Thinking Outside of the Emergency Room:
A Collaborative Response to the Overuse of Emergency Rooms in Western Massachusetts

New Orleans
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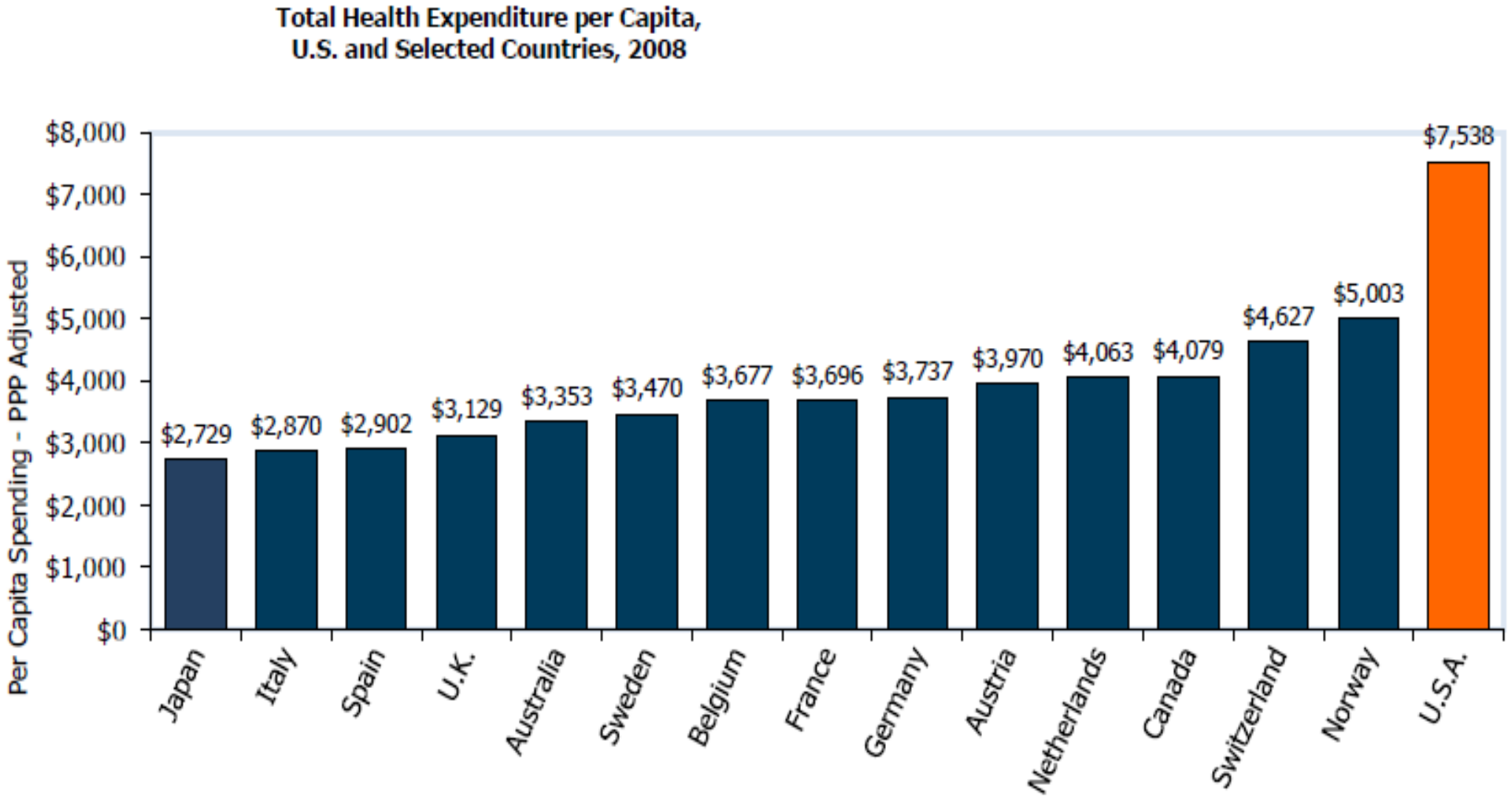
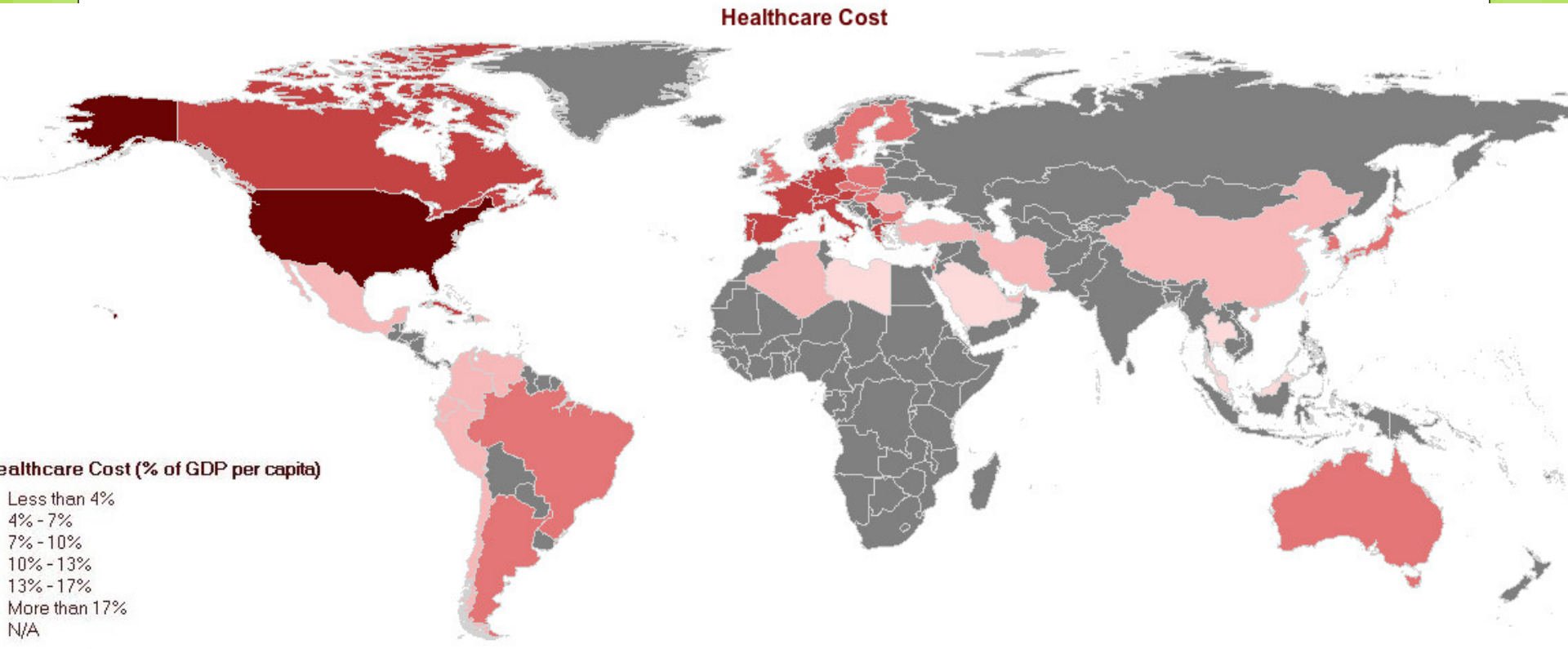
The Challenge and the Opportunity

