Social Determinants of Health: Advocating on behalf of our patients

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Case Study: Boston in the setting of Massachusetts Health Care Reform

- 68 y/o male with DM walks into clinic with cough, itchy skin and feeling weak. His medication bag stolen 3 times this month at the shelter, ran out of money to rent a room, and admits to not understanding all the directions at his last endocrinology appt.

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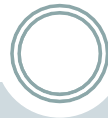

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  - Under the diagnoses are the social determinants of health including abject poverty, unsafe living environment, low health literacy

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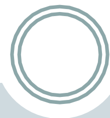
Current situation



Future possibility

Inconsistent quality

Fragmented delivery

Fragmented payment

Volume incentives

Vulnerable populations

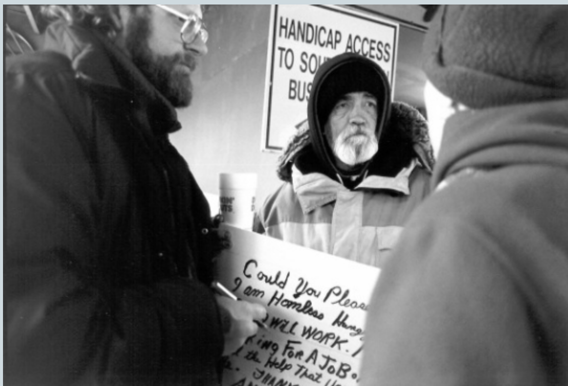
Accountability for defined population

Pay for value

Comprehensive and transparent care

Health Status of Homeless Individuals

- Abject Poverty
- Lack of consistent shelter
- Violence and trauma
- Absence of healthy food options



- Increased mortality
- Increased chronic medical illnesses
- Increased mental illness and substance use
- Multitude of barriers to medical care
- Fragmented and crisis oriented medical care
- Medical follow up is greatly lacking
- No sufficient place to recuperate

Higher Mortality Among Homeless Individuals

- Cohort study of >28,000 patients seen by Boston Health Care for the Homeless from 2003-2005
- Average age at death: **51**
- Leading causes of death:
  - 25-44: Drug overdose (**9x** higher)
  - 45-64: Cancer, closely followed by heart disease
  - 65-84: Cancer, closely followed by heart disease

(Baggett, JAMA IM Feb. 2013)

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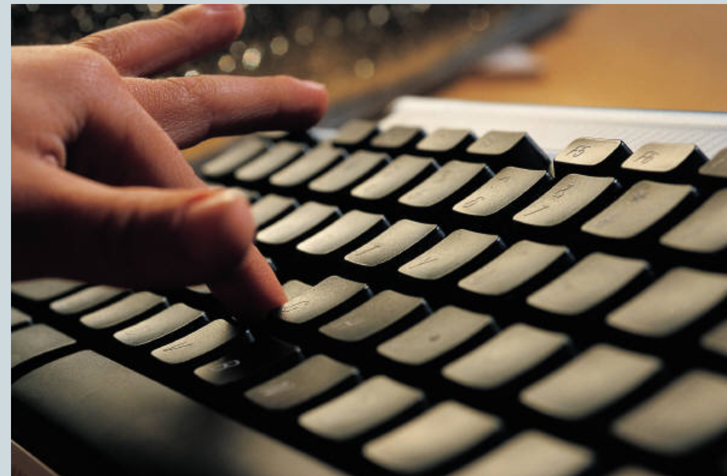
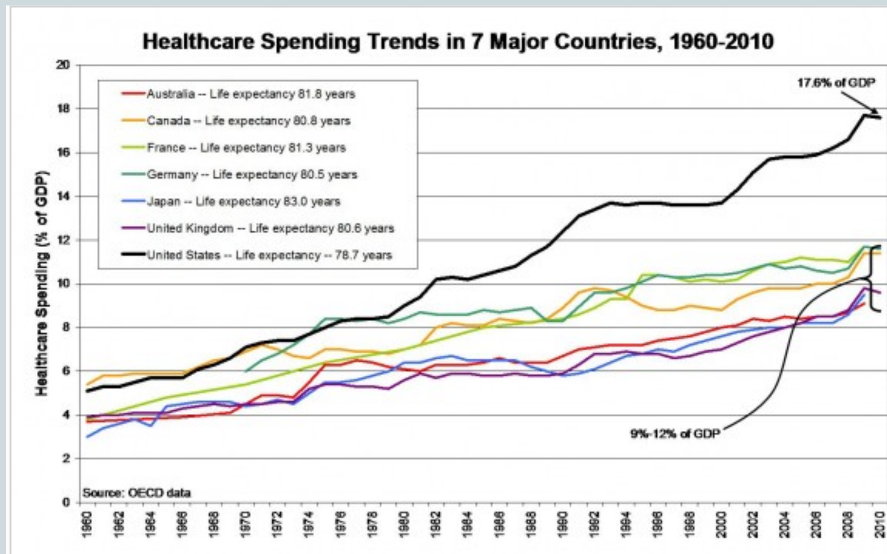
- Lack of data tracking homeless individuals
- Starting point becomes obtaining data



