Problem Gambling Screening, Assessment and Treatment Integration in a Primary Care Setting

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NICOS Chinese Health Coalition

Mission: To Enhance the Health and Well-Being of San Francisco's Chinese Community.

- Founded in 1985
- Located in SF Chinatown
- Public-private-community partnership of 30+ groups
North East Medical Services

**Mission:** To provide affordable, comprehensive, compassionate and quality health care services in a linguistically competent and culturally sensitive manner to improve the health and well-being of our community.

- Founded in 1968
- Operates 10 clinics throughout SF Bay Area
Agenda

• Integration of behavioral health at North East Medical Services, a primary care agency in the Bay Area, California
• Incorporation of problem gambling in Behavioral Health integration process – Screening, Warm Handoff, Phone outreach, Referral
• Data
• Lessons Learned
Integrated Behavioral Health Care
Need for Behavioral Health Services in Primary Care

• “Many patients come for multiple medical appointments, but there is very little that I can do for them, they really need mental health services” - quote from a primary care provider

• Cheung, Lau, and Waldemann (1981) found among Chinese patients at a primary care clinic, most frequently endorsed depressive symptoms were “feeling tired and fatigued,” “pains and aches,” and gastrointestinal or cardiovascular symptoms
Barriers to Access

- There are many barriers to access to behavioral health care, some of them are:
  - (1) Cultural Stigmas and Beliefs
  - (2) Language
  - (3) Availability of behavioral health services
  - (4) Availability of trained and bilingual BH providers
  - (5) Geographic distance and lack of transportation
  - (6) Cost and co-payment for treatment
  - (7) Immigration and Refugee experience
  - (8) Trauma experience
Integration of behavioral health in primary care

• Integration of behavioral health services in primary care is one of the solution being proposed to address some of the barriers

• Seeking help from primary care clinics and providers are often more culturally acceptable than from stand alone mental health clinics and mental health providers

• Warm handoff from primary care providers (PCP) to behavioral health providers transfer some of the trust and positive regard of the patients’ towards the PCP, to that of the BH provider

• It also addresses other issues such as geographical locations and transportation, as well as coordination between PCP and BH providers
BHI Project Funded by HRSA

- Two year project funded by HRSA (2014-2016) at North East Medical Services
- Ninety percent (90%) of the membership is Asian, and 86% speak a language other than English.
- The majority of the providers at the agency are bilingual in one or more Asian languages.
- The agency has an enrollment of 66,000 members currently.
- The goal of the HRSA project is to improve collaboration between on site behavioral health services and primary care.
BH Services added thru BHI Project

- On site behavioral health therapist
- On site behavioral health coach
- Implement Annual Behavioral Health Screening – an universal screening of individuals seen in Adult Medicine for behavioral health issues
- Annual Behavioral Health Screening is comprised of four tools: PHQ-2 & PHQ-9; AUDIT-C; Domestic Violence; Problem Gambling
- Same day warm hand-off referral to BH coach
- Automatic referral to BH coach for follow up for individuals with Red Flags, that is, positive outcome on screening
- Referral to behavioral health therapist for therapy and counseling, as appropriate
Problem Gambling

- The BHI project focuses on multiple levels of change in the organization, we will only present the part that is relevant to problem gambling in today’s presentation.

- North East Medical Services partnered with NICOS to implement the Problem Gambling Initiative.
The Case for Integrating PG in Primary Healthcare
Asian Americans & Problem Gambling

Gambling Among Chinese Adults in San Francisco: 
14.5% meet criteria for problem gambler, 21% meet 
criteria for pathological gambler 
(Wong and Toy, 1999)

Pathological Gambling Among University Students: 
12.5% among APIs vs. 4-5% among African-
American, whites, American Indians vs. 11% among 
Latinos 
(Lesieur et al, 1999)

San Francisco State University Problem Gambling Survey: 
12.8% of AAPI students are probably pathological 
gamblers (15.7% of foreign-born AAPI students) 
(Zhao, Lee, Kuwatani, 2016)

