



American Hospital  
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*2017 Webinar Series*

# The presentation will begin shortly.

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*2017 Webinar Series*

# Housing and the Role of Hospitals

September 21, 2017

## **Speakers:**

- Margo Quiriconi, Director of Community Health Initiatives, Strategic Planning, Children's Mercy Kansas City
- Stephen B. Brown, Director of Preventive Emergency Medicine, Department of Emergency Medicine, University of Illinois Hospital and Health Sciences System
- Moderator: Vincent Tufo, Chief Executive Officer, Charter Oak Communities

# Lead, Bugs, Rent, Mold and Beyond: Housing and Children's Health

Margo Quiriconi

Director, Community Health Initiatives



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# Ahead of Their Time...

## Founded in 1897



Alice Berry Graham



Katharine Berry Richardson

# The Region's Pediatric Health System of Choice



- 367 beds
- 352,286 outpatient visits
- 191,500 ER/UC visits
- 14,190 admissions
- 20,188 surgeries
- 5,586 transport

# Health happens where children live, learn, play





# Why is Housing Important?

- Epicenter of stability for a family
- Source of health
- Address for mail
- Residency for school

# How Housing Affects Children's Health

- Poor housing conditions increase the risk of severe ill- health and/or disability during childhood.
- Children living in poor or overcrowded conditions are more likely to have respiratory problems, to be at risk of infections, and have mental health problems.
- Children who are homeless are sick more often than other children.
  - Have twice as many ear infections, five times more gastrointestinal problems and are four times more likely to develop Asthma
- Housing costs may produce parental stress and leave limited resources to meet children's health and developmental needs.
- Violence, neighborhood safety and resource-poor environments may have an impact on mental health, physical activity and weight.

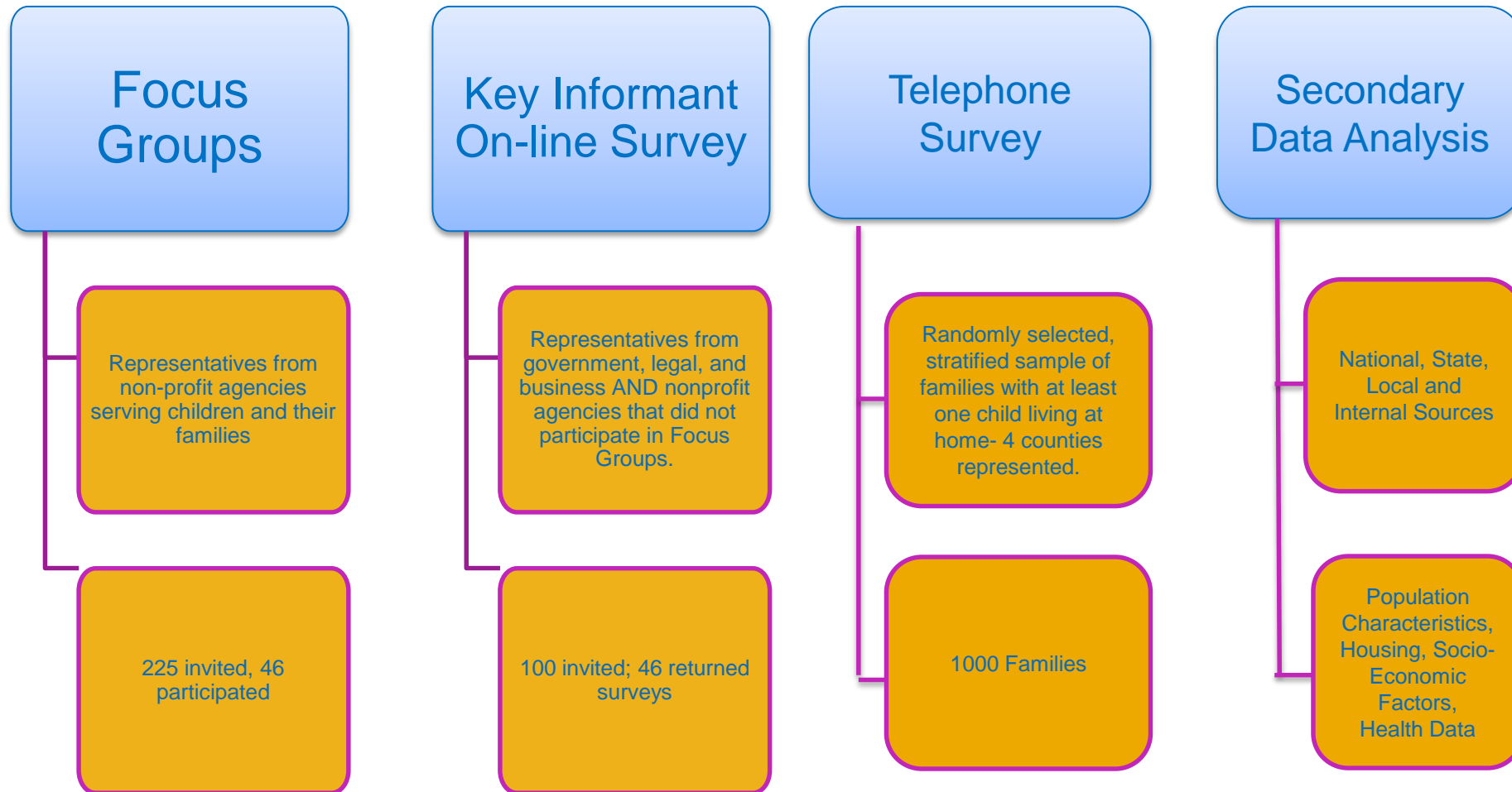


# Children's Mercy Programs/Initiatives that Address Housing

- Community Health Needs Assessment
- Determinants of Health Screening
- Center for Community Connections
- Intimate Partner Violence Program
- Section on Toxicology and Environmental Health

