American Indian and Alaska Native Colorectal Cancer Screening Data

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Presented by:
Donald Haverkamp, MPH
Presentation Overview

- Importance of CRC screening surveillance in AI/AN populations

- Indian Health Service GPRA screening measure for CRC and rates by IHS Area

- Other CRC screening data sources for AI/AN
**CRC Stage at Diagnosis**

**AI/AN and Non-Hispanic white, 2005-2009**

*Early stage includes local disease; late stage includes regional and distant stage disease*

CRC Incidence by Age at Diagnosis
AI/AN and Non-Hispanic white, 2005-2009

Age-adjusted Colorectal Cancer Death Rates and Joinpoint Trend Lines in CHSDA Counties, 1990-2009, Males
Age-adjusted Colorectal Cancer Death Rates and Joinpoint Trend Lines in CHSDA Counties, 1990-2009, Females
Cancer screening among IHS user population (GPRA results)

- Breast
- Cervical

Year: 2002 to 2012

Percent Screened

Breast: Increase over time
Cervical: Decrease over time
Cancer screening among IHS user population (GPRA results)

- Colorectal
- Breast
- Cervical

Percent Screened

Year: 2002 to 2012
Current GPRA Colorectal Cancer Screening Measure
(aligned with HEDIS measure and USPSTF guidelines)

- **Criteria**
  - Ages 50-75 years
  - Average-risk

- **Tests**
  - Colonoscopy *every 10 years*
  - Sigmoidoscopy *every 5 years*
  - Fecal occult blood test (FOBT) *every year*
    - Guaiac-based fecal occult blood test (gFOBT)
    - Fecal immunochemical test (FIT)

Current CRC Screening Among IHS User Population (GPRA results)

Healthy People 2020 Goal is 70.5%

<table>
<thead>
<tr>
<th>Year</th>
<th>Percent Screened</th>
</tr>
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<tbody>
<tr>
<td>2013</td>
<td>35.0</td>
</tr>
<tr>
<td>2014</td>
<td>37.5</td>
</tr>
<tr>
<td>2015</td>
<td>38.6</td>
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Colorectal Cancer Screening: GPRA 2015 results, by IHS Area

<table>
<thead>
<tr>
<th>Location</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Alaska</td>
<td>59.3</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>39.7</td>
</tr>
<tr>
<td>Bemidji</td>
<td>34.2</td>
</tr>
<tr>
<td>Billings</td>
<td>34.3</td>
</tr>
<tr>
<td>California</td>
<td>31.2</td>
</tr>
<tr>
<td>Great Plains</td>
<td>27.5</td>
</tr>
<tr>
<td>Nashville</td>
<td>42.7</td>
</tr>
<tr>
<td>Navajo</td>
<td>49.4</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>34.6</td>
</tr>
<tr>
<td>Phoenix</td>
<td>26.7</td>
</tr>
<tr>
<td>Portland</td>
<td>38.5</td>
</tr>
<tr>
<td>Tucson</td>
<td>33.9</td>
</tr>
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2016 GPRA Target: 40%
Other CRC screening data sources for AI/AN
Behavioral Risk Factor Surveillance System

- Collects data in all 50 states as well as the District of Columbia and three U.S. territories
- More than 400,000 adult interviews each year
- Core questions and optional modules collect information about health risk behaviors (including cancer screening)
- In 2014, states collected 36% of BRFSS data by cell phone.

*CRC screening = FOBT within 1 year or Endoscopy within 5 years


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Limitations of BRFSS for AI/AN

- State level BRFSS data often includes small number of AI/AN, leading to unstable estimates
- Core module does not collect data on Tribal Affiliation
- AI/ANs in general have lower rates of household phone coverage than the general U.S. population
One solution: Provide funds to oversample for AI/AN in statewide survey

Colorectal Cancer Screening, Adults (50+ Years), 1993-2012
Data Sources: State of Alaska, Division of Public Health, Behavioral Risk Factor Surveillance System; Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System

Note - Data presented are for flexible sigmoidoscopy or colonoscopy ever.
Another solution: conduct Tribal BRFSS

Research Articles

Colorectal Cancer Screening Among American Indians in a Pacific Northwest Tribe: Cowlitz Tribal BRFSS Project, 2009–2010

Annika G. Maly, MD, MPH
Tessa L. Steel, MD, MPH
Rongwei Fu, PhD
David A. Lieberman, MD, FACC
Thomas M. Becker, MD, PhD

Abstract

Objectives. Colorectal cancer (CRC) screening is low among American Indians (Als). We describe the demographics, health status, prevalence of modifiable CRC risk factors, and use of CRC screening modalities in a Pacific Northwest Al tribe.

Methods. We conducted a survey among Cowlitz tribal members using a
Advantages of conducting Tribal BRFSS Survey

• Can provide an estimate for CRC screening that is very specific to the community surveyed, and estimates can be quite a bit different than state or regional estimates

• Can have higher participation and survey response when conducted by local entity such as a Tribal Health System or Tribal Epidemiology Center, known to the community
Another alternative: conduct in-person Tribal BRFSS surveys

<table>
<thead>
<tr>
<th>TRIBAL BRFSS COMPLETED SURVEYS</th>
<th>RESPONSE RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone (raw)</td>
<td>6.0%</td>
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<tr>
<td>Telephone (adjusted)</td>
<td>35.7%</td>
</tr>
<tr>
<td>In-Person</td>
<td>68.5%</td>
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Summary of AI/AN Colorectal Cancer Screening Data

• Tribes want tribal specific cancer data
• Tribes want to control their data and publications about their data
• Tribal health programs use the data for funding and reporting opportunities
• Tribes use the data to identify gaps in services
• Many more tribes would like to participate in a tribal BRFSS project
Thank you!

Questions?

For more information please contact Donald Haverkamp at:

Email: donald.haverkamp@ihs.gov, or cyq1@cdc.gov
Telephone: 505-235-1163

The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.