Turning He Tide FOR NATIVE AMERICAN CHILDREN

COMBATTING CHILDHOOD OBESITY AND TYPE 2 DIABETES IN NEW MEXICO

A PROJECT SUPPORTED BY THE ROBERT WOOD JOHNSON FOUNDATION AND PNM RESOURCES INC.

COERCE

NOTAH BEGAY III FOUNDATION NOVEMBER 2012

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INTRODUCTION

The Notah Begay III Foundation (NB3) and its partners are honored to share the enclosed research and recommendations. It is the NB3 Foundation's shared hope that this project will help to serve as a catalyst for all stakeholders in the health of New Mexico's Native American children to mobilize and come together systematically to address a growing public health crisis: Native American childhood obesity and type 2 diabetes.

NB3 has worked hard to accurately represent and honor the contributions of all project participants, which is why the organization has made a concerted attempt to document participants' testimonies and input at length. NB3 has also put forth great effort to provide a national and New Mexico-based context for this health issue that is imperative to understanding not only the root causes of this public health crisis but also to shed light on the needed pathways going forward to truly foster holistic and long-term change.

NB3 is also keenly aware that there may be limitations and gaps in research given the scope of this project. The organization also does not seek to shed negative light on any entity, rather the objective is to bring to light barriers, challenges, unmet needs, and opportunities for action. This report is designed to be a catalyst not only for continued research and dialogue, but more importantly for next steps for concerted, comprehensive, and consensus-based action among all stakeholders in the health of New Mexico's Native American children.

Native American children cannot remain invisible or under-represented on this universal public health issue. No single entity has the ability alone to turn the tide against childhood obesity and type 2 diabetes. It will take tribes, non-profits, entities in the public and private sectors, policy makers, institutionalized philanthropy, parents, families, schools, and the youth themselves working in partnership to devise a wide range of coordinated multi-sector and multi-level strategies to make the systemic change needed for the improved health and lives of Native American children.

The clock is ticking, and *the time is now* to act for New Mexico's Native American children before it is too late. The next generation of New Mexico Native American leaders and cultural-keepers that will protect and strengthen the health, vibrancy, and future of tribal communities, tribal sovereignty, and the cultures and languages of New Mexico's Native peoples is on the line.

Childhood obesity and type 2 diabetes is preventable. This is a fight than can be won, but only together.

Respectfully,

Cruptal Schofaul

Crystal Echo Hawk (Pawnee) Executive Director NB3 Foundation

EXECUTIVE SUMMARY

With funding from the Robert Wood Johnson Foundation and PNM Resources, Inc., the Notah Begay III Foundation (known as NB3) undertook a project in 2012 that focused on researching the issue of obesity and type 2 diabetes in Native American children in New Mexico.

With epidemic rates of obesity and type 2 diabetes affecting Native American communities nationally, *this may be the first generation of Native American children that does not outlive their parents*. New Mexico, with its 10.5 percent American Indian population and dramatic health and educational disparities within the state, is *ground zero* for addressing childhood obesity and diabetes in Native American children.

The NB3 Foundation's focus on addressing Native American childhood obesity and type 2 diabetes through sports, health and wellness programs, healthy foods access, community leadership development, and advocacy positioned this organization to spearhead this effort.

The NB3 Foundation, through the support of the Robert Wood Johnson Foundation, was able to conduct an unprecedented level of outreach, research, education, and facilitated dialogue about possible next steps to address these issues in New Mexico. The project focused on engaging 255 stakeholders who participated in the stakeholder interviews and/or participated in four convenings held over the course of the project.

The project began with an environmental scan comprised of a literature review of secondary research, limited primary research and facilitated convenings of stakeholders which gathered information on rates of Native American childhood obesity and type 2 diabetes; barriers and risk factors; trends in at-risk behaviors; impact of policy at the federal, state, and tribal levels; existing collaborations and opportunities for collaborations; pertinent academic research; community-specific innovations/promising practices; and actionable recommendations.

The project's convenings attracted representatives of each of New Mexico's tribal communities, Native American nonprofit organizations, New Mexico and national foundations, research institutions, federal and New Mexico state government agencies and offices, and other allies. The professionally-facilitated convenings drew upon the insights of those most affected by and involved with this issue, with each convening guiding and providing content for the subsequent.

This was the first time that these types of convenings and discussions regarding childhood obesity and type 2 diabetes prevention in Native American children were held in New Mexico.

The first convening shared the content of the environmental scan with a diverse group of representatives from tribes, tribal health programs, state agencies, health organizations, and New Mexico and national non-profit organizations and foundations. The group then recommended actions linked by common underlying themes, conducted an assessment of strengths, weaknesses, benefits, and pitfalls for collaboration among key stakeholders and partners, and recommended topics for future convenings.

The second (two-part) convening attracted Pueblo Governors, tribal council members, and designated leadership representatives from numerous Pueblos. During the first part of this convening, tribal leaders were briefed on the content of the environmental scan, and then focused their discussions on the critical role of Native American culture in involving community members to prevent and address these diseases. Tribal leaders emphasized the need to collaborate and develop a comprehensive and culturally appropriate strategic plan that will support and empower families and individuals to address this health crisis. This recognition of the need for tribal leadership manifested in the second part of this convening held at a meeting of the All Indian Pueblo Council (AIPC). Upon AIPC's invitation, NB3 developed and presented a resolution for AIPC to formally support NB3's mission, efforts, the goals and findings of this project, and promote engagement with tribal leadership across the 20 Pueblos. On September 20, 2012, AIPC unanimously passed the resolution and indicated willingness to work more closely with NB3 on developing and implementing comprehensive strategies to reduce childhood obesity and type 2 diabetes in the pueblo communities.

The third convening was attended by a large number of representatives from the Pueblos, tribes, Native American non-profit organizations, youth, philanthropic and state stakeholders, and representatives from a number of non-profit organizations with a focus on food systems, youth, and physical activity. Focused discussions focusing on the areas of Native American food systems development, physical activity/built environment programs, and youth leadership development garnered a host of insights, recognition of potential partnerships and existing resources, and recommendations for developing an agenda that would be relevant tribally, statewide, and nationally to positively address childhood obesity and type 2 diabetes.

The fourth convening hosted state, federal, tribal, and non-profit entities dealing with health data collection pertaining to Native American children and communities. Attendees discussed barriers, challenges, and opportunities to improve data collection, sharing, and management. The group reviewed sources of and access to Native American health data related to obesity and type 2 diabetes, and discussed the limitation of some data sources and methodologies, as well as data gathering uses and needs. The dialogue culminated in recommended next steps to improve data quality, tribal/Native American non-profit organization access to data and enhance tribal capacity-building related to data management and gathering.

Collectively, these convenings resounded with a strong call for action to urgently, comprehensively, and effectively address the issues of Native American childhood obesity and type 2 diabetes. This report synthesizes participants' findings on themes, needs, and recommendations that will help to: guide philanthropic, federal, state, and tribal investment; build tribal and Native American community capacity to address this critical health issue in multi-faceted and culturally-based ways; and ultimately to reverse the trend of overweight/obese Native American children who are at risk for developing type 2 diabetes and for experiencing additional health-related quality of life issues.

PROJECT PURPOSE

The overarching purpose of this project was to positively impact the significant health challenges facing Native American communities through assessing existing and future needs, identifying possibilities for collaboration, strengthening local programs, informing state and national policymaking, and guiding future philanthropic and social investment. The project's goal was to have it serve as a catalyst for the development of comprehensive strategies for positive and sustainable change in the health of New Mexico's Native American children. Objectives were to effectively engage Native American communities in gathering valuable research data, recognizing barriers and opportunities, and building consensus. This hands-on, community-focused approach was designed to ascertain successful, results-oriented, and demonstrable solutions that could help reduce Native American childhood obesity and type 2 diabetes in New Mexico. NB3 hopes that the data, up-to-date research, and comprehensive participation of tribal leaders, Native American communities, and political and philanthropic stakeholders in the state will provide an invaluable service to the broader community regarding this issue.

PROJECT GOALS

- Document data, trends, and complexities of the current environment related to childhood obesity and type 2 diabetes;
- Formulate a collective vision for community health and identify obstacles, including access to healthy foods at home, in school, and across the community, as well as access to fitness education and physical activity programs;
- Define strategies to address challenges through local, regional, statewide, and national action by classifying positive tactics, potential resources, research, and other points of leveraging influence; and
- 4. Formulate a collective response toward comprehensive policy-making and advocacy that supports prevention, intervention, and wellness opportunities and resources for Native American children and families at every level.

MEASURES FOR PERFORMANCE

- Ability to access accurate and up-to-date research regarding the impact of childhood obesity and type 2 diabetes on Native American children in New Mexico;
- Conduct effective outreach and recruitment of key and diverse stakeholders regarding this issue in New Mexico that included: tribal leaders; tribal health and youth program directors; Native American non-profit and health organizations; state and federal health agencies/institutions; New Mexico philanthropic leaders; private sector representatives with involvement in health and Native American communities; policymakers; and Native American parents, families, and youth;
- Convey research in a clear and concise way and create spaces for education and dialogue that were inclusive, accessible, and well-documented;
- Ensure a transparent process so that all project participants have access to all findings and documentation for each convening and have input into the final project recommendations; and
- Effectively synthesize and communicate findings and create next steps for action regarding this issue.

METHODOLOGY

The key to NB3's success with this project was aligning with highly respected, diverse, and primarily Native American-led organizations and partners with a proactive track record of working in New Mexico Native American communities, with tribal leadership, and with state and federal health agencies and institutions. Those involved included tribal leaders, Native American non-profit leaders, and political/health/ philanthropic leaders from New Mexico and national agencies. The types of participants were as follows:

- 60 percent were tribal leaders and those representing their tribal programs dealing with health and youth programs;
- 30 percent were from non-tribal government entities that were health-focused and that included the Indian Health Service (IHS), New Mexico Department of Health, Bernalillo County Collective Impact for Neighborhood and County Health (CINCH) Project, Johns Hopkins Center for American Indian Health, University of New Mexico College of Nursing, Farm to Table, and the Albuquerque Area Southwest Tribal Epidemiology Center;
- 5-10 percent were from entities and organizations that were not specifically focused on the issue of health, including Iroots Media, Santa Fe Indian School, Senator Tom Udall's Office, Boys and Girls Club of Gallup, and Taos County Economic Development; and
- In addition, several philanthropic funders were represented: Robert Wood Johnson Foundation; Santa Fe Community Foundation; New Mexico Community Foundation; Con Alma Health Foundation; McCune Foundation; PNM Resources, Inc.; and First Nations Development Institute.

For the environmental scan, NB3 and its consultants conducted 23 separate interviews in January and February of 2012 with high-level resource people selected by the consultants at the Blue Stone Group and the NB3 Foundation. From the interviews, qualitative data was compiled, coded, and analyzed to ascertain certain key themes, issues, and recommendations. Additionally, an extensive literature review was conducted of information available about Native American childhood obesity and type 2 diabetes retrieved from peer-reviewed journals, IHS documents, congressional testimony, and information from other foundations and organizations.

The limitations and challenges of the available data and research surveyed for this scan must be noted. A large majority of the research that has been conducted in Native American communities in the past has been without the full consent, participation in planning and/or data collection, and analysis of the studied community(s).¹ This has led to a major gap in the trust and expectations of the peoples of these communities, with mistrust creating a cultural disincentive to participate in the research and policy process. All too often, Native American communities have been the subjects of non-Native American researchers or have been the "beneficiaries" of programs conceived by those unfamiliar with Native American issues, history, circumstances, and culture. The lack of community-driven research and programs negates the valuable knowledge and cultural resources found in Native American communities and reduces the chances of creating sustainable programs.

With a basis in researched facts and factors relating to childhood obesity and type 2 diabetes (for Native Americans nationally and in New Mexico), the collaborative *process* of the project was as important as the final recommendations.

The methodology of four facilitated convenings in New Mexico, with each informed by the previous and influencing the subsequent, resulted in increased stakeholder consensus, assessed opportunities and challenges, identified potential collaborations, and the beginning of formulation of a collective response to guide future philanthropic and social investment in effective and long-term community-based programs.

The convenings were professionally facilitated by Lesley Kabotie of Kabotie Consulting. Her approach ensured a safe space for participants to voice varying opinions, with respect for a multitude of perspectives and experiences. At some convenings, focus questions were posed to emphasize attention on a particular topic. Participants' input was documented and synthesized to propel the recommendations put forth in this report.

There are many initiatives hosted by tribal programs, state agencies, schools, universities, and non-profit organizations utilizing a variety of approaches, often in isolation from each other. The convenings set out to provide some initial pathways for Native American communities to influence, participate in, and benefit from academic research that would strengthen their efforts, as well as provide philanthropic and nonprofit organizations current data about these efforts to better allocate and leverage resources. For these reasons, this project is an attempt to map the totality of these efforts, maximize limited resources, share best practices, and enhance collaboration that would support policy development and funding at the tribal, state, and federal levels.

Upon presenting the environmental scan and research to participants at the first convening, participants put forth common themes and next steps for further discussion. Based on this process, NB3 was able to build on key themes and actions from one convening to the next. The hands-on, community-focused approach engaged Native American communities and allies in gathering research data, presenting community-specific innovations and promising practices, and documenting priorities for moving forward.

Even so, the project encountered some limitations. It became clear early on that there wasn't enough time and resources to really get into in-depth discussions and elicit feedback on any one particular topic or major theme. NB3 was only able to touch the top layer of the landscape in New Mexico and of developing and building a comprehensive strategy to make a collective change. In hindsight, NB3 would have built in more time and resources for more in-depth, facilitated conversations and research with stakeholders. In addition, NB3 would have liked to have achieved higher levels of participation from the Navajo Nation and the Jicarilla Apache Nation and Mescalero Apache Tribes, urban Indian organizations, and the two remaining Pueblos in the state. Their input will be invaluable in the next possible stages of this process to build a comprehensive response to these health issues affecting Native American children.