# CHNA Methodology-2016

Incorporated questions related to housing across all areas



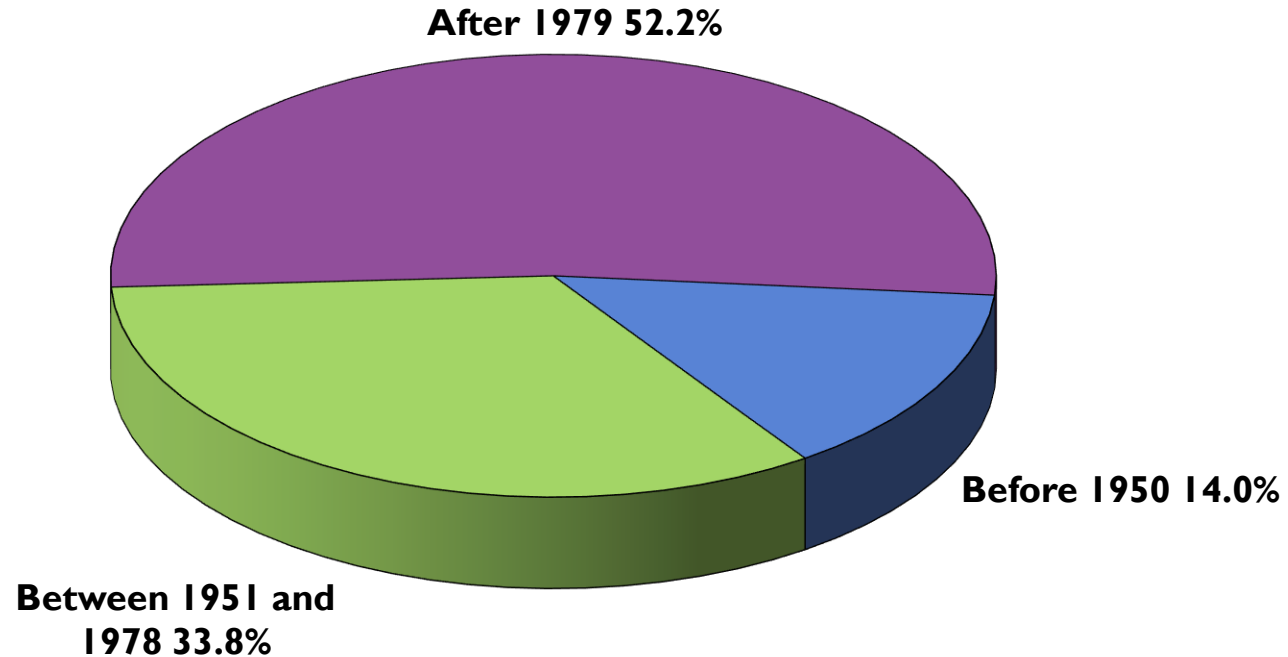


# Housing Conditions and Low Income Children

- Approximately 50% of very low-income families live in homes built before 1950.
- Low-income black and Hispanic children in Jackson and Wyandotte County are most likely to have gone without electricity, hot water or heat in the past year.
- Low-income black children are more likely to live in homes with peeling paint, long lasting stale odor or water leaks or flooding.

## Year Home was Built

(Johnson & Wyandotte Counties, Kans. and Clay & Jackson Counties, Mo., 2015)



Notes: • Children's Mercy Hospital Community Health Needs Assessment, 2016. [www.childrensmc.org/About/Us/Community\\_Health\\_Assessment](http://www.childrensmc.org/About/Us/Community_Health_Assessment)  
• Asked of all respondents about a randomly selected child in the household.

Source: • 2015 PRC Child & Adolescent Health Survey-Kansas City, Professional Research Consultants, Inc. [Items 326-333]

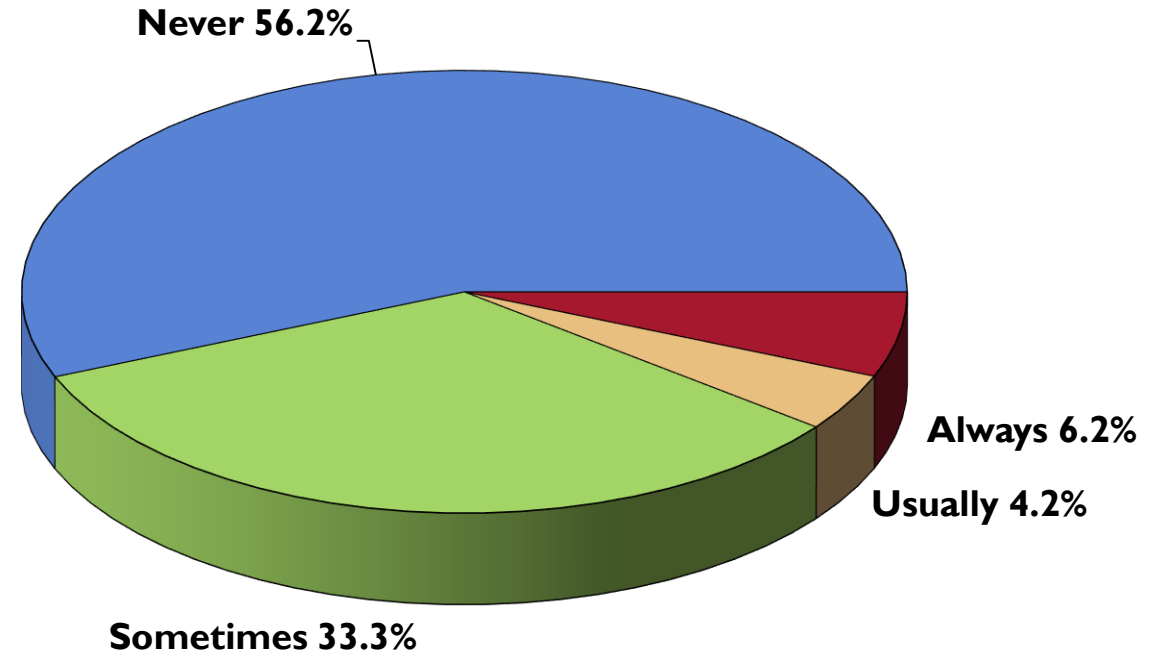
# Housing Instability

- 16.2% of area families moved residences at least once in the past year
- Over 6,900 children (5 – 18 years of age) in the Kansas City region, met the McKinney-Vento homeless definition.

Source: 2015 PRC Child & Adolescent Survey-Kansas City and The State of Children's Health, 2016  
Community Health Needs Assessment for the Kansas City Region, Children's Mercy

# How Often Worried or Stressed about Having Money for Rent or Mortgage Payment

(Johnson & Wyandotte Counties, Kans. and Clay & Jackson Counties, Mo., 2015)



Notes: • Children's Mercy Hospital Community Health Needs Assessment, 2016. [www.childrensmercy/About.Us/Community\\_Health\\_Assessment](http://www.childrensmercy/About.Us/Community_Health_Assessment)  
• Asked of all respondents about a randomly selected child in the household.

Source: • 2015 PRC Child & Adolescent Health Survey-Kansas City, Professional Research Consultants, Inc. [Items 326-333]



# The Built Environment



- Far too many children live in neighborhoods with:
  - Vacant properties
  - Poorly kept housing
  - High levels of Vandalism
  - Litter and loose garbage

2015 PRC Child & Adolescent Health Survey-Kansas City

# Screening for Determinants of Health

- Children's Mercy Pediatric Care Center
- Screening for determinants of health with the SEEK Tool-Safe Environment for Every Kid
- Assessed at all visits
- Resources given and/or social worker consulted for positive screen and/or referral to Center for Community Connections

# I-HELP Screening (inpatient settings)

I	Income & Insurance
H	Hunger, Housing Conditions, and Homeless
E	Education & Ensuring Safety (Violence)
L	Legal Status (Immigration)
P	Power of Attorney & Guardianship

# H

## Housing (Poor Conditions, Evictions, & Homelessness)

- **Do you have any concerns about having enough food?**
  - **Have you ever worried whether your food would run out before you have money to buy more?**
  - **Within the past year, has the food you bought ever not lasted and you didn't have money to get more?**
- ▪ **Do you have any concerns about poor housing conditions such as *mice, mold, or cockroaches*?**
- ▪ **Do you have any concerns about being evicted or not being able to pay the rent?**
- ▪ **Do you have any concerns about not being able to pay your mortgage?**

# Center for Community Connections

- Goal: To reduce barriers to accessing and engaging in pediatric health care
- Intensive navigation of resources within Children's Mercy and in their own community, housing and utilities in the top five issues of concern
- Medical Legal Services on-site

# Intimate Partner Violence Program

- The Intimate Partner Violence Program provides multiple opportunities for access to resources *at the right time*
- Key program components
  - Passive educational cues
  - Universal education and screening
  - Social Work consultation
  - Domestic Violence Shelter on-site

**Everyone deserves a safe, caring home.**



**There is Hope.  
There is Help.**

*Do you ever feel like you or your children aren't safe at home?*

*Do you worry that someone you know isn't safe at home?*



# Section on Toxicology and Environmental Health

- Healthy Homes Program
  - Healthy home assessment, coaching by phone or in person, and referrals to community services
  - Target population: Asthma, Immunocompromised, Blood Lead level, complex medical conditions
- Lead Poisoning Prevention Home Assessment Program for Kansas
- Pediatric Environmental Health Specialty Unit, Region 7 collaboration
- Education and Training Programs
  - Community health workers, shelter case workers, neighborhood associations, environmental organizations, etc.