U.S. Health Care Expenditures are Rising



Massachusetts Spends More on Health Care than Any Other State

PER CAPITA PERSONAL HEALTH CARE EXPENDITURES, 2009

$10,000
$9,000
$8,000
$7,000
$6,000
$5,000
$4,000
$3,000
$2,000
$1,000
$0

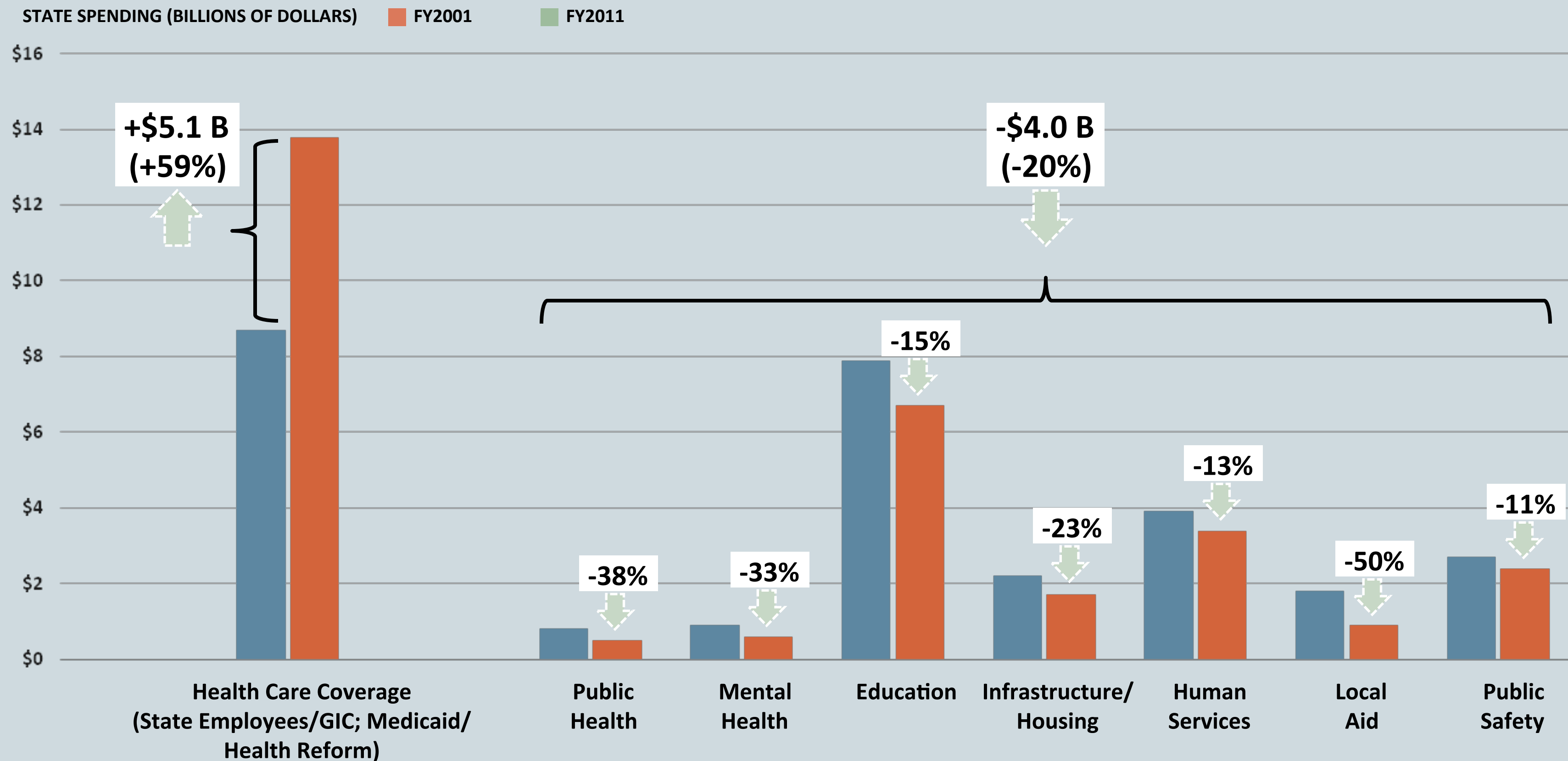
NATIONAL AVERAGE

UT AZ GA ID NV TX CO AR CA AL VA SC TN NC OK MS OR KY MI MT NM IN IL KS WA LA HI IA MO WY NE SD OH FL WI MN MD NJ VT WV PA ND NH RI NY DE ME CT AK MA

State

NOTE: District of Columbia is not included.
SOURCE: Centers for Medicare & Medicaid Services, *Health Expenditures by State of Residence*, CMS, 2011.