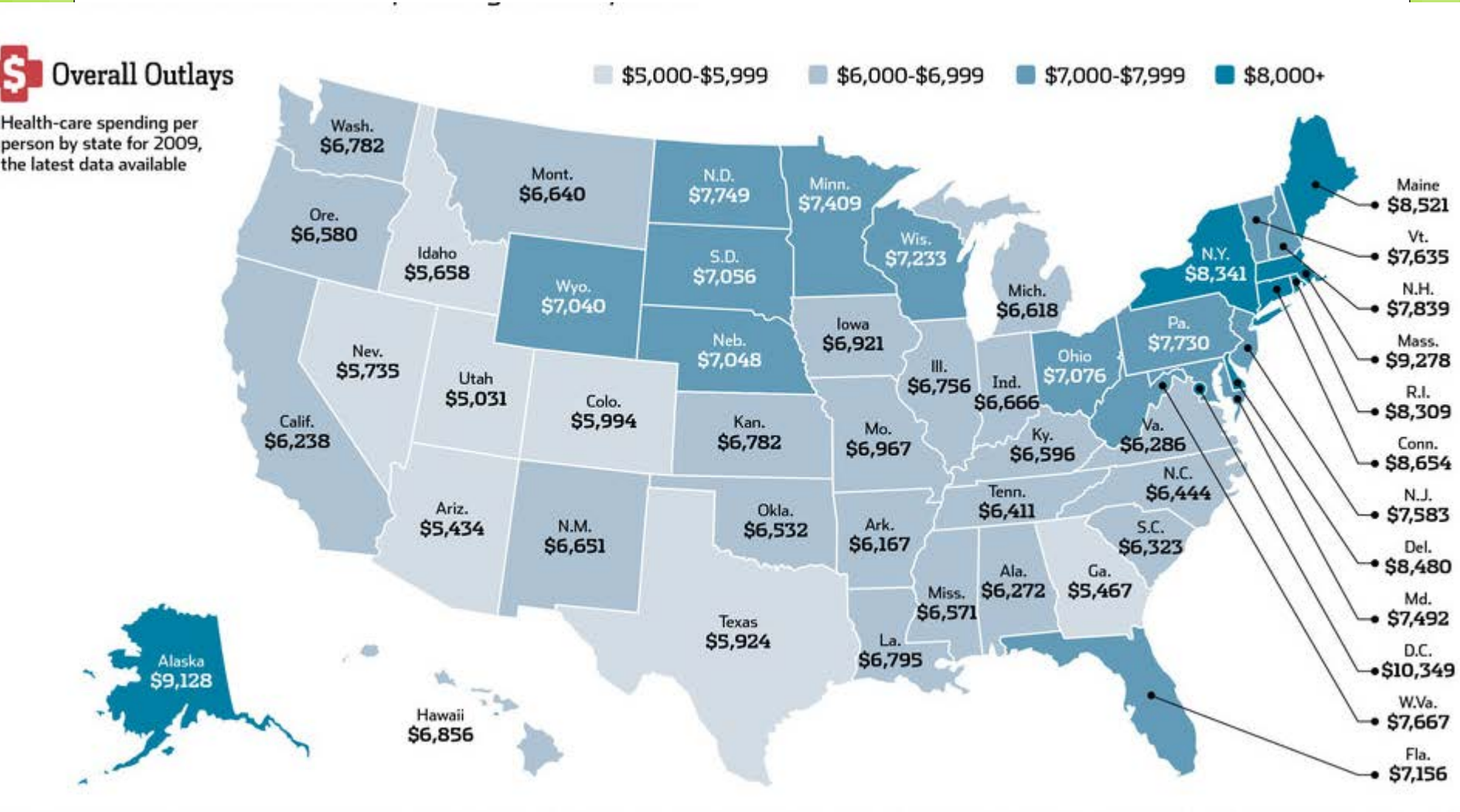
The United States Spends More on Health Care than Any Other Developed Nation



Healthcare Cost as % of GDP per Capita (2013)



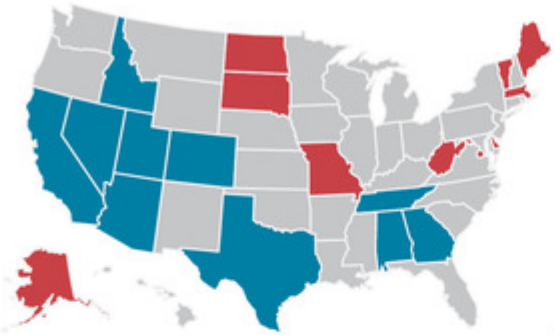
A break-down of health care spending state-by-state (2009)



Hospital Care

- Hospital care is spending for services provided in hospitals, including outpatient care, operating-room fees and services of resident physicians.

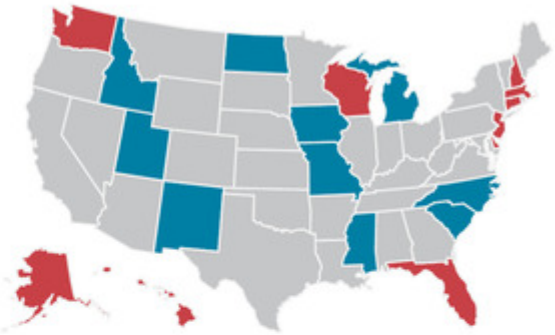
Highest		Lowest	
D.C.	$4,948	Utah	$1,830
Alaska	3,879	Ga.	1,922
Mass.	3,505	Nev.	1,949
Vt.	3,408	Ariz.	1,977
Maine	3,268	Calif.	2,077
N.D.	3,183	Ala.	2,111
S.D.	3,147	Idaho	2,115
Mo.	3,143	Texas	2,138
Del.	3,109	Conn.	2,150
W.Va.	3,073	Tenn.	2,160



Physician and Clinical Services

- Physician and clinical services is treatments in health professionals' establishments.

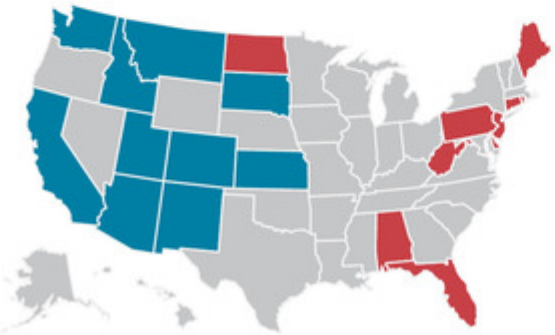
Highest		Lowest	
Alaska	$2,570	Utah	$1,189
Mass.	2,078	Mo.	1,277
N.J.	2,049	Idaho	1,287
Del.	1,978	N.D.	1,306
Conn.	1,952	Mich.	1,366
Fla.	1,950	Iowa	1,381
Wis.	1,879	Miss.	1,391
Hawaii	1,873	S.C.	1,399
N.H.	1,863	N.C.	1,401
Wash.	1,842	N.M.	1,440



Prescription Drugs and Other Nondurables

- Prescription drugs and other nondurable medical products include over-the-counter drugs such as cough and allergy medications and medical sundries such as surgical dressings or thermometers.

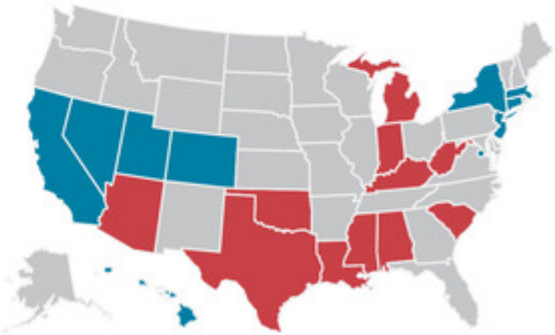
Highest		Lowest	
Conn.	$1,269	Colo.	$690
R.I.	1,230	Mont.	733
Del.	1,219	Idaho	739
Fla.	1,213	Utah	741
N.D.	1,185	S.D.	768
Ala.	1,179	Calif.	786
W.Va	1,175	N.M.	791
N.J.	1,171	Ariz.	804
Maine	1,126	Wash.	807
Pa.	1,113	Kan.	822



Obesity

- Obesity is 2011 rate among adults calculated from respondents' self-reported weight and height.

