



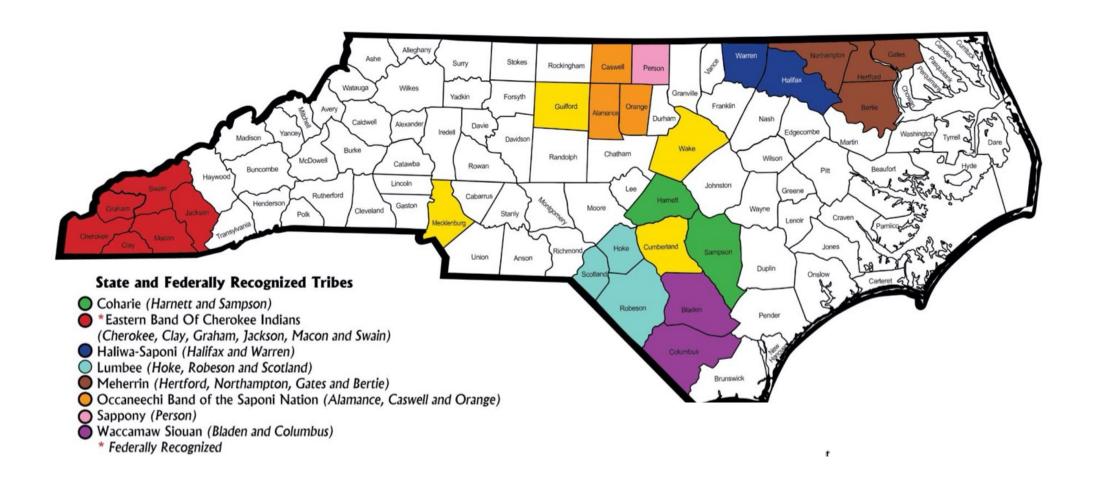
Provision of intercultural approaches to cancer services for rural Indigenous women in the US 22 February 2022

Marc Emerson, PhD, MPH

University of North Carolina – Lineberger Comprehensive Cancer Canter



Recognizing land and sovereignty of Native nations







Native protocol: Establishing relationality

K'é - Traditional practice of introductions rooted in relationality and kinship







Research philosophy: Creating a context for <u>why</u> this work is meaningful

Sa'ah Naaghai Bik'eh Hozhoon (SNBH) – The life force which is the reason for being and becoming; the pathway for continual learning and renewal of aspiration

- A way of life for Diné (Navajo)
- Provides an equitable framework
- A process, philosophy, and orientation
- Guides and grounds me personally and professionally



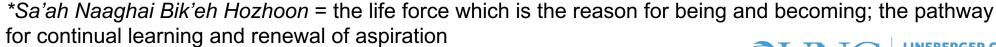


Research as a pathway to SNBH*

- Addresses the challenge of research in culturally complex settings
- Indigenous epistemology and storytelling
 - Indigenous storytelling must be heard and added as a research paradigm (Chilisa)
 - Theorizing through autobiography (hooks)



UIHI https://www.uihi.org/about/





Allowing Sa'ah Naaghai Bik'eh Hozhoon* to guide the research process

Question:

 How can we improve AIAN health measured by what is meaningful to the community?

Method:

- Academic protocol
- Indigenous protocol
- Draws on both Navajo epistemology and Western academic epistemology

Conclusion:

 Interpretation is informed by worldview, method, and results





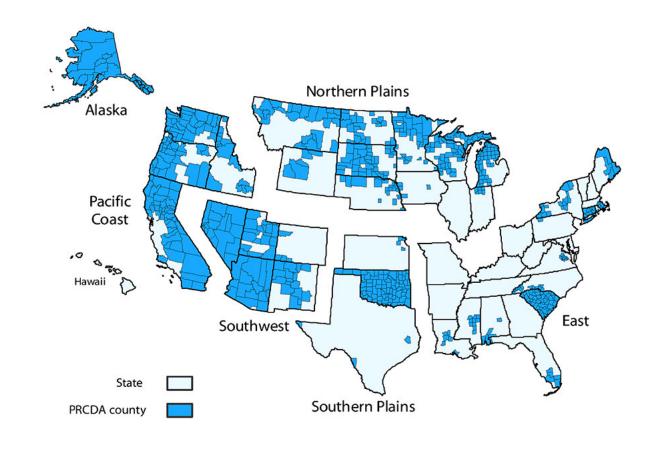
Improving access and treatment in American Indian/ Alaskan Natives (AIAN)





