Improving Childhood Immunization Coverage among the Russian-Speaking Community in Sacramento – A Health Plan Perspective

Jill R Lopez-Rabin, MPH
Cultural and Linguistics Consultant

Martha Geraty, MA
Health Promotion Consultant

Amie Eng, MPH, MSW
Quality Improvement Specialist

April 25, 2016
Agenda

• Introduction
• Background of Project
• Formative Research
• Multi-Pronged Interventions
  ✓ Community Component
  ✓ Provider Component
  ✓ Media
• Where are we now?
• Questions and Answers
Objectives

1. Explain 2 ways to identify health disparities
   - Spatial
   - Descriptive

2. Identify 2 methods to investigate root causes of observed disparities in childhood immunization coverage.

3. Describe 1 new strategy to engage diverse communities in vaccine promotion activities.
Background of Project

• In accordance with state and federal requirements, we continually monitor and annually report on performance metrics

• Healthcare Effectiveness Data and Information Set (HEDIS) contains the metrics we use to evaluate performance

• Annually the state releases the Minimum Performance Level (MPL), which qualified health plans (QHPs) are required to meet
  ✓ National 25th percentile for Medicaid lines of business

• QHPs that do not meet the MPL for required performance metrics must develop an improvement plan

• QHPs that continually fall below the MPL for certain performance measures may have to implement corrective action plans (CAPs)
HN Medi-Cal CIS-3 Compliance Rates by Race/Ethnicity for HN Counties, RY2014

The Problem

✓ Below the MPL for 2 years for Childhood Immunization Status
  – Combo 3 (CIS-3)
✓ At risk for a Corrective Action Plan (CAP)

3 Year Trend Comparing Childhood Immunization Rates for Health Net Counties and the Minimum Performance Level (MPL), 2013-2015

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPL</td>
<td>64.72%</td>
<td>66.08%</td>
<td>66.67%</td>
</tr>
<tr>
<td>Sacramento County</td>
<td>66.67%</td>
<td>59.57%</td>
<td>62.31%</td>
</tr>
<tr>
<td>County 1</td>
<td>72.30%</td>
<td>67.46%</td>
<td>74.32%</td>
</tr>
<tr>
<td>County 2</td>
<td>68.71%</td>
<td>65.28%</td>
<td>67.29%</td>
</tr>
<tr>
<td>County 3</td>
<td>81.63%</td>
<td>76.15%</td>
<td>75.74%</td>
</tr>
<tr>
<td>County 4</td>
<td></td>
<td></td>
<td>57.59%</td>
</tr>
<tr>
<td>County 5</td>
<td>71.67%</td>
<td>70.18%</td>
<td>65.52%</td>
</tr>
<tr>
<td>County 6</td>
<td>78.47%</td>
<td>75.69%</td>
<td>74.44%</td>
</tr>
</tbody>
</table>
Recommended Vaccines for Children from Birth to 2 Years Old

- 4 DTaP (diphtheria, tetanus, and pertussis)
- 3 IPV (polio)
- 1 MMR (measles, mumps, and rubella)
- 3 HiB (haemophilus influenza type b)
- 3 Hep B (hepatitis B)
- 1 Varicella (chickenpox)
- 4 PCV (pneumococcal disease)
The following actions were taken to identify relevant barriers to performance:

- Identified barriers and challenges discovered during the HEDIS® Reporting Year (RY) 2014 data collection period.

- Conducted literature review to identify possible systemic barriers related to the Childhood Immunization Status (CIS) – Combination 3 measure.

- Analyzed administrative data for the HEDIS® RY 2014 results for this measure and medical charts and establishing coding to identify a reason within the chart for non-compliance with the CIS measure (called M-Code Analysis).

- Evaluated compliance rates by race/ethnicity and language.
CIS Disparity in Sacramento Co.

