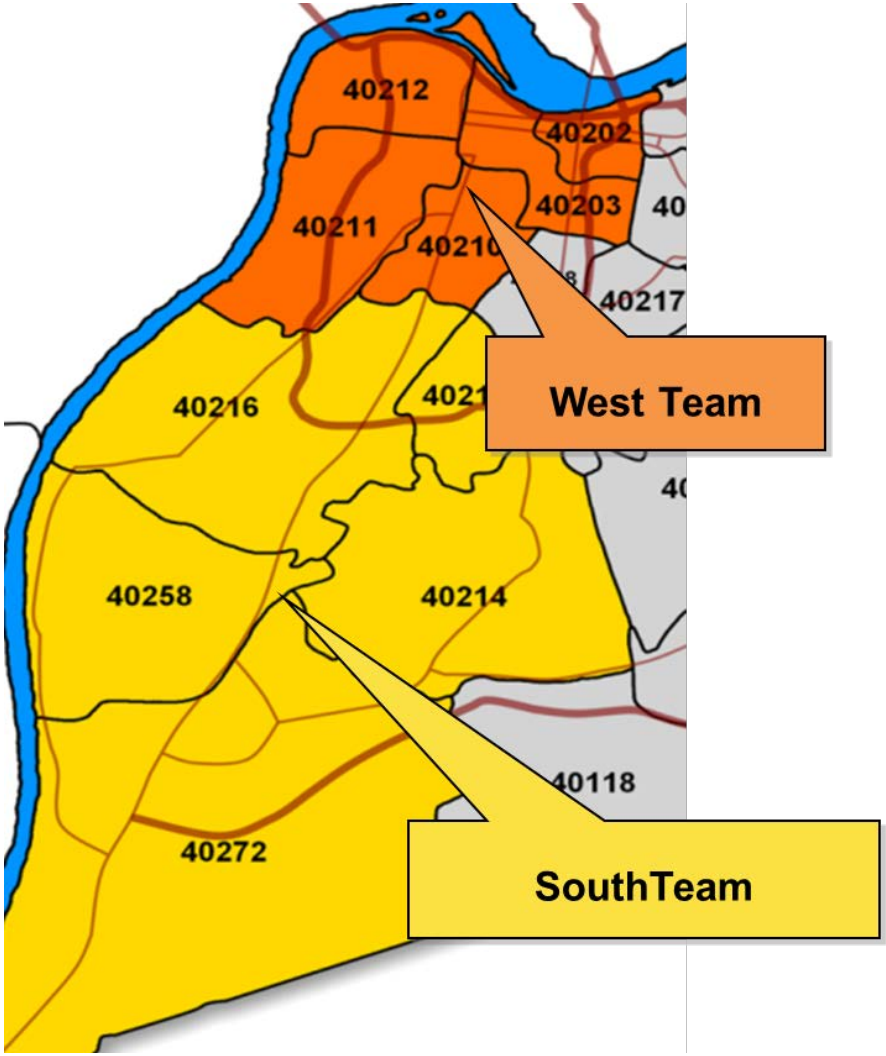
An Interdisciplinary Approach to Improved Care Coordination for Vulnerable Patients

KentuckyOne Health

Background

According to the US Census, four neighborhoods near Jewish Hospital have families in poverty up to six times the community norm with higher death rates from heart disease, cancer and diabetes.

They used a “hot spotting” method to map the home addresses of “super-users” of care (defined for their study as having four or more inpatient, outpatient, or ED visits resulting in an admission).



Criteria

- Top 5 % in charges among inpatient, outpatient and ED cases - identify target zipcodes
- Lace Index Score of 11 or higher
- Medicare, Medicaid or self-pay
- Live in one of the neighborhoods of concern

The Program

- Employs a multidisciplinary team working in the homes of recently discharged, high-risk patients from low-income neighborhoods to help them better manage their medical conditions and prevent readmission, while addressing barriers to good health
- Patient is in the program for 90 days.
- Health Connections Initiative is based on the model developed by Camden Coalition of Healthcare Providers
- The team works with the patient to set goals for health improvement, to identify any barriers to good health, and to work together to overcome them.
- Home visits focus on medical and social-support service delivery, with the ultimate goal of promoting self-management and transitioning the participant to a medical home.

Talent Management

- Lead RN, LPN, SW, two CHWs
- As needed: dietician or interpreter
- Community Health Workers are one of the most successful components of the program.

