Rationale for Improved Data Collection and Analysis

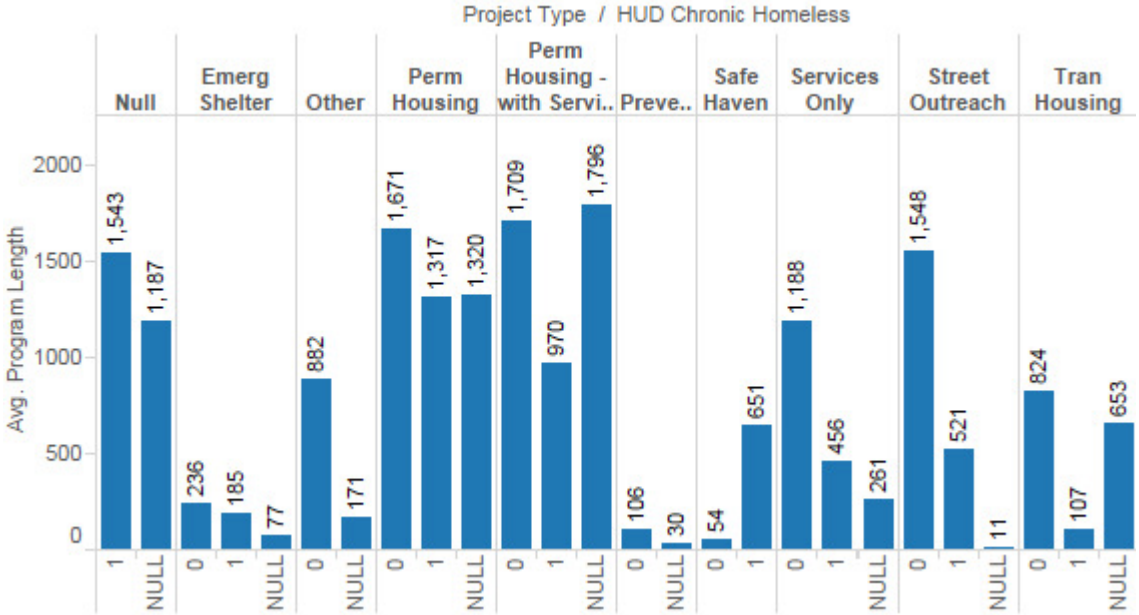
As communities look to prioritize people experiencing homelessness for limited housing resources, they are adopting tools such as the *Vulnerability Index – Service Prioritization Decision Assistance Tool (VI-SPDAT).* The VI-SPDAT is based largely on the work cited above and places equal emphasis on each of the following markers which place individuals at a greater risk of mortality:

1. more than three hospitalizations or emergency room visits in a year
2. more than three emergency room visits in the previous three months
3. aged 60 or older
4. cirrhosis of the liver
5. end-stage renal disease
6. history of frostbite, immersion foot, or hypothermia
7. HIV+/AIDS
8. tri-morbidity: co-occurring psychiatric, substance abuse, and chronic medical condition

It is well known that the average life span for a person experiencing homelessness in considerably less than that of their housed peers. Simtech Solutions manages a comprehensive HMIS data warehouse which contains over 330,000 records of people experiencing, or whom have experienced, homelessness. According to this data, ***the average age of death of the 646 people reported to have died while in a homeless project is 52 years of age.***

Average Length of Residency Prior to Death - by Chronic Status and Project Type

n=646 (out of 330K homeless throughout the US), Average Age of Deceased at Death = 52



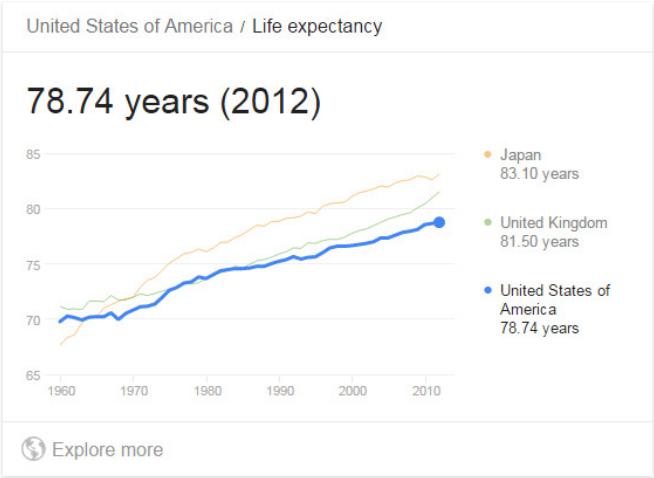
Source: HomelessData.com

Chronic Key (X Axis):

0 = Not Chronic 1 = Chronic Null = Unknown Chronic Status

This is in contrast to the average life expectancy of all US citizens which is currently 78.7 years of age. This represents an additional life expectancy in excess of 26 years for those who have a stable living environment.