EMERGING THEMES

Overall, a strong call for action was issued for the following:

- Clear and responsible leadership and advocacy that is *led by Native Americans* in *partnership* with appropriate non-Native American partners;
- A strong respect and understanding for the *importance of culture* in the development of any future strategies or a comprehensive framework that will foster transformation on this issue;
- Time and resources for *collaboration* and national/statewide/local *education*;
- Peer mentoring, network building, technical assistance, and education about issues and the latest trends in the field of obesity and type 2 diabetes prevention and mechanisms to share data and best practices that can enlighten the development of model programs;
- Investment in more community-based data collection, evaluation, and research into root causes and potential community solutions to health issues having positive outcomes for Native American children;

- Building bridges for sharing knowledge with the larger field of childhood obesity and type 2 diabetes prevention practitioners;
- Understanding of social determinants on health in Native American communities and active development of holistic strategies to address these root causes in conjunction with prevention programs;
- Communicating with and involving Native American youth, community members, and tribal leadership;
- Capacity building of and support for existing and new community-driven models that will develop and showcase best practices with the potential for policy ramifications;
- Culturally appropriate community/state and even national *media campaigns*; and
- Increased resource development and investment from funding sources beyond IHS and the federal government to support obesity and type 2 diabetes prevention for Native American children and families.

ABOUT NB3

The NB3 Foundation was founded in 2005 by Notah Begay III (Navajo/San Felipe/Isleta Pueblos), a 4-time PGA TOUR winner and the only full-blooded Native American golfer on the PGA TOUR. NB3's mission is to reduce the incidences of Native American childhood obesity and type 2 diabetes and promote the leadership development of Native American children through sports and health and wellness programs that are based on proven and documented best practices. NB3 addresses a lightning rod issue for many Native American communities by devoting resources to an extremely underserved population and by generating national awareness about the negative effects of the epidemics of childhood obesity and type 2 diabetes on Native American children. NB3's holistic programs address Native Americans' nutritional, physical fitness, and community-building needs, with the goal of producing measurable and long-term change in tribal communities that are too often neglected by mainstream America. To date, the NB3 Foundation has served more than 12,000 children in 11 states through its programs and initiatives. NB3 is headquartered at the Santa Ana Pueblo, just outside of Albuquerque, New Mexico.

ACKNOWLEDGEMENTS: IN GRATITUDE

NB3 would like to offer its most sincere and heartfelt thanks to its partners for their expertise, networks, time, energy, guidance, and financial assistance.

The Robert Wood Johnson Foundation (RWJF), Program Officer, Jasmine Hall Ratliff, and Dwayne Proctor, Team Director and Senior Program Officer, Childhood Obesity Prevention. RWJF's financial commitment and support made this project possible. Its mission is to improve the health and healthcare of all Americans. With a goal to reverse the childhood obesity epidemic by 2015, RWJF is a key player in tackling one of the most urgent threats to the health of Native American children and families. In a joint 2011 report by the Foundation Center and Native Americans in Philanthropy, RWJF ranked as the top funder by grant dollars supporting Native American causes in 2009, with 23 grants totaling \$10.2 million.

PNM Resources, Inc., Cathy Newby, Tribal Relations Manager, and Diane Harrison Ogawa, Executive Director, PNM Resources Foundation. PNM graciously joined the NB3 Foundation's cause with a much-needed financial boost. Based in Albuquerque, New Mexico, PNM Resources is an energy holding company. Through its utilities, PNM and TNMP, PNM Resources serves electricity to nearly 730,000 homes and businesses in New Mexico and Texas.

The Blue Stone Strategy Group, Project lead Alvin Warren (Santa Clara Pueblo), Christina Stick, Rochelle Tuttle (Nomilacki/Wylacki), and David Mahooty (Zuni). Mr. Warren was an integral part of the development of this project. Mr. Warren's background as a former New Mexico Cabinet Secretary of Indian Affairs, a Lieutenant Governor of Santa Clara Pueblo, and his present role as a senior member of the Blue Stone Strategy Group, in combination with his team, brought to the table vast experience in Native American (and non-Native American) communities in New Mexico.

Lesley Kabotie (Crow), Kabotie Consulting. Ms. Kabotie served as lead facilitator and was an invaluable consultant on this project. She is a private consultant in human resource development, nonprofit board development, strategic planning, and leadership and network development for communitybased entrepreneurs.

First Nations Development Institute, President Michael Roberts (Tlingit), Executive Vice President Sarah EchoHawk (Pawnee), and Program and Research Officer Raymond Foxworth (Navajo), committed invaluable insight, guidance, and resources to this project. First Nations specializes in providing culturally appropriate capacity-building services to Native American organizations, community-based groups, and tribes. As a Native American-led 501(c) (3) non-profit organization, First Nations' expertise lies in providing training, technical assistance, and grants to promote the economic and social well-being of families, children, individuals, and communities in Indian Country. First Nations serves as the only national, Native American-led non-profit organization dedicated to assisting tribes and Native American organizations through a combination of financial assistance, training, and technical assistance. Since the mid-1990s, First Nations has been active in initiatives focusing on hunger, nutrition, food sovereignty, and agriculture on reservations and in Native American communities.

Ken Lucero (Zia Pueblo), Director, RWJF Center for Native American Health Policy at UNM, and Lia Abeita-Sanchez. They contributed their expertise regarding Native American health policy issues. The RWJF Center for Health Policy at the University of New Mexico is designed to increase the capacity of tribal communities to be proactive in encouraging healthy habits and to deliver quality health services by providing policy analysis, leadership training, and community engagement while honoring the cultural traditions and practices valued by Native American people.

The All Indian Pueblo Council (AIPC) and Chairman Sanchez (Acoma Pueblo). They played an integral role in helping the NB3 Foundation bring the issue of Native American childhood obesity and type 2 diabetes to the AIPC. Established in 1958, the AIPC has served as the political voice of the Pueblos of New Mexico. Twenty Pueblo Governors are the official representatives of their Pueblos on the Council.

Regis Pecos (Cochiti Pueblo), Co-Director Santa Fe Indian School Leadership Institute (SFISLI). Mr. Pecos served as a keynote speaker for two convenings and brought valuable insight into the importance of Pueblo cultural values in addressing critical social and policy issues affecting Pueblos. The Leadership Institute, based at the Santa Fe Indian School in Santa Fe, New Mexico, was established in 1997 to create a space for discourse on a wide range of public policy and tribal community issues challenging the vitality and spirit of the 22 Tribal Nations in New Mexico.

Ted Garcia (San Felipe Pueblo), New Mexico Gas Company. New Mexico Gas Company graciously provided support for the dissemination of this white paper and our final convening to take place on December 6, 2012 to share our final recommendations with stakeholders in New Mexico. New Mexico Gas Company is based in New Mexico. They are headquartered in Albuquerque and locally managed. They provide natural gas service to more than 500,000 customers here in New Mexico. Benny Shendo (Jemez Pueblo), The Pueblo Insurance Agency (PIA). PIA also graciously provided support for the dissemination of this white paper and the final convening for the project. PIA is a full service insurance agency established and owned by the 19 Pueblos of New Mexico. As a Native American owned agency, PIA predominantly focuses on serving tribal governments and their business enterprises by designing, implementing and monitoring their employee benefit programs, as well as their commercial insurance coverages. PIA's programs and services were built around the goal of preserving and protecting tribal sovereignty.

NB3 Foundation

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Valarie Lyon (Santa Clara Pueblo), former NB3 Development Associate

Marian Quinlan, CFRE, Quinlan and Associates

Our Founder, Notah Begay III, and his family

Our Entire Staff and Board of Directors

And last, but certainly not least, NB3 is grateful to those individuals who participated as high-level resource and subject-matter experts and to the many convening attendees for their generous donation of time, thoughtful ideas, and insights.



OVERVIEW OF STRUCTURES AND FACTORS: HEALTHCARE CONTEXT OF INDIAN COUNTRY AND NEW MEXICO



"For a subject worked and reworked so often in novels, motion pictures and television, American Indians remain probably the least understood and most misunderstood Americans of us all."

Forty-nine years later, President Kennedy's words still ring true, for mainstream America still knows little about the current lives and struggles of Native Americans.

Over the past 150 years, virtually all aspects of life on reservations and in Native American communities have been controlled by the federal government. Over 5,000 federal laws were passed in the 1800s to legally define the relationship between Indian tribes and the United States government. This system of colonization led to government domination of almost every aspect of Native American life, which continues to present day. Areas of domination include healthcare and services, control of natural resources, practice of Native American culture and traditional spiritual beliefs, education, control of trust funds and other assets, and economic development. Historically, laws and policies were created and enacted to benefit the dominant white society. This emphasis on government-centered development has left the for-profit and non-profit sectors severely underdeveloped on reservations.

Federal policies were created mainly to solve what the government viewed as the "Indian problem," or its attempt to deal with the country's Native American peoples. In contrast, Native Americans and tribal nations have fought to exercise their rights of tribal sovereignty. When the Indian Wars ended with the massacre at Wounded Knee in 1890, new battlefields for Native Americans transitioned to the major political and legal arenas of the United States, concentrated in the executive, legislative, and judicial powers of the Supreme Court and Congress.

TRIBAL SOVEREIGNTY AND THE FEDERAL GOVERNMENT'S TRUST RESPONSIBILITY TO TRIBES

Tribal sovereignty and the federal government's trust responsibility to tribes makes Native Americans the most distinct and unique population in the country. –John F. Kennedy, 1963

Each of the 566 federally-recognized tribes is a sovereign nation with a government-to-government relationship with the United States. The federal government recognizes tribal nations as "domestic dependent nations²" and has established a number of laws attempting to clarify the relationship between the federal, state, and tribal governments. Tribal sovereignty is recognized within the U.S. Constitution³ and also within the body of federal Indian law that defines the U.S. government's Federal Indian trust responsibility. Tribal sovereignty includes the right of tribes to regulate all matters affecting reservation lands and Native American people, including civil regulatory jurisdiction, environmental jurisdiction, taxation, and land use.

The federal Indian trust responsibility is a legal obligation under which the United States "has charged itself with moral obligations of the highest responsibility and trust" toward Indian tribes *(Seminole Nation v. United States, 1942)*. The federal Indian trust responsibility is also a legally-enforceable fiduciary obligation on the part of the United States to protect tribal treaty rights, lands, assets, and resources, as well as a duty to carry out the mandates of federal law with respect to Native American and Alaska Native tribes and villages.

One of the primary agents in the management of the federal government's trust responsibility is the Bureau of Indian Affairs (BIA), an agency of the federal government within the U.S. Department of the Interior. It is responsible for the administration and management of 55,700,000 acres (225,000 km²) of land held in trust by the United States for Native Americans, Native American tribes, and Alaska Natives.

The BIA's responsibilities once included providing healthcare to American Indians and Alaska Natives. In 1954, that function was legislatively transferred to the U.S. Department of Health and Human Services, where it has remained to this day as the IHS.

FEDERAL TRUST RESPONSIBILITY AND HEALTHCARE FOR NATIVE AMERICANS

The United States Government entered into hundreds of treaties with tribes⁴ in exchange for land. In many of these treaties, the U.S. Government promised to provide land, housing, education, *and healthcare* to the tribes.

The Snyder Act of 1921 is the principal legislation authorizing federal funds for health services to recognized Indian tribes. Two other Acts, the 1) Indian Self-Determination and Education Assistance Act (Public Law 93-638, as amended) and 2) Indian Healthcare Improvement Act (Public Law 94-437 of 1976), also play a role in how healthcare services are delivered to Native Americans through IHS or tribally-operated hospitals and clinics, tribal-contracted services, and urban health centers. IHS, through the Department of Health and Human Services, is the primary vehicle for delivery of healthcare services to Native Americans living on Indian reservations. Native Americans also are eligible to participate in their state's Medicaid program and federal programs/agencies such as Medicare, the Veterans Administration, and Federally Qualified Health Centers.

Members of 566 federally-recognized American Indian and Alaska Native Tribes and their descendants are eligible for services provided by the IHS, although eligibility for certain services is further restricted based on regional policies.

The multiple healthcare programs created to deliver treaty-mandated healthcare are impossibly complex and difficult to navigate for both tribes and tribal community members and may not address the most pressing health issues in Indian Country.

The IHS healthcare delivery system includes hospitals, regional health centers and clinics, and urban health projects and operates 31 hospitals, 52 health centers, and 31 health stations. In addition, 34 urban Indian health projects provide a variety of health and referral services. Through P.L. 93-638 contracts, tribes directly administer 15 hospitals, 256 health centers, 112 health stations, and 166 Alaska village clinics.⁵ Contracted services include cancer care and other

specialized care beyond the scope of practice of most IHS providers.⁶

The Albuquerque Area IHS is divided into eight Service Units, which deliver community-level services. Most health facilities are strategically located near population centers and include 5 hospitals, 11 health centers, and 12 field clinics.

The U.S. Civil Rights Commission report states:

Most Native Americans do not have private health insurance and thus rely exclusively on the Indian Health Service for health care. The federal government spends less per capita on Native American health care than on any other group for which it has this responsibility, including Medicaid recipients, prisoners, veterans, and military personnel. Annually, IHS spends 60 percent less on its beneficiaries than the average per person health care expenditure nationwide.⁷

As a federal program, IHS policy is determined through the legislative process, with important input provided by tribal representatives.

Tribal knowledge of health policy is critical in determining funding focus for IHS programs. Therefore, it behooves tribes to have a sophisticated understanding of their role in influencing health policy in order to improve health for their communities. However, educational opportunities to increase health policy knowledge have been few and far between, and as a result, precious few tribal leaders have the knowledge needed to offer informed input into the design, implementation, operation, and evaluation of their own systems that meet federal requirements mandated through P.L. 93-638.