Great diversity among AIANs

- 574 federally recognized tribes
 - Different culture, location, language and beliefs
- Primary healthcare provided by the Indian Health Service
 - Must be enrolled members of federally recognized tribe
 - Must reside on/near reservation within a contract health service delivery area





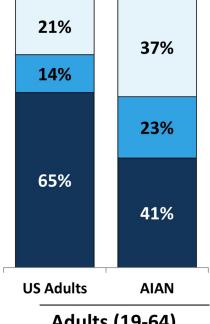


Urban AIANs

- The majority of AIAN persons reside in urban areas
- Outside of the Indian Health Service, AIAN have the lowest rate of private health insurance of any racial/ethnic group

AIAN population 27% 73% ■ Urban ■ Tribal lands

Insurance status



Adults (19-64)

- **■** Uninsured
- Medicaid/Other Public
- Private





Published OnlineFirst November 29, 2017; DOI: 10.1158/0008-5472.CAN-17-0429

Prevention and Epidemiology

Disparities in Prostate, Lung, Breast, and Colorectal Cancer Survival and Comorbidity Status among Urban American Indians and Alaskan Natives

Marc A. Emerson¹, Matthew P. Banegas², Neetu Chawla³, Ninah Achacoso³, Stacey E. Alexeeff³, Alyce S. Adams³, and Laurel A. Habel³









AIAN breast cancer mortality

Adjusted for patient + disease characteristics

Adjusted for patient + disease characteristics + Charlson score

HR (95% CI)

HR (95% CI)

All-cause mortality

1.52 (1.17-1.99)

1.47 (1.13–1.92)

Cancer–specific mortality

1.31 (0.89–1.95)

1.31 (0.88–1.94)

Emerson MA et al. Cancer Res. 2017





Initiation and adherence to adjuvant endocrine therapy (AET) among insured, urban AIAN







Objective

To evaluate whether AET initiation and adherence were lower among AIAN than other races/ethnicities





Source population: Kaiser Permanente Northern California

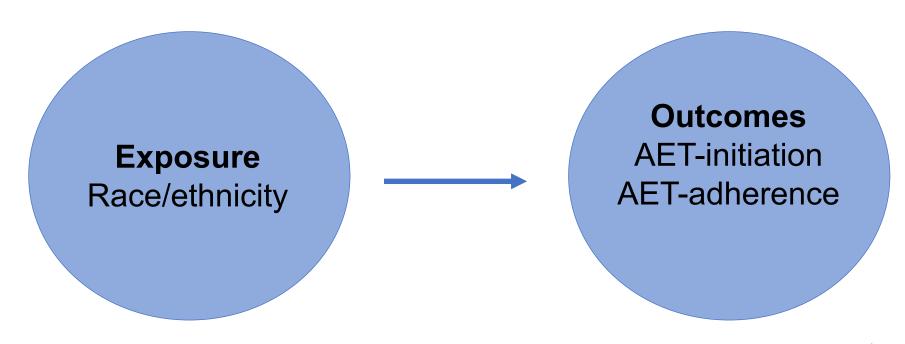
- Over 3.9 million currently active members
- Membership comprises approximately one-third of the population of California's San Francisco Bay Area and Central Valley





Participants and analysis overview

23,680 AET eligible (first primary, stage I-III, hormone receptor-positive breast cancers) patients from 1997 to 2014