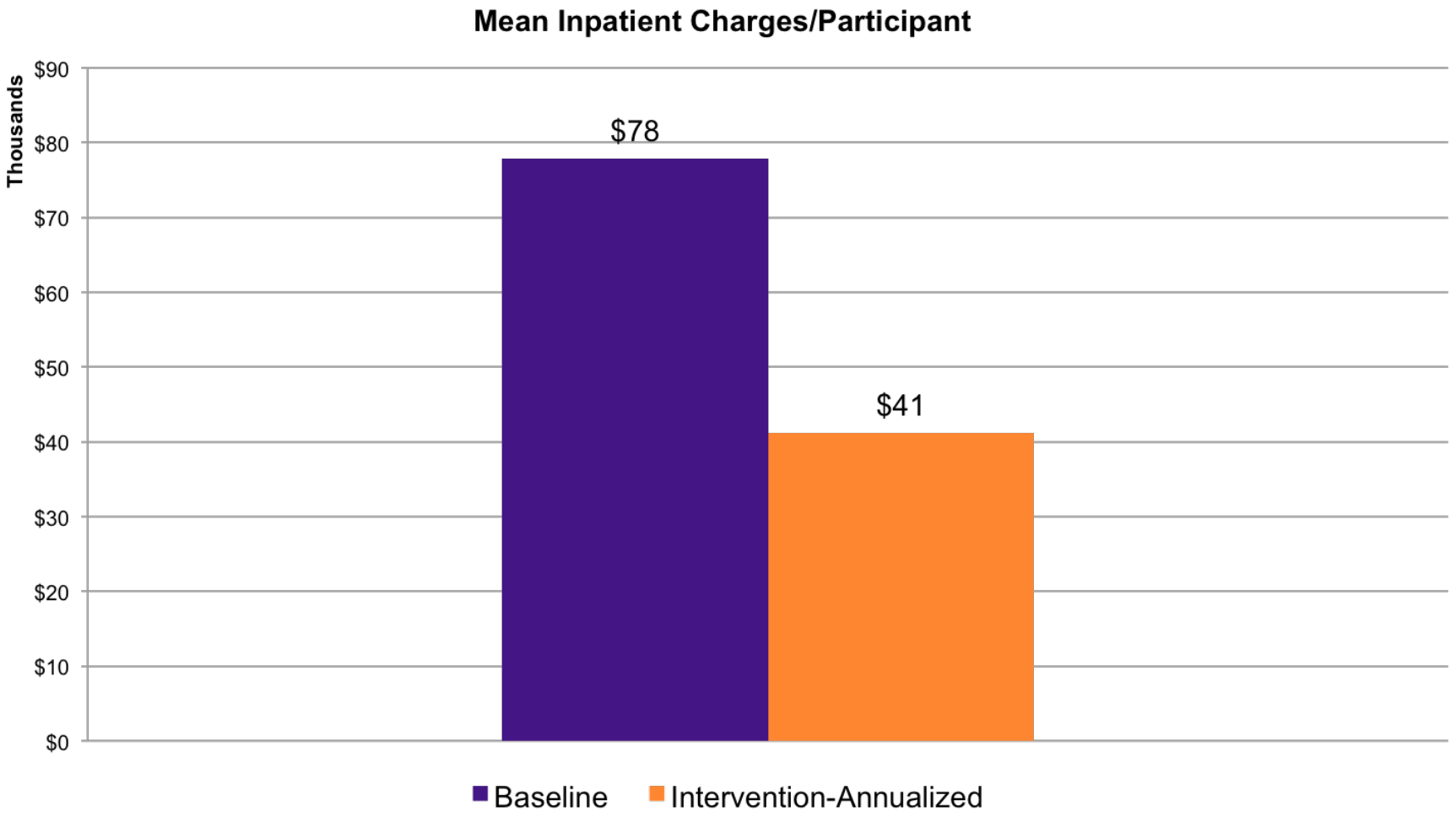
Key Components

- **Identified root causes** with risk modeling (neighborhood, payer sources, LACE tool)
- **Start from the start** – team works with patients for 90 days on assessing and addressing risk of readmissions
- **Deploy a team - ** Lead RN, LPN, SW, CHW, dietician and interpreter
- **Consider systems, social support and social determinants** – address participants needs holistically with home visits
- **Focus attention on community, coordination and continuity-** connect w/comm based resources

Results

- From November 2013 through February 2015 readmission rates decreased significantly by 17%, from 29.7% to 12.8%
- Participants saw dramatic improvements in rates of depression, confidence in their ability to manage their health and connection to the medical home.

Outcomes: Cost/Value



When Collecting SDH DATA…

- Look at the capacity of your EHR
- Identify & prioritize 3 measures and start with that
- Identify ahead of time how you will use the data (measure and report)
- Think about resources but don't let it be the limiting factor
- Pilot, pilot, pilot
- Training is key, including providers
- Address patient privacy concerns
- Check your assumptions

