Improving Hepatitis B Testing and Linkage to Care Among Hard-to-Reach Populations:
The Northern New Jersey and New York City Hepatitis B Program

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Saint Barnabas Medical Center
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Hep B United Webinar
New York City/New Jersey Demographics

New York City:
• 38% of residents are foreign-born
• 13% of the population is Asian American (1.13 million)

New Jersey:
• 21% of NJ’s population is foreign-born (3rd highest % in US)
• NJ has the 4th largest AAPI population in the U.S. (behind NY, CA, TX)
• NJ Chinese increased by 34% between 2000-10
Screening Approaches

• 2 sites – Northern NJ and NYC

• CBWCHC: Ongoing primary care based screening and comprehensive HBV care in FQHC setting

• SBMC: Adapt CBWCHC approaches to a community hospital model in suburban region
  – Primary care based screening
  – Community based screening
  – Online/print media campaign
  – Household contact screening
  – Train another primary care site to conduct HBV screening
Primary Care-Based Screening
Charles B. Wang Community Health Center (CBWCHC)

Non-Profit & Federally Qualified Health Center
• Established in 1971
• Level III Medical Home NCQA Certification
• 4 clinical sites across Chinatown, Manhattan and Flushing, Queens

Multidisciplinary care
• Primary care & specialists, social work, dental, mental health
• Focus on medically underserved & Asian Americans
  – Languages offered: Mandarin, Cantonese, Toishanese, Shanghainese, Fujianese, Vietnamese, & Korean

Additional Departments
• Research and Evaluation
• Health Education
• Marketing & Communications
Primary Care-Based Screening & Care
Charles B. Wang Community Health Center (CBWCHC)

• Screen all new internal medicine patients as part of preventative care (HBsAg/ HBsAb/ HBcAb)
• Some community screening events (Chinese American Medical Society, American Cancer Society, APA Medical Student Association)
• Hepatitis B Care Program for HBV+ patients
  • Primary care-based Hep B care and treatment
CBWCHC EMR Support:
HBV Flowsheet (autofills completed HBV tests)
New Jersey:
Community Hospital + Primary Care

Saint Barnabas Medical Center
- Extensive resources for medical care
- Community Outreach
- Marketing & Public Relations

Center for Asian Health
- Can reach into the Asian community
- Partner with community groups
- Access to ethnic media (newspapers)
- Patient navigation

= Population based health
Center for Asian Health
Let’s be healthy together.

Primary care team providing bilingual services

- Dr. Su Wang Medical Director Mandarin/English
- Dr. Hudy Hoang Korean/English
- Dr. Shih-Fen Chou Mandarin/Tagalog & English

Offering expanded hours
- Monday – Friday: 9am to 5pm
- Weekend hours: Every 2nd Saturday from 9am to 2pm
- Extended hours: Every other Wednesday from 9am to 7pm

Specialists with on-site office hours

- Sarah Fan, MD Cardiologist New Jersey Cardiology Associates 973.774.6422
- Alyssa Gelpi, PA Pharmacist 973.281.9078
- Wei-Chen Hsia, PhD Psychology St. Barnabas Health Behavioral Health Network 973.355.2010
- Larry Liu, MD Gastroenterologist Affiliated in Gastroenterology 973.458.0414

Do you know Asians are more at risk for:
- Hepatitis B: The #1 cause of liver cancer. Do you know your Hepatitis B status?
- Diabetes: You should be screened for Diabetes if you have a BMI >23.
- Cancer: The #1 cause of death in Asians. Are you up to date with your mammogram or colonoscopy?

Providing care for everyone. Patient navigation available in Mandarin and Cantonese.

Center for Asian Health
222 Columbia Turnpike
Florham Park, NJ 07932
973.281.9077
rwqh.org/medicalgroup

Center for Asian Health
Launched in 2013

We provide:
- Primary care practice w specialists
- Patient navigation
- Community outreach/education

In first 2 years:
- 2500 patient visits
- Conducted 55 events with a reach of 11,000 people
Chinese Community Outreach
Language schools, Places of Worship, Chinese New Year

Livingston HuaXia School
Largest in NJ
1200 students every Saturday

Tzu-Chi Buddhist Foundation
Mid-Atlantic Headquarters
Caldwell, NJ

LivingStone Christian Church

Livingston Chinese New Year
Training the Internal Medicine Faculty Practice

- Faculty Practice Teaching Clinic
  - 5 attendings, 30 residents
  - Launched HBV screening began June 2016

- Required intensive collaboration with attendings, residents, and medical assistants

- Program staff conducted chart review of patients to identify those for testing
  - Sent physician a reminder as alert in EMR, included reason and actual tests to order
  - Survey and consent were a barrier
  - Labor intensive
Screening Coupon

Novel screening strategy for patient convenience

– Serves as lab requisition and payment
– Patient initiated
  – Removes barrier of medical visit & insurance
– Multiple lab locations
– Given out health fairs, doctor’s office, etc
– Coupon could be printed online at LiverBWell.com
Get Your Free Test — Visit One of Our Hepatitis B Screening Sites Today!

