

Findings and Lessons Learned from the 2014 CRCAIH Pilot Grantees



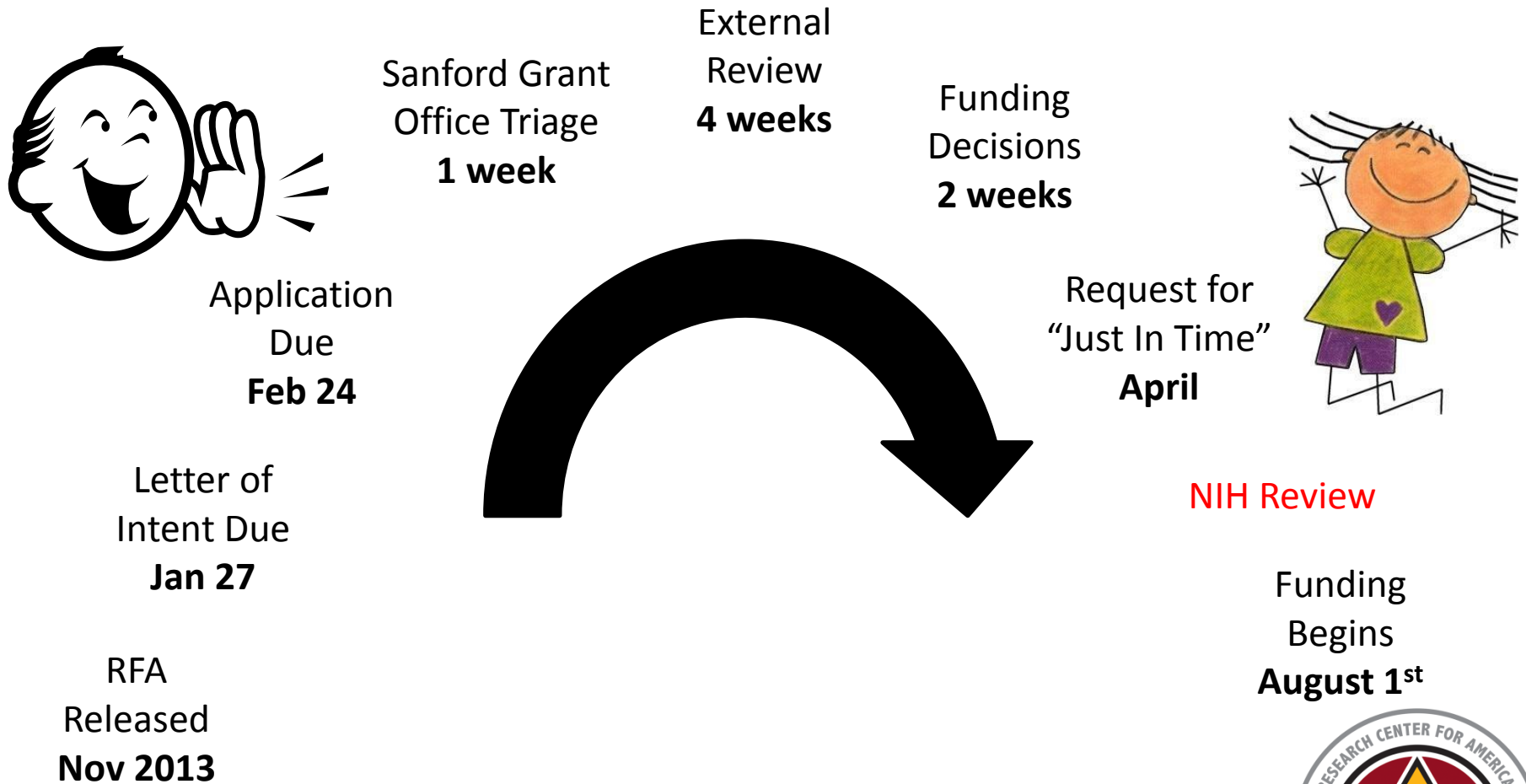
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Emily Griese, PhD, Sanford Research
Heather Peters, PhD, University of Minnesota-Morris
Teresa Peterson, PhD, Lower Sioux Indian Community
MaryLou Mylant, PhD, South Dakota State University
Ursula Running Bear, PhD, University of Colorado

CRCAIH Pilot Grants Program

- To fund cutting-edge **transdisciplinary** research that will address the significant health disparities experienced by American Indians in South Dakota, North Dakota and Minnesota.
- Projects will embrace a “**social determinants of health**” theme leading to the improvement of **American Indian health**.
- Have a strong potential for future funding, including sustainability and growth of the project.