Highest		Lowest	
Miss.	34.9%	Colo.	20.7%
La.	33.4	Hawaii	21.8
W.Va.	32.4	Mass.	22.7
Ala.	32.0	D.C.	23.7
Mich.	31.3	N.J.	23.7
Okla.	31.1	Calif.	23.8
Ariz.	30.9	Utah	24.4
Ind.	30.8	Conn.	24.5
S.C.	30.8	Nev.	24.5
Ky.	30.4	N.Y.	24.5
Texas	30.4		



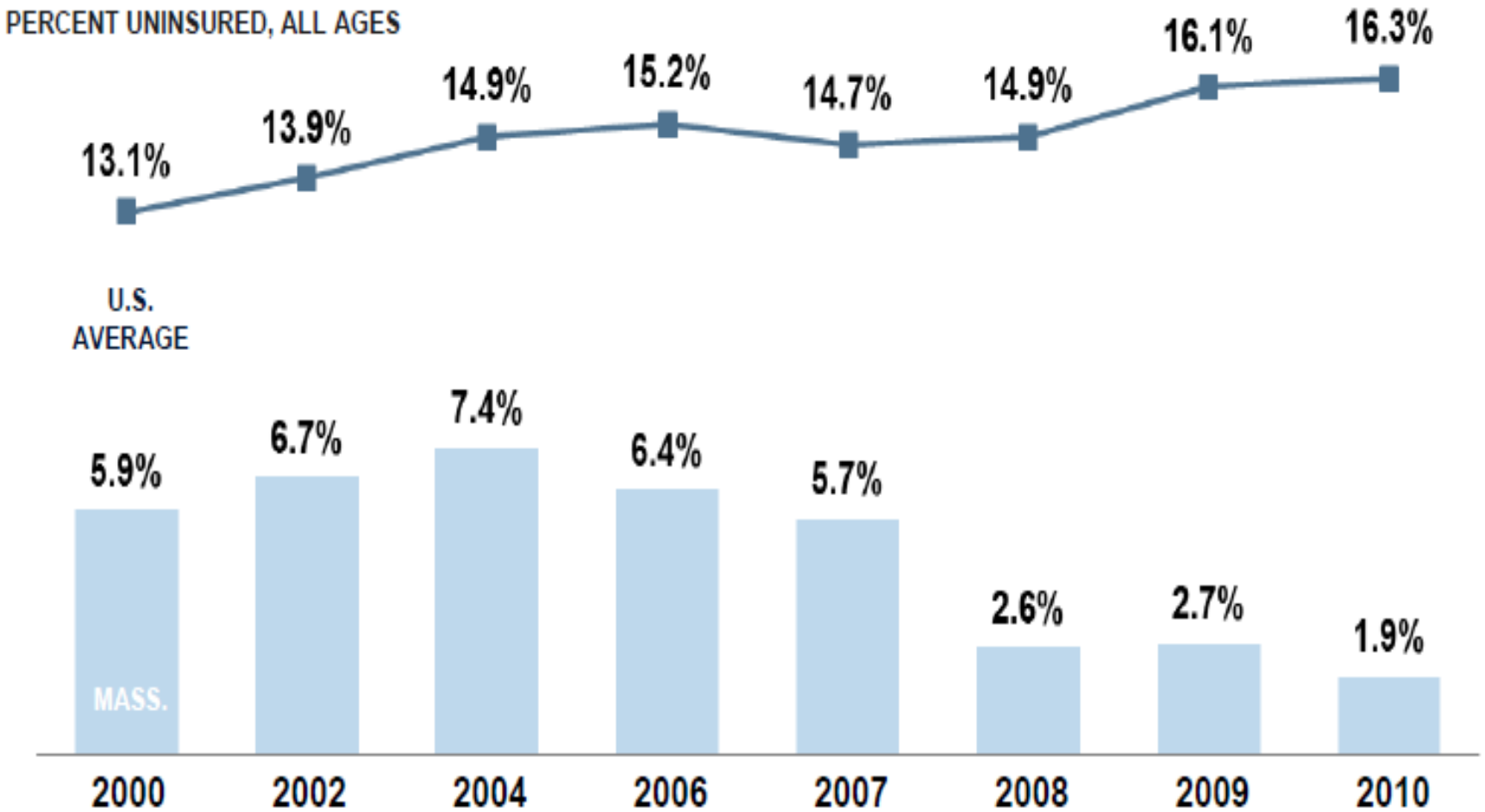
Note: All spending figures are per capita in 2009.

Sources: Centers for Medicare and Medicaid Services (spending data); Census Bureau (population); Centers for Disease Control and Prevention (obesity)

