National Institutes of Health
Tribal Advisory Committee

Perspectives and Experiences from the Research Field with Southwest Tribal Communities

August 16, 2023

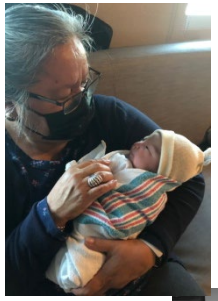
Lorenda Belone, Professor, PhD, MPH
University of New Mexico, College of Population Health
Albuquerque, New Mexico



Who I am in my community

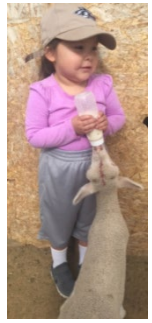
- I am a Navajo woman
- Mother
  - Four grown children
- Grandmother
  - Two lovely grandchildren
- Live in Naakaii Beto'
- Continue the traditional life style of raising sheep
  - Lambing
  - Castration
  - Shearing











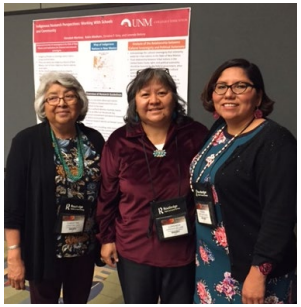






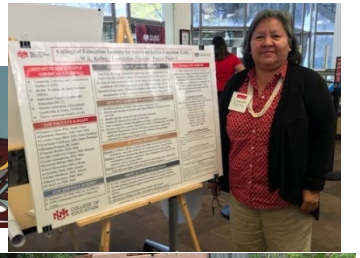


















Who I am in the academy

- Undergraduate–Biology
- 10 years – Navajo Nation
- Master in Public Health – Epidemiology concentration
- 10 years as Associate Scientist/Lecturer
- Ph.D. Health Communication
- 2012 Assistant Professor, Community Health Education
- 2018 Associate Professor
- 2023 Full Professor
- Senior Fellow: CPR & RWJ
- Director, CEDC, TREE Center
- 23 years of research experience on multiply NIH funded studies primarily with tribal communities

Theoretical Approach to Research

- Community-Based Participatory Research
- Culturally-Centered Research
- Public Health Socio-ecological Framework
- Health Communication Activism
- Decolonizing Approach to Research
  - Co-development of Intervention
  - Co-presentation and publication

Theoretical Approach to Research

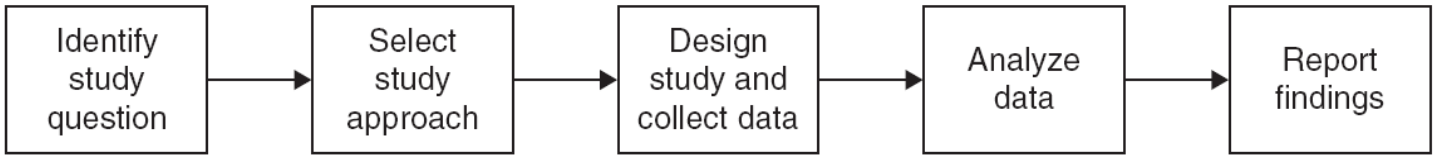
Navajo/Dine'

- Community-Based Participatory Research
- Culturally-Centered Research
- Public Health Socio-ecological Framework
- Health Communication Activism
- Decolonizing Approach to Research

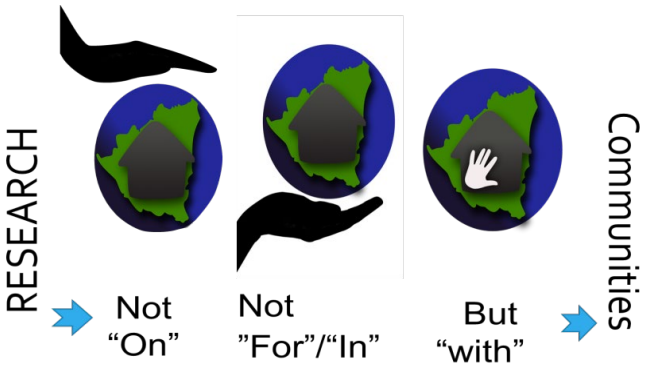
Community-Based Participatory Research (CBPR)

"Collaborative approach to research that equitably involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community with the aim of combining knowledge and action for social change to improve community health and eliminate health disparities."

W.K. Kellogg Community Scholar's Program (2001)



Source: Jacobsen, 2012



Source: Cacari-Stone et al., (2012)

CBPR Principles

- Recognizes community as unit of identify
- Cooperative and co-learning process
- Systems development & local capacity building
- Long term commitment
- Balances research and action

(Israel et al, 1998 and 2008)

CBPR Principles for Tribes

- Tribal systems shall be respected and honored
- Tribal government review and approval
- Tribally specific data shall not be published without prior consultation; data belongs to tribe
- Core Values: trust, respect, self-determination, mutuality of interests, perspective taking, reciprocity

(NACCHO, Kellogg & RWJF: Turing Point Collaboration, 2001)





Guiding Principles for NA

- Native Centered
- Respect
- Self-Reflection and Cultural Humility
- Authentic Relationships
- Honor Community Time Frames
- Build on Strengths
- Co-learning and Ownership
- Continual Dialogue
- Transparency and Accountability
- Integrity
- Community Relevance

(Straits et al., 2012)

23 Years of Community-Based Participatory Research Partnerships with Tribal Communities



Graduate Student

CDC Grant: Pueblo Social Protective
1999-2003

NARCH I Grant: Navajo & Pueblo Community Profile
2001-2005

Doctoral Student

NARCH III Grant: Navajo & Pueblo Intervention Pilot
2005-2009

NARCH V Grant: Apache Intervention Pilot
2009-2014

Assistant Professor

NIDA R01 Grant: Implementation & Evaluation
Apache, Navajo & Pueblo
2014-2021

Associate Professor

Professor

NIMHD R01 Grant: Dissemination & Implementation
Six Tribal Communities
2020-2025

Early Collaboration

CDC Grant: Pueblo Social Protective 1999-2003

Purpose: To understand community strengths and cohesions for better health (social capital) and the facilitators and barriers to the tribal community in improving its own health

Findings:

- Alcohol prevention programs with open communication
- Counseling programs for whole families
- Better health attention & education for elders
- Better communication & opportunities for sharing cultural values & language between elders & youth
- Programs to address loss of language and culture contributing to health problems

NARCH I Grant: Navajo & Pueblo Community Profile 2001-2005

Purpose: Conduct participatory research with tribes to identify capacities and what keeps tribal members healthy

Findings:

- Elders are strong role models for the younger generations
- Need for communication between elders & youth
- Need to improve communication between parents & youth
- Need to keep up the oral teachings to our youth both in the home & at school
- Want to learn native language and culture

Review of the Literature

"Listening to Each Other Project"

- National Institute on Drug Abuse
- Intervention – development of a family strengthening curriculum involving the Anishinabe (Ojibwe) people and Dr. Les Whitbeck at the University of Nebraska
  - Combined a culturally supported approach with a dominant culture adolescent empirically supported intervention
  - Anishinabe Project found that parents and children retained prevention messages and behaviors when cultural content was most integrated in the curriculum.

CDC Grant: Pueblo Social Protective 1999-2003

NARCH I Grant: Navajo & Pueblo Community Profile 2001-2005

NARCH III Grant: Navajo & Pueblo Intervention Pilot 2005-2009

Research Question

Utilizing CBPR, what is the effectiveness of a co-adapted intergenerational intervention for reducing risky behaviors and initiation of substance use among third, fourth, and fifth graders in two southwest tribal communities.