Pilot Grant Process



**Dates from the 2014 Pilot Grants Program are used to illustrate the process.



“Walking Forward American Indian Survivorship Physical Activity Pilot Program” (PI: Petereit; 5 U54 MD008164)

- 🥁 Rationale
- 🥁 Eligibility
- 🥁 Comm Adv Committee
- 🥁 Usability Tests



Research Question: Can a culturally appropriate cell phone application (app) increase daily physical activity in American Indian (AI) cancer survivors living in the Northern Plains?

Intervention to test cell phone app

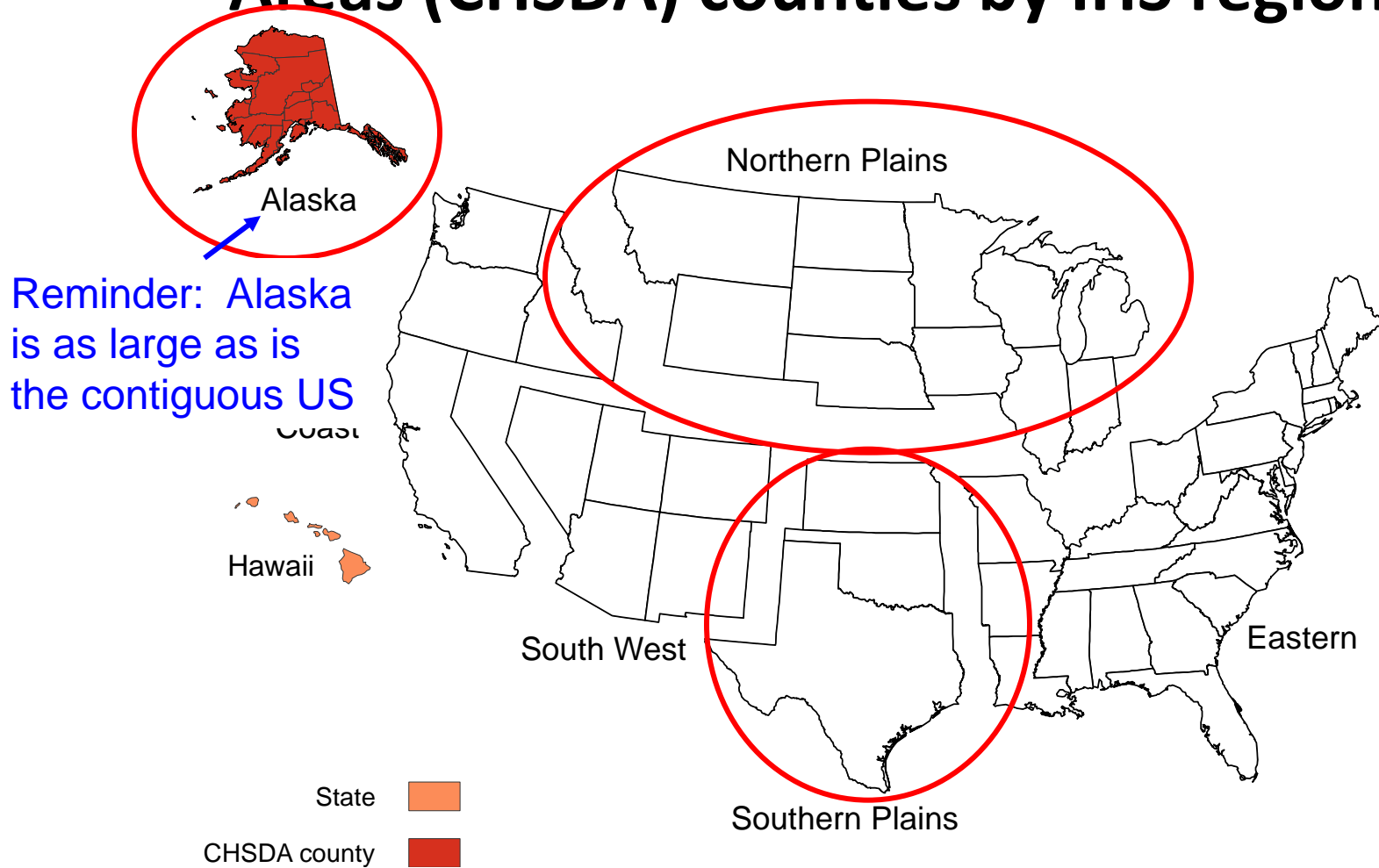
- 🥁 12 week intervention
- 🥁 iPads for survey & tracking for CRRs
- 🥁 Stretchbands
- 🥁 Cell phone video and text messages)
- 🥁 Counseling Initial visit (purpose, confirm eligibility, informed consent, SDS) followed by bi-weekly sessions (weeks 2, 4, 6, 8, 10)



