



University of California
San Francisco

Why is end of life planning so important: changing demographics, common diagnoses and mortality patterns in homeless-experienced adults

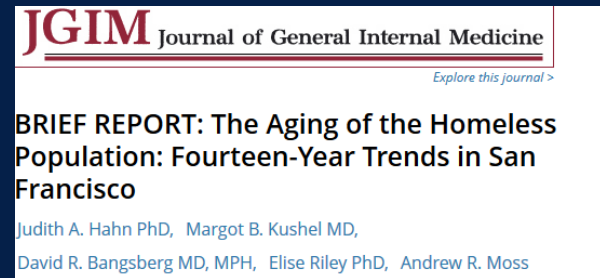
Margot Kushel, MD
Professor of Medicine, UCSF
@mkushel

6/29/2017



The homeless population is aging

- In 1990, 11% of people experiencing homelessness in SF were over 50
- In 2003, 37% were over 50



S.F.'S HOMELESS AGING ON THE STREET / Chronic health problems on the rise as median age nears 50

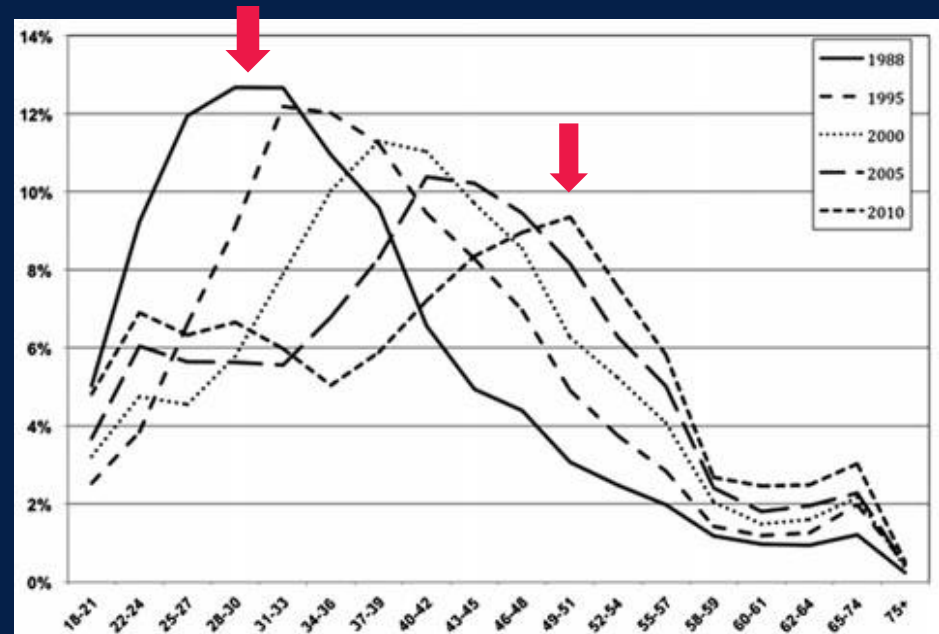
By Kevin Fagan | August 4, 2006



Hahn J et al. The Aging of the Homeless Population
JGIM 2006

Generational effect

- Americans born in the second half of the baby boom (1954-1963) have had elevated risk of homelessness throughout lifetime
- 30-40% of homeless individuals* born 1954-1963
- Estimated that about half are aged 50 and over



*doesn't include people living in homeless families or unaccompanied youth

Dennis P. Culhane, Stephen Metraux, Thomas Byrne, Magdi Steno, Jay Bainbridge, and National Center on Homelessness among Veterans. "The Age Structure of Contemporary Homelessness: Evidence and Implications for Public Policy" *Analyses of Social Issues and Public Policy* 13.1 (2013): 1-17.

Will the trend continue?