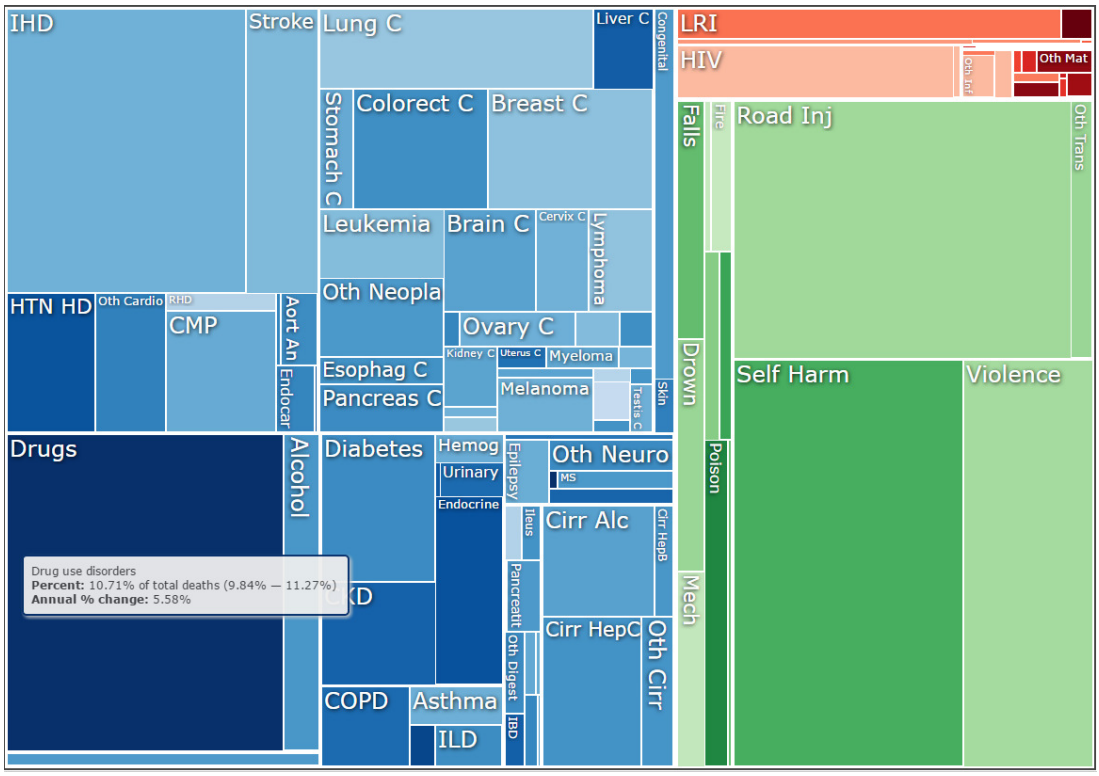
Average Life Expectancy – United States



Source: World Bank

To understand why there is a shortened expected life span for people experiencing homelessness we can look towards the causes of death for both populations.

Cause of Death of All 15-49 Year Olds in the US, 2015 (Both Sexes)

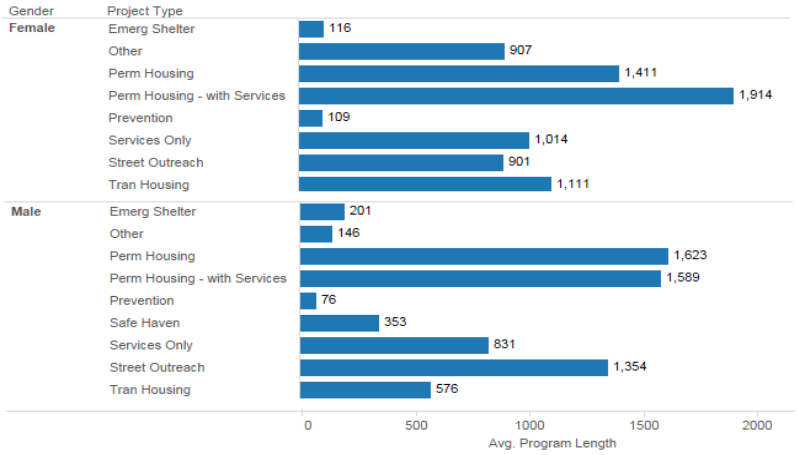


Source: HealthData.org

According to this data, drug use disorders constitute 10.71% of the primary cause of death in the US for individuals between 15 and 49. In comparison, according to a February 2013 study of *Mortality Among Homeless Adults in Boston,* ***"drug overdose accounted for one-third of deaths among adults younger than 45 years. Opioids were implicated in 81% of overdose deaths."***[1]

There is concern among some in the medical and research communities, including Dr. Jim O'Connell of Boston Healthcare for the Homeless and professor of Sociology, Eric Hirsch, PhD, from Providence College, that the Vulnerability Index is being over-emphasized in the prioritization methodology and that length of homelessness is a greater determining factor when considering the morbidity risk of an individual.

Average Length of Residency Prior to Death - by Gender and Project Type
n=646 (out of 330K homeless throughout the US), Average Age of Deceased at Death = 52



Source: HomelessData.com

Recommendation

Before communities go too far in the adoption of additional data collection tools, which rely upon self-reported data, additional consideration should be given to length of homelessness as a primary determinant in the risk of death. Given the high prevalence of opioid related deaths among adults under the age of 45, in contrast to the general population, this marker should also be given additional consideration.

Limitations of the Data

Data that is collected in HMIS or using tools such as the VI-SPDAT are reliant on self-reported information. Not only is this prone to error, and it increases the administrative burden, but the data is limited in that there are no "costs to the system" associated. Innovative financing models such as social impact bonds rely on this cost data for demonstrating return on investment (ROI) of housing versus shelter. Ideally, a data match with the "systems of record" would be used for this. Medicaid data, public death records, and data from the SAMHSA funded PATH data management system for people with mental health issues are likely candidates for integration.

[1] Travis P. Baggett, MD, MPH ;Stephen W. Hwang, MD, MPH ;James J. O'Connell, MD ;et al. "Mortality Among Homeless Adults in BostonShifts in Causes of Death Over a 15-Year Period". JAMA. February 2013