



Diabetes Prevention and Treatment: An Integration of Physical Training and Psychosocial Interventions

Apache Diabetes Wellness Program
White Mountain Apache Tribe

National Tribal Health Conference
Health=Sovereignty

September 18, 2019



Dagot'ee

The White Mountain Apache Reservation is in Eastern Arizona where we have lived for thousands of years. We believe that we come from the Earth, and that we belong to the earth.

Our beautiful home was given to us by our creator and is rich in tradition, resources, and wildlife.

Our home starts about 2,600 feet above sea level on our southwest side and ranges up to 11,400 feet on the peak of Mt. Baldy, our most



We have 17,000 Tribal Members and at least 15,000 of them live on the reservation. Our people are known for being resilient and having the will to survive in tough circumstances.

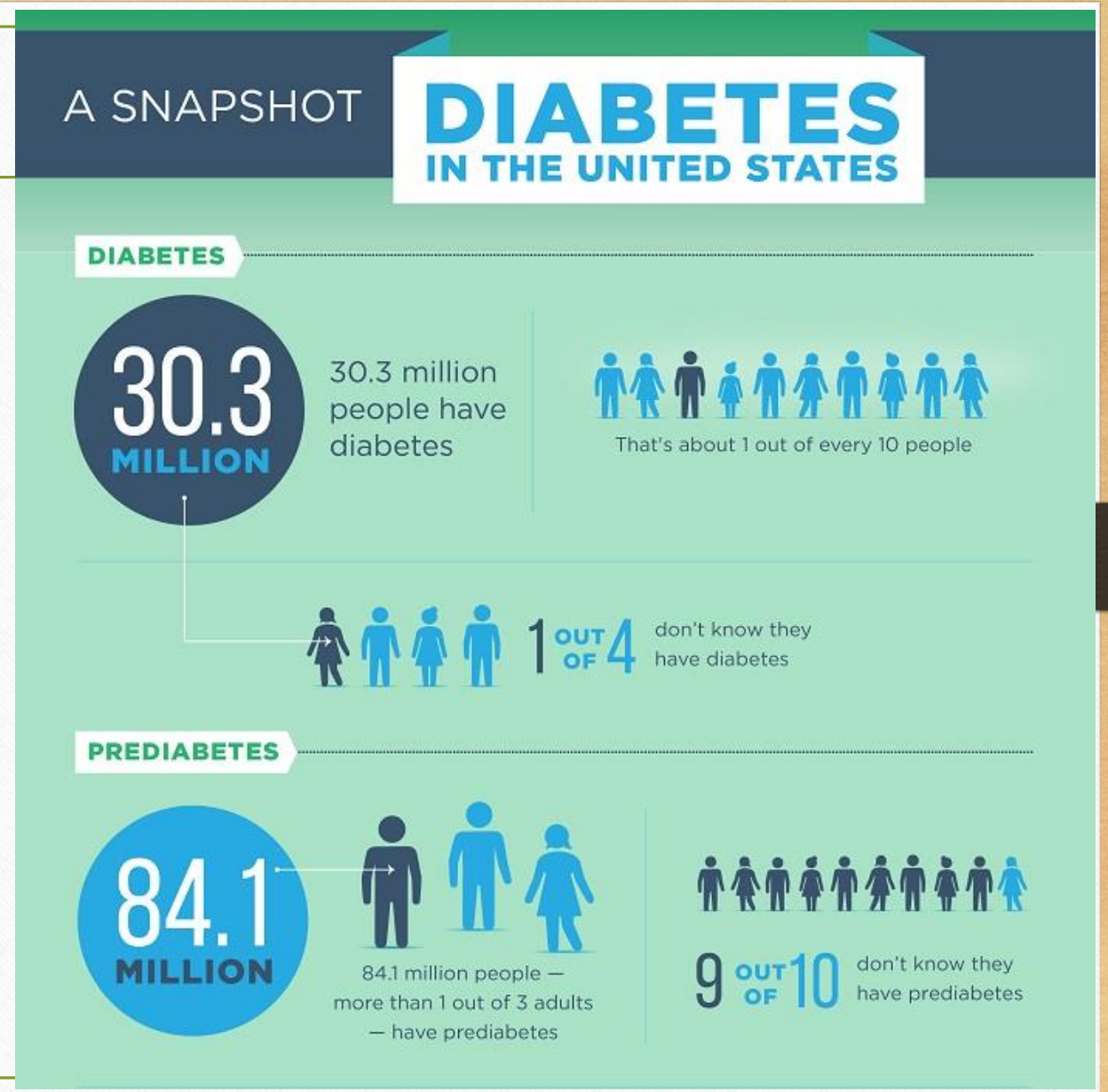
Despite any challenges we may face, the ancestors of before gave us the bloodlines that remain today with us.

Diabetes is one of the largest challenges we face today. A challenge that we meet face-on.

