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ABSTRACT

Background: Finding and bringing into effective antiretroviral treatment individuals with undiagnosed HIV infection is required to limit and reduce the burden of HIV. Where to effectively invest limited resources to achieve this goal is unknown.

Methods: Attempts to link patients to HIV care are reviewed for patients newly diagnosed with HIV infection as a result of universal opt out screening made in a major hospital's Emergency Department in Houston, Texas. Standard opt-out HIV testing was offered to all presenting adults.

An infectious diseases team including linkage workers attempted linkage to HIV care for all patients with a new HIV diagnoses.

Results: From January to December 2018, 7043 HIV 4th Gen ADVIA HIV Ag/Ab tests were performed. 123 (1.7%) were positive of which 18 (0.25%) were new diagnoses. 94.4% of new HIV diagnoses were successfully disclosed to the patients; 79% of new HIV diagnoses were successfully linked to care with an HIV specialist. The 22 % of linkage failures were further investigated to determine characteristics that differentiated them from those who were successfully linked to HIV care. A single finding fully discriminated the groups successfully and unsuccessfully linked to HIV care: those with stable housing were 100% successfully linked to HIV care.

Conclusions: The importance of finding and bringing into effective HIV treatment individuals with undiagnosed HIV infection was recognized years ago and interventions including Emergency Room testing of all presenting patients have been implemented. With the maturation of the ER HIV testing, the issue of housing of newly diagnosed patients is now the most notable constraint on successful HIV intervention.

BACKGROUND

- Lack of stable, secure, adequate housing is a significant barrier to consistent and appropriate HIV medical care, access and adherence to antiretroviral medications, sustained viral suppression, and risk of forward transmission¹.
- Increasing efforts to improve housing assistance for HIV-positive populations in particular, may be warranted not only for the benefits of stable housing, but also to improve HIV-related biomarkers².

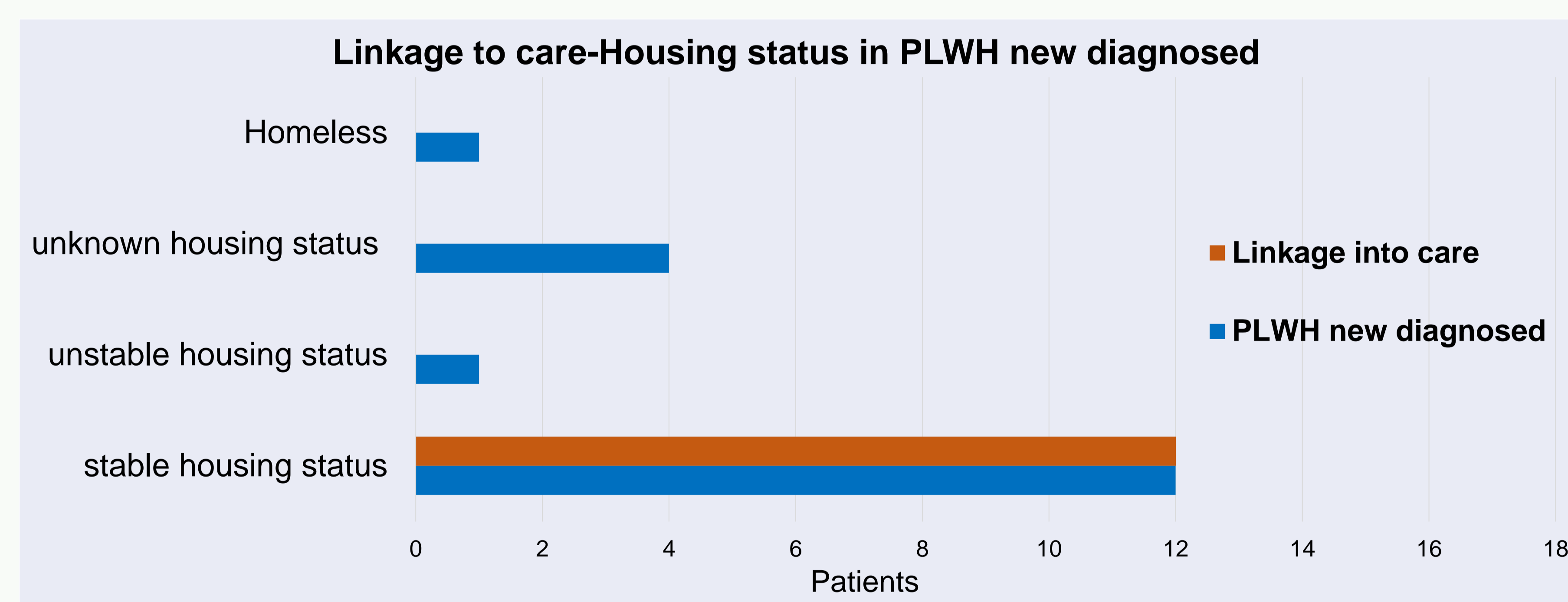
METHODS

- In June 2017, the Emergency Medicine and Infectious Diseases Departments at Memorial Hermann TMC implemented a routine HIV testing program.
- Opt out HIV Screening was offered to conscious (Glasgow score > 9), adults between 18 and 65 years of age presenting at the Memorial Hermann Hospital Texas Medical Center Emergency Department (MH TMC ED).
- Unique patients were identified and investigations were made to classify positive patients newly HIV diagnosed or previously diagnosed. Subsequently it was determined if the patients were linked to HIV care or not, and for those not linked to care a linkage worker was assigned.
- **Definitions**
 - *Contacted* : Service Linkage Care Team reached patient. Staff members contacted patient directly in person or by phone or patient was seen in person by partner agency.
 - *Not Contactable*: Service Linkage Care Team was unable to reach patient with HIV. Reasons include: patients deceased, out of state jurisdiction, homeless, unable to locate due to falsified information and transfer to hospice care.

RESULTS

Table 1. Linkage to care in patients found HIV positive at the Emergency Department n, (%)

	New Diagnosis, 18 (15%)	Previously Diagnosed, 105 (85%)
Contacted by Linkage Worker	14 (78)	89 (85)
<i>Linkage to HIV care</i>		
Linked	11 (79)	
Established		55 (62)
Relinked		29 (32)
Out of Care	2 (14)	3 (3)
Declined	1 (7)	2 (2)
<i>Housing status</i>		
Stable	12 (86)	75 (84)
Unstable		4 (4)
At risk	1 (7)	
Homeless	1 (7)	1 (1)
Hospice		4 (4)
Unknown		5 (6)
Not Contactable by Linkage Worker	4 (22)	16 (15)
<i>Linkage to HIV care</i>		
Unknown	4 (100)	16 (100)
<i>Housing status</i>		
Unstable		2 (12)
Homeless		4 (25)
Unknown	4 (100)	10 (62)



CONCLUSIONS

- The importance of finding and bringing into effective HIV treatment individuals with undiagnosed HIV infection was recognized years ago and interventions including Emergency Room testing of all presenting patients have been implemented.
- With the maturation of the ER HIV testing, the issue of housing of newly diagnosed patients is now the most notable constraint on successful HIV intervention.
- Provision Housing in patients living with HIV might improve the adherence and treatment outcomes.

REFERENCES

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2. Galárraga O, Rana A, Rahman M. et al. The effect of unstable housing on HIV treatment biomarkers: An instrumental variables approach. Soc Sci Med. 2018 Oct;214:70-82