



# BETTER HEALTH THROUGH HOUSING

a healthcare & housing collaborative

Lessons Learned

Stephen Brown MSW LCSW  
Director, Preventive Emergency Medicine  
University of Illinois Hospital & Health Sciences System  
sbbrown9@uic.edu

*“Homelessness is a failure of systems, not people”*

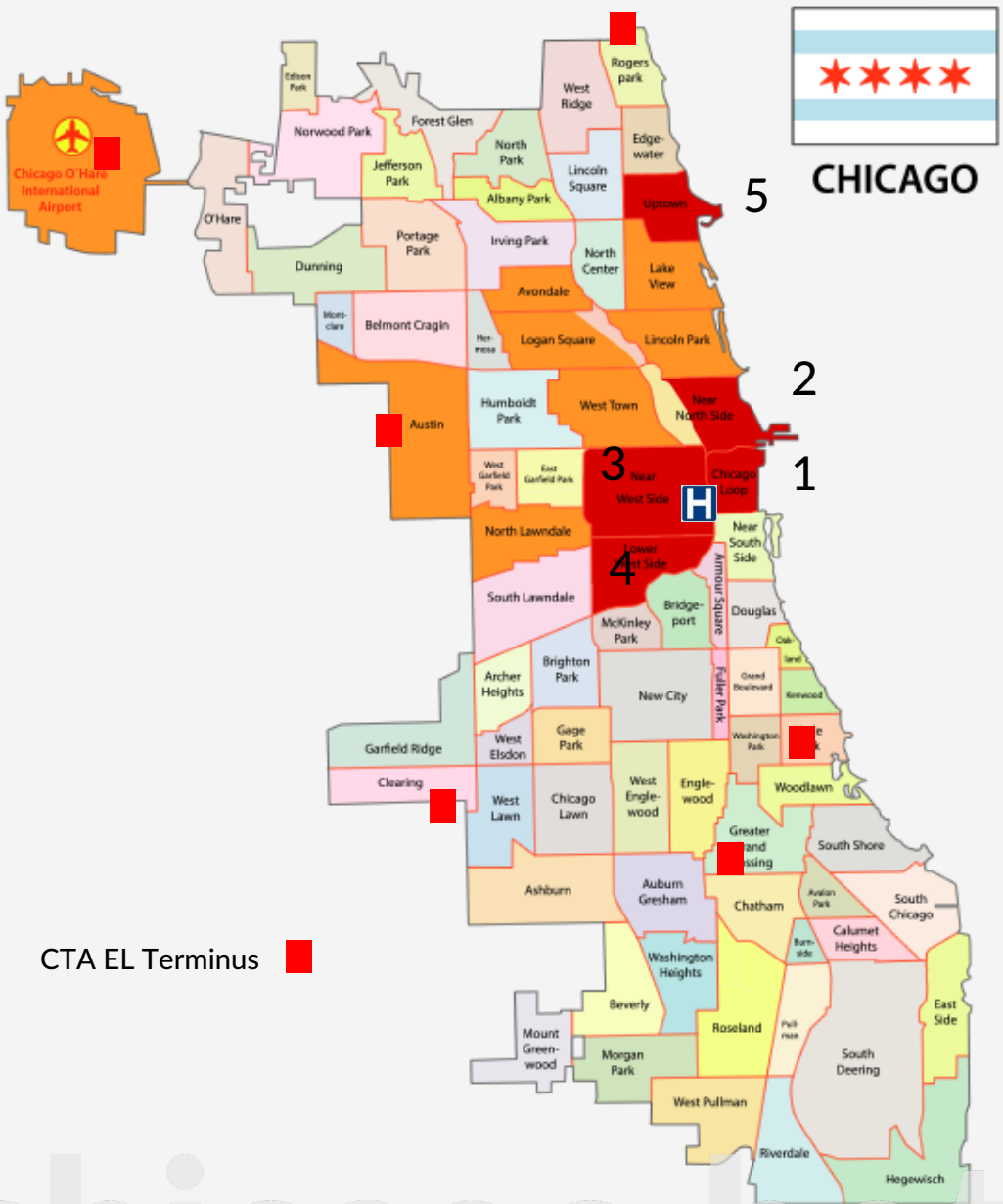
Ed Stellan, Executive Director  
Heartland Healthcare



## Wicked Problems: Societal Issues Worth Solving

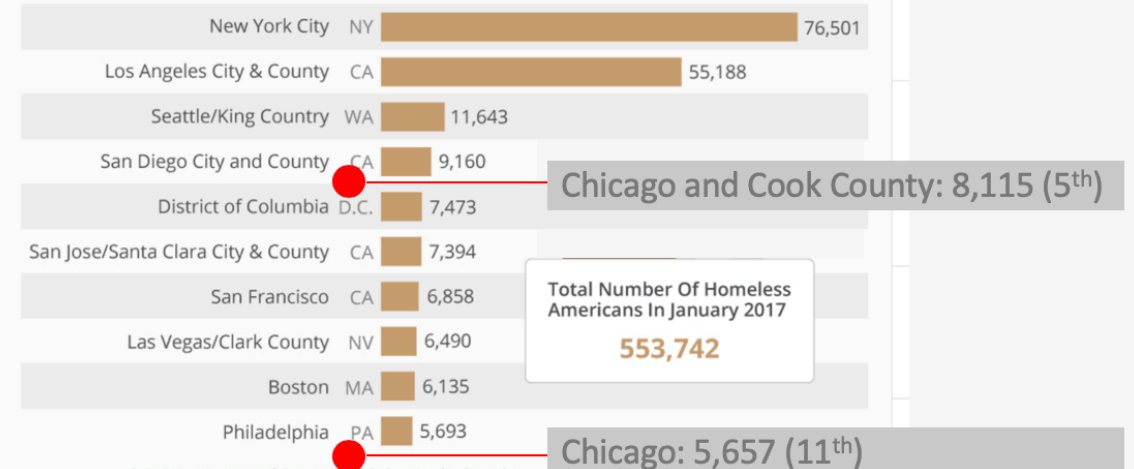
A wicked problem is a social or cultural problem that is difficult to solve for as many reasons: incomplete or contradictory knowledge, the number of systems, lack of access to data, people and opinions involved, the large economic burden, and the interconnected nature of these problems with other problems.