The Wall Street Journal

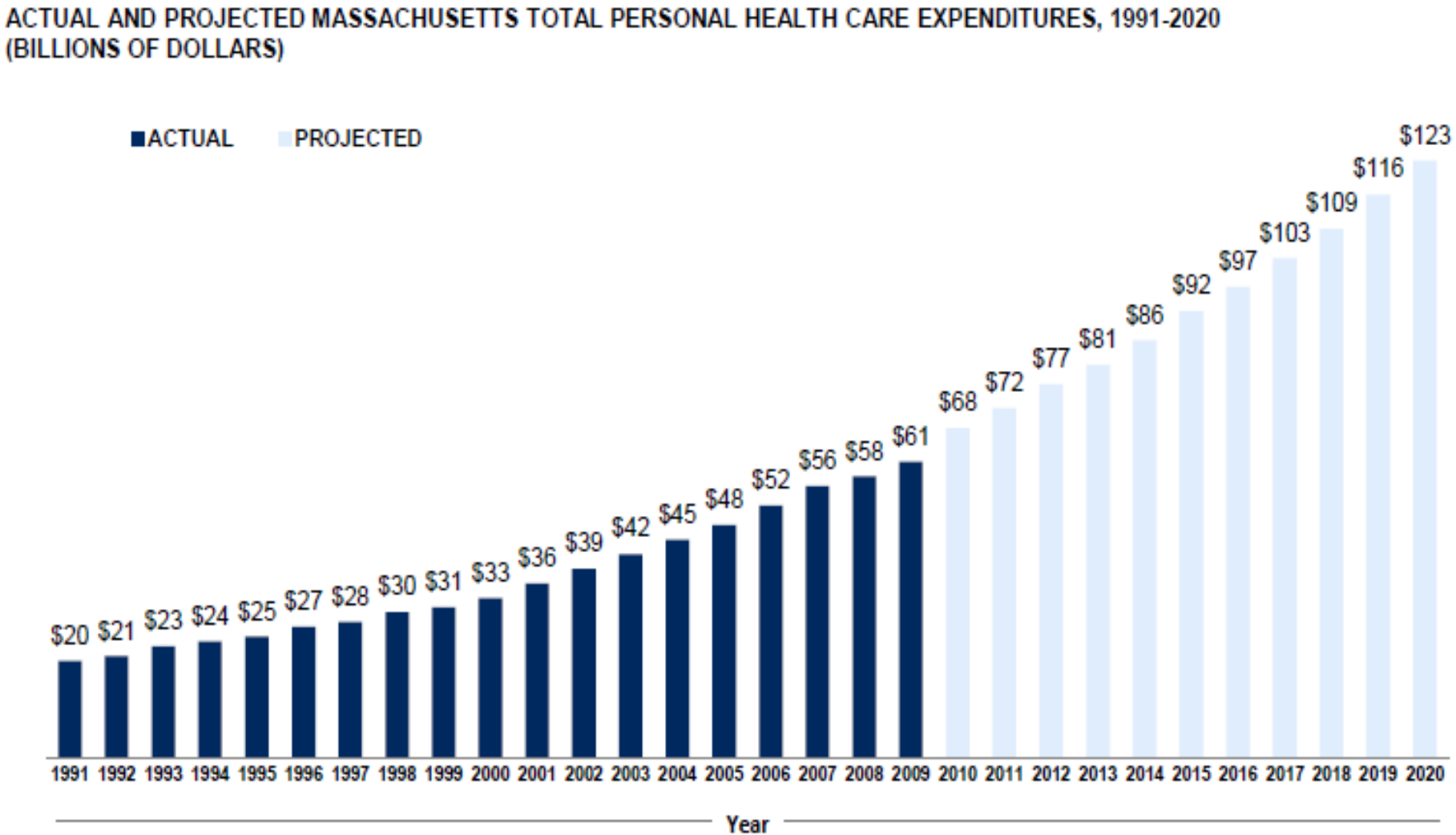
How We Got Here

MASSACHUSETTS NOW HAS THE LOWEST RATE OF UNINSURANCE IN THE COUNTRY

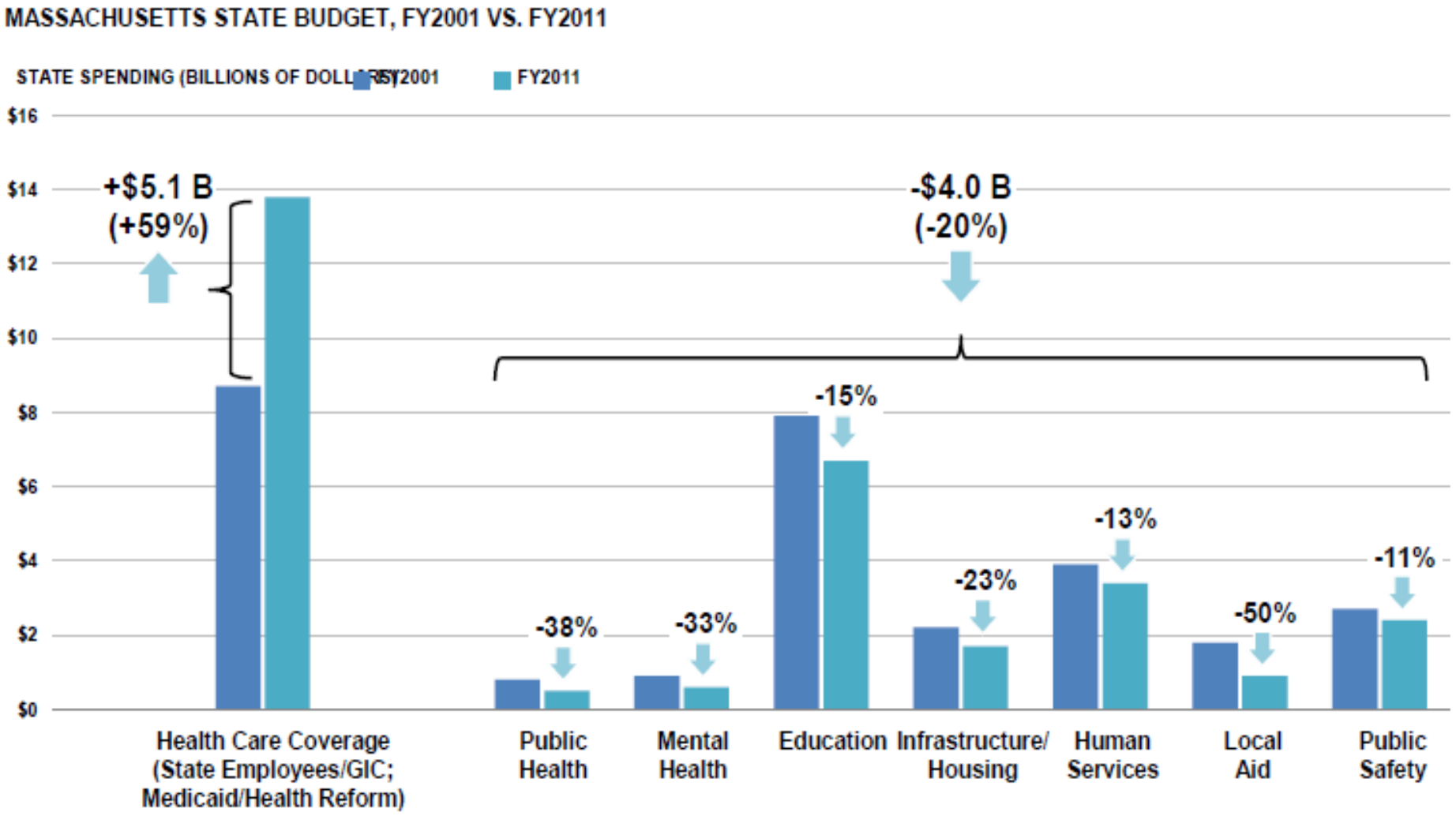


The Challenge and the Opportunity

Total Health Spending Will Double from 2009 to 2020



Increasing Costs of Health Care Squeeze Out Other Public Spending



SOURCE: Massachusetts Budget and Policy Center Budget Browser.

"Start with only two people"

Jeffrey Brenner, MD
Camden (NJ) Coalition of Healthcare Providers

Found a better and cheaper way to treat costly patients through collaborative care by using data to map "hot spots" of health care high-utilizers.

Making Health Care Affordable: Preserving Access and Improving Value

Making Health Care Affordable provides **up to three-year grants** for initiatives that demonstrate substantive cost containment while maintaining or improving access and quality of care. Moderating the growth of health care spending is critical to sustaining the grains that Massachusetts has made in access and coverage since 2006. This program supports the development, expansion, testing, and measurement of the impact of affordability strategies among Massachusetts health care organizations in order to ensure the sustainability of these gains.

Funded by Blue Cross Blue Shield Foundation of MA

Mercy Hospital	Springfield
Brockton Neighborhood Health Center	Brockton
Holyoke Health Center	Holyoke
Steppingstone	Fall River
Brookline Community Mental Health Center	Brookline
Judge Baker Children's Center	Boston
Alliance Foundation for Community Health	Somerville
VNA of Greater Lowell	Lowell
Community Healthlink, Inc.	Worcester
Lynn Community Health Center	Lynn
Boston Medical Center	Boston
Greater Lawrence Family Health Center	Lawrence

Special Community Health Outreach to Redirect Homeless High-End Utilizers of Hospital Emergency Departments into Primary Care and Case Management, 2012-2015

- ***Goal:*** To contain health care costs by redirecting homeless persons who are high end utilizers of hospital emergency rooms to primary care and intensive case management in cases of non-emergent care and chronic conditions

- ***Funding Source:*** Blue Cross and Blue Shield of Massachusetts Foundation

- ***Principal Investigator:*** Doreen Fadus, Mercy Medical Center, Springfield, MA