# In Progress

- OneTouch KC Pilot
  - Common intake, referral and follow-up to address housing issues
- Universal Screening tool for Determinants of Health Screening across system
- CHNA 2018
  - Identify opportunity areas

*“The connection between health and the dwelling of the population is one of the most important that exists.”*  
*Florence Nightingale*

For further information contact:

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# healthcare & homelessness

A deadly, dangerous and underreported social condition

Stephen Brown MSW LCSW PMP  
Director, Preventive Emergency Medicine  
University of Illinois Hospital & Health Sciences System

# healthcare & homelessness: agenda



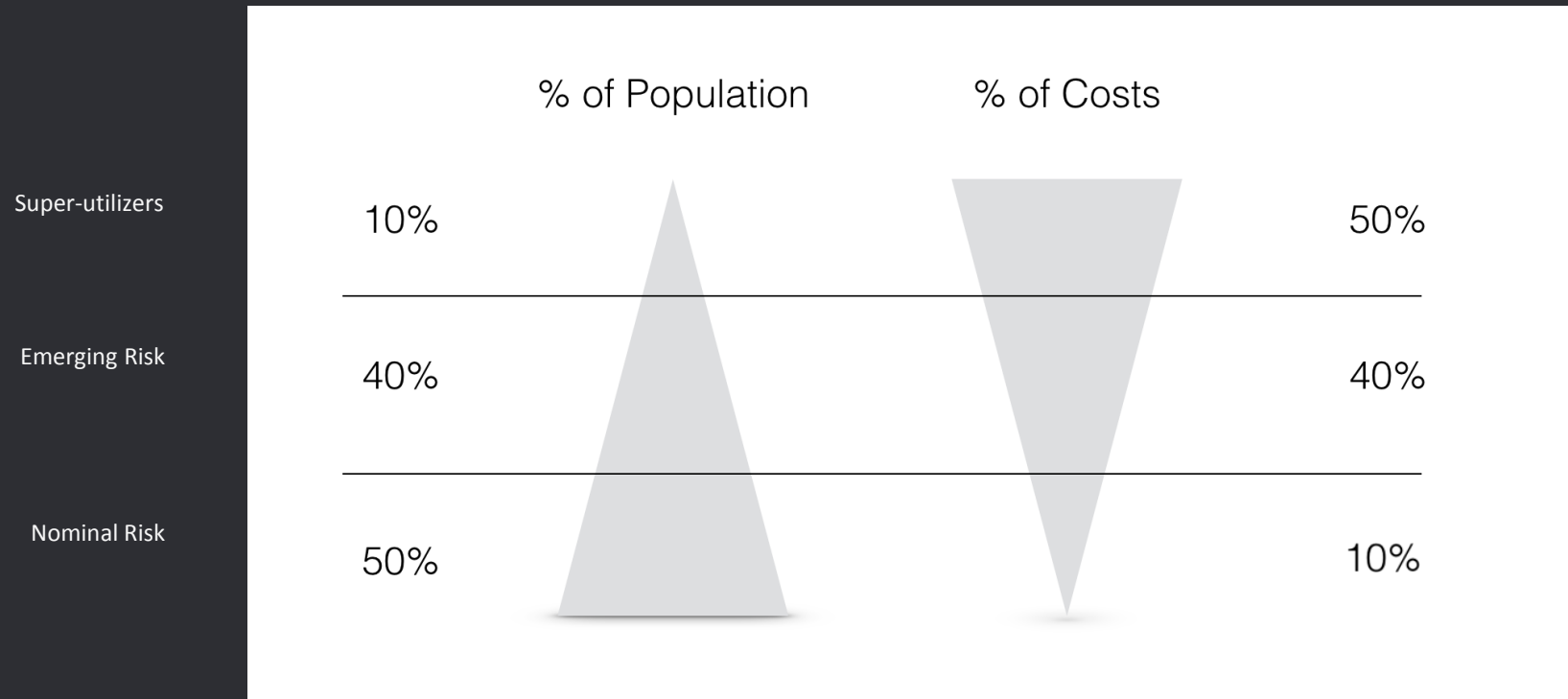
- *A Population/Public Health Perspective*
  - *Homelessness in Chicago*
- *Public sector costs & utilization*
- *What is Housing First?*
- *The Better Health Through Housing Program*
- *Lessons learned*
  - *Homelessness is a dangerous health condition*
  - *The homeless are invisible in healthcare*
  - *Exorbitant healthcare cost & utilization*
- *Towards Collective Impact*

melessness

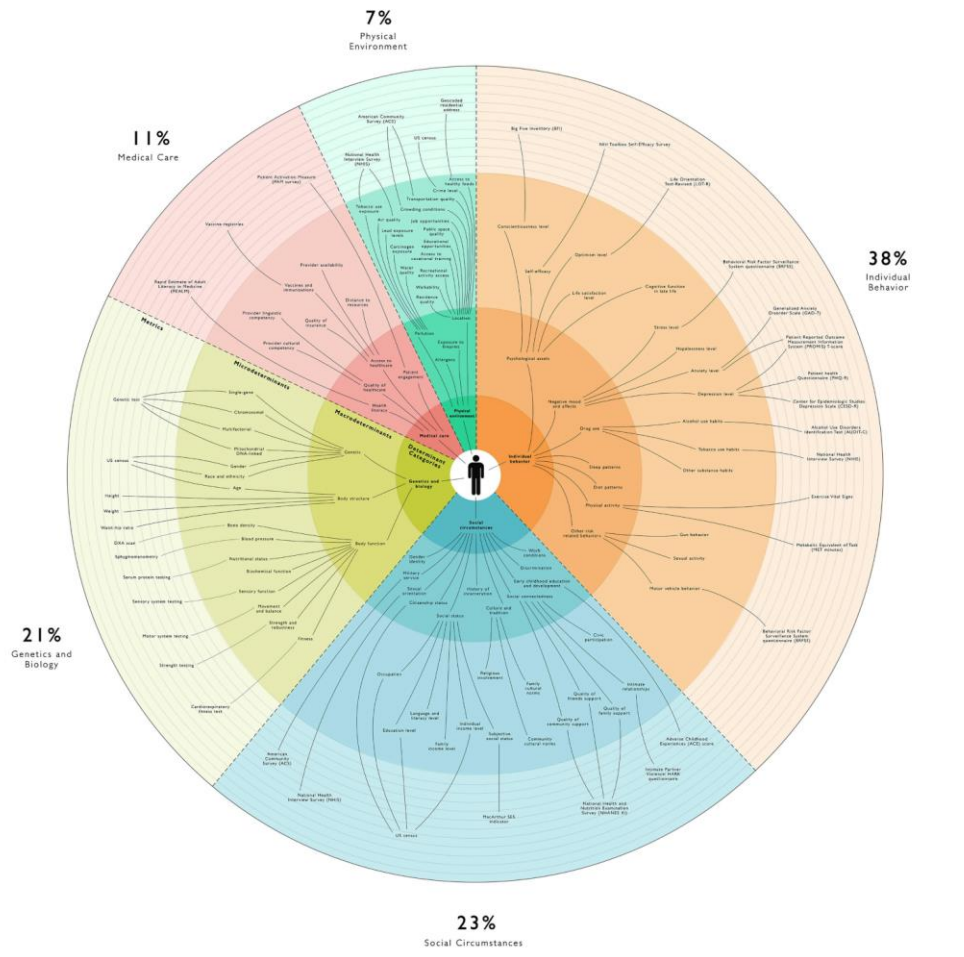
# POPULATION HEALTH PERSPECTIVE

The Chronically Homeless population follow a **Power-Law Distribution**

A minority of patients accumulate most of the cost & utilization  
In Illinois and other states, 5% of Medicaid patients make up 48% of the cost