# Chicago: Homelessness



## The U.S. Cities With The Most Homeless People

CoCs with the largest numbers of people experiencing homelessness in 2017\*



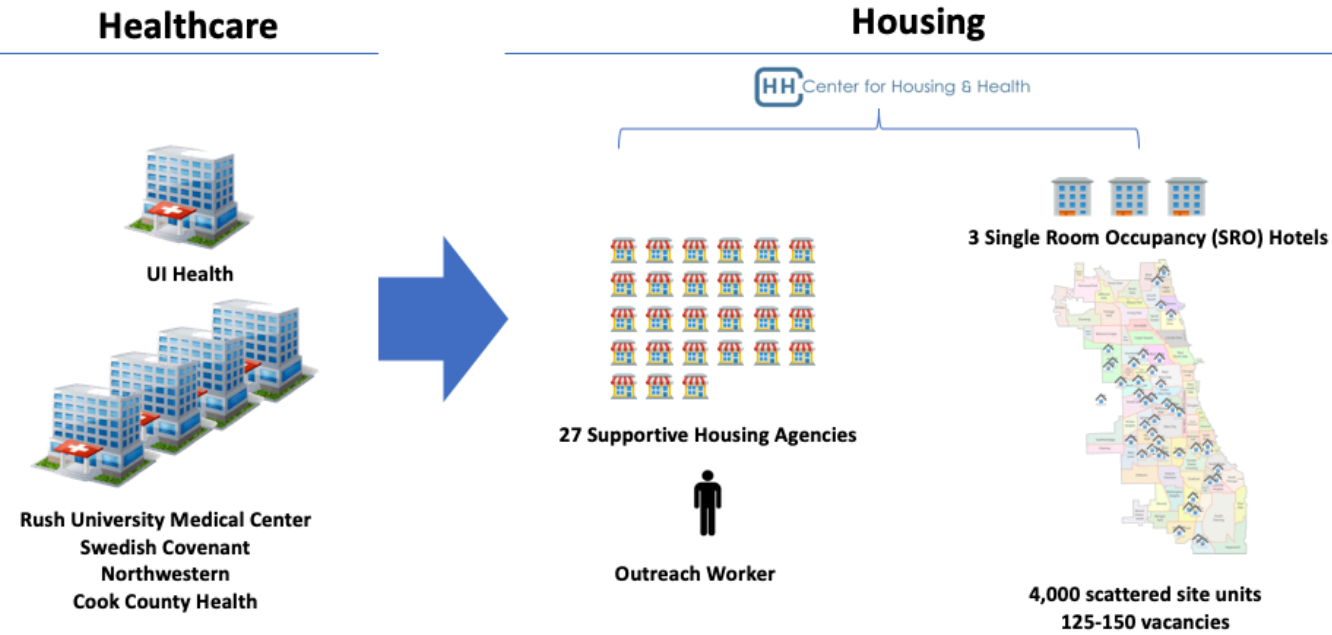
Total Number Of Homeless Americans In January 2017  
**553,742**

\* CoC-Continuums of Care are local planning bodies who coordinate homelessness services in certain areas  
Source: U.S. Department of Housing and Urban Development

Chicago's unsheltered rate has remained constant for 5 years: ~1,500

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

A model that makes it easy for hospitals to refer their patients into supportive housing



## 27 Supportive Housing Partners

- Housing Forward
- Chicago House
- H.O.W.
- Debra's Place
- Sarah's Circle
- Bobby E Wright
- Thresholds
- Heartland Alliance
- More...



**FIRST COHORT  
(N=26)**

**47%**

*Housing Retention  
(8 of 17 survivors)*

**- 21%**

*Reduction in  
Healthcare Costs*

**- 57%**

*Drop-in Hospital  
Utilization*

**- 67%**

*Drop-in Emergency  
Department Utilization*

**34%**

*Mortality Rate*

**Outcomes**

**ALL PATIENTS  
(N=59)**

**63%**

*Housing Retention  
(8 of 17 survivors)*

**0%\***

*Reduction in  
Healthcare Costs*

**- 30.3%**

*Drop-in Inpatient  
Utilization*

**- 34.8%**

*Drop-in Emergency  
Department Utilization*

**+ 16.3%**

*Increase in Outpatient  
Utilization*

**22%**

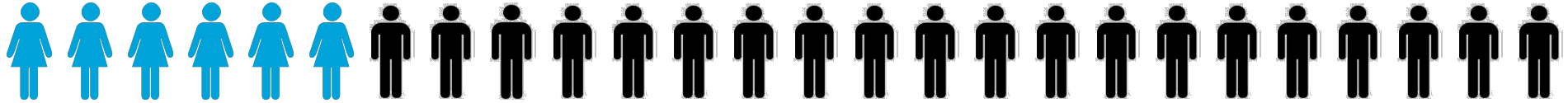
*Mortality Rate*

# 47% HOUSING RETENTION RATE

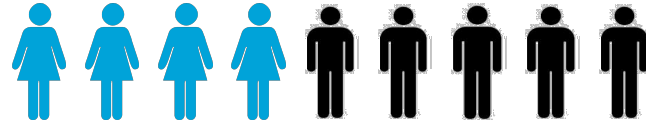
Reasons for Program Discharge – first cohort