Participating Hospitals

Mercy Medical Center, Springfield

Baystate Medical Center, Springfield

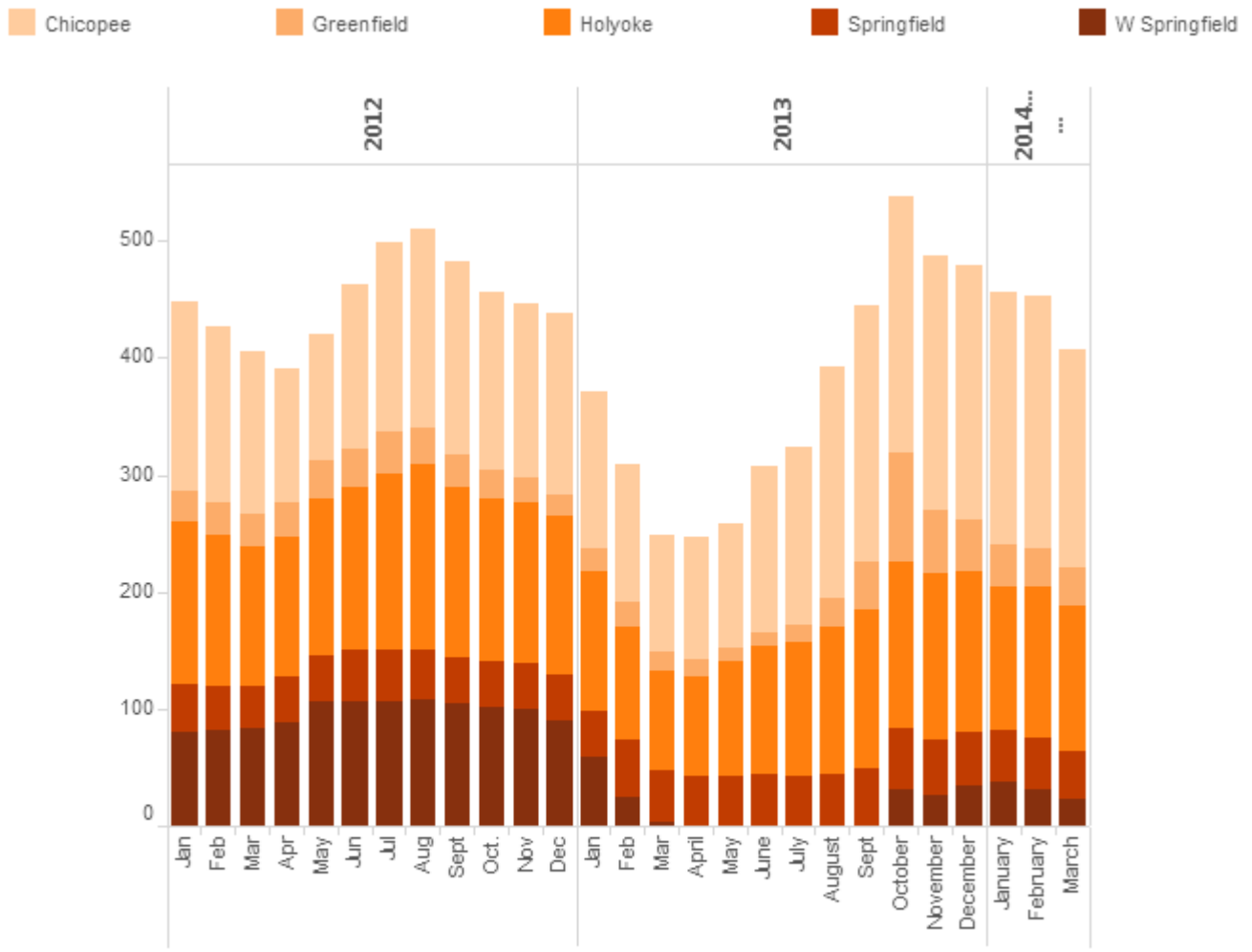
Cooley Dickinson Hospital, Northampton

Holyoke Medical Center, Holyoke

Noble Hospital, Palmer

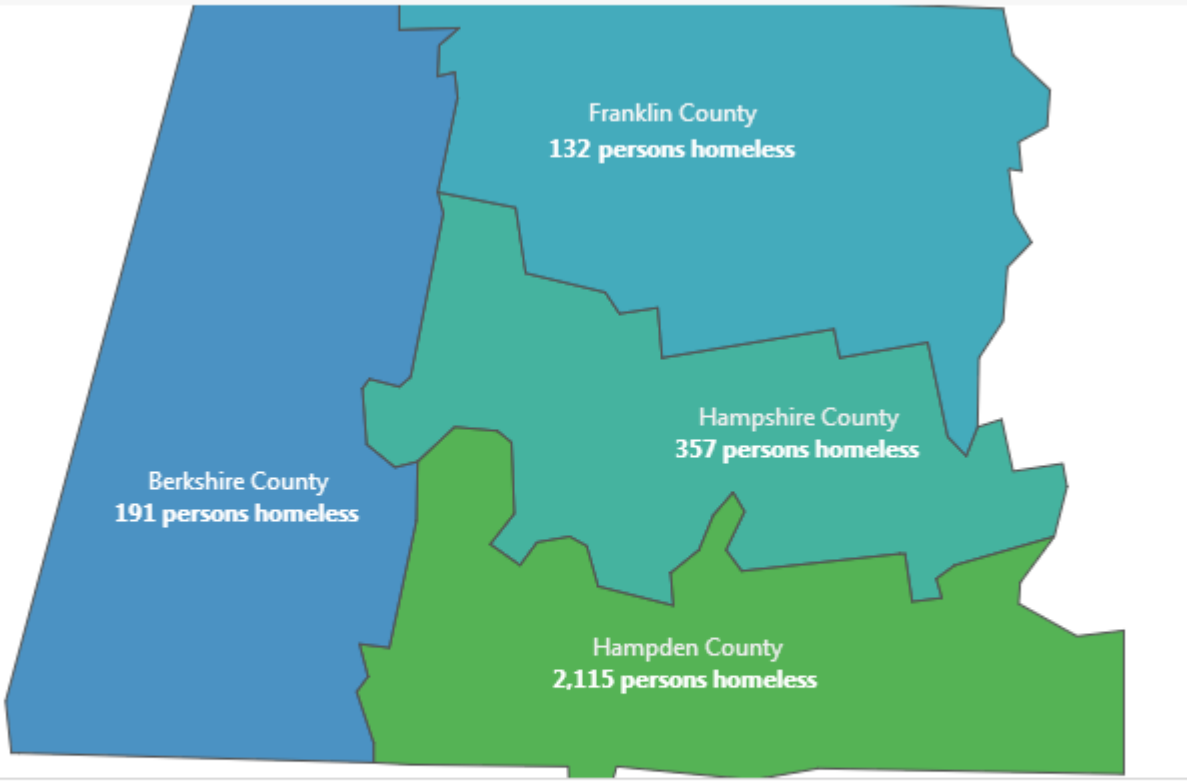
Size of Homeless Population in Western MA

- Source: Western MA network for homelessness
  http://westernmasshousingfirst.org/data/



Western MA families make up a disproportionate share of families placed in hotels/motels statewide.

Regional Point In Time Count Data
January 30th, 2013



2,795 persons homeless across Western Massachusetts

Consisting of **887 individuals** and **1,908 persons** in **633 families**

Individuals Persons in Families

How the Project Works

- Case management based: 1 case manger, 1 social worker
- High end utilizers' needs assessed using prior knowledge & hospital records
- Referrals came from Health Care for Homeless, Western MA interagency meetings, ER, other homeless service providers
- Project staff recruited potential participants at soup kitchens, shelters, streets etc.
- Following initial assessment, services offered to participants as they arrived at Health Care for Homeless.

Survey Questions

- Is client covered by Insurance?
- Does client have a Primary Care Provider?
- Would you recommend this program to a friend or family member?
- Self-assessment of health status
- Where did participant stay the night before?
- Was participant ever housed?
- How did participant get to the Emergency Department for the last visit?
- What is the participant’s general means of transportation?

SURVEY QUESTIONS *(Cont.)*

- Is the participant currently working for pay (including under the table pay)?
  IF YES, what is the occupation & place of employment?
  IF NO, what was the last source of employment?
  IF NO, during the past 30 days, has the participant made specific efforts to find work?
  IF NO, which category best describes the participant's current situation?

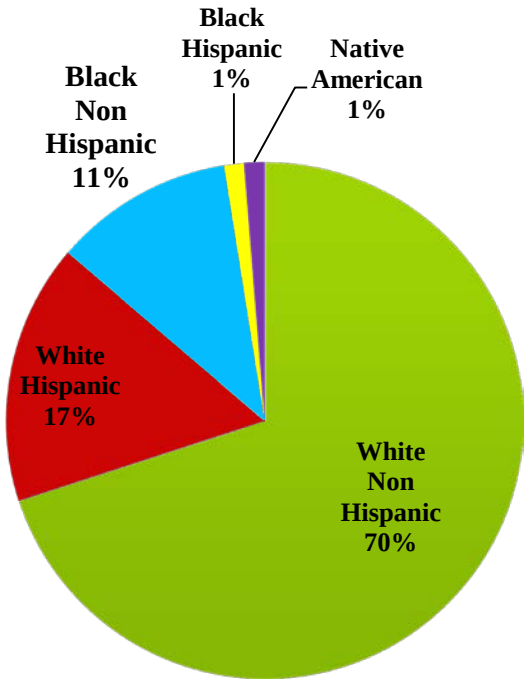
- During the past 12 months has the participant received assistance from any public assistance programs? If NOT, why not?

- In the last 12 months, has the participant received any in-kind assistance?

