

Sacramento Collaborative to Advance Testing and Care of Hepatitis B (SCrATCH B)

Duke LeTran

COE Coordinator

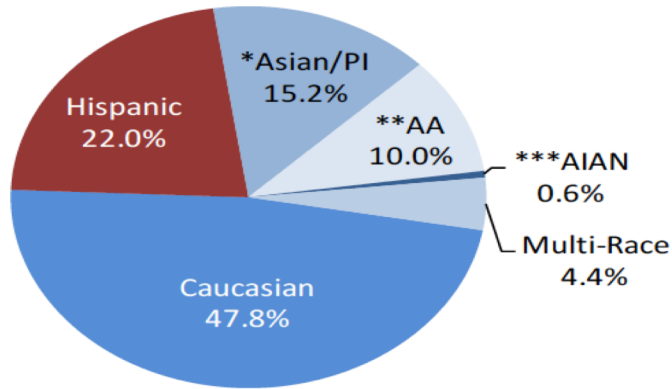
Office of Community Outreach and Engagement
UC Davis Comprehensive Cancer Center

Agenda

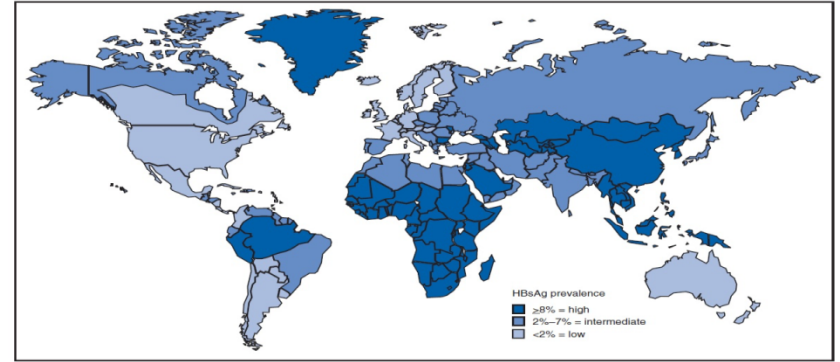
- Scope of Hepatitis B in Sacramento
- In-Reach
- Out-Reach
- Impact