# social determinants



*Health is more than great medical care*

Where you live, what schools you attended, your parents style of upbringing, the presence of mental illness or substance abuse, access to healthy food, the neighborhood, the environment, access or limitations to healthcare, all affect health

*“We found that many of the chronically homeless came from households where one or both of the parents suffered from mental illness and/or substance abuse”*





## Chicago: ranked 11<sup>th</sup>

Lagging behind other U.S. cities in a coordinated, multi-sector strategy



Measured two ways

*Annually: Estimated to be ~125,000*

*Point-In-Time: Every January: 5,833*

*Undercount in some west and south side community areas: "Abandoniums"*



The highest concentrations of homelessness are in:

- Loop (9.7% of all homeless)
- Uptown (9.4%)
- Near Northside (8.4%)
- Near Westside (7.8%)
- Lower South Loop (6.8%)

Source: Chicago Department of Family and Support Services (DFSS), Annual Point In Time Count (7/17)



# Typology

## The 3 types of homelessness

A time-oriented classification of the homeless, based upon the length of time they have been homeless.



Both individuals (48%) and families (52%) who become homeless due to a housing, health care, or other financial crisis. They come into the shelter system and stay about three months and often move into housing. **50% are homeless less than 7 days.**

80%

Transitional

More individuals than families who regularly go in and out of shelters. They tend to be younger and leave shelters when they get income, or use shelters seasonally. **31% of foster care children who age-out** of the system will be homeless in their twenties

10%

Episodic

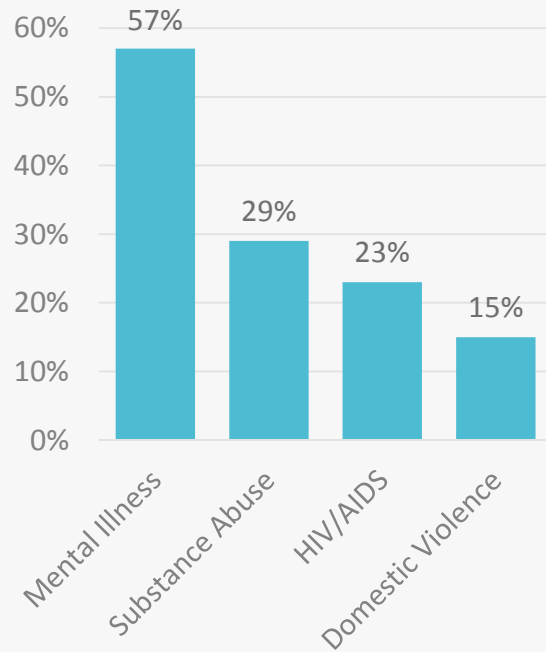
Primarily individuals who have been homeless for a year or more, or four times in the last three years. They tend to be older with significant mental illness, substance abuse and many have a chronic medical condition(s).

10%

Chronic

## Why is their homelessness?

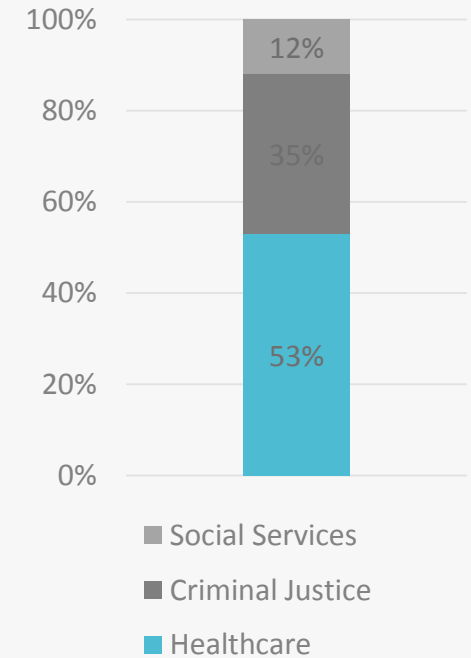
### Population Characteristics



The episodic & chronically homeless have high rates of mental illness & substance abuse

- A lack of a comprehensive, unified, coordinated strategy cause homeless persons to remain homeless, who then become vulnerable to injury and the development of poorly managed chronic
- Housing prices: Trending over 30% of disposable income

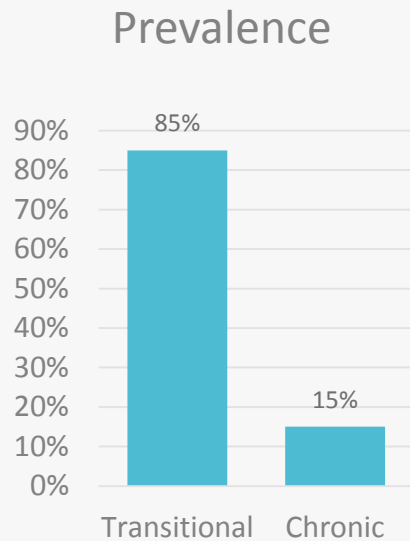
### System Response



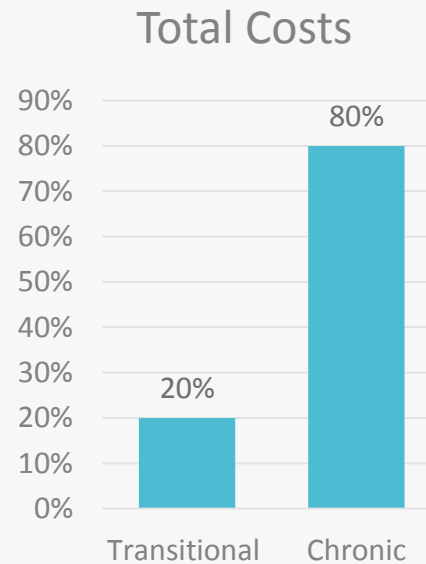
# The chronically homeless have very high public sector costs

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Among all homeless, the chronically homeless make up 10-20% of the general population...

