Community Health Needs Assessment Survey Results for American Indian Residents of the Greater F-M Area:
A Step Toward the Development of Culturally Appropriate Health Care

Presentation to the Fargo Native American Commission
June 12, 2014
Ramona Danielson, MPH Program at NDSU
Acknowledgements

Research Team:
- Donna Grandbois (Turtle Mountain), RN, Ph.D., NDSU Assistant Professor of Nursing and MPH Faculty Member
- Jaclynn Davis-Wallette (Turtle Mountain), NDSU Assistant Vice President of Equity, Diversity, and Global Outreach
- Willard Yellow Bird, Jr. (Three Affiliated Tribes), City of Fargo Cultural Planner
- Clinton Alexander (White Earth), Director of the Native American Center in Fargo and Director of Sacred Spirits in Fargo
- Sharon Cobb (Fargo Resident), former Director of the NDSU Group Decision Center

Fargo Native American Commission
Greater Fargo-Moorhead Community Health Needs Assessment Collaborative
Thank you to community members who took the time to complete the survey!
Stark health disparities for ND American Indians (AI)

- Largest minority population: 6.4% of state population, 2.1% of F-M Metro Area
- On average, AI in ND die 20 years younger than whites: 57.4 years vs. 77.4 years from 2007-2012
- Disparities cross a broad spectrum of issues: infant mortality, substance use, injuries, chronic disease (diabetes)
- AI are challenged to access health services, and to find culturally appropriate health care when they do
  - Providers trained in patients’ culture, culturally-specific healthcare setting, images used, readability of materials
Disparities in broad context

- Inter-generational impacts of historical trauma
- Adverse Childhood Experiences (ACEs)\(^5\)
  - Abuse, neglect, household dysfunction as a child → increased risk for health problems as an adult
  → Need for trauma-informed care\(^6\)

- Social determinants of health\(^7\)
  - Economic stability, education, social & community context, health & health care, neighborhood & built environment
Context for prioritizing “community needs”

- **Maslow’s Hierarchy of Needs**
  - First 4 are “deficit” needs
  - Expect different priorities based on where person is at in the pyramid
  - Doesn’t mean other needs aren’t important
Assessing community health needs

- Look systematically at health of community
  - Ensure services are provided effectively/efficiently
  - Identify health inequalities, unequal access to services
  - Prioritize resources

- Greater F-M Community Health Needs Assessment Collaborative (GFMCHNAC) process on-going
  - Want urban Indians to be included in larger community process
Assessing needs

- Collaborative collected data
  Spring 2012
  - Generalizable community survey (N=236) and community leaders (N=58)
  - Only 2 American Indian participants
- Survey tool
  - Assess opinions and concerns about a broad array of community issues
    - 88 Qs across 12 topics
  - 1 to 5 scales, where larger value → greater concern
- Overall priorities chosen by GFMCHNAC:
  - Mental Health
  - Obesity
  - Aging Issues

Statements about the community (19 Qs)
- the people, services & resources, quality of life

General community concerns (36 Qs)
- transportation, environment, children & youth, aging population, safety, economic issues

Health-related community concerns (33 Qs)
- access to health care, physical & mental health, substance use & abuse
Critical need to address health disparities for urban Indians → special survey effort

- Spearheaded by Urban Indian Health & Wellness Center of F-M and supported by Fargo Native American Commission
- Seek to:
  - Demonstrate the unique needs of American Indian residents
  - Inform policy-making
  - Improve access
  - Promote culturally appropriate, trauma-informed health care
American Indian survey

- Important to use same tool (not designed with American Indians in mind)
  - Compare among 3 survey groups
  - Add voice to on-going conversation
  - Assess over time

- Utilized community-based participatory research principles
  - Convenience sampling (e.g., community events, Native American Center) → 97 surveys completed (summer 2012)
Analysis

- “Cleaned” the data
- Created composite indices (i.e., “factors”) of Qs for the 12 topic areas
- Looked at average responses to each question (and index)
  - “Among respondents to the American Indian survey effort, the average level of concern for that question was X”
- Looked at how individual concerns (and indices) ranked relative to one another
- Examined significant differences among concerns by survey group
### Demographics → Reflect Distinct Experiences