Sacramento Demographics

County 1.46 million total population
Metro 2.1 million total population

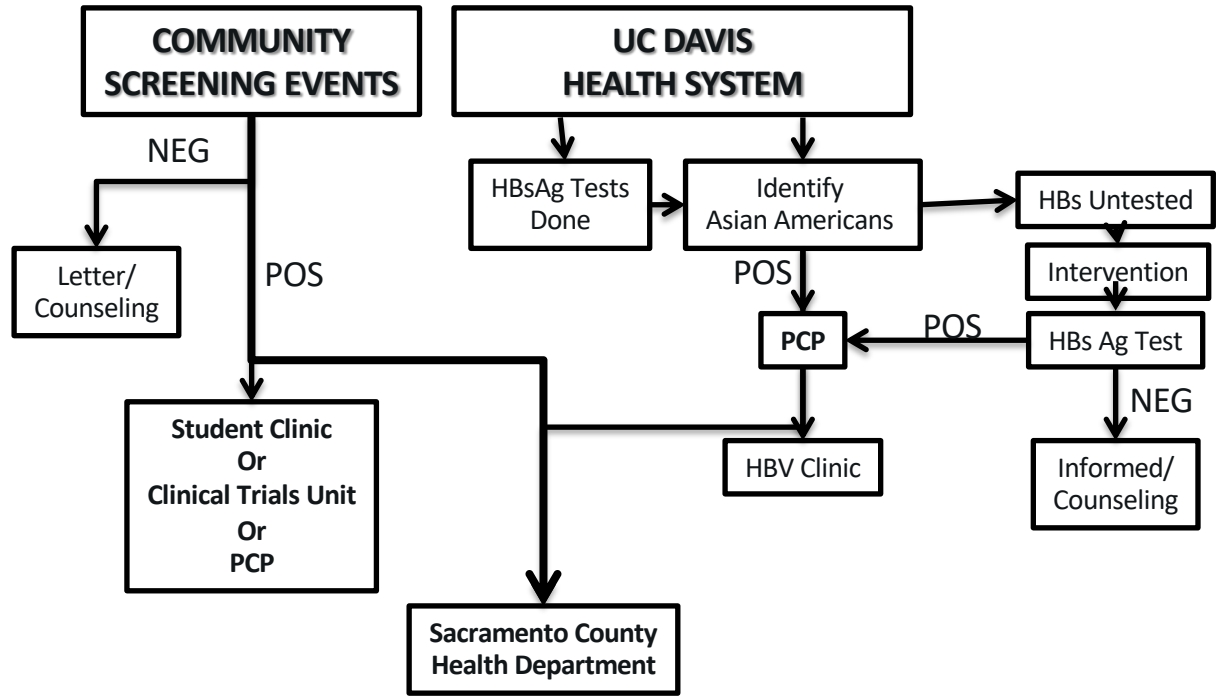


*AA: African American
**Asian and Pacific Islander
***American Indian and Alaskan Native
Data Source: State of California, Department of Finance, Race/Ethnic Population with Age and Sex Detail, 2010–2060. Sacramento, CA, Jan 2013



5th highest % by API in a metropolitan area

LINKAGE TO CARE **SCREENING**



SCrATCH B:

In-Reach

In-Reach Linkage to Care

- Case Manager (Ann Sanchez, RN)
 - 2-year retrospective and prospective quarterly reports of all HBsAg tests
 - Data collected regarding place of birth, etc for purposes of grant
 - Review of all HBsAg Positive
 - New versus prior diagnosis
 - Coordination of Care
 - Follow up testing by PCP versus Referral
- UC Davis Hepatitis B Clinic
 - Hepatologists (Christopher Bowlus, MD & Eric Chak, MD)
 - Case Manager (Sherri Shockley, RN)
 - Pharmacist (Rebecca Hluhanich, PharmD)

Electronic Medical Alerts Increase Screening for Chronic Hepatitis B: A Randomized, Double-Blind, Controlled Trial

Eric Chak¹, Amir Taefi¹, Chin-Shang Li², Moon S. Chen Jr³, Aaron M. Harris⁴, Scott MacDonald⁵, and Christopher Bowlus¹



Abstract

Background: Implementation of screening recommendations for chronic hepatitis B (CHB) among foreign-born persons at risk has been sub-optimal. The use of alerts and reminders in the electronic health record (EHR) has led to increased screening for other common conditions. The aim of our study was to measure the effectiveness of an EHR alert on the implementation of hepatitis B surface antigen (HBsAg) screening of foreign-born Asian and Pacific Islander (API) patients.

Methods: We used a novel technique to identify API patients by self-identified ethnicity, surname, country of origin, and language preference, and who had no record of CHB screening with HBsAg within the EHR. Patients with Medicare and/or Medicaid insurance were excluded due to lack of coverage for routine HBsAg screening at the time of this study.

At-risk API patients were randomized to alert activation in their EHR or not (control).

Results: A total of 2,987 patients met inclusion criteria and were randomized to the alert ($n = 1,484$) or control group ($n = 1,503$). In the alert group, 119 patients were tested for HBsAg, compared with 48 in the control group (odds ratio, 2.64; 95% confidence interval, 1.88–3.73; $P < 0.001$). In the alert group, 4 of 119 (3.4%) tested HBsAg-positive compared with 5 of 48 (10.4%) in the control group ($P = 0.12$).

Conclusions: An EHR alert significantly increased HBsAg testing among foreign-born APIs.

Impact: Utilization of EHR alerts has the potential to improve implementation of hepatitis B–screening guidelines. *Cancer Epidemiol Biomarkers Prev*; 27(11); 1–6. ©2018 AACR.