The Increasing Costs of Health Care Squeeze Out Other Public Spending Priorities

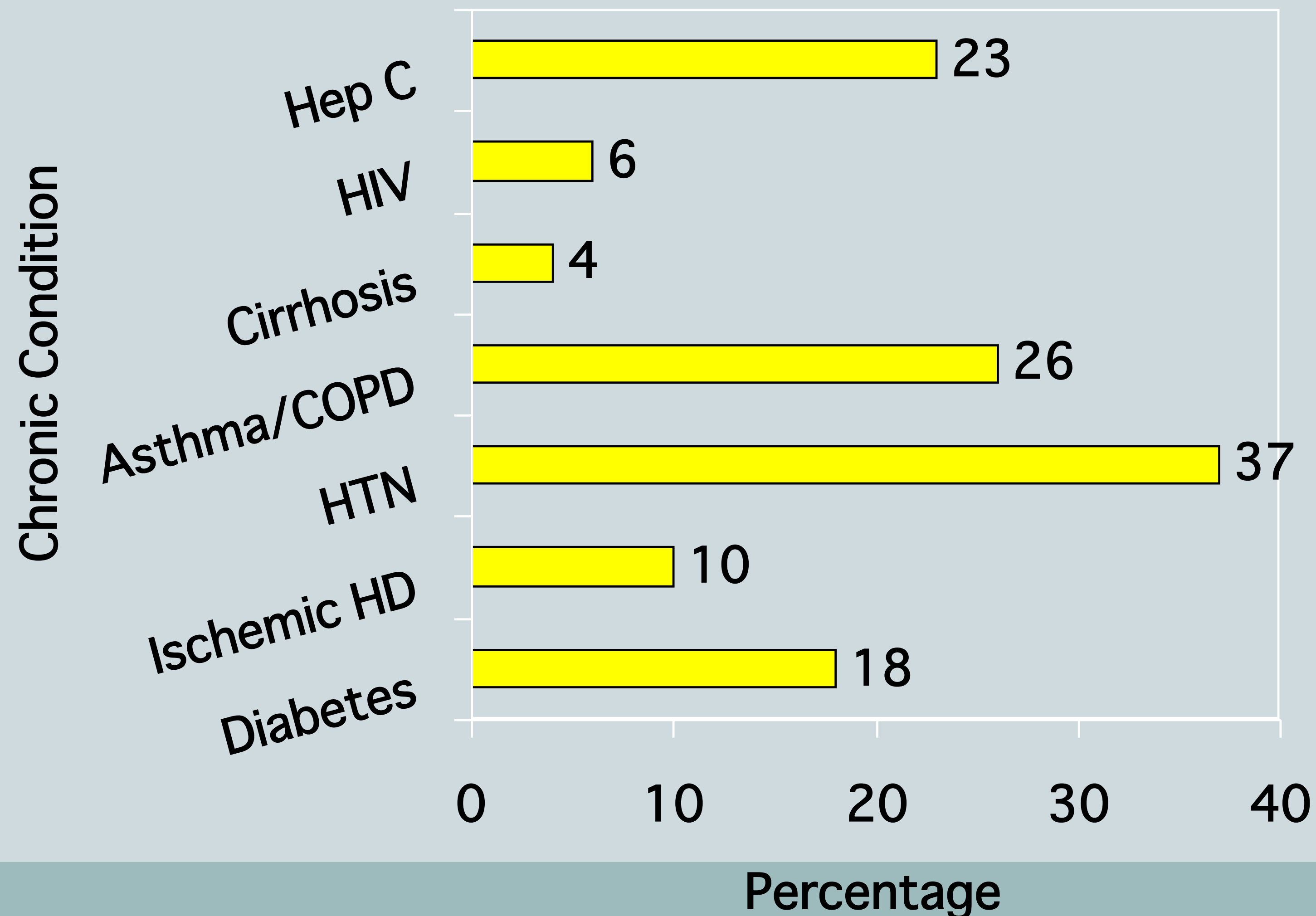


SOURCE: Massachusetts