Stretch band instructions

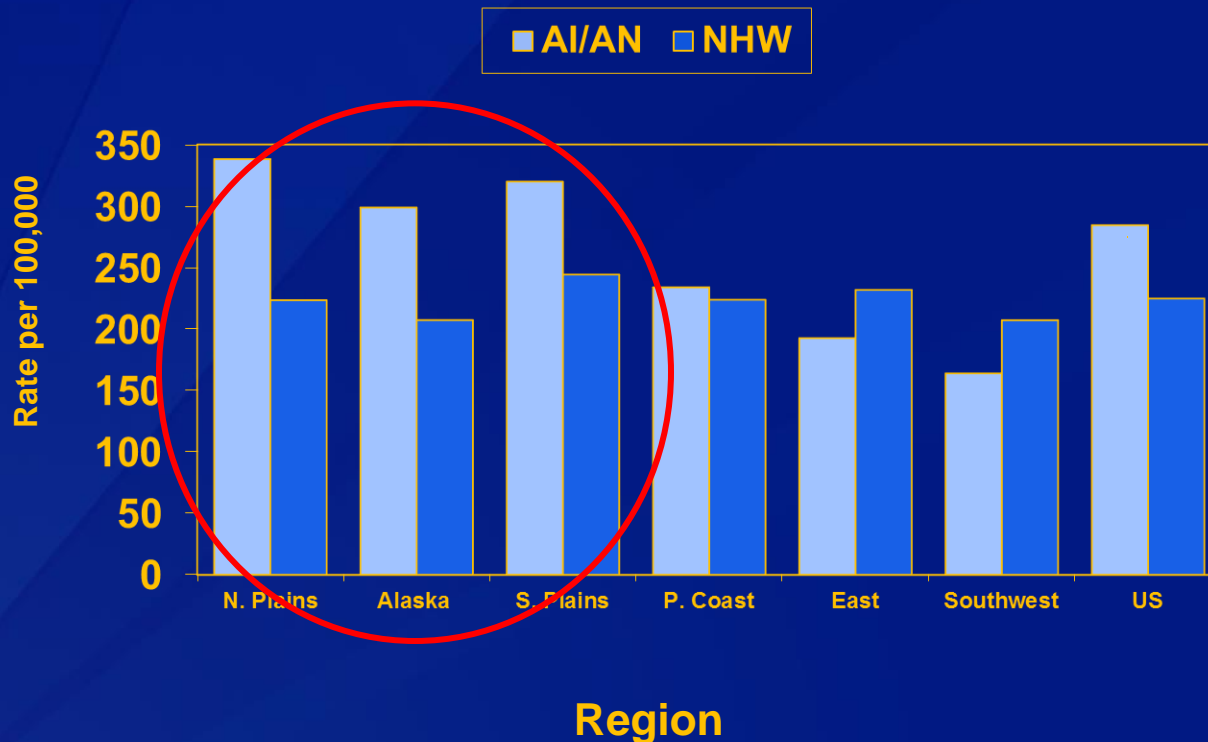


States and Contracted Health Service Delivery Areas (CHSDA) counties by IHS region