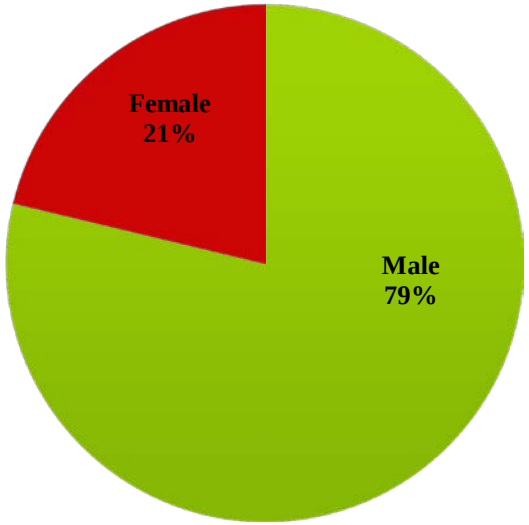
- What is the participant's monthly income?

Overall Demographics of Program Participants N=80

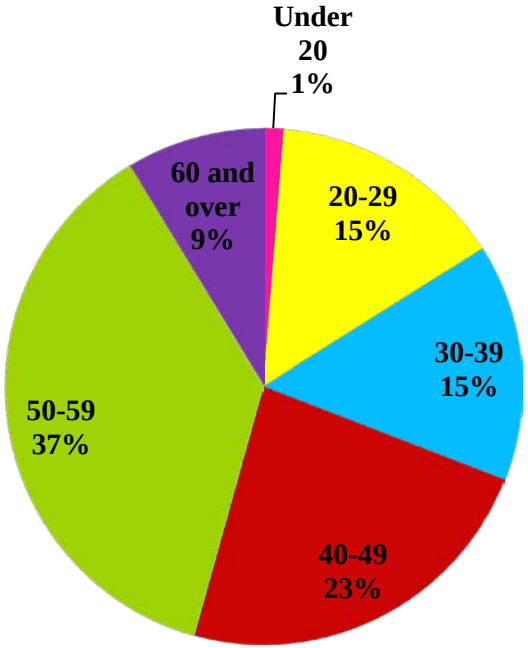
Race/Ethnicity



Gender



Age



Update on Participants…April 1, 2014

Total clients enrolled as of April 1, ‘14: 81

- **# of clients enrolled at least 12 months as of April 1, ‘14: 50**

  Of these 50:

  Utilization data collected on: 20

  In the process of collecting utilization data on: 9

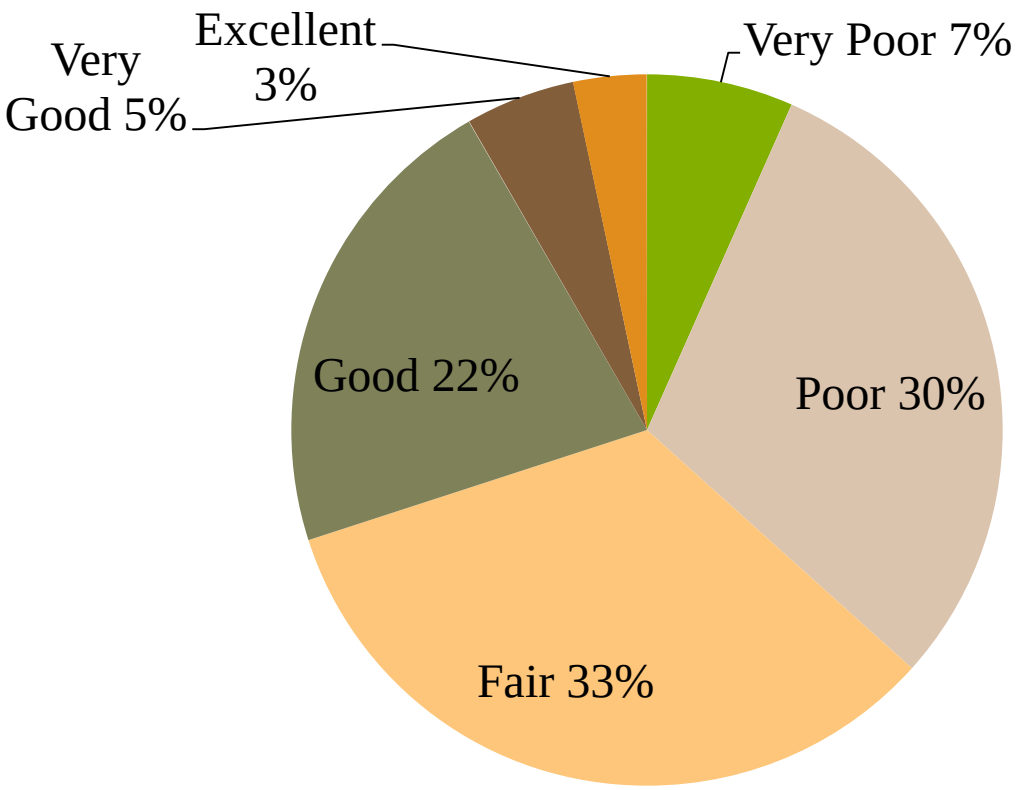
  Did not complete a full 9 months during initial 12 months in program: 21

  Reasons:

Unable to locate	*13*
Moved out of area	*5*
Unable to reach	*2*
Moved in with family	*1*

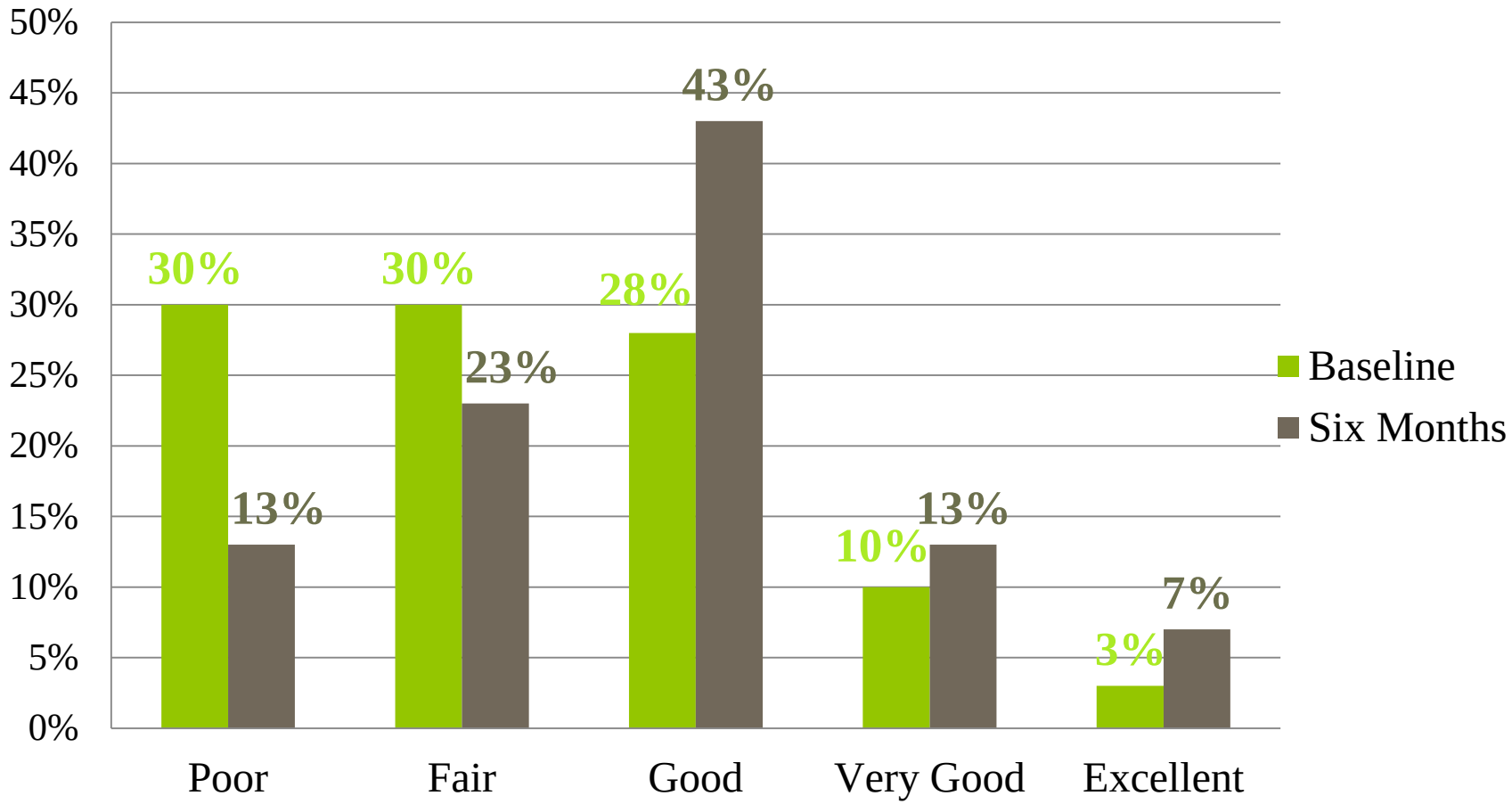
- **# of clients not enrolled a full year (too early to collect): 31**