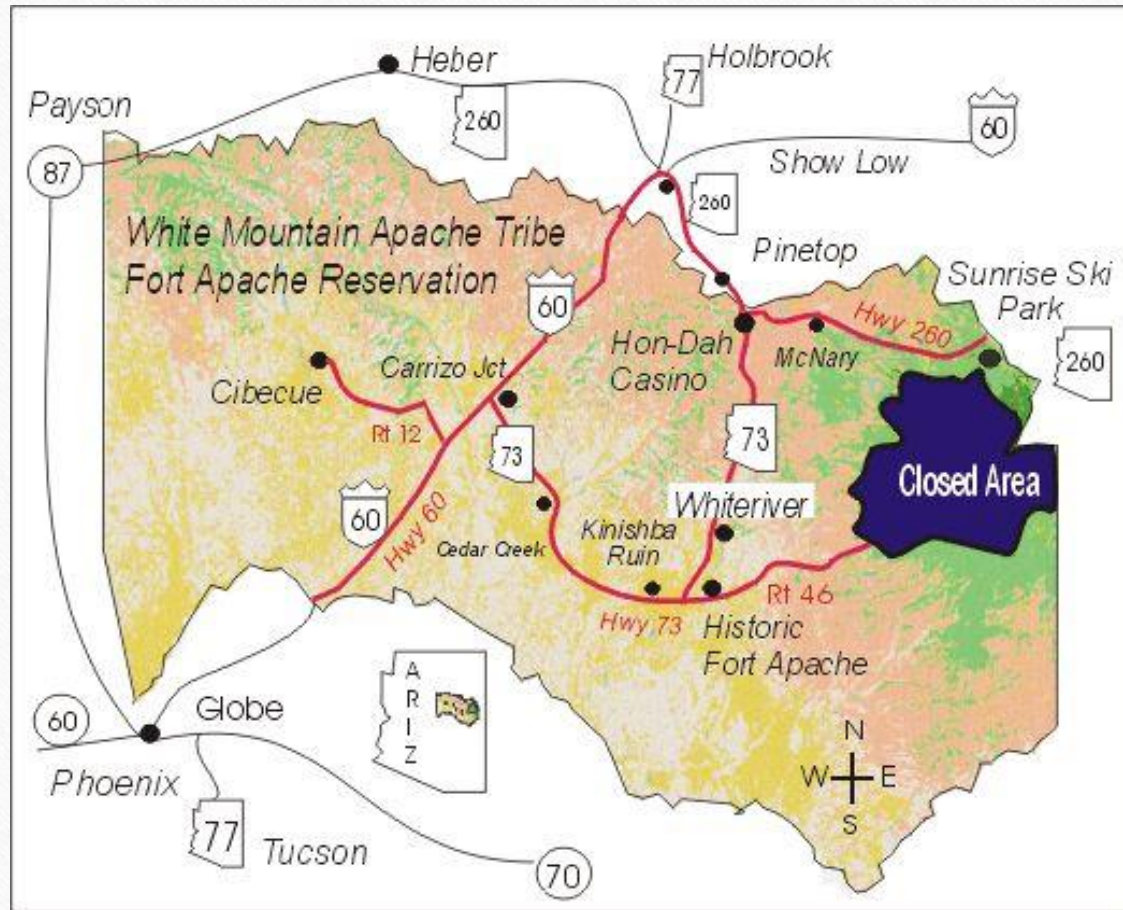
Diabetes in the USA

Diabetes affects an estimated 29.1 million people, or 9.3% of the U.S. Population.

More than 1 in 3 American adults (84 million) have prediabetes and are at significant risk of developing Type 2 Diabetes--and 90% of them don't know it.



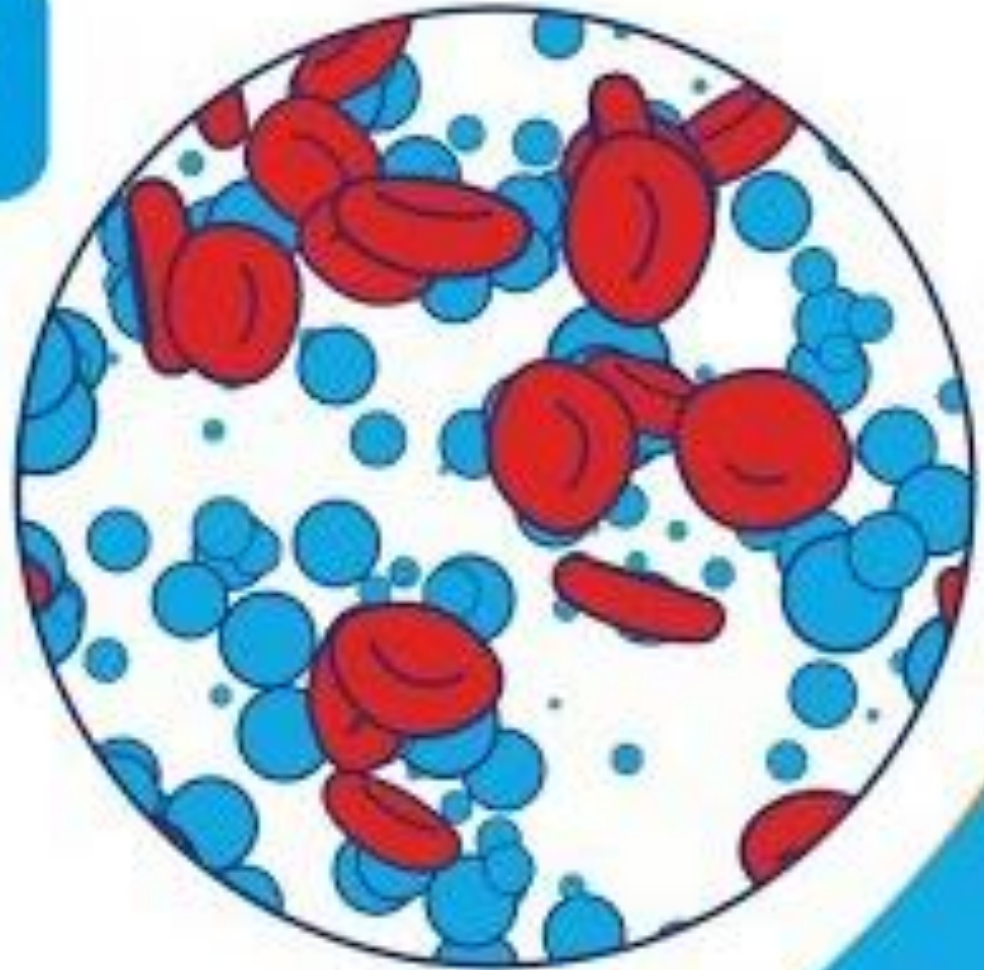
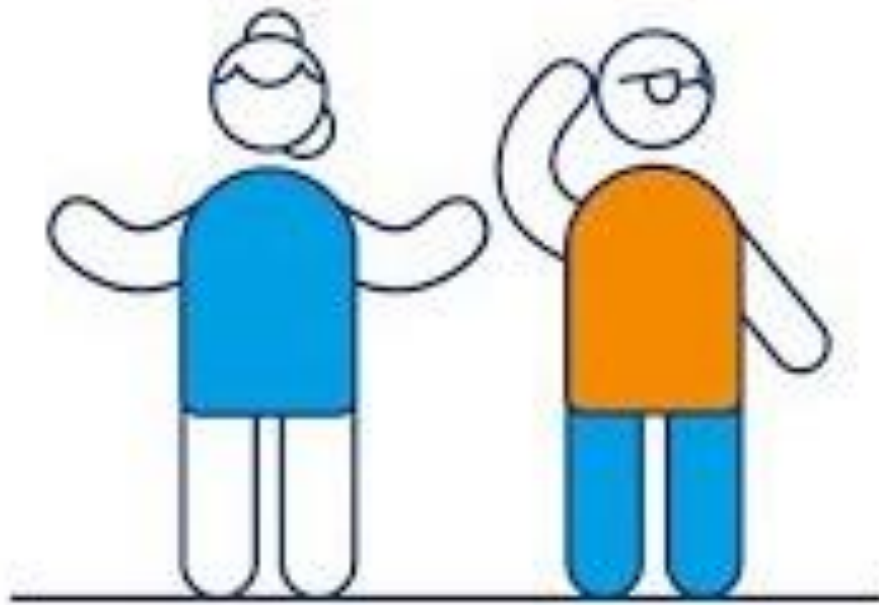
Diabetes – Native Americans