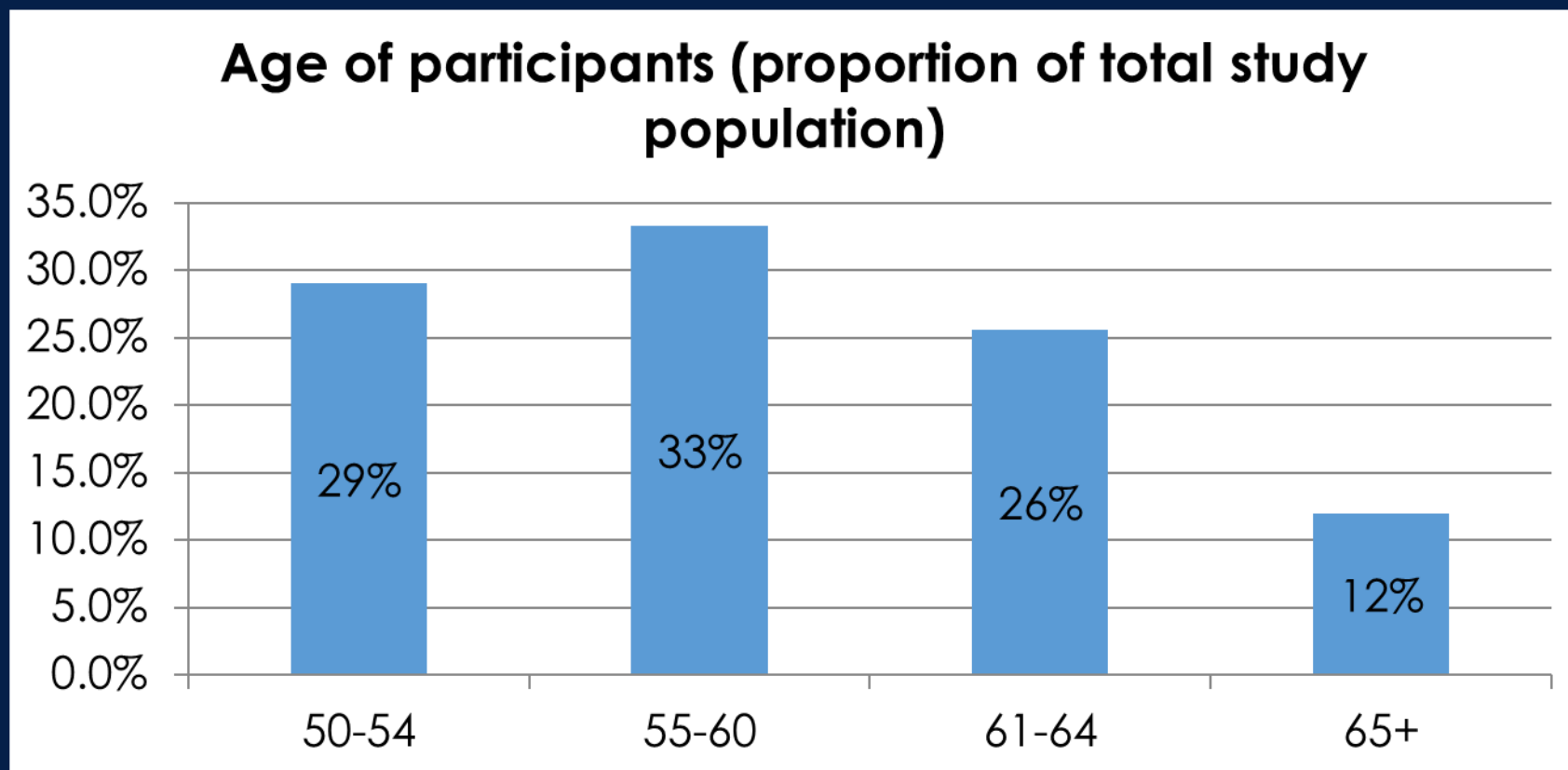
- Housing affordability crisis acute for those 50 and over
- Among renters age 50 and over, 30% spend more than half their income in rent “severe housing burden”
- Median age of homeless individuals expected to rise

Baker K, Baldwin P, Donahue K, et al. Housing America's Older Adults – Meeting the Needs of an Aging Population. Joint Center for Housing Studies of Harvard University. 2014.

Changing health profiles

- While younger homeless adults
 - Infectious disease
 - Substance use related disease/overdose
 - Violence/victimization
- Older adults
 - Chronic diseases
 - Cancer
 - Geriatric conditions
- Older adults have higher prevalence substance use than non-homeless older adults, but lower than younger
- Mental health disabilities common in both younger and older

Among those 50 and older, median age 57, range 50-80



Older homeless adults NOT as socially isolated as thought

Partnership:

- 5% currently married/partnered
- 41% never married
- 11% widowed; 43% divorced or separated