Low AET initiation among AIAN

83% were AET initiators

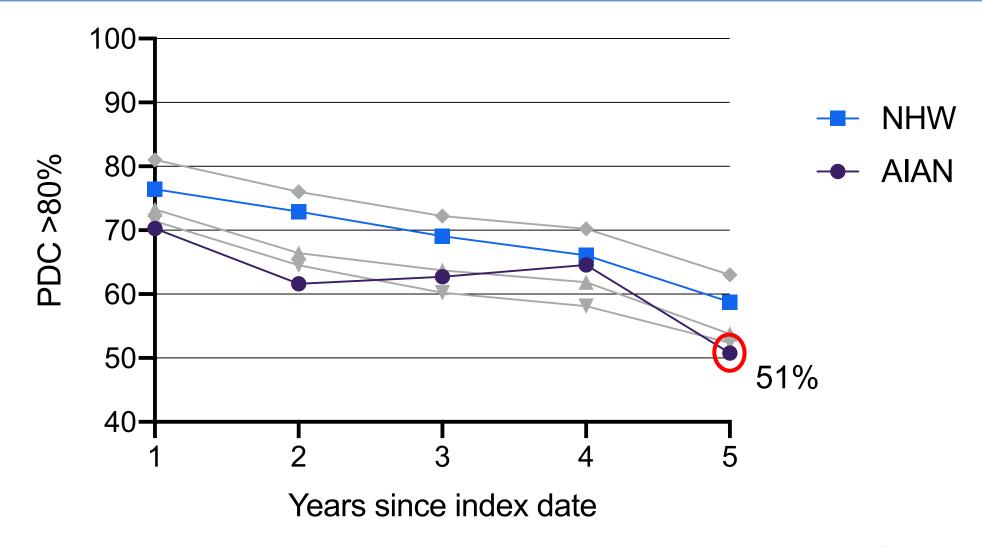
 AIAN women had the second lowest AET initiation

Race	%
API	84.7
Hispanic	83.0
White	82.5
AIAN	78.6
Black	78.0





AIAN AET-adherence







AET treatment gap

At the end of the 5-year period, total underutilization (combining initiation and adherence) in AET eligible was greatest among AIAN (70.6%)