Permanent Supportive Housing

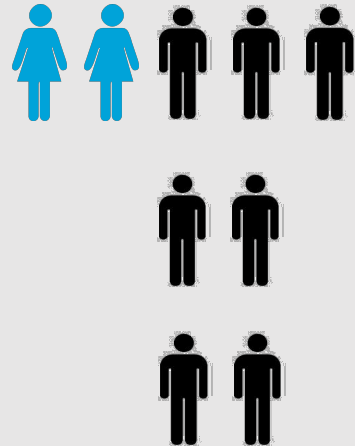


34%



Deceased

35%

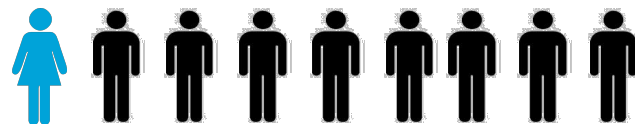


Severe Mental Illness

Intellectual Disability

Re-incarcerated

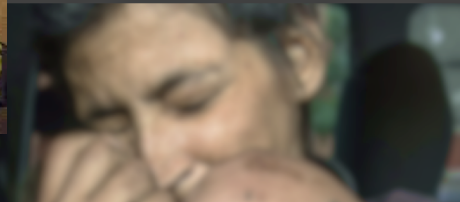
34%



Remain in Housing

\* 47% Housing Retention

Discharged



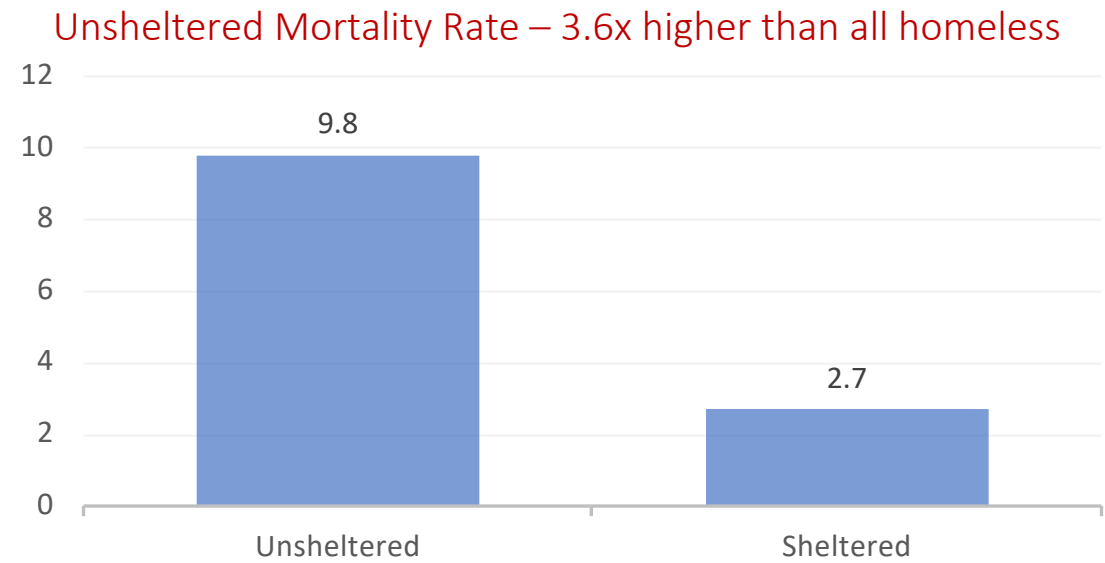
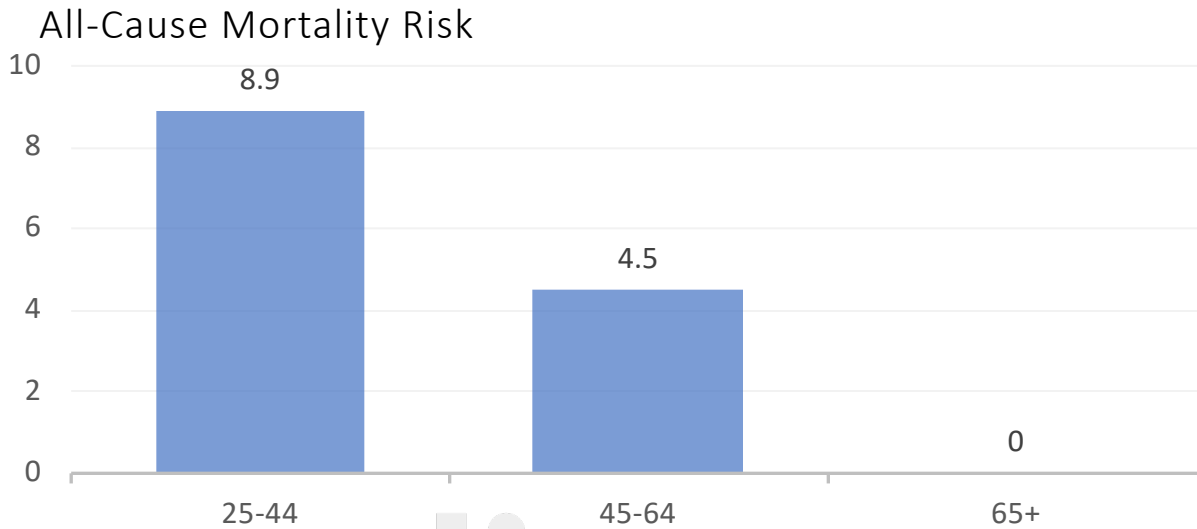
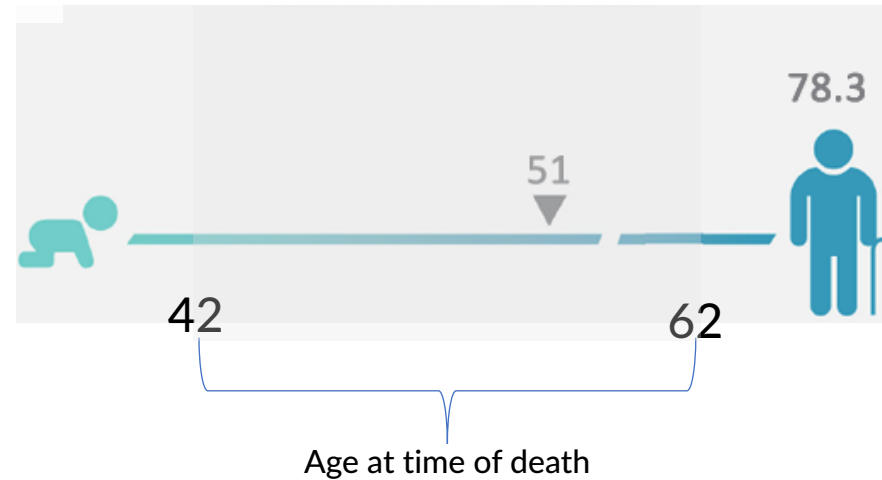
**Lesson #1:**  
Homelessness is a dangerous health condition





# Life Expectancy

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



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.

