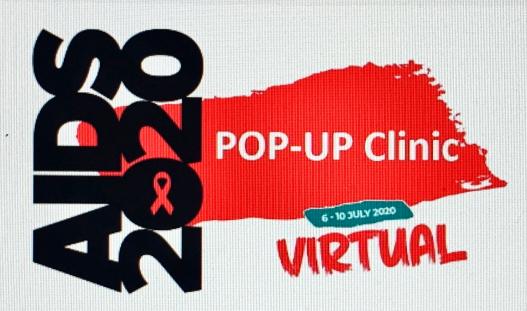
#### OAE04 - Innovation in initiation, treatment and care: Differentiated Service Delivery

OAE0406 - POP-UP clinic: A multicomponent model of care for people living with HIV (PLHIV) who experience homelessness or unstable housing (HUH) me essness or unstable housing (FUF)

Elizabeth Imbert, University of California San Francisco



Elizabeth Imbert, MD MPH, Matthew D. Hickey MD, Angelo Clemenzi-Allen MD, Madellena Conte, Elise D. Rilev PhD, Diane V. Havlir MD, and Monica Gandhi, MD









In SF,

**75%** 

Viral suppression among PLHIV who are housed

33%

Viral suppression among PLHIV who experience homelessness

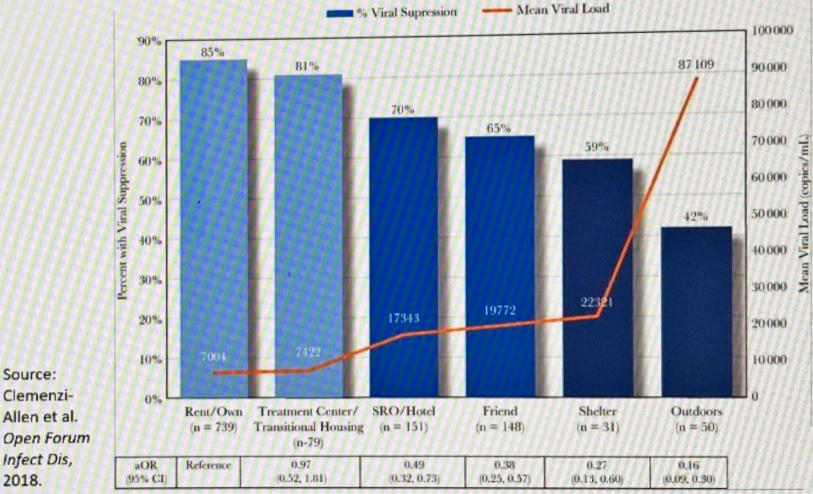
Background

People unhoused at HIV diagnosis had a 27-fold higher odds of death compared to those housed.





## Percent of Patients with Viral Suppression & Mean Viral Load by Living Arrangement



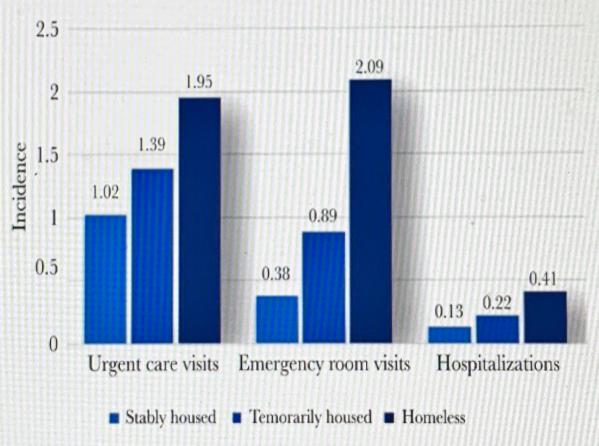
Source: Clemenzi-

Allen et al.

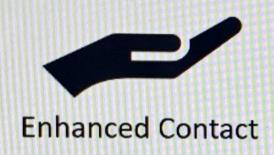
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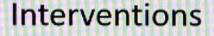
2018.