Race	%
API	52.3
White	58.7
Hispanic	63.2
Black	69.6
AIAN	70.6



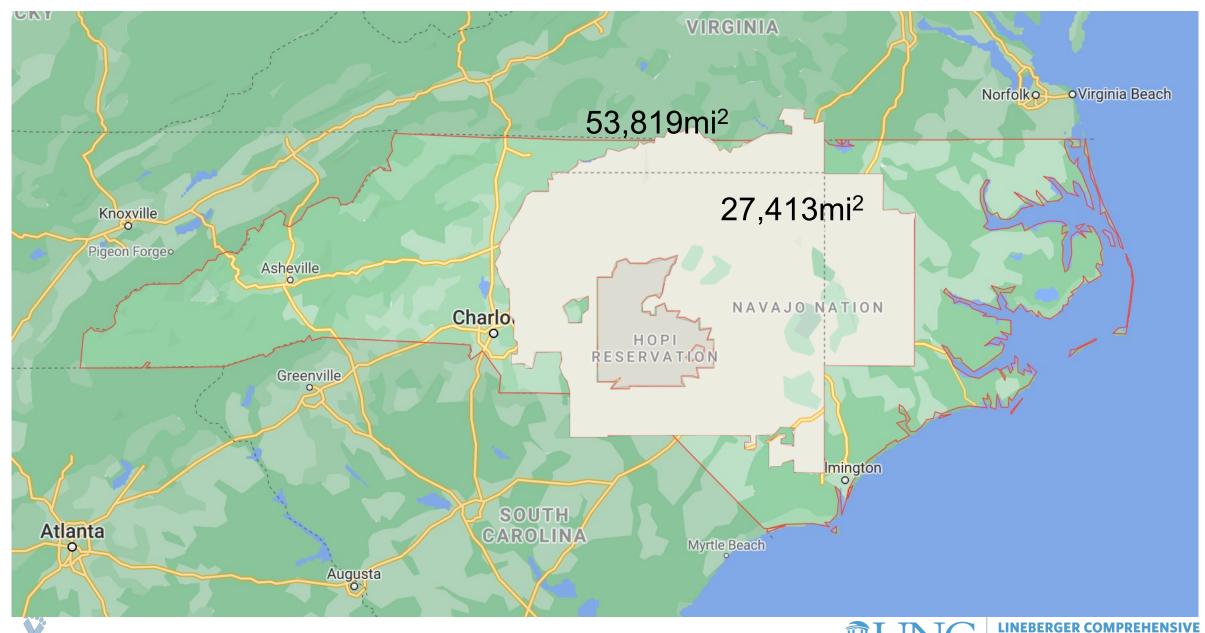


The takeaways

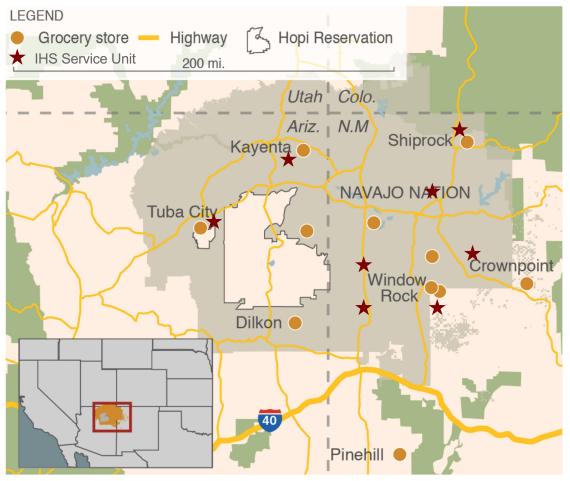
- Our results suggest that <u>AET initiation and adherence</u> are particularly <u>low</u> for <u>insured</u>, <u>urban AIAN women</u>
- Results may represent a "best-case scenario" for access yet still highlights substantial racial disparities
- Interventions that address barriers specific to AIAN women are needed



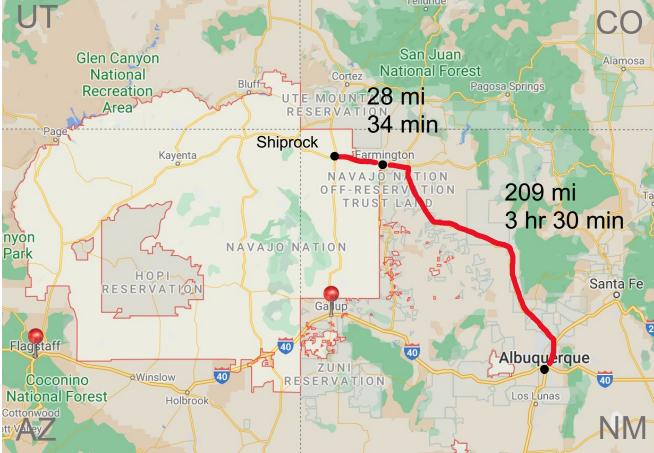




Additional barriers for AIAN populations



Glen Canyon National Recreation Area Kayenta nyon Park HOPI RESERVATION Flagstaff **Winslow** Coconino National Forest Cottonwood