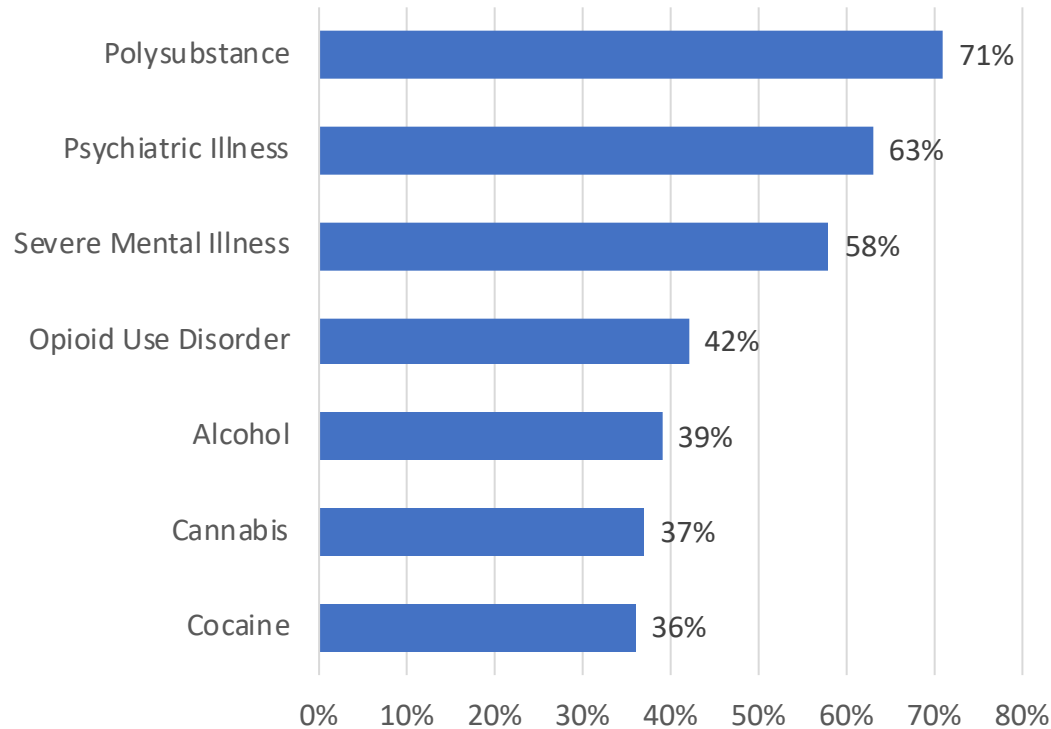
mortality

# Tri-morbidity: the complex nature of chronically homeless patients

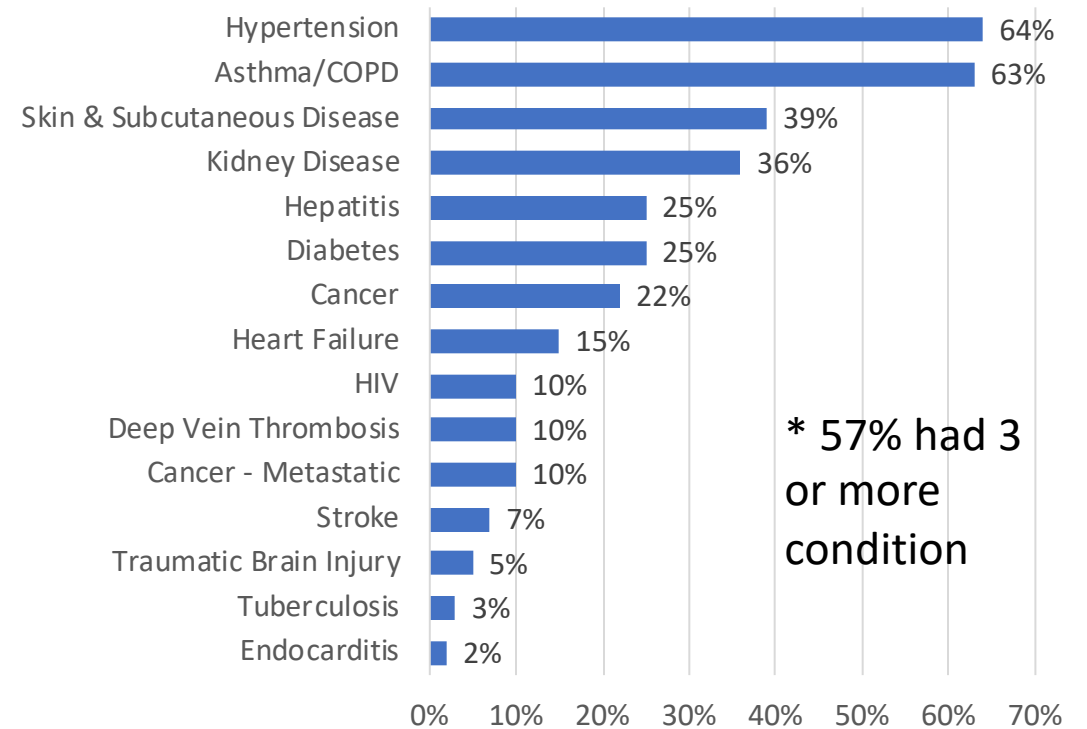
25x the rate of sheltered homeless

- Trimorbidity is the combination of:
- Complex Chronic Condition(s)
  - Substance Use Disorder
  - Severe Mental Illness