Budget and Policy Center Budget Browser.

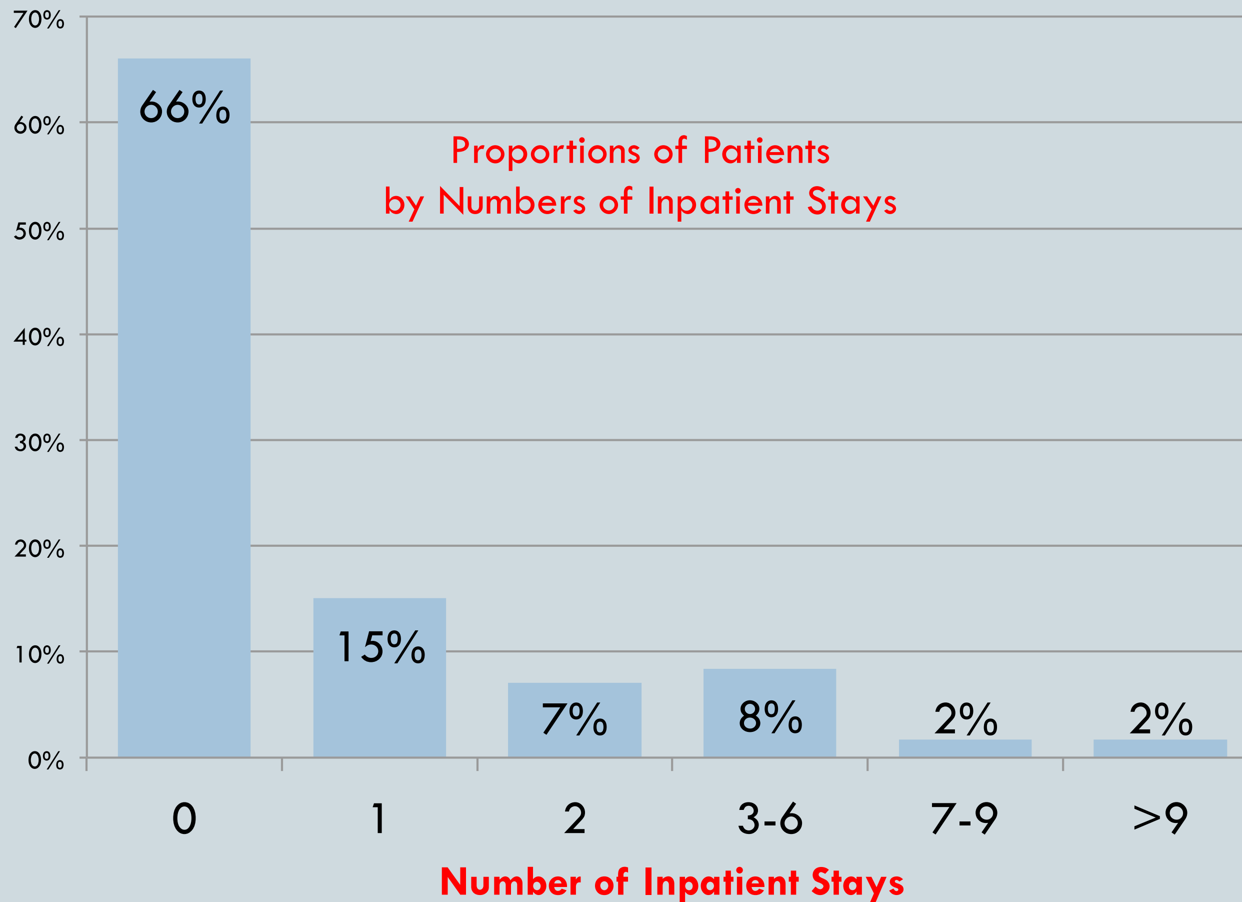
Boston Homeless Cohort: Mental Health and Substance Use AJPH 2013