Map by Alex Newman/Al Jazeera America & Marc Emerson

Map by Google Maps https://www.google.com/maps/place/Navajo+Nation









COMPREHENSIVE TER

Native protocol: Establishing relationality

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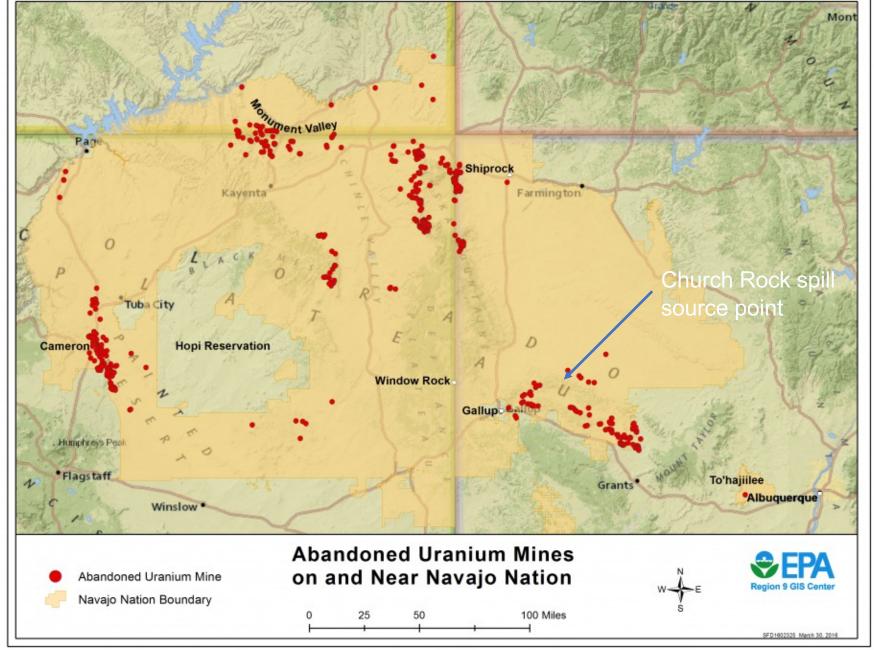








COMPREHENSIVE







HEALTH EFFECTS OF URANIUM ON PREGNANT WOMAN



BONES

Uranium (a) (1000s of years)
Thorium-230 (α&γ) (77,000 years)
Radium-226 (α) (1600 years)
Lead-210 (β) (22 years)
Polonium-210 (α) (138 days)

SPLEEN

Thorium-230 (a&y) (77,000 years)

LIVER

Uranium (a) (1000s of years) Radium-226 (a) (1600 years) Thorium-230 (α & γ) (77,000 years)

KIDNEYS

Uranium (α) (1000s of years) Lead-210 (β) (22 years)

BRAIN

Radon (α) (3.8 days)
Radium-226 (α) (1600 years)
Lead-210 (β) (22 years)

LUNGS

Radon (α) (3.8 days) Thorium-230 (α & γ) (77,000 years) Lead-210 (β) (22 years) Polonium-210 (α) (138 days) Radium-226 (α) (1600 years)

PANCREAS

Thorium-230 (α&γ) (77,000 years)

DIGESTIVE TRACT

Radium-226 (a) (1600 years) Thorium-230 (a&y) (77,000 years)

REPRODUCTIVE SYSTEM

Uranium (a) (1000s of years) Polonium-210 (a) (138 days) Radium-226 (a) (1600 years) Thorium-230 (a& γ) (77,000 years) Lead-210 (β) (22 years)

Image courtesy Radiation Monitoring Project





Integrating K'é: Key questions for researchers

Accountability the individual has for the collective well-being

- To whom I am accountable? How can I expand my sense of accountability to consider a connection to a broader collective?
- Do my research questions, methods, and interpretations consider Indigenous populations, perspectives, or sovereignty?
- Does this project acknowledge and promote structures of accountability to Indigenous land and territory?

Relationships to broader community, family, and non-human relations

- What is my subject position in relation to the research topic? Who else can I elevate and support as a collaborator or stakeholder?
- How do I promote equity in research design, methods, and interpretation? (considering gender, class, race, ability, etc.)
- How will the data and knowledge be protected? How will it be shared? How does it benefit the community outside the project?

Social responsibility to viewing all life forms as relatives and research partners

- How does project this consider beyond human-to-human relations towards the inclusion of other than human beings?
- How do we consider mental, emotional, physical, and spiritual dimensions of the research project and its implementation?
- Does any part of this project control, subjugate, commodify, manipulate, or exploit?