## Psychiatric Illness & Substance Use Disorders



## Chronic Disease & Injury

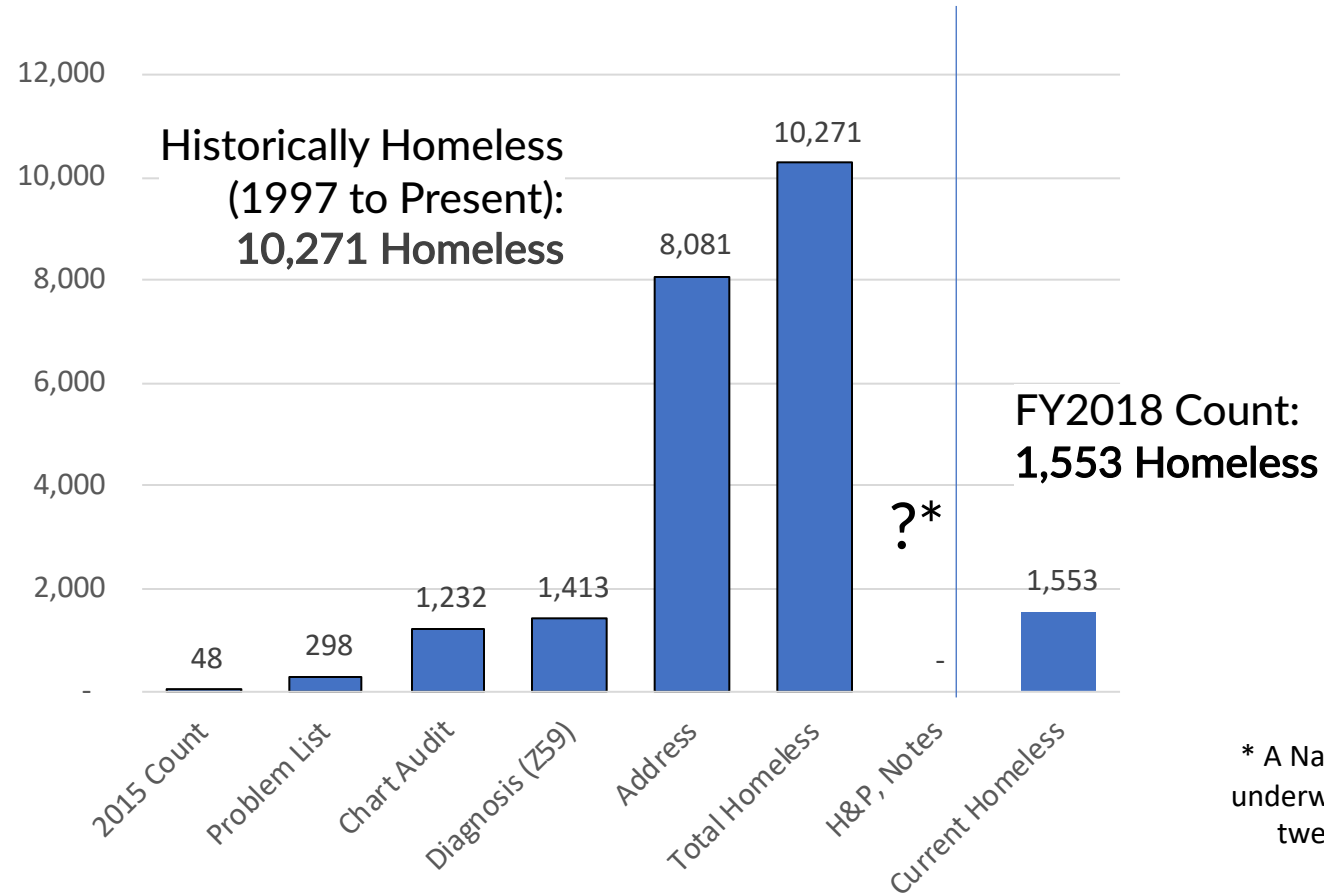


All BHH Patients (n=59) November 2015 to present



**Lesson #2:** The homeless are invisible in healthcare

# Homelessness is significantly underreported



In 2015, less than 100 homeless patients had been identified by ED & Psych staff interviews.

\* A Natural Language Processing (NLP) project is currently underway in order to identify homeless patients from over twenty million clinical notes. Preliminary results will be reported in the Spring of 2020.

## POPULATION HEALTH PERSPECTIVE

The chronically homeless population follows 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



from **The New Yorker**

February 13, 2006  
DEPT. OF SOCIAL SERVICES

### Million-Dollar Murray

*Why problems like homelessness may be easier to solve than to manage.*

by Malcolm Gladwell

1.

Murray Barr was a bear of a man, an ex-marine, six feet tall and heavyset, and when he fell down—which he did nearly every day—it could take two or three grown men to pick him up. He had straight black hair and olive skin. On the street, they called him Smokey. He was missing most of his teeth. He had a wonderful smile. People loved Murray.

His chosen drink was vodka. Beer he called "horse piss." On the streets of downtown Reno, where he lived, he could buy a two-hundred-and-fifty-millilitre bottle of cheap vodka for a dollar-fifty. If he was flush, he could go for the seven-hundred-and-fifty-millilitre bottle, and if he was broke he could always do what many of the other homeless people of Reno did, which is to walk through the casinos and finish off the half-empty glasses of liquor left at the gaming tables.

"If he was on a runner, we could pick him up several times a day," Patrick O'Bryan, who is a bicycle cop in downtown Reno, said. "And he's gone on some amazing runners. He would get picked up, get detoxed, then get back out a couple of hours later and start up again. A lot of the guys on the streets who've been drinking, they get so angry. They are so incredibly abrasive, so violent, so abusive. Murray was such a character and had such a great sense of humor that we somehow got past that. Even when he was abusive, we'd say, 'Murray, you know you love us,' and he'd say, 'I know'—and go back to swearing at us."

under the equivalent of house arrest, and he thrived. He got a job and worked hard. But then the program ended. "Once he graduated out, he had no one to report to, and he needed that," O'Bryan said. "I don't know whether it was his military background. I suspect that it was. He was a good cook. One time, he accumulated savings of over six thousand dollars. Showed up for work religiously. Did everything he was supposed to do. They said, 'Congratulations,' and put him back on the street. He spent that six thousand in a week or so."