Self-Reported Health Status at Time of Enrollment N=60



Health Status at Baseline and at Six Months

Baseline N=71; Six months N=30



Hospital ED Visits

(findings based on 20 participants)

Pre Enrollment:

20/20 = **100%** of participants entered the ED before enrolling in the HEU Grant.

Post Enrollment:

17/20 = **85%** of participants entered the ED after enrolling in the HEU Grant.

Brian

Enrolled: June 2012

Visits: pre-enrolled 87, post-enrolled 42

Brian's story

- 68 year old born in Providence
- Never married; no children
- No family relationships
- Loves historical trivia
- Started drinking at 18, 2 pints of alcohol daily
- Homeless for 50 plus years
- ***Hypertension, insomnia, excessive episodic drinking***
- Unable to find stable housing due to ETOH abuse and history
- Behavior while intoxicated disrupts receipt of services
- 52% decrease in ED visits

Little things matter

- 59 encounters in 12 months
- Daily meeting with case manager
- Connected with: Primary Care, FOH, Detox, Safe Havens, La Belle & country estates
- Advocated extended detox stays
- Helped with bus passes, cab vouchers, clean clothes, hygiene supplies, showering at clinic
- Assisted with representative payee
- HEU paid for professional haircut and shave
- Passed away sober with dignity, surrounded by people who cared
- Buried at family's plot at brother's request

Latasha

Enrolled: July 2012

Visits: pre-enrolled 46, post-enrolled 12

Latasha's story

- 49 year old born in NC
- One son; parents deceased; siblings unknown
- Cousin has custody of her son
- Completed 12th grade
- Past experience working as housekeeper and CAN
- ***Substance abuse (alcohol), Hepatitis C, hypertension, depression***
- 74% decrease in ED visits

Little things matter

- 20 encounters in 12 months
- Always reached out to case manager when struggling with sobriety
- Advocated for her at doctor appointments, FOH, and food stamps
- Referred her to Future Works where she is training for future employment skills
- Helped come up with a sobriety plan
- Social Services counselor used LAOCI to create a recovery tool(**?)** box

Jose

Enrolled: July 2012

Visits: pre-enrolled:18; post-enrolled: 0

Jose's story

- 50 years old
- Parents deceased
- One daughter and two grandchildren
- One year of college
- Worked in restaurants when he was younger
- ***History of hypertension, seizures, schizophrenia, insomnia and drug abuse***
- Living at the shelter
- 100% decrease in ED visits

Little things matter

- 79 encounters in 12 months
- Worked on relationship with family
- Met with him daily at Loaves and Fishes to establish trust and dependency
- Connected him with different agencies
- Coordinated to work with case managers from Lighthouse to help him get housed
- HEU helped furnish apartment and make doctor appointments.
- HEU purchased school supplies & Christmas gifts for grandchildren
- Continues to work on importance of family responsibility

Rose

Enrolled: July 2012

Visits: pre-enrolled: 19; post-enrolled: 0

Rose's story

- 68 year old grandmother
- 2nd grade education; illiterate in Spanish and English
- Released from prison after 20 years
- No social security card, Medicaid, or housing
- ***Struggled with PTSD, panic attacks, and hypertension***
- 100% decrease in ED visits

Little things matter

- 14 encounters in 12 months
- Gave her resources: primary care, mental health services in Spanish and dental care
- Helped build relationships with her biological son and daughter
- Assisted with referrals to outside service providers
- Enjoys time with grandchildren and has a room at daughter's house
- HEU helped furnish that room

Bob

Enrolled: September 2012

Visits: pre-enrolled: 30; post-enrolled: 14

Bob's story

- 51 year old man
- Born and raised in Springfield, MA
- High School education
- Played Youth Hockey
- "I practically grew up at the Y"
- Worked as a CNA and custodian
- History of frequent falls with head injuries
- ***Hypertensive, anemic, alcohol dependency, severe depression over passing of parents***
- Moved into transitional housing March 2012
- Evicted after being housed 19 months
- Non-compliant with medical appointments
- 53% decrease in ED visits

Little Things Matter

- Met at least one time a week since Sept 2012
- First year of intervention: total encounters 53, total case management 105 (1:1, case coordination with other agencies, attempts to locate client)
- Provided education about and encourage him to attend AA, YMCA Mocha, Lighthouse, sober community events
- Encouraged him to stay away from triggers
- Assistance with making appointments
- Accompanied him to primary care appointments
- Met him at the ED and advocated for discharge coordination
- Advocated to get him into detox, providing cab voucher & meeting him there each time.
- Advocacy & collaboration with area homeless service providers on his behalf
- Gave bus passes, new sneakers, blanket, pocket dictionary
- Assisted him with building a budget and encouragement to stick to it
- Celebrated 50th birthday with card and small gift
- ***"I like working with you because you don't nag me, you treat me with respect".***

John

Enrolled: September 2012

Visits: pre-enrolled: 8; post-enrolled: 2

John's story

- 53 year old man from Springfield, MA
- 11th grade education
- Worked in restaurant industry for many years
- Became homeless after argument with roommate
- Homeless for 6 months, staying on friends' couches, various shelters, crisis, and streets
- ***COPD, neuropathy, emphysema, history of rectal cancer, GERD, knee problems, gallstones, liver masses, bilateral hip degeneration, hypertension, anxiety, clinical depression, seizure disorder, high cholesterol, urinary incontinence, sleep apnea***
- Walked with cane due to chronic pain
- Medical appointments increased anxiety
- Unable to name providers or specialists
- No cohesive care coordination between providers/specialists
- 75% decrease in ED visits

Little things matter

- Met since Sept 2012; once a week
- First year of intervention: total encounters 79, total case management 123 (1:1, case coordination with other agencies, attempts to locate client.)
- Assisted with housing applications, apartment hunting, & reference letter for housing
- Referred for financial assistance for move-in expenses
- Referral to agencies for free household supplies & Bob's Furniture Charitable Foundation for furniture
- Assistance with making appointments and bus passes
- Wal-Mart gift card
- Coordination with providers to assist with understanding of diagnosis, tests, treatment options
- Provided educational material on medical needs to decrease anxiety
- Assisted with finding new provider
- Assisted with filling prescriptions & understanding medical billing
- Pain decreased significantly; discontinued use of cane
- Was able to decrease mg?? of some medications and discontinue others throughout the year.

Helga

Enrolled: October 2013

Visits: pre-enrolled: 22; post-enrolled: 12

Helga's story

- 53 year old; born in Germany
- No family support
- Homeless over 4 years
- ***History of depression, bi polar, PTSD, and acute anxiety***
- Lack of trust issues
- Difficult to engage with
- Multiple legal issues
- 45% decrease in ED visits

Little things matter

- 106 encounters in 12 months
- Met with her daily
- Difficult to build a trusting relationship
- Resistant to receive HEU services; social services counselor had lunch with her and was able to build trust
- Provided resources for help with primary care & mental health services
- Provided socks, hygiene supplies, bus passes
- Moved into single-room occupancy
- HEU helped furnish room with sheets, lamps, pictures
- Able to pay rent and be responsible

Hospital Admissions

(Findings based on 20 participants)

Pre Enrollment:

15/20 = **75%** of clients went to the hospital before enrolling in the HEU Grant.