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly American Indian</td>
<td>Mostly white</td>
<td>Mostly white</td>
</tr>
<tr>
<td>Younger overall; no elders</td>
<td>*Older (skews older)</td>
<td>Older, but fewer elders</td>
</tr>
<tr>
<td>Lower education levels</td>
<td>*Half with at least a 4-year degree (skews high)</td>
<td>Very highly educated</td>
</tr>
<tr>
<td>Even split for gender</td>
<td>*More females</td>
<td>More females</td>
</tr>
<tr>
<td>~Half work/volunteer outside home</td>
<td>¾ work/volunteer outside home</td>
<td>(~100% work/volunteer outside home)</td>
</tr>
<tr>
<td>Low homeownership</td>
<td>*High homeownership level (skews high)</td>
<td>Nearly universal homeownership</td>
</tr>
<tr>
<td>Lower income levels</td>
<td>*Middle to upper-middle income (skews high)</td>
<td>Upper-middle to high income</td>
</tr>
<tr>
<td>More who are parenting a child 18 or younger (2 in 5)</td>
<td>Fewer who are parenting a child 18 or younger (1 in 4)</td>
<td>Fewer who are parenting a child 18 or younger (1 in 3)</td>
</tr>
</tbody>
</table>

*Not representative of overall community*
Ranking is of all 88 questions, where 1 is greatest concern, across all of the 12 factors in the survey. **Mean reflects average level of concern among respondents for that question, on a scale from 1 to 5 where 1=no concern at all and 5=a great deal of concern (so a higher average indicates greater concern).**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Community Concern</th>
<th>Rank* (of 88)</th>
<th>Mean** (1 to 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>physical &amp; mental health</td>
<td>Stress</td>
<td>1</td>
<td>4.06</td>
</tr>
<tr>
<td>physical &amp; mental health</td>
<td>Depression</td>
<td>2</td>
<td>4.03</td>
</tr>
<tr>
<td>substance use &amp; abuse</td>
<td>Alcohol use and abuse</td>
<td>2</td>
<td>4.03</td>
</tr>
<tr>
<td>economic issues</td>
<td>Homelessness</td>
<td>4</td>
<td>3.97</td>
</tr>
<tr>
<td>access to health care</td>
<td>Cost of health care</td>
<td>5</td>
<td>3.94</td>
</tr>
<tr>
<td>substance use &amp; abuse</td>
<td>Smoking and tobacco use</td>
<td>6</td>
<td>3.90</td>
</tr>
<tr>
<td>physical &amp; mental health</td>
<td>Poor nutrition/eating habits</td>
<td>7</td>
<td>3.86</td>
</tr>
<tr>
<td>safety</td>
<td>Domestic violence</td>
<td>8</td>
<td>3.79</td>
</tr>
<tr>
<td>physical &amp; mental health</td>
<td>Chronic disease</td>
<td>8</td>
<td>3.79</td>
</tr>
<tr>
<td>access to health care</td>
<td>Cost of health insurance</td>
<td>10</td>
<td>3.78</td>
</tr>
<tr>
<td>physical &amp; mental health</td>
<td>Inactivity, lack of exercise</td>
<td>10</td>
<td>3.78</td>
</tr>
</tbody>
</table>

Top Individual Areas of Concern for American Indian Residents
### Comparative Rankings of Top Individual Areas of Concern for American Indian Residents

<table>
<thead>
<tr>
<th>Factor</th>
<th>American Indian survey</th>
<th>Generalizable community survey</th>
<th>Community leaders survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank* (of 88)</td>
<td>Mean** (1 to 5)</td>
<td>Rank* (of 88)</td>
</tr>
<tr>
<td>physical &amp; mental health</td>
<td>Stress</td>
<td>1</td>
<td>4.06</td>
</tr>
<tr>
<td>physical &amp; mental health</td>
<td>Depression</td>
<td>2</td>
<td>4.03</td>
</tr>
<tr>
<td>substance use &amp; abuse</td>
<td>Alcohol use and abuse</td>
<td>2</td>
<td>4.03</td>
</tr>
<tr>
<td>economic issues</td>
<td>Homelessness</td>
<td>4</td>
<td>3.97</td>
</tr>
<tr>
<td>access to health care</td>
<td>Cost of health care</td>
<td>5</td>
<td>3.94</td>
</tr>
<tr>
<td>substance use &amp; abuse</td>
<td>Smoking and tobacco use</td>
<td>6</td>
<td>3.90</td>
</tr>
<tr>
<td>physical &amp; mental health</td>
<td>Poor nutrition/eating habits</td>
<td>7</td>
<td>3.86</td>
</tr>
<tr>
<td>safety</td>
<td>Domestic violence</td>
<td>8</td>
<td>3.79</td>
</tr>
<tr>
<td>physical &amp; mental health</td>
<td>Chronic disease</td>
<td>8</td>
<td>3.79</td>
</tr>
<tr>
<td>access to health care</td>
<td>Cost of health insurance</td>
<td>10</td>
<td>3.78</td>
</tr>
<tr>
<td>physical &amp; mental health</td>
<td>Inactivity, lack of exercise</td>
<td>10</td>
<td>3.78</td>
</tr>
</tbody>
</table>

*Ranking is of all 88 questions, where 1 is greatest concern, across all of the 12 factors in the survey. **Mean reflects average level of concern among respondents for that question, on a scale from 1 to 5 where 1=no concern at all and 5=a great deal of concern (so a higher average indicates greater concern).
### Top 11 Ranked Community Concerns Among All 88 for Each Survey Group