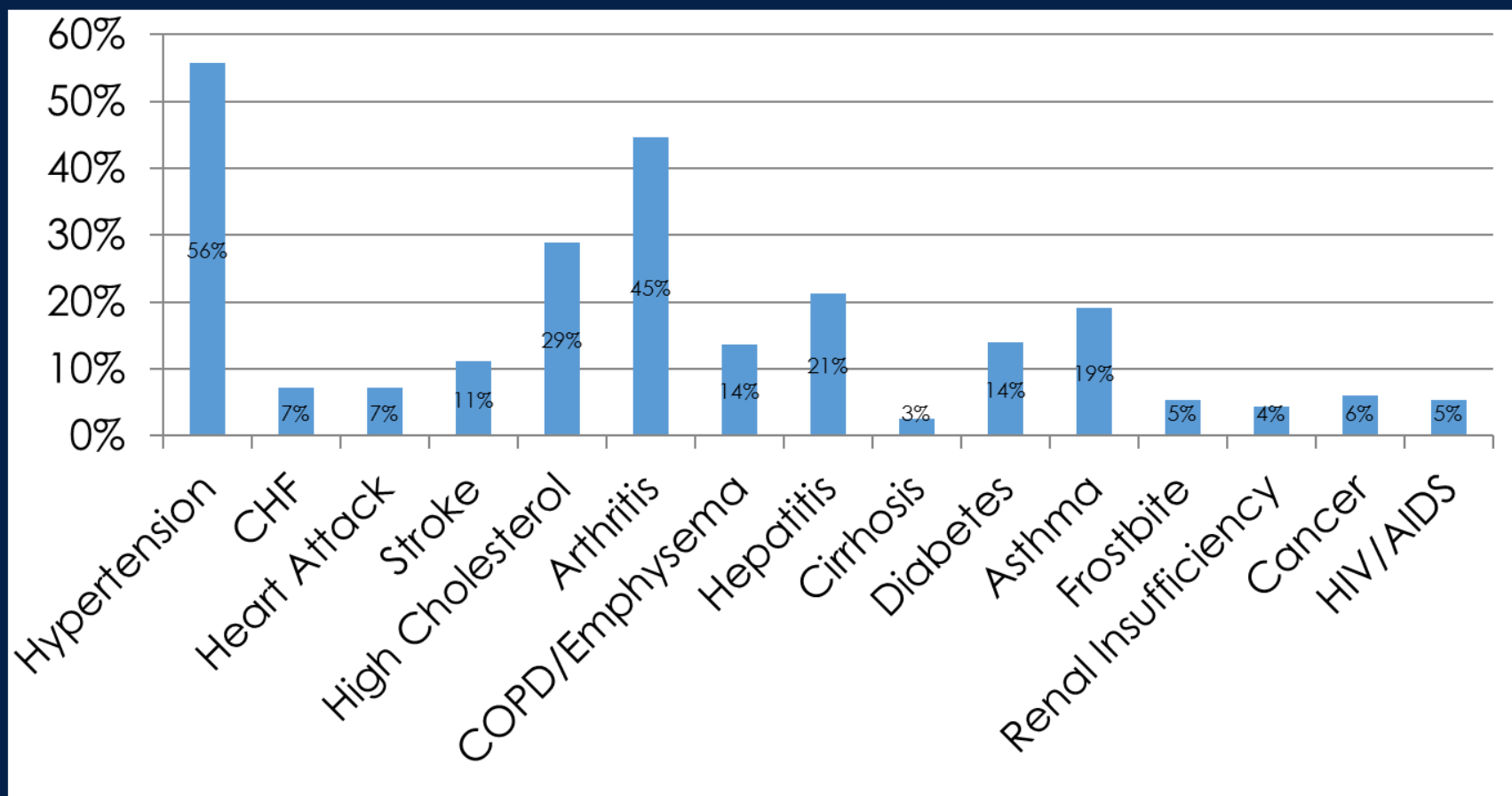
Other Sources:

- 80% of our sample was able to give us a contact
- 60% of participants reported family member as contact
- 67% say that they have “someone to confide in”
- 54% report attending house of worship or social club

