

Monisha Arya¹, Siavash Pasalar², and Thomas P. Giordano¹

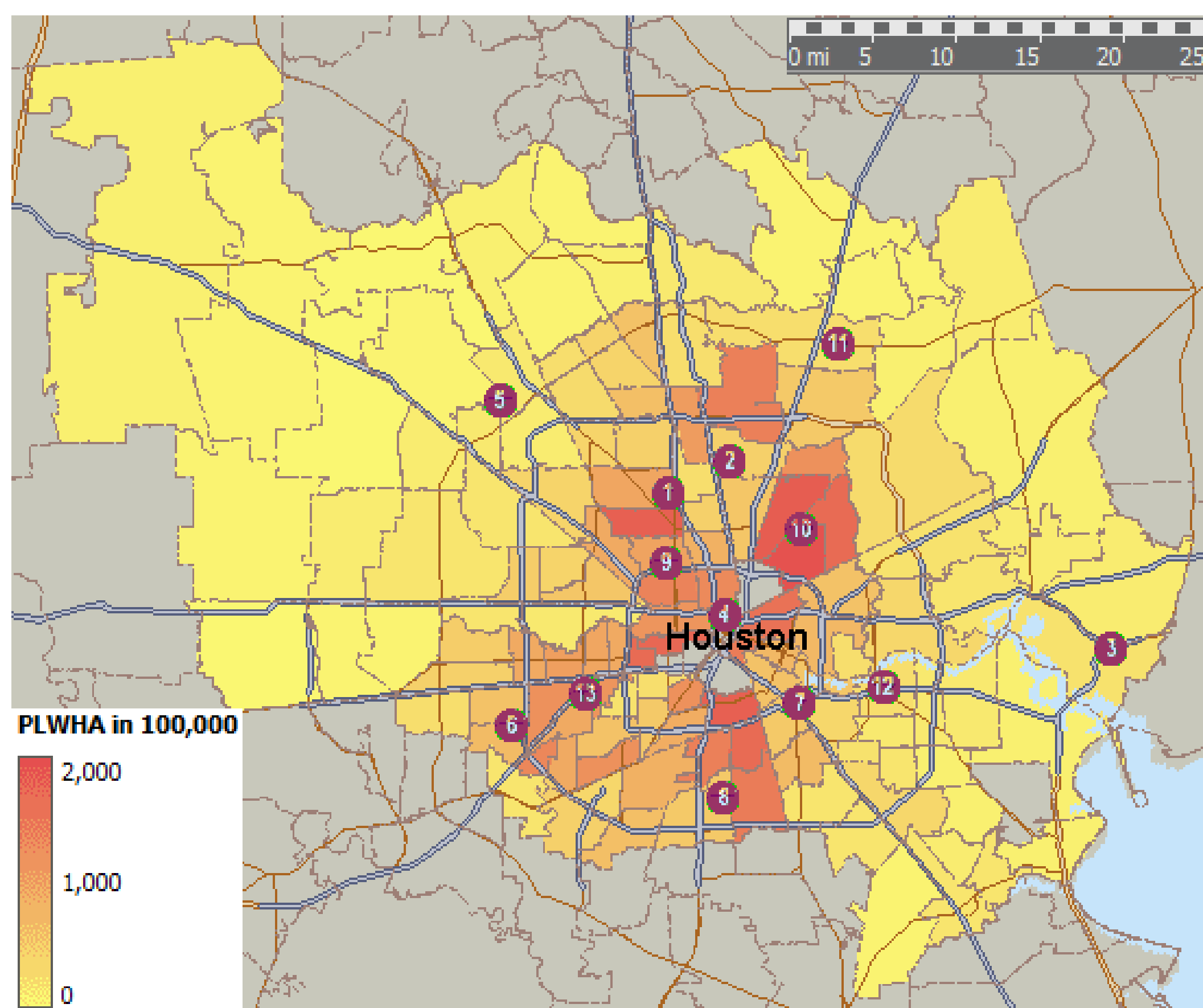
¹Baylor College of Medicine, Houston, TX; ²Harris Health System, Houston, TX

Background

This study took place in the Harris Health System which is the public safety net hospital system in Harris County (Houston), TX. Following the 2006 CDC recommendations,¹ Harris Health started a routine HIV screening program in one emergency center in 2008, and then gradually expanded it to the rest of the organization including 13 community health centers (shown in the map² below) between 2009 and 2012.

In this program patients 16 years of age and older who receive a blood draw for other reasons may be tested for HIV unless they opt out of testing.³

Patients are informed at registration and are given the opt-out form along with other registration forms.



Objectives

To determine if CDC and USPSTF HIV testing recommendations have been adopted, the objective of this study was to review HIV testing rates in community health centers in one of the largest publicly funded healthcare systems in the country.