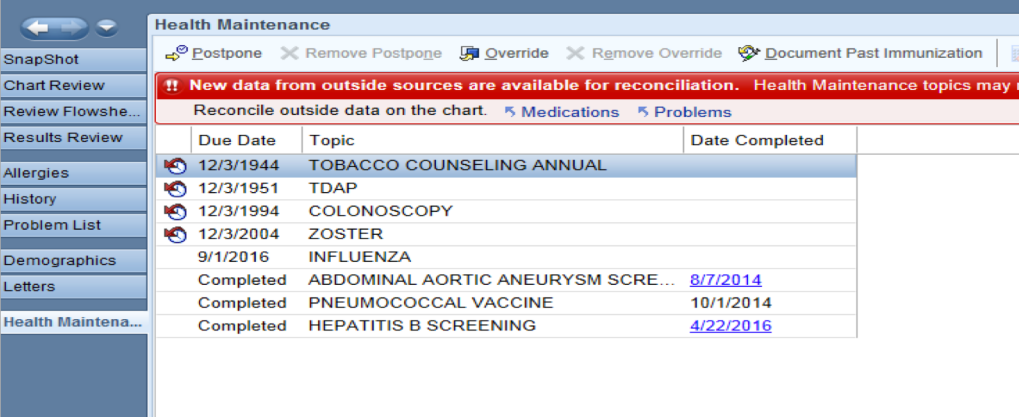
Introduction

One in four patients with chronic hepatitis B (CHB) will die prematurely from liver cirrhosis, hepatocellular carcinoma

(6, 7). Current guidelines from the Centers for Disease Control and Prevention, United States Preventive Services Task Force, and the American Association for the Study of Liver Diseases, recom-

EMR Alert for Hepatitis B Screening

- Novel Algorithm used to identify at-risk ANHPI not yet screened for CHB
 - Contrast to simply filtering by birth cohort for HCV (1945-1965)
- Exclusion:
 - Prior HBsAg
 - HBV diagnosis
 - Medicare/Medicaid // *CMS unfortunately did not cover HBsAg at time of study*
- Control (n=1503)
 - 48 were tested for HBsAg
- Alert (n=1484)
 - 119 were tested for HBsAg
- Conclusion: EHR alerts significantly increased CHB testing rates



Health Maintenance

Postpone Remove Postpone Override Remove Override Document Past Immunization

!! New data from outside sources are available for reconciliation. Health Maintenance topics may r

Reconcile outside data on the chart. Medications Problems

Due Date	Topic	Date Completed
12/3/1944	TOBACCO COUNSELING ANNUAL	
12/3/1951	TDAP	
12/3/1994	COLONOSCOPY	
12/3/2004	ZOSTER	
9/1/2016	INFLUENZA	
Completed	ABDOMINAL AORTIC ANEURYSM SCRE...	8/7/2014
Completed	PNEUMOCOCCAL VACCINE	10/1/2014
Completed	HEPATITIS B SCREENING	4/22/2016

EHR Alert: Conclusions

- EHR Alert: More than Doubles CHB Screening!
- Effect is small though: 8% versus 3.2
- Possible reasons:
 - alert is passively present in the pt's chart
 - If a pt did not present to their PCP during the study period, the alert would not be seen, and the HBsAg test would not have been ordered.
- EMR did not increase HBsAg positive tests
- To improve screening:
 - Patient navigator
 - Inform patients and PCP (electronic messages, letter, phone calls, MD to MD education)
 - Opt-out CHB screening
- UCD Medicare/Medi-cal patients had the alert activated 2018-09-09