In some Tribal Communities, over 50% of adult Tribal Members are diagnosed with Type 2 Diabetes.

Native Americans are 177% more likely to die from diabetes than the average person in the U.S.

What is diabetes?



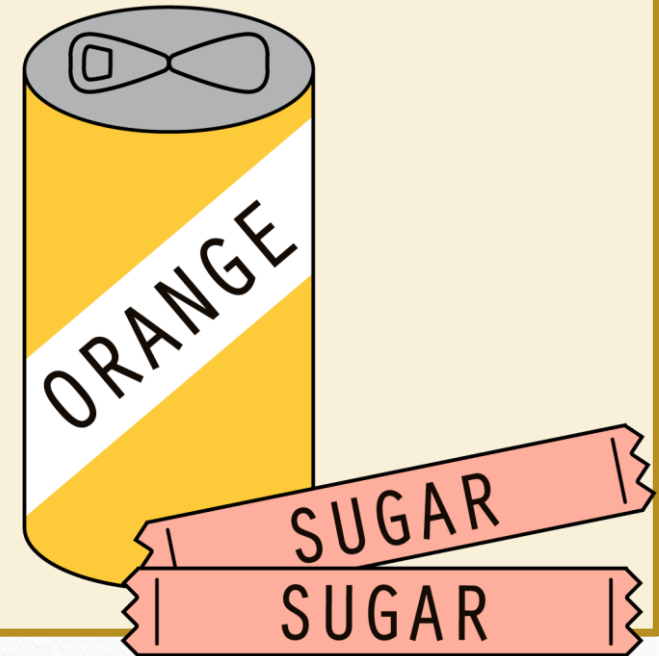
HEALTH Problems

TOO MUCH SUGAR

- Heart Disease
- Stroke
- Kidney Disease (Kidney Failure)
- Dental Disease
- Nerve Damage (Neuropathy)
- Foot Problems (nontraumatic lower limb amputations)

NOT ENOUGH SUGAR

- Seizures
- Loss of consciousness
- Death



Risk Factors for Developing Type 2 Diabetes

- Increasing Age
- Obesity
- Sedentary Lifestyle
- Family History of Diabetes
- Personal History of Gestational Diabetes
- Impaired Glucose Metabolism (related to lifestyle and some medications)
- Race or Ethnicity



TAKE the SCREENING TEST



Diabetes **TREATMENT**

MEDICAL/BIOLOGICAL

- Diabetes Medications-directly impact the systems of the body that regulate glucose levels.
 - Metformin
 - Sulfonylureas
 - Neglitnides
 - Thiazolidinediones
 - The list continues.....
- Insulin Therapy