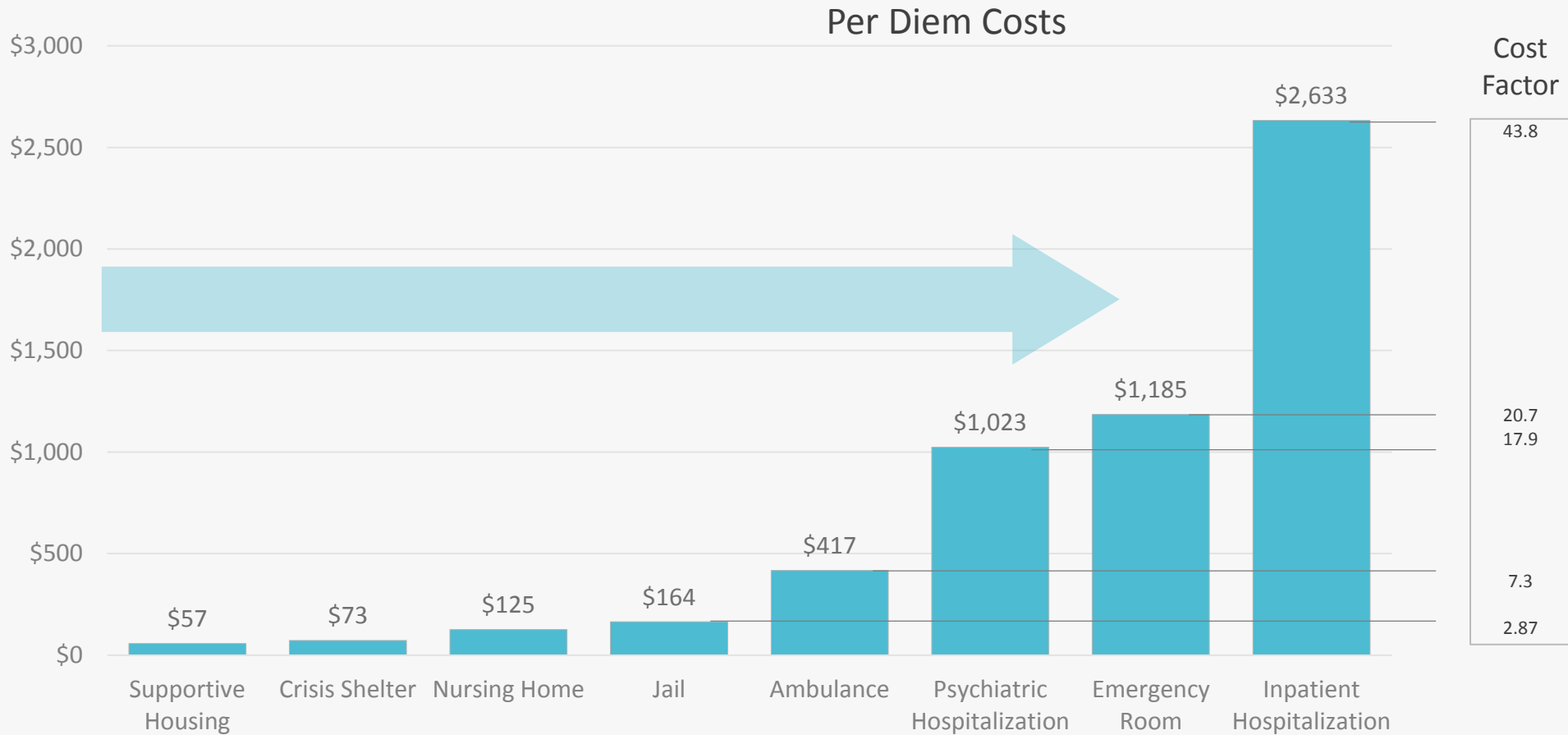


...Yet account for nearly 80-90% of the total cost of services to the entire population



*"We've found that chronically homeless people, who are about 12% of the homeless population, make up 80% of the total government costs spend, from emergency room visits to jail time... We are wasting a huge amount of money in this country keeping these people homeless."*

Jack Maguire, Director of Communications for the 100,000 Homes Campaign.



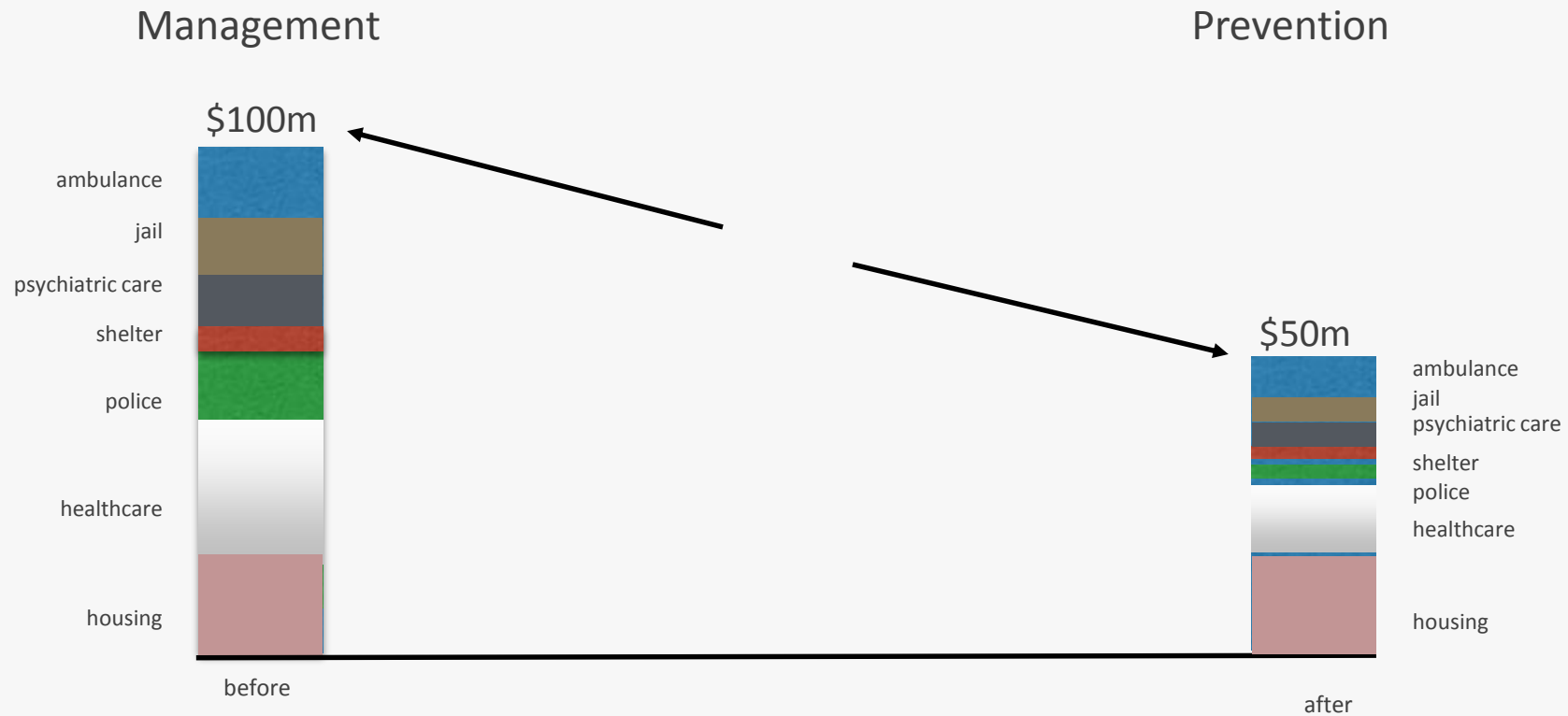
*“It would cost us 1/3 to a 1/2 of what we now spend collectively on the homeless if we simply gave them a place to live.”*

*Sam Tsemberis – Pathways to Housing, NYC*

**Fragmented, uncoordinated silos shift costs to the most expensive public facilities.**

# Resulting in a wasteful, inefficient use of public resources

Other cities have found it is a third to twice as expensive to manage homelessness than to prevent it



How do we reduce costs while increasing access to supportive housing?

# What is Housing First?

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Housing First is a process and a philosophy that prioritizes providing people experiencing homelessness with permanent housing as quickly as possible – along with supportive services.

Housing First does not require residents to undergo psychiatric treatment or maintain sobriety prior to obtaining housing. Vulnerable clients can more easily engage in services and address their chronic medical conditions once they are no longer dealing with the chaos of homelessness.

- Scattered site housing
- 1-bedroom, independent housing. Not a group setting
- 1/3 of income, no matter what the income
- **Supportive case management** that helps participant learn how to do daily activities, assist them with medical appointments, pay bills, etc.

## EFFECTIVENESS

- 2-year housing retention is 80-90% (vs 20% for traditional methods)
  - 38-72% reduction in healthcare costs & utilization

**Source:** Sadowski LS, Kee RA, VanderWeele TJ, Buchanan D. Effect of a housing and case management program on emergency department visits and hospitalizations among chronically ill homeless adults: A randomized trial. JAMA. 2009 May 6; 301(17): 1771-1778.