Building Bridges to Liver Health: A Northern New Jersey & New York City Hepatitis B Collaborative Program
LiverBWell.com

NORTHERN NEW JERSEY — You Must Bring This Coupon

CENTER FOR ASIAN HEALTH Call for appointment
Phone: 973.322.6888
Hours: M-F 9:00 AM – 5:00 PM
101 Old Short Hills Road, Suite 408, West Orange, NJ 07052

NEW YORK CITY

CHARLES B. WANG COMMUNITY HEALTH CENTER Call for Appointment
■ Manhattan:
  268 Canal Street, New York, NY 10013
  Phone: 212.379.6998
■ Queens:
  136-26 37th Avenue, Flushing, NY 11354
  Phone: 718.866.1212

SAINT BARNABAS MEDICAL CENTER OUTPATIENT LABS Walk-In
■ 94 Old Short Hills Road, Livingston, NJ 07039
  (Saint Barnabas Medical Center)
  Hours: M – Th: 6 am – 6 pm
  F: 6 am – 4 pm
  S: 6 am – 1 pm
■ 200 South Orange Avenue, Suite 105, Livingston, NJ 07039
  (Ambulatory Care Center)
  Hours: M, W, F: 6 am – 5 pm
  T, Th: 6 am – 6 pm
  S: 6 am – 2 pm
■ 189 Eagle Rock Avenue, Roseland, NJ 07068
  Hours: M – F: 6:30 am – 5 pm
■ 560 Springfield Avenue, Suite 104, Westfield, NJ 07090
  Hours: M – F: 8 am – 4 pm
■ 382 Bloomfield Avenue, Caldwell, NJ 07006
  Hours: M – F: 7 am – 5 pm
  Th: 7 am – 7 pm
  S: 7 am – 3 pm

This is a lab requisition for:
(Please fill out your name) First Name_________________________ Last Name__________________

For NJ Lab Personnel:
■ Patient must complete consent form (Lab results will be sent by mail, so patient must fill in correct address)
■ Patient must complete survey
■ Please fax both consent form and survey to 973.322.6886 (For any questions, please call 973-322-6777)

Ordering physician: Dr. Su Wang (ph 973.322.6888 fax 973.322.6886) Plan Code: G32 (no insurance info needed)
3 Lab Tests: Hepatitis B Surface Ag & Hepatitis B Surface Ab & Hepatitis B Core Ab IgG
Ethnic Print & Online Campaign

- Wider reach to increase public awareness of HBV and offer free screening
- Chinese newspaper advertisements
  - Articles & ads w info on HBV & screening
  - Send in survey & be submitted for drawing
Online Campaign

Utilized CDC’s “Know More Hepatitis” PSA (Youtube)
• Ad buys through IW group which targeted users by zipcode, ethnicity
• Ads showed up across popular Chinese websites- newspaper, shopping & video streaming sites
• Linked to LiverBWell.com website for local screening info
## Combined Screening Results

<table>
<thead>
<tr>
<th>Program Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HBsAg-positive</td>
<td>245</td>
</tr>
<tr>
<td>Immune</td>
<td>1789</td>
</tr>
<tr>
<td>-Due to previous infection</td>
<td>875</td>
</tr>
<tr>
<td>-Due to vaccination</td>
<td>914</td>
</tr>
<tr>
<td>Susceptible (Need Vaccine)</td>
<td>1008</td>
</tr>
<tr>
<td>Isolated HBcAb-positive</td>
<td>130</td>
</tr>
<tr>
<td>Indeterminate</td>
<td>85</td>
</tr>
<tr>
<td>Total Screened</td>
<td>3257</td>
</tr>
</tbody>
</table>
# Demographic Differences between NYC and NJ

<table>
<thead>
<tr>
<th></th>
<th>New York City</th>
<th>New Jersey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender - Female</td>
<td>751 (56%)*</td>
<td>708 (61%)*</td>
</tr>
<tr>
<td>Median Age</td>
<td>45 (19, 98) yo</td>
<td>54 (10, 94) yo</td>
</tr>
<tr>
<td>Top 3 Birthplaces</td>
<td>China (77%)*</td>
<td>China (27%)*</td>
</tr>
<tr>
<td></td>
<td>US (6%)*</td>
<td>US (24%)*</td>
</tr>
<tr>
<td></td>
<td>Malaysia (4%)</td>
<td>Taiwan (19%)</td>
</tr>
<tr>
<td>No Medical Insurance</td>
<td>458 (34%)*</td>
<td>125 (11%)*</td>
</tr>
<tr>
<td>With Medical Insurance</td>
<td>878 (66%)*</td>
<td>974 (84%)*</td>
</tr>
<tr>
<td>Types of Insurance</td>
<td>Medicaid (60%)*</td>
<td>Medicaid (11%)*</td>
</tr>
<tr>
<td></td>
<td>Medicare (6%)*</td>
<td>Medicare (14%)*</td>
</tr>
<tr>
<td></td>
<td>Private (13%)*</td>
<td>Private (47%)*</td>
</tr>
<tr>
<td></td>
<td>Other/ACA (20%)</td>
<td>Other (21%)</td>
</tr>
<tr>
<td>Total Screened</td>
<td>1336</td>
<td>1164</td>
</tr>
</tbody>
</table>

*Difference between NYC and NJ is statistically significant, z-test p<.05

*Data collected from 10/1/2014 – 12/31/2016*
Insurance, PCP and HBV Screening Status

Do you have health insurance?