	All (N=6,494)
Mental Illness	4,384 (68%)
Schizophrenia	1264 (19%)
Bipolar Disorders	1889 (30%)
Depression	3068 (47%)
Anxiety	2627 (40%)
Substance use disorders	3890 (60%)
Alcohol use disorder	2628 (40%)
Drug use disorder	3118 (48%)
Co-occurring mental illness and substance use	3135(48%)

Boston Homeless Cohort: Selected Chronic Physical Conditions AJPH 2013



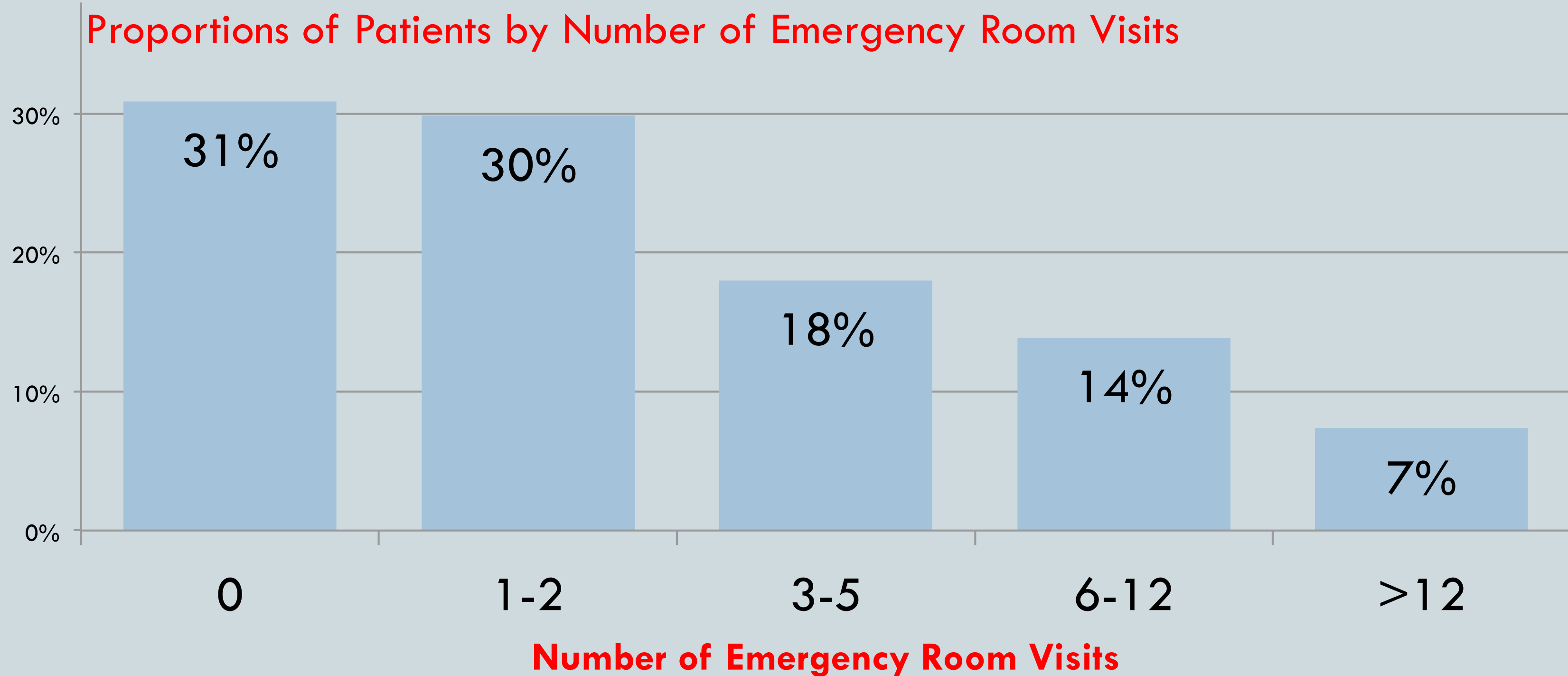
Inpatient Stays



By comparison, 8% of the entire U.S. population in 2007 used hospital care.

