

BEYOND ACCREDITATION: USING DATA TO IMPROVE COMMUNITY HEALTH

Sujata Joshi, MSPH

Nanette Star Yandell, MPH

Northwest Tribal Epidemiology Center



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”



© MARK ANDERSON

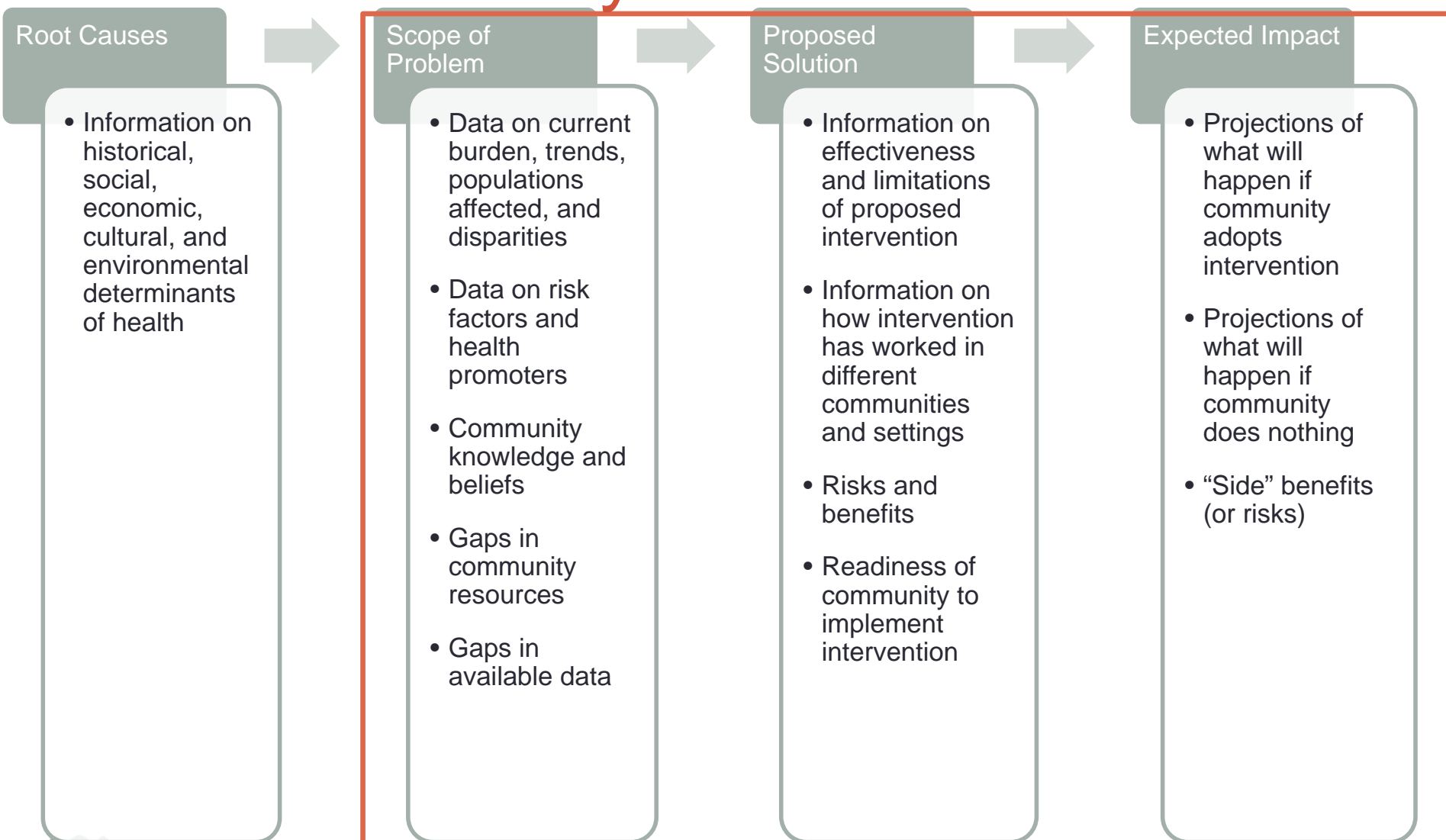
WWW.ANDERTOONS.COM



"So things are good, stuff is OK, and I reiterate my request for more specific data."



What's the story?