LIMITED FUNDING FOR NATIVE AMERICAN HEALTHCARE

The majority of tribes in the United States operate health programs based on limited funding from the IHS. Alternative or supplemental programs for healthcare and prevention programs are exceptionally limited to tribes and Native Americans. Consider the following philanthropic statistics related to Native Americans:

- As reported in 2011, 0.3 percent of all philanthropic funding goes to Native Americans;
- In 2009, of this Foundation giving, only 10 percent went to fund health issues. The majority of grants went to public health followed by funding to support hospitals and medical care;
- 2009 Foundation giving to Native American health issues totaled \$6.9 million. This is the same amount invested by the Indian Health Service for the management of diabetes and diabetes prevention in the state of New Mexico alone; and
- Few health and prevention dollars are designated for childhood obesity and diabetes prevention from either private philanthropy or the Federal government.⁸

STRUCTURAL ROOTS AND IMPLICATIONS

Politically over the decades, Native Americans have suffered whiplash as a result of federal government policies that have veered from assimilation to termination and finally to self-determination. Only in the last 30 to 40 years has the federal government dedicated some limited resources toward Indian selfdetermination that have not come close to meeting the obligations and promises originally made by the federal government. This was affirmed in a July 2003 report published by The U.S. Commission on Civil Rights, an independent, bipartisan agency established by Congress.⁹

According to the U.S. Commission on Civil Rights:

The federal government has a long-established special relationship with Native Americans characterized by their status as governmentally independent entities, dependent on the United States for support and protection. In exchange for land and in compensation for forced removal from their original homelands, the government promised through laws, treaties, and pledges to support and protect Native Americans. However, funding for programs associated with those promises has fallen short, and Native peoples continue to suffer the consequences of a discriminatory history. Federal efforts to raise Native American living conditions to the standards of others have long been in motion, but Native Americans still suffer higher rates of poverty, poor educational achievement, substandard housing, and higher rates of disease and illness. Native Americans continue to rank at or near the bottom of nearly every social, health, and economic indicator.

The Commission's report further stated:

Small in numbers and relatively poor, Native Americans often have had a difficult time ensuring fair and equal treatment on their own...Its small size and geographic apartness from the rest of American society induces some to designate the Native American population the "invisible minority." To many, the government's promises to Native Americans go largely unfulfilled...there persists a large deficit in funding Native American programs that needs to be paid to eliminate the backlog of unmet Native American needs, an essential predicate to raising their standards of living to that of other Americans. Native Americans living on tribal lands do not have access to the same services and programs available to other Americans, even though the government has a binding trust obligation to provide them...The severity of the situation constitutes a flagrant civil rights violation, as Native Americans are in essence denied equal opportunity by the federal government's failure to live up to its promises. Civil rights concerns are manifest in the fact that Native Americans often receive fewer services and less funding than other populations.

NEW MEXICO TRIBAL GOVERNMENT CONTEXT

In New Mexico, a majority of the tribes are in a historic federation of Puebloan communities, with governments operating under a variety of traditional Native American and democratic organization models. The Native American population in New Mexico is on the rise, according to the U.S. Census Bureau.

There were 193,222 Native Americans in the state in 2010, up from 173,483 in 2000, an 11.4 percent increase. Twenty-eight percent live in urban areas, and 72 percent live in rural communities.

Native Americans represent 9.4 percent of the state population. But when mixed-raced Native Americans are included, the number increases to 10.7 percent.

PUEBLO NATIONS

New Mexico is home to 20 Pueblo Nations, parts of the Navajo Nation and the Jicarilla Apache Nation and Mescalero Apache Tribe. The Pueblo Nations include Acoma, Cochiti, Isleta, Jemez, Laguna, Nambe, Ohkay Owingeh, Picuris, Pojoaque, San Felipe, San Ildefonso, Sandia, Santa Ana, Santa Clara, Santo Domingo, Taos, Tesuque, Ysleta del Sur, Zia, and Zuni.

Thirteen of the Pueblo Governments operate under a theocratic government, in which secular leaders within the community appoint people to governmental positions. Under these governments, individuals are required to lead the community in the traditional tribal activities as well as interact with outside entities. Theocratic Tribal Council structures and government operations vary from community to community, posing a challenge to entities seeking to work with these communities. These appointments are usually for one year, creating a lack of continuity within the communities.

Six of the Pueblo governments operate under a constitutional government, in which tribal members vote for their Governor, Tribal Council, and other government officials. Constitutional officials are often elected to serve terms from 2 to 4 years. New Governors and Tribal Council members often must rely heavily on tribal government staff for continuity of programs and initiatives as they take office.

Key organizations such as the All Indian Pueblo Council (AIPC), the Southern Pueblos Governors Council, the Five Sandoval Indian Pueblos, and the Eight Northern Indian Pueblos Council offer other avenues for tribal leaders to share common programs and concerns. Through the Pueblo Health Committee, AIPC is beginning to work with tribal health boards and Indian Health Service diabetes programs to combine western medicine's best practices, while basing efforts on Native American holistic health values.

NAVAJO NATION AND JICARILLA AND MESCALERO APACHE TRIBES

The Navajo Nation has a population of over 250,000, of which 70 percent live on the reservation that encompasses over 27,000 square miles in Arizona, New Mexico, and Utah. The government is compartmentalized into three branches (Legislative, Executive, and Judicial). It is a sophisticated form of government resembling the U.S. government but one that is also rooted in the Navajo governance of traditional law, customary law, natural law, and common law.

The Navajo Nation is divided into five Agencies that are similar to provincial entities. The Agencies are divided further into community Chapters. The Chapters serve as local political units similar to towns. In all, the Navajo Nation consists of 110 Chapters. The Navajo legislature is made up of 24 delegates elected from the 110 local chapters. By initiative in 2009, the Navajo people reduced the size of the legislature from 88 members to 24 members.

New Mexico-based components of the Navajo Nation (and non-contiguous with the rest of the Navajo Nation) include:

- The Ramah Navajo Indian Reservation is home to 2,167 individuals near the Zuni Pueblo;
- The Alamo Navajo Indian Reservation (Navajo: T'iistsoh), lying in northwestern Socorro County, is home to nearly 2,000 individuals; and
- The Tohajiilee Indian Reservation (formerly known as the Canoncito Indian Reservation), lying in parts of western Bernalillo, eastern Cibola, and southwestern Sandoval counties, is home to 1,649 individuals.

JICARILLA APACHE NATION

• The three-branch tribal government was established in 1937 with its own constitution and bylaws. The Tribe is home to 3,254 individuals.

MESCALERO APACHE TRIBE

 The Tribe holds elections for the office of president every two years. The eight Tribal Council members also are elected for two years. Election for the Council is held every year, when one half of the members are up for re-election. The Tribe is home to 3,613 individuals.

SOCIAL DETERMINANTS OF HEALTH AND HEALTH TRENDS

The disruption of historic Native American systems of governments, religions, customs, traditions, and economies has led to shocking and disheartening statistics that represent families, children, and individuals living in Third World conditions, while paradoxically inhabiting one of the world's most expensive economies. Years of genocide, isolation, economic and social disempowerment, and the stripping of assets and wealth has caused overwhelming poverty, lack of basic infrastructure, insufficient education rates, poor mental health, and abysmal physical health.

NATIONAL STATISTICS ON NATIVE AMERICANS

Overwhelming Poverty

- Of the 4.5 million Native Americans and Native Alaskans, one in every four (25.3 percent) lives in poverty, and nearly a third (29.9 percent) are without health insurance coverage;
- The 2010 poverty rate on reservations was 28.4 percent, compared with 15.3 percent among all Americans;
- Thirty-six percent of Native American families with children who live on reservations are below the poverty line, compared with 9.2 percent of families nationally;
- More than 60 percent of residents are living in poverty on some reservations in Washington, California, Wisconsin, Georgia, Michigan, North Dakota, South Dakota, Arizona, and New Mexico; and
- Unemployment is higher in rural Native American communities (in some communities 57 percent or higher) than in non-Native American communities.

Myths About Indian Gaming

 Poverty is not countered, in contrast to popular belief, by Indian gaming operations. Among approximately 130 tribes with casinos, only 23 casinos are deemed highly successful in profit generation according to ABC News. Two-thirds of the Native American population does not have casinos and suffers high poverty rates due to lack of economic development.

Lack of Basic Infrastructure

- Over 14 percent of reservation homes lack electricity, ten times the national average;
- One-fifth of reservation households lack running water;
- Nearly 20 percent of reservation homes lack basic kitchen facilities, including piped-in water, a range or a cookstove, and a refrigerator;
- More than half of households on reservations do not have phone service; and
- Fewer than 10 percent of reservation residents have Internet access.
- Insufficient Education Rates
- About three out of every ten Native American students drop out before graduating from high school both on reservations and in cities; and
- Native American adults achieve lower levels of education than the national average.

Historical Trauma Leading to Poor Mental Health

- The suicide rate is 25 percent higher among Native Americans than the overall national rate. Higher rates of suicide have long been tied to alcoholism, drug use, depression, and poverty that are prevalent in many American Indian communities;
- Suicide is ranked as the second leading cause of death for those aged 10 to 34; and
- Native American youth suffer from higher rates of mental health disorders related to suicide, anxiety, substance abuse, and depression than other groups.

NEW MEXICO STATISTICS

New Mexico statistics do not contradict the national Native American data set.

Poverty

 According to the US Census 2010 American Community Survey (ACS), 25.7% of Native American families in New Mexico live below the federal poverty line and 36.9% of Native American children (under 18 years) in New Mexico live below the federal poverty line; • The median household income for the AI/AN population in New Mexico is \$23,440, compared with \$34,133 statewide;

McKinley is the poorest county in New Mexico and also has one of the largest Native American populations in the state.; and other New Mexico counties with the highest population of Native Americans are: Bernalillo, San Juan, and Sandoval.

Myths About Indian Gaming in New Mexico

- Consistent with national trends, poverty is not countered in New Mexico tribal communities, by Indian gaming operations;
- Fourteen out of the 23 Tribes and Pueblos in New Mexico operate casinos, and of the revenues reported in FY 11 for New Mexico Indian Gaming, 5 tribes accounted for more than 65 percent of net win revenues out of the 14 tribes in the state with casinos; and
- The remaining 9 tribes of New Mexico see significantly smaller gaming revenues.

Unemployment

• 43.4 percent of New Mexico Native Americans are either unemployed or not in the labor force.

Lack of Basic Infrastructure

On the Navajo Reservation (which spans locations in Utah, New Mexico, and Arizona), nearly 40 percent of homes are without electricity.

Drop-out Rates

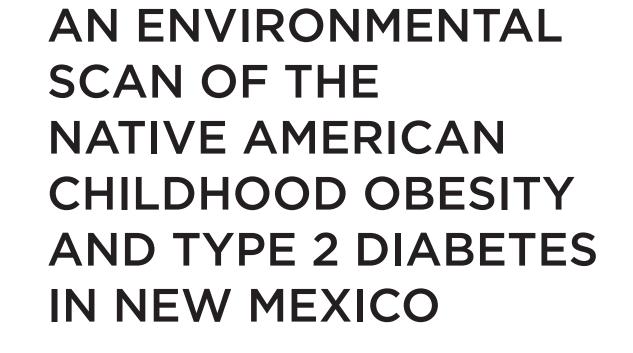
 According to 2005 data, only 45.3 percent of Native American high school students graduate.¹⁰

Suicide

 According to the American Indian Health Disparities in New Mexico (2008), between 2005 and 2007, the suicide rate among AI/ANs in New Mexico was 1.6 times higher than non-Hispanic whites in New Mexico.

These alarming statistics indicate that the growing crisis of childhood obesity and type 2 diabetes in Native American communities is occurring within some of the most challenging socio-economic contexts within the United States. This context cannot be divorced and/or compartmentalized from the development of any strategies to address these health issues. It is also important to remember that behind these overwhelming and heart-wrenching numbers are Native American people who deserve a chance at a future with sound physical, economic, spiritual, cultural and mental health.

The following section presents the primary and secondary research and literature review conducted for this project, providing an important context for the project's four convenings and resulting recommendations. Understanding why things are the way they are as well as the state of Native American health related to childhood obesity and type 2 diabetes will deepen the reader's awareness that this issue has deep historic and complex roots. And yet, groundwork is being laid and recommendations are being made for Native American children to achieve a healthy quality of life – one that will be achievable only with sufficient resources.



Native Americans, once completely self-sufficient and healthy, suffer from the greatest health problems in the United States. In 2003, the U.S. Commission on Civil Rights found that, American Indians are 318 percent more likely to die from diabetes, 630 percent more likely to die from alcoholism, and 650 percent more likely to die from tuberculosis.¹¹

According to the Indian Health Service, the age-adjusted death rate for adults exceeds that of the general population by almost 40 percent, with deaths due to diabetes, chronic liver disease and cirrhosis, and accidents occurring at least three times the national rate. Deaths due to tuberculosis, pneumonia, influenza, suicide, homicide, and heart disease also exceed those of the general population.¹²

NEGLECTED BY MAINSTREAM PHILANTHROPY

Institutionalized philanthropy has not responded at a level equal to the needs in Indian Country. A 1998 Foundation Center study found that the total foun-

Overweight and obesity, the located to Native underpinnings of type 2 diabetes, begins in early childhood varied between 0.5 for Native American children, even before many begin school.

dation funding al-Americans from 1992 through 1996 percent and 0.9 percent of total giving. More recently, a 2002 Foundation

Center study confirmed again this same trend for the period from 1997 through 2000, with funding allocated to Native Americans ranging between 0.5 percent and 0.8 percent of total giving, or less than 1 percent. A 2011 update of the 2002 report revealed that total grant dollars¹³ targeting Native Americans between 2008 and 2009 dropped 30.8 percent, compared to an overall drop of 12.4 percent in foundation giving over the same period, with the share of foundation giving benefiting Native Americans reported during 2000 to 2009 decreasing to .3 percent (please note that all of these percentages are less than 1 percent).

Native Americans in New Mexico have fared better. According to an analysis of 2001 to 2004 Foundation Center data regarding the top 50 recipients of foundation grants in New Mexico, \$159,834,252 foundation dollars flowed into New Mexico, and American Indians received a total of \$11,736,332, accounting for 11 percent of the total grant receipts in the state. However, further and updated analysis is warranted on the ratio of large institutions vs. tribes who received funding.

LAYING THE GROUNDWORK: EXAMINING NATIVE AMERICAN CHILDREN'S HEALTH ISSUES IN NEW MEXICO

To inform and provide a framework for the project's four convenings, a literature review (of peer-reviewed journals, Indian Health Service documents, congressional testimony, and reports from foundations and non-profit organizations) and 23 stakeholder interviews of key public, private, and tribal stakeholders were conducted. This environmental scan of New Mexico's Pueblos, tribes, and off-reservation Native American communities attempted to provide a comprehensive picture of the Native American obesity and diabetes epidemic in New Mexico.