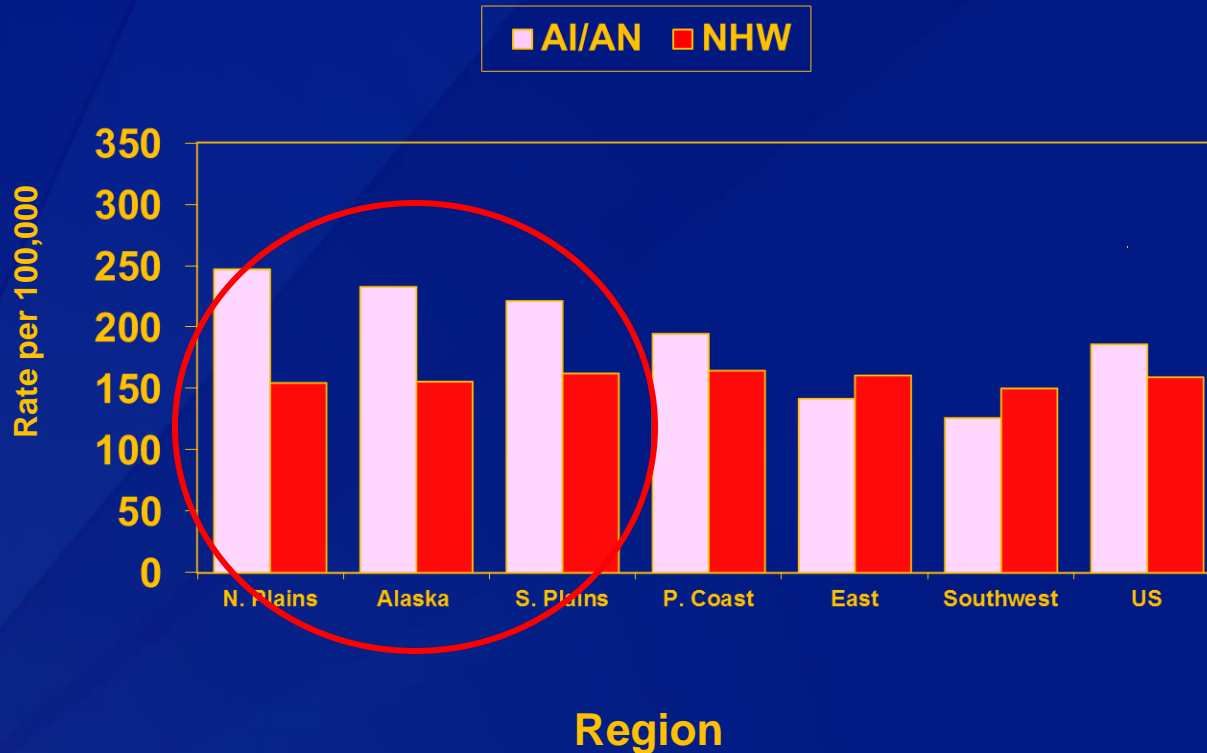
Espey et al, AJPH 2014;
doi:10.2105/AJPH.2013.301798

AI/AN and NHW death rates,
all cancers combined, by region, males,
1999-2009



Thank you David: Espey et al, AJPH 2014;
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AI/AN and NHW death rates,
all cancers combined, by region, females,
1999-2009



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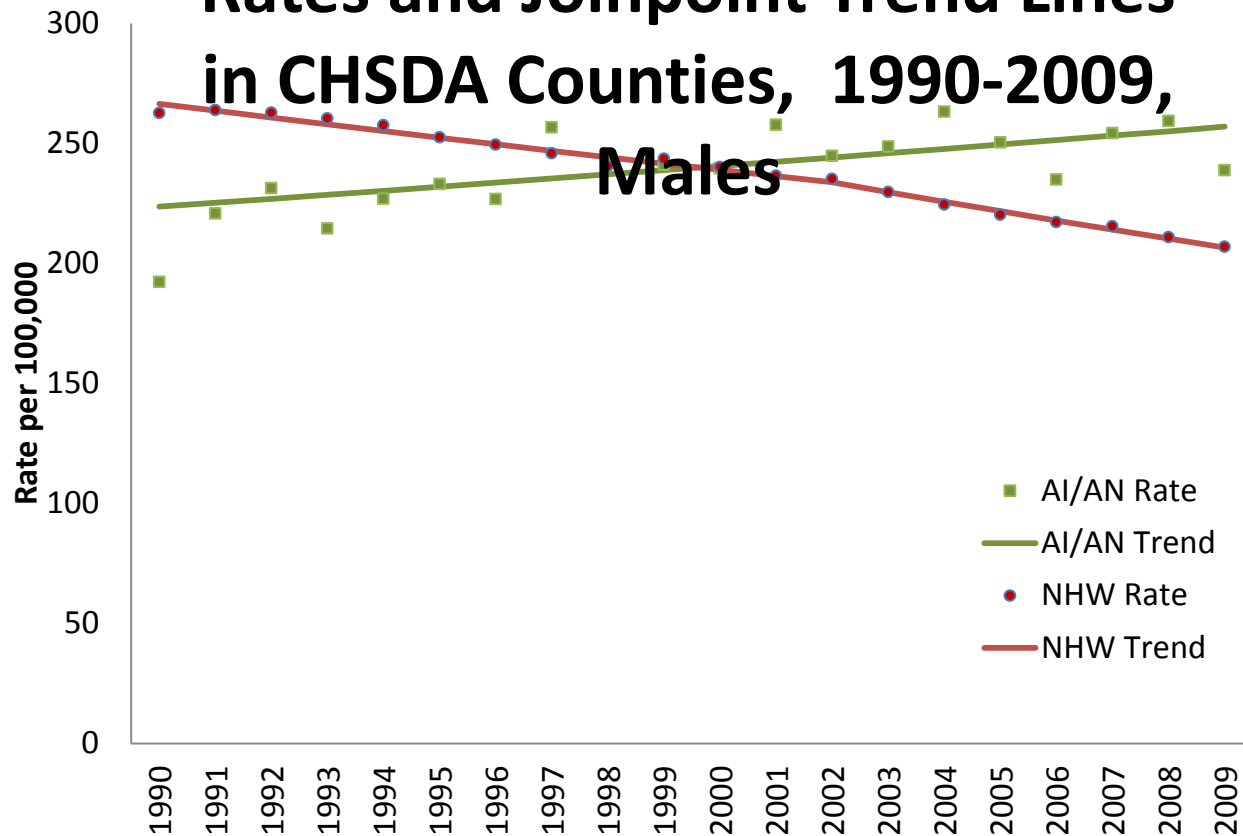
Mortality to Incidence Ratio (MIR) for All Cancer Sites Combined by Region, for AI/AN compared with NHW, CHSDA counties, 1999-2009