Post Enrollment:

11/20 = **55%** of the clients went to the hospital after enrolling in the HEU Grant.

Brian

Enrolled: June 2012

Pre Enrollment: 6

Post Enrollment: 2

- **67% decrease** in hospital visits from a year before entering the program to a year after

Bob

Enrolled: September 2012

Pre Enrollment: 5

Post Enrollment: 0

- **100% decrease** in hospital visits from a year before entering the program to a year after

Emergency Department Visits *(5 hospitals)*

Client	Pre ED	Post ED	%
Brian	87	42	52
Latasha	46	12	74
Sally	15	9	40
Sofia	4	4	0
Kristin	4	1	75
Jose	18	0	100
Reuben	13	7	46
Jake	5	0	100
Rose	19	0	100
Frank	7	5	29

Client	Pre ED	Post ED	%
Denzel	15	11	27
Barbara	8	14	75(↑)
Peter	14	13	7
Tom	7	15	114(↑)
Bob	30	14	53
Allen	5	3	40
John	8	2	75
Kevin	1	4	300(↑)
Phil	5	2	60
Helga	22	12	45

Acute Care Admissions

Client	Pre Admit	Post Admit	%
Brian	6	2	67
Latasha	1	0	100
Sally	2	1	50
Sofia	0	0	0
Kristin	1	0	100
Jose	2	0	100
Reuben	7	7	0
Jake	0	0	0
Rose	2	0	100
Frank	3	1	67

Client	Pre Admit	Post Admit	%
Denzel	2	2	0
Barbara	5	7	40(↑)
Peter	1	0	100
Tom	3	4	33(↑)
Bob	5	0	100
Allen	0	1	100(↑)
John	1	1	0
Kevin	0	1	100(↑)
Phil	1	0	100
Helga	0	0	0

Data from Providence Behavioral Health

Client	Pre Providence	Post Providence	%
Brian	6	1	83
Latasha	0	0	0
Sally	0	0	0
Sofia	0	0	0
Kristin	0	0	0
Jose	0	0	0
Reuben	0	2	100(↑)
Jake	0	0	0
Rose	0	0	0
Frank	0	0	0

Client	Pre Providence	Post Providence	%
Denzel	3	2	33
Barbara	0	0	0
Peter	0	0	0
Tom	0	0	0
Bob	0	0	0
Allen	0	0	0
John	0	0	0
Kevin	0	0	0
Phil	0	0	0
Helga	0	1	100(↑)

Frequency and Total Cost of ED Visits

Total difference in cost: $92,916

Client	Pre Enrollment	Post Enrollment	%
Brian	87 $49,590	42 $23,940	52 $25,650
Latasha	46 $26,220	12 $6,840	74 $19,380
Sally	15 $8,550	9 $5,130	40 $3,420
Sofia	4 $2,280	4 $2,280	0
Kristin	4 $2280	1 $570	75 $1,710
Jose	18 $10,260	0	100 $10,260
Reuben	13 $7,410	7 $3,990	46 $3.420
Jake	5 $2,850	0	100 $2,850
Rose	19 $10,830	0	100 $10,830
Frank	7 $3,990	5 $2,850	29 $1,140

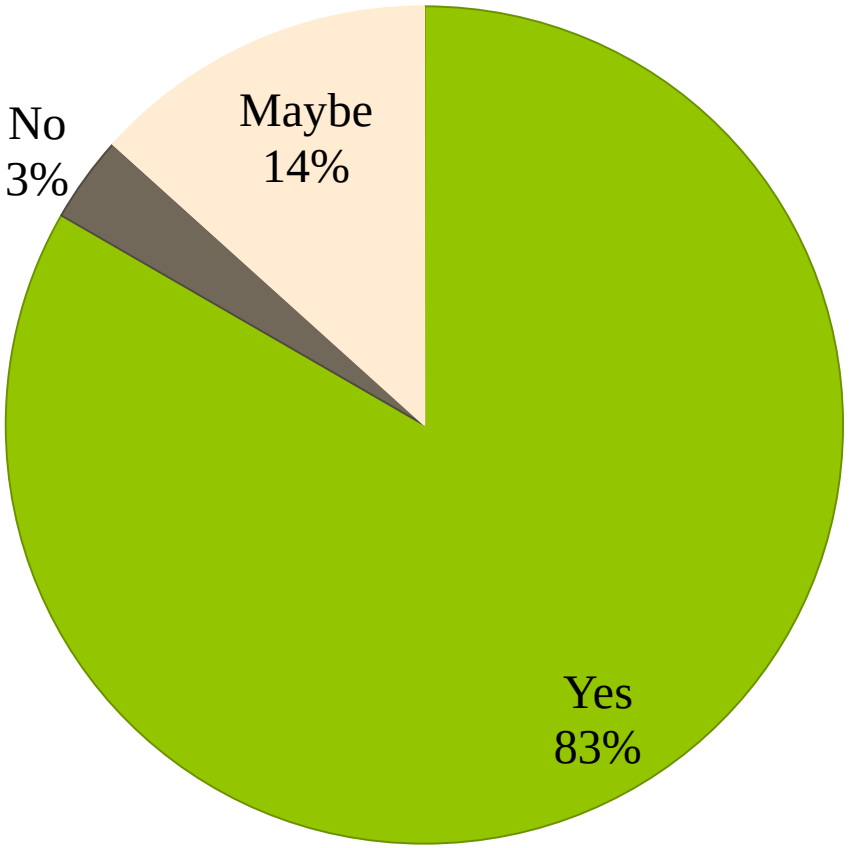
Client	Pre Enrollment	Post Enrollment	%
Denzel	15 $8,550	11 $6,270	27 $2,280
Barbara	8 $4,560	14 $7,980	75(↑) + $3,420
Peter	14 $7,980	13 $7,420	7 $570
Tom	7 $3,990	15 $8,550	114 (↑) +$4,560
Bob	30 $17,100	14 $7,980	53 $9,126
Allen	5 $2,850	3 $1,710	40 $1,140
John	8 $4,560	2 $1,140	75 $3,420
Kevin	1 $570	4 $2,280	300(↑) + $1,710
Phil	5 $2,850	2 $1,140	60 $1,710
Helga	22 $12,540	12 $6,840	45 $5,700

A Cost-Benefit Analysis…

Total Difference/Cost Reduction: $305,553

Client	ED Pre	ED Post	Acute Pre	Acute Post	Prov Pre	Prov Post
Brian	$49,590	$23,940	$76,800	$28,800	$79,700	$21,207
Latasha	$26,220	$6,840	$4,800	0	0	0
Jose	$10,260	0	$12,000	0	0	0
Rose	$10,830	0	$16,800	0	0	0
Bob	$17,100	$7,980	$81,600	0	0	0
John	$4,560	$1,140	$2,400	$2,400	0	0
Helga	$12,540	$6,840	0	0	0	0
Total	$131,100	$46,740	$194,400	$31,200	$79,700	$21,207
Post Difference		**$84,360**		**$163,200**		**$57,993**

Participants' Satisfaction with Program
N= 60



Would you recommend this program to a member of your family or a friend?

Who is Likely to Succeed in the Program?

Participant likely to have success in the program:

- is female
- has a primary care provider
- spent the previous night in a shelter
- is looking for work
- had a high number of ED visits in the previous year

Unique Features of the Program

- Intensive and highly-focused case management
- Primary care connection
- Multi-disciplinary team: *case management*, *primary care*, *mental health care*
- Housing connection
- Grant funding & patient services account
- Multi-hospital (regional) cooperation
- Overall community connection
- Hospital-university collaboration

Thank You!

Presenters' Contact Information

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