# Better Health Through Housing

## 1<sup>st</sup> Cohort

### Program

- Partnership with Center for Housing & Health (CHH)
- Pilot to demonstrate a healthcare-to-housing Housing First model
- \$250,000 funding by hospital leadership
- Evaluating health, cost & utilization
  - CHH project manager with 28 supportive housing agencies
  - 125 one-bedroom units
  - 3 bridge unit providers (single room occupancy)
  - Scattered housing across city
  - HUD waiver allows UI Health to select patients to transition



### Patient Status

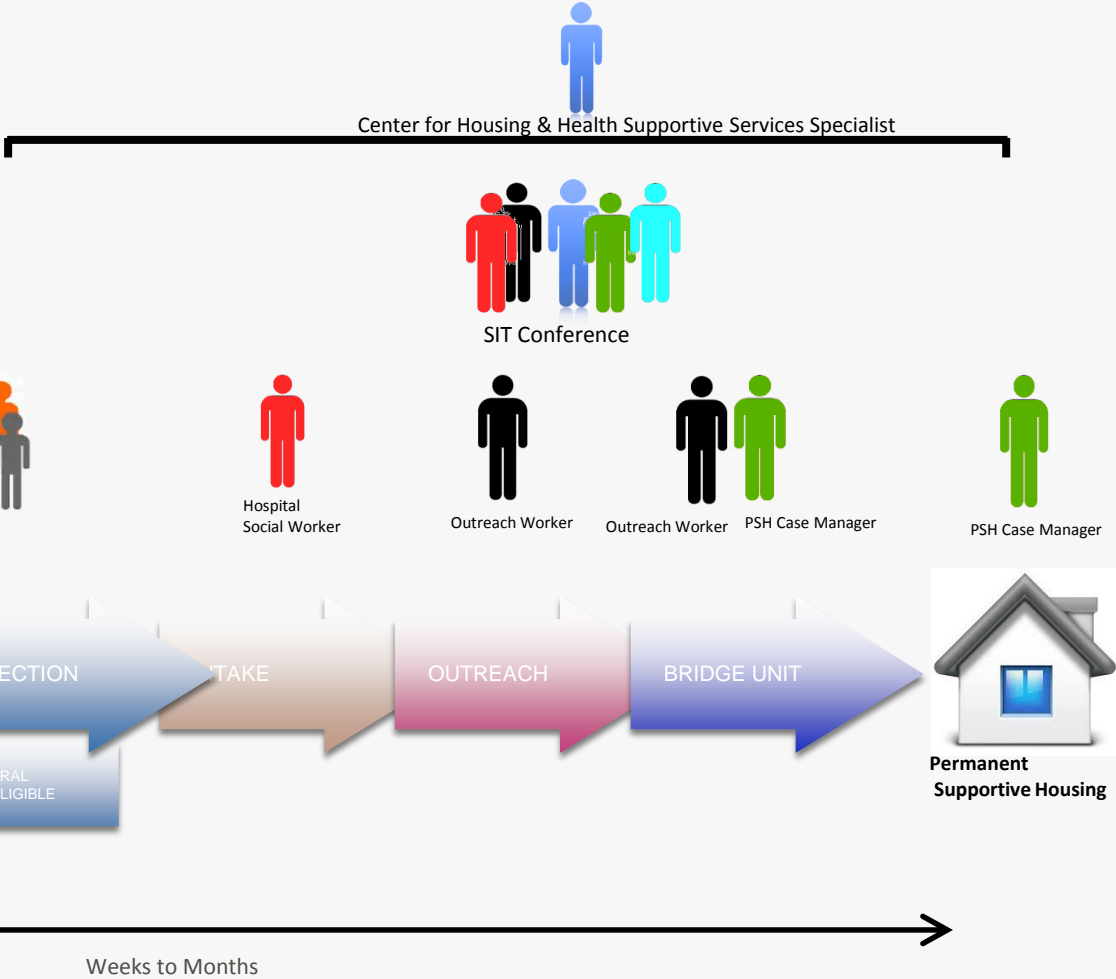
- 68% male, 32% female
- Age range: 28-63 years old, average is 53
- 60+ - patients reviewed by panel
  
- 27 - referred into the program
- 4 - deceased
- 1 - violated probation
- 2 - discharged, deemed incapable of independent living
- 1 – discharged, now in home hospice



# From A Hospital to A home

A Coordinated Interdisciplinary, Interagency Process

To successfully move chronically homeless patients into permanent supportive housing, **Care Transition**, not traditional hospital discharge, is required



The partnership includes UI Health, the Center for Housing and Health as the organizing agency, 27 supportive housing agencies and one outreach agency (Heartland Health)

## Lesson # 1:

Homelessness is a dangerous health condition.

health risks





The average life expectancy is 27.3 years less than the average American



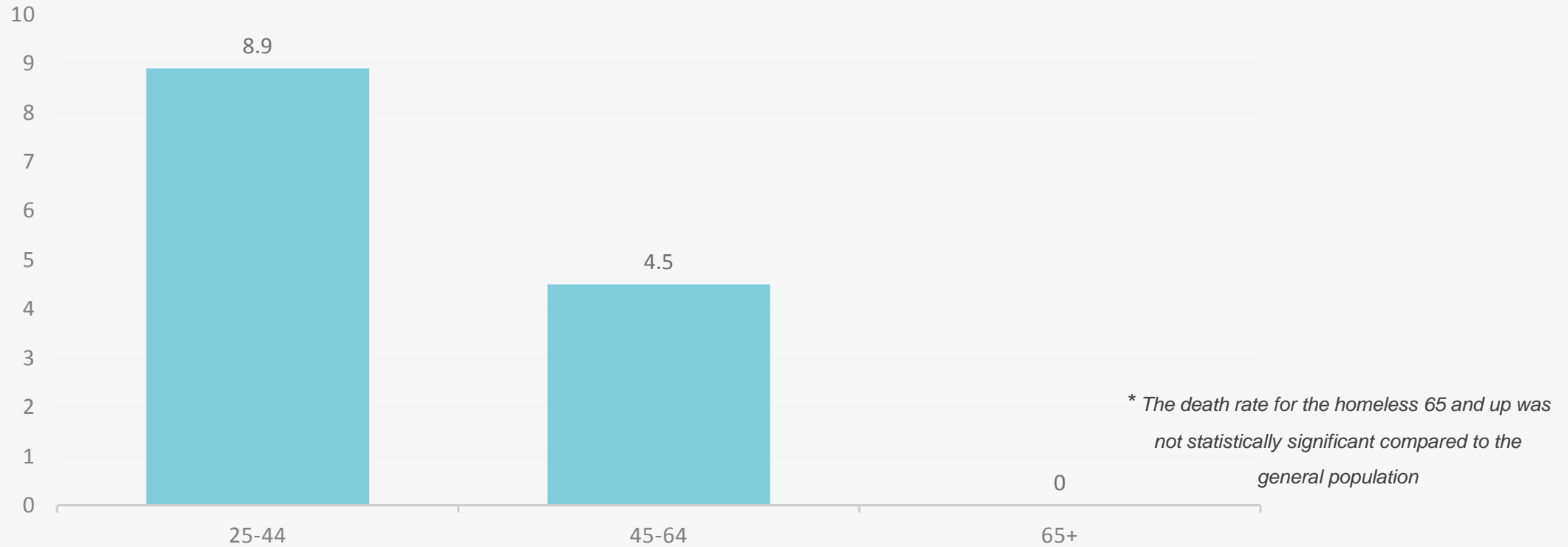
mortality

Source: Baggett TP, Hwang SW, O'Connell JJ, Porneala BC, Stringfellow EJ, Orav EJ, Singer DE, Rigotti NA. Mortality among homeless adults in Boston: Shifts in causes of death over a 15-year period. *JAMA Intern Med.* 2013 Feb 11; 173(3): 189-195.