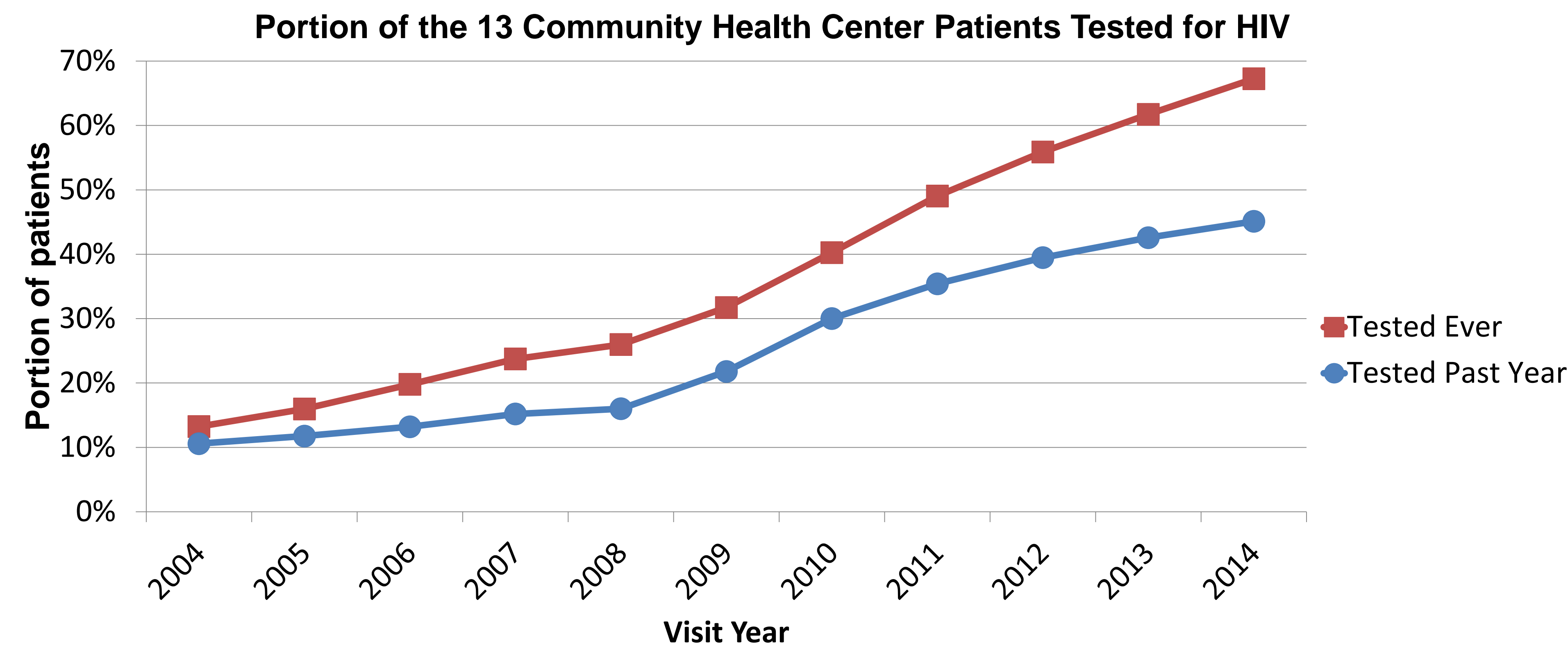
Methods

To capture baseline data and the potential impact of HIV testing recommendations by the CDC in 2006 and the USPSTF in 2013, HIV testing laboratory and demographic data for patients who had visited any of the 13 community health centers between 2004 and 2014 and were 18-64 year old at the time of visit were abstracted from the electronic medical records.

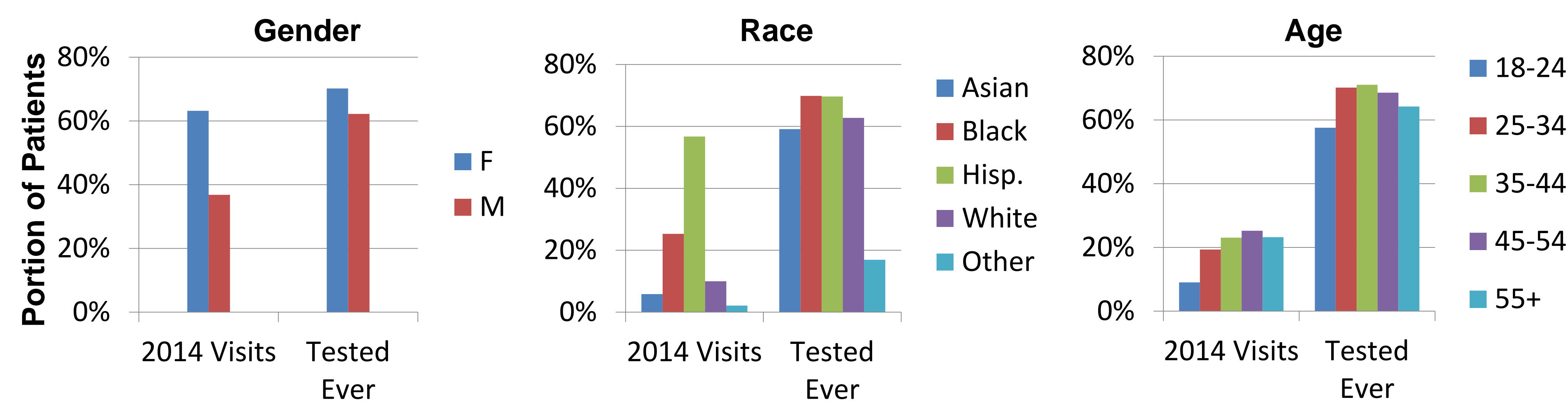
Proportions of patients visiting each community health center each year that were tested within the past 12 month of their visit as well as at any time in the past (since 2002 when electronic records are available) were calculated.

