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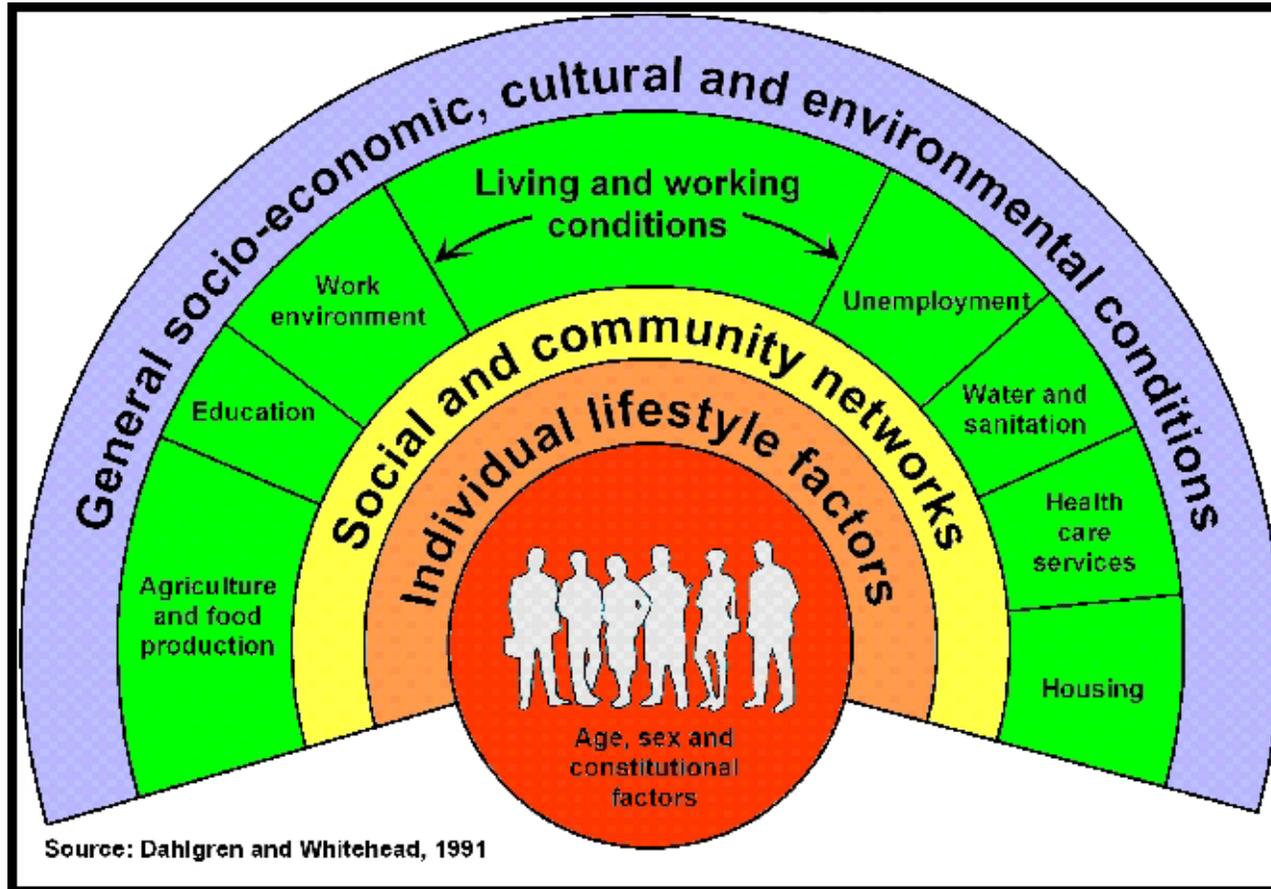
# Housing equals healthcare

Ruth Morgan, M.D., F.A.A.F.P.

The Center for Healthcare Services

Courtyard Integrated Clinic at Haven for Hope

# Social determinants of health (SDH)



Source: Dahlgren, G. and Whitehead, M. (1991). Policies and Strategies to Promote Social Equity in Health. Stockholm: Institute for Futures Studies.

# Social determinants of health (SDH)



# Social determinants of health (SDH)



# Who needs housing?

3.5 million people are homeless in U.S. during the course of a year  
- The Urban Institutes

5.4 million people in U.S. live in substandard housing and/or paying more than half their income in rent  
- HUD

## San Antonio Point in Time Count

Year`	Total	Unsheltered	Children <18 yrs
2016	2781	1137	488
2015	2891	1158	546

Source: SARAH: South Alamo Regional Alliance for the Homeless. <http://www.sarahomeless.org/>

# Housing Crisis

Mental Illness

# Housing Crisis

Mental  
Illness

Physical  
Disabilities

# Housing Crisis

Mental  
Illness

Physical  
Disabilities

Intellectual  
Development  
Disabilities

Addiction

Abused  
Women  
/Children

Former  
Foster Care

Ex-offenders

# Connection between housing and improved health outcomes

- ▶ HIV Care Continuum Initiative / HOPWA  
(Housing Opportunities for People with AIDS)
- ▶ Project 25
- ▶ Enterprise Community Partners, Inc/ Center for Outcomes Research and Education (CORE)

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the page, creating a modern, layered effect.

# Housing Opportunities for People with AIDS

# HIV Care Continuum Curriculum/ HOWPA

- ▶ 1990: The Housing Opportunities for Persons With AIDS (HOPWA) Program was created.
- ▶ 2010: The first National HIV/ AIDS Strategy was released
- ▶ 2013: HIV Care Continuum Initiative

# HIV Care Continuum Curriculum/ HOWPA

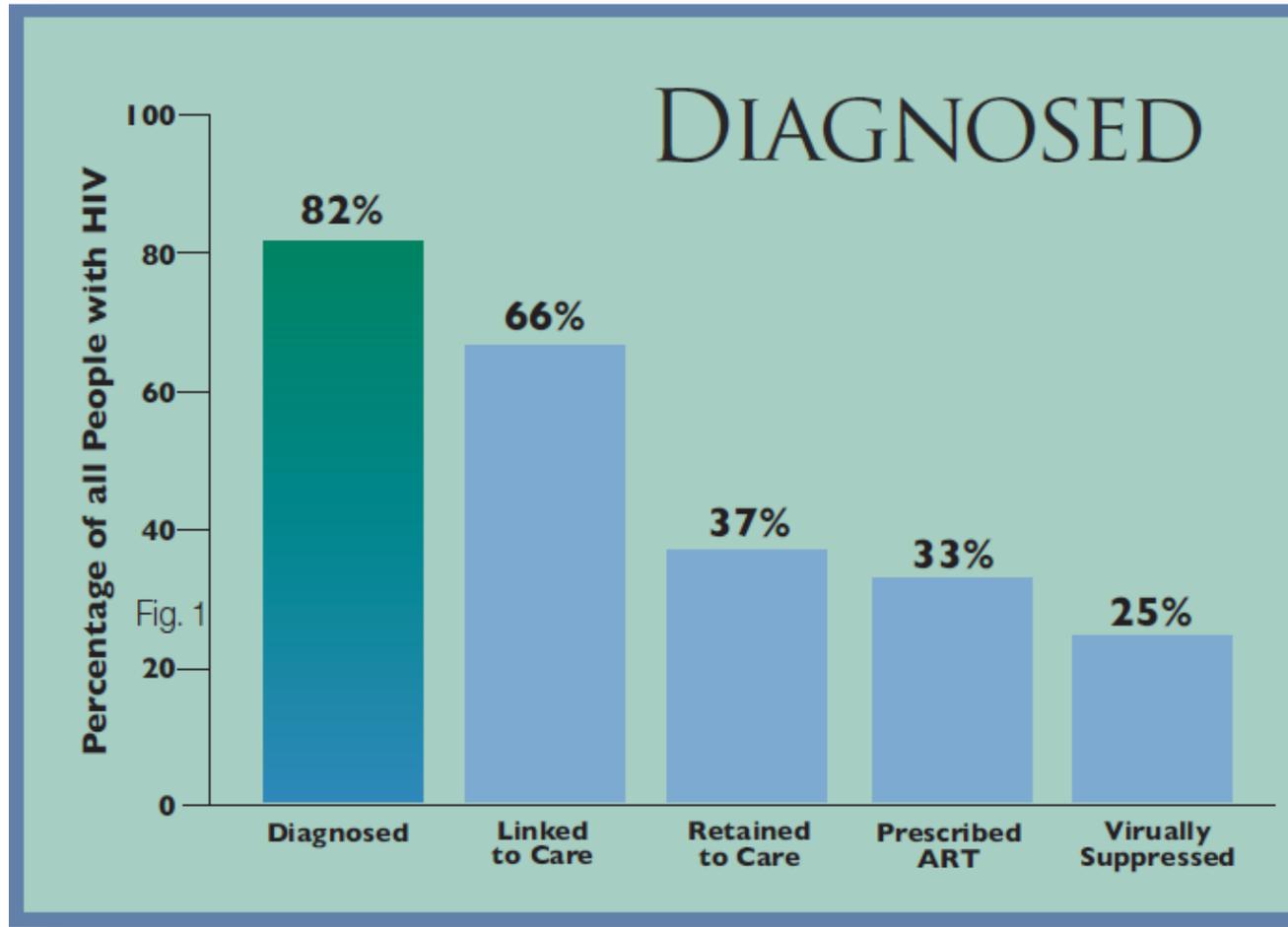
- ▶ At least half of Americans living with HIV experience homelessness or housing instability following diagnosis.
- ▶ Persons experiencing homelessness are at heightened risk of acquiring HIV, with rates of new infections as high as **16 times** the rate in the general population.
- ▶ Evidence shows that housing assistance improves HIV health outcomes at each stage of the HIV Care Continuum.