Culturally-Centered Intervention

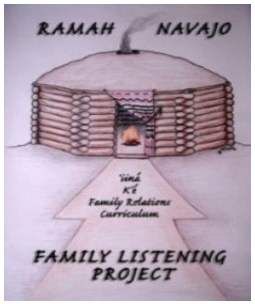
Focus Group – Indigenous Approach
Use of Navajo Language Only
No Time Constrains
Use of Appropriate Ways of Communicating

FG Participants:

- **Local community church**
- **Medicine man**
- **Former council delegate**
- **Retired police officer**
- **Community health provider**
- **Well known community members**



Pueblo Family Circle Curriculum

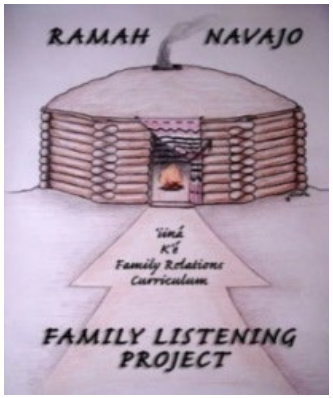


Navajo Family Listening Curriculum

NARCH – Native American Research Center for Health

Cultural-Centering of Family Intervention Program

- Locally produced artwork, stories, video & activities
- Included importance of sharing a meal
- Developed culturally appropriate activities





1. Welcoming
2. My Family
3. Tribal History
4. Tribal Way of Life
5. Tribal Vision
6. Community Challenges
7. Communication & Help Seeking
8. Recognizing Types of Anger
9. Managing Anger
10. Problem Solving
11. Being Different
12. Positive Relationships
13. Building Social Support
14. Making a Commitment
15. Presentation of Projects

CDC Grant: Pueblo Social Protective 1999-2003

NARCH I Grant: Navajo & Pueblo Community Profile 2001-2005

NARCH III Grant: Navajo & Pueblo Intervention Pilot 2005-2009

NARCH V Grant: Apache Intervention Pilot 2009-2014



Artist Melvin Herrera

- Shortened from 14 sessions to 12 sessions – Time & Distance
- Added a second session on history, Timeline, Historical Pictures & Flashcards
- Finalized and developed a new pre/post-test based on lessons learned from NARCH III
  - California Healthy Kids Survey
  - Cut the number of questions in both child (145 items from 204) and adult (230 items from 344) pre/post-tests
  - Piloted twice

nationalatlas.gov™
Where We Are

NEW MEXICO

FEDERAL LANDS AND INDIAN RESERVATIONS

- Bureau of Indian Affairs
- Bureau of Land Management / Wilderness
- Bureau of Reclamation
- Department of Defense (includes Army Corps of Engineers lakes)
- Fish and Wildlife Service / Wilderness
- Forest Service / Wilderness
- National Park Service / Wilderness
- Other agencies

Some small sites are not shown, especially in urban areas.

MILES
0 25 50 75 100

Albers equal area projection

Abbreviations

AFB	Air Force Base
IR	Indian Reservation
NCA	National Conservation Area
NF	National Forest
NHP	National Historical Park
NL	National Laboratory
NM	National Monument
NRA	National Recreation Area
NWR	National Wildlife Refuge
Res	Reservoir



CO
OKLAHOMA
TEXAS
ARIZONA
CHIHUAHUA
MEXICO
SONORA

Ute Mountain IR
Shiprock
Farmington
Navajo Reservoir
Aztec Ruins NM
Carson NF
Heron Res
El Vado Res
Navajo Indian Reservation
Chaco Culture NHP
Fort Wingate Depot Activity (Closed)
Gallup
Cibola National Forest
Zuni IR
Ramah Navajo Indian Reservation
El Morro NM
Grants
El Malpais NCA
El Malpais NM
Acoma IR
Laguna IR
Alamo Navajo IR
Cibola NF
Jemez NRA
Santo Domingo IR
Zia IR
Santa Ana IR
Petroglyph NM
Sandia IR
Jemez IR
Santa Clara IR
Abiquiu Res
Santa Fe NF
Los Alamos NL
Bandelier NM
Cochiti IR
Carson National Forest
San Juan IR
Taos IR
Taos
Cimarron
Springer
Raton
Capulin Volcano NM
Maxwell National Wildlife Refuge
Kiowa National Grassland
Picuris IR
San Ildefonso IR
Pojoaque IR
Nambe IR
Tesuque IR
Fort Union NM
Mosquero
Santa Fe
Santa Fe NF
Pecos NHP
Las Vegas
Las Vegas NWR
Conchas Lake
Logan
Cochiti Lake
Kasha-Katuwe Tent Rocks NM
Santa Fe National Forest
Tucumcari
Albuquerque
Jemez Canyon Res
Military Reservation
Santa Rosa Lake
Santa Rosa
Isleta IR
Canoncito IR
Laguna IR
Belen
Estancia
Vaughn
Cibola National Forest
Sumner Lake
Fort Sumner
Clovis
Cannon AFB
Melrose Air Force Range
Grulla NWR
Sevilleta NWR
Salinas Pueblo Missions NM
Socorro
Bosque del Apache NWR
Reserve
Apache National Forest
Gila National Forest
Gila Cliff Dwellings NM
Truth or Consequences
Elephant Butte Reservoir
White Sands Missile Range
Caballo Reservoir
San Andres NWR
Carrizozo
Lincoln National Forest
Mescalero Apache Indian Reservation
Roswell
Bitter Lake National Wildlife Refuge
Two Rivers Reservoir
Alamogordo
Ancho
Lovington
Hobbs
Brantley Reservoir
Avalon Reservoir
Carlsbad
Carlsbad Caverns National Park
Silver City
Gila NF
Hatch
Jornada Experimental Range
Holloman AFB
White Sands NM
Fort Bliss McGregor Range
Las Cruces
Lordsburg
Deming
Rio Grande
Pecos R.
Coronado National Forest

U.S. Department of the Interior
U.S. Geological Survey

The National Atlas of the United States of America®

pagefed_nm2pdf INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-2003

Ramah Navajo TRT

Community PI:
Benelda Cohoe-Belone

Kayetrina Raphaelito, RaeNell Platero, Elena Enque & Randolph Alonso

Jemez Pueblo TRT

Community PI:
Kevin Shendo

Harriet Yepa-Waquie, Anita Toya, Eleanor Tafoya, & Melissa Yepa (Janice Tosa)



Mescalero Apache TRT

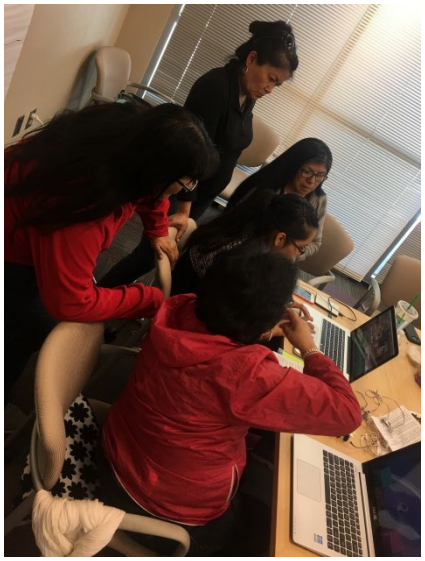
Community PI: Ardena Orosco

Eloise Damon, Pius LaCroix-Garcia, Wendolyn Murphy, Lillian Chavez & June Shaw

UNM Research Team

PIs: Lorenda Belone & Nina Wallerstein

Rebecca Rae, Orrin Myers, Sumaira Abrar, Kaytona Begay, Hope Johnson, Felicia Otto & Logan Shea