Often, he was too intoxicated for the drunk tank at the jail, and he'd get sent to the emergency room at either Saint Mary's or Washoe Medical Center. Marla Johns, who was a social worker in the emergency room at Saint Mary's, saw him several times a week. "The ambulance would bring him in. We would sober him up, so he would be sober enough

**Lesson #3:** Many homeless have excessive cost & utilization

# FY2018 UI Health Homeless Costs

Rankings by decile  
40% have elevated costs

Decile	# of Homeless	Avg. UIH Patient Cost	Total Costs	Average Cost	Average Factor	High Cost	High Factor
10 <sup>th</sup>	123	\$5,835	\$11,195,902	\$90,290	15.47	938,133	160
9 <sup>th</sup>	123	\$5,835	\$3,143,801	\$25,535	4.35	36,141	6.19
8 <sup>th</sup>	123	\$5,835	\$1,807,524	\$14,577	2.50	18,770	3.22
7 <sup>th</sup>	123	\$5,835	\$1,109,073	\$8,944	1.53	11,138	1.91
6 <sup>th</sup>	123	\$5,835	\$699,902	\$5,644	.97	7,055	1.21
5 <sup>th</sup>	123	\$5,835	\$433,458	\$3,496	.60	4,388	.75
4 <sup>th</sup>	123	\$5,835	\$231,159	\$1,864	.32	2,530	.43
3 <sup>rd</sup>	123	\$5,835	\$120,533	\$972	.17	1,306	.22
2 <sup>nd</sup>	123	\$5,835	\$58,523	\$472	.08	672	.12
1 <sup>st</sup>	123	\$5,835	\$26,845	\$216	.04	321	.06

FY2018 cost analysis comparing patients believed to be homeless to all other UIH patients who had charges > \$100. n= 162,178

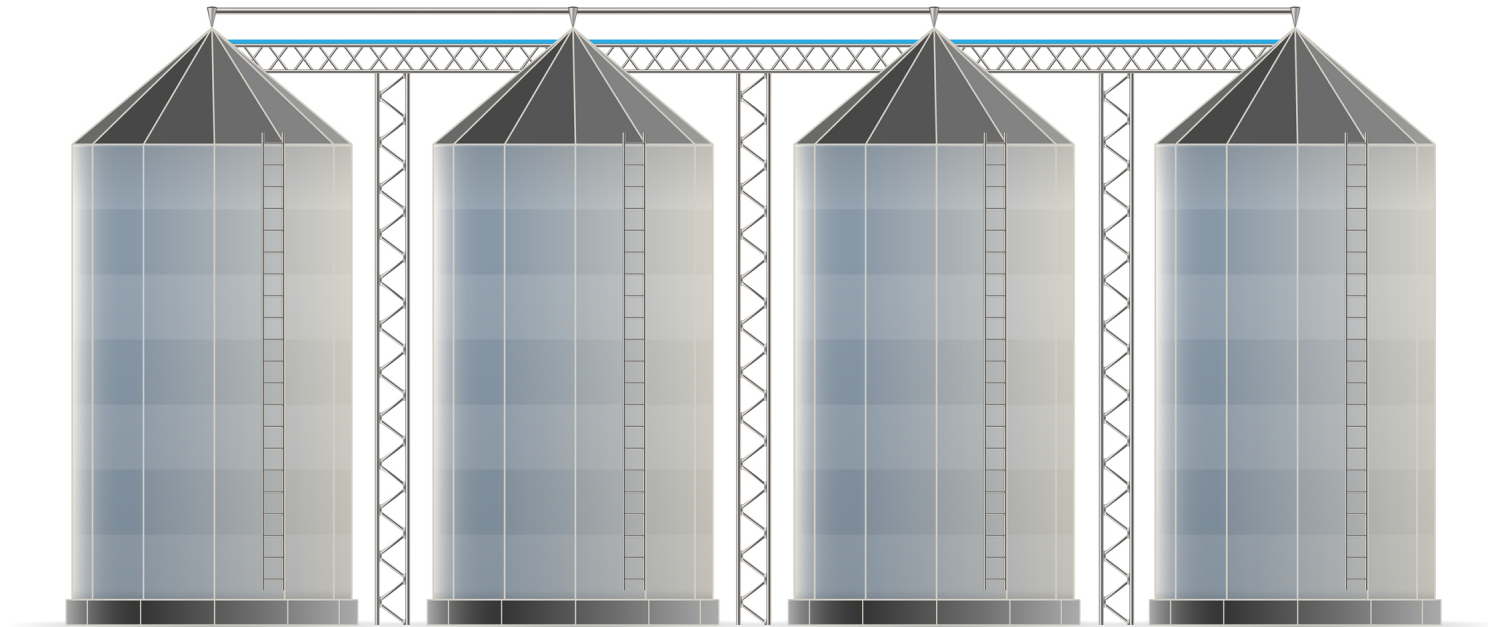
Ambulance Ride: \$800  
ER Visit: \$1,250  
Hospital Admission: \$2,633



