BEYOND ACCREDITATION: USING DATA TO IMPROVE COMMUNITY HEALTH

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CHA…CHA…CHA Now What?

• Identify some strengths and limitations of health data for tribal communities
• Learn examples of how communities moved from data into actions to improve health
• Practice using tools to prioritize, strategize, and get “unstuck”
“So things are good, stuff is OK, and I reiterate my request for more specific data.”
How do we use health data?

- Identify and establish priorities
- Select and implement interventions
- Evaluate programs and progress toward health goals
- Apply for funding
- Develop policies, advocate, and educate
What’s the story?

Root Causes
- Information on historical, social, economic, cultural, and environmental determinants of health

Scope of Problem
- Data on current burden, trends, populations affected, and disparities
- Data on risk factors and health promoters
- Community knowledge and beliefs
- Gaps in community resources
- Gaps in available data

Proposed Solution
- Information on effectiveness and limitations of proposed intervention
- Information on how intervention has worked in different communities and settings
- Risks and benefits
- Readiness of community to implement intervention

Expected Impact
- Projections of what will happen if community adopts intervention
- Projections of what will happen if community does nothing
- “Side” benefits (or risks)
Common Data Sources

• Mandatory Reporting Systems
  • Vital Statistics (births, deaths)
  • Disease registries (cancer, birth defects)
  • Disease surveillance/notifiable conditions
  • US Census
• Clinic data: GPRA, IHS diabetes audit, immunization records, Uniform Data System, EpiDataMart
Common Data Sources

• Surveys
  • Youth Risk Behavior Survey
  • Behavioral Risk Factor Surveillance Survey
    (National or Tribal in some cases)
  • National Health Interview Survey
  • Clinic data; patient satisfaction surveys

• Academic Studies
  • PubMed, Google scholar
  • NIH library for IHS users
Collecting data on your data

• Are data on AI/AN available?
• If yes:
  • How accurate?
  • How relevant?
  • How credible?
  • How old?
  • Noteworthy or compelling?
Data accuracy

• Small numbers
  • Difficult to maintain patient confidentiality (suppressed data)
  • Statistical instability

• Surveys
  • Bias from sampling methods

• Racial misclassification
  • AI/AN are often coded as White or another race in administrative datasets
  • Compounds small numbers issue
  • Underestimates disease burden
<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause of Death</th>
<th>Pre-linkage AI/AN</th>
<th>Post-linkage AI/AN</th>
<th>Change in # of deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Major Cardiovascular Diseases</td>
<td>1148</td>
<td>1261</td>
<td>113</td>
</tr>
<tr>
<td>2</td>
<td>Malignant Neoplasms</td>
<td>902</td>
<td>980</td>
<td>78</td>
</tr>
<tr>
<td>3</td>
<td>Unintentional Injury or Accident</td>
<td>543</td>
<td>580</td>
<td>37</td>
</tr>
<tr>
<td>4</td>
<td>Chronic Liver Disease and Cirrhosis</td>
<td>250</td>
<td>275</td>
<td>25</td>
</tr>
<tr>
<td>5</td>
<td>Chronic Lower Respiratory Diseases</td>
<td>231</td>
<td>260</td>
<td>29</td>
</tr>
<tr>
<td>6</td>
<td>Diabetes Mellitus</td>
<td>206</td>
<td>224</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>Suicide</td>
<td>147</td>
<td>166</td>
<td>19</td>
</tr>
<tr>
<td>8</td>
<td>Alzheimer's Disease</td>
<td>98</td>
<td>111</td>
<td>13</td>
</tr>
<tr>
<td>9</td>
<td>Influenza and Pneumonia</td>
<td>69</td>
<td>73</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>Other Respiratory Diseases</td>
<td>68</td>
<td>73</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Total Deaths</td>
<td>6759</td>
<td>7485</td>
<td>726</td>
</tr>
</tbody>
</table>
Are the data relevant?

• Do the data reflect your community?
  • Geography
  • Who counts as American Indian or Alaska Native?
  • Enrolled members vs. people living on the reservation vs. clinic population vs. ???