	AI/AN	NHW	AI/AN: NHW
Region	MIR	MIR	RATIO
Northern Plains	0.53	0.40	1.33*
Alaska	0.49	0.37	1.32*
Southern Plains	0.46	0.42	1.09*
Southwest	0.51	0.40	1.27*
Pacific Coast	0.49	0.39	1.26*
East	0.51	0.38	1.34*
Total	0.49	0.39	1.26*

Thank you David: Espey et al, AJPH 2014; doi:10.2105/AJPH.2013.301798

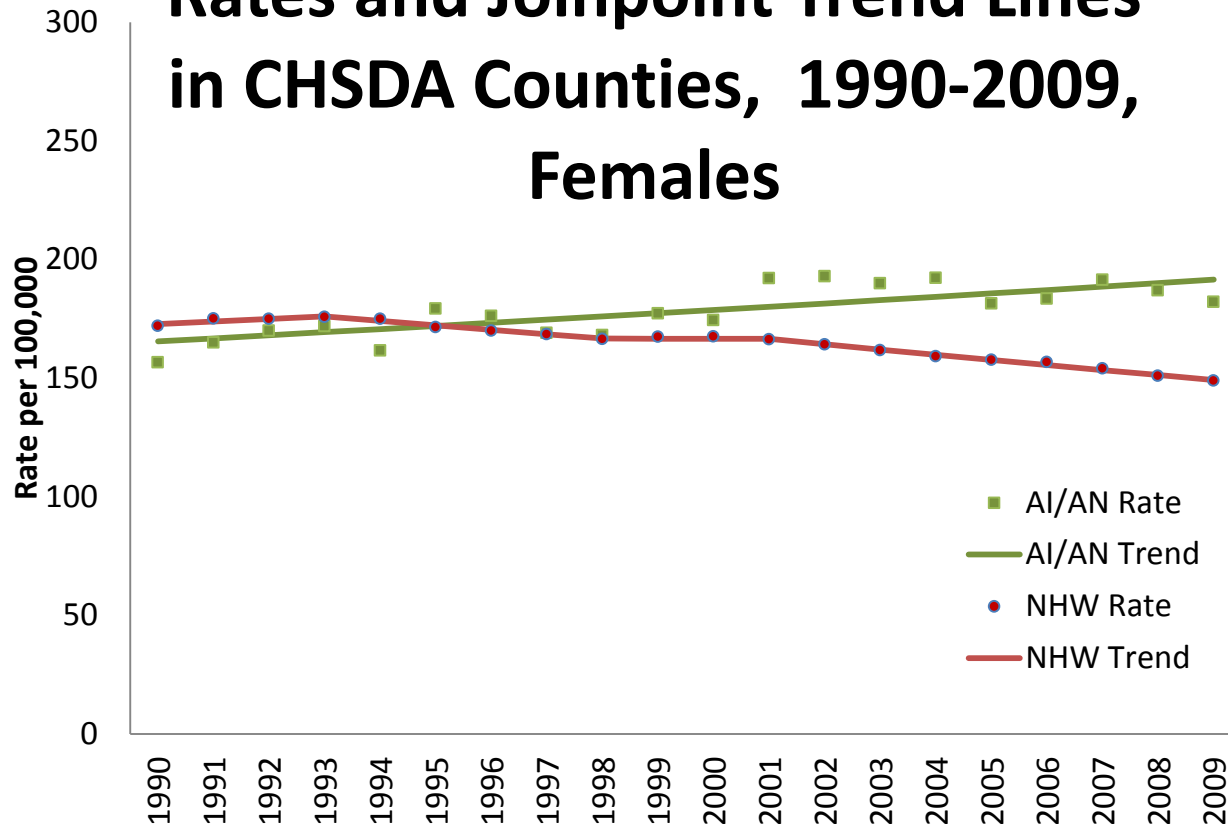


Age-adjusted All Cancer Death Rates and Joinpoint Trend Lines in CHSDA Counties, 1990-2009, Males



Thank you David: Espey et al, AJPH 2014;
doi:10.2105/AJPH.2013.301798

Age-adjusted All Cancer Death Rates and Joinpoint Trend Lines in CHSDA Counties, 1990-2009, Females



Thank you David: Espey et al, AJPH 2014;
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What is “Native American Cancer Education for Survivors”?