Problem gambling among San Francisco Youth: 11% 
among API youth vs. 2-6% national average (Chiu 
& Woo, 2012)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Unweighted N (Weighted %)</th>
<th>At-Risk %</th>
<th>Problem %</th>
<th>Pathological %</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>Male</td>
<td>3003 (49.4)</td>
<td>11.7</td>
<td>3.1</td>
<td>2.3</td>
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<tr>
<td></td>
<td>Female</td>
<td>4117 (50.6)</td>
<td>7.3</td>
<td>1.3</td>
<td>0.7</td>
</tr>
<tr>
<td><em>P&lt;.001</em></td>
<td></td>
<td></td>
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<tr>
<td><strong>Age</strong></td>
<td>18 - 29</td>
<td>1031 (23.3)</td>
<td>12.4</td>
<td>3.0</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>30 - 39</td>
<td>1248 (20.7)</td>
<td>9.6</td>
<td>2.7</td>
<td>1.6</td>
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<tr>
<td></td>
<td>40 - 64</td>
<td>3367 (41.6)</td>
<td>8.7</td>
<td>1.6</td>
<td>1.7</td>
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<tr>
<td></td>
<td>65 and over</td>
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<td>6.9</td>
<td>2.0</td>
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<td><strong>Ethnicity</strong></td>
<td>Non-Hispanic White</td>
<td>4195 (48.7)</td>
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<td>1.6</td>
<td>1.4</td>
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<td></td>
<td>Hispanic</td>
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<td>3.0</td>
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<tr>
<td><em>P&lt;.001</em></td>
<td>Asian*</td>
<td>504 (12.8)</td>
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<td>2.3</td>
<td>0.7</td>
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<tr>
<td></td>
<td>African American</td>
<td>391 (6.1)</td>
<td>14.1</td>
<td>2.3</td>
<td>4.1</td>
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<tr>
<td></td>
<td>Other**</td>
<td>385 (1.7)</td>
<td>16.0</td>
<td>5.0</td>
<td>1.7</td>
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<tr>
<td><strong>Employment</strong></td>
<td>Employed</td>
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<td>10.0</td>
<td>1.8</td>
<td>1.3</td>
</tr>
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<td><em>P&lt;.001</em></td>
<td>Retired</td>
<td>1403 (41.2)</td>
<td>6.7</td>
<td>2.3</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>Keeping House</td>
<td>442 (11.7)</td>
<td>6.7</td>
<td>...</td>
<td>0.6</td>
</tr>
<tr>
<td></td>
<td>Disabled</td>
<td>355 (4.5)</td>
<td>14.8</td>
<td>5.2</td>
<td>4.5</td>
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<tr>
<td></td>
<td>Unemployed</td>
<td>243 (4.5)</td>
<td>8.5</td>
<td>5.5</td>
<td>2.9</td>
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<tr>
<td></td>
<td>Student</td>
<td>142 (3.1)</td>
<td>11.4</td>
<td>3.3</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>176 (2.7)</td>
<td>12.2</td>
<td>4.3</td>
<td>3.7</td>
</tr>
</tbody>
</table>

* Includes Native Hawaiian and Pacific Islander.
** Includes Native American, Middle Eastern, multi-racial and unspecified other.
# Table 2. Odds** of Being a Problem/Pathological Gambler by Acculturation Level among CA Adults who Gamble (n=3,608)

<table>
<thead>
<tr>
<th>Acculturation</th>
<th>Odds Ratio</th>
<th>95% Confidential Interval</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High (Non-AAPI &amp; uses non-AAPI Lang)</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid (AAPI &amp; uses non-AAPI Lang)</td>
<td>0.93</td>
<td>0.33, 2.64</td>
<td>0.887</td>
</tr>
<tr>
<td>LOW (AAPI &amp; uses AAPI Lang)</td>
<td>2.83</td>
<td>1.07, 7.47</td>
<td>0.036*</td>
</tr>
</tbody>
</table>