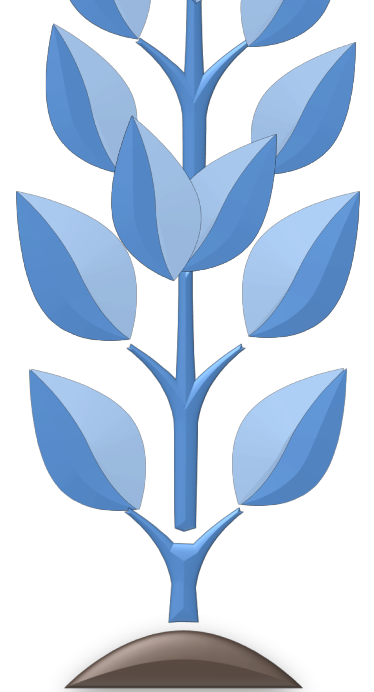
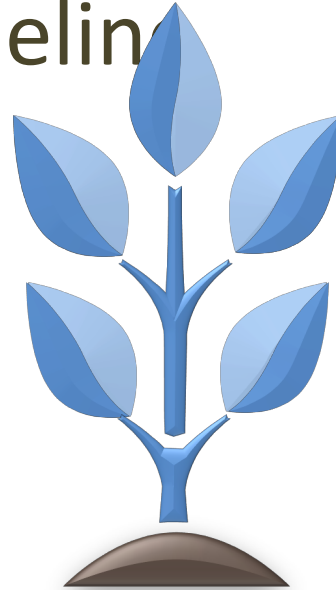
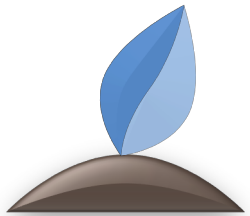
Summary of In-Reach Screening

- Lessons Learned
 - Obtrusive interventions work but are unacceptable to the PCP
 - EMR-based alerts increase screening but several questions remain
 - Implementation of system-wide interventions requires collaboration
 - Multiple partners
 - PCP, IT, Administration, Insurers, Patients
 - Invested in hepatitis B
 - Competing diseases
- Future Plans
 - Continue/Expand EMR Alert
 - Trial Pre-Visit Planners

SCrATCH B:

Outreach

Scratch B Community Timelin



Relationships

Community presentations, Meet with gate keepers, Promote & educate

Training

Train students and CBO's on process and procedures

Logistics

Venue, advertise, Scheduling, Man Power, Inventory

Day of

Mobile Hep B Screening Unit, Translators, Transport

Follow-up

Test results, Scheduling, Translation, Tracking, lasting infrastructure

Sacramento HEPATITIS B Community Efforts

2007

Literature Review

Nguyen, T. T., Taylor, V., Chen Jr, M. S., Bastani, R., Maxwell, A. E., & Mcphee, S. J. (2007). Hepatitis B awareness, knowledge, and screening among Asian Americans. *Journal of Cancer Education*, 22(4), 266-272.

2010

Developing a Framework

Bastani, R., Glenn, B. A., Taylor, V. M., Chen, M. S., Nguyen, T. T., Stewart, S. L., & Maxwell, A. E. (2010). Integrating theory into community interventions to reduce liver cancer disparities: The Health Behavior Framework. *Preventive medicine*, 50(1), 63-67.

2013

Hmong Lay Health Worker

Chen, M. S., Fang, D. M., Stewart, S. L., Ly, M. Y., Lee, S., Dang, J. H., ... & Nguyen, T. T. (2013). Increasing hepatitis B screening for hmong adults: results from a randomized controlled community-based study. *Cancer Epidemiology and Prevention Biomarkers*, 22(5), 782-791.

2015

TAAS

Dang JHT, Chen MS Jr. Increasing hepatitis B testing and linkage to care of foreign-born Asians, Sacramento, California, 2012-2013. *Public Health Reports* 2016; 131(Suppl 2): 119-131. PMID: PMC4853338

2017

SCrATCH B

Harris, A. M., Link-Gelles, R., Chandrasekar, E., Wang, S., Bannister, N., Pong, P., Chak, E., Bowlus, C., Nelson, N. (2018). Community-Based Services to Improve Testing and Linkage to Care Among Non-U.S.-Born Persons with Chronic Hepatitis B Virus Infection — Three U.S. Programs, October 2014–September 2017. *MMWR. Morbidity and Mortality Weekly Report*, 67. <https://doi.org/10.15585/mmwr.mm6719a2>

Outreach and Promotion



Social Media

@UCDPopHealth (Twitter)
ucdpophealth (Instagram)