Bharel et al, *AJPH* 2013

Emergency Department Use

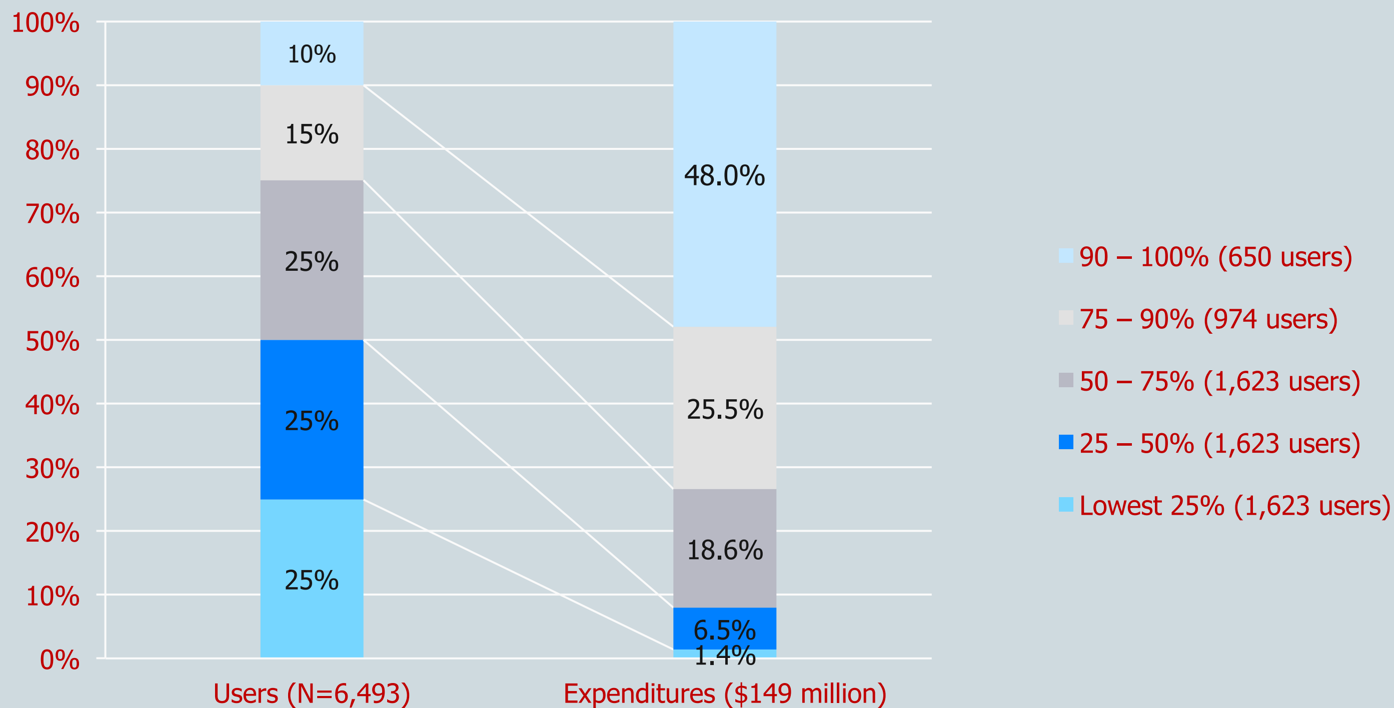


N	2,006	1,938	1,170	902	477

The average number of ER visits for all patients was 4.0.

Bharel et al, *AJPH* 2013

Total Annual Expenditures by Expenditure Group for BHCHP Users with Medicaid in 2010



Health Care Utilization and Housing

- Studies in New York, Seattle and Chicago have found that housing homeless individuals can decrease use of services including:
  - Emergency department
  - Hospital inpatient
  - Detoxification services

Am J Public Health. Apr 2004, JAMA. Apr 1 2009, JAMA. May 6 2009.

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Long History of Reform in Massachusetts

Year	Event
1997	Medicaid 1115 waiver to expand Medicaid, including MCO development
2006	Comprehensive Health Reform: shared individual and state government, responsibility for access
2007	Despite a recession, Massachusetts succeeds at having the lowest rate of uninsured in the nation
2012	Chapter 221 passed with focus now on cost containment while providing high quality care
2013	One Care Program begins to coordinate care for dual eligible patients (both Medicaid and Medicare)
2014	Primary Care Payment Reform beings to coordinate behavioral health and primary care services in a global payment to primary care practices

BHCHP PCC Patients versus members of the PCC Plan

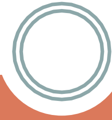
Diagnostic and Other Characteristics	Statewide	BHCHP Patients*
Number	426,768	3,998
DxCG Score	1.5	3.4
Both Mental Health & Substance Use	10%	51%
Asthma or COPD	6%	24%
Diabetes	6%	15%
Hospital Discharges Per 1,000	129	859
ED Visits Per Person	1.1	4.2
Average Annual Cost	$6,679	$20,925