<table>
<thead>
<tr>
<th>Rank* (of 88)</th>
<th>Community survey</th>
<th>Generalizable community survey</th>
<th>Community leaders survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Mean</strong> (1 to 5)</td>
<td><strong>Mean</strong> (1 to 5)</td>
<td><strong>Mean</strong> (1 to 5)</td>
</tr>
<tr>
<td>1</td>
<td>Stress</td>
<td>4.06</td>
<td>Cost of health insurance</td>
</tr>
<tr>
<td>2</td>
<td>Depression</td>
<td>4.03</td>
<td>Cost of health care</td>
</tr>
<tr>
<td>3</td>
<td>Alcohol use and abuse</td>
<td>4.03</td>
<td>Cost of prescription drugs</td>
</tr>
<tr>
<td>4</td>
<td>Homelessness</td>
<td>3.97</td>
<td>Adequacy of health insurance</td>
</tr>
<tr>
<td>5</td>
<td>Cost of health care</td>
<td>3.94</td>
<td>Access to health insurance coverage</td>
</tr>
<tr>
<td>6</td>
<td>Smoking and tobacco use</td>
<td>3.90</td>
<td>Availability, cost of dental, vision insurance</td>
</tr>
<tr>
<td>7</td>
<td>Poor nutrition/eating habits</td>
<td>3.86</td>
<td>Availability, cost of dental, vision care</td>
</tr>
<tr>
<td>8</td>
<td>Domestic violence</td>
<td>3.79</td>
<td>Cancer</td>
</tr>
<tr>
<td>9</td>
<td>Chronic disease</td>
<td>3.79</td>
<td>Chronic disease</td>
</tr>
<tr>
<td>10</td>
<td>Cost of health insurance</td>
<td>3.78</td>
<td>Obesity</td>
</tr>
<tr>
<td>11</td>
<td>Inactivity, lack of exercise</td>
<td>3.78</td>
<td>Stress</td>
</tr>
</tbody>
</table>

*Ranking is of all 88 questions, where 1 is greatest concern, across all of the 12 factors in the survey. **Mean reflects average level of concern among respondents for that question, on a scale from 1 to 5 where 1=no concern at all and 5=a great deal of concern (so a higher average indicates greater concern).*

#### Top Individual Areas of Concern for the Other 2 Survey Groups

- **Generalizable community** focused strongly on cost/access to health care
- **Community leaders** focused on cost/access to health care AND obesity, poor nutrition, lack of exercise
Significant Differences on Indices

Compared to generalizable community:
- AI have MORE concern
  - Substance use and abuse
  - Physical and mental health
  - Economic issues
  - Children and youth
  - Access to health care
  - Environment
  - People, quality of life, and services and resources

Compared to community leaders:
- AI have MORE concern
  - Environment
  - People, quality of life, services and resources
  - Physical and mental health
  - Access to health care

Comparative Index Rankings:
- #1: SUBSTANCE USE & ABUSE generalizable 2nd / leaders 2nd
- #2: PHYSICAL & MENTAL HEALTH 1st / 1st
- #3: ECONOMIC ISSUES 6th / 6th
- #4: SAFETY 4th / 7th
- #5: CHILDREN & YOUTH 8th / 5th

**Multivariate Analysis of Variance omnibus test shows differences between survey groups are significant: Pillai’s Trace = .381, F(24, 646) = 6.334, p = .000, Partial Eta Squared = .191.

**Univariate tests show that the mean differences for the individual survey question are significant at p < .05.

*Comparing two groups only, there are significant differences between estimated marginal means at p < .05.
General PATTERN in responses:

- **Community leaders** answered across the board with higher values than the other two groups (more likely to give 4 or 5)
- **Generalizable community** survey respondents answered across the board with lower values than the other two groups (less likely to give 4 or 5)

<table>
<thead>
<tr>
<th>Survey Group:</th>
<th>Substance use and abuse</th>
<th>Physical and mental health</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian</td>
<td>3.85 (1)</td>
<td>3.73 (2)</td>
</tr>
<tr>
<td>Generalizable community</td>
<td>3.47 (2)</td>
<td>3.49 (1)</td>
</tr>
<tr>
<td>Community leaders</td>
<td>3.97 (2)</td>
<td>4.04 (1)</td>
</tr>
</tbody>
</table>
## Significant Differences on Qs within Safety