If insured, do you have a PCP?

If you have a PCP, have you been screened for HBV?
# NJ Screening Sources and Geographic Distribution

59% Community event, 30% Primary care, 11% Coupon

## 54 community screening events

<table>
<thead>
<tr>
<th>Screening sources &amp; outreach</th>
<th>no.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBMC - CAH</td>
<td>423</td>
<td>36.3%</td>
</tr>
<tr>
<td>SBMC - Health Events</td>
<td>208</td>
<td>17.9%</td>
</tr>
<tr>
<td>SBMC - Walk in</td>
<td>80</td>
<td>6.9%</td>
</tr>
<tr>
<td>SBMC - IMFP</td>
<td>59</td>
<td>5.1%</td>
</tr>
<tr>
<td>Tzu-chi Foundation</td>
<td>110</td>
<td>9.5%</td>
</tr>
<tr>
<td>Four Square Christian Church</td>
<td>27</td>
<td>2.3%</td>
</tr>
<tr>
<td>Living Stone Christian Church</td>
<td>17</td>
<td>1.5%</td>
</tr>
<tr>
<td>Nia Fellowship Church</td>
<td>15</td>
<td>1.3%</td>
</tr>
<tr>
<td>Hua-Xia Chinese School</td>
<td>23</td>
<td>2.0%</td>
</tr>
<tr>
<td>Livingston Chinese School</td>
<td>21</td>
<td>1.8%</td>
</tr>
<tr>
<td>Murry Hill Chinese School</td>
<td>11</td>
<td>0.9%</td>
</tr>
<tr>
<td>Millburn Health Day</td>
<td>26</td>
<td>2.2%</td>
</tr>
<tr>
<td>Maplewood Health Day</td>
<td>24</td>
<td>2.1%</td>
</tr>
<tr>
<td>Livingston Health Department</td>
<td>37</td>
<td>3.2%</td>
</tr>
<tr>
<td>Orange Health Fair</td>
<td>11</td>
<td>0.9%</td>
</tr>
<tr>
<td>South Orange Health Fair</td>
<td>28</td>
<td>2.4%</td>
</tr>
<tr>
<td>Livingston Chinese Culture Day</td>
<td>4</td>
<td>0.3%</td>
</tr>
<tr>
<td>OCA National Convention</td>
<td>36</td>
<td>3.1%</td>
</tr>
<tr>
<td>Household Contact</td>
<td>4</td>
<td>0.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1164</td>
<td>100%</td>
</tr>
</tbody>
</table>
# NJ Household Contacts

<table>
<thead>
<tr>
<th>Household Contact</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HBV+</td>
<td>28</td>
<td>18%</td>
</tr>
<tr>
<td>Susceptible</td>
<td>37</td>
<td>24%</td>
</tr>
<tr>
<td>Non immune</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>Core Postive</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Immune by Vaccination</td>
<td>45</td>
<td>29%</td>
</tr>
<tr>
<td>Immune by Infection</td>
<td>44</td>
<td>28%</td>
</tr>
<tr>
<td>Total #</td>
<td>157</td>
<td></td>
</tr>
</tbody>
</table>
High rates of HBV Exposure in Foreign Born vs US born (All HBcAb+)

<table>
<thead>
<tr>
<th>AGE GROUPS</th>
<th>Foreign-Born</th>
<th>US-Born</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;24</td>
<td>7.1%</td>
<td>2.5%</td>
</tr>
<tr>
<td>25-44</td>
<td>29.8%</td>
<td>4.6%</td>
</tr>
<tr>
<td>45-64</td>
<td>39.9%</td>
<td>5.3%</td>
</tr>
<tr>
<td>&gt;65</td>
<td>52.1%</td>
<td>5.0%</td>
</tr>
</tbody>
</table>

*10% did not indicate country of birth
Lessons Learned

- Can learn from other’s models and adapt as needed
- Partnership w/ hospitals can reach at-risk populations
  - Have resources like community affairs, marketing but don’t have access to communities
- Collaboration is key
  - CBOs, Health departments, Medical organizations
- Include HBV w/ other efforts (health fairs, cancer prevention, immunization, wellness)
- Suburban vs. urban Asian profiles
  - May be more insured but still with gaps in HBV screening
- FB w/ higher current & previous infected HBV rates
- Other FB at-risk: Africans, Caribbean, Latino
- Navigation, care management important for at-risk populations due to healthcare barriers
Acknowledgements

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