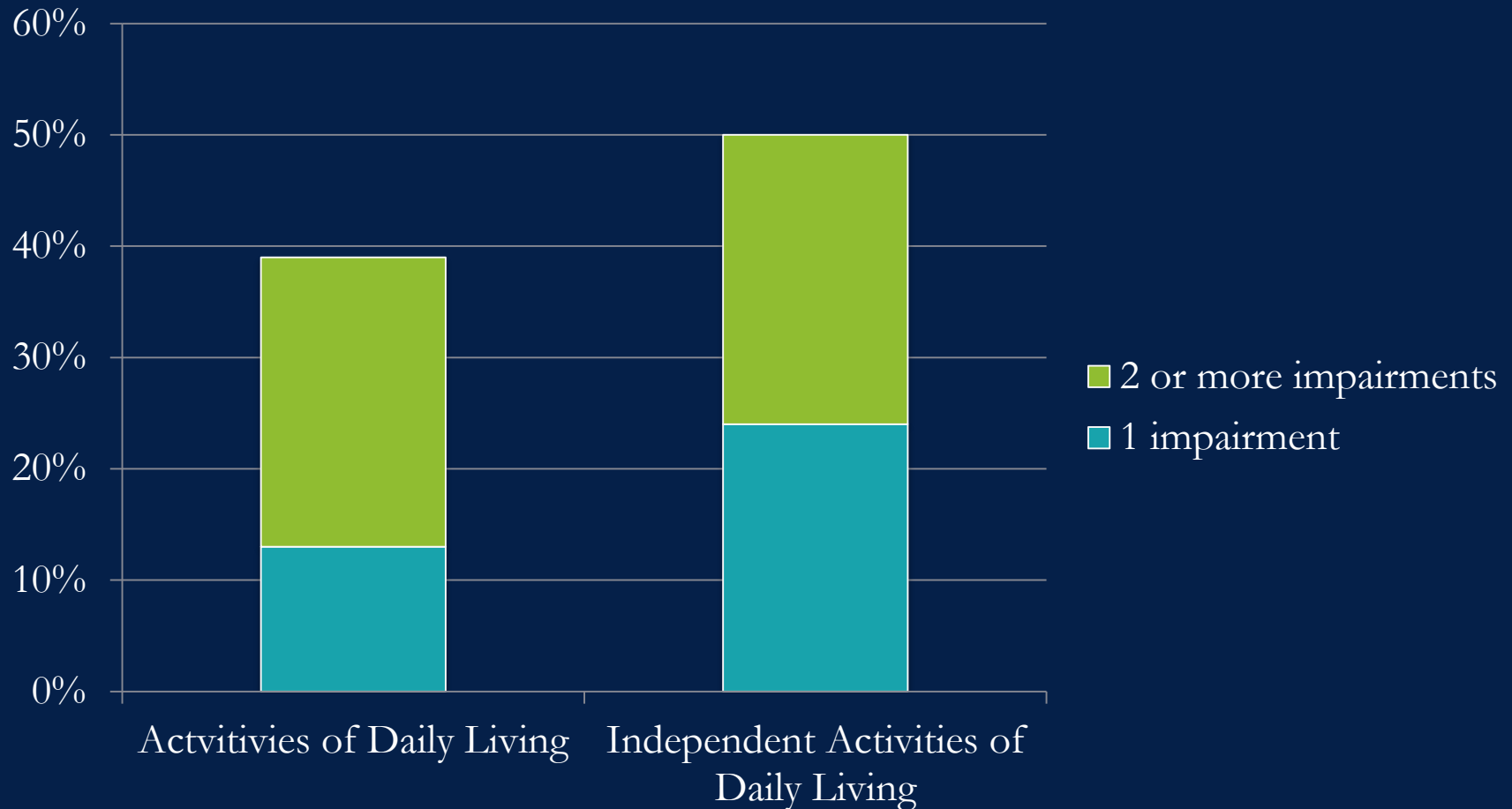
For those 50 and older, poor health in every
measure

56% report health as fair or poor

In older homeless