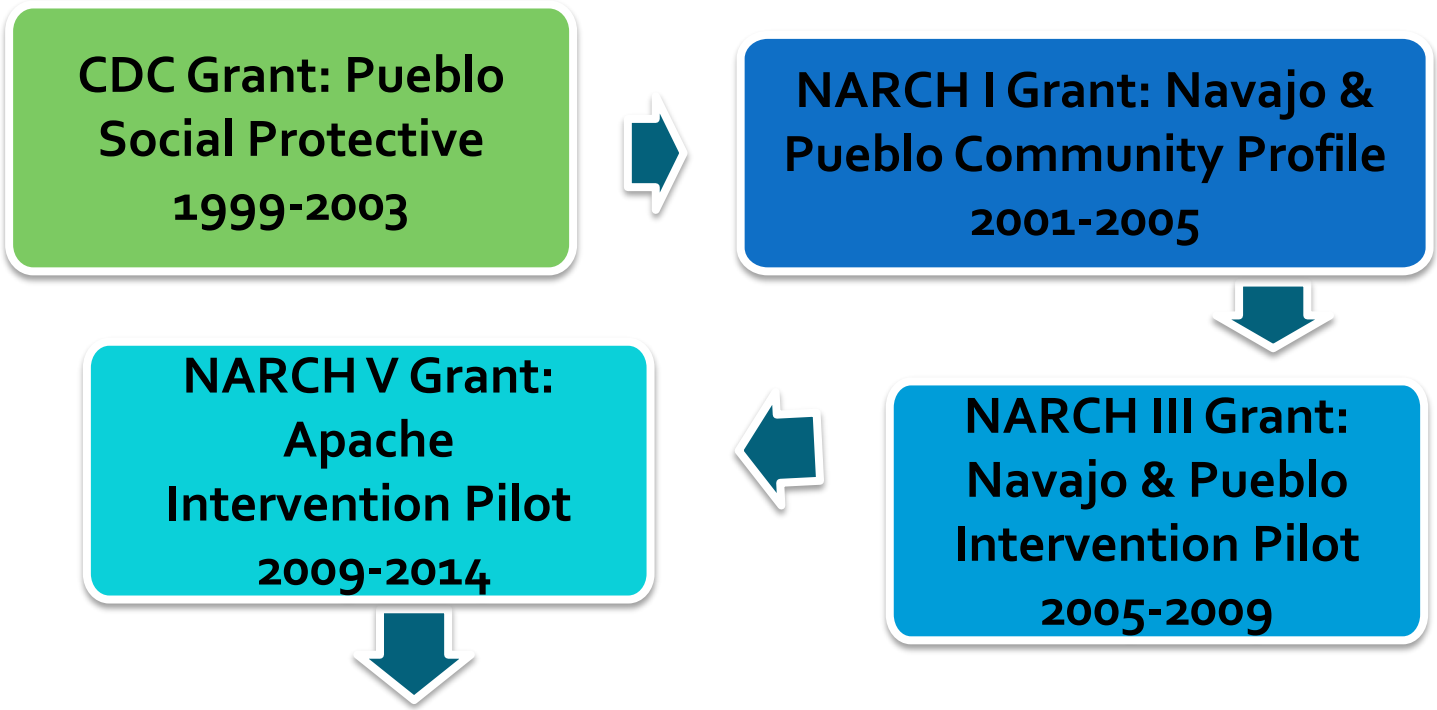










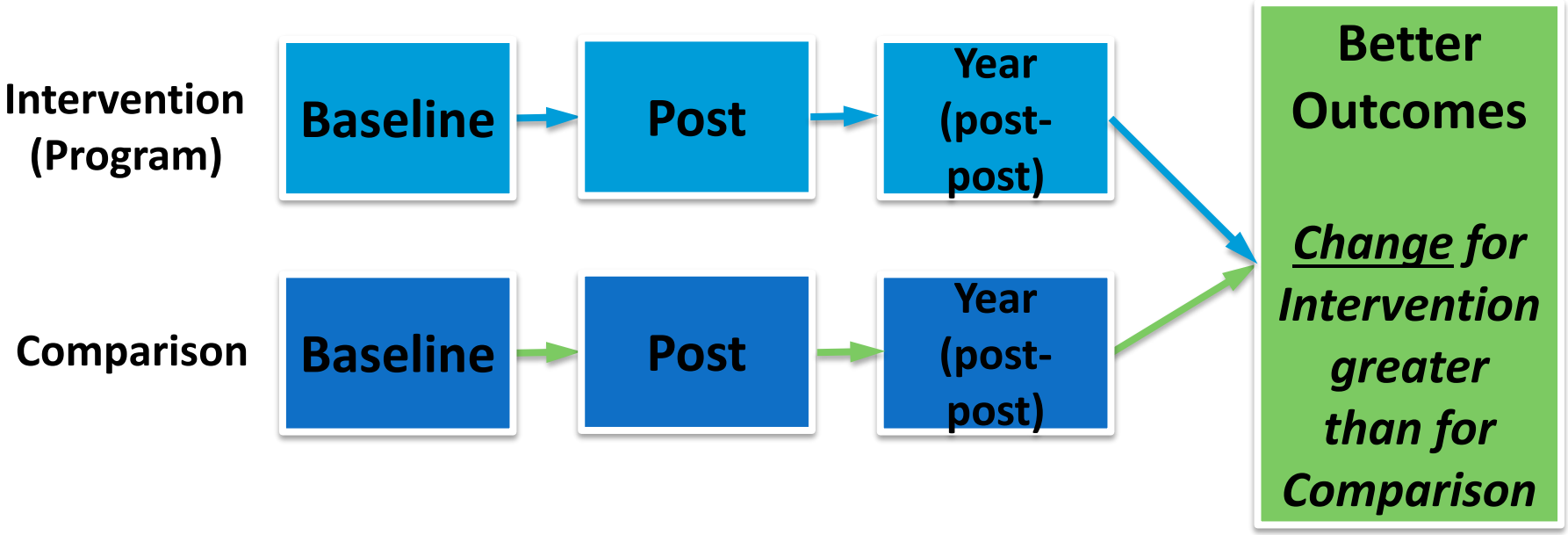


Research Aim 1

Rigorously test the effectiveness of the Family Listening Program, with a comparative longitudinal design within and across three small tribal communities, with 4th and 5th graders to prevent substance abuse initiation disparities and to strengthen family well-being.

NIDA – National Institute on Drug Abuse

"comparative longitudinal design"