Magnificent Mile  
Hotel:  
\$625/ evening







**Lesson #4:** Chronic homelessness is a complex social issue that requires alignment among public sector systems

# Treating one condition at a time has contributed to ER being revolving doors

## Fragmentation of Care: Healthcare's Role



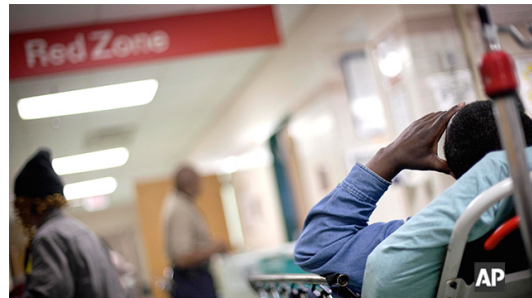
Treat & Release

Repeat

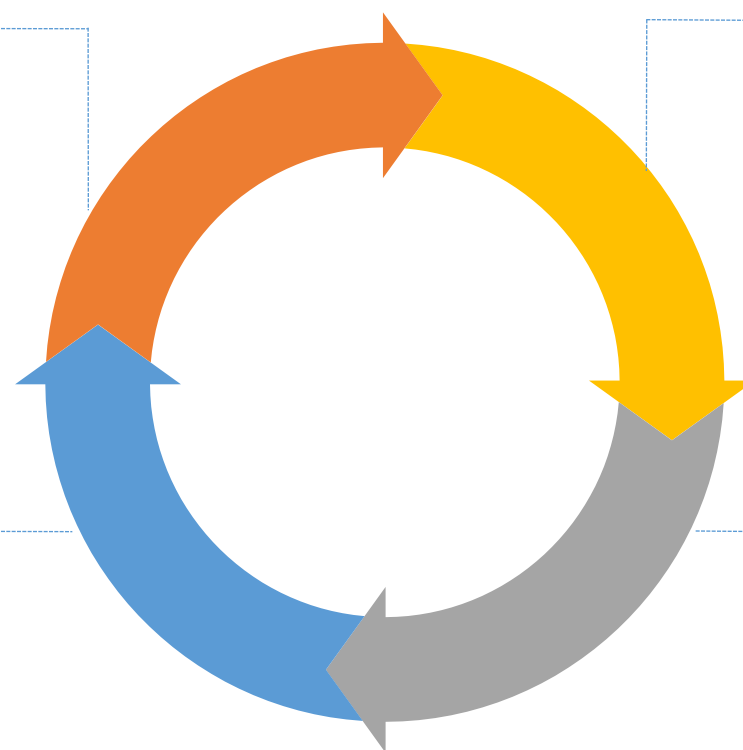
Injury, Public Nuisance,  
Intoxication, Psychiatric Crisis



ED Workup or Psych Admission



Transport To ED by police & fire



# Alignment with housing: A tiered approach

## INSTITUTIONALIZATION

For patients with refractory, severe mental illness  
LOCUS: 28+

05

## CLUSTERED OR PROJECT-BASED WITH ONSITE SUPPORT

For patients with severe mental illness or substance abuse  
May include patients with Assisted Outpatient Treatment (AOT)  
LOCUS: 25-27

04

## SCATTERED SITE - WITH ASSERTIVE COMMUNITY TREATMENT (ACT)

For patients with moderate or well-controlled mental illness or substance abuse  
LOCUS: 23-24

03

LOCUS:23-30

LOCUS:0-22

## SCATTERED SITE - HOUSING CASE MANAGEMENT

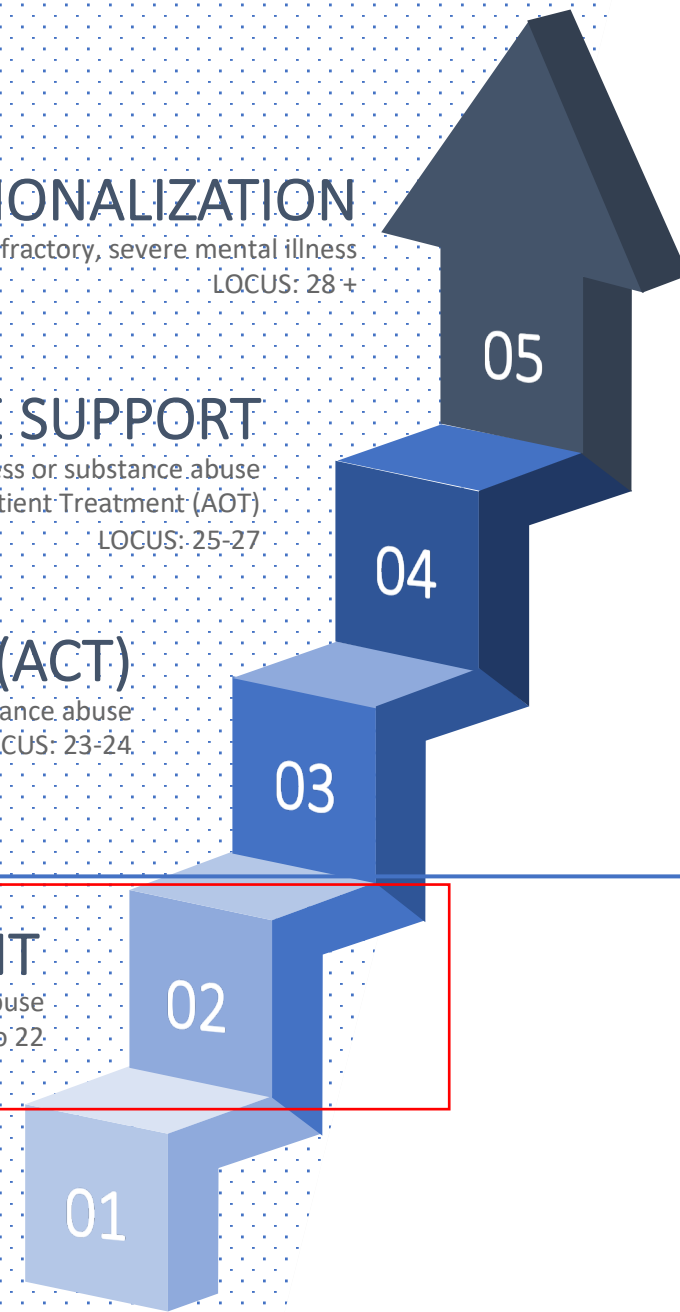
For patients with controlled or mild mental illness and/or substance abuse  
LOCUS: up to 22

02

## RAPID RE-HOUSING

For patients identified as needing assistance locating affordable or supportive housing

01



# Addressing system failures



## Assisted Outpatient Treatment

For patients with untreated severe mental illness who cycle through EDs, jails, EMS and police. Patients placed on long-acting injectables, given Asserive Community Treatment (ACT) and monitored by the courts



## Medication Assisted Therapy

Suboxone, Methadone or Vivitrol for Opioid Use Disorders, coupled with trauma-informed psychotherapy. The critical phase is the first 5 days