- 🥁 Web-based, quality of life survivorship education
- 🥁 Originally designed for breast cancer patients
 - ⊕ But has information relevant to patients who have other types of cancer
 - ⊕ Includes both genders
- 🥁 **FREE!**



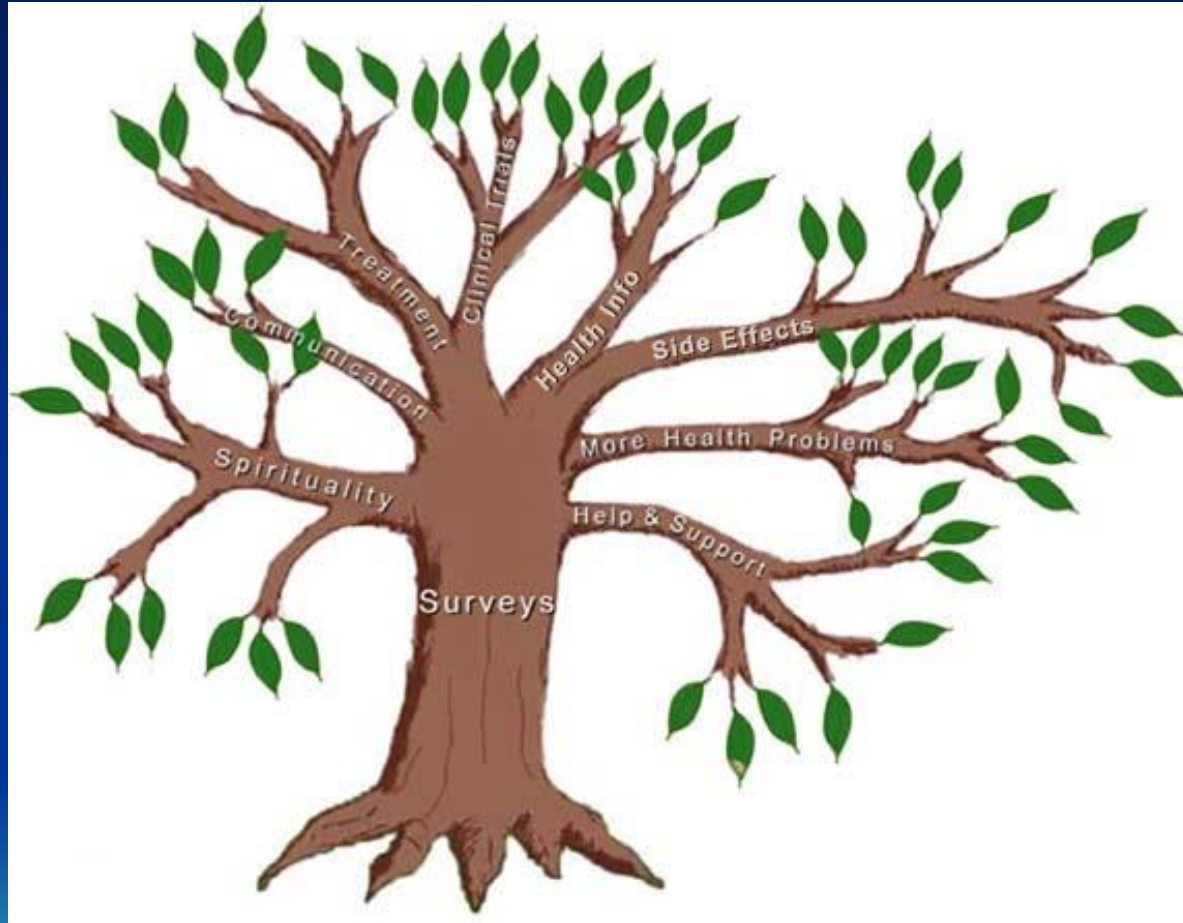
Dorcas Bloom
Siberian Yupik
Dx breast cancer 1998

My doctor talked to me about what I had and I talked to my husband and then we decided what we wanted to do

Layout of the Quality of Life Tree Information



The hummingbird appears next to the current leaf being viewed



Trained Native Survivorship Navigators are Available to Help (from Denver, CO) and via toll free number

1-800-537-8295

NOTE: volunteers and not available daily!