UCD CCC

Calendar and Events



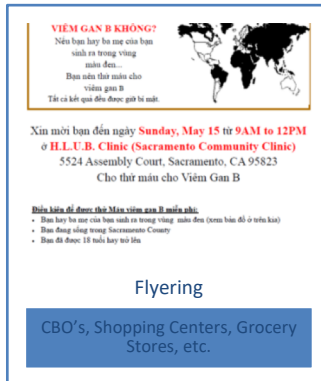
Newspaper

Ethnic Newspapers



Radio

Ethnic Radio



Flyering

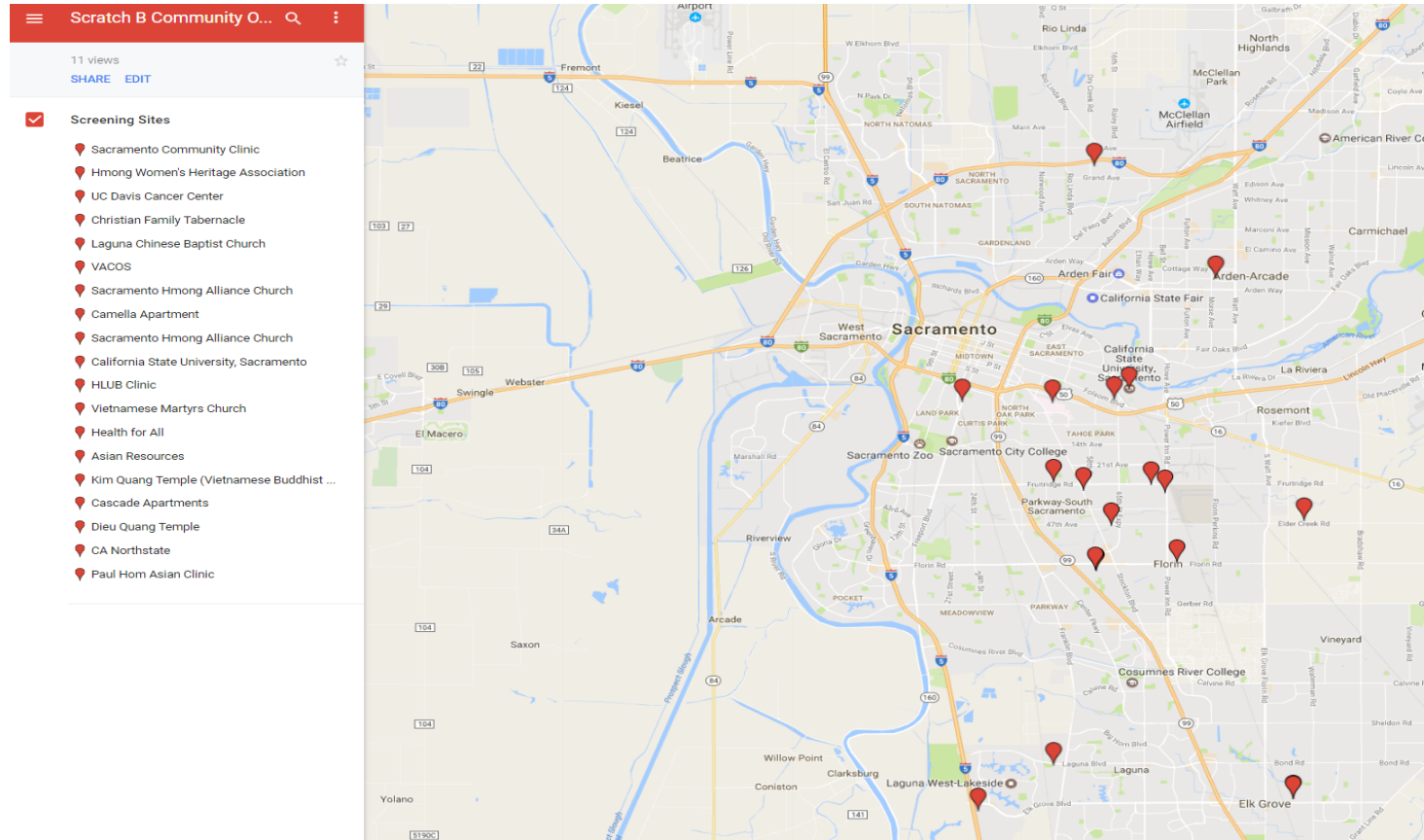
CBO's, Shopping Centers, Grocery Stores, etc.