1. Aidala, et al. (2007). Housing need, housing assistance, and connection to medical care. *AIDS & Behavior*; 11 (6)/ Supp 2:S101 - S115.

2. Kerker, B., et al. (2005). The health of homeless adults in New York City: A report from the New - York City Departments of Health and Mental Hygiene and Homeless Services. Available at - <http://www.nyc.gov/html/doh/downloads/pdf/epi/epi-homeless-200512.pdf>.

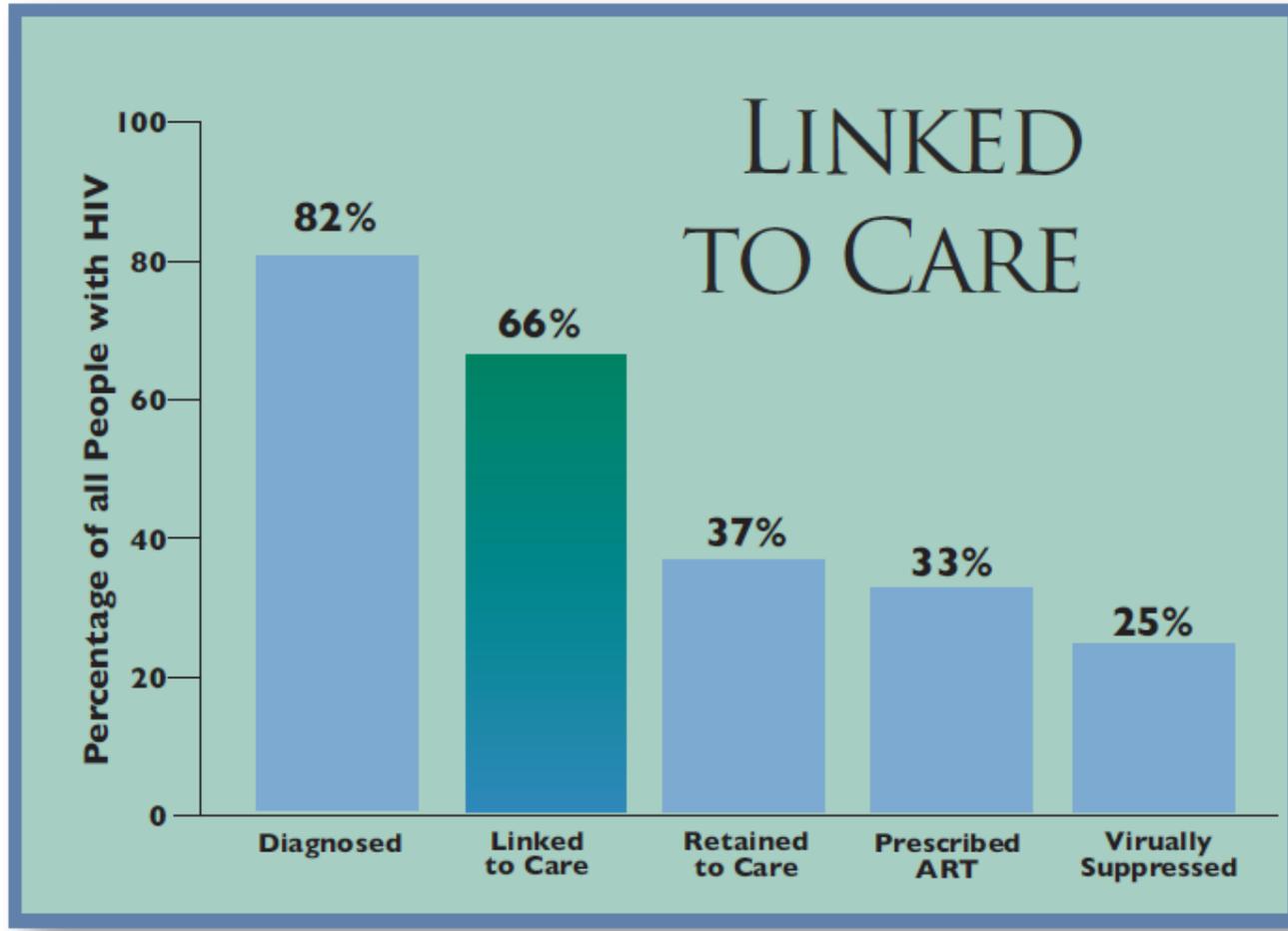
3. Aidala, et al. 2012; Leaver, et al. 2007. -