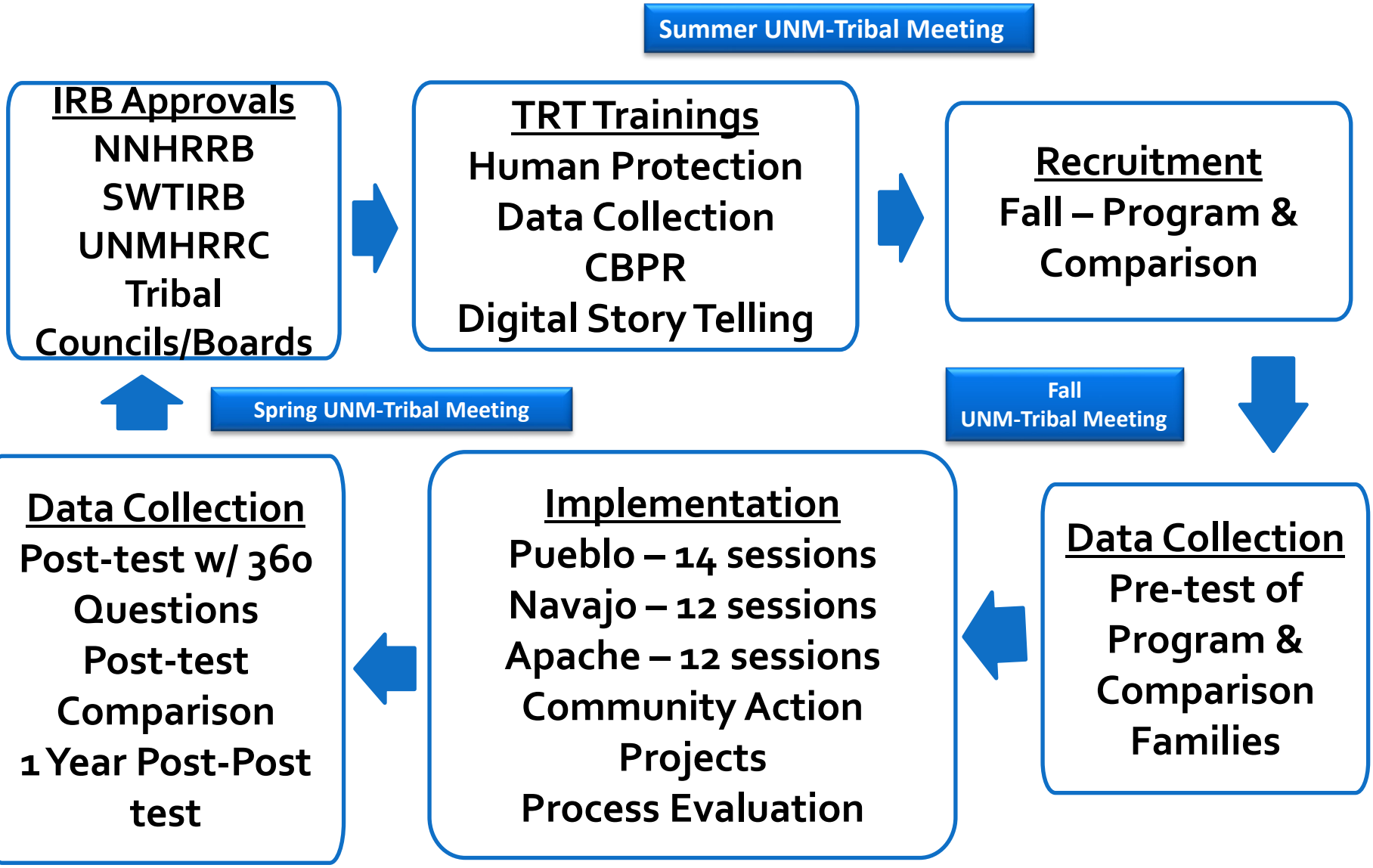
Measurement of change for individual children and adults in the Post and Post-Post measurements provides the strongest evidence

Data Collection Plan

Table 1.	FY01		FY02		FY03		FY04		FY05		FY06	
Data Collection	2014	2015	2015	2016	2016	2017	2017	2018	2018	2019	2019	2020
	FALL	SPR	FALL	SPR	FALL	SPR	FALL	SPR	FALL	SPR	FALL	SPR
2014-15 Wave 1	Pre-Test	Post-Test		1-YR								
2015-16 Wave 2			Pre-Test	Post-Test		1-YR						
2016-17 Wave 3					Pre-Test	Post-Test		1-YR				
2017-18 Wave 4							Pre-Test	Post-Test		1-YR		
2018-19 Wave 5									Pre-Test	Post-Test		
2019-20 Wave 6											Pre-Test	Post-Test

Wave: 14 Program (7 Children + 7 Parents) + 14 Comparison (7 Children + 7 Parents) = 28
Wave x 3 Tribal Communities = 28 participants x 3 Tribes = 84 participants
5 Waves = 84 participants/wave x 5 waves = 420

Five Waves of FLP Implementation





Tribal Facilitators
1.5 to 2 Hour Evening Session
4th or 5th Grader and Parent/Elder/Caregiver

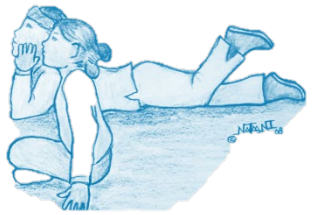
Dinner & Prayer → Greeting by Clans/Indian Names → Review of Home Practice

↓

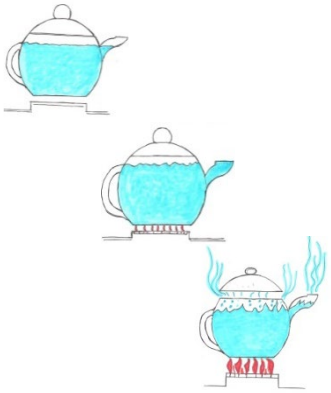
Activities Adult /Youth → Journals → Take Home Activity

↓

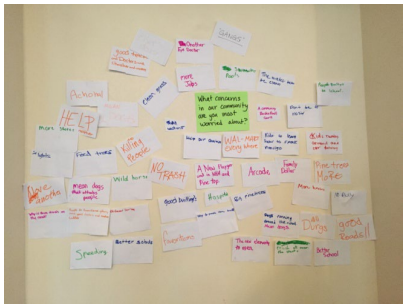
Small Incentive → Facilitator Evaluation