**Gender**
- Female: 1.00
- Male: 2.43, 1.56, 3.77, 0.000*

**Education**
- Less than HS: 1.00
- HS degree: 0.45, 0.25, 0.82, 0.009*
- Some College/Tech School: 0.39, 0.22, 0.72, 0.002*
- College degree: 0.29, 0.14, 0.64, 0.002*
- Grad/Prof School: 0.15, 0.06, 0.37, 0.000*

**Employment**
- Employed: 1.00
- Retired: 1.51, 0.72, 3.26, 0.271
- Other: 1.74, 1.07, 2.84, 0.026*

**Lifetime Depression**
- No: 1.00
- Yes: 2.83, 1.88, 4.26, 0.000*

*Level of significance at p<0.05  **Multivariate logistic regression analysis adjusting for covariates gender, age, education, employment, marital status, HH income, religion, depression, smoking, general health, & drinking.
The Immigration Factor

Sub. Use Disorder

- In general, evidence suggests native-born individuals have higher rates of SUD
- Foreign-born individuals seem to be somewhat protected from SUD

Gambling Disorder

- Evidence suggests that those who are less acculturated, those who are immigrants, have higher rates of GD compared to those who are more acculturated
## Physical Health Issues

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Potential Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tachycardia (Morasco et.al, 2006)</td>
<td>Alteration of heart rhythms</td>
</tr>
<tr>
<td>Hypertension (Lorenz &amp; Yaffee, 1986)</td>
<td>Decreased blood flow to the heart</td>
</tr>
<tr>
<td>Angina (Morasco et.al, 2006)</td>
<td></td>
</tr>
<tr>
<td>Headaches (Bergh &amp; Kuhlhorn, 1994, Lorenz &amp; Yaffee, 1986)</td>
<td>Increased body tension</td>
</tr>
<tr>
<td>Insomnia (Lorenz &amp; Yaffee, 1986)</td>
<td></td>
</tr>
<tr>
<td>Skin Problems</td>
<td>Exacerbation of skin conditions</td>
</tr>
<tr>
<td>Gastrointestinal problems such as nausea, ulcers, and colitis (Bergh &amp; Kuhlhorn, 1994, Lorenz &amp; Yaffee, 1986)</td>
<td>Irritation and disruption of the digestive system</td>
</tr>
<tr>
<td>Cirrhosis and other liver diseases (Morasco et.al, 2006)</td>
<td>Increased prevalence of alcohol abuse</td>
</tr>
</tbody>
</table>
Problem Gambler Medical Utilization, Help Seeking Patterns

- Morasco et al. (2006) found that PGs are more likely to be treated in the ER in the past year.
- Evans and Delfabbro (2005) found that PGs did not view treatment services as an option, but rather as a “last resort”.

Problem Gambling Screening, Assessment and Treatment Integration

NEMS NORTH EAST MEDICAL SERVICES 北東醫療中心
North East Medical Services NICOS Chinese Health Coalition 華人健康組織聯會
San Francisco, CA
Disparities in Accessing Mental Health Care

**African Americans**: more likely to use emergency services or primary care providers than mental health specialists. (Surgeon General, 2001)

**Asian Americans**: Only 4% would seek help from mental health specialist vs. 26 percent of whites. (Zhang et al., 1998)

**Latinos**: < 1 in 11 with mental disorders contact mental health specialists, & < 1 in 5 contact primary care providers. (Surgeon General, 2001)

**Native Americans**: 44% with a mental health problem sought any kind of help---and only 28% of those contacted a mental health agency. (King, 1999)
Who are the partners involved?
NEMS/NICOS Problem Gambling Initiative