NACES Demographics (2015)

- 🥁 47.4% diagnosed *prior* to age 50
- 🥁 > 50% are full blood quantum
- 🥁 54.5% are 5+ years since diagnosis (long-term survivors)
- 🥁 32% diabetic as well as diagnosed w/ cancer (co-morbidity)
- 🥁 37.2% live in a city, town or village (33.1% on Reservation)
- 🥁 36.8% have difficulty getting into treatment

NACES Demographics (2015)

- 🥁 48.7% travel *WAY* to access treatment ~15% travel more than 400 miles 1-way to access treatment
- 🥁 47.4% travel *more than 2 hours one way*
- 🥁 *Only* ~12% access care through Indian Health Services (Contract Health Services)
- 🥁 Shift from diagnoses in stages III and IV (1990s and early 2000s) to majority are dx stages 1 and 2 now (progress due to AI/AN-specific programs throughout USA)

Quality of Life (QOL) Measures

QOL Definition:

How well you are able to do everything you want to do: physically, mentally, emotionally, socially and spiritually?

 Answered “excellent, good or okay”

Major improvements since the 1990s!

⊕ Physical QOL = 85.4%

⊕ Social QOL = 87.5%

⊕ Emotional QOL = 86.2%

⊕ Spiritual QOL = 94.3%



Dominga Rosetta,
Santo Domingo
Pueblo Tribe
Dx 1991 Breast

IMPACT OF RESIDENTIAL TREATMENT ON AMERICAN INDIAN MATERNAL-CHILD HEALTH

Emily Griese, PhD – Principle Investigator

Luke Mack, MA – Project Manager

Tracey McMahan, MA – Senior Research Associate

New Start Team, VOA-Dakotas



Specific Aim 1: Examine the impact of the New Start program on the maternal-child health and home environment of New Start patients and their children post-treatment

- N=19 mother-child pairs
- M maternal age = 26.95 years; M child age = 26.91 months
- 50% AI/AN, 50% White
- Average household income = \$15,764 annually

HOME Scales	Less than HS	HS or above	Sig.	Residential	Non-Res.	Sig.
Parental Warmth	5.00	6.63	**	6.00	6.76	**
Learning Materials	5.50	8.33	**	NA	NA	
Learning & Literacy	NA	NA		10.06	12.41	*
Responsivity	9.00	10.63	*	NA	NA	
Total HOME	32.67	39.25	**	36.67	40.97	**



Specific Aim 2: Examine the cultural-relevance of the New Start program and its desired outcomes for American Indian women and their children.

- Interview findings (n=18):
 - Description of Culture
 - Recovery Social Support Systems
 - Reasons for Maintaining Sobriety

Specific Aim 3: Develop and deliver program recommendations to the New Start program regarding their cultural-relevance for American Indian women and maternal-child health.

- Program Recommendations:
 - Identify appropriate cultural resources.
 - Provide staff with culture-specific formal training
 - Discrepancy in literacy & learning: Program can work to educate women on the importance of books, etc.
 - Impact from SES factors - education level, job status



Culturally Based Curriculum, Wicozani and Suicidal Ideation in Dakota Youth

Heather J. Peters, Ph.D., LP, CC-AASP
&
Teresa Peterson, Ed.D.



UNIVERSITY OF MINNESOTA MORRIS

Overview of Project & Methods

■ **Indigenous Participatory Action Research**

- Dakota Wicohan community, school partner, Lower Sioux & UMM

■ **Mixed Methodology: Qualitative and Quantitative**

■ **Data Collection & Procedure**

- Prior to and following the 10 lesson Mni Sota Makoce curriculum
 - Dakota Wicohan created the culturally-based curriculum
 - 6th and 10th grade social studies classes
- Data collected outside classroom:
 - Suicidal Ideation Questionnaire (SIQ- 10th grade SIQJR- 6th grade; Reynolds, 1998)
 - Sense of Belonging Instrument (SOBI; Hagerty & Patusky, 1995)
 - Culturally-based student talking circles
- Data collected in classroom:
 - The Wicozani Self-Assessment (Peters & Peterson, 2016)
 - Psychological Sense of School Membership (PSSM; Goodenow, 1993)
 - The Awareness of Connectedness Scale (ACS; Mohatt, Ching Ting Fok, Burket, Henry & Allen, 2011)

Findings

■ *Qualitative Results*

- **Native American Youth:** Dakota Way of Life, Suggestions to Incorporate Dakota Experience in Curriculum, Experiences of Racism, Sense of Belonging, Lack of Sense of Belonging, Like Curriculum
- **Non-Native Youth:** Lack of Knowledge, Historical Knowledge, Dakota Way of Life Valued in School, Sense of Belonging, Like Curriculum