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



Rank	Cause of Death	Pre-linkage AI/AN	Post-linkage AI/AN	Change in # of deaths
1	Major Cardiovascular Diseases	1148	1261	113
2	Malignant Neoplasms	902	980	78
3	Unintentional Injury or Accident	543	580	37
4	Chronic Liver Disease and Cirrhosis	250	275	25
5	Chronic Lower Respiratory Diseases	231	260	29
6	Diabetes Mellitus	206	224	18
7	Suicide	147	166	19
8	Alzheimer's Disease	98	111	13
9	Influenza and Pneumonia	69	73	4
10	Other Respiratory Diseases	68	73	5
	Total Deaths	6759	7485	726

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

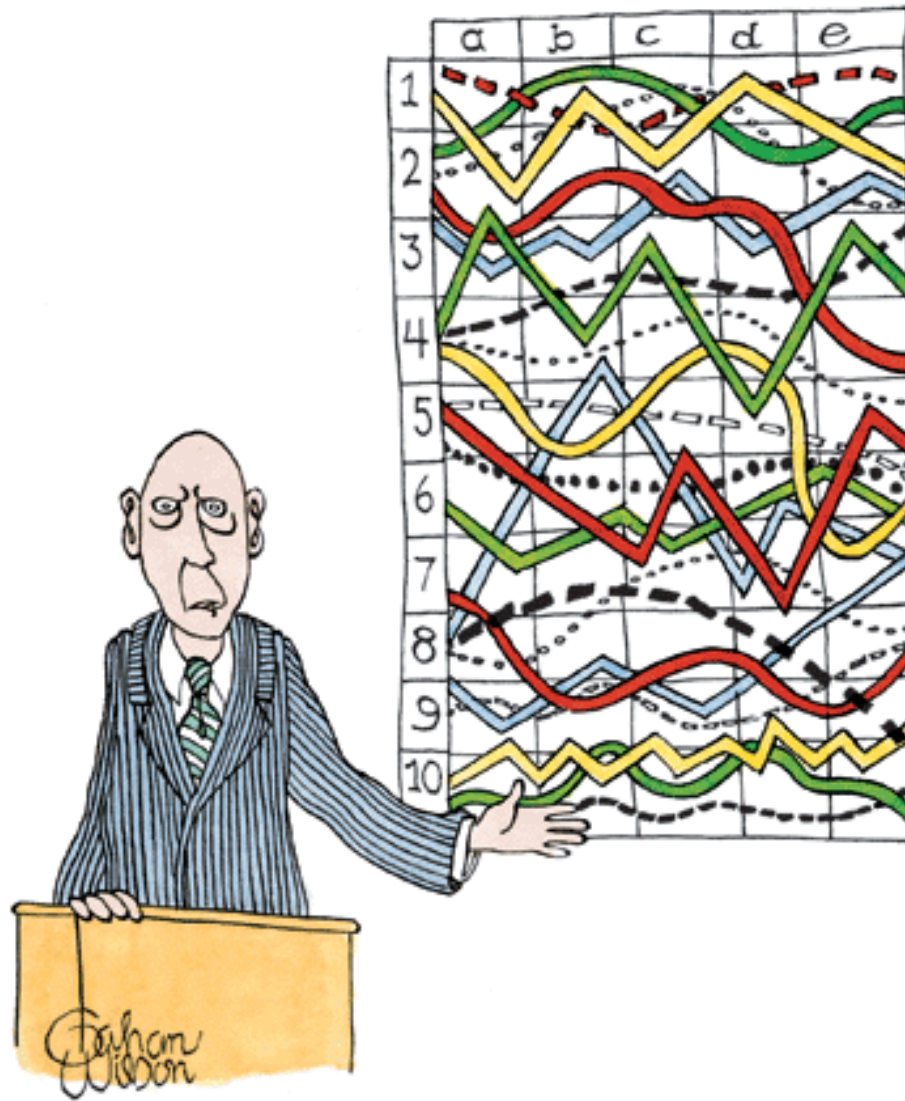
- Use what you've got!
- Combine years, sub-groups, geographies
- Find linkage-corrected data
- Combine multiple data sources to identify themes



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 aged 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 patient education materials that address 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



Strategy Chart

Strategy Chart

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



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

IDEAS	Diabetes/ Obesity	Cancer (prescreen)	Substance Abuse	STIs	Homelessn ess	Afterschool Care
CRITERIA						
no added cost	x	x		x	x	
short duration		x		x	x	x
community buy-in		x	x		x	x
current staff	x	x	x	x	x	
sustainable		x			x	x
TOTAL	2	4	2	3	5	3



Thank you

Contact Us

Nanette Star Yandell
nyandell@npaihb.org

Sujata Joshi
sjoshi@npaihb.org

- 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