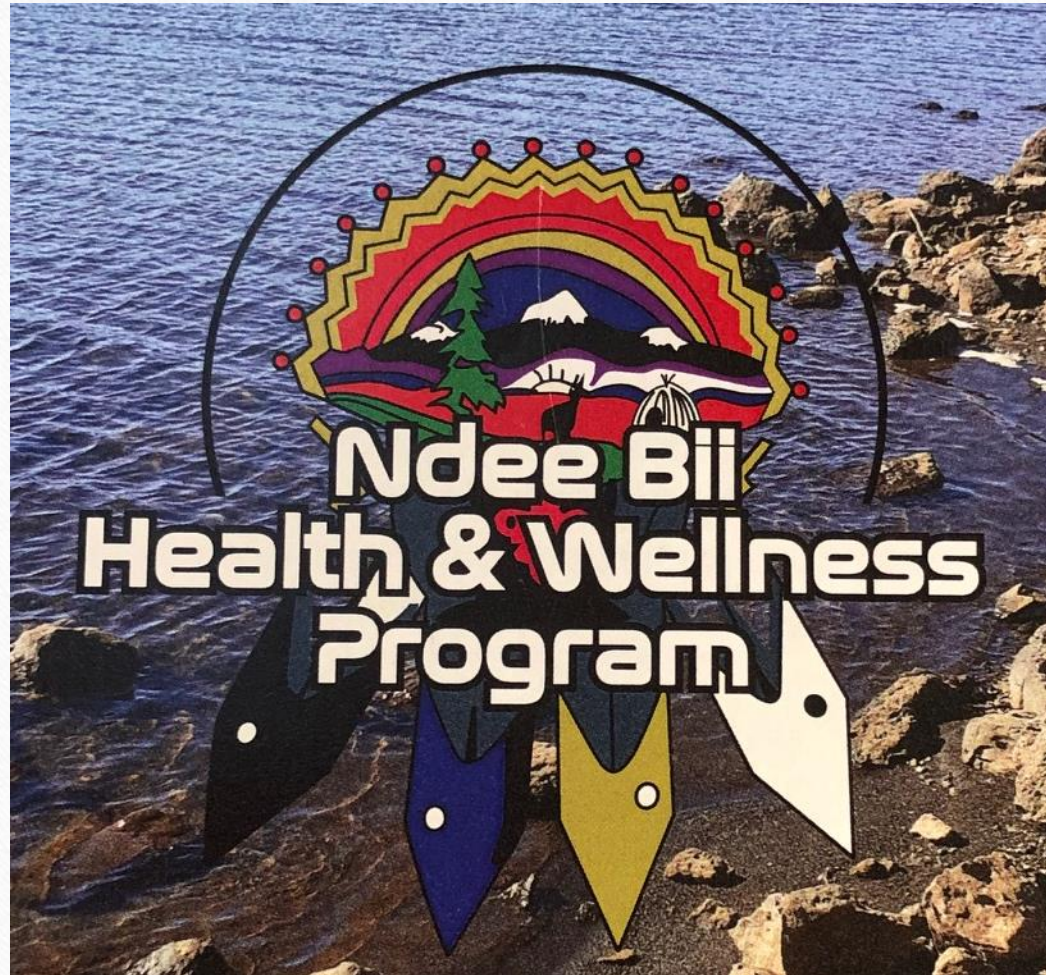


SELF-MANAGEMENT

- Regular Self-Administration of Medication
- Body Weight Management (decrease obesity)
- Self-Monitoring of Blood-Glucose
- Changes in Diet
- Changes in Physical Activity
- Foot Self-Care



APACHE DIABETES WELLNESS PROGRAM



Began in 20??

Funded by the Special
Diabetes Program for
Indians Grant (SDPI)

APACHE DIABETES WELLNESS PROGRAM

The Apache Diabetes Wellness Program (ADWP) offered:

- A **GYM** to support diabetes prevention.
- Diabetes **EDUCATORS** to assist in supporting and educating newly diagnosed diabetes clients and to provide preventive education to the Tribal Community.
- **OUTREACH** to the Tribal Community on issues related to diabetes.
This included: radio discussions, special sessions with young children in the schools, newspaper articles, department presentations, pamphlets, etc.



In 2016 the Tribe lost its
SDPI Grant Funding
and would not be eligible again until 2020!

Our **PREDICAMENT:**



- No available tribal funding for diabetes prevention and support services....
- No way to support our gym....
- ? employees were supporting themselves and their families through their work in this worthy cause....

Determined our **RESOURCES** and **STRENGTHS**

- We have a good gym
- We have a committed staff
- We have ?? months until the SDPI funding all runs out.
- We have committed and dedicated leadership.
- We are close to our diabetic clients and know how to reach out to them.
- The Tribe has two large community behavioral health programs with strong Third-Party/Medicaid Billing Programs.
- We know what types of strategies have worked in reaching out and enrolling mental health clients in the behavioral health centers.
- There is no other diabetes support/treatment program on the reservation: there must be a demand for help.



Did some **RESEARCH**

Mental health struggles are positively associated with poor diabetes health outcomes.

- Adults with diabetes show an 24-38% increased prevalence rates of depression and/or anxiety compared to those without diabetes.
 - One in four individuals with diabetes experience increased symptoms of depression.
 - Lifetime prevalence of Generalized Anxiety Disorder appear to be 19.5% in people with either Type 1 or Type 2 Diabetes.



Did some **RESEARCH**

Mental health struggles are positively associated with poor diabetes health outcomes.

- Anti-depression medication is a risk factor for Diabetes.
- Increases in T2D symptoms/illness related complications are positively associated with increased depressive symptomology.
 - This may cause a downward spiral for clients as symptoms of depression are positively correlated with poor diabetes self-care.



Did some **RESEARCH**

Depression and anxiety have shown to be associated with:

- Poorer attendance at medical appointments.
- Poorer adherence to medication regimens.
- Poorer adherence to dietary recommendations
- Poorer adherence to glucose monitoring.
- Poorer foot care.
- Less exercise.
- Less weight loss.



Rates of depression are higher among those prescribed insulin compared to those using noninsulin medication or dietary and lifestyle interventions alone.

Looked at **COMMUNITY** Risk Factors

- Anxiety, depression and substance abuse rates are significantly higher for those with lower levels of income.
 - Census data shows that 47% of WAMT Members live in households with income below the Federal Poverty Rate.
- Unpublished research shows that 52% of our Tribal Members consider themselves to have an active substance use disorder (most often related to alcohol use).
 - Alcohol abuse has been directly implicated in inducing insulin resistance in animal studies.



How Could we **HELP** Our **CLIENTS**?

Several of the factors related to poor outcomes in diabetes are behaviorally controlled by our patients:

- Regular Exercise
- Weight Loss
- Dietary Planning
- Monitoring of blood-glucose levels
- Medication Self-Administration
- Foot Inspections
- Control of depression, anxiety, and self-esteem.

**Being Diabetic is hard
work!**

**It takes up to 2 hours
per day for average
adult to meet all of the
requirements of his or
her diabetes care plan.**

How could we **HELP** Our **CLIENTS**?

We wanted a **PROGRAM** that...