# Mortality Risks

By Age Range

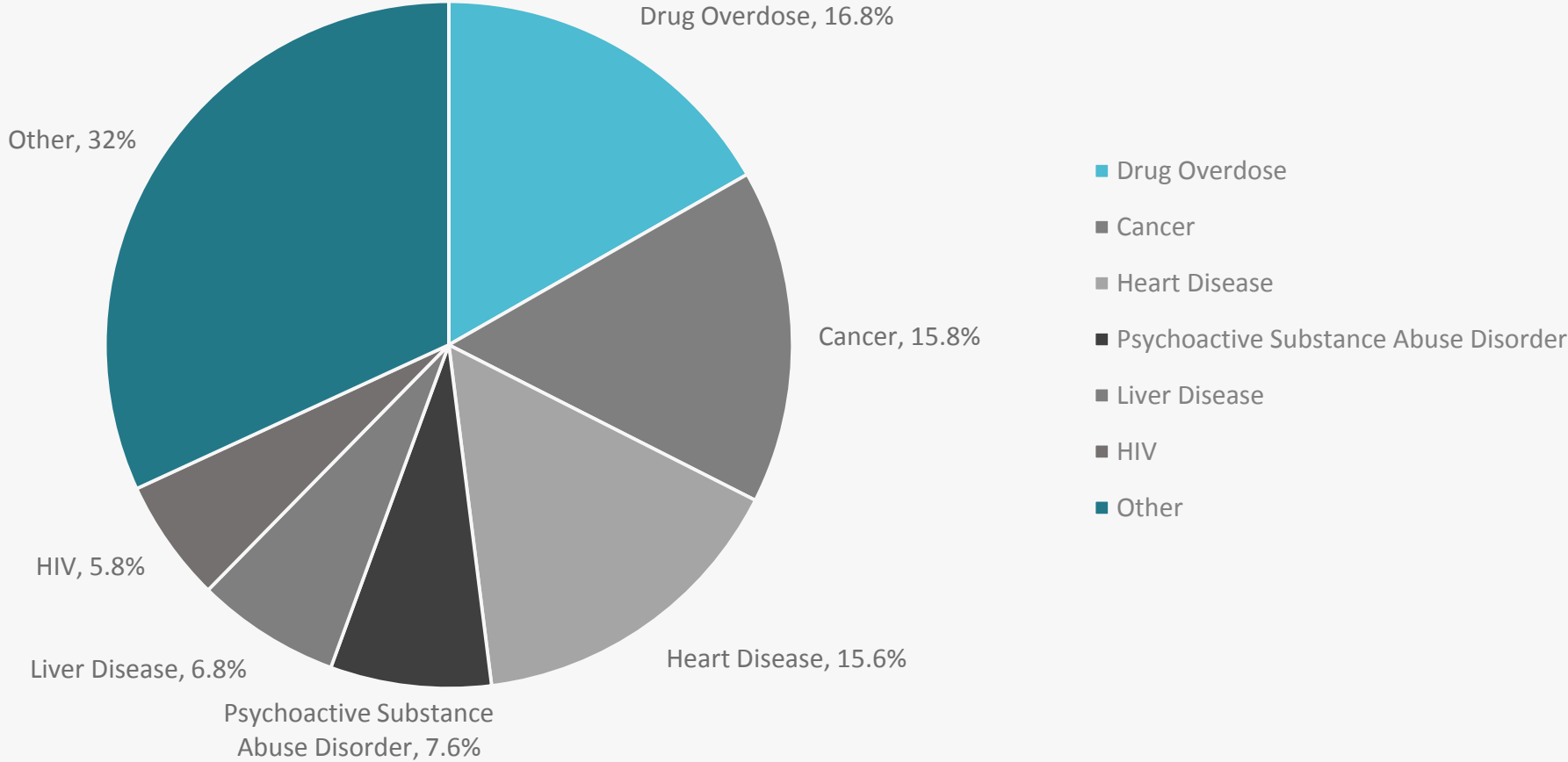
All-Cause Mortality Risk Compared to the General Population



Source: Baggett TP, Hwang SW, O'Connell JJ, Porneala BC, Stringfellow EJ, Orav EJ, Singer DE, Rigotti NA. Mortality among homeless adults in boston: Shifts in causes of death over a 15-year period. *JAMA Intern Med.* 2013 Feb 11; 173(3): 189-195.

mortality

# Causes of Death



causes

<sup>1</sup>Connell J. Homelessness and early death. Md Med. 2008 Autumn; 9(4): 38-40.

A photograph of a man walking in a snowy environment. He is wearing a dark, heavy winter coat with a hood that is pulled up over his head. The hood and his beard are covered in a layer of snow. The background is a blurred, snowy street with trees and a fence. The image is partially obscured by a white diagonal shape on the right side.

Those that have had frostbite  
have an 8x risk of early death



72% of the chronically homeless have neurocognitive deficits



Etiologies include severe mental illness, PTSD, uncontrolled seizure disorder, intellectual disability traumatic brain injury (TBI), dementia, hepatic encephalopathy, childhood lead poisoning.

Nearly 50% have evidence of severe traumatic brain injury

# cancer



## High rates of head & neck cancers



15.8% of all deaths

**Source:** Baggett TP, Chang Y, Porneala BC, Bharel M, Singer DE, Rigotti NA. Disparities in cancer incidence, stage, and mortality at boston health care for the homeless program. Am J Prev Med. 2015 Nov; 49(5): 694-702. PMID: PMC4615271.



A close-up photograph of a man with long, light-brown dreadlocks. He is wearing a dark hoodie and is in the process of smoking crack cocaine. He holds a small piece of clear, crystalline crack cocaine in a silver foil pipe in his mouth. In his other hand, he holds a lit blue lighter, with a flame visible. The background is dark and out of focus.

Early onset of COPD associated  
with smoking heroin

60% of crack cocaine users had  
asthma or COPD,  
20% had both

**Source: 1)** Walker PP, Thwaite E, Amin S, Curtis JM, Calverley PMA. The association between heroin inhalation and early onset emphysema. *Chest*. 2015 Nov; 148(5): 1156-1163.  
**2.)** Leece P, Rajaram N, Woolhouse S, Millson M. Acute and chronic respiratory symptoms among primary care patients who smoke crack cocaine. *J Urban Health*. 2013 Jun; 90(3): 542-551. PMID: PMC3665975.

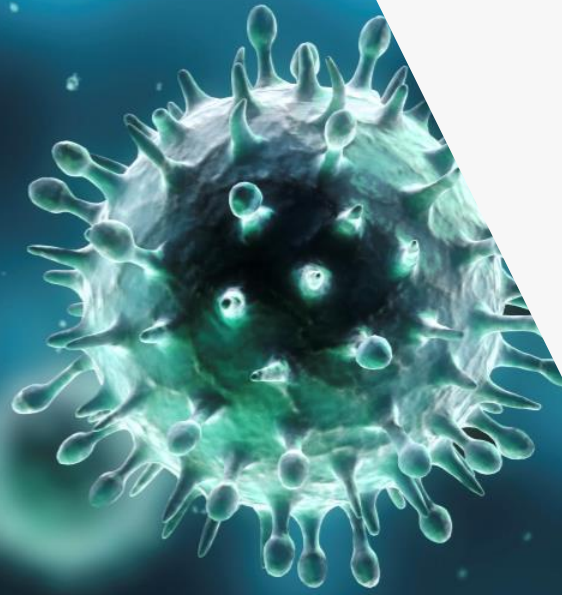


domestic viole

22-48% of homeless women report that domestic violence was the immediate cause of their homelessness.