• How did we go about to implement the Problem Gambling Initiative?
• (I) Leadership – Support and lead on the prioritization of problem gambling as one of four conditions to be included in annual behavioral health screening
• (II) Practice Change – Support and train staff in administration of screening, work with Electronic Health Record team to incorporate screening data in chart, build and implement and train to new work flow
• (III) Practice Change – Train behavioral health staff to use motivational interview skill to engage individuals in treatment
• (IV) Practice Change – Provide educational sessions to patients on problem gambling and available treatment resources
• (IV) Quality Improvement – Review and learn from data collected to improve program over time
Capacity Building: Training & Technical Assistance
Training Partner: NICOS Chinese Health Coalition

- Providing problem gambling prevention and treatment services since 1999
- Operates the statewide Asian language problem gambling helpline (1-888-968-7888)
Training & Education: Recipients

Year 1

• 7/8/15: Training of Nursing/ Medical Assistant staff

• Covered: prevalence of gambling; warning signs for problem gambling/ DSM-5 criteria; case vignettes; consequences of PG; brief neuroscience; high risk groups; brief interventions; available resources
Training & Education: Recipients

Year 1

- 7/22/15 & 8/26/15: Training of medical provider/ physicians
- Covered: Warning signs of PG/ DSM-5 criteria; Asian Americans & PG; case vignette; health impacts; potential pathways to PG (biological/ genetic, trauma, other risk factors); assessment & interventions; available resources
Training & Education: Recipients

Year 2

• 4/1/16 & 4/30/16: Training of NEMS consumers

• Covered: definition of gambling; busting myths (cognitive restructuring); warning signs; 3 concepts (randomness, independence of events, house edge); financial tips; resources
Training & Education: Recipients

Year 2

- 9/22/16 & 11/17/16: Advanced clinical trainings for NEMS Behavioral Health staff
- Focused on imparting clinical skills in engaging clients and motivating change
Implementation: Universal Screening, Follow-Up & Referrals
Sample Introduction to Screening

• Sample Introduction to Annual Behavioral Health Screening Questionnaire
• “As your primary care provider, we care about your total health and well-being. We understand that many factors affect one’s total wellness, including behavioral health concerns. We are asking all our patients to complete the following screening questions at Intake and annually, so that we can provide better and more comprehensive care for you. Please circle your answer. Thank you”
Tool for Screening - Brief Biosocial Gambling Screen (BBGS)

• Created by the Division on Addictions at Cambridge Health Alliance
• Purpose is to help people decide whether to seek formal evaluation of their gambling behavior. The 3 items BBGS is based on the APA DSM-IV criteria for gambling disorder
• Scoring – A “yes” response to any single item indicates potential gambling related problems and the need for additional evaluation
• Psychometric Properties, Gebauer et.al (2010) report that BBGS has good psychometric characteristics: high sensitivity (0.96) and high specificity (0.99). The positive Predictive Value of the BBGS is 0.37. This suggests that one of three individuals who screen positive on the BBGS will be identified as having gambling disorder after full follow-up
BBGS Questions

• **Assess! Ask the right questions:** *(Brief Biosocial Gambling Screen BBGS)*

1) During the past 12 months, have you become restless irritable or anxious when trying to stop/cut down on gambling? 當您嘗試減少或停止賭博時，您是否感到渾身不自在或脾氣暴躁呢？

2) During the past 12 months, have you tried to keep your family or friends from knowing how much you gambled? 是否曾經對家人或朋友隱瞞自己參與賭博的程度？

3) During the past 12 months did you have such financial trouble as a result of your gambling that you had to get help with living expenses from family, friends or welfare? 是否曾經應因為賭博帶來的經濟絕境而需要倚靠家人、朋友或社會福利組織來提供金錢？
Behavioral Health Follow Up

- Same Day warm hand-off
- Follow up Phone call
- Provide resource such as the statewide problem gambling referral line (1-800-GAMBLER number), and NICOS helpline for problem gamblers: 1-888-968-7888
- Referral for individuals to local treatment programs, if applicable
1-888-968-7888 Services

Training & outreach
Problem Gambling Technical Assistance & Training (PGTAT) Project

Bilingual face-to-face counseling
Chinese Community Problem Gambling Project

Telephone counseling
9 languages/ dialects: Cantonese, Mandarin, Teo-Chow, Taiwanese, Korean, Hindi, Punjabi, Tagalog, Vietnamese

Referrals & resources
Signing up for self-exclusion programs, finding GA meetings, free brochures & booklets, linking to state-sponsored treatment services, referrals to other legal/financial resources, etc.
All services are cost-free!
Evaluation: Preliminary Data
Data

• Total number of adults screened since December 21st, 2015 to January 10, 2017 – 28,892

• Total number of individuals with “red flags” (i.e. answer yes to one of the three screening questions) – 144

• Percentage – 0.52%
Age

- 11-20 Years: 2
- 21-30 Years: 16
- 31-40 Years: 21
- 41-50 Years: 27
- 51-60 Years: 40
- 61-70 Years: 31
- 71-80 Years: 5
- 81-90 Years: 2
Race

- Declined: 12
- Native American: 1
- Pacific Islander: 3
- White: 6
- Black: 7
- Asian: 116

Problem Gambling Screening, Assessment and Treatment Integration

North East Medical Services  東北醫療中心
NICOS Chinese Health Coalition  華人健康組織聯會
Preferred Language

Cantonese: 71
English: 50
Mandarin: 11
Spanish: 5
Vietnamese: 2
Chinese Other: 1
Indonesian: 1
Thai: 1
Other: 1
Geographic Location

- SF Excelsior: 42%
- SF Sunset: 17%
- SF Chinatown: 17%
- SF Richmond: 6%
- SF Bayview: 1%
- Daly City: 13%
- San Jose: 4%
- SF Bayview: 1%
- Daly City: 13%
- San Jose: 4%
- SF Excelsior: 42%
- SF Sunset: 17%
- SF Chinatown: 17%
- SF Richmond: 6%
- SF Bayview: 1%
- Daly City: 13%
Reasons for low number of red flags for problem gambling

• Some of the possible reasons contributing to the relatively low number of red flags on the BBGS are:
  • Stigma
  • Fear to disclose in the presence of other family members while taking survey
  • Lack of understanding of relationship between problem gambling and brain functioning
  • Lack of understanding of relationship between problem gambling and health conditions
  • Lack of understanding of the distinction between recreational gambling and problem gambling
Lessons Learned
Lessons Learned

• Incorporation of problem gambling into overall behavioral health integration and screening at primary care is a good approach to “de-stigmatize” problem gambling, and to improve awareness and education of both the provider and patient population. For individuals at risk of problem gambling behavior, this can prompt the start of the “Pre-contemplation” and “Contemplation” phases.

• More research and validation of the screening tool is needed. If the screening tool is accepted as an evidence-based tool for prevention of problem gambling, there may be reimbursement for these screening as part of primary care services, in the future, just like screening for depression and alcohol misuse.
Lessons Learned (2)

• Change process is hard, support from the agency leadership is a “must”, and financial support from either public or private funding sources is essential for success.

• Ongoing training and continuous feedback to front line staff allows continuous correction of problems with implementation and follow up.

• More research is needed to understand the best practice for outreach and engage of individuals at risk of becoming problem gamblers. For individuals at risk of problem gambling behavior, therapeutic skill to help them to move into the “Preparation” and “Action” phase of motivational interview.
Lessons Learned (3)

• The rate of problem gambling obtained from NEMS patients (0.5%) was lower compared to the rate from the California Prevalence Study (Volberg, 2016) for Californians overall (3.7%) and Asian Californians (3.0%).

• This is the first instance we are aware of that the BBGS is translated into Chinese, and the translated version has NOT been subject to psychometric testing for its validity/ reliability.

• We have to continue to look for effective strategies to remove barriers, and support help-seeking from individuals at risk of and/or impacted by problem gambling, either for themselves or their family members, especially for the minority population impacted by this condition.
Q & A
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