Results

Proportion of patients visiting the community health centers that were tested at any time in the past in the Harris Health System - including Harris Health System hospitals and emergency departments – constantly increased (from 13% in 2004 to 67% in 2014). Proportion of patients tested within the past 12 months had a similar trend (from 11% in 2004 to 45% in 2014):



Routine HIV testing program covered adult patients of all demographic categories:



In 2014, a total of 42,307 HIV tests were performed across the 13 community health centers including 96 tests with a positive result (0.23% overall positivity rate):

| CHP Code | Zip code | Unique Patients in 2014 | Tested In Same CHP in 2014 | Positivity (New or Previous; among 2014 tests) | Positivity NEW ONLY (among 2014 tests) | Tested in Past Year Anywhere in Harris Health | Tested Ever Anywhere in Harris Health |
|--------------|----------|-------------------------|----------------------------|--|--|---|---------------------------------------|
| 1 | 77088 | 30286 | 2652 (9%) | 8 (0.30%) | 3 (0.11%) | 12023 (40%) | 20582 (68%) |
| 2 | 77039 | 38395 | 3524 (9%) | 10 (0.28%) | 4 (0.11%) | 15080 (39%) | 24918 (65%) |
| 3 | 77520 | 16612 | 1566 (9%) | 2 (0.13%) | 1 (0.06%) | 6628 (40%) | 10317 (62%) |
| 4 | 77009 | 23997 | 2839 (12%) | 7 (0.25%) | 5 (0.18%) | 11918 (50%) | 18296 (76%) |
| 5 | 77070 | 5186 | 1081 (21%) | 1 (0.09%) | 1 (0.09%) | 2898 (56%) | 3586 (69%) |
| 6 | 77099 | 39392 | 4206 (11%) | 8 (0.19%) | 4 (0.10%) | 15681 (40%) | 24461 (62%) |
| 7 | 77012 | 23977 | 4383 (18%) | 7 (0.16%) | 3 (0.07%) | 12412 (52%) | 17805 (74%) |
| 8 | 77047 | 35228 | 6018 (17%) | 17 (0.28%) | 11 (0.18%) | 17372 (49%) | 25312 (72%) |
| 9 | 77018 | 24929 | 2601 (10%) | 20 (0.77%) | 4 (0.15%) | 11960 (48%) | 17576 (71%) |
| 10 | 77028 | 22125 | 1488 (7%) | 9 (0.60%) | 5 (0.34%) | 9207 (42%) | 15220 (69%) |
| 11 | 77338 | 12571 | 1364 (11%) | 0 (0.00%) | 0 (0.00%) | 4852 (39%) | 7996 (64%) |
| 12 | 77506 | 30694 | 4882 (16%) | 2 (0.04%) | 2 (0.04%) | 14845 (48%) | 22281 (73%) |
| 13 | 77074 | 32153 | 5703 (18%) | 5 (0.09%) | 5 (0.09%) | 15215 (47%) | 22011 (68%) |
| TOTAL | | 335545 | 42307 (13%) | 96 (0.23%) | 48 (0.11%) | 150091 (45%) | 230361 (69%) |

Conclusions

- Routine HIV screening at Harris Health community health centers has been successful in testing more and more patients each year.
- The program has covered patient of all demographic groups.
- However, over 30% of patients still have not been tested and may not know their status, and over 50% have not been tested in the past year.
- Given recent modeling studies⁴ demonstrating that HIV testing should be performed at least annually for high prevalence areas and the program's 0.23% HIV positivity rate, routine HIV screening should continue.
- To improve screening rates, system wide changes are needed including provider and patient education, and utilizing EMR capabilities to optimize and facilitate the screening process and frequency.

References

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- 2- Map data from AIDSvu (www.aidsvu.org). Emory University, Rollins School of Public Health. Accessed 1/16/2015
- 3- Hoxhaj S. et al., "Using nonrapid HIV technology for routine, opt-out HIV screening in a high-volume urban emergency department." *Ann Emerg Med*. 2011.
- 4- Lucas A. and Armbruster B., "The cost-effectiveness of expanded HIV screening in the United States" *AIDS*, 2013.

Acknowledgments

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