adults, self-reported chronic diseases are common: but may be underreported



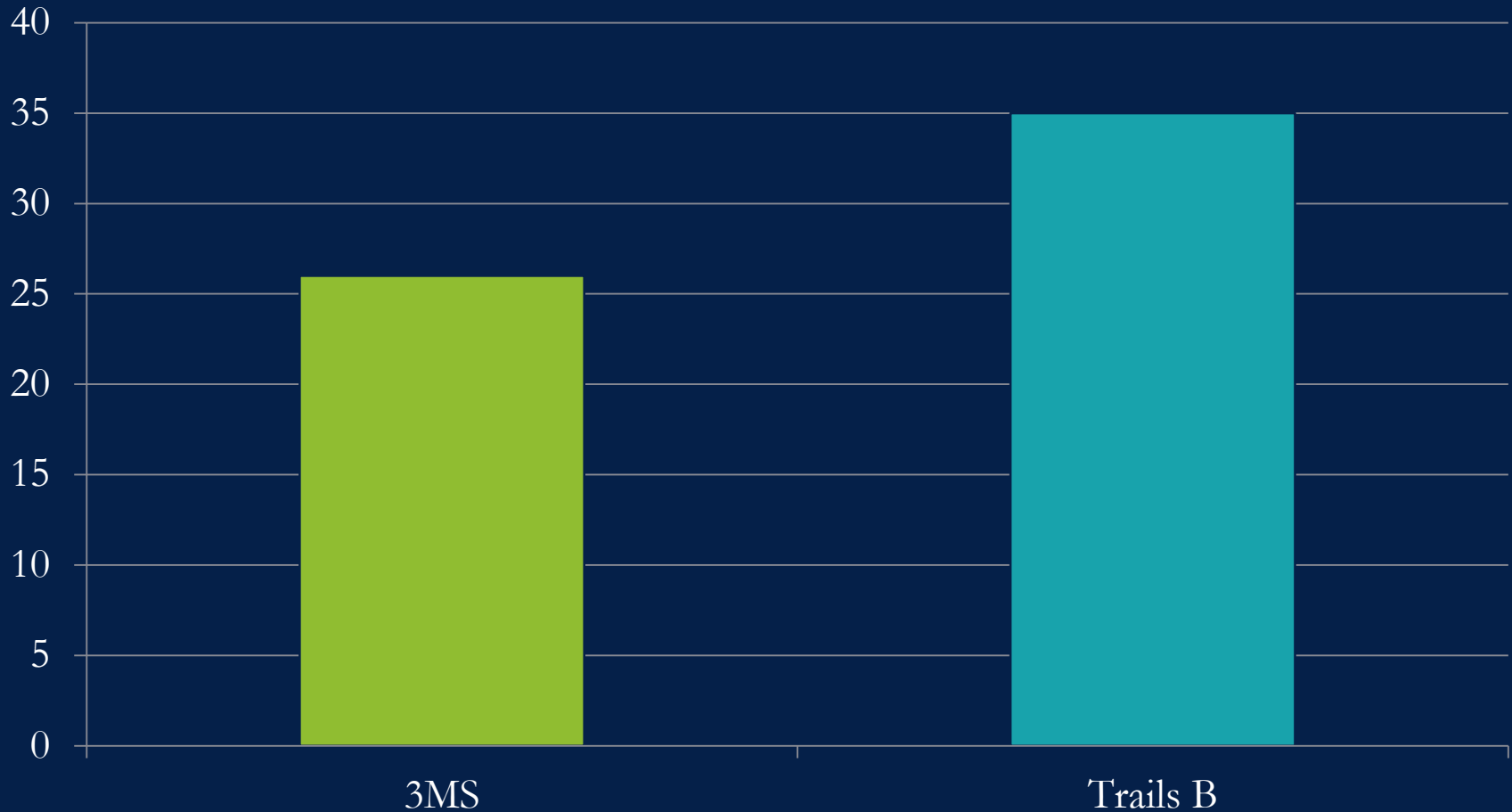
High Proportion with functional impairments