- Strengthens **MOTIVATION** and ability to make healthy, autonomous decisions regarding medical and self-care.
- Stresses and **SUPPORTS** the benefits of **EXERCISE** to one's physical and emotional well-being.
- Identifies **MENTAL HEALTH** disorders at the onset of services and provide proper **PROFESSIONAL SUPPORT**.
- Provides individuals with cognitive **SKILLS** necessary for dealing with depression, anxiety, substance use, conflict with family and others, and other stresses related to the burden of living with diabetes.

How could we **HELP** Our **CLIENTS**?

We wanted a **PROGRAM** that:

- Assists participants with gaining the skills necessary to become **ACTIVE PARTICIPANTS** in their diabetes care team.
- Fosters a **COMMUNITY** of individuals with diabetes who can offer support, structure, and hope to one another.
- Provides programming that is **FUN**, engaging, entertaining, and useful.
- Emphasizes the ideals of **SELF-DETERMINATION** and personal strengths when dealing with the challenges inherent in living with diabetes.
- Provides all services according to **PROFESSIONAL STANDARDS** in the fields of mental health, diabetes education, and physical exercising training.

How could we **HELP** Our **CLIENTS**?



- Provided services to all interested individuals diagnosed with diabetes or prediabetes **WITHOUT** any financial **COST** to them.
- Where services are provided to White Mountain Apache People **BY White Mountain Apache People!**

So, where do we find a professional system of care that seamlessly combines the basic premises and constructs of professional mental health with the ideals and practices associated with sound diabetes self-care, exercise and fitness, diabetes education, client empowerment, and the creation of a supportive peer network of persons with diabetes, and where the majority of services can be provided by paraprofessional staff members?



**We
CREATE IT**



Clinical **FEEL GOOD** Moment

Right after we created and implemented our program, the American Diabetes Association issued a position statement on the “Psychosocial Care for People with Diabetes” that established “evidence-based guidelines for psychosocial assessments and care of persons with diabetes and their families.”

**Intuitively we had
followed their guidelines**

Creating the **PROGRAM** – **STEP 1**

Establish ADWP as a Tribal Behavioral Health Care Program.

- The White Mountain Apache Tribal Council passed a resolution wherein:
 - The ADWP was directed to establish itself as a Tribal Health Care Provider for Persons with Diabetes and to create programs and policies that would lead to eventual third-party reimbursements for mental health counseling and support.
 - Apache Diabetes was instructed to enter into a contract with one of the P.L. 93-638 Tribal Outpatient Behavioral Health Providers to provide professional counseling and support services to Tribal Members with Diabetes.





Creating the **PROGRAM** – **STEP 2** **CONTRACT** with an Outpatient Behavioral Health Provider

- ADWP agreed to follow the clinical policies and procedures of the Outpatient Clinic in all aspects of clinical service provision, (assessments, treatment planning, consent for treatment, utilization review, medical necessity requirements, ethics, care coordination, etc.)
- ADWP agreed to enter into the quality management systems of the Outpatient Behavioral Health Clinic.
- ADWP agreed to have all clinical services provided by or supervised by an appropriately licensed behavioral health professional.



Creating the **PROGRAM** – **STEP 2** **CONTRACT** with an Outpatient Behavioral Health Provider

- All clinical documentation is submitted to and stored at the Outpatient Behavioral Health Clinic.
- All professional and paraprofessional staff members have to meet the credentialing requirements of the Outpatient Clinic.
- In return, the Behavioral Health Clinic (a Tribal P.L. 93-638 Outpatient Counseling Program) would bill Arizona's Medicaid Program for the contracted professional counseling services provided to qualified clients per the State of Arizona's Health Care Cost Containment Administration (AHCCCS) policies and procedures and compensate ADWP for the billable services at 90% of the "All-Inclusive, 100% Passthrough, I.H.S Outpatient Rate."

Creating the **PROGRAM** – STEP 3

Getting it all **TOGETHER...**

- Qualify the fitness trainers as behavioral health technicians.
- Create the required clinical programming/groups.
- Create the internal systems to meet the behavioral health program's requirements.
- Hire a behavioral health professional to provide assessments and BHT supervision.



Creating the **PROGRAM** – BHT Training

- Introduction to counseling as a profession
- Introduction and the nature and treatment depression
- Introduction to the nature and treatment of anxiety
- Basic Theories of Counseling
- Introduction to suicide assessment and response
- Clinical Documentation
- Professional Ethics (3 hours)
- Introduction to the “Emotional Fitness” Group Therapy Program
- Introduction to the “Health Institute Group Therapy Program”



Total time spent in **MENTAL
HEALTH** specific training:
72 hours

Creating the **PROGRAM** – BHT Training

DIABETES TRAINING:

- The Basic Biology of Diabetes
- Issues Related to Exercise and Diabetes
- Issues Related to Diabetes and Diet
- Responding to diabetes related Medical Crises



**Total Hours
of BHT
Training
96 Hours**

Total time Spent in Diabetes Specific Training: 24 Hours



Creating the Program: Intake, Assessment and Orientation

- The client:
 - Completes a basic application and demographic form; and
 - Completes clinical questionnaires (symptoms checklists, diabetes screening tool, alcohol/drug use questionnaires); and,
 - Participates in a psychodiagnostics/psychosocial assessment, with a special emphasis on diabetes adjustment and self-care skills.
 - Complete a “Consent for Treatment” and an “Informed Consent for Exercise as a Person with Diabetes.”
 - Completes a treatment plan, including a statement of his or her goals for participation in the program.
 - Is oriented to the gym and the clinical programming by a behavioral health technician.



Who is a **CLIENT**?

- Anyone who self-identifies as having diabetes or pre-diabetes and is willing to participate in a psychodiagnostics interview and enroll in the counseling program.
 - Individuals who are referred from I.H.S. for strength and conditioning support.
-
- There are no attendance requirements. Participants are free to attend whatever groups they feel are worthwhile and helpful and are encouraged to exercise as they see fit.
 - The only requirement is that people be respectful to one another and to our staff members.