■ *Quantitative Results*

- Sense of Belonging Instrument
- Suicidal Ideation Questionnaire- Native American Youth 3x
- Wicozani- Self-rating, Importance to Quality of Life
- Wicozani & Suicidal Ideation Questionnaire
- Awareness and Connectedness Scale- Overall Scale & Family subscale
- Psychological Sense of School Membership- Overall, Caring Relationship, Rejection

AI Pilot Study on Caregiving and Health of Young Children: Lessons Learned

MaryLou Mylant, PhD, RN | Mary Isaacson, PhD, RN |
Jennifer Heil, RN, BSN, DNP Student

Findings

- N=25 children participated in two treatment and one waitlist control groups. Although obesity rates stayed the same for the two treatment groups, the obesity rates for the waitlist control group increased from 30% to 50% without intervention.
- The caregiver focus group revealed three overarching themes:
 - Positive child behaviors
 - Meaning to child
 - Adult disconnect
- Subthemes within the first theme were improved caregiver to child and child to child interactions, knowledge of healthy eating, and increased use of the traditional language.

Lessons Learned

- **Limitations:** Caregivers all saw how important their active participation in the program was to their children; however, were unable to identify ways to encourage other caregivers to participate. School and community led AI-SFP sessions has been limited.
- **Implications:** Future efforts to initiate similar programs in reservation communities must begin with community-based dialogue, gaining community support from the onset. Programs, such as the SFP, which require a pre-training of facilitators and AI adaptation, should include caregivers whose children will participate in the program so to maintain sustainability.

Findings and Lessons Learned from 2014 CRCAIH Pilot Grantees

Ursula Running Bear, PhD

University of Colorado Anschutz Medical Campus

Centers for American Indian and Alaska Native Health, Colorado School of Public Health

Lessons Learned

Secondary Data Analysis

- Outcomes: Physical health status, mental health status

Multilevel Model

- Individual level data - AI-SUPERPFP
- Community level data - census block group data

Primary Aim

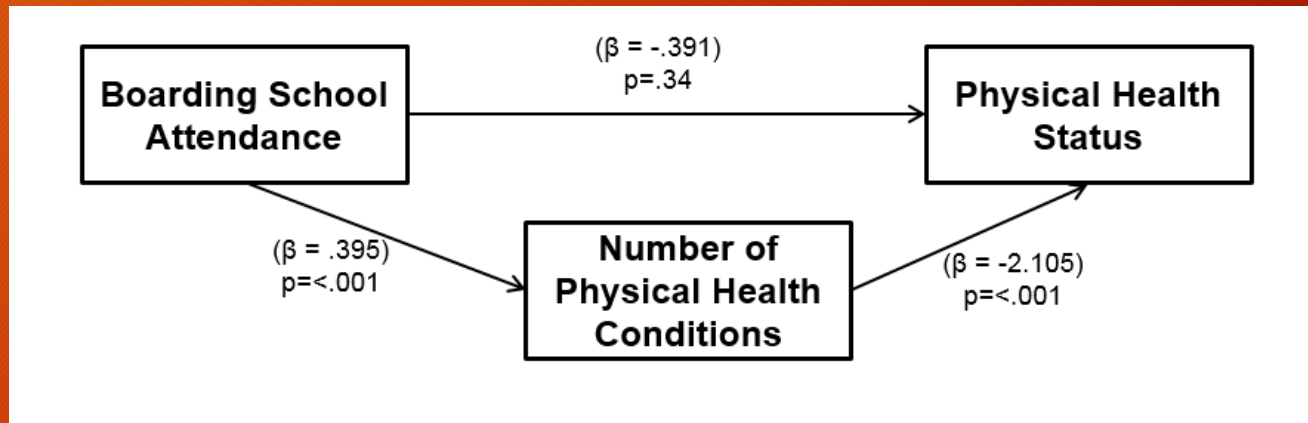
- To develop multilevel models that account for individual and community level correlates

Secondary Analyses

- Suggestions from senior faculty
- Have back up plan(s)
- Plan more time than you think is necessary

Findings: Results - Analysis 1

- Northern Plains American Indians who attended boarding school have lower physical health status (beta = -1.22, CI= -2.18, -.26, $p \leq .01$) than those who did not.
- Relation is mediated by the number of physical health conditions



Findings: Results - Analysis 2

- Higher cultural spirituality scores are associated with better mental health status (beta = 7.07, CI= 4.98 - 9.17, $p \leq .001$).
 - Direct and indirect relationship mediated by number of mental health disorders
- No association detected between general spirituality and mental health status