Brown RT, Hemati K, Riley ED, Lee CT, Ponath C, Tieu L, Guzman D, Kushel MB. Geriatric Conditions in a Population-Based Sample of Older Homeless Adults. Gerontologist. 2016 Feb 26. pii: gnw011. PubMed PMID: 26920935

High prevalence of cognitive impairment

3MS measures global impairments;
Trails B measures executive function



Hurstak et al Drug and Alcohol Dependence, in press

High prevalence of all geriatric conditions

▪ Mobility impairment:	27%
▪ One or more falls (6 months)	34%
▪ Visual impairment	45%
▪ Hearing impairment	36%
▪ Urinary incontinence	48%

Brown RT, Hemati K, Riley ED, Lee CT, Ponath C, Tieu L, Guzman D, Kushel MB. Geriatric Conditions in a Population-Based Sample of Older Homeless Adults. *Gerontologist*. 2016 Feb 26. pii: gnw011. [Epub ahead of print] PubMed PMID: 26920935.

Overall poor functional status

Median age of sample 57

Prevalence of geriatric conditions worse than those in general population samples in their 70s and 80s

“50 is the new 75”

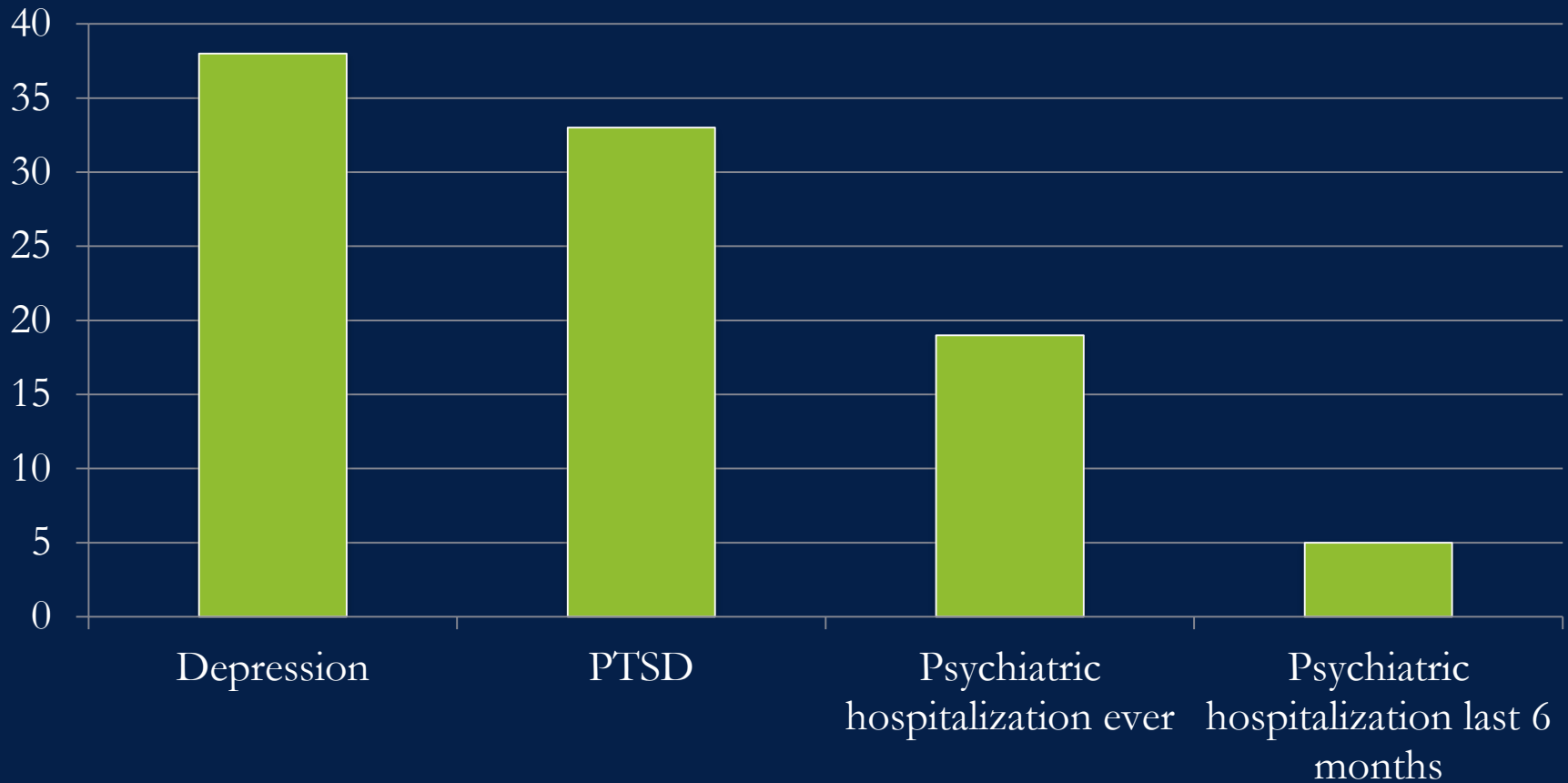
Alcohol and Drug use problems common

- 65% with moderate or greater severity of drug use symptoms
 - 15% severe symptoms
 - Cocaine (43%), cannabis (39%) and opioids (13%) moderate or severe use symptoms
- 26% moderate or greater severity alcohol use symptoms
 - 15% severe symptoms

Spinelli et al. Factors associated with substance use in older homeless adults: Results from the HOPE HOME study. *Substance Abuse* 2017; 38(1): 88-94.

Prevalence of illicit drug and alcohol use problems lower than samples of younger homeless adults, but higher than age-matched (and dramatically higher than those of general population ages 70s and 80s)