*Medicaid-only BHCHP patients enrolled in the PCC plan.

DxCG and Expenditure of 650 Most at Risk

	Top 10% N=650 %	Remainder N=5843 %
Average Dxcg	10.99	2.97
Average expenditure per pt per year	$109,861.23	$13,264.26

Using the data to advocate



Collaborator	Issue
• Local community organizations • Academic medical centers • Medicaid • Executive Office of Health and Human Services • Elected Officials	• Special population • Attribution of care issue • Medical respite needs • BH integration needs

Is Being Homeless Independently Associated with Health Outcomes?

- Cost data is suggestive: shows a **$210** increase monthly cost to medical care for MATCHED DxCG scores.

  (Bharel, et al manuscript in preparation)
- Morbidity and mortality data is suggestive
- Clinical experience is suggestive
- Direct causal data is challenging to obtain and does not currently exist

Collaborations: who else is a stakeholder?

- Neighborhood hospitals and academic medical centers
- State Medicaid
- State Legislators/local politicians
- Consumer advocacy groups
- Other organizations caring for special populations
- National advocacy groups
- Shelter alliances
- And more….

Your Advocacy Roadmap
10 Keep It Going!
9 Take Action
8 Create a Detailed Plan
6 Get to the Right Person
5 Find Allies
7 Choose Your Tactics
4 Get the Facts
3 Define Your Request
1 Identify Your Issue
2 Develop Your Story
Produced by the Commission of Deaf, DeafBlind and Hard of Hearing Minnesotans

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  - He is admitted to medical respite for FS monitoring and treatment, rest and scabies treatment
  - He is working with nurses on a treatment plan
  - He is connected with housing services through CM and working on housing options