### Compared to generalizable community:
- AI have MORE concern
  - Elder abuse
  - Domestic violence
  - Violent crimes

### Compared to community leaders:
- AI have MORE concern
  - Violent crimes

### Table: Comparisons of Estimated Marginal Means for Questions Relating to SAFETY

<table>
<thead>
<tr>
<th>Question relating to SAFETY</th>
<th>Generalizable community survey</th>
<th>Community leaders survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Diff.</td>
<td>SE</td>
</tr>
<tr>
<td>Child abuse and neglect</td>
<td>.182</td>
<td>.141</td>
</tr>
<tr>
<td>Elder abuse**</td>
<td>.351*</td>
<td>.142</td>
</tr>
<tr>
<td>Domestic violence**</td>
<td>.334*</td>
<td>.136</td>
</tr>
<tr>
<td>Presence and influence of drug dealers in the community</td>
<td>.059</td>
<td>.140</td>
</tr>
<tr>
<td>Property crimes</td>
<td>.084</td>
<td>.134</td>
</tr>
<tr>
<td>Violent crimes**</td>
<td>.578*</td>
<td>.144</td>
</tr>
</tbody>
</table>

Note: Higher means indicate “concern” (i.e., less agreement with the statement).

* Multivariate Analysis of Variance omnibus test shows differences between survey groups are significant: Wilks’ Lambda = .813, F(12, 688) = 6.270, p = .000, Partial Eta Squared = .099.

** Univariate tests show that the mean differences for the individual survey question are significant at p < .05.

* Comparing two groups only, there are significant differences between estimated marginal means at p < .05.
Comparisons of Estimated Marginal Means for Questions Relating to THE PEOPLE

<table>
<thead>
<tr>
<th>Question relating to THE PEOPLE</th>
<th>Estimated marginal means, compared to American Indian Survey Respondents*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generalizable community survey</td>
</tr>
<tr>
<td></td>
<td>Mean Diff.</td>
</tr>
<tr>
<td>People are friendly, helpful, and supportive**</td>
<td>.504*</td>
</tr>
<tr>
<td>There is a sense of community/feeling connected to people who live here**</td>
<td>.380*</td>
</tr>
<tr>
<td>People who live here are aware of/engaged in social, civic, or political issues**</td>
<td>.286*</td>
</tr>
<tr>
<td>The community is socially and culturally diverse</td>
<td>.159</td>
</tr>
<tr>
<td>There is an engaged government**</td>
<td>.632*</td>
</tr>
<tr>
<td>There is tolerance, inclusion, and open-mindedness</td>
<td>.104</td>
</tr>
<tr>
<td>There is a sense that you can make a difference**</td>
<td>-.176</td>
</tr>
</tbody>
</table>

Note: Higher means indicate “concern” (i.e., less agreement with the statement).

*Multivariate Analysis of Variance omnibus test shows differences between survey groups are significant: Pillai’s Trace=.283, F(14,686)=8.067, p=.000, Partial Eta Squared=.141.

**Univariate tests show that the mean differences for the individual survey question are significant at p<.05.

#Comparing two groups only, there are significant differences between estimated marginal means at p< .05.

Significant Differences on Qs related to the People

Compared to generalizable community and community leaders:

- AI have MORE concern
- Supportiveness
- Sense of community
- Civic engagement
- Engaged government
Significant Differences on Selected Qs related to Access to Health Care

Compared to generalizable community:

- AI have MORE concern
- All of these access issues!

Compared to community leaders:

- AI have MORE concern
- Distance to health care services
- Patient confidentiality
- AI have LOWER LEVELS of concern
- Availability of mental health services and providers
- Coordination of care
For Urban Indians in the Fargo-Moorhead Metro Area

Different experiences/reality than the “mainstream” community
- Reflected in attitudes about “the people”
- Differences in safety concerns (elder abuse, domestic violence, violent crimes*)

Differences in which concerns ranked highest
- Top concerns: stress, depression, alcohol use/abuse, homelessness

Significantly greater concern regarding key access to care issues*
- Language, distance/transportation, getting in to see a provider (taking new patients, time to get an appt., non-traditional hours)

*Significantly greater concern compared to generalizable community
Next Steps

- Share results with the community
  - Compile a public report
  - Will be available on the Collaborative’s page on the ND Compass website
- Additional research
  - Focus groups about how to address these disparities
  - Repeat survey in 2015 (may revise Qs)

Search online for “ND Compass Health Collaborative” or go directly to: http://www.ndcompass.org/health/greater-fm-community-health-collaborative.php
Addressing Health Disparities

- Survey results offer a wealth of information to help inform decision-making
- Different concerns are on urban Indian’s “radar;” real concerns about access
  - Work with stakeholders to ensure that we create culturally appropriate services in the F-M area
  - MPH can provide technical assistance: help with grant-writing, program design, business plans, students to work on projects
  - American Indian Public Health Resource Center (by end of the summer)
MPH Program at NDSU

- Dr. Donna Grandbois
  - 701-231-9793
  - donna.grandbois@ndsu.edu

- Ramona Danielson
  - 701-231-8916
  - ramona.danielson@ndsu.edu
References