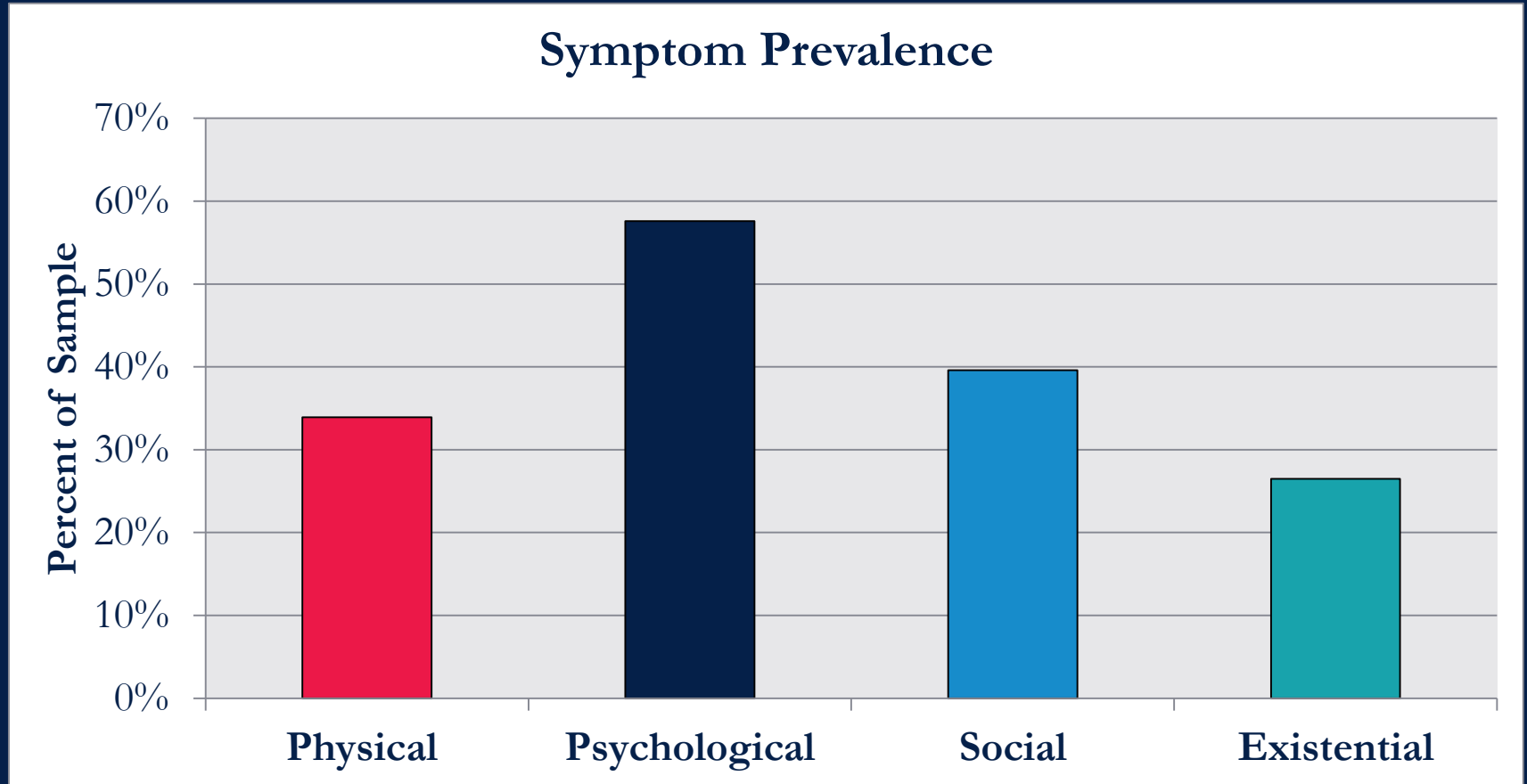
Mental Health Problems are common



Mental health and Substance use co-morbidity common

- 38% had moderate to severe depressive symptoms, of whom 78% had moderate to severe substance use problems
- 15% had both severe PTSD symptoms AND a history of experiencing violence, 77% had co-morbid moderate-severe substance use

High prevalence of symptoms



Patanwala et al under review

Physical, psychological, social and existential symptoms cause distress and are related to homelessness

“When I start thinking that I’m not gonna get off of this situation, my body starts to hurt, my stomach gets nauseated. It’s burning like it’s on fire.”

“My back pain actually is pretty real because I’m sleeping on cement but the thing that really gets me is the future. Sometimes there is a hopeless feeling that comes on.”

“Psychologically...I’m getting more used to the idea that my life is a complete waste. Nothing gets done. I don’t have family. I don’t have a career. I’m not a productive human being. It’s day after day of wasting my time.”

Loneliness and regret cause suffering

“...One of the things that gets me is when I say hello to somebody, and they don't say hello back. That hurts. That's one of the mix-ups of this culture that I am, that level of being untouchable...and that hurts. I mean psychologically is devastating...”

“Emotional pain, the thing that most recently really upset me is knowing that I'm almost 60 years old now and my chances at having a career are somewhat behind me, my chances at having some type of retirement plan are – that's non-existent for me now. The fact that I'm 60 years old and can't do some of the things that you still like to do has been bugging me lately.”

High mortality rate and institutional care

- 36-47 months after study entry, of 350 participants (median age 57), 29 confirmed deaths
- Multiple diagnoses of metastatic cancer, strokes, heart attacks, kidney failure, etc.
- Many living in nursing homes or with life limiting conditions

Mortality—slides care of Travis Baggett MD

- Homeless people experience excess mortality
- U.S.-based studies on this topic are outdated or lack information about causes of death
- Most recent: Hwang SW et al examined mortality and causes of death in 17,292 adults seen at BHCHP in 1988-93
 - HIV accounted for 18% of deaths; leading cause among 25-44 year olds
 - Homicide the leading cause among 18-24 year olds
 - Heart disease and cancer the leading causes among 45-64 year olds

25-44 years

Cause	N	Crude Rate	Race-adjusted RR (95% CI)
Men			
1) Drug overdose	92	346.9	16.0 (12.6, 20.3)
2) Heart disease	24	90.5	5.1 (3.1, 8.4)
3) Psychoactive substance use disorder	24	90.5	22.1 (14.0, 34.9)
4) HIV	21	79.2	17.3 (10.1, 29.8)
5) Suicide	15	56.6	7.1 (4.2, 11.8)
All causes	252	950.1	8.6 (7.4, 9.9)
Women			
1) Drug overdose	28	172.6	23.6 (15.2, 36.6)
2) Heart disease	8	49.3	3.6 (1.2, 11.1)
3) HIV	7	43.1	9.7 (2.9, 32.4)
4) Psychoactive substance use disorder	7	43.1	33.0 (13.0, 83.7)
5) Liver disease	6	37.0	21.3 (8.4, 53.9)
All causes	95	585.6	9.6 (7.4, 12.4)