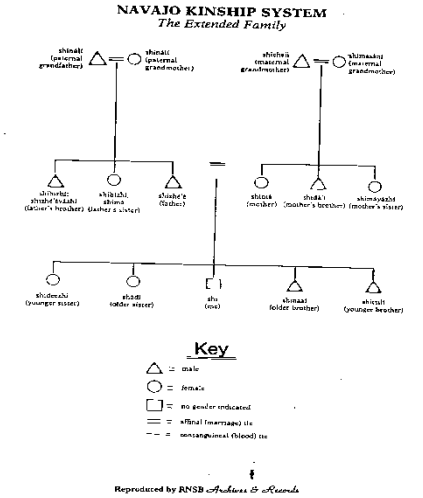


Session Activities







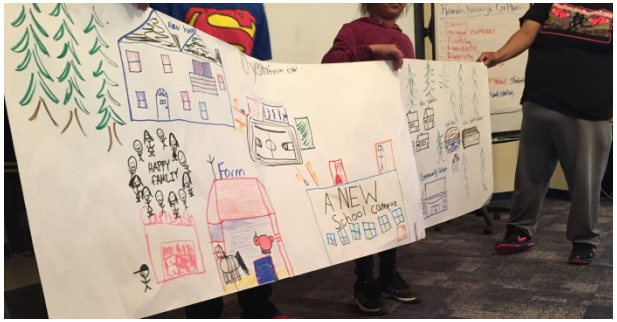




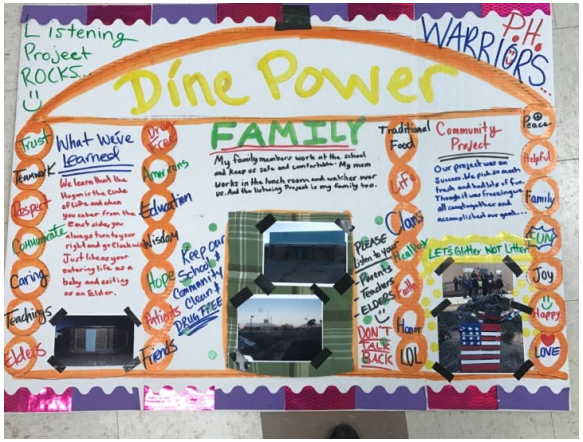




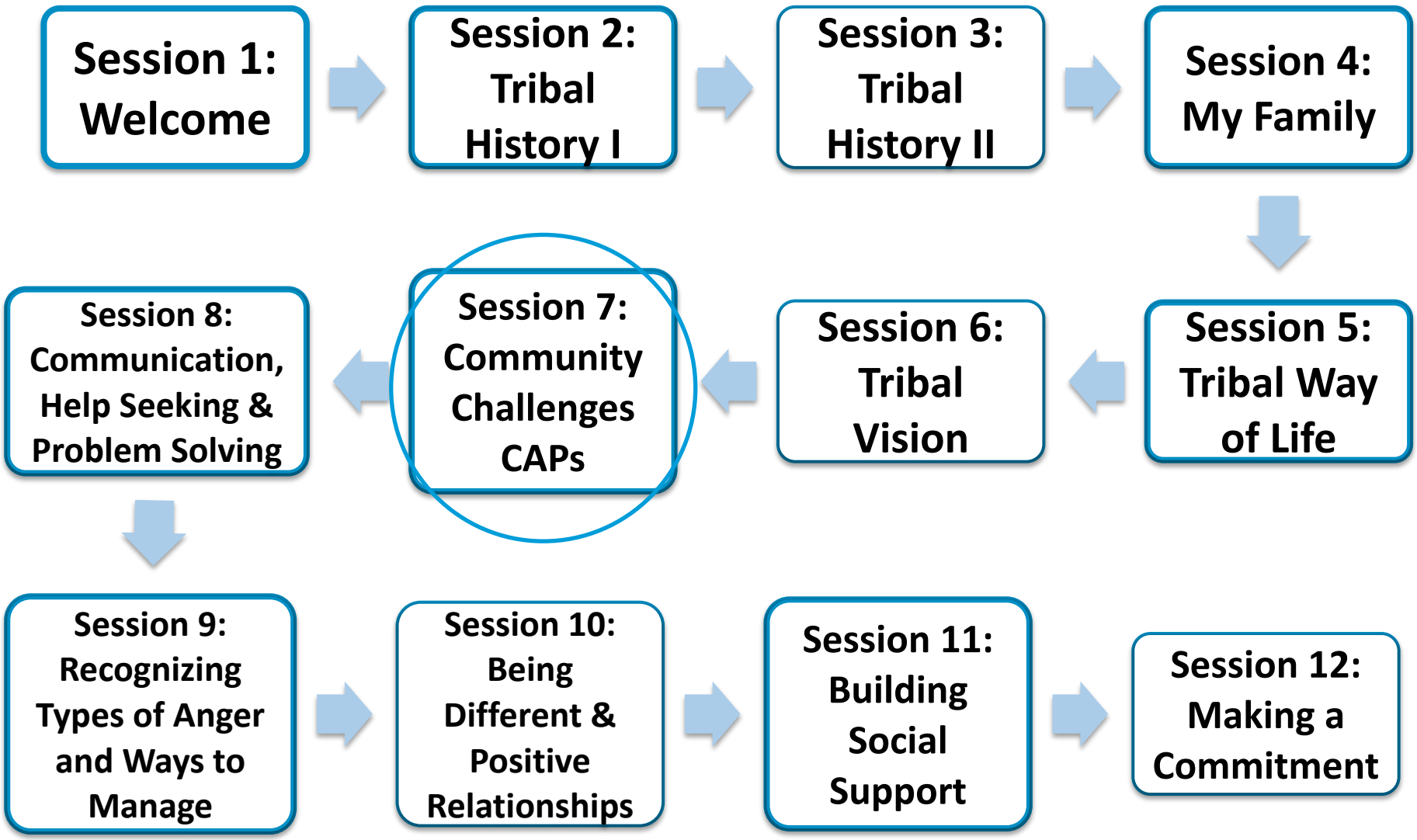








Family Listening Program Sessions



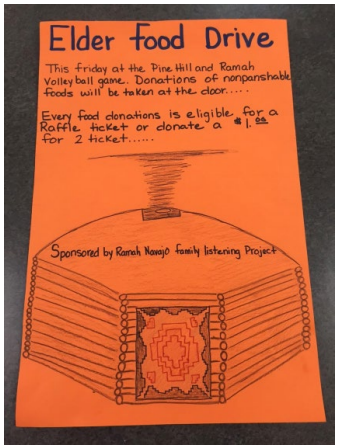
Community Action Projects















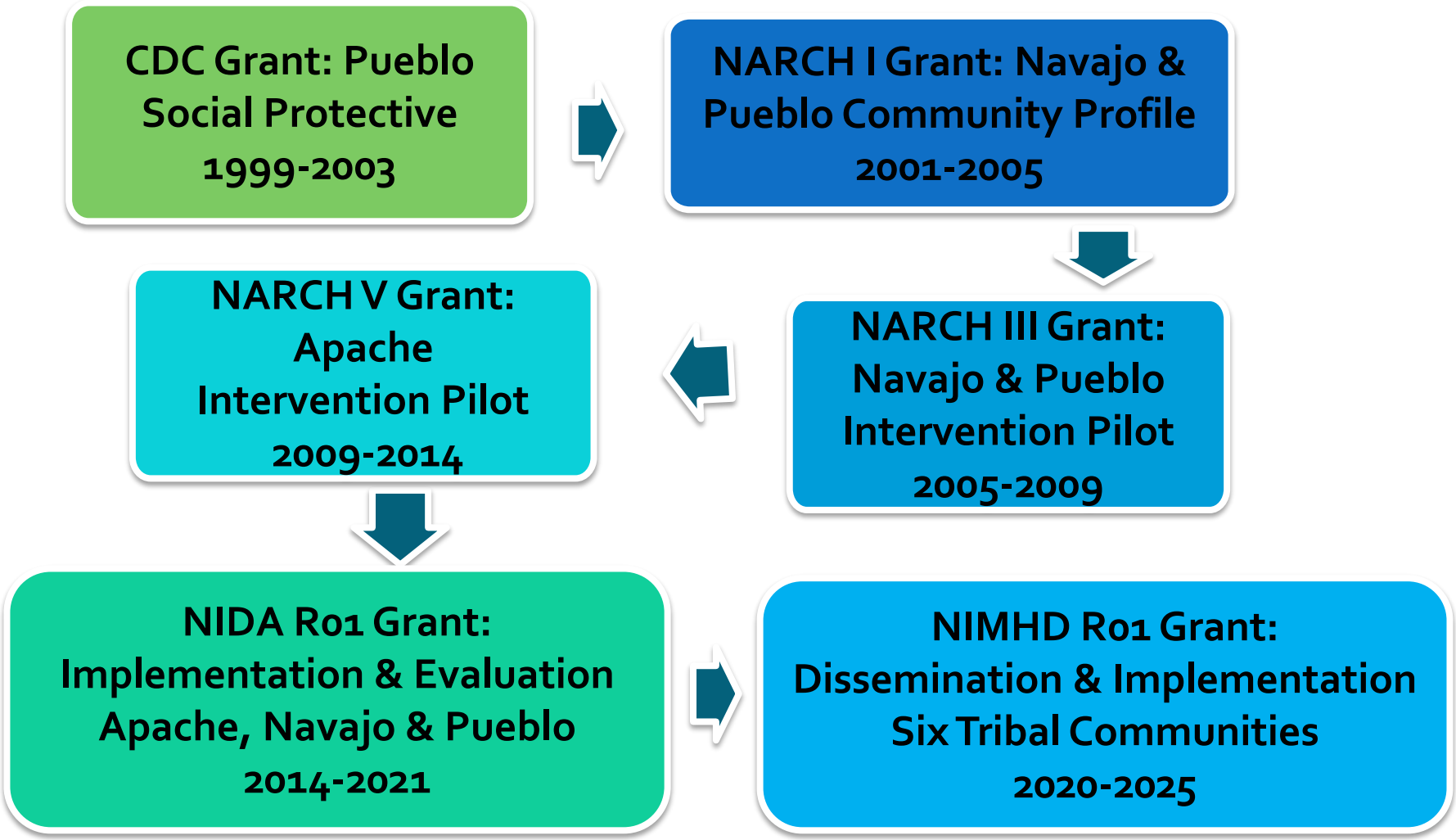












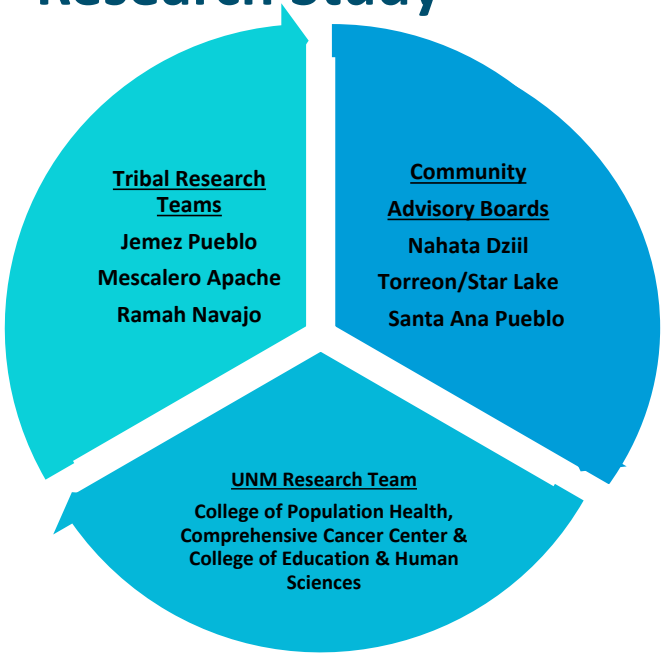
***Implementation Science** is the study of strategies that are used to implement and sustain evidence-based interventions in community settings.*

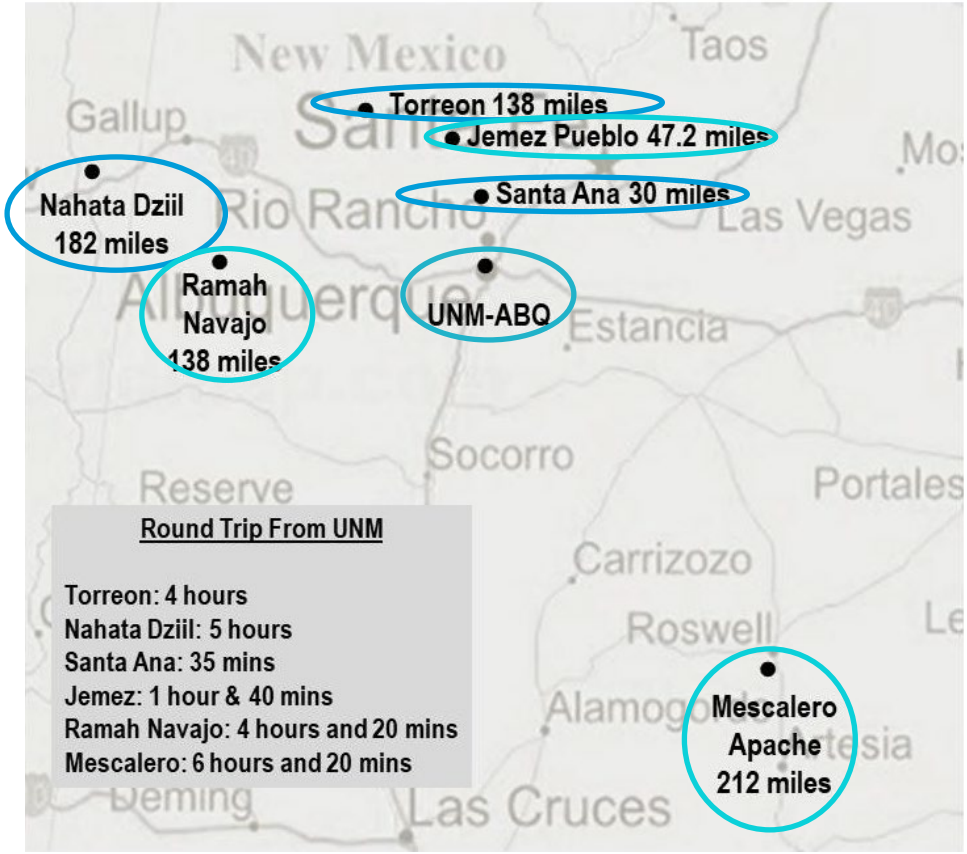
Research Aim 1

To explore and assess the implementation context for the FLP program with three new southwest tribal communities.

Family Listening Program (FLP) a Culturally-Centered Dissemination & Implementation Research Study







Title: Family Listening Program (FLP) Culturally-Centered Dissemination & Implementation Project

Funder: National Institute on Minority Health and Health Disparities

Project Dates: September 26, 2020 – June 30, 2025

Implementation Science is the study of strategies that are used to implement and sustain evidence-based interventions in community settings.

This study has three specific aims:

Aim 1. To explore and assess the implementation context for the FLP program with three new southwest tribal communities;

Aim 2: To prepare and refine the CBPR-CCS implementation strategy in three new southwest tribal communities; and

Aim 3: To implement and evaluate the CBPR-CCS implementation strategy and test the effectiveness of the FLP program with the goal of sustainment in the three new southwest tribal communities.

The goal is to strengthen dissemination and implementation (D&I) science by testing the implementation of our indigenous focused Family Listening Program which is a culturally transformed intervention through the use of a CBPR approach.

In this new study we introduce an innovative process called *CBPR Culture-Centered System* which will be integrated with the Interactive Systems Framework (D&I structures and functions to bridge science & practice) for an examination of the uptake, cultural acceptance, and sustainability of evidence-based strategies moved into practice with three new southwest tribal communities, Torreon-Star Lake, Nahata Dziil, and Santa Ana Pueblo, who will each develop their own research community advisory board.

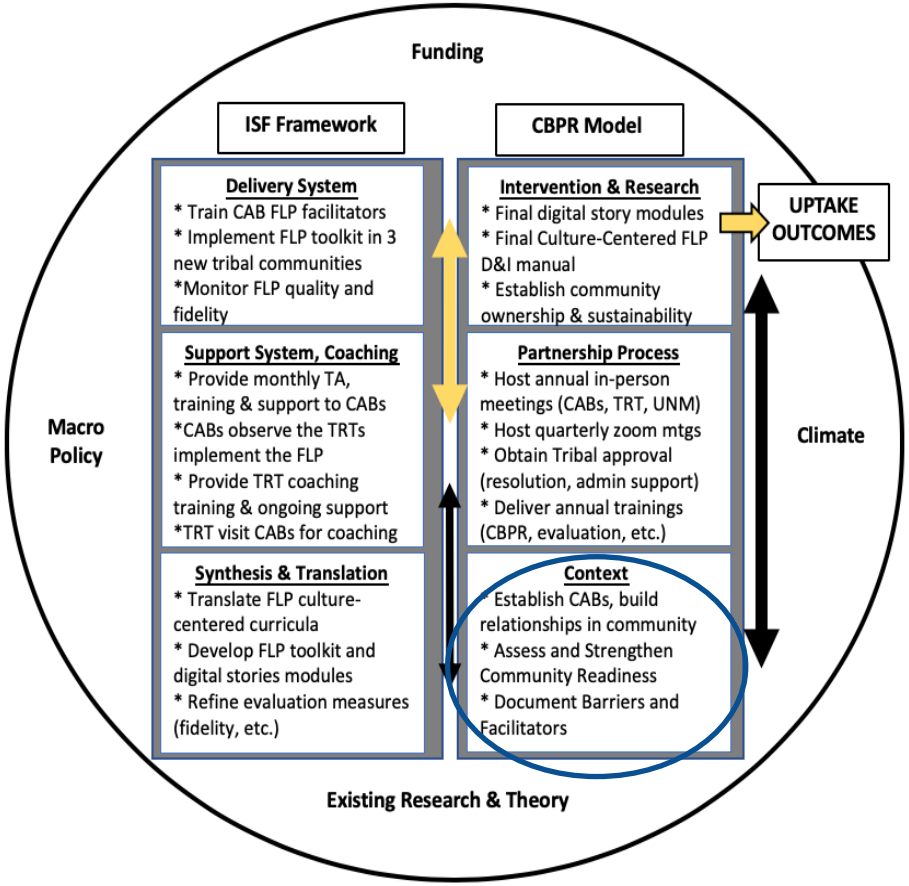
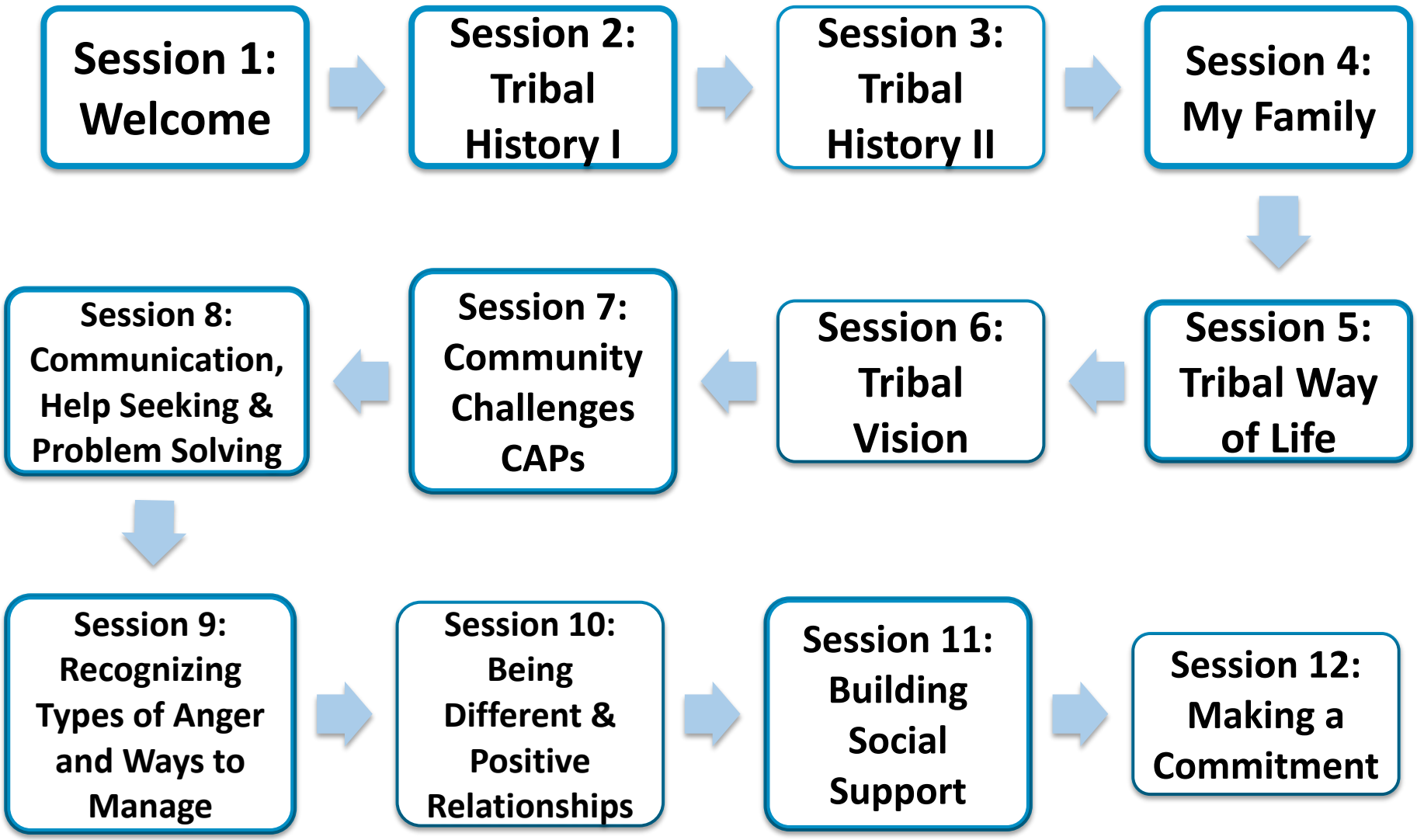