Listservs

CAPITAL, APICC

Where We've Been



44 Community Hepatitis B screenings held at 20 different venues

SCrATCH B:

Impact

Tangible differences were effected on the individual level

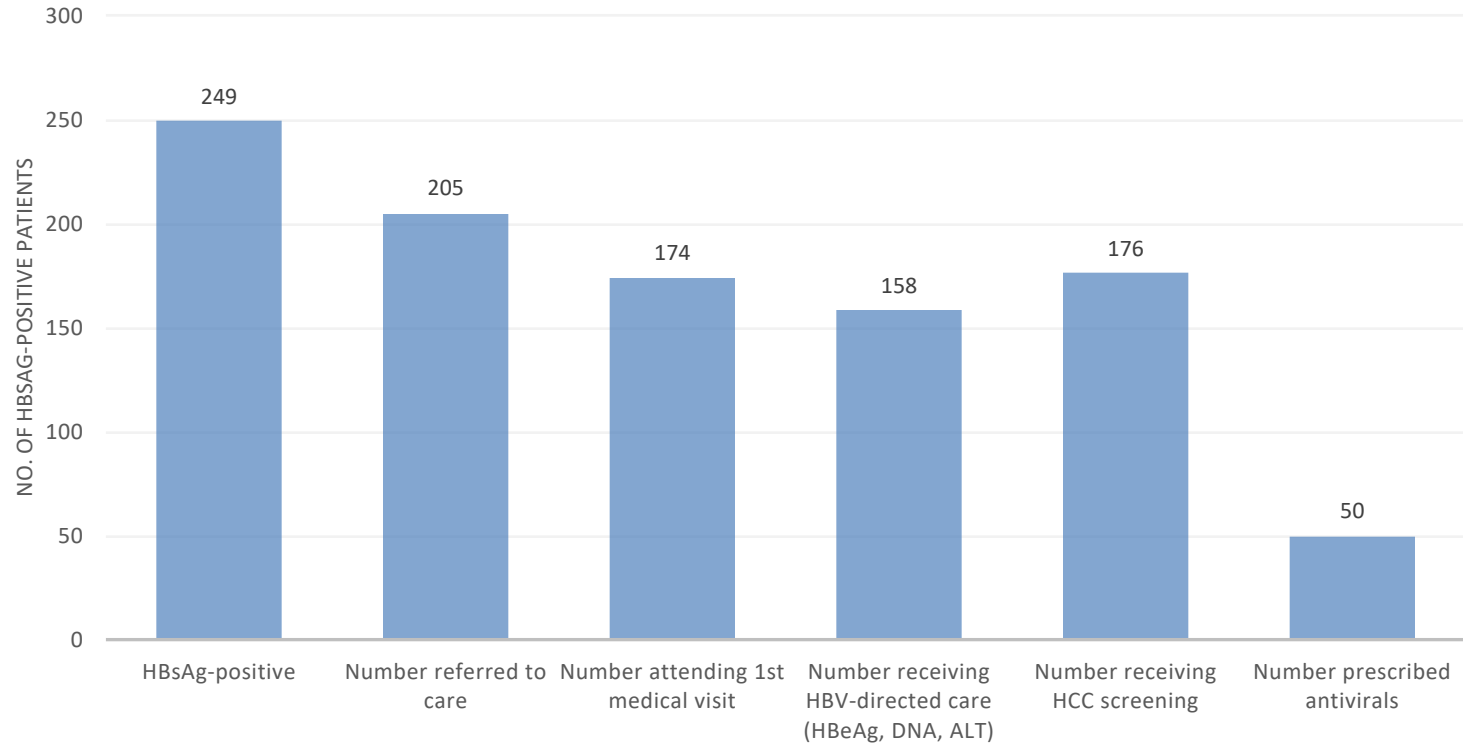
“ One SCrATCH B participant was a **young Buddhist monk** who had just recently immigrated from Vietnam. Despite his relatively young age, the monk’s kindness, smiles, and body language implicitly spoke of his significant role in his community. One could see that other participants at our Outreach screening event deferred to his actions as to whether or not they should also be screened that day for hepatitis B. The community respected him, and so as soon as he got screened, everyone else followed. On the way out, he grabbed my hand and thanked us for doing such a good service for the community.