- Findings
  - In RY2014 Sacramento County demonstrated low registry participation rates (registry information is a data source for our performance metrics)
  - HEDIS Team also reported major barriers to medical record review, evident in the substantial decreases of Hybrid rates from the prior year.
  - Children missing one or more vaccines from the series

### Medi-Cal Immunization Registry Data by County – RY2014

<table>
<thead>
<tr>
<th>County</th>
<th>Total Assigned Members (N)</th>
<th>Members with Registry Data (N)</th>
<th>Percent of Members with Registry Data (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>County 1</td>
<td>1,434</td>
<td>1,150</td>
<td>80.2</td>
</tr>
<tr>
<td>County 2</td>
<td>16,188</td>
<td>11,760</td>
<td>72.6</td>
</tr>
<tr>
<td>Sacramento</td>
<td>1,940</td>
<td>564</td>
<td>29.1</td>
</tr>
<tr>
<td>County 3</td>
<td>1,034</td>
<td>816</td>
<td>78.9</td>
</tr>
<tr>
<td>County 4</td>
<td>9</td>
<td>4</td>
<td>44.4</td>
</tr>
<tr>
<td>County 5</td>
<td>1,013</td>
<td>317</td>
<td>31.3</td>
</tr>
<tr>
<td>County 6</td>
<td>2,168</td>
<td>1,900</td>
<td>87.6</td>
</tr>
<tr>
<td>Total</td>
<td>23,786</td>
<td>16,511</td>
<td>69.4</td>
</tr>
</tbody>
</table>

### Childhood Immunization Status - Combination 3 (CIS-3) Results for M-Code Analysis on Hybrid Data RY 2014, by Sacramento and All Counties Combined

- M11: Chart received but missing one or more vaccine
- M3: Chart with no service found
- M1: Service in chart but out of timeframe
Evaluation of compliance rates by race/ethnicity and language revealed that Russian-speaking children in Sacramento County showed statistically significantly lower immunization rates compared to other language groups.

<table>
<thead>
<tr>
<th>Language</th>
<th>Combo 3 Numerator (N)</th>
<th>Combo 3 Denominator (N)</th>
<th>Combo 3 Compliance Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>502</td>
<td>1331</td>
<td>37.72%</td>
</tr>
<tr>
<td>SPANISH</td>
<td>224</td>
<td>332</td>
<td>67.47%</td>
</tr>
<tr>
<td>RUSSIAN</td>
<td>1</td>
<td>113</td>
<td>0.88%</td>
</tr>
<tr>
<td>HMONG</td>
<td>33</td>
<td>59</td>
<td>55.93%</td>
</tr>
<tr>
<td>CANTONESE</td>
<td>21</td>
<td>27</td>
<td>77.78%</td>
</tr>
<tr>
<td>VIETNAMESE</td>
<td>18</td>
<td>26</td>
<td>69.23%</td>
</tr>
<tr>
<td>OTHER NON-ENGLISH</td>
<td>7</td>
<td>22</td>
<td>31.82%</td>
</tr>
<tr>
<td>ARMENIAN</td>
<td>1</td>
<td>8</td>
<td>12.50%</td>
</tr>
<tr>
<td>LAO</td>
<td>4</td>
<td>6</td>
<td>66.67%</td>
</tr>
<tr>
<td>MANDARIN</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>TAGALOG</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>FARSI</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>MIEN</td>
<td>NR</td>
<td>NR</td>
<td>NR</td>
</tr>
</tbody>
</table>

NR: Not reportable; denominator <5
Literature Review & Formative Research

• Literature Review
  ✔ Washington State Study

• Formative research and analysis
  ✔ Kids Day in the Park Surveys (May 2015)
  ✔ Key informant interviews (June and July 2015)
Formative Research

• Health Fair Surveys – May 2015
  ✓ 34 evaluations; 32 Health Net Members surveyed

  ○ Beliefs about vaccines:
    - I believe they are bad for my children - 10 (29.4%)
    - I do NOT understand enough about them - 1 (2.9%)
    - I immunize my children part way - 20 (58.%)  
    - Other: I vaccinate all children - 2 (5.9%)
    - Other: No vaccines in clinic -1 (2.9%)
Formative Research

• Key Informant Interviews with local Russian-speaking community leaders and professionals
  ✓ Community Organizations
  ✓ Medical
  ✓ Media
  ✓ Religious
What have you noticed about the attitudes of Russian speaking parents towards getting their infants vaccinated?