**Source:** Shinn M, Weitzman BC, Stojanovic D, Knickman JR, Jimenez L, Duchon L, James S, Krantz DH. Predictors of homelessness among families in new york city: From shelter request to housing stability. Am J Public Health. 1998 Nov; 88(11): 1651-1657. PMID: PMC1508577

# Infectious disease



- HIV/AIDS rates are **3-9x** higher in the homeless than the stably housed
- 27% of homeless in LA screened positive for **hepatitis C**
- Tuberculosis prevalence in the homeless is **.2 to 7%**

#### Sources:

- 1) National Health Care for the Homeless Council (December 2012). In Focus: HIV/AIDS among Persons Experiencing Homelessness: Risk Factors, Predictors of Testing, and Promising Testing Strategies. Available at: [http://www.nhchc.org/wp-content/uploads/2011/09/InFocus\\_Dec2012.pdf](http://www.nhchc.org/wp-content/uploads/2011/09/InFocus_Dec2012.pdf).
- 2) 9 Beijer, U., Wolf, A., and Fazel, S. (November 2012). Prevalence of tuberculosis, hepatitis C virus, and HIV in homeless people: a systematic review and meta-analysis. The Lancet 12 (11): 859-870. Available at: [http://www.thelancet.com/pdfs/journals/laninf/PIIS1473-3099\(12\)70177-9.pdf](http://www.thelancet.com/pdfs/journals/laninf/PIIS1473-3099(12)70177-9.pdf).
- 3). Ibid

## Lesson # 2:

The homeless are  
invisible in  
healthcare.

Underreporting

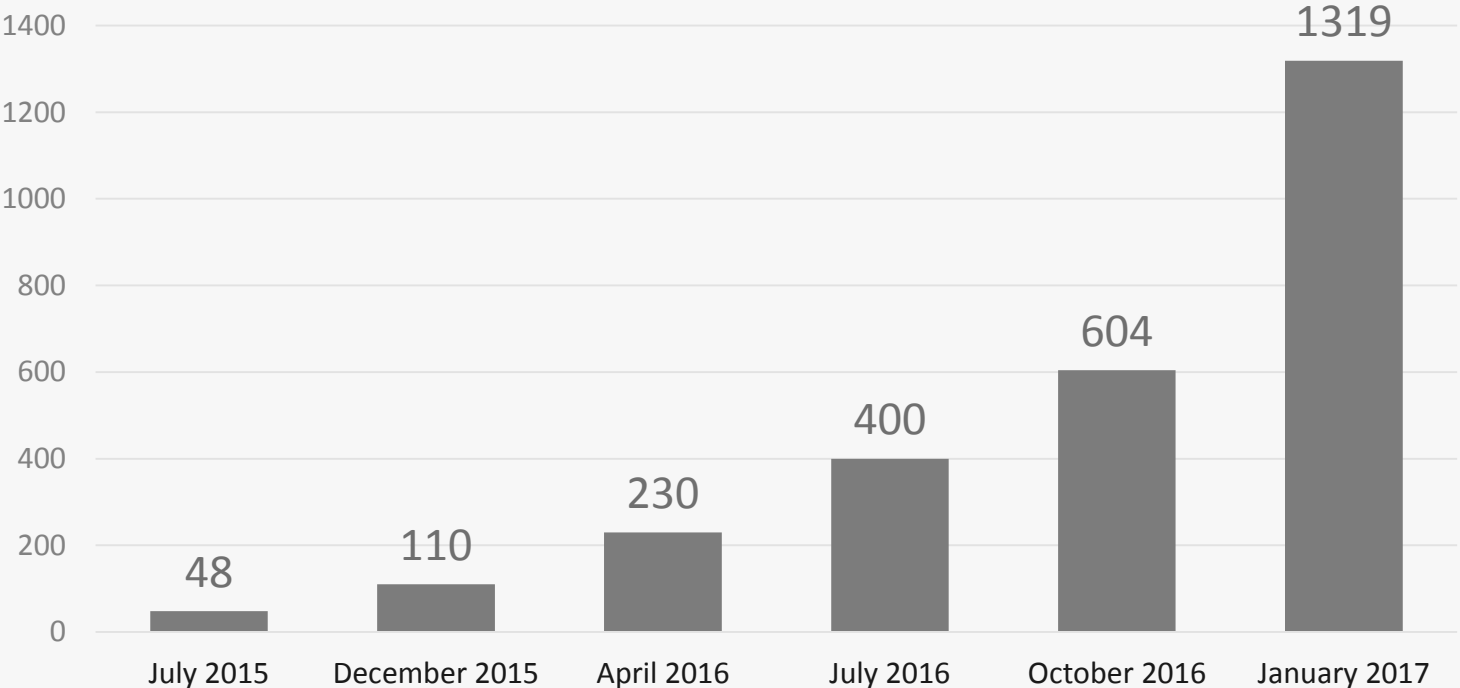




# Documentation of a dangerous condition

In 2015, only 48 homeless patients had been identified by ED & Psych staff interviews.

As of January 2017, over 1,300 patients have been identified



45%

...of the top 100 ED frequent visitors are homeless

A recent paper suggests that the majority of homeless list other hospitals as their primary address. The number of homeless could exceed 1,500



## Lesson # 3:

The homeless have  
exorbitant  
healthcare costs.

prevalence



# First Cohort Cost & Utilization

26 patients referred into permanent supportive housing

**21%**

*Cost reduction for 17  
chronically homeless  
patients*

*“One patient, now  
deceased, had annual  
healthcare costs of  
\$533,000”*

**67%**

*Cost reduction for 16  
patients after  
removing one outlier\**

*\* Patient in hospice care*

# All Homeless Cost & Utilization

Among the Highest Cost & Utilization of all UI Health Patients

## Average Costs & Uncompensated Care

- *616 homeless patients had healthcare costs 32% higher than an average UI Health patient. (\$9,207 vs. \$6,947)*
- *11-14% of their total healthcare costs were uncompensated (\$635,936 to \$855,195 / \$5,671, 071)*

## Decile Ranking

- *32% (197) of 575 homeless patients sampled were in the top decile of the most expensive patients.*
- *Tenth decile homeless patients costs ranged from \$51,010 to \$533,000 – 7 to 76 x the average UI Health patient cost (\$6,947).*

DECILE RANKING	#	%
10th	197	32.3%
9th	-	-
8th	-	-
7th	-	-
6th	-	-
5th	-	-
4th	-	-
3rd	-	-
2nd	-	-
1st	-	-
TOTALS	574	100%

All CY 2016 Patients (n=156,675)

\* Patient in hospice care

# Towards Collective Impact

Hospitals can and should play a vital role in decreasing homelessness by acknowledging it is a dangerous health condition, and by creating programs that, along with other hospitals, pay for supportive housing.

If every hospital in Chicago committed to paying for supportive housing for ten chronically homeless individuals, we could reduce that population by a third.\*

*That is major impact.*



melessness

\* Hospitals can also claim a community benefit on their taxes to enhance their non-profit status.



Thank You

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## Q & A





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# Housing and the Role of Hospitals

[aha.org/housing](http://aha.org/housing)





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## Upcoming Guides in the SDOH Series

- **Transportation**
  - **Education**
- **Health Behaviors**

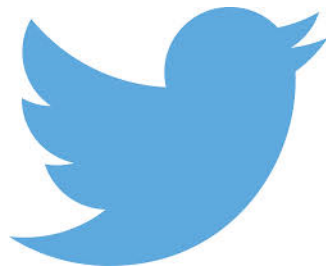
*Details coming soon!*



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