The scan encompassed a review of rates of childhood obesity and type 2 diabetes (nationally for Native Americans and New Mexico); barriers and risk factors; trends in at-risk behaviors; impact of policy at the federal, state, and tribal levels; existing and future opportunities for collaborations; pertinent academic research and community-specific innovations; promising practices; and actionable recommendations.

SUMMARY OF DATA: OBESITY AND TYPE 2 DIABETES IN NATIVE AMERICAN COMMUNITIES

Many Native Americans need only to talk with their friends, families, neighbors, and leaders to know that obesity and diabetes and their impact are becoming ubiquitous in tribal and off-reservation communities. In the past 30 years, the rates of obesity and diabetes have increased so that there is not a mother, father, grandparent, or child who cannot tell a story of how it affects their life or that of their loved ones.

When looking at rates of overweight and obesity, the literature supports experience. A 2003 study of Native American children in Arizona, New Mexico, and South Dakota found that 20.3 percent of second graders were overweight and 28.6 percent were obese.¹⁴ This is consistent with previous findings that 39 percent of Native American children were overweight or obese when compared to 15 percent of children from all other races.¹⁵ More recently, a 2011 report from the New Mexico Department of Health found that when compared with their peers of other racial/ethnic groups, Native American children were more likely to be obese.¹⁶ Astonishingly, 42.7 percent of Native American kindergartners were overweight or obese, and 49.7 percent of Native American third graders were obese.¹⁷ This report perhaps illustrates better than any other the reality that overweight and obesity, the underpinnings of type 2 diabetes, begins in early childhood for Native American children, even before many begin school.

The issues of obesity and overweight among Native American children in New Mexico do not abate as they get older. In the 2009 New Mexico Middle School Youth Risk and Resiliency Survey (YRRS) produced by the Southwest Tribal Epidemiology Center, 34 percent of American Indian middle school students self-identified as overweight while approximately 60 percent were trying to lose weight.¹⁸ This is in the context of 20 percent of the students saying that they had no days with 60 minutes of physical activity, and nearly one-third of the students indicated that they watch 3 or more hours of TV on an average school day.¹⁹ Among high school students, 45.6 percent of Native American students self-identified as overweight or obese.²⁰ The survey also found a significant drop-off in the rate of participation in PE class after 9th grade²¹, and for all grades, over 50 percent of Native American students stated that they had 3 or more total daily hours of screen time with television, telephone and/ or computer.²² The survey also found that roughly a third of Native American students sampled reported drinking a soda once or more daily.²³

Overweight and obesity among Native American youth and children is not limited to on-reservation populations. In 2007, urban Indian youth were found to be nearly three times as likely to be obese or at risk for becoming obese when compared to their peers.²⁴ In addition, a national survey of students in urban areas found that 18.9 percent of Native American high school students self-reported being obese.²⁵

With the increases in the rates of obesity, there is also a significant increase in the rates of type 2 diabetes in Native American children. Indeed, an increase in the prevalence of type 2 diabetes has been observed in Native Americans since the early 1980s.²⁶ The first significant study to show the disproportionate effect of this disease on Native Americans was conducted in Arizona among the Pima Indians.²⁷ Since then, several studies have been run among smaller populations in an attempt to estimate the prevalence and trends of type 2 diabetes in the Native American population. In 2002, a study was conducted using Indian Health Service outpatient data input from 1990 to 1998, finding that the prevalence of type 2 diabetes increased by 46 percent among children, adolescents, and young adults.²⁸ In contrast, the prevalence of type 2 diabetes in the general U.S. population of children and youth during the same time period showed an increase of a mere 14 percent.²⁹ The study also found that while Native American males had a lower overall prevalence of diabetes compared to females, they had a higher relative increase in prevalence over the study time period, indicating that type 2 diabetes is becoming an increasingly significant issue specifically for Native American boys.³⁰

A more recent study called the SEARCH Study was also a significant source of information regarding the prevalence of youth-onset diabetes. The SEARCH study was a large-sample, longitudinal study of diabetes prevalence in multiple racial and ethnic groups including Native Americans, and it is one of only two studies to include a large sample of Native American youth and children.³¹ The objective of the SEARCH study was to describe the incidence of childhood diabetes (types 1 and 2) among racial/ethnic groups. It has produced several important findings specific to Native American youth, namely that Native American children diagnosed with diabetes are more likely to be diagnosed with type 2 diabetes than type 1 diabetes, and 76 percent of all cases of diabetes among Native American youth (ages 10 to 18 years) were type 2 diabetes.³² The study also noted that while type 2 diabetes was found in all racial groups studied, it was less common in those groups than type 1 diabetes, except in the case of Native American youth.33

The average age at diagnosis in the Native American youth surveyed in the study was also much older

(12 years) when compared with other racial/ethnic groups.³⁴ This could be due to many factors, including ease of access to and availability of care, cost of care, and IHS diabetes screening practices among children and youth. Data gathered through a national survey of high school students indicates that there is also a high prevalence of overweight and obese individuals within this age group.

Off-reservation populations are experiencing higher rates of type 2 diabetes as well, although there may be contributing factors to diabetes that are unique to the urban experience. Data on urban Native Americans indicates that the onset of diabetes is at an earlier age than the general population.³⁵ Moreover, during the 1990s, diabetes was labeled as the 5th leading cause of death among the urban Native American population that was serviced by urban Indian health centers.³⁶ It is also important to note that mortality rates increased during this period at a greater pace for Native Americans than for the general population.³⁷

ABOUT THE DATA: ITS LACK OF TRANSPARENCY AND FUNDING LIMITATIONS

The process of conducting the environmental scan also revealed the lack of available health data about childhood obesity and type 2 diabetes among Native American children in New México, particularly regarding type 2 diabetes rates. While the Indian Health Service is the primary health service provider to tribal communities, and is therefore the primary repository for most health data, the transparency of its data and the process for making it available to tribal communities and their allies is complex and fraught with barriers.

A follow-up survey of four tribal communities in New Mexico revealed that while many tribes receive Indian Health Service funding from the Special Diabetes Program for Indians (SDPI) that requires tribes to collect and report data on youth obesity and diabetes, there is a lack of tribes' understanding about how to use this data, why it is important, and how comprehensive evaluation processes can influence the development of holistic programs that have the overall goal of reducing rates of overweight/obesity. The Indian Health Service data that is available can only be shared with IHS service units, tribal grantees, or individual tribes through a formal request process. Individual tribes electing to share data with allies (such as NB3) would need to either sign a data sharing agreement or pass a tribal resolution for NB3 or others to access the data.

Data collection on Native Americans in general is driven by funding priorities. Without earmarked funding and/or policy priorities directing the process, data collection simply will not occur or will occur on a much more limited (and potentially not scientifically valid) scale.

And with limited or no research, there will be no compelling evidence to warrant policy changes and resource development priorities among federal agencies and private philanthropy, exponentially shrinking the visibility of Native American peoples even further and therefore the ability to develop and implement best practices that will reduce this epidemic.

In addition, there is an overall lack of data about Native Americans in general and about their health issues in particular. Researchers agree that:

Historically, our understanding of health disparities within the American Indian and Alaska Native population as a whole has been limited because of the lack of adequate data; our understanding of the health disparities experienced by American Indian and Alaska Native children in particular has been especially so. The literature on American Indian and Alaska Native children's health is relatively small, oftentimes dated, and characterized by descriptive studies of small regional samples, partly because of difficulties in sampling the small, isolated, diverse, and culturally distinct groups that form the American Indian and Alaska Native population.³⁸

IMPACTS OF OBESITY AND TYPE 2 DIABETES

The consequences of childhood obesity and type 2 diabetes are significant, for both the child and his or her family and community. It affects a child's education, with one study finding the high school drop-out

rate 6 percent higher, on average, for youth with diabetes than for youth without the disease.³⁹ The same study found that reduced education duration was also associated, not unexpectedly, with reduced future earnings.⁴⁰ Overweight and obesity is also associated with at-risk behaviors such as prolonged substance abuse among girls and violent behavior/bullying among boys.⁴¹

A child's future health outcomes and quality of life may also be negatively affected. One study looked at a measure called health-related quality of life (HRQOL), which is a statistical measurement of those aspects in a person's life that directly affect their physical and mental health and changes their perception of their quality of life.⁴² This could include their health risks and conditions, how well they are able to move and interact with their environment, their social support, and their socioeconomic status.43 When looking at HRQOL measures, the study found that children who were diagnosed later in childhood, which many Native American children are, exhibited lower measures of HRQOL compared to children diagnosed early with type 1 diabetes.⁴⁴ The study speculates that this could be due to children with type 2 diabetes having more difficulty in controlling their glycemic levels and that they are more likely to experience comorbidities.⁴⁵ Or, especially among girls, the social pressures and selfconsciousness experienced in school and peer groups influences a youth's management of his/her diabetes and thus the overall quality of life.⁴⁶ An early diagnosis of a child with type 2 diabetes decreases the probability of developing costly and disabling diabetes-related complications, or comorbidities, earlier in life.⁴⁷ These diseases include heart disease, hypertension, high cholesterol levels, and diabetic ketoacidosis.48

Families and communities are also negatively affected by these diseases through healthcare costs and generational disease transmission. Studies estimate that approximately 1 in every 3 IHS dollars is spent on treatment for services for adults with diabetes, which constitutes approximately 37 percent of all costs for adult care.⁴⁹ And conservative estimates suggest that diabetes (types 1 and 2) costs the U.S. economy \$92 billion (in 2002 dollars) in direct healthcare costs and an additional \$40 billion in lost productivity annually.⁵⁰ Current projections suggest that costs could rise to \$192 billion by 2020.⁵¹ On a more personal level, the costs of diabetes can extend over multiple generations through intrauterine exposure to type 2 diabetes and gestational diabetes. Studies looking at the generational impacts of diabetes found that children whose mothers had diabetes during pregnancy were at increased risk of developing the disease themselves.⁵² Gestational diabetes can cause congenital anomalies, malformations, and prenatal death if not managed⁵³, and women who experience gestational diabetes have a 20 to 25 percent chance of developing type 2 diabetes within 5 to 10 years of being pregnant.⁵⁴

RISK FACTORS AND BARRIERS TO ADDRESSING OBESITY AND TYPE 2 DIABETES

To understand the reasons for such high rates of obesity and type 2 diabetes among Native American children and youth, and what can be done about them, it is important to understand what contributes to obesity and type 2 diabetes and what makes them so difficult to address. In other words, what are the risk factors for and challenges to addressing obesity and diabetes among Native American youth and children? What are the key factors and areas of opportunity for change?

When talking about risk factors and barriers, it is important to recognize how they are related. A "health risk factor" is a correlation, not a determinant, to developing a disease, and by definition, can be anything increasing an individual's chances of developing a disease.⁵⁵ A "barrier" refers to a social, behavioral, personal, or economic obstacle that creates a level of challenge to reaching a desired outcome or goal.⁵⁶ Risk factors and barriers can be linked, because, frequently, what increases one's risk for becoming obese and/or developing type 2 diabetes is often what makes it difficult to prevent or treat these diseases.

The risk factors most associated with childhood-onset type 2 diabetes include obesity as well as a high concentration of centralized adipose tissue.⁵⁷ Native American children, in particular, are more likely than all other racial/ethnic groups to have increased central body fat.⁵⁸ Additional risk factors associated with childhood-onset type 2 diabetes include:

- Family history of type 2 diabetes⁵⁹;
- High and low birth weights⁶⁰;
- Formula-feeding vs. breastfeeding⁶¹;
- Intrauterine exposure through parental diabetes and gestational diabetes⁶²; and
- Lifestyle behaviors.⁶³

Risk factors for lifestyle behaviors include activity levels, food choices, and larger portions of food. Inactivity is an at-risk behavior that can be compounded by eating larger portions, watching television, playing video games, and being on the computer for long periods of time. Participants described children in the communities as not physically active and spending less time outside than previous generations. This inactivity may be linked to the lack of a built environment

Frequently,

prevent or treat.

what

one's risk for developing obesity

and type 2 diabetes is often

what makes it difficult to

increases

or safe areas to walk, play, exercise, and gather. Studies have shown that the lack of a built environment serves as a barrier to being physically active, which could result in increased obesity and type 2 diabetes rates.⁶⁴ And while the inadequacies of infrastructure in many of New Mexico's tribes is read-

ily apparent, urban areas and the off-reservation population also face this obstacle due to limited outdoor areas that are considered safe.¹⁷

It was also pointed out that overindulgence is not just an issue with alcohol and drugs but also with food. Kiva teachings say take what you need - no more, no less. Overall, we've moved away from this when it comes to food. Food choices such as the high consumption of soft drinks has been looked at as a lifestyle risk factor, with one study examining the rates of soft drink consumption among the Navajo youth, finding that Navajo adolescents consumed more than twice the national average for total soft drink intake.

THE ROLE OF POVERTY

Risk factors and risk behaviors outlined above could be influenced by many factors, varying from location to socioeconomic status. For many, the affordability and availability of healthy foods is a real problem. Full service markets are frequently not as easily accessible as liquor stores or gas stations in rural New Mexico. In addition, the high cost of healthy

foods makes it hard to compete with the cheaper and more easily accessible junk foods that can be quickly purchased. With

At the heart of these issues is poverty...

these circumstances in mind, it is easy to see that people sometimes have no choice whether to eat healthy. Rather the real choice is to eat what is most affordable.

As noted previously, at the heart of these issues is poverty. Many of the participants cited poverty as a significant, if not the most important, risk factor and barrier:

> Poverty goes hand in hand with food access. Tribal poverty is 31 percent higher than other demographics in New Mexico.

> Affordability of food. Poor families spend 30 to 40 percent of their income on food.

...People don't think they have the ability to buy healthy food...[they need to] buy quantity over quality.