Monitoring Our Performance at MGH and Developing Interventions

Annual Report on Equity in Health Care Quality

Massachusetts General Hospital

ANNUAL REPORT ON EQUITY IN HEALTH CARE QUALITY **2016–2017**

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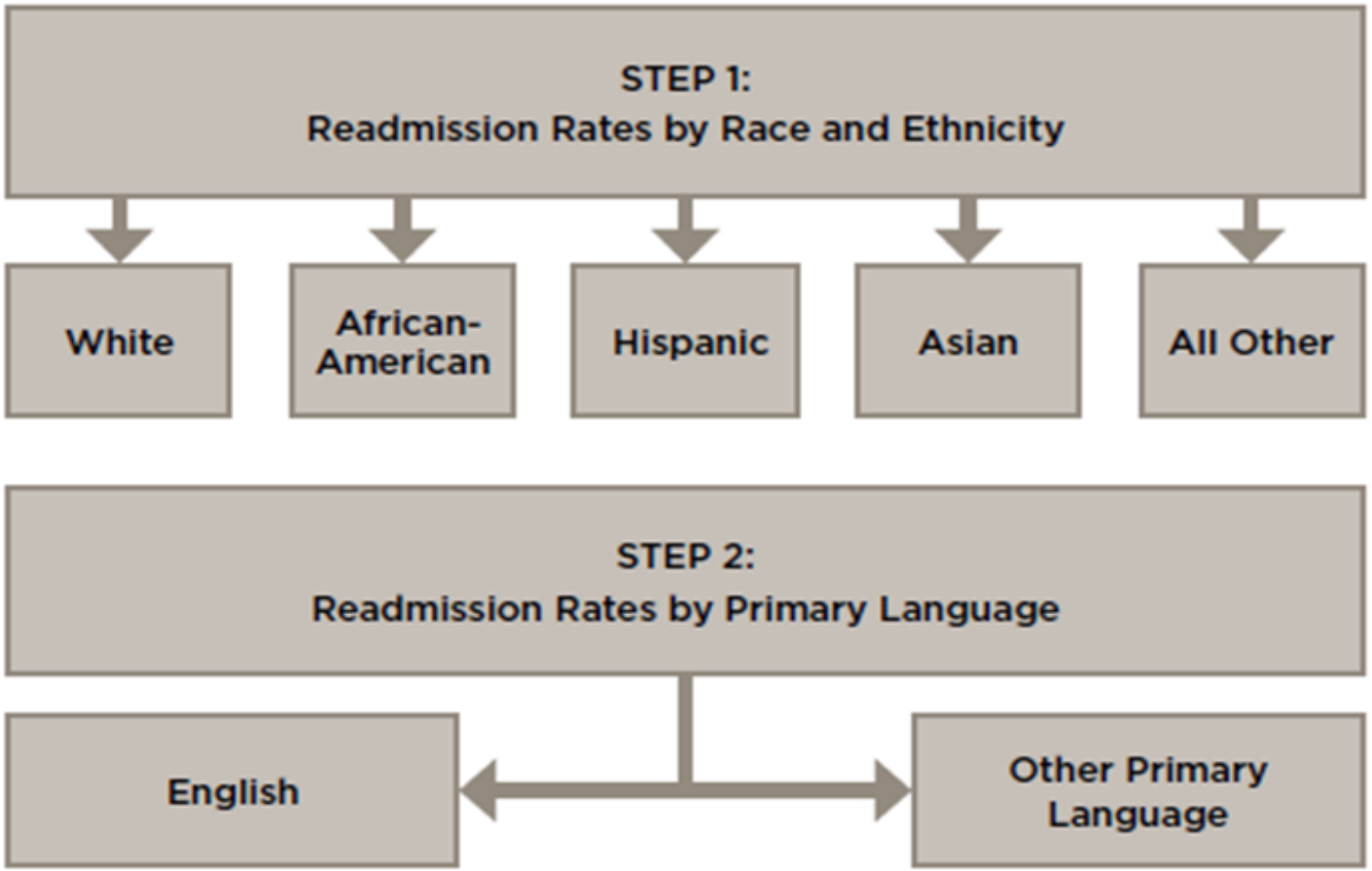
New Area of Exploration: Readmissions



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Key Findings: Readmissions

Readmissions Analysis Phase I:

- No differences in overall readmission rates between racial and ethnic minority groups and white patients or between patients with English as their primary language and patients speaking other languages (Oct 2012-Sept 2014)

- Statistically higher readmission rates for:
  - **Patients with limited English proficiency age 65 or older** compared to their English-speaking counterparts (16.1% vs. 13.9%)
  - **Asian patients with limited English proficiency** compared to Asian patients with English as their primary language (13.2% vs. 8.7%)

Key Findings: Readmissions

Readmissions Analysis Phase II:

- Conducted follow-up analyses to determine whether differences in readmission rates would be present for patients with LEP after controlling for socio-demographic and clinical factors (Jan. 2013-June 2016)

- Clinical factors (rather than demographic or socioeconomic factors) have the greatest impact on patients' likelihood of readmission
  - Number of days in the hospital in the previous year
  - Patients discharged home with services
  - Multiple co-morbidities

Limitation

- Dataset used for this analysis only includes readmissions to MGH. If LEP or minority patients are more likely to be readmitted elsewhere, we would not be able to identify that association with these data.

Key Findings: Readmissions

- Results highlight the need to pay special attention to medically complex patients, many of whom may not speak English as their primary language.

- Future analyses linking readmissions data to data on interpreter use:
  - Address questions about mode and frequency of interpreter use during the inpatient stay
  - Determine whether use of interpreter services has a positive impact on reducing readmissions for patients with LEP

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Edit

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Thank You

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