A week later, the results came back – he screened positive. After informing him of the results, he was terrified and asked for further clarification. This monk, who I met at the screening as confident young man, was now asking me whether the severity of this infection would require him to step down from his role as a monk – you can see the sincerity in his concern for the community; he immediate concerns were unselfish. He was more afraid about the safety of the community rather than himself.

As per protocol through our post-testing counseling, we provided him all the relevant information. We reassured him that although, yes, the virus may be infectious through specific means such as blood transmission, it’s difficult and there was no need for him to step down from his role as a Buddhist monk. With a sense of relief, he thanked us. He brought up other concerns such as his lack of confidence in his fluency in English which would in turn make it difficult for him to navigate the complex U.S. healthcare system. Fortunately through the initial work of our grant and past projects, the relationships we had built with local CBOs provided us the infrastructure to connect him to high quality care. He was enrolled as patient to our free clinic at Paul Hom Asian Clinic/VN CARES.

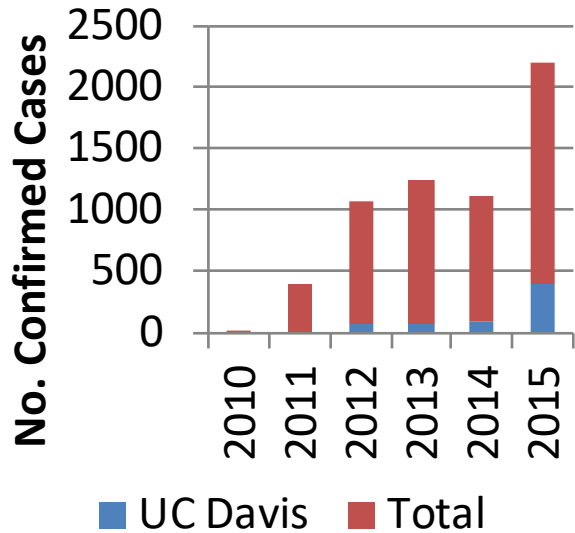


SCrATCH B: Hepatitis B Linkage-to-care continuum

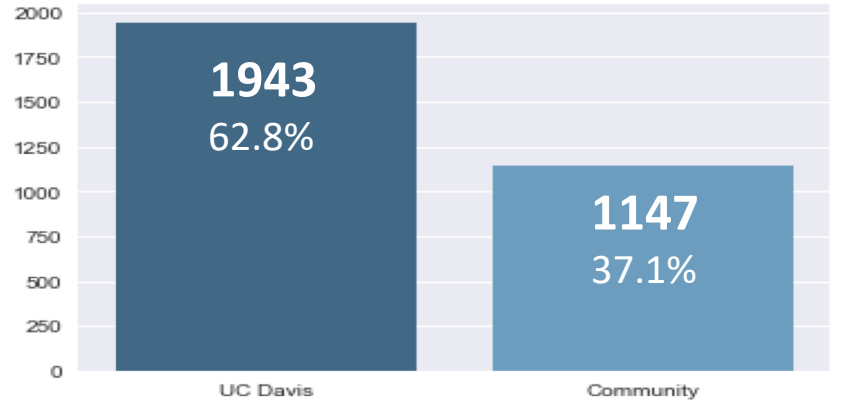


SCrATCH B Impact

Reported HBV Cases in Sac County



Tested Sep 2014 to Dec 2017



SCrATCH B Thank you Dinner



Acknowledgements:

The Sacramento Collaborative to Advance Testing and Care of Hepatitis B (SCrATCH B) project is funded by grant U51PS04633-01 awarded by Department of Health and Human Services, Centers for Disease Control and Prevention.