#### Rates for acute care visits by housing status and visit type









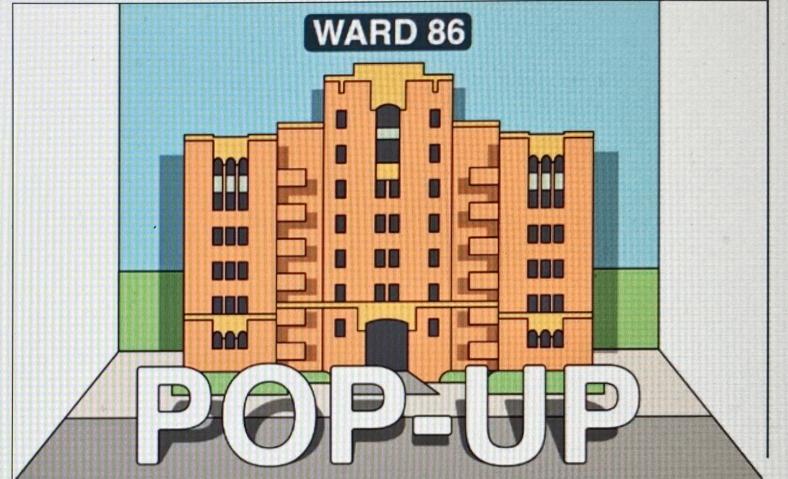






Source: Gardner LI et al. Clin Infect Dis Off Publ Infect Dis Soc Am. 2014; Metsch LR et al. JAMA. 2016; Kushel MB et al. Clin Infect Dis Off Publ Infect Dis Soc Am. 2006; Bhatta DN et al. Health Qual Life Outcomes. 2017; Risher KA et al. AIDS Behav. 2017.







### Who is eligible?

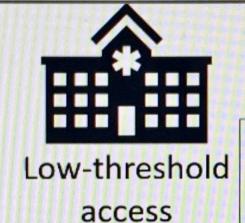
Ward 86 patients who have a:

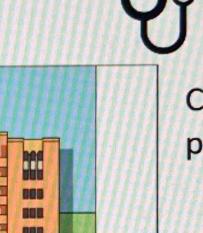
- 1) HIV viral load >200 copies/mL or are off ART
- 2) Homeless or Unstable Housing (HUH)
- 3) ≥1 missed primary care appointment and ≥2 drop-in visits to Ward 86 over prior 12 months.

### Referrals

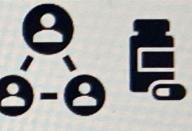
-surveillance data and chart review -Ward 86 providers -City's health department linkage to care program







**WARD 86** 



Comprehensive primary care

\$\$\$

Incentivized care



**Enhanced Outreach** 

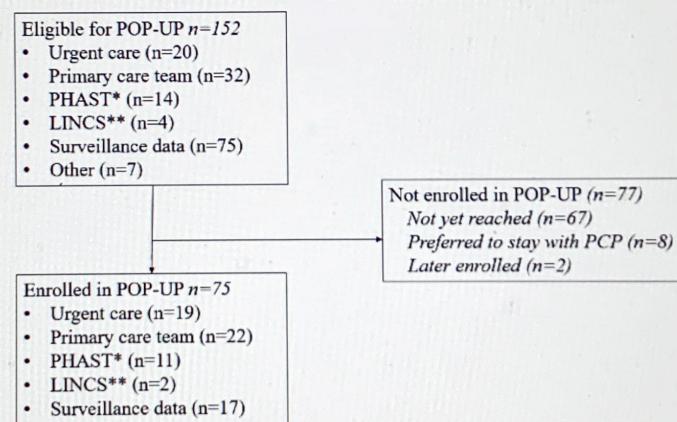


### **Outcomes and Analysis**

- Primary Outcome: Cumulative incidence of viral suppression (<200 copies/ml) assessed 6 months post-enrollment</li>
- Secondary outcomes:
  - % starting/restarting ART within 7 days of enrolment
  - Early engagement (% with a follow-up visit within 1 and 3 months)
  - Sustained engagement (% with a visit in 1st 3 months and 2<sup>nd</sup> 3 months)



#### Flowchart of POP-UP clinic referrals, January 2019 to February 2020





Other (n=4)

## **Participant Characteristics**

	Enrolled (n=75)	
	n	%
Age		
18-50	50	67%
>50	25	33%
Geńder		and the second s
Cisgender man	64	85%
Cisgender woman	7	9%
Transgender woman	1	1%
Nonbinary/Gender nonconforming	3	4%
Race/Ethnicity		4-4-1
Black/African American	26	35%
White	34	45%
Hispanic/Latinx	7	9%
American Indian/Native American	5	7%
Other	3	4%