Who Comes to the **PROGRAM**?

- Add in the client demographics HERE

Who Comes to the **PROGRAM**?

Types of Client's Mental Health Diagnoses:

- Major Depressive Disorder:
- Anxiety Disorders:
 - Generalized Anxiety Disorder:
 - Panic Disorder
 - Other Anxiety Disorders
- Z-Codes:

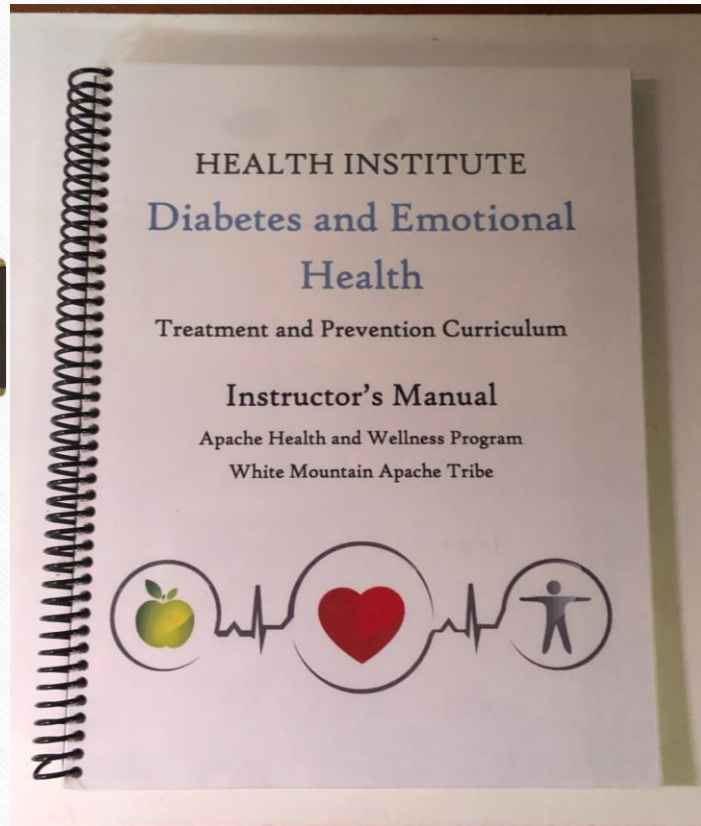
What **SERVICES** are **OFFERED**?

- Special Gym Times when the gym is only open to ADWP Club Members: individuals who have completed an assessment.
- On Site-Child Care



- Free Physical Trainer Instruction
- A club store with a small contingency management program for program adherence and attendance.

Group **THERAPY**/Psychosocial **CLASSES**



Health Institute: Diabetes and Emotional Health

- 24 Lessons taught ideally over 12-plus weeks; 189 page treatment manual
- The classes are designed to present self-care strategies to clients in a fun, supportive and meaningful manner.
- Utilizes techniques from Cognitive Behavioral Therapies; Narrative/Story-Telling Therapies; Art Therapy.
- The treatment manual draws upon several sources, including: William Polonsky's book entitled "Diabetes Burnout".