• Do the data answer your question?
Overcoming Data Challenges

• Use what you’ve got!
• Combine years, sub-groups, geographies
• Find linkage-corrected data
• Combine multiple data sources to identify themes
Overcoming Data Challenges

• Consider different comparison populations
• Use data from a population with similar characteristics
• Lack of data can be turned into a way to advocate for improvements!
“I’ll pause for a moment so you can let this information sink in.”
Yellowhawk Clinic Cancer Intervention Plan

• Root Causes – Rural Health Challenges
  • Unemployment, Education, Demographic Shifts
  • Higher rates of smoking and other risk behaviors
• Shortages in healthcare providers and services
• Difficulty accessing services
Breast Cancer

**Scope of Problem**
- Leading cancer site for AI/AN, 2nd for total population
- AI/AN had similar incidence rates as total population
- County X had low rates (~43%) of mammography screening, with only 40 women screened in the past 5 years

**Proposed Solution**
- Network should adopt the USPSTF recommendation to provide mammograms to women aged 50-74 years every 2 years
- All four counties should continue to educate and screen women in the target population
- County X should expand mobile mammography services and work with adjoining county to expand screening services and follow-up to county residents

**Expected Impact**
- Providing 734 mammograms over two years will allow County X to achieve a 90% screening rate for women ages 50-74
- Based on Medicaid data the average cost of a mammogram screenings is $243.
- The network will need total of $178,362 is needed to screen 734 patients over the next two years.
Cancer Disparities

**Scope of Problem**
- Compared to NHW, AI/AN had statistically significant higher rates of kidney and renal pelvis cancers (2.9 times higher) and stomach cancers (4.4 times higher).
- Risk factors for kidney & renal pelvis cancers include smoking, obesity, and high blood pressure.
- Risk factors for stomach cancer include H. pylori infection, diets with smoked/salted foods and tobacco use.

**Proposed Solution**
- Hire a cancer outreach specialist to develop education materials and conduct outreach to clinicians and patients.
- Coordinate with Yellowhawk’s nutrition and health education staff to develop protective and risk factors from traditional diets (smoked salmon).

**Expected Impact**
- Outreach specialist will improve coordination among network members, support the development and dissemination of culturally appropriate patient education materials, and assess and coordinate healthcare provider training.
- Cost for Outreach Specialist: $120,000/year.
- Cost to develop materials: $6,800.
Teen Pregnancy Prevention Program

California Health Interview Survey data

2010 = Highest rate of teen pregnancy in the state

Teen Pregnancy Prevention Team

Strategic Planning

Action & Advocacy
<table>
<thead>
<tr>
<th>Goals</th>
<th>Momentum team</th>
<th>Power</th>
<th>Targets</th>
<th>Activities/Actions</th>
<th>Timeline</th>
<th>Bike Rack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term (specific, doable, meaningful, tangible)</td>
<td>What resources can you put in? What can be contributed or already exists? (Be specific: costs, number of staff, volunteers, supplies, facilities)</td>
<td>Strengths</td>
<td>Primary Target (what needs to be addressed to get your long-term goal to succeed?)</td>
<td>What needs to be done in steps to get you to your long-term/short-term goal?</td>
<td>Is there a deadline or benchmark of opportunity? (Each Activity/Action should have a date)</td>
<td></td>
</tr>
<tr>
<td>Short-term (smaller goals that help you get closer to your long-term goal)</td>
<td>How will the above contribution strengthen the momentum of the team?</td>
<td>Challenges</td>
<td>Secondary Target (factors that influence the primary target)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Northwest Portland Area Indian Health Board
Strategies

• Goals:
  • Short & Long Term

• Momentum Team
  • Resources
  • Identify other champions/potential partners

• Power
  • Strengths & Challenges

• Targets
  • Primary & Secondary

• Activities/Actions = Steps to take

• Timeline/Benchmark
# Decision Matrix

<table>
<thead>
<tr>
<th>IDEAS</th>
<th>Diabetes/Obesity</th>
<th>Cancer (prescreen)</th>
<th>Substance Abuse</th>
<th>STIs</th>
<th>Homelessness</th>
<th>Afterschool Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRITERIA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>no added cost</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>short duration</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>community buy-in</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
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<tr>
<td>current staff</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>sustainable</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>
Thank you

- Tribes of Idaho, Oregon, and Washington, patients and families
- Centers for Disease Control and Prevention/Office of Minority Health
- Yellowhawk Tribal Health Center
- California Endowment

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