SOCIAL INJUSTICE, HISTORICAL TRAUMA, AND NEGATIVE IMPACTS ON CULTURE

Poverty is also associated with other risk factors, including limited physical inactivity, overcrowded or poor living conditions, psychological stress, and chronic illness⁶⁶, and research findings support the notion that traumatic events such as abuse, neglect, or adverse living situations in early childhood are directly linked with an individual's health status later in life.⁶⁷ Indeed, chronic diseases including obesity and diabetes have been linked with adverse conditions and events,⁶⁸ and depression as a risk factor should not be underestimated. One interview participant noted that depression and withdrawal from community was a risk factor that he had observed in the local diabetes prevention program, and the goal was to help clients re-engage in life in the community:

Issues stand in the way of contributing to the community not eating right, [and] not exercising

enough to participate in the activities of the community. Our goal [should be] to be fully engaged. When you are left out, you begin to feel disenfranchised or left out of the life of the community. To know the 'goodness' of being a full participant in the community is important.

Social injustice, historical trauma, forced cultural change and assimilation, and displacement leading to cultural disintegration have been shown to be risk

factors for health outcomes as well. According to literature, historical trauma is the collective emotional and psychological injury both over the life span and across generations resulting from the history of difficulties that Native Americans as a group have experienced in America.⁷⁰

NEGATIVE EFFECT ON NATIVE AMERICAN CULTURE, FOOD, DIET, AND HEALTH

In many cases, changes have led to a distancing from historic activities such as hunting, gathering, and farming that has ultimately changed many Native peoples' relationships with Native American foods and ways of providing for their families.⁷¹ Additionally less healthy, western foods have replaced traditional foods in cultural-related events, and people's attitudes toward food have changed, as evidenced by project participants:

[We] used to have a healthy, sacred relationship with food and with each other. [We] literally ate out of one bowl. That was a healthy best practice. Now we no longer have a healthy, sacred relationship with food. We need to figure out how to restore this.

Underlying all this is to return to the values... our elderly blessed themselves with the foods they ate. They asked for good health, strength, and asked that the food nourish their bodies and mind. Now in this day and age, we have gone away from that practice. We have lost the respect for food and the thankfulness for food.

"We used to have a healthy, sacred relationship with food and with each other...We need to figure out how to restore this."

One participant decried the loss of culture and a way of life dramatically altered by forced cultural change, saying ...in last 30 years, Cochiti [Pueblo] is a classic example of forced impositions of change that came by way of construction of the dam. [Things] changed overnight from an agriculture community and production of our own food. That kind of disruption was both drastic and traumatic in [your] ability to produce your own foods which was an important part of the cultural environment and which had highest value be-

cause it was so closely associated with a spiritual way of life.

Another participant noted, however, that regardless of past experiences and present conditions and diseases, Native American peoples have the strength within their communities to protect and heal their people, saying: We focus too much on the disease and not enough on the strengths

and opportunities of communities to do what they do best. We need to remember that the strength lies within the community, and [community members] have the ability to understand their culture and what they must do to perpetuate and protect it and their communities.

This sentiment was echoed in findings in a U.S. Department of Health and Human Service's 2007 report, Obesity and American Indians/Alaska Natives:

Many traditional belief systems include the concepts of harmony and balance in respect to food, and these concepts can motivate individuals and communities to increase their use of traditional foods and adopt healthier lifestyles (Story et al, 2000). Examples of these types of foods include: wild rice (Minnesota), berries, teas, blue corn (Southwest), squash, roots, beans, salmon (Pacific Northwest) and other fish, fermented foods (e.g., heads and eggs of salmon) seal, beaver, bison (Plains) caribou, deer meat, wild game, whale. Most of these traditional foods are high in protein and low in fat and sugar....One study reported that the extent and use of traditional foods and harvesting practices is often unrecognized or underestimated by non-Native health care providers.

PARENTS AND FAMILIES

Another barrier to improving the incidence of obesity and diabetes in tribal communities include the lack of parental involvement. Participants spoke of how ...both parents have to work and their different schedules result in kids regulating their activities... generally, this means lots of sitting on the couch and how the ones who have the most face-time are those who have the most influence on children.

The literature supports this experience, showing that children of single-parent families are more likely to be overweight or obese than children in two parent families,⁷² and the rise of obesity coincides with increases in women working outside the home.⁷³ This

may be due to a busy parent's reliance on convenient processed food and the likelihood of unsupervised children making less healthy food choices and engaging in more sedentary activities.⁷⁴ ...Mom's not at home cooking food. No one is there to regulate what kids put into their mouths. The kids have this sense of instant gratification.

Sometimes a parent may also not know how to choose and provide healthy foods. One participant speculated that some parents may lack the nutritional education to understand how to provide economic and nutritious meals, and this may create a problem in improving the health outcomes of their children. People have lost their knowledge of what a whole, healthy food balance is, not just in Indian communities, also in many poor communities. Participants felt that it was now more important than ever to educate families about making healthy food choices, with one participant stating that both on and off rez, [you] don't see people cooking as much...we need to provide education to people to make their own food again.

However, one participant felt that this barrier should be tempered with an acknowledgement of personal responsibility in making a choice to eat healthy. It may be the choice of food that people are making. I don't think it's a lack of a grocery store that's accessible, but rather it's the abundance of bad choices that are available.

No amount of nutritional education will improve health outcomes if you do not have access to healthy food.

LACK OF ACCESS TO HEALTHY AND AFFORDABLE FOOD

No amount of nutritional education will improve health outcomes, though, if people do not have access to healthy food. In fact, this was cited as one of the greatest challenges to reducing obesity and type 2 diabetes. The distance to full grocery stores in rural and urban areas and the cost of healthy food and availability were listed as major barriers to prevention of these diseases. Studies state that the rural locations of many tribal communities, as well as food deserts (places where people can't get fresh, nutritious food, where there isn't a grocery store in a mile or two within a person's home)in urban population centers, limit access to high protein, low-carb, and

> low-fat foods.14 And this is a particular problem in New Mexico. If you were to look at the USDA's food desert mapping tool, you would find that two-thirds of New Mexico, including swaths of Albuquerque and most of the areas where tribal populations are located, is considered to be a food desert.⁷⁵ Interview participants

corroborated this finding through their experiences of having to drive 40 to 50 miles one way to buy groceries or to only have candy bars and a few disreputable-looking apples available at their local convenience store.

Studies and participants also mentioned the Food Distribution Program on Indian Lands (FDPIR) as a culprit in limiting access to high quality foods by only providing highly processed and shelf-stable foods, and throughout the interview sessions, mixed feelings about FDPIR were expressed. Some individuals felt that the program could cease to be an issue by providing healthier options and eliminating lard, butter, and white flour, whereas others felt that the program should be scrapped. ...The foods are all wrong for Native American people. White man's food is all wrong. Participants also affirmed that prior to the commodities program there was much stronger healthier eating because food was grown locally.

CHALLENGES TO TRADITIONAL NATIVE AMERICAN FOOD SYSTEMS

With the aforementioned access issues, the challenge of restoring viable food systems in rural tribal communities and urban off-reservation communities becomes a problem in itself. Interview participants commented that the adequacy of local food systems in providing sufficient amounts of healthy food varied by community, and factors included the vibrancy of traditions in gathering, farming, and hunting food; the food choices of community members; and support in communities to create sustainable local food systems. For example, it was mentioned that the Pueblo of Santo Domingo has strong farming traditions, and although not vital, they are still valued as they are really connected to traditional foods, and yet others believed that their community's food system was inadequate to the task. Our local food system does not provide well at all. Hunting is more of a sport rather than a means of obtaining food; farming skills are dying out/ not promoted; adequate water is an issue for farming; ranching is expensive. In order to create a healthy and viable food system, participants discussed the need for efficient ways to harvest, store, and transport the food that is grown and stated that community buy-in and active support from leadership was essential for the long-term success of local food systems.

Additional research supports the fact that a shift away from traditional, indigenous foods has led Native Americans down the path toward poor health.

According to First Nations Development Institute's 2004 report, Time for the Harvest: Native Food Systems in Perspective:

> One of the prevailing theories to explain the high rate of obesity, diabetes, and related diseases among Native Americans is that

traditional foods may be "protective" against diabetes, a benefit that is lost with the adoption of a modernized diet.⁷⁶ The mechanism that is believed to be responsible for this protection is "slow release" carbohydrate foods. Analysis of the insulin and sugar responses to desert plants rich in soluble fiber, such as tepary beans, prickly pear

Consistency and prioritization by tribal leadership in addressing childhood obesity and type 2 diabetes is essential to making a significant impact.

pad, mesquite flour and acorns, has shown that the majority of these traditional foods are slowly digested and therefore do not produce rapid rises in blood glucose.⁷⁷ One possible explanation for the current rise in diabetes among many Native peoples is that through dietary assimilation, they have lost many of these "slowly digested" foods. For example, one study has found that obesity, and perhaps diabetes, is less prevalent among Pima [Indians in Arizona] living in a "traditional" lifestyle than among Pima with a more modernized diet. These findings suggest that a traditional lifestyle, characterized by a diet including less animal fat and more complex carbohydrates and by greater energy expenditure in physical labor, may protect against the development of cardiovascular disease risk factors, obesity and diabetes⁷⁸...In general, there is a growing realization among the medical profession that traditional Native American foods are an important component in preventing and controlling nutritionally-related diseases such as diabetes and hypertension.

LIMITATIONS AND LACK OF FUNDING FOR PREVENTION

Additional obstacles include inconsistent funding and clashing public policy. Funding is frequently a problem for most programs due to its "here today/gone tomorrow" nature, and although diabetes and obesity is affecting children at a rate higher than ever before, funding streams for prevention and treatment are

just starting to respond and adjust their balance between youth and adult diabetes prevention, treatment, and management. There is also concern about the coordination between funding and program efficacy, with one individual stating that there is very little alignment be-

tween what is being funded and what is working, and this limits tribes' and organizations' ability to prove the efficacy of programs and expand them. Moreover, grant funding comes with many stipulations that, for better or for worse, create a challenge for many tribal communities to implement a culturally appropriate program while still adhering to the funding model and requirements. Participants noted that with this cookie cutter approach, it is difficult to maintain programs in tribal communities.

CHALLENGES IN POLICY

Policy was also cited as an issue among the tribal communities. Participants noted that there are clear difficulties associated with clashing policies between different levels of government as well as a lack of consistent policies to address obesity and type 2 diabetes. In addition, it was noted that there is still a clear focus on individual change not on systematic, community based, or environmental changes. Finally, a number of participants noted that constant tribal leadership change often posed obstacles to policy development and implementation.

TRIBAL LEADERSHIP

Finally, it is important to take note of an additional barrier mentioned during the interviews that was not found in the academic literature: that of the lack of consistent tribal leadership in addressing obesity and diabetes among children and youth. Interview participants felt that in a tribal community, consistency and prioritization of this issue was essential to making a significant change, and without it, planning for a healthier future would be difficult.

The biggest challenge is lack of clear vision at the tribal level supported by policy and where we want to end up in terms of health. We're without a destination, so how can we create a map to get to that destination?

...We have to ask ourselves if we have ever talked at Tribal Council level about how to engage our communities in healthy eating and lifestyles and how to create policies for this. As policymakers, why don't we engage in this kind of policymaking? We're not articulating our own vision for where we want our communities to be related to being healthy...Without the policy framework, you'll have individual program people doing good activities without support or context. Unless it's a life-changing event, it's not going to be made a priority. The Tribal Council focuses on access to healthcare and funding, not talking about obesity and diabetes, alcoholism, mental health. Look at the Council. Only one person exercises regularly. One of the steps is to recognize that there is a problem, prioritize and then put resources to it. Look at it as an investment, not a cost.

...When we say we're sovereign, it implicitly says we'll take care of our communities, but sometimes we don't fund these initiatives. Continued prosperity of our communities depends on health. Sometimes our position is that the federal government said it would provide for us based on trust responsibility but this is uncertain and diminishing. Tribes need to take more ownership in underwriting these things that we say are priorities. We need to create our own priorities and back them with dollars at the tribal level and then approach states and feds to cost share.

PROMISING AND EMERGING PRACTICES: INVESTMENTS THROUGH PROGRAMS, POLICY, AND COLLABORATION

The numerous challenges to reducing obesity and diabetes can negatively affect the effectiveness of interventions. However, many tribes and organizations are working hard to overcome these barriers and turn the tide of childhood obesity and early-onset type 2 diabetes. In a survey of programs successfully focusing on obesity and type 2 diabetes prevention, a number of them are being implemented in New Mexico tribal communities. Goals of these programs ranged from increasing access to healthy foods and improving local food systems to increasing physical activity among children and youth and educating them about healthy choices and lifestyles. The following are a sample of the types of programs that have been or are currently being implemented in New Mexico:

Community Gardens and Farming	Indian Pueblo Cultural Center Teaching Garden
	Community Gardens at Schools and Senior Centers
Increasing Access to Food and Nutrition Assistance	Mo-Gro Mobile Grocery Program
	WIC Farmer's Market Program
	Tesuque Food Sovereignty Program
Education-Based Interventions	Healthy Kids Healthy Tribal Communities/Health, Honor, Wisdom Curriculum
	IHS Staying on the Active Path Program
Tribal Diabetes Programs and Initiatives	Wings of America/community and Youth Cross- Country Races
	Native Survivor Eating and Exercise Program
	IHS Diabetes Best Practices
Youth Leadership Development/ After-school Programs	Native Vision
	Southwest Youth Services
Physical Activities	Free Zumba Classes
	NB3 Soccer Program Zuni Youth Enrichment Project (ZYEP)
Marketing/Social Media	Edu-entertainment DVDs
Built Environment Initiatives	Tribal Playgrounds
	Community Centers and Exercise Rooms
	Walking and Biking Trails

Investments are also being made through the realm of policy, with state and federal government and the tribes seeking ways to systematically impact and reduce the rates of childhood obesity and type 2 diabetes among Native American children in New Mexico.

While the federal government has historically been focused on Native American adult diabetes treatment and management and less on prevention of obesity and diabetes, this is beginning to change. The Indian Health Service is placing an increasing emphasis on prevention through community-based and educationbased interventions via its Special Diabetes Program for Indians (SDPI). Out of \$150 million annually appropriated through the SDPI, New Mexico receives over \$6 million for 31 community-directed programs designed to allow communities to create initiatives based on their priorities for reducing and preventing diabetes among their populations, including type 2 diabetes in youth. However, based on research, only one of these programs in New Mexico was found to be focusing on obesity and diabetes prevention for Native American youth.