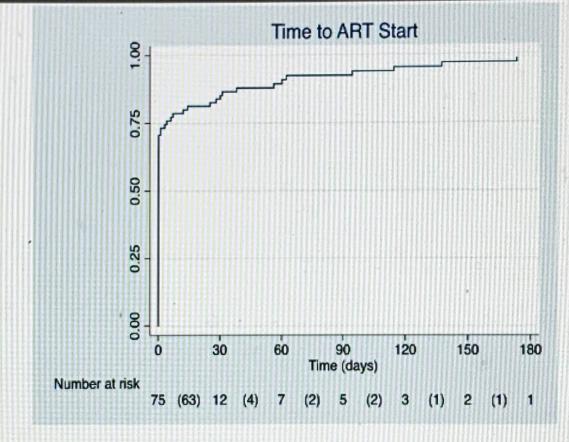
### Participant Characteristics

	Enrolled (n=75)	
	<b>n</b>	%
Housing status at enrollment		
Single room occupancy	5	7%
Transitional housing	9	12%
Treatment program	2	3%
Couch surfing	11	15%
Shelter	10	13%
Street	38	51%
Baseline CD4 count (cells/mm3)		
<200	30	40%
200-349	20	27%
350-499	16	21%
≥500	12	16%

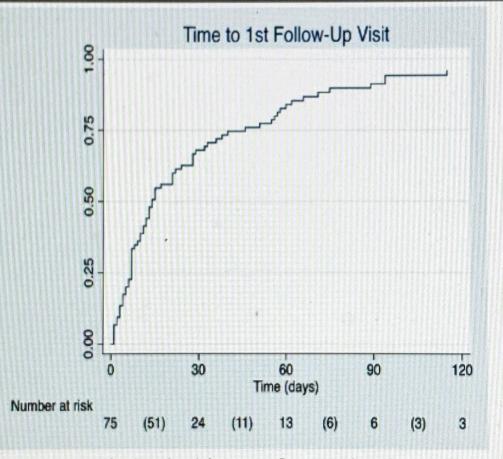


# Participant Characteristics

	Enrolled (n=75)	
	n	%
Substance use disorder (any)	75	100%
Methamphetamine	68	91%
Cocaine	8	11%
Opioids	11	15%
Alcohol	7	9%
Mental health disorder (any)	58	77%
Psychotic disorder	12	16%
Bipolar disorder	11	15%
Depressive disorder	38	51%
Anxiety disorder	14	19%



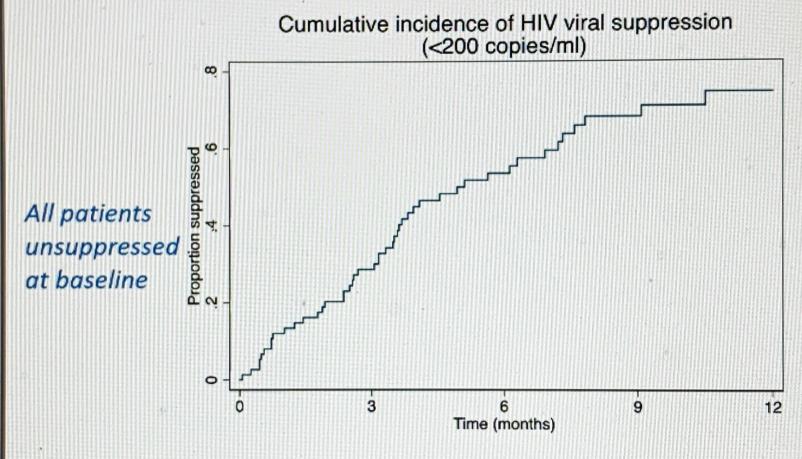
The cumulative incidence of restarting ART within 7 days of enrollment was 79% (95% confidence interval (CI) 69-87%)



The cumulative incidence of returning for a visit within 1 month was 68% (95% CI 57-78%) and, within 3 months, was 91% (95% CI 83-96%).

86% of the 49 patients with at least 6 months of follow up had visits in both the first and second quarters.





Cumulative incidence of viral suppression by 6 months among the entire cohort (n=75) was 54% (95% CI 41-68%).

# Summary

- With an exceptionally vulnerable population of viremic people experiencing homelessness, we demonstrated sustained engagement in the POP-UP model of care
- Over half achieved viral suppression within the first six months following enrollment.
- Limitations: lack of control group; implementation at a single site

### Discussion

- Low-threshold, high-intensity primary care programs similar to POP-UP may improve patient outcomes for people with HIV experiencing unstable housing or homelessness in other urban settings.
- Challenges linking this patient population to even low-threshold models of care.

The high proportion of substance use and mental health diagnoses demonstrate

- additional challenges to care engagement.
- Next steps involve understanding factors and implementation mechanisms associated with achieving and maintaining viral suppression in this population.