## Diversion Strategies

Psychiatric Stabilization Centers, Sobering Centers, Re-entry healthcare for patients exiting jail & prison



## Asserive Community Treatment

A shortage of evidence-based ACT has led to high rates of untreated mental illness, readmissions, ER visits, and over-use of first responder and criminal justice systems



COOK COUNTY  
**HEALTH**



City of Chicago



# Towards Collective Impact: The Flexible Housing Pool

- Based off a model in Los Angeles (city & county partnership)
- Led by the Center for Housing & Health, Chicago Department of Public Health (CDPH), the Department of Family and Support Services (DFSS) UI Health and the Corporation for Supportive Housing (CSH)
- Mitigates the “Wrong Pocket Problem” by braiding together subsidies, grants and investments into a common funding pool.
- Over \$9m / \$12 commitment from CDPH, DFSS, DPD & Cook County Health, Blue Cross, Advocate Aurora, UI Health
- Attracts investment from non-traditional funders (hospitals, insurance companies)
- Facilitates capacity-building: more apartments to come online

**750** MORE APARTMENT UNITS



- Homelessness consumes exorbitant amounts of public sector cost & utilization
- It's a dangerous & deadly health condition that requires a sustained effort and a multi-sectoral approach
- Integrated health systems are the most motivated hospital/payors (Geisinger, Kaiser-Permanente)
- If hospitals focus on detection, they will find it (just like HIV)
- Hospitals with a strong sense of mission will embrace the responsibility
- Affordable Care Act (ACA) has incentives for hospitals to embrace population health
- Hospitals can demonstrate community benefit
- The Anchor Mission: Hospitals replacing industry as largest employer and economic engine of communities

So why should healthcare pay for housing?

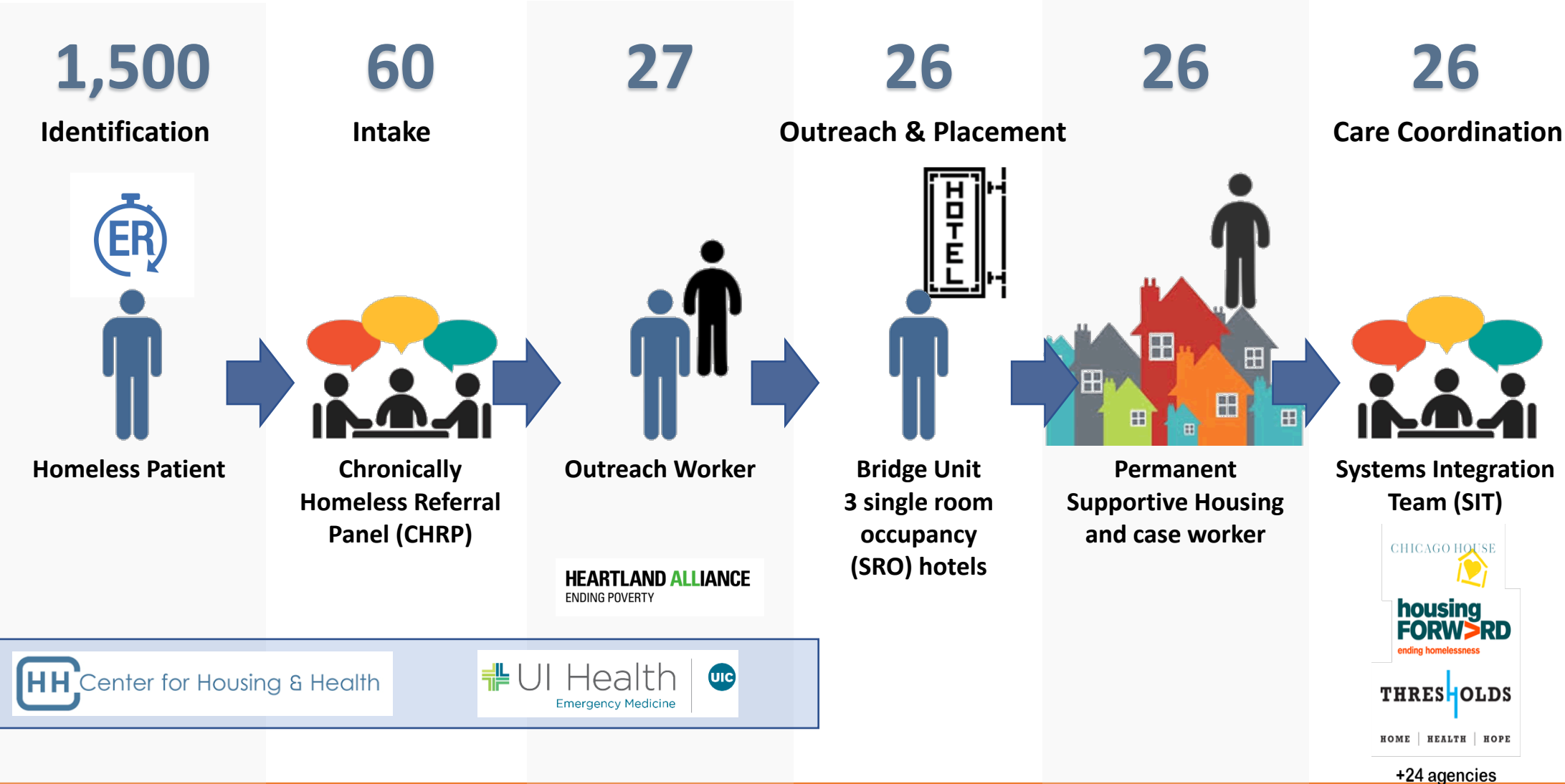


# Questions?

**Stephen Brown MSW LCSW**  
Director, Preventive Emergency Medicine  
University of Illinois Hospital & Health Sciences System  
[sbbrown9@uic.edu](mailto:sbbrown9@uic.edu)  
312-996-4859

# The Process: From a Hospital to a Home

An Interdisciplinary, Interagency process that uses the **Housing First** model







Red Zone