Group **THERAPY**/Psychosocial **CLASSES**

Health Institute: Diabetes and Emotional Health

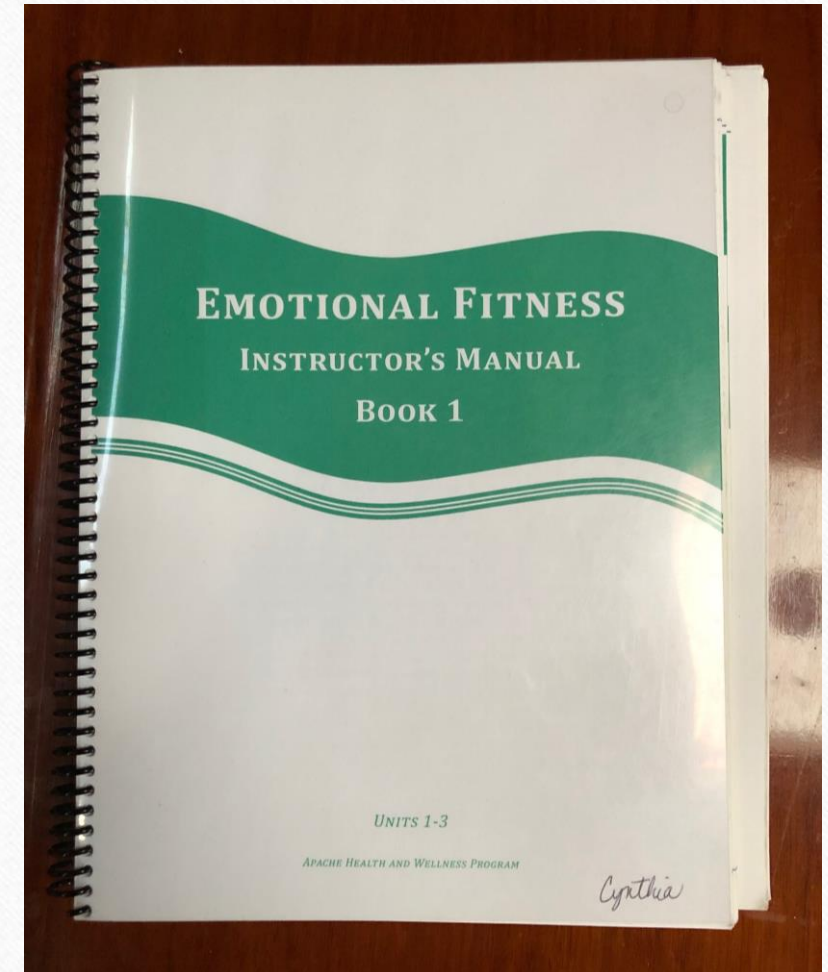
CHAPTER TITLES

Pandora's Box – The Pendulum of Life – The Big Lie – Sugar, the Camel – It's Too Hard! – John's Story – Being Assertive – Depression and Diabetes: The Double Whammy! – Thought Monitoring and Positive Self-Talk – The Werewolf Syndrome- Taming the Werewolf – Taming the Werewolf II- It's So Hard to Exercise – Overcoming Barriers to Exercise – Denial: Not just a River in Egypt- Jumping Over that River in Egypt (or, how to deal with denial) – Stress and Blood Sugar – Escape from the Diabetes Police – Self-Esteem: how to get it – Creating Your Best Healthcare Team – Using Records to Solve Problems – Worry and Hypoglycemia – Hypoglycemia – the Blood Sugar Fairy.

Group **THERAPY**/Psychosocial **CLASSES**

Emotional Fitness Group

- 75 lessons, 615 page manual
- To help clients acquire coping mechanisms and motivational strategies that assist in successfully dealing with the emotional, social and physical challenges inherent in a diagnosis of diabetes.
- Utilizes cognitive behavioral, story-telling, narrative therapy, acceptance and commitment therapy, art therapy, and goal setting strategies.



Group **THERAPY**/Psychosocial **CLASSES**

Emotional Fitness – Unit 1: Connection

Identifying, creating, and increasing family and peer support for one's physical health and emotional goals.

CHAPTER TITLES

Connecting with Others – Loneliness –
Finding Support – Belonging – The Anatomy
of Trust - Toxic Friends and Crabs – Negative
Social Pressure – Your Choice – Story of
Change

Emotional Fitness – Unit 2: The Emotional Journey

Learn to identify, accept and cope with unpleasant emotions. Learn strategies and skills whereby unpleasant emotions can be used as tools that lead to better living.

CHAPTER TITLES

Acceptance of Pain, Suffering, and
Hardship – Willingness – Emotions as
Allies – Nuanced Emotions – More
Emotions – The Iceberg – Secondary
Emotions – Grief – What We Fear –
Dealing with Fear – Living with Purpose

Group **THERAPY**/Psychosocial **CLASSES**

Emotional Fitness – Unit 3: Values

Learn to identify and strengthen values that promote healthy life choices, the establishment of goals, and motivation for goal completion.

CHAPTER TITLES

What are Values? – What We Value –
Knowing Your Why – A life Devoid
of Values: The Crash and the Loop
– Value Conflicts and Our Troubles
– Creating a Life Goal – Finding
Meaning in Life – What We Control



Group **THERAPY**/Psychosocial **CLASSES**

Emotional Fitness – Unit 4: Thoughts and Hooks

Learn to monitor thoughts, assumptions, and beliefs and detect how they impact emotions and behaviors for the better and/or for the worse. Learn to challenge maladaptive thoughts, assumptions and beliefs and replace them with more functional, healthy beliefs, thoughts and assumptions that lead to better emotional, social and behavioral outcomes.

CHAPTER TITLES

The Wise Mind – Unhelpful Thinking – More Unhelpful Thinking – Recognizing Thought Traps – Chaining – Word Power – Just Worrying – Urge Surfing – The Backpack – Emotional Hooks – The Situation Circle

Emotional Fitness – Unit 5: Our Response

Learn to express and deal with painful emotions in a manner that leads to healthy expression, insight, and positive resolutions. Learn concrete strategies to identify and counter self-defeating behaviors. Learn how defense mechanisms are helpful, but when taken to the extreme become unhealthy.

CHAPTER TITLES

The Shield – Denial – Defense Mechanisms – A Positive Defense – What Is My Mindset? – The Mindset Continuum – Self-doubting Sam – The Flood Zone – Am I a Bottler? – Brooder – Stop Brooding – Thriving in Change

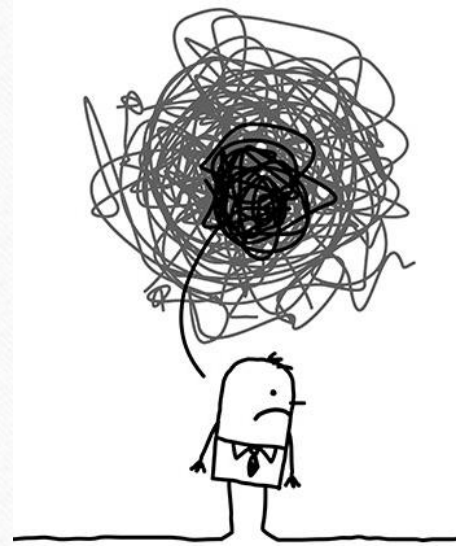
Group **THERAPY**/Psychosocial **CLASSES**

Emotional Fitness – Unit 6: The Real Me

Learn basic skills in developing a positive self-image. Learn to judge themselves, their families, their community, and their culture based upon their own valuing systems rather than labels assigned to them by others.

CHAPTER TITLES

Labeling – I am I-I-esh – Positive Self-Talk – Our Community Strengths – The Real Me – Personal Strengths – Tearing Off the Label



Lesson 55
**Distorted
Thoughts &
Positive
Alternatives**

Group **THERAPY**/Psychosocial **CLASSES**

Emotional Fitness – Unit 7: Perspective

To gain specific skills in: goal attainment; the selection of appropriate and reasonable goals; responding to significant life-events in meaningful and purposeful ways; perspective shifting techniques in dealing with stress and new situations.

CHAPTER TITLES

Possibilities – Earthquake Events – Resistance –
Broad View – I Want To – Waiting for the Wrong
Train – Tiny Tweaks – When Life is Unfair –
Progress – Work and the Brain Hard Work

Emotional Fitness – Unit 8: Summitting

Participants gain skills in integrating the course subjects in a way that is unique and meaningful for them.