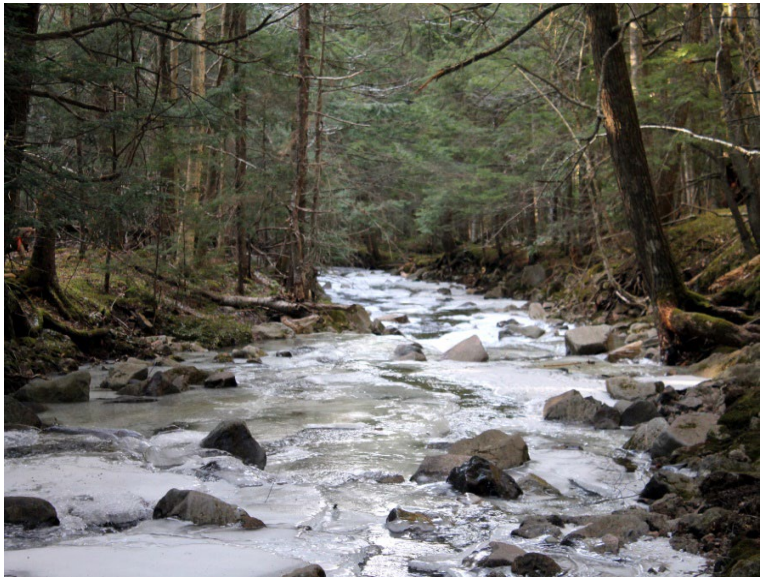
Figure 4. ISF Framework and CBPR Model

Family Listening Program Sessions





River of Life Family Listening Project Historical Timeline



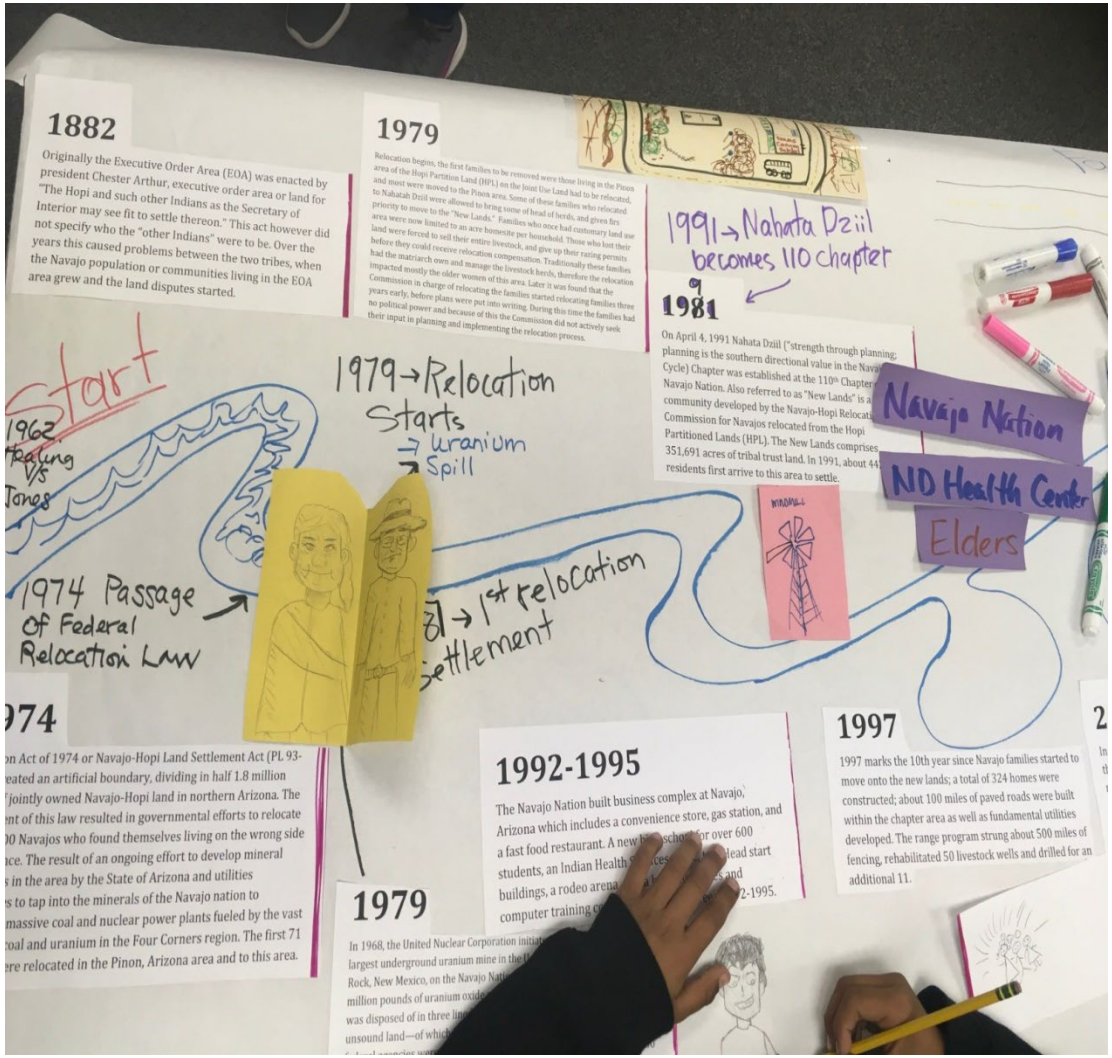




Nahata Dziil

- Relocation due to Navajo-Hopi Dispute
- From 20+ communities (Chapters)
- 1991 became the 110th Navajo Chapter





NAHATA DZIIL FAMILY LISTENING PROJECT HISTORICAL TIMELINE, HISTORY & PEOPLE



1882

President Chester Arthur signed an executive order; the order left out specified details, which characterized the situation of that order as the Great Title Problem of the West.

1920

Important minerals were being discovered; Navajo Tribal Council created to negotiate natural resource leases in a friendly manner.

1962

Healing v. Jones, 210 F. Supp. 125- U.S. District Court for the District of Arizona.

1968

The United Nuclear Corporation initiated mining operations located in Church Rock, New Mexico, on the Navajo Nation.

1974

Congress passed the Navajo-Hopi Land Settlement Act, Public Law 93-531, which resulted in an ongoing effort to develop mineral resources in the area by the State of Arizona and utilities companies.

1977

The first fence was constructed; dividing land, blocking sacred sites, & removing/ relocating between 10,000 to 13,000 Navajo & 100 Hopi people.

1979

An accidental uranium mine spill occurred at United Nuclear Co. contaminating riverside causing human health issues and killing of livestock. Navajo relocation given 400,000 acres of "New Lands". First families from Joint Use Area relocated.

1987

First Relocatees to the Nahata Dziil area in July 20, 1987 first settlement in Little Silversmith.

1991

On April 4, Nahata Dziil ("strength through planning; planning is the southern directional value in the Navajo Life Cycle) Chapter was established at the 110th Chapter of the Navajo Nation.

1992-1995

Throughout these years the development of the Newlands community has increase with its infrastructure that are seen today.

1997

1997 marks the 10th year since Navajo families started to move onto the new lands; a total of 324 homes were constructed; about 100 miles of paved roads were built within the chapter area as well as fundamental utilities developed.

2015

In 2015 the Sanders Arizona community found out that their drinking water is toxic due to historical uranium mining contamination.

2015

In January 2015 the Nahata Dziil Renewal of Hope Task Force, along with community and leadership celebrated their work to close Ole Red Barn liquor store.

2017

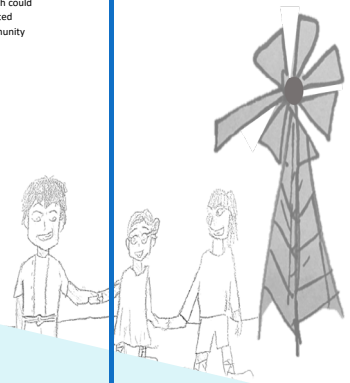
The school district installed filtration systems for the schools in the summer of 2017. Many communities discovered high incidence of cancer, which could be due to the contaminated water drank by the community over many years.

2018

The Radiation Exposure Compensation Act (RECA) is established. It provides compensation to individuals who contracted certain cancers and other serious diseases as a result of their exposure to radiation released during above-ground nuclear weapons tests or as a result of their exposure to radiation during employment in underground uranium mines.

























April 2022 – Saturday
Santa Ana Hotel

June 2022
Ramah Navajo
Prevention Program













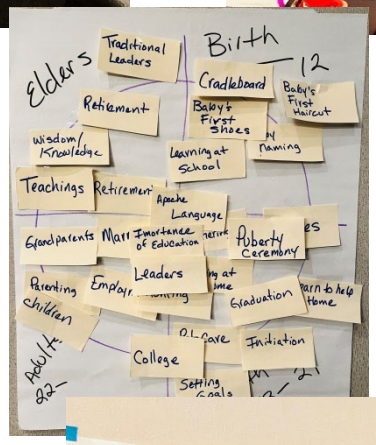
September 2022
UNM-Nahata Dziil
FLP Meeting
History Session
Demonstration by
Kayetrina Raphealito

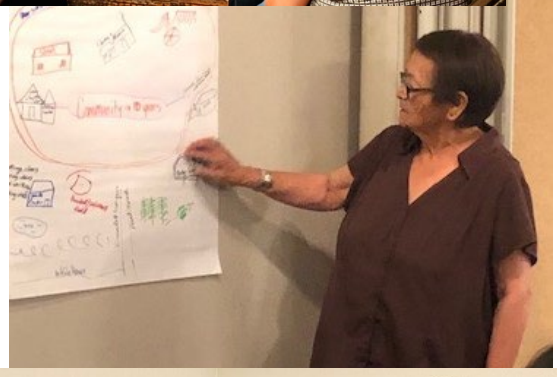
















June 2022
Saturday
Albuquerque


April 2023 Meeting
Ethics in Research Training
Review
Consent Forms
Program Evaluation
Package for UNM IRB
Protocol
Certificates
Consent Forms
Program Evaluation
Finalize Curriculum
Package for Navajo IRB
Protocol
Curriculum
Consent Forms
Program Evaluation
Nahata Dziil Family Listening Program
Data Collection & Management and Facilitator Trainings
Recruitment
Child & Adult
4th-5th Graders
Data Collection Pre-Program Evaluation
Run FLP
12-Sessions
6-8 Families
Data Collection Post-Program Evaluation
Edits to FLP Navajo Curriculum

Nahata Dziil CAB Meeting / April 2023
Ethics in Research Training





Coordinated Efforts

- Key driver is the benefits for the community and being responsive to their needs and challenges;
- Despite pandemic have been able to continue research activities;
- Identified key individual from community as the Community PI;
- Scheduled UNM-Tribal Partner zoom meetings; and
- Held in-person meetings off-site in an urban location and used hotel banquet rooms for meetings.

Coordinated Challenges

- Limitation on meeting size in communities;
- Closure of communities from entering and/or leaving;
- Closure of tribal buildings and shut-down of water and electricity;
- Multiple IRBs: UNM and Tribal (phone calls);
- Reporting & Dissemination requirements; and
- Subawards (communities' varied capacities).

Publications

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Dickerson, D., Baldwin, J. A., Belcourt, A., Belone, L., Gittelsohn, J., Kaholokula, J. K. a., . . . Wallerstein, N. (2020). Encompassing cultural contexts within scientific research methodologies in the development of health promotion interventions. *Prevention Science, 21, 33-42. doi: 10.1007/s11121-018-0926-1*

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Rae, R., Belone, L., Tafoya, E., Yepa, M., Cohoe-Belone, B., Burbank, I., . . . Wallerstein, N. (2023). Family listening/family circle program: The experience of community action projects to promote family and community wellness in three tribal communities in New Mexico. *Frontiers in Public Health.*

Snijer, M., Stapinski, L., Lees, B., Ward, J., Conrod, P., Mushquash, C., . . . Newton, N. (2019). Preventing substance use among Indigenous adolescents in the USA, Canada, Australia and New Zealand: a systematic review of the literature. *Prevention Science. doi: 10.1007/s11121-019-01038-w*