45-64 years

Cause	N	Crude Rate	Race-adjusted RR (95% CI)
Men			
1) Cancer	120	418.7	2.2 (1.8, 2.8)
2) Heart disease	114	397.8	3.5 (2.8, 4.3)
3) Drug overdose	80	279.1	17.5 (13.6, 22.5)
4) Psychoactive substance use disorder	59	205.9	19.6 (14.6, 26.4)
5) Liver disease	58	202.4	7.7 (5.7, 10.3)
All causes	670	2337.7	4.5 (4.1, 4.9)
Women			
1) Cancer	28	326.4	1.9 (1.1, 3.1)
2) Heart disease	16	186.5	3.0 (1.5, 6.1)
3) Drug overdose	14	163.2	21.2 (11.4, 39.5)
4) Liver disease	12	139.9	16.9 (9.2, 30.9)
5) HIV	8	93.3	18.0 (6.1, 52.5)
All causes	126	1469.0	4.5 (3.6, 5.6)

65-84 years

Cause	N	Crude Rate	Race-adjusted RR (95% CI)
Men			
1) Cancer	38	1350.4	1.2 (0.8, 1.7)
2) Heart disease	36	1279.3	1.4 (0.9, 2.1)
3) Chronic lower respiratory disease	5	177.7	0.9 (0.3, 2.5)
4) Cerebrovascular disease	4	142.1	0.7 (0.2, 2.5)
5) Sepsis	4	142.1	1.1 (0.3, 5.0)
All causes	114	4051.3	1.1 (0.9, 1.4)
Women			
1) Cancer	6	672.4	1.3 (0.5, 3.0)
2) Heart disease	4	448.3	1.1 (0.4, 3.2)
3) Diabetes	3	336.2	5.8 (1.5, 22.1)
All causes	21	2353.4	1.1 (0.7, 1.8)

Conclusions

- Homeless people have always had elevated risk of death
 - Changing demographics increases urgency of having discussions
- High prevalence of chronic disease, function, cognitive and mobility impairments as well as behavioral health conditions
- Need to consider advance care planning and services for the end of life

Margot.kushel@ucsf.edu
@mkushel

HOPE HOME Papers currently available

Lee CM, Mangurian C, Tieu L, Ponath C, Guzman D, Kushel M. Childhood Adversities Associated with Poor Adult Mental Health Outcomes in Older Homeless Adults: Results From the HOPE HOME Study. *Am J Geriatr Psychiatry*. 2017 Feb;25(2):107-117. doi: 10.1016/j.jagp.2016.07.019. Epub 2016 Aug 17. PubMed PMID: 27544890; PubMed Central PMCID: PMC5253307.

Raven MC, Tieu L, Lee CT, Ponath C, Guzman D, Kushel M. Emergency Department Use in a Cohort of Older Homeless Adults: Results From the HOPE HOME Study. *Acad Emerg Med*. 2017 Jan;24(1):63-74. doi: 10.1111/acem.13070. PubMed PMID: 27520382.

Brown RT, Goodman L, Guzman D, Tieu L, Ponath C, Kushel MB. Pathways to Homelessness among Older Homeless Adults: Results from the HOPE HOME Study. *PLoS One*. 2016 May 10;11(5):e0155065. doi: 10.1371/journal.pone.0155065. eCollection 2016. PubMed PMID: 27163478; PubMed Central PMCID: PMC4862628.

Brown RT, Hemati K, Riley ED, Lee CT, Ponath C, Tieu L, Guzman D, Kushel MB. Geriatric Conditions in a Population-Based Sample of Older Homeless Adults. *Gerontologist*. 2016 Feb 26. pii: gnw011. [PubMed PMID: 26920935.

HOPE HOME papers currently available

Vijayaraghavan M, Tieu L, Ponath C, Guzman D, Kushel M. Tobacco Cessation Behaviors Among Older Homeless Adults: Results From the HOPE HOME Study. *Nicotine Tob Res.* 2016 Aug;18(8):1733-9. doi: 10.1093/ntr/ntw040. Epub 2016 Feb 26. PubMed PMID: 26920648; PubMed Central PMCID: PMC4941600.

Lee CT, Guzman D, Ponath C, Tieu L, Riley E, Kushel M. Residential patterns in older homeless adults: Results of a cluster analysis. *Soc Sci Med.* 2016 Mar;153:131-40. doi: 10.1016/j.socscimed.2016.02.004. PubMed PMID: 26896877; PubMed Central PMCID: PMC4788540.

Spinelli MA, Ponath C, Tieu L, Hurstak EE, Guzman D, Kushel M. Factors associated with substance use in older homeless adults: Results from the HOPE HOME study. *Subst Abus.* 2017 Jan-Mar;38(1):88-94. doi: 10.1080/08897077.2016.1264534. PubMed PMID: 27897965.

Landefeld JC, Miaskowski C, Tieu L, Ponath C, Lee CT, Guzman D, Kushel M. Characteristics and Factors Associated with Pain in Older Homeless Individuals: Results from the HOPE HOME Study. *J Pain.* 2017 Apr 12. pii:S1526-5900(17)30535-7. doi: 10.1016/j.jpain.2017.03.011. [Epub ahead of print] PubMed PMID: 28412229.