**Story Lantern:
Lesson 75**

CHAPTER TITLES

The Wellness Triangle –
The Tree of Life –
Summitting the Mountain
– Self Compassion – My
Story

Group **THERAPY**/Psychosocial **CLASSES**

Training 4 Life

62 Lessons that draw upon sports psychology (concepts such as teamwork, personal discipline, exercise, goal setting, creating a support network, tracking one's progress, etc.) as a metaphor for reaching one's goals. Special applications for addressing diabetes and substance abuse-specific issues are made throughout the curriculum.



**Offered in conjunction
with the ADWP Running
Group.**

Group **THERAPY**/Psychosocial **CLASSES**



Family Fitness

30 Lessons created for families. Family members meet together once a month for dinner, a family activity, and a short lesson. The lessons are created for all types of families including those with small children, teenagers, and older couples without children. Family members are encouraged to talk with one another and work on creating stronger relationships.

ACTIVITY: Multiple Perspectives (Lesson 19)

Group **THERAPY**/Psychosocial **CLASSES**

Additional Classes

- Conflict Resolution
- Breakfast Club
- Diabetes Education





SUBSTANCE ABUSE

Treatment

- The substance abuse treatment program brings their men's and residential substance abuse treatment clients to the gym where our staff provides them with fitness training and Dialectical Behavioral Group Therapy two times each week.
- We offer a Running Group for the Outpatient Substance Abuse Program 2 times a week that utilizes the Training for Life Curriculum
- A total of 261 clients from the Outpatient Behavioral Health/Substance Abuse Program have received services.

Our **CHALLENGES**



- It was hard on morale to change the basic mission of the agency so drastically.
 - Over half of our trainers got new jobs and left the program.
 - However the majority of staff members stayed and express satisfaction with the program at the one-year point.
 - It was somewhat frightening to staff that their pay and the program's welfare was dependent on how well they performed their jobs. (Grant vs. Fee-for-service)

Our **CHALLENGES**



Our Tribal Accounting Systems are not accustomed to working with Tribal Programs that have adopted business/market practices and strategies for their financial foundations. Most financial strategies and attitudes at the Tribal Administrative Level are designed and implemented for grant operated programs. **We no longer speak the same language.**

Our **CHALLENGES**

It has been difficult to hire and maintain a professional clinician - Working in our department requires a special commitment to paraprofessional/Tribal delivered services on the part of non-Tribal behavioral health professionals





Our **CHALLENGES**

Turf battles in the area of service delivery continues (not every program is comfortable that “the Tribal Gym” is now providing supportive services to clients with mental health conditions and struggles), but we have learned that we provide better and more services to our clients, feel stronger as an agency, and feel more positive about our work when we cooperate and value the work that other Tribal Programs contribute; and we believe that the agencies who work with us feel the same way.



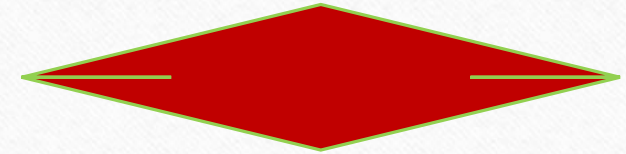
SUCCESSSES – Tribal SOVEREIGNTY

1. CMS has a much larger budget than IHS, and its programs should be considered an important component of the federal trust responsibility to provide health services.
 - For many IHS and tribal service units, the funds generated from third-party revenue exceeds the funding from direct Congressional appropriations.

SUCSESSES – Tribal SOVEREIGNTY

2. The relationship between the Apache Diabetes Wellness Program and the Tribe's 638 Behavioral Health Program allowed the Tribe to create its own diabetes psychosocial treatment program with the only requirements being that the program meets the basic service provisions as outlined in Arizona's Medicaid Program.

**APACHE
DIABETES**



**RAINBOW
TREATMENT
CENTER**

SUCSESSES – Tribal SOVEREIGNTY

3. Tribal leadership, resources, strengths, determination and work created the program. There was no direct input on program design or implementation from Indian Health Services or the State of Arizona.



SUCSESSES – Tribal SOVEREIGNTY



4. The 455 dollars per client-service reimbursement rate (the “All Inclusive Rate”) allows the Apache Diabetes Wellness Program (the Tribe) to provide supportive services to all Tribal Members with diabetes, regardless of income-level or symptom severity.

SUCSESSES – Tribal SOVEREIGNTY

1.2 Million

5. In the first year of clinical operations, the Apache Diabetes Wellness Program billed down 1.2 million dollars.
6. We have been able to improve our pay structure. We now pay our employees in the 75% for their professions based upon profession, education, years of experience, and certification status.



SUCCESSES – Tribal SOVEREIGNTY

7. The Apache Diabetes Wellness Program is sustained by our efforts to have “Apache People serving Apache People.”
8. The majority of mental health services are now being offered by Behavioral Health Technicians. The title of behavioral health technician has become the entry level provider credential and is recognized as such in Tribal Programs and Policy – This has opened many career opportunities to our employees.

FUTURE



- Improve Outcome **RESEARCH**
 - Pre and Post-weight measures
 - A1C levels at time of enrollment and 1 year later.
 - Pre- and Post-anxiety and depression levels.
 - On-going client satisfaction surveys
- **EXPAND** meaningful **ACTIVITIES** for out clients, such as field trips, family activities, etc.

Future **GOALS**



- Develop and promote additional exercise, diet, self-care focused programming for our partnering behavioral health provider's substance use clients.
- Work closer with the Whiteriver Indian Health Service Hospital to develop supportive exercise/physical health/behavioral health programming for clients with other appropriate medical conditions.
- Expand our capacity to provide on-site **INDIVIDUAL COUNSELING** to clients.