The federal government also funds a significant amount of research and demonstration projects aimed at finding effective interventions for earlyonset obesity and type 2 diabetes among Native American children. The Centers for Disease Control and Prevention (CDC) funds programs focused on prevention, education, and surveillance of obesity. These programs include the well-known Eagle Books and local programs such as the Traditional Foods Project with the Ramah Navajo School Board. Moreover, with the support of an \$859,000 grant from the CDC's Communities Putting Prevention to Work (CPPW) initiative, the Pueblo of Jemez has implemented a variety of changes throughout the community.

To decrease the prevalence of obesity, the Pueblo of Jemez:

- Supported an afterschool program's implementation of wellness guidelines that requires participating children to engage in at least 45 minutes of daily physical activity and 30 minutes of daily nutrition education. This program serves students from three local schools;
- Sponsored wellness activities for all ages, including

the Healthy Bodies, Healthy Minds program Walatowa Bike Club, "fun runs" and walks. As a result of these activities, the rate of participation in community physical activity events has increased by 50 percent;

- Started efforts to develop a comprehensive school wellness policy that supports increased physical activity, nutrition education, healthy vending options, and farm-toschool options. To date, there has been an increase in the availability of healthy foods and beverages in local schools and at school events;
- Increased the number of local farmers' market vendors from 3 to 17. Vendors accept vouchers from seniors and participants in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and
- Expanded the size of the local community garden by 60 percent. This garden will provide locally grown produce to Jemez schools through a farmto-school program.

Moreover, the federal government has been improving its policies with respect to nutrition standards for public nutrition assistance programs. Over 3,000 Native American women in the state WIC program now have access to fresh, local produce and foods at farmers' markets across the state through a voucher program, and federal regulations are being changed to improve the nutritional quality of the WIC food package, school lunches, and the Food Distribution Program on Indian Reservations (FDPIR).

The State of New Mexico also has a commitment to reducing childhood obesity and type 2 diabetes among Native American populations. While the resources are limited, the state has invested in specific programs, such as the Healthy Kids Healthy Tribal Communities program, through the DOH Office of Nutrition and Physical Activity, to bring curricula and program supports to tribal communities to reduce the rates of obesity among Native American children. The office also monitors obesity rates among youth in New Mexico, including the Native American population, and just published a 2011 report about the state of childhood obesity in New Mexico. There is also

interest in the state legislature to implement policies to create a tax on sweetened beverages sold and provide funding for programs specifically to reduce diabetes among Native Americans in the state.

Tribal policies to reduce obesity and type 2 diabetes

depend largely on the priorities of individual tribes, but many tribes have made strides in this area. The policies include implementing community-based programs and supporting funding through the Special Diabetes Program; increasing access to public health programs in tribal communi-

ties; increasing access to healthy foods; public health policies focused on wellness and healthy lifestyles; generational mentoring; and the transmission of traditions and culture.

UNMET NEEDS

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Native American communities

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overwhelming

limited resources.

Despite all of the investments that have been made through programs and policy commitments, much still needs to be done. Native American communities continue to struggle with overwhelming needs and limited resources. In addition to funding for grant programs and infrastructure improvements, the interview participants recognized a number of other resource needs, including:

- Resources to provide parental education about ٠ healthy eating and cooking;
- Greater flexibility in the funding to allow tribes to design programs appropriate for their communities;
- Greater access to New Mexico-specific data through the Indian Health Service and the Southwest Tribal Epidemiology Center;
- Technical assistance in techniques and models for collaboration across tribal programs; changing federal, tribal, and state health policies; using data effectively; community engagement tools and strategies; and increasing healthy and local foods in schools and tribal facilities and communities;
- Resources to support expansion of local food sys-٠ tems such as farmers' markets and food co-ops; and
- Resources to improve the built environment, like • safe roads and sidewalks, safe places to play, and community facilities.

NEED FOR GREATER COLLABORATION AND NETWORK BUILDING

Our interview participants also placed much emphasis on the need for greater cooperation in order to extend the impact of innovative and fruitful programs and align a myriad of efforts to focus on key priorities. There have been examples of this such as:

- The Southwest Youth Services/VISTA and AMERICORP youth development and soccer programs;
- NB3 Foundation/Pueblo of San Felipe Place-Based Program that includes soccer and community development initiatives;
- Wings of America community and youth runs in partnership with tribal communities around New Mexico;
- Tesuque Farms Agricultural Initiative and Seed Project in partnership with multiple non-profits in New Mexico dedicated to preserving traditional agriculture and food biodiversity; and
- The USDA has also successfully partnered with New Mexico farmers' markets to create food vouchers for WIC recipients to purchase locallygrown foods.

Creating successful collaborations, however, is time consuming and challenging. Often the collaborations in tribal communities are project-based and timelimited due to funding, and it is a challenge to align the interests and agendas of multiple tribes, the state, IHS, and private organizations. Multiple interviewees cited the lack of dedicated resources for the process of collaboration, in time and funding, rather than a lack of vision as the main stumbling block to creating successful and broad-based collaborations. Indeed, interviewees documented multiple potential opportunities for greater and broader reaching collaborations, including joint projects with tribes, private organizations, and the Special Diabetes Program for Indians, expanding the Mo-Gro mobile grocery program to more rural and tribal communities across the state, partnerships with school-based health centers, and partnering on initiatives with the New Mexico Department of Health Native American Partnership program.

When looking at successful and viable collaborations, research suggests that there are several key components. According to researchers John Kania and Mark Kramer, successful collaborations are created through:⁷⁹

- 1. A *common agenda* where all participants have a shared vision for change, a common understanding of the problems, and a joint approach to solving the issues through agreed-upon actions;
- 2. A *shared measurement system* where participants develop a system for consistent data collection and measurement that ensures that all efforts, however varied, remain aligned and accountable;
- Mutually reinforcing activities that allow participants to engage in different activities according to their organizational strengths while will being coordinated through a mutually reinforcing plan of action;
- 4. A *method of continuous communication* that allows open, consistent, and continuous communication between participants to foster trust, common motivation, and a common vocabulary; and
- 5. A *backbone support organization* with staff with specific skills dedicated solely to the planning, management, facilitation, data collection and reporting, and logistics of the initiative. This final component, while requiring resources to implement, was cited multiple times by interviewees as necessary to successful collaboration.

Our interviewees also made several recommendations for collaboration in light of the unique needs of New Mexico's tribal and off-reservation communities and the innovative work that is already being done to address the issues of obesity and type 2 diabetes. They recommend first that any efforts for collaboration take place in the Native American communities where community members can fully participate and the outcomes will be felt. They noted that it is also important to have the right people in the room, both those who can make decisions and fund them as well as community members, youth, and people who actually implement, participate, and give life to the programs. Developing a shared understanding of the issues and a vision for how to address them, including a comprehensive strategy with viable actions, is also important. Any coalition must maintain momentum

and commitment from its participants by investing in innovative programs that are already working and strengthening existing collaborations and networks.

TAKING ACTION TO REDUCE CHILDHOOD OBESITY AND TYPE 2 DIABETES

The need for results-oriented and actionable recommendations that could be undertaken by the NB3 Foundation or a coalition of organizations cannot be overstated. The epidemic of obesity and type 2 diabetes among Native American children in New Mexico has reached a tipping point, and it is solutions, not more talks, that are needed.

The following recommendations have been developed out of community input, interviews, and research, with the goal of making the recommendations actionable, strategic, and focused on systemic change.

- Broad recommendations include prioritizing ways to overcome challenges like access to healthy food and improving the built environment in addition to implementing school-based or community interventions designed to influence behavior. Research indicates that this two-fold strategy may result in larger and long-lasting transformations than just implementing programs promoting behavior change, like nutrition education, alone.
- 2. Based on the findings from the 2011 New Mexico Childhood Obesity Report, NB3 recommends considering prevention programs starting in early childhood and Pre-K, as statistics show that overweight and obesity among Native American children begin before elementary school.
- 3. NB3 would also recommend using an inclusive and collaborative model that is supported by a separately funded backbone support organization, such as the model aforementioned, to pursue new programs and policies. Research conducted during this phase of the environmental scan indicates that such models, supporting the collaboration of multiple organizations, have a better chance of achieving systemic and ongoing change.

Other recommendations from interviews and research include:

- Addressing the economic factors of obesity and type 2 diabetes by working to increase enrollment among qualified applicants for federal nutrition programs (WIC, SNAP, and FDPIR) and work with the state WIC program to expand voucher programs to purchase food at local farmers' markets and co-ops;
- Increasing access to fresh foods in rural tribal areas and urban areas and where food access is an issue for off-reservation populations through expanding programs such as Mo-Gro (Mobile Grocery) program and community gardens;
- Removing sweetened beverages and highly-processed foods from school concessions and/or support legislation to implement a tax on sweetened beverages;
- Working with tribes to create a community health profile and a strategic plan to implement wellness programs and policies in the tribal community if they have not already done so. Such policies could include implementing tribal farmto-school initiatives to increase the availability of fresh foods at tribal schools;
- Promoting tribal wellness policies that encourage physical activity and healthy behaviors in schools, such as nutrition education and requiring participation in a physical activity during the school day or in school sponsored activities for all grade levels;
- Creating alignment between BIE, federal, and state education policies to promote physical activity and wellness, such as changing the BIE policy to allow afterschool programs in BIE facilities;
- Increasing tribal access to hunting opportunities in New Mexico;
- Creating an online, managed data portal for New Mexico-specific data about overweight, obesity, and diabetes which includes data from IHS, Southwest Tribal Epidemiology Center, and the New Mexico Department of Health;
- Collaborating with IHS to implement SDPI community-based initiatives that improves surveillance and prevention of obesity and type 2 diabetes among young Native American children (ages 0 to 10 years) in New Mexico, both on and off-reservation;
- Investing in the evaluation of innovative

community-based programs in New Mexico with the goal of learning from and replicating successful initiatives; and

• Increasing resource development and investment in the above recommendations and prevention programs in Native American communities.



CONVENING 1: PRESENTING THE ENVIRONMENTAL SCAN'S FINDINGS TO KEY STAKEHOLDERS



On April 19, 2012, the research and interview findings summarized above were presented and discussed with 52 representatives from tribes, tribal health programs, state agencies, health organizations, and New Mexico and national non-profit organizations and foundations.

Pueblos represented include Sandia, Isleta, Ohkay Owingeh, Santa Clara, San Ildefonso, Tesuque, Laguna, Nambe, Santa Ana, Zuni, San Felipe, Acoma, and Jemez, as well as the Navajo Nation Special Diabetes Project and the All Indian Pueblo Council.

Foundation and non-profit organization representatives included The Center for Native American Health Policy (CNAHP), housed within the Robert Wood Johnson Foundation (RWJF) Center for Health Policy, Notah Begay III Foundation, First Nations Development Institute, Santa Fe Community Foundation, Albuquerque Area Indian Health Board, Inc., New Mexico Kids Count/New Mexico Voices for Children, McCune Foundation, Farm to Table, Johns Hopkins Center for American Indian Health, Association of American Indian Physicians, PNM, Con Alma Foundation, and Blue Stone Strategy Group.

Federal and New Mexico state government representatives included the following agencies: the New Mexico Department of Health Diabetes Prevention and Control Program, Indian Health Service/ Albuquerque Area Division of Diabetes Treatment and Prevention, Senator Tom Udall's office, New Mexico Department of Health/Healthy Kids New Mexico, and New Mexico House Speaker Ben Lujan's office.

Guided by a professional facilitator (Lesley Kabotie of Kabotie Consulting), the group first divided into 14 subgroups of 2 to 3 people each to consider this focus question:

What actions can we take to unify efforts to combat type 2 diabetes across New Mexico?

Each subgroup shared its set of recommended actions, and upon the entire group's engagement, review, and discussion, the following action areas were developed:

- Share information to drive action;
- Create a movement for healthy lifestyles;
- Mobilize community influencers to achieve strategic outcomes;

- Share information to get everyone on the same page and poised for effectiveness;
- Increase youth leadership and ownership for sustainability of community; and
- Forge and create a vision for Native Americans to unify efforts.

Common themes among the action items were:

- The importance of peer-to-peer learning between tribes, for strengthened networks (with each other and federal resources), and shared best practices;
- Community engagement and community ownership;
- Transparency of and easy access to data and information about activities;
- Youth empowerment and involvement;
- Enhanced and supported tribal government leadership; and
- Emphasis on traditional Native American cultures as a basis for focusing on health, healthy foods, and physical fitness.

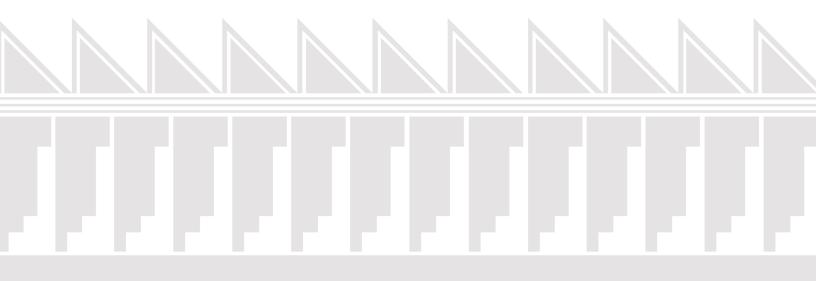
Next, as a representative sample of stakeholders and partners who would drive programs to address childhood obesity and type 2 diabetes in Indian Country, this convening's participants considered their own group's potential for collaboration and related strengths, weaknesses, benefits, and pitfalls. What is recounted here could be extrapolated to be relevant for actual collaborators that could come together to design/conduct programs.

While the strengths area revealed commitment to the issue and teamwork, pooled networks, and a high level of skilled experience, weaknesses were the limitations of time and money, lack of collaboration history, and the potential for miscommunication/lack of information. Benefits included healthier communities with reduced rates of childhood obesity and type 2 diabetes, shared/more efficient operations, shared learning/creativity, and development of culturallybased programs with the potential for replication or adaptation elsewhere. Pitfalls listed were lack of time/ money (again), time needed for a sustained effort in order to make a difference, and turnover of staff and tribal government leaders (through retirement and annual tribal elections). The day's discussions culminated in recommendations for future convenings in this series funded by the Robert Wood Johnson Foundation. The group recommended involving a diversity of allies and constituencies: tribes and tribal departments; foundations; federal and state government grantmakers; government agencies; youth and youth educators; those in academia; and Native American community members (parents, tribal elders, and other leaders).