# HIV Care Continuum Curriculum/ HOWPA



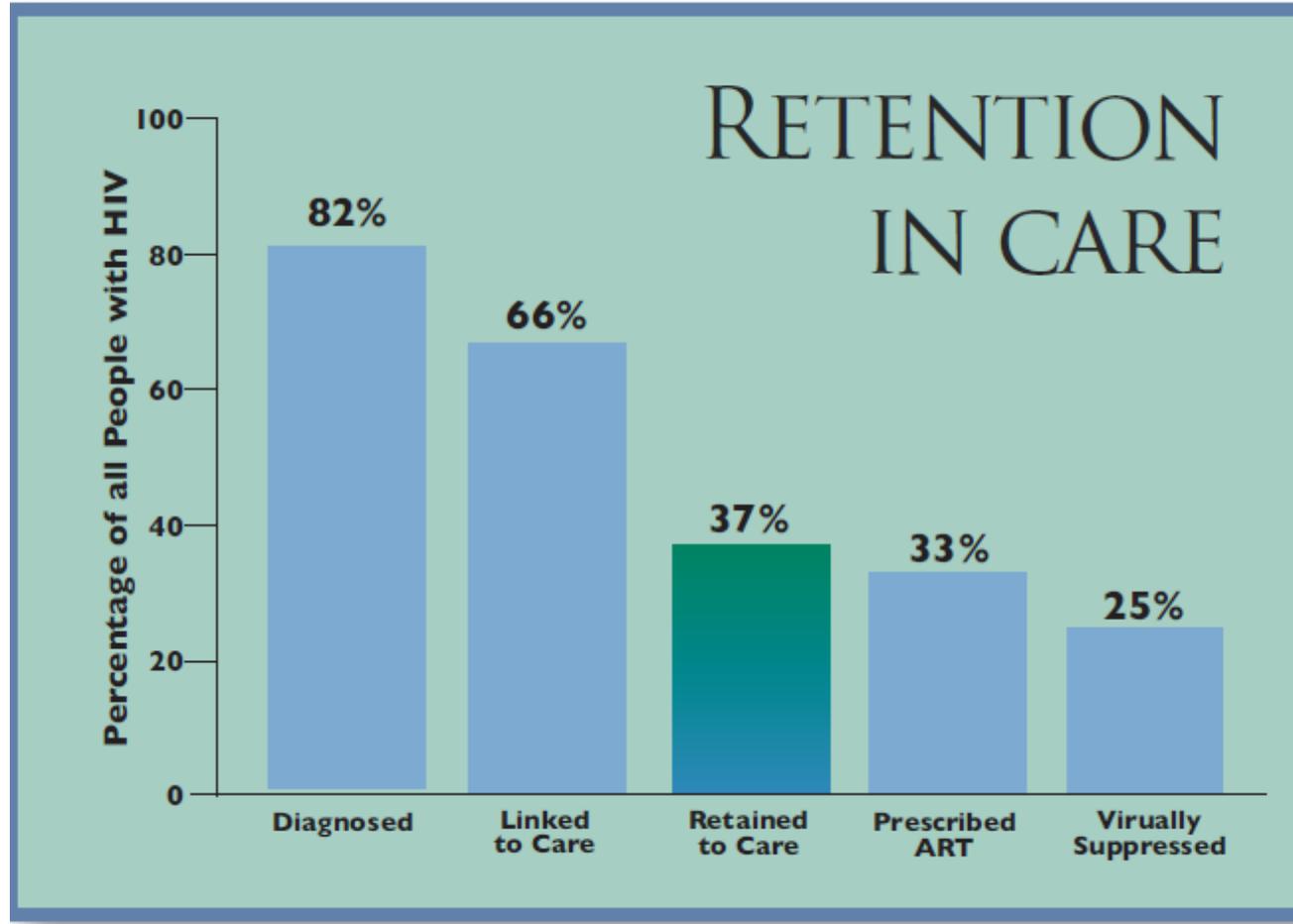
Tested and diagnosed with HIV infection

# HIV Care Continuum Curriculum/ HOWPA



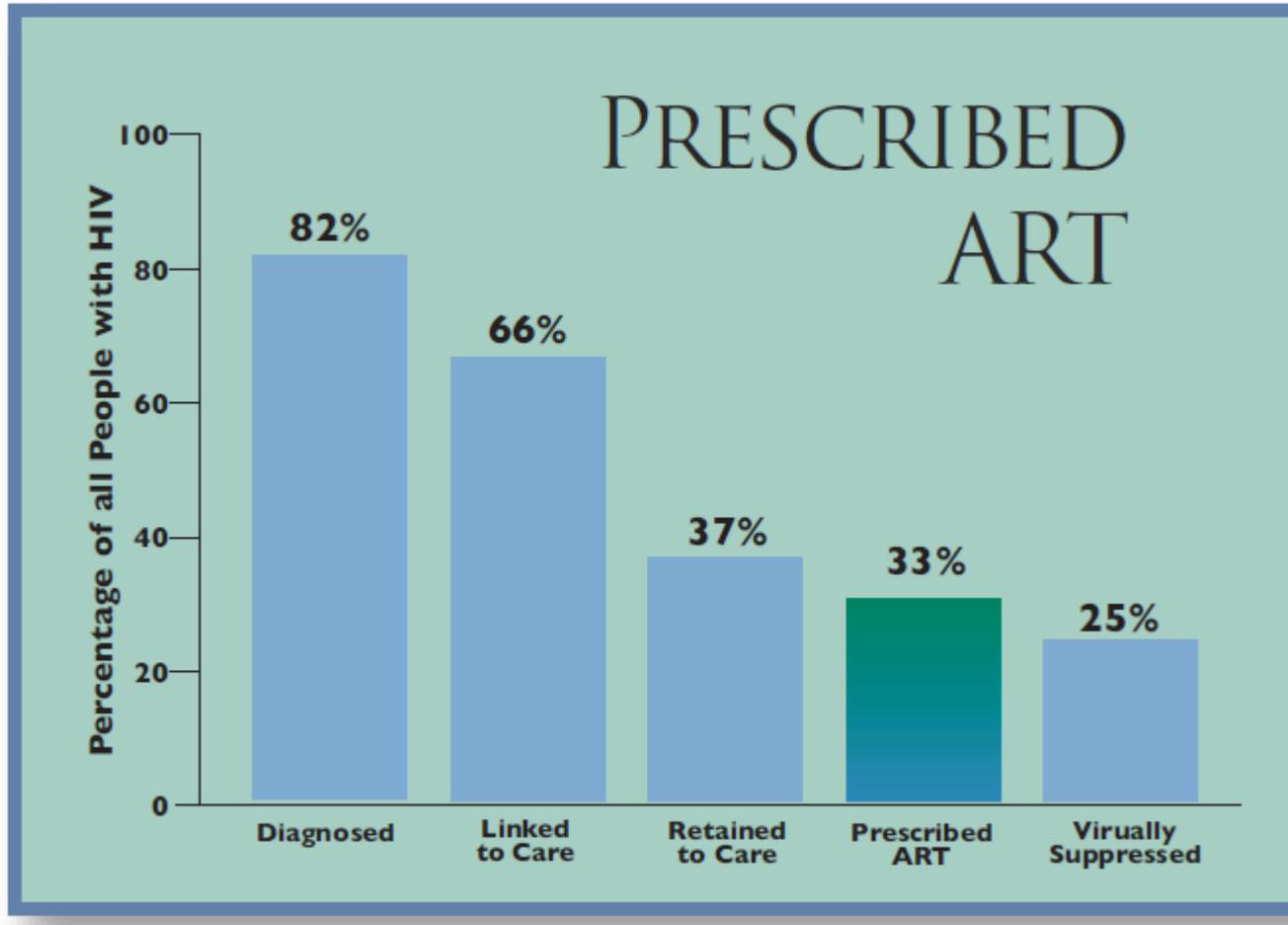
Linked to HIV medical care within 3 months after diagnosis

# HIV Care Continuum Curriculum/ HOWPA



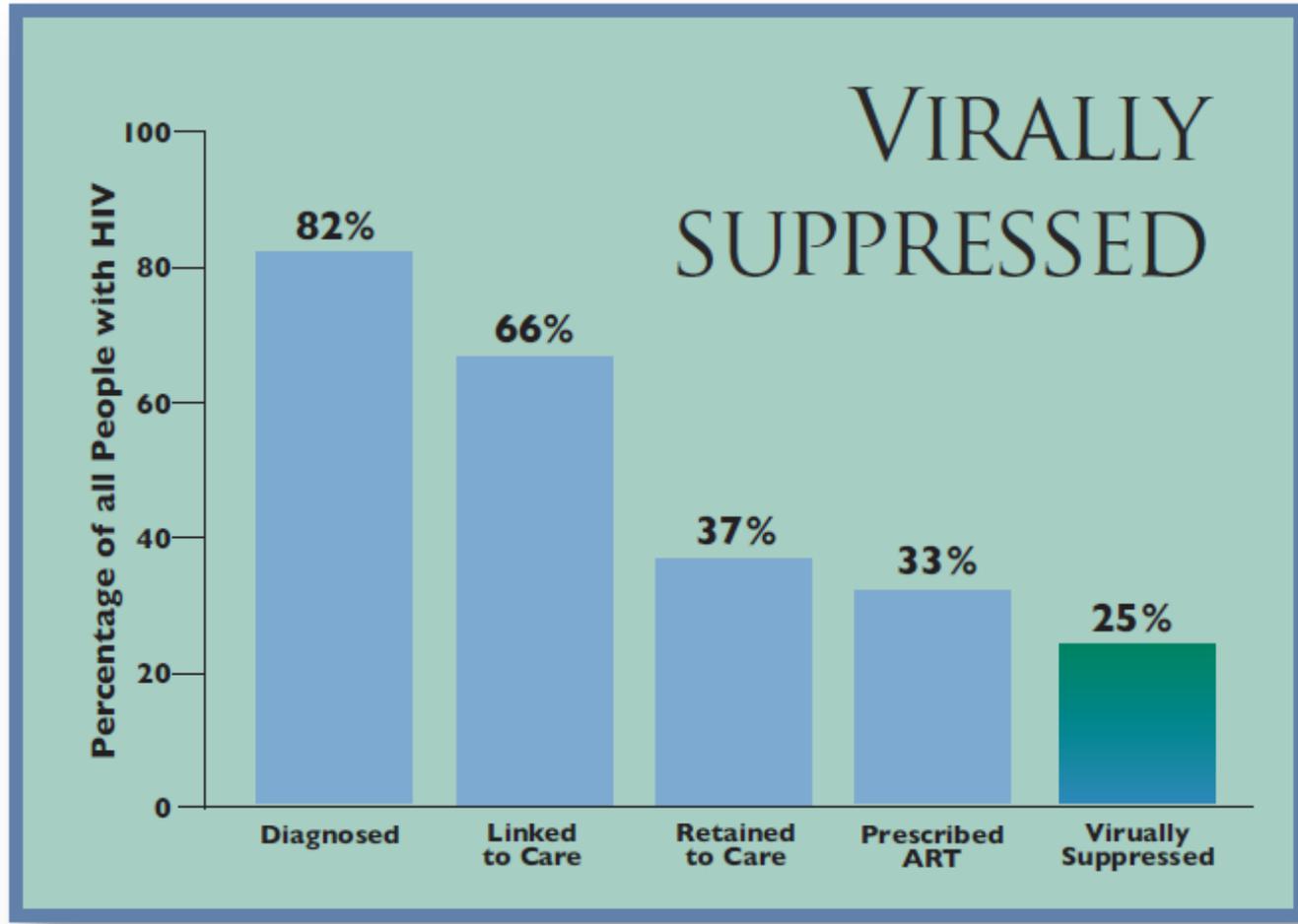
2 or more primary care visits per year, at least 3 months apart

# HIV Care Continuum Curriculum/ HOWPA



Prescribed antiretroviral medications

# HIV Care Continuum Curriculum/ HOWPA



Most recent viral load undetectable or  $\leq 200$  copies/ML

# Lessons Learned : The impact of stable housing on the health of PLWHA

- ▶ For persons who lack a safe, stable place to live, housing assistance is a proven, cost--effective health care intervention.
- ▶ Stable housing has a direct, independent, and powerful impact on HIV incidence, health outcomes, and health disparities.
- ▶ Housing status is a more significant predictor of health care access and HIV outcomes than individual characteristics, behavioral health issues or access to other services.

# Lessons Learned : The impact of stable housing on the health of PLWHA

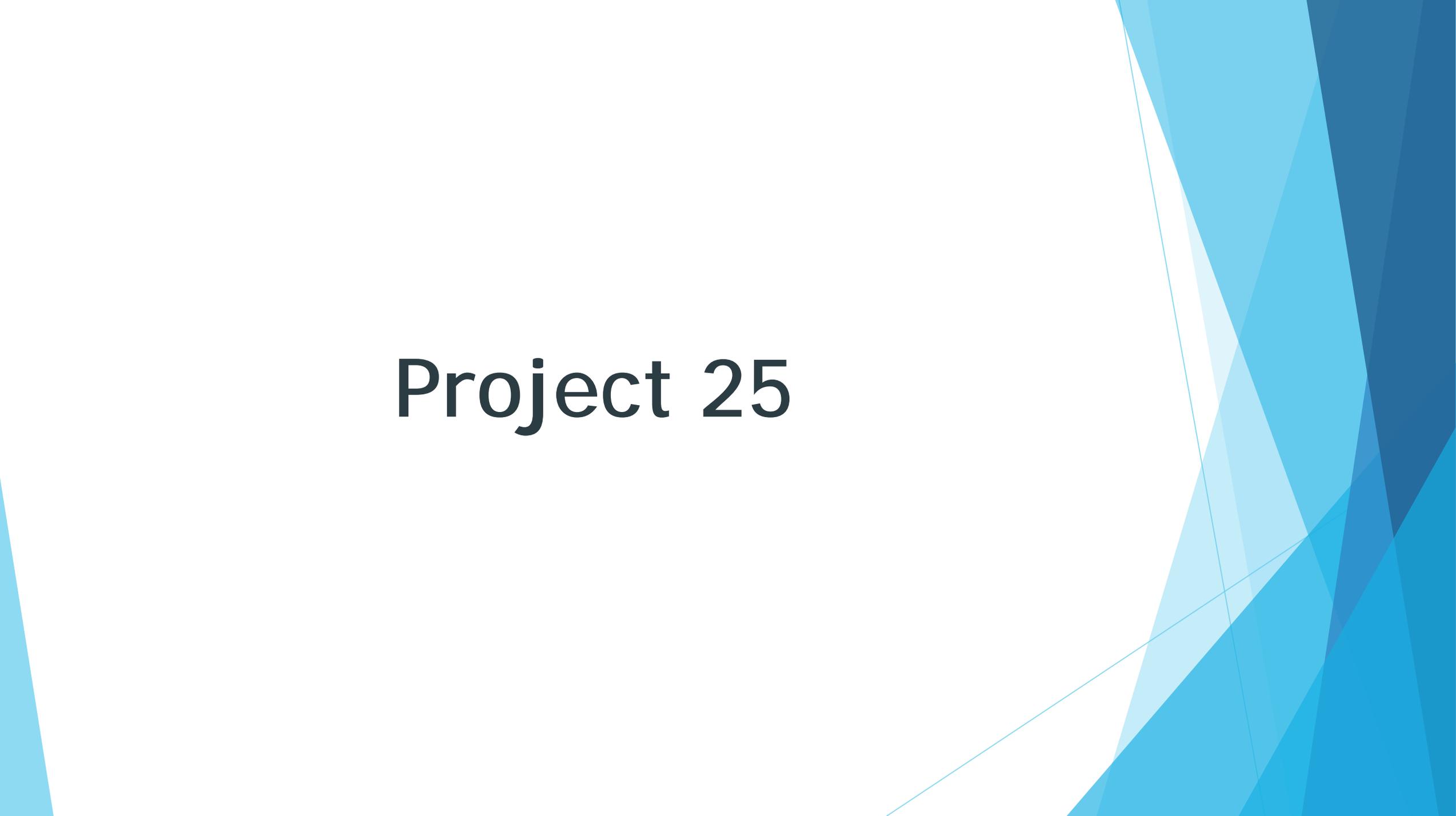
Compared to stably housed persons, persons who are homeless or unstably housed:

- ▶ Are more likely to become HIV infected
- ▶ Are more likely to be diagnosed late, after infection has progressed to HIV illness
- ▶ Are more likely to delay entry into HIV care
- ▶ Experience higher rates of discontinuous health care
- ▶ Are less likely to be prescribed ARV treatment
- ▶ Are less likely to achieve sustained viral suppression
- ▶ Have worse health outcomes with greater reliance on emergency and inpatient care
- ▶ Experience higher rates of HIV- related mortality.

# Lessons Learned : The impact of stable housing on the health of PLWHA

- ▶ Homeless/unstably housed people with HIV whose housing status improves
- ▶ Reduce behaviors that can transmit HIV
- ▶ Increase rates of HIV primary care visits, continuous care, and care that meets clinical practice standards
- ▶ Are more likely to return to care after drop out
- ▶ Are more likely to be receiving ARV treatment
- ▶ Are more likely to be virally suppressed
- ▶ Reduce avoidable use of expensive emergency and inpatient health care
- ▶ Use less public resources even taking into account housing supports

# Project 25

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.

# Project 25

- ▶ San Diego County
- ▶ Homeless population: 8600 individuals
- ▶ Targeted homeless individuals who were high utilizers of public services including EMS, emergency rooms, hospitals, jails, etc.
- ▶ Housing first model

# Project 25

## Demographics

### EXHIBIT 1

	Male	Female	
Gender	86%	14%	
	Black / African	White	American Indian / Alaska Native
Race	18%	78%	4%
	Hispanic	Non-Hispanic	
Ethnicity	7%	93%	

	Yes	No
Veterans	18%	82%
Disabling Condition	100%	0%
Mental Health Illness	89%	11%
Substance Abuse	89%	11%
Victim of Domestic Violence	11%	89%

# Project 25

## Age, Education, and Income

### EXHIBIT 2

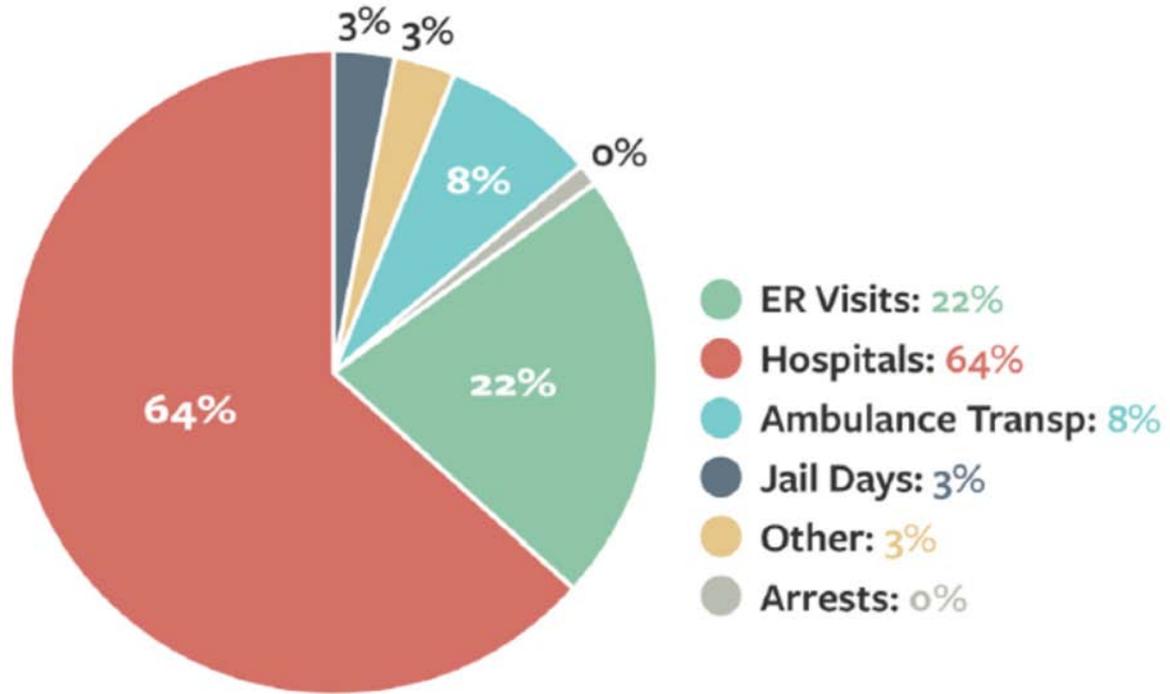
<b>Age Distribution</b>	20 - 29	30 - 39	40 - 49	50 - 59	60+
<i>(no. of people)</i>	3	1	13	10	1
<b>Level of Education Completed</b>	Less than 12 years	High School Diploma or GED	High School 12 years		
<i>(no. of people)</i>	7	16	5		
<b>Income</b>	Income	No Income			
<i>(percent)</i>	39%	61%			
<b>Level of Income</b>	\$0 - \$500	\$500 - \$1000	\$1000 - \$1500	\$1500 - \$2000	
<i>(no. of people)</i>	17	8	2	1	

# Project 25

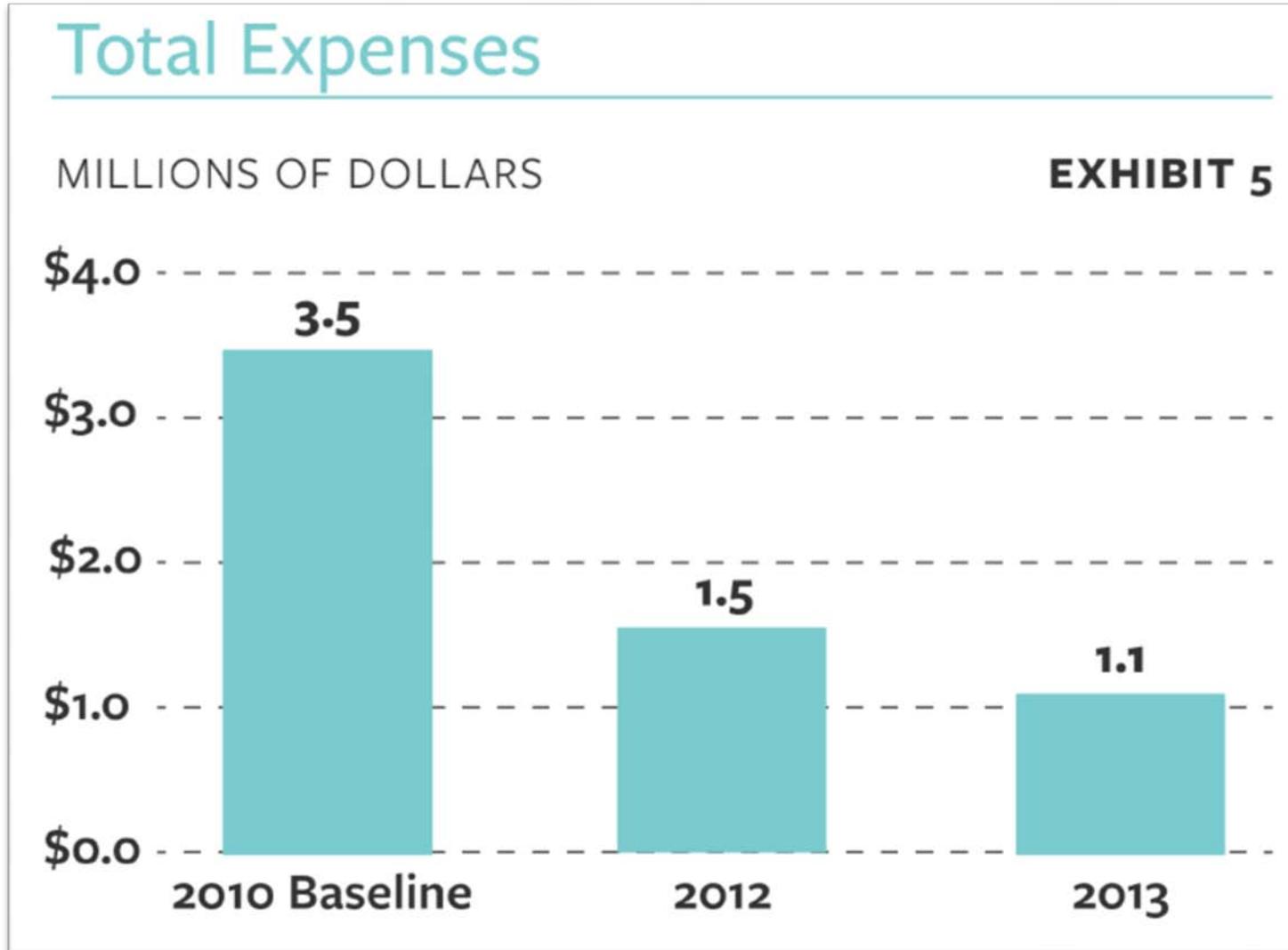
## 2010 Baseline Expenses

TOTAL: \$3.5 MILLION

EXHIBIT 3

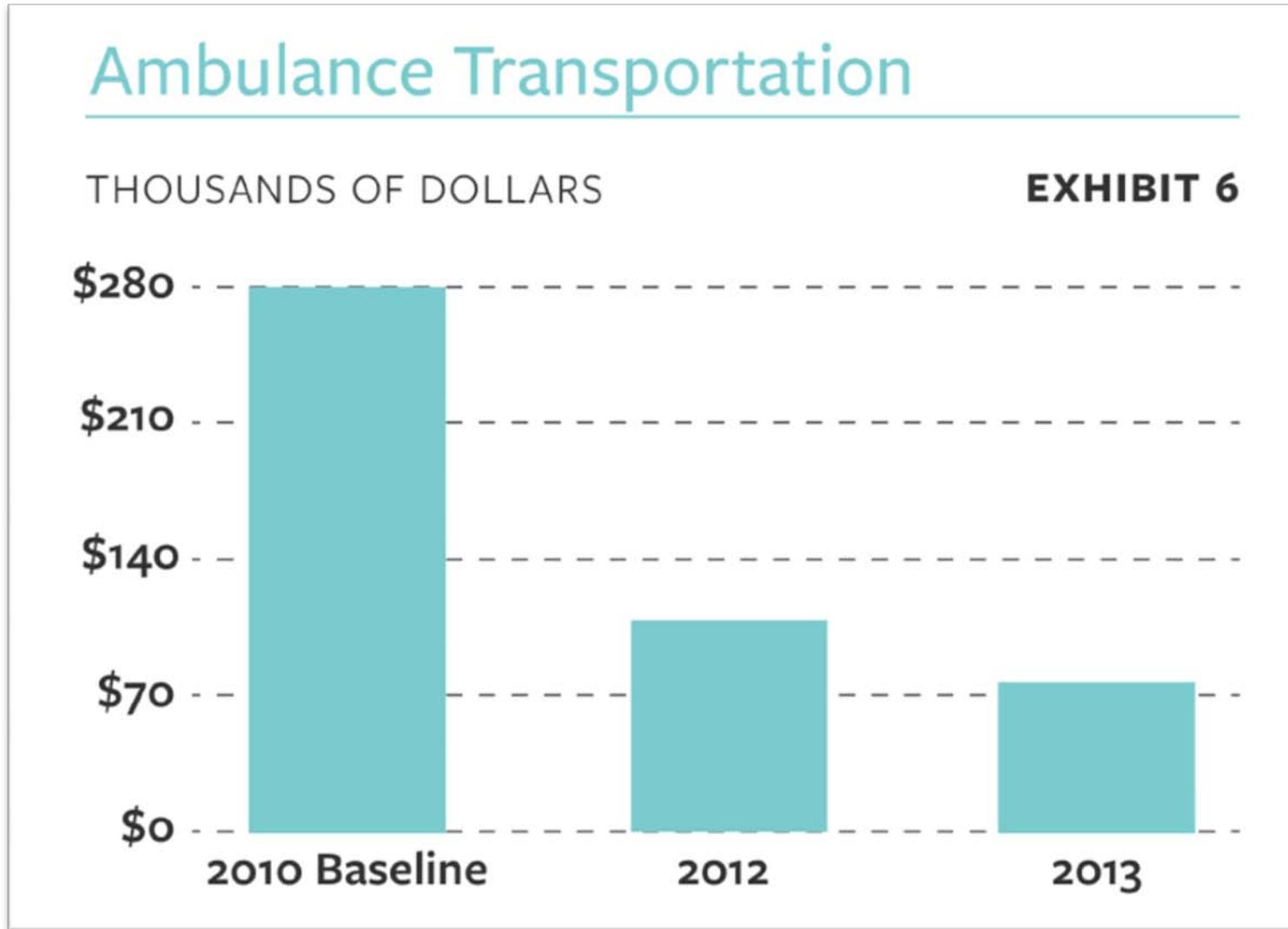


# Project 25



Source: [https://uwsd.org/files/galleries/Project\\_25\\_Report.pdf](https://uwsd.org/files/galleries/Project_25_Report.pdf)

# Project 25



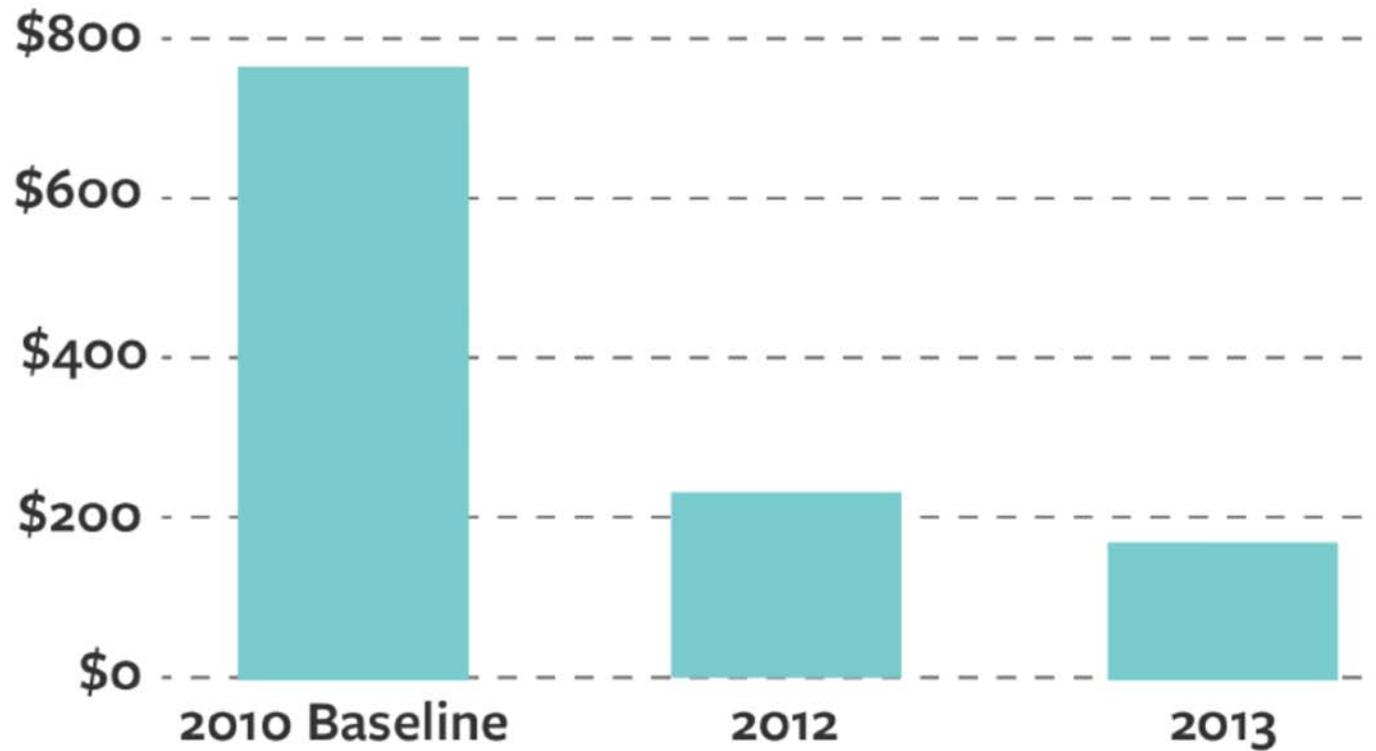
Source: [https://uwsd.org/files/galleries/Project\\_25\\_Report.pdf](https://uwsd.org/files/galleries/Project_25_Report.pdf)

# Project 25

## Emergency Room Visits

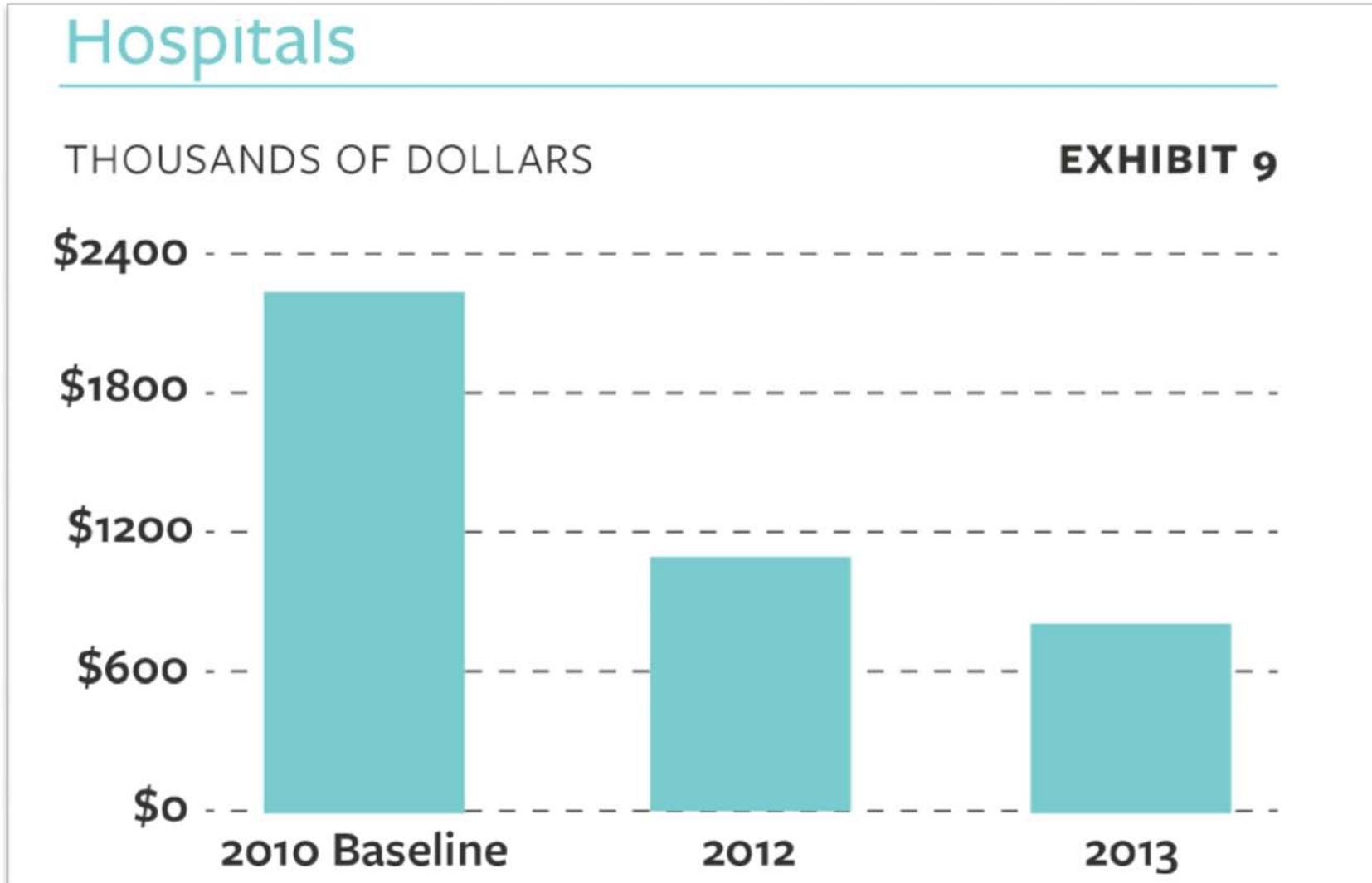
THOUSANDS OF DOLLARS

**EXHIBIT 8**



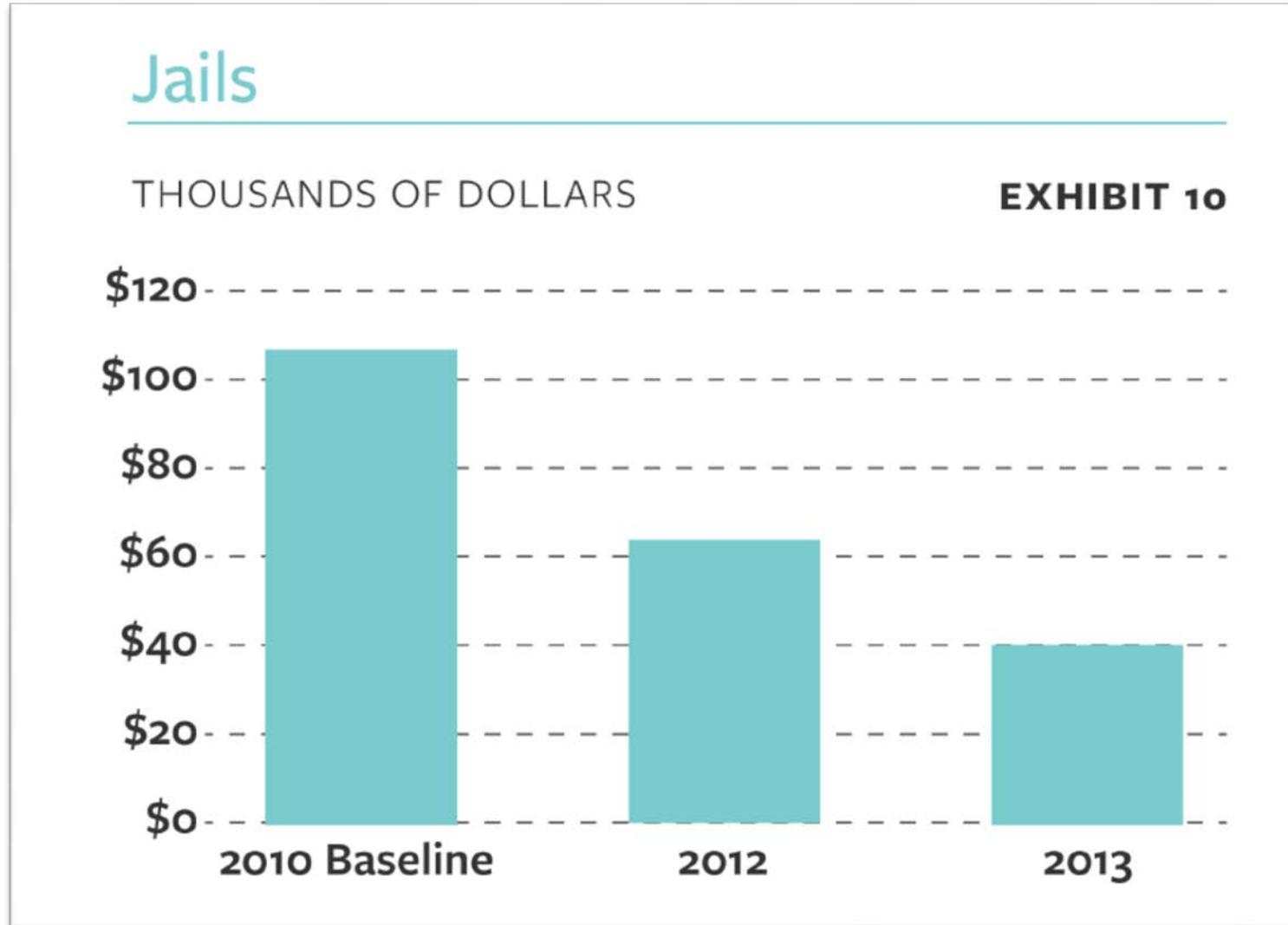
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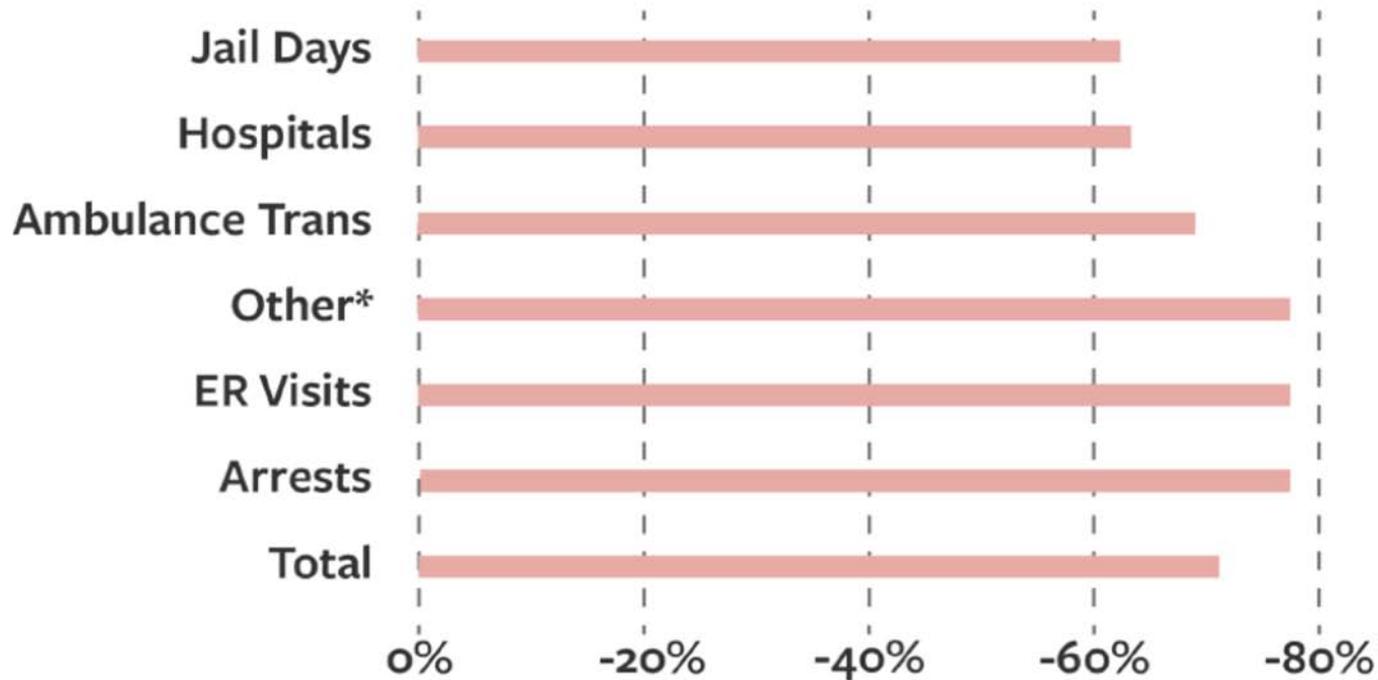
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# Project 25

## Project 25's Impact on Public Service Expenses

2010 BASE TO 2013

**EXHIBIT 12**



# Project 25

## Project 25's Impact on Total Public Service Usage

NUMBER

EXHIBIT 17

	2010 base	2012	Change from base to 2012 (numeric)	Change from base to 2012 (percent)	2013	Change from 2012 to 2013 (numeric)	Change from 2012 to 2013 (percent)	Change from base to 2013 (numeric)	Change from base to 2013 (percent)
Hospitalizations	289	112	-177	-61%	47	-65	-58%	-242	-84%
Hospital Days	1301	399	-902	-69%	488	89	22%	-813	-62%
ER Visits	1171	367	-804	-69%	278	-89	-24%	-893	-76%
Arrests	82	28	-54	-66%	18	-10	-36%	-64	-78%
Jail Days	773	565	-208	-27%	285	-280	-50%	-488	-63%
Ambulance Rides	620	219	-401	-65%	147	-72	-33%	-473	-76%
Other*	151	79	-72	-48%	96	17	22%	-55	-36%

\*Includes: Crisis House, detox centers, homeless shelters, legal assistance, Psychiatric Emergency Response Team

# Project 25 Financial Results

DOLLARS

EXHIBIT 4

28 member group	Dollars			Percent Change		
	Baseline	2012	2013	Base to 2012	2012 to 2013	Base to 2013
<b>Expenses</b>						
Ambulance Transportation	\$279,576	\$122,647	\$90,182	-56%	-26%	-67%
Arrests	\$12,300	\$3,750	\$2,700	-70%	-28%	-78%
ER Visits	\$750,977	\$225,661	\$164,919	-70%	-27%	-78%
Hospitals	\$2,214,060	\$1,092,019	\$818,306	-51%	-25%	-63%
Jail Days	\$105,901	\$61,787	\$39,715	-42%	-36%	-62%
Other*	\$112,361	\$21,549	\$24,840	-81%	15%	-78%
<b>Total</b>	<b>\$3,475,174</b>	<b>\$1,527,414</b>	<b>\$1,140,662</b>	<b>-56%</b>	<b>-25%</b>	<b>-67%</b>
<b>Program Costs</b>		\$754,294	\$790,202		5%	
<b>Avg expense per person</b>	<b>\$124,113</b>	<b>\$54,550</b>	<b>\$40,738</b>	<b>-56%</b>	<b>-25%</b>	<b>-67%</b>
<b>Median expense per person</b>	<b>\$110,715</b>	<b>\$26,364</b>	<b>\$11,717</b>	<b>-76%</b>	<b>-56%</b>	<b>-89%</b>
Extrapolated baseline expenses	\$3,475,174	\$3,840,962	\$4,002,410			
Total program expenses		\$1,527,414	\$1,140,662			
Total program costs		\$754,294	\$790,202			
<b>Net savings</b>		<b>\$1,559,254</b>	<b>\$2,071,547</b>			
<b>Average net savings</b>		<b>\$55,688</b>	<b>\$73,984</b>			
<b>Net return</b>		<b>207%</b>	<b>262%</b>			

\*Includes: Crisis House, detox centers, homeless shelters, legal assistance, Psychiatric Emergency Response Team

# Project 25 Financial Results

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\*Includes: Crisis House, detox centers, homeless shelters, legal assistance, Psychiatric Emergency Response Team

# Lessons Learned

- ▶ Time and care must be devoted to finding the appropriate housing for each individual.
- ▶ A close relationship between the landlord and the program must be established.
- ▶ Intensive case management is essential.
- ▶ To effectively deliver health care, case managers must be closely involved.

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Enterprise Community Partners, Inc/  
Center for Outcomes Research and  
Education (CORE)

# Enterprise/ CORE

- ▶ Portland, Oregon area. Homeless population: 3800 individuals
- ▶ Explored the impact on healthcare cost when low income individuals move into affordable housing.
- ▶ Medicaid claims data was used to measure changes in health care costs and use.

# Enterprise/ CORE

- ▶ Survey data was used to examine health care access and quality.
- ▶ The study included 145 housing properties of the three different types: family housing (FAM), permanent supportive housing (PSH), and housing for seniors and people with disabilities (SPD).
- ▶ The impact of integrated services with housing.

# Enterprise/ CORE

**1** Costs to health care systems were lower after people moved into affordable housing.

- Total Medicaid expenditures declined by 12 percent.
- Declines in expenditures were seen for all housing types.
- *IMPLICATION: Access to affordable housing will likely drive down costs to the health care system.*

Overall	FAM	PSH	SPD
-12%	-8%	-14%	-16%

# Enterprise/ CORE

## 2 Primary care visits went up after move-in; emergency department visits went down.

- Outpatient primary care utilization increased 20 percent in the year after moving in, while ED use fell by 18 percent.
- Similar trends were observed for each housing type.
- IMPLICATION: *Affordable housing helps meet major health reform utilization metrics.*

Primary Care:  +20%

ED Visits:  -18%

# Enterprise/ CORE

## 3 Residents reported that access to care and quality of care improved after moving into housing.

- Many residents reported that health care access and quality were better after move-in than before; very few people reported it was worse.
- IMPLICATION: *Expenditure and utilization differences did not come at the expense of access or quality.*

ACCESS to health care after moving to affordable housing	Better	Worse	QUALITY of health care after moving to affordable housing	Better	Worse
	40%	4%		38%	7%

# Enterprise/ CORE

## 4 Integrated health services were a key driver of health care outcomes.

- The presence of health services was a driver of lower costs and ED use, despite low awareness among residents. (See Exhibits 1 to 21.)
- *IMPLICATION: Increasing use of these services may result in even greater cost differences.*

### Adjusted impact of health services:

EXPENDITURES	-\$115 member/month	ED VISITS	-0.43 visits/year
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# Enterprise/CORE Lessons Learned

- ▶ Housing positively affects health outcomes.
- ▶ Access to integrated services in affordable housing further reduces health care costs and significantly reduces use of expensive health care services, such as emergency department visits.
- ▶ The greater the client health needs at move-in, the more housing helped.

**“The bottom rungs of the housing ladder are broken and we need to fix them. It makes our whole society stronger.”**

**- Phillip Mangano of the U.S. Interagency Council on Homelessness**

# Recommendations

- ▶ Using Peer Support/Resident Services Coordinators to Increase Awareness
- ▶ Improve Access to Mental Health and Dental Care Services
- ▶ Establish a Coordinated Care Organization (CCO) Metric to Address Housing Stability

# Recommendations

- ▶ Increase Medicaid Flexibility to Allow Investment in Affordable Housing and Related Services
- ▶ Include Affordable Housing in Hospital Community Improvement Plans
- ▶ Invest in Housing and Urban Development Section 4 Resources
- ▶ Increase Use of Flexible Services Funding for Health and Housing

# References

- ▶ Dahlgren, G. and Whitehead, M. (1991). Policies and Strategies to Promote Social Equity in Health. Stockholm: Institute for Futures Studies.
- ▶ <http://drawingchange.com/wp-content/uploads/2013/11/GW6-Social-Determinants-closeup.jpg>
- ▶ SARAH: South Alamo Regional Alliance for the Homeless. Point in Time Count. <http://www.sarahomeless.org/>
- ▶ HIV Care Continuum: The connection between housing and improved outcomes along the HIV care continuum. [https://www.health.ny.gov/diseases/aids/ending\\_the\\_epidemic/docs/key\\_resources/housing\\_and\\_supportive\\_services/hopwa.pdf](https://www.health.ny.gov/diseases/aids/ending_the_epidemic/docs/key_resources/housing_and_supportive_services/hopwa.pdf)
- ▶ Aidala, et al. (2007). Housing need, housing assistance, and connection to medical care. *AIDS & Behavior*; 11 (6)/ Supp 2:S101 - S115.
- ▶ Kerker, B., et al. (2005). The health of homeless adults in New York City: A report from the New - York City Departments of Health and Mental Hygiene and Homeless Services. <http://www.nyc.gov/html/doh/downloads/pdf/epi/epi-homeless-200512.pdf>.
- ▶ Project 25: Housing the most frequent users of public services among the Homeless (2015). [https://uwsd.org/files/galleries/Project\\_25\\_Report.pdf](https://uwsd.org/files/galleries/Project_25_Report.pdf)
- ▶ Health in Housing: Exploring the Intersection between Housing and Health Care (2016). [https://s3.amazonaws.com/KSPProd/ERC\\_Upload/0100981.pdf](https://s3.amazonaws.com/KSPProd/ERC_Upload/0100981.pdf)