6 of 7 participants responded to word of mouth (WOM) as being a major influence among the Russian-speaking community to not vaccinate their kids. Several participants responded to WOM being a major influence in the decision of parents to not vaccinate their kids due to the negative stories they hear about the effects it has on their children.

5 of 7 participants indicated that parents postpone vaccinations and also make their own schedule for shots resulting in young children receiving only partial vaccinations from the state requirements.

The same respondents (5 of 7) stated that Russian-speaking parents will choose to only give their children some of the required vaccinations rather than all of them. They tend to space them out and do not follow the vaccination schedule.
Key Informant Interview

Where would be a comfortable place for Russian-speaking parents to sit and have group discussions for an hour?

5 of 7 participants agreed that a church would be the most ideal place for the Russian-speaking community to sit and have group discussions. However, all 5 participants strongly indicated that no political agenda should be present when having these community discussions at a church.

3 of 7 participants indicated that a community center would be ideal.

3 of 7 participants indicated that schools would be an ideal place.
## CIS Process and Timeline

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Convened internal CIS Health Disparity workgroup &amp; completed lit review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducted and analyzed formative research</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyze Barriers and Data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop CIS workplan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish and meet with Community Advisory Group (CAG)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connect with Community Collaborators in Sac. Co.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select CIS Targets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provider Intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member Intervention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian-language Media Campaign</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Multi-Pronged Interventions

**Community Component**
- Community Presentations
  - School District A
    - School 1
    - School 2
  - School District B
  - Religious Leaders
- Partnership with County Public Health
- Community Advisory Group (CAG)
- Direct member outreach

**Media Campaign**
- Russian-language media outlets
  - Print ads
  - Public Service Announcements (PSAs)
  - Radio Interview
  - Social Media

**Provider Component**
- Targeted intervention to a specific provider and clinic site
- Trainings
- Resources on SB 277
## Provider Component

<table>
<thead>
<tr>
<th>PPG NAME</th>
<th>TOTAL RUSSIAN SPEAKERS</th>
<th>PERCENT OF PPG</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPG -1</td>
<td>47</td>
<td>19.34%</td>
</tr>
<tr>
<td>PPG -2</td>
<td>35</td>
<td>5.41%</td>
</tr>
<tr>
<td>PPG -3</td>
<td>28</td>
<td>4.09%</td>
</tr>
<tr>
<td>PPG -4</td>
<td>NR</td>
<td>NR</td>
</tr>
<tr>
<td>PPG -5</td>
<td>NR</td>
<td>NR</td>
</tr>
</tbody>
</table>

NR: Not reportable, denominator <5
Community Outreach: Preliminary Analysis

• Comparison of two Parent Workshops – School A
  ✓ Immunizations – September 2015
    o 32 evaluations ~70 attendees

  ✓ Immunizations and SB 277 – February 2016
    o 52 evaluations ~90 attendees
    o Change in beliefs:
      ▪ Vaccines prevent illness – 4% at both events
      ▪ Vaccines are bad for my children – 2% decrease between events (13% and 15%)
      ▪ Will NOT vaccinate children – decrease of 4% between events (17% and 13%)
Where are we now?

• The CIS-3 health disparity project is in progress
• Community presentations are ongoing
• Media campaign will begin in May 2016
• Provider intervention will begin in June 2016
• Evaluations ongoing with all interventions
Q&A
Thank You
Contact Information

Jill R. Lopez-Rabin, MPH
Cultural and Linguistics Consultant
jill.r.lopez-rabin@healthnet.com

Martha Geraty, MA
Health Promotion Consultant
martha.x.geraty@healthnet.com

Amie Eng, MPH, MSW
Sr. Quality Improvement Specialist
amie.x.eng@healthnet.com