A Zip Code Analysis – HCV - location, location, location.

Pamela J. Green RN, BSN,
Memorial Hermann Healthcare System

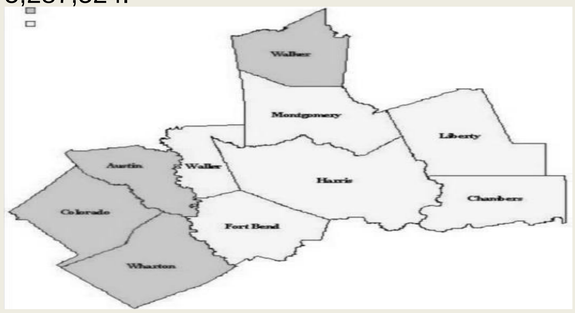
James J. McCarthy, MD,
The University of Texas Medical School at Houston

Background

The CDC estimates that there are 2.7 to 3.9 million people in the US living with Hepatitis C. Because of the slow progression of the disease many of these people are unaware they are infected leaving them at high risk for liver disease and hepatocellular carcinoma.

Hepatitis C virus (HCV) is not a reportable condition in the State of Texas. In addition, HCV surveillance is not routinely conducted or supported. As a result, accurate estimates of the burden of disease in Texas are insufficient for planning, intervention and evaluation.

During the implementation of birth cohort HCV screening in an urban ED, zip code data was collected in an effort to learn the "snap shot" view of HCV infection throughout Harris County. Houston eligible metropolitan area (EMA) includes Chambers, Fort Bend, Harris (including the City of Houston), Liberty, Montgomery, and Waller counties, with a total population is 5,287,524.



Objective

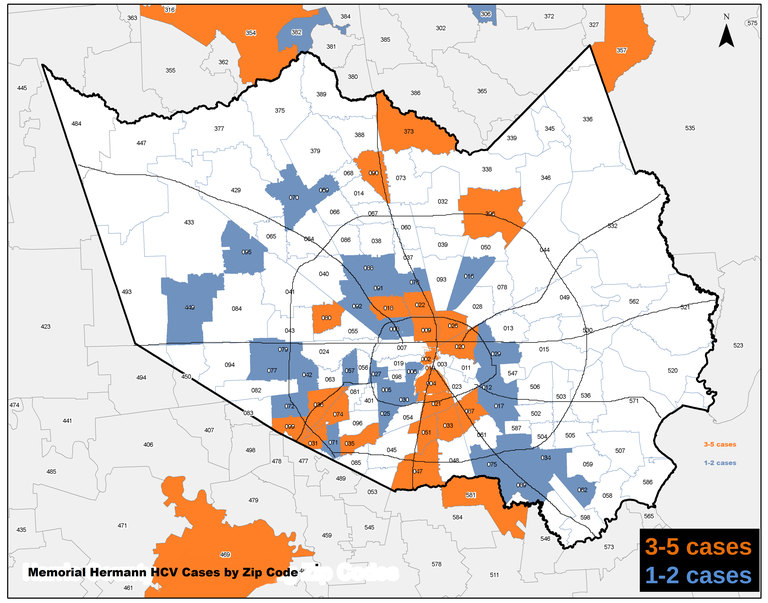
To analyze zip code data for the purpose of providing awareness to enhance the understanding and knowledge of HCV in the Harris County Community.

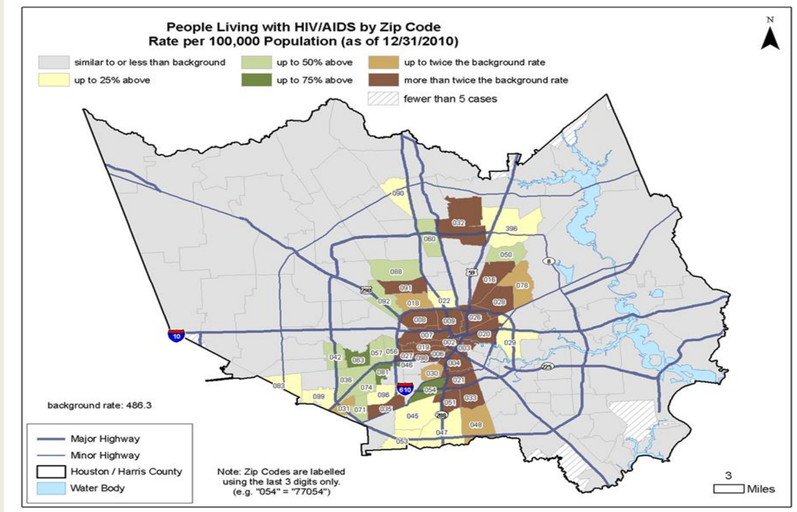
Methods

Study Design: Clinical Quality Improvement Protocol.

Participants: all patients born 1945-1965 who access the ED for care and who are able to opt-out of HCV screening.

Interventions: Patients are informed of HCV screening and given the opportunity to opt out of testing. The blood sample is processed by IgG antibody methodology and two wash immunoassay using chemiluminometric technology for HCV antibody positivity. Roche COBAS AmpliPrep/COBAS TaqMan HCV real-time RT-PCR IVD system is used to confirm the HCV genome utilizing a dual probe approach.





Results

New HIV diagnosis for 2011 occurred in 17 different zip codes.

Memorial Hermann **HCV prevalence since onset of screening occurred in 28 different zip codes**. Only 6 zip codes were common for new diagnosis in both HIV and HCV**.**

Conclusion

While HIV is a concern for Houston's EMA, the characteristics and severity of the disease vary from one area to another and between different risk groups. In considering current HIV and HCV incidence, only 6 zip codes are shared with current MH data: **77004, 77021, 77051, 77033, 77026 and 77079.** The majority of HM HCV incidence comes from more suburban areas. Establishing an effective HCV surveillance system needs an ongoing process of case investigation, data collection, analysis of data and dissemination of data to a public health professionals and health care providers to better understand the HCV incidence in our community.

THE UNIVERSITY of TEXAS
MEDICAL SCHOOL AT HOUSTON
A part of The University of Texas Health Science Center at Houston

MEMORIAL HERMANN
Breakthroughs every day™

Acknowledgments

Gilead HIV FOCUS – Funding Source
Texas Department of State Health Services
Memorial Hermann Healthcare System

References

http://www.cdc.gov/hepatitis/HCV/GuidelinesC.htm

https://www.houstontx.gov/health/HIV-STD/2013