Recommended topics for future convenings were: strategies about increased engagement with tribal youth, acknowledging and stimulating collaboration partners' motivation for participation, moving toward developing a shared vision and stated goals, continued focus on tribal cultures as the basis for all programs, and how to increase and support tribal government leadership on the issue.



CONVENING 2: ENGAGING TRIBAL LEADERSHIP



Convening 2 was guided by the Convening 1 participants who expressed the need for additional tribal leadership on this issue. A special halfday convening was held on June 19, 2012, for focused discussion on both the challenges and the opportunities to increase tribal leadership and engagement on the issues of childhood obesity and type 2 diabetes. Participants who were involved in one or more of the activities in the two-part second convening of the project included Pueblo Governors, tribal council members, and designated leadership representatives from the Pueblos of Tesugue, Isleta, Santo Domingo, San Felipe, Zuni, Laguna, Acoma, Cochiti, Jemez, Nambe, Ohkay Owingeh, Picuris, Pojoaque, Sandia, Santa Ana, Santa Clara, San Idelfonso, Taos, Zia, and the Chairman of the All Indian Pueblo Council (AIPC).

The dialogue focused on the following areas:

- Insights/reactions to the New Mexico Native American obesity/type 2 diabetes environmental scan conducted by Blue Stone Strategy Group;
- 2. Barriers to leadership engagement;
- 3. The role and importance of culture and its related undermining and challenging features;
- 4. Supportive elements for tribal leaders as drivers of collaboration; and
- 5. Recommendations for tribal leadership action.

First, facilitator Lesley Kabotie guided the tribal leaders in attendance through a process of sharing their reactions to the health data presented by Blue Stone Strategy Group, ranging from alarm, that younger and younger Native children are being diagnosed with type 2 diabetes, to urgency to not only address these diseases but also to attempt to eradicate them.

There is a lack of knowledge about this issue among leadership. We know that diabetes exists, but we don't talk about it. We need to let everyone know and hear from leadership that prevention is key. We need to stop it in any way we can, to help all of us. We are all affected by this in one way or another. ~ Participant

This information is a wake-up call that we're the generation to make the decisions and carry on. ~ Participant

Every tribal leader was shocked at the alarmingly high rates of childhood obesity and the trends that indicate

that type 2 diabetes is on the rise among children. However, when asked, many were not aware of the specific obesity rates and health trends affecting children in their own communities. A number of Governors and leaders pledged to go back and visit with their health program directors to inquire about these health issues and to see what, if any, work was being done in their respective communities.

A number of reasons were cited for the lack of immediate knowledge about this issue and its effect in their tribal communities.

Tribal leaders are reliant on community members and their tribal health program directors to educate them about issues. Tribal leaders are overwhelmed by the range of issues they have to deal with, and they are reliant on these folks to understand issues and what needs to be the priorities and policies that we need to implement, explained one tribal leader. Tribal leaders do care about these health issues, but we are overwhelmed. However, when we can make time, we can attend meetings and express leadership regarding this issue. It is powerful, and they can empower their tribal program directors and people in the communities with policies, resources, and support they need. We as tribal leaders are not spending enough time talking about healthy lifestyles, programs, and policies that need to be developed. We need to make more time for this, prioritize this, and direct resources to support change and frontline work to prevent obesity and diabetes for our children.

This sentiment was repeated by a tribal program director representing her tribal leadership:

Tribal leadership has a zillion things to do daily. [As a result], every tribe needs to have a comprehensive plan...we currently do not have a comprehensive plan in place for programs. The participant added, What has been difficult for diabetes prevention is that we have always involved tribal leadership but most tribal leadership serves on an annual basis, so every year we have to orient new leadership about the health issues. When it comes to funding, we have to do a hard sell and [or it results in] insufficient funding.

This participant and others acknowledged the need for more Pueblos to implement comprehensive

plans around health as a means for programs and interventions addressing childhood obesity and diabetes to have more continuity and long-term viability despite annual leadership changes that occur in the majority of Pueblos in New Mexico.

I'm hoping that all tribes have a comprehensive plan but most don't, so tribal leadership comes into crisis management without a plan, explained one participant. Our great challenge is that the IHS hospital is only for treatment of health issues like diabetes. There are no prevention services in the IHS hospital, which means that this falls on the tribe.

Consensus among leaders and representatives was that this was also an issue for many other Pueblos in that the focus of existing health resources and programs in their communities was geared toward *treatment and management of diabetes and not on prevention*.

THE ROLE OF CULTURE IN PUEBLOS

Another powerful theme of the conversations with tribal leaders was the *role of Pueblo culture* and both the challenges and opportunities it holds within the issue of childhood obesity and type 2 diabetes. Participants universally acknowledged that pueblo culture has an intrinsic set of core values around food and the powerful practical and symbolic role it plays in everyday life and Native American Feast days and other cultural and spiritual traditions. Many also noted that popular culture and mainstream values in the United States that promote overconsumption and unhealthy foods were powerful forces in undermining Pueblos culture and were a major contributor to the health issues facing their children and families.

These observations made by convening 2 participants are consistent with findings in the environmental scan and are also echoed in a report submitted to Congress earlier in the year. According to the recent report, entitled Addressing Child Hunger and Obesity in Indian Country: Report to Congress, submitted in January 2012:

The determinants of overweight and obesity in the United States are complex, but the trend of increasing

overweight and obesity among American Indians and Alaska Natives (AI/AN), as well as the Nation at large, is associated with environments that promote increased food intake and decreased activity (Strauss 2010; Halpern 2007). Historically, the AI/AN diet was higher in complex carbohydrates and lower in fat than current diets and primarily made up of homegrown foods (Halpern 2007). However, there has been a shift in Indian Country, whereby American Indians are eating less traditional food and more food that is commercially prepared and processed, a trend also reported among the U.S. population as a whole. This dietary shift was summarized in a review of reservation-based studies by Story and colleagues (2003) who reported that in the 1990s, dietary fat intake among American Indians was at the high end of or above the currently recommended 25 to 35 percent of total calories, ranging from 31 to 47 percent. AI/ANs have also shifted from a subsistence lifestyle to a lifestyle that involves less physical activity (Mendlein et al. 1997). Research has found low physical activity levels among those AI/ANs living on or near reservations (Mendlein et al. 1997; Yurgalevitch et al. 1998).80

Over time, many Native American communities have experienced changes in cultural understandings and relationships to food. As an example, 75 percent of San Felipe Pueblo (New Mexico) residents surveyed by NB3 in December 2010 perceived traditional events in the Pueblo, known as feasts, as a potential barrier to healthy eating because of the amount of unhealthy foods offered.

Food is a multi-faceted part of life in Native American communities. Its availability (or lack of) influences the health of Native American families, the local economy, and the perpetuation of Native American cultures.

EROSION OF TRADITIONAL CULTURAL VALUES AND THEIR RELATIONSHIP TO FOOD AND HEALTH

One participant noted that the traditional pueblo cultural value of "eat well" and "fill yourself", which is central to our culture, our traditional values, are good values but can perhaps lead our people to overindulge. One pueblo Governor agreed with this trend. We have to look at our systems, we have a throw⁸¹ coming up, and a lot of the food that will be given is unhealthy, soda, cheaper food items from the dollar stores. At those big traditional festivities, we are gifting with each other unhealthy foods. Part of that is driven by economics, but we need to look at how we can address that within our cultures and communities.

Another tribal leader further elaborated on the changes to pueblo culture and the trends he sees in his tribe:

In the past, we used to give one little basket of food. Now it seems like we try to outdo each other, who can give more, who can throw for an hour. Maybe as tribal leaders, we need to go back and remind our communities of the purpose of the throw. The offerings [given at throws] are so much now. Twenty to thirty years ago, the offerings given were just a handful, but now we just try to outdo each other and ourselves, and we are passing this value onto new generations. We shop at cheap places for offerings for pop, Top Ramen, and other unhealthy and cheap items. It is not how much you are giving. How do we educate our communities?

TRADITIONAL CULTURE MUST BE PART OF STRATEGIES AND SOLUTIONS

A great concern was expressed by not only tribal leaders but all participants throughout the course of this project about the erosion of traditional cultural values and lifeways. It was repeatedly echoed by participants that the need to revitalize and strengthen Native American cultures couldn't be divorced from the formulation of any strategies or solutions to address the crisis of childhood obesity and type 2 diabetes among Native American children and families.

In [my Pueblo], we are losing our traditional ways of doing stuff. Our kids would rather watch new media, and when we have traditional activities, they don't want to be involved. Lots of kids come from single-parent families and are losing the ability to learn Native language and traditional ways. We need to focus on teaching our kids their language and culture. It is too easy for us to take our kids to McDonalds. We are always in a hurry, and we need to slow down and teach our children. Everything has a purpose. That is what our Elders taught us, and now we are losing that. We need to fix that. Let's slow down and focus on what we need to do for our kids, our traditional ways, which are healthier ways. Our kids do not how to say their clan, their names [in their Native language], they do not how to harvest traditional foods, but they know how to turn on a computer and operate all kinds of technology.

This need to integrate cultural revitalization at the center of any comprehensive strategy addressing obesity and diabetes among Native American children and families was reiterated several different times by participants.

When we are talking obesity and diabetes affecting our youth and what we are going to do, we need to at the same time address language and cultural revitalization with our young people and families, communities. The two are intertwined, stated one tribal leader.

You have to insert cultural revitalization work with youth, and it must be at the center of all policies that tribal government is developing [about this issue], stated a tribal wellness director.

A number of participants noted that cultural activities, such as community hunts and harvests of crops, serve as powerful unwritten health policies that need to be acknowledged and strengthened.

One participant stated, The more that we have the unwritten and cultural policies that are so important, the more that traditions can reinforce healthy lifestyles. These cultural traditions and practices can be even more powerful and effective than policies made in government.

A diabetes prevention director shared that in the pueblo she serves, We are fortunate to have nice parks and facilities, but if people don't use them then they are not serving the purpose we created them for. We have to promote values around health, otherwise [programs and facilities] do not matter, and people won't use these things. Traditional culture teaches about generosity and modesty, not overconsumption. However, values are moving toward overconsumption and addiction. Basic cultural value systems need to be addressed by tribal leaders, because program directors can only do so much. We program directors need support of tribal leadership to transform and reinforce cultural values around health and well-being.

ADDITIONAL THEMES AND OUTCOMES: LIMITATIONS AND OPPORTUNITIES FOR TRIBAL LEADERSHIP

Leaders discussed how the power of tribal leadership is limited by federal funding that often focuses on diabetes treatment rather than prevention, federal food subsidy programs that allow for purchase of unhealthy foods, and schools that do not recognize overweight/obesity problems.

While recognizing their role to drive tribal policy and manage resources, tribal leaders emphasized the need to work collaboratively and under a comprehensive and culturally appropriate strategic plan to support and empower families and individuals to address this health crisis.

We see that when the programs involve the families, the impact is much better...We can provide the tools, the guidance, and the support, but it all comes back to the family and the support all around the community, including leadership. ~ Participant

The group considered this focus question:

When success requires collaboration between lead-ership, programs, communities, and across Tribes, the role of Leadership is that of a driver in setting the context, priority, and direction of programs and allies. What are some of the blocks that stand in the way of Leadership taking on that role of the driver in this effort?

Collectively, the tribal leaders found the following:

 Balancing tribal empowerment with accepting federal resources and their accompanying strings and the danger of available monies driving the programs rather than programs being need- and community-driven;

- Lack of a comprehensive plan to specifically address childhood obesity and type 2 diabetes; and,
- Need to empower tribal communities from passivity to action and to educate community members about disease prevention.

Next, tribal leaders discussed supportive elements for collaboration, envisioning a future 10 years from now, and agreed upon the importance of:

- Clear communications within the tribe and externally to non-tribal allies and other tribes;
- Community engagement in ways that motivate and empower youth, families, and individuals;
- Policies that are supportive of shared values and commitment to health priorities;
- A wrap-around approach to internal tribal services; and
- Strengthening traditional cultural practices and language and make them central to any strategies and approach to health and disease prevention.

To support leadership engagement, tribal leaders indicated a need for education and information, both internal and external to the tribe, and for the community to come together.

Leadership is not about policy. It is about the heart. ~ Participant

Finally, the group recommended next steps for New Mexico tribal leaders:

- Take a multi-tiered and a multi-tribal approach;
- Increase awareness about this issue nationwide and send the message that tribal leadership and the Native American community does care about this issue;
- Support Native American organizations to lead in advocacy and serve as an intermediary for resource development and investment to help supplement and bolster existing resources for obesity and diabetes prevention for Native American children;
- Intra- and intertribal communications about the effect of programs related to childhood obesity and type 2 diabetes;

- Education of tribal leadership about the childhood obesity and diabetes epidemic so that they can take the message back to their communities;
- Support and reinforce efforts already underway;
- Promote and invest in the strengthening of cultural values and traditions as a means to promote and achieve healthy lifestyles; and
- Have a leadership discussion about health and make a proclamation of taking charge of childhood obesity and type 2 diabetes.

This focused discussion with tribal leadership was followed by the second of half of the second project convening held on June 20, 2012. NB3 presented the research findings from the environmental scan conducted to 60 participants at the monthly AIPC meeting. Established in 1958, the AIPC has served as the political voice of the Pueblos of New Mexico. Twenty pueblo Governors are the official representatives of their tribes on the AIPC. Participants in attendance for the presentation of NB3's research project and discussion of the preliminary findings included pueblo Governors and tribal council members from 18 of the 20 Pueblos in New Mexico and the leadership of AIPC. A brief overview of the project findings to that point and the result of the focused conversations with tribal leaders the day prior was shared with AIPC members.

Following the presentation, NB3 was asked to develop a resolution to put forth to AIPC to have that organization formally support NB3's mission, efforts, the goals and findings of this project, and promote engagement with tribal leadership across the 20 Pueblos. On September 20, 2012, AIPC unanimously passed the resolution and is looking to work more closely with NB3 on developing and implementing comprehensive strategies to reduce childhood obesity and type 2 diabetes in the pueblo communities. Tribal leaders' support for the future strategies and implications of this project will be critical to the long-term effect on the health of New Mexico's Native American children.



CONVENING 3: MODEL PRESENTATION, NETWORKING, AND IDEA SHARING FOR HOLISTIC PROGRAM DEVELOPMENT

Guided by the recommendations gathered in the previous two convenings, convening 3 met on August 7, 2012, with 134 representatives from the Pueblos, tribes, Native American non-profit organizations, youth, philanthropic and state stakeholders, and representatives from a number of non-profit organizations with a focus on food systems, youth, and physical activity.

Tapping collective knowledge, the focus was on discussing promising practices and steps toward building capacity, network building, collaboration, and change in the areas of Native American food systems development, physical activity/built environment programs, and youth leadership development. From these discussions, the purpose of this convening was to expand the consciousness of participants regarding model programs in other communities, how to more effectively consider existing resources and assets that could benefit their programs already in place, and to develop a vision that would be relevant tribally, statewide, and nationally for moving forward an agenda to positively address childhood obesity and type 2 diabetes.

The format began with an opening panel introducing several promising Native American model programs addressing childhood obesity and type 2 diabetes prevention, followed by a series of three break-out innovation and impact sessions, then afternoon actionplanning sessions, concluded by a funder's panel.

The lunchtime keynote speaker, Regis Pecos, former Governor of Cochiti Pueblo discussed the importance of traditional core values and how these values effect the well-being of tribal communities and what this holds for future generations.

Model programs introduced were drawn from Native American communities throughout the country, with a concentration in the Southwest:

 Jeff Metoxen, of the Oneida Community Integrated Food Systems (OCIFS), a tribal department of the Oneida Tribe of Indians of Wisconsin, shared its five food-related agencies that work to assist low income families by institutionalizing an economically-based, community food system that incorporates indigenous food products and creates a local economy, promotes comprehensive responses to local food, farm and nutrition issues, and encourages long-term innovative solutions to hunger on the Oneida Reservation;

- Kristyn Yepa, of the Jemez Pueblo Health and Human Services Public Health Programs, discussed its multi-pronged, community-based programs that encourage tribal members' increased physical activity and control of local food systems as well policy development to promote obesity prevention;
- Carnell Chosa, of the Santa Fe Indian School Leadership Institute, provided an overview on its work regarding creating a space for discourse about a wide range of public policy and tribal community issues challenging the 23 tribal nations in New Mexico. The Institute also provides training to community members and specifically youth on public policy issues in order to create systemic change starting within tribal communities; and
- Mike Roberts, President, First Nations Development Institute, a national non-profit organization, spoke about its asset-building efforts that educate, advocate, and capitalize Native American communities. Since the early 1990s, First Nations has supported hunger, agriculture, and food systems programs.

A following question and answer session allowed participants to gain insight into how elements of these models could be applied to their local situations.

VISIONING AN ASSET-BASED APPROACH: FOOD SYSTEMS, YOUTH ENGAGEMENT, AND PHYSICAL ACTIVITY/BUILT ENVIRONMENT

Morning and afternoon sessions focused (separately) on food systems, built environment/physical activity, and youth engagement and featured participatory discussions guided by facilitators and that encouraged participants to take an asset-based approach in their thinking (rather than focusing first and foremost on financial needs). This interactive process drew on the collective knowledge of those in attendance and encouraged creativity, information sharing, and new ideas.

The three morning sessions centered respectively on the following focus questions:

- Food Systems: What is being done to support tribes and Native American communities as they strengthen food systems in their communities to improve health and nutrition, provide access to healthy and affordable foods, increase food security, and strengthen cultural and economic connectedness to local food systems?
- Built Environment/Physical Activity: What is being done to promote physical activity and authentically engage Native American children and families in physical activity programming as well as in facilities development?
- Youth Engagement: What is being done to actively engage youth as key leaders in their communities? What does effective and sustainable youth leadership programming look like in programs and in communities?

Participants analyzed and discussed elements of successful programs in Native American communities, including what types of supports communities and programs need to build capacity and increase their outcomes. Participants were encouraged to share innovative community practices and themes that make dynamic and successful programs work in their communities.

Below is an overview of key elements and what makes them successful as defined by participants for each breakout session:

FOOD SYSTEMS AND HEALTHY FOOD ACCESS

Key Successful Elements

 Strengthen existing and new efforts through collective community action and participation (e.g., community garden where local harvest is shared, intergenerational programming);

- Build community knowledge about the importance of healthy food through nutrition education and a renewed interest in indigenous foods;
- Provide immediate access to healthy foods and ensure that local farmers are key partners in any healthy foods effort;
- Invest in and support family farms, community gardens (traditional Native American-focused and modern), personal gardens, farmers' markets, Johns Hopkins Mobile Grocery (Mo-Gro) store initiative, school gardens, and any community member who is interested in harvesting and selling their produce; and
- Commit to long-lasting initiative/program implementation (e.g., set goal of 80 percent of community eating at least some homegrown food).

Successful local initiatives/program examples

 Food voucher program with local grocery store, educational grocery store tours, youth change to coalition-sponsored food drive and local garden, Mo-Gro, education/awareness through radio and social media outlets, role models to champion cause, and healthy food options in all stores.

BUILT ENVIRONMENT AND PHYSICAL ACTIVITY

Key Successful Elements

- Promotion of physical fitness must be familyfocused, activities must be fun, and appropriate incentives should be given to inspire personal development;
- All activities, programs, and completion of a community assessment should be supported and guided by the community;
- Invest in programs with measurable outcomes to ensure that positive results are being made over time;
- Invest in infrastructure and resources to provide safe places to play and live; and
- Identify key partners and where program funding could be combined for greater payoff.

Successful Local Initiatives/Program Examples

• Wings Running and Fitness Camps, which include mentorship and leadership development;

Pueblo Crossroads, Partnership with Wings and Neighboring Pueblos; Jemez Prescription Trails; Just Move It Chapter communities; Zumba; cross country; Boys & Girls Clubs; NB3 Foundation Soccer League; 75210 healthy behavior messaging; and organized sports.

YOUTH EMPOWERMENT

Key Successful Elements

- An effort that prioritizes youth opinions, encourages passion for a project, provides education/awareness, and shows real effort through real actions;
- An effort that motivates and encourage youth to work/give back to the community and to become leaders in promoting a healthy body, mind, and spirit;
- A non-invasive process/program in a positive and youth-friendly environment that is inclusive of all community members;
- Provides opportunities for career readiness, promotes team building, and provides effective leadership training for youth; and
- Reflects Native American core values and a culture of community.

Successful Local Initiative/Program Examples

 Project Venture⁸³, NB3 Foundation, Southwest Youth Services⁸⁴, Zumba, running clubs, summer youth employment, youth leadership project/ mentorship, youth summit, revitalization of local farming/agriculture, 4-H programs, school sports programs, focus groups, forums, and talking circles.

PARTICIPANT FEEDBACK: HOW TO CREATE A COLLECTIVE RESPONSE?

The three afternoon sessions focused on forming a collective response, engaging on the following focus question, and ultimately identifying 3 to 5 critical next steps that must take place to support innovative and sustainable programs in Indian Country:

How do you integrate local, individual efforts into a larger movement or network to move the agenda forward in relation to Native American food systems, built environment, and/or youth engagement? What types of support do projects and communities need, aside from financial support, to build capacity and increase their impact? What are the challenges that Native American practitioners and communities face in making lasting and critical impacts within their programmatic areas?

The sessions provided both local views of issues and programs in individual communities as well as larger perspectives of working with federal agencies. At times, the challenge was to channel a focus on the "big picture" while valuing community-based perspectives and priorities. The table below lists the gaps or areas of uncertainty in knowledge put forth by participants that were related to the three breakout session topics, followed by key challenges in moving this work forward. Directly following the table is a summary of the key areas of action and needs for each of the three breakout sessions topics.

FOOD SYSTEMS AND HEALTHY FOOD ACCESS			
Gaps in Knowledge: Individuals and Family	Challenges		
 Limited knowledge of healthy food. Change in culture of food. Does access to healthy food lead to consumption? No clear data. No one collecting body mass index (BMI) data. How to build interest/motivation to garden? How to engage older youth? Health not always a priority. Gaps in Knowledge: Community and Programs Unclear about water and soil resources. Access to farm equipment. Practices differ from what we know and what is right. How to support and provide technical assistance to grow in rural areas. Life issues take precedence. Gaps in Knowledge: Tribal Leadership Unclear health priorities. Funding differences in Bureau of Indian Education (BIE), IHS and, others. Disconnect from families. Tribal food sovereignty not clear. Nutritional food access not a priority. How to get leadership on board? Lack of support and awareness. 	 commitments. Regulations: controlled Farmers' Markets and hard to differentiate between producers and vendors. Community choosing the unhealthy when given the choice. Politics, rapid change in leadership, and territorialism. Changing people's paradigm around health, food, and weight. Income: choices of food and high prices of food in general (\$.99 burger vs. home cooked meal). Cost of retail prices of perceived 'high status' healthy food (e.g., Trader Joe's organic). Mindset of oppression, not wanting to be first to do something and fear of being alone in taking action. 		

	YOUTHEMP	OWERMENT
Gaps in Knowledge: Individuals and Family		Challenges
•	Understanding culture and traditional knowl- edge: What is truly traditional? How to keep kids motivated and participating? Unaware of what is available in community. How to make effective use of time and compet- ing demands. aps in Knowledge: Community and Programs Challenge in navigating programs and systems, including food stamps, housing, and healthcare. Community engagement does not necessarily include youth. What is a holistic approach? Resources and connections unclear. aps in Knowledge: Tribal Leadership Youth voice not embraced, unsure how to en- gage youth. Unclear priorities for youth and health. Do we actually practice things the way we talk about them? Unclear policies in schools. Misconceptions between youth and leadership.	tion gap, and actions.
		ND PHYSICAL ACTIVITY
Ga	aps in Knowledge: Individuals and Family	Challenges
•	Aware but still not active. Don't know how to start and how to encourage consistency once started. How to prioritize health and wellness over basic needs during hard economic times. Building and driving motivation. Change is hard. No clear community planning involvement. Indigenous foods. Some are good yet bad [de- pending on how they are prepared]. aps in Knowledge: Community and Programs Lack of community assessment. No awareness/need. How to encourage participation after incen- tives. Consider sustainability. Unclear about resources/programs available. How to retain program staff. aps in Knowledge: Need to education/involve Tribal Leadership. How can leadership support programs/ initiatives? Unclear regarding importance and overall lack of knowledge. Address fear of using culture and Native American traditions within context of this work. No clear communication. How to get around bureaucratic barriers and create cross-organizational collaboration?	 Competition for Resources. Participation Levels. Motivation to Keep it Going. Buy-in from Tribal Leadership. Personal Responsibility.

FOOD SYSTEMS AND HEALTHY FOOD ACCESS

- Provide consistent and clear, targeted information/education to the community (e.g., community health programs, elders, children, local farmers, and others) about the importance of healthy food and the revitalization of traditional foods;
- Promote healthy eating by providing culturally appropriate, evidence-based, and effective programs in the community (e.g., a healthy food prescription program, a tribal food curriculum, and healthy traditional cooking demonstrations);
- Invest in what works, and share successful programs, models, and experiences across systems, programs, and communities;
- Increase access to healthy foods by promoting the development of tribal community farmers' markets, utilization of the mobile grocery store (Mo-Gro), support of school/community gardens, and the support of local growers;
- Build community capacity to conduct food system data collection and asset mapping to help develop programs, interventions, and policies;
- Consistently and over time, effectively engage and educate tribal leadership and key stakeholders about their roles and how they can help to create measurable change; and
- Build or enhance existing or new partnerships at the local and state level with the goal to coordinate joint efforts, share resources and information, develop networking opportunities, identify and implement effective policy changes (e.g., healthy eating in schools, employee wellness programs, etc.) and finally to designate a core team to establish critical one-year action plans and develop a four-year implementation plan.

BUILT ENVIRONMENT AND PHYSICAL ACTIVITY

- Promote community involvement (ensuring active participation from youth) and ownership from the ground up and conduct community planning and feedback through open planning meetings;
- Provide ongoing education to tribal leaders and council members about the importance of physical activity/built environment and what they can

do to have a positive result in their communities (e.g., support of tribal resolution/proclamation by Pueblos or Tribes);

- Strengthen existing systems, programs, and initiatives by building on and investing in what is already there (e.g., community gardens, trails, coordinate across wellness programs);
- Collaborate across tribes, coalitions, and networks to share information, determine resources (e.g., social media options), foster partnerships, share lessons learned, and develop a shared mission and vision to move this work forward;
- Build local capacity by investing in people, prioritizing staff retention (e.g., compensation), engaging youth volunteers, and sharing successful models;
- Develop key partnerships across systems/programs to define a collective set of goals and activities to support this work; and
- Develop effective local, tribal, and state policies to support above actions. This includes wellness policies (e.g., in work, school, tribal council, afterschool programs), the development of safe playgrounds and gardens, and a safe route to school.

YOUTH EMPOWERMENT

- Invest in and support youth as key partners in developing any health programs, messages, or intervention strategies within the community;
- Build a strong and mutually respectful intergenerational partnership to grow leadership, share wisdom, and build traditional knowledge across generations;
- Educate and build awareness through social media outlets (e.g., post community health facts on the benefits of healthy food via Facebook, Twitter, and others), including digital storytelling to educate, motivate, and build consciousness about the importance of health;
- Provide clear and up-to-date research with the opportunity to provide feedback;
- Build youth capacity and leadership by creating formal mentorships with elders/other adults through informal settings, develop a train-thetrainer model to allow youth to train their peers, and develop youth councils to inform community programs and tribal council;
- Develop key partnerships across systems/programs to define a collective set of goals and

activities to support this work (e.g., a grassroots advocacy to prevent obesity with a 1 percent sales tax on sugar sweetened beverages); and

• Allocate funding by tribal council to support youth empowerment goals and activities.

Ultimately, consensus was developed for both communities/individuals and a national agenda.

CRITICAL NEXT STEPS FOR IMMEDIATE LOCAL ACTION

- Start small. Connect to existing programs and efforts. Be present, build relationships, get involved, take action;
- Educate and get educated. Actively research, read labels, ask questions about food and nutritional values, