Immun-wize: A Successful Collaborative Approach

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Objectives

• Identify why the SPMI population is at higher risk for infectious diseases.
• Describe the barriers to receiving preventive immunizations.
• Identify intervention modes that can be effective to improve immunization rates in the SPMI population.

SPMI Population

• Medical needs neglected
  – Negative impact of symptoms of disease on functioning
  – Lack of knowledge
  – Socioeconomic status
  – Fractured provider system

SPMI Population

- Higher rates of morbidity, premature mortality
  - Die on average 25 years earlier than the general population
- Medical illnesses prevalent
  - Unrecognized, untreated, or poorly treated
- Medical providers often fail to address
  - Health promotion and prevention activities

Carney, Jones & Washburn, 2000; Cohon & Marderescheid, 2006; Drus, et al., 2001; Horvitz-Lennon, et al., 2006; Miller, Paschall, & Svendsen, 2006; Parks, et al., 2006.

SPMI Health Rates

- Smoking rates 40-85%
  - Dickey et al., 2002; Kalman, Morisett, & George, 2005; Leonard, et al., 2001; McClave, et al., 2010
  - U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration Office (2005)
  - Asthma and acute respiratory disorders
  - Dickey, et al., 2002
- Substance abuse ~26.9%
  - U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration Office (2005); Dickey et al., 2002
  - Hepatitis B ~ 5 times
  - Rosenberg, et al., 2001
- Diabetes ~ 4 times

Immunization Status & Barriers

- Convenience non-probability sample
  - SPMI clients n=392
  - WMH employees n=172
- Adult immunization questionnaire
  - 17 items
  - Immunization Rates
  - Assess beliefs and knowledge
  - Barrier identification
### Immunization Records

- **SPMI**
- **Employees**

<table>
<thead>
<tr>
<th>Record</th>
<th>SPMI</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2.3%</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>24.4%</td>
<td></td>
</tr>
</tbody>
</table>

### MMR

- **SPMI**
- **Employees**

<table>
<thead>
<tr>
<th>MMR</th>
<th>MMR Booster</th>
</tr>
</thead>
<tbody>
<tr>
<td>63.8</td>
<td>79.1</td>
</tr>
<tr>
<td>7.7</td>
<td>19.5</td>
</tr>
</tbody>
</table>

### Tdap

- **SPMI**
- **Employees**
- **Td CDC**
- **Tdap CDC**

<table>
<thead>
<tr>
<th>Tdap</th>
<th>SPMI</th>
<th>Employees</th>
<th>Td CDC</th>
<th>Tdap CDC</th>
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</thead>
<tbody>
<tr>
<td>49.5</td>
<td>54.7</td>
<td>64</td>
<td></td>
<td></td>
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<tr>
<td>8.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Pneumococcal

- **SPMI:** 36.2%
- **CDC:** 18.5%
- **2020 Targets:** 60%

### Herpes Zoster 60+

- **SPMI:** 2.8%
- **Employees:** 2.1%
- **CDC:** 30%

### Hepatitis A

- **SPMI:** 6.1%
- **Employees:** 10.7%
- **CDC:** 53.8%
Baseline Survey- SPMI Immunization Questionnaire

- **Beliefs:**
  - Important for adults to receive immunizations
    - 84.4% strongly agree or agree
  - Immunizations are safe and prevent disease
    - 84% strongly agree or agree

- **Behaviors**
  - 56.6% interested in receiving information
  - 56.8% interested in having their immunization status assessed
  - 58.4% would like to receive their immunizations at WMH.
SPMI Barrier Themes

• “Why did you choose to not receive immunizations?”
  - Lack of awareness/knowledge - 42.22%
  - Accessibility - 16.29%
  - Personal Cost - 13.3%
  - Fears - 10.37%
  - Complacency - 10.37%
  - Not recommended by doctor - 1.5%
  - Other 5.92%

Intervention Strategies
Collaboration of Agencies

Lack of Awareness/Knowledge

• Patient education
  - Education groups
    - 5 sessions
  - Flyers & Posters
  - Newsletters
    - Staff
    - Wellness - Meds Only
    - Clubhouse
  - Nurses/Staff
Physician Recommendation

- Identified medical providers in community
  - 1 week WMH nurse collected data
- Letter to community medical providers
  - 95
- Goal: Increased awareness to local providers and support for immunization clinics

Accessibility

- Expanding access
  - WMH site clinics
- Targeted times
  - Banking Days
  - Day treatment
- Employee inclusion
- Vouchers

Voucher

Clients are given a voucher for immunizations that contains their Medicaid and Medicare billing information. This voucher can be utilized at any county health department immunization clinic to receive vaccine free of charge
Cost

• No cost to SPMI clients
• UCHD Clinic – (2 nurses)
  – No extra personnel costs
  – Reimbursement (Medicaid/Medicare)
  – Free vaccine as available (HPV/Varicella)
• Other support to clinics
  – WMH – Space/Computer
  – BYU Nursing students (2-3)
  – Project facilitator

Personal Health Record

• Utah Statewide Immunization Information System (USIIS)
• WMH clinic site designation
  – Collection of data
  – Reminder system
  – Personal immunization records
• Updated immunization records sent to clients with a reminder of next clinic
  – Distribute at day treatments
  – Mailing

Immunization Clinics

• Project Facilitator/WMH
  – Coordinate clinic schedules and support personnel
  – Medicaid/Medicare billing information
• BYU Nursing Students/Volunteers
  – Intake & initial answering of questions
  – USIIS information sheet
• UCHD Personnel
  – SPMI Education
  – Provide assessment & vaccines
  – Data entry to USIIS
Outcomes
*Sept/Oct 2012 Data Not Included*

- USIS: 358 enrolled/ 4200 SPMI population
  - Reached 8.5%
- 7 Clinic Dates – 129 served
  - 3 sites – 2 sites currently
  - 2 – 4 hours/each clinic
- Vouchers – 229 /
- Vaccines

<table>
<thead>
<tr>
<th>Flu 2011-2012</th>
<th>Hepatitis A</th>
<th>Hepatitis B</th>
<th>Tetanus (3)</th>
<th>MMR</th>
<th>Pneumococcal</th>
<th>TDAP</th>
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</thead>
<tbody>
<tr>
<td>106</td>
<td>25/17 c</td>
<td>14c</td>
<td>233/24c</td>
<td>19</td>
<td>38</td>
<td>159</td>
</tr>
</tbody>
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Patient Satisfaction Survey

- Up-to-date Immunizations Belief
  - 59.5% ▵ 75.9%
- Follow-up Immunizations
  - Copy Immunizations/WMH staff/flyers/mailed reminder/newsletters
- Beliefs
  - Safe and prevent disease 84% ▵ 88.5%
  - Important for adults to receive – 84.4% ▵ 92.3%
- Immunizations at WMH – 58.4% ▵ 90.4%
  - Convenient to receive at WMH – 92.3%

Conclusion

- Partnership
  - WMH & UCHD & BYU
- Elimination of barriers
- Sensitivity to SPMI needs
- Simple Low Cost Marketing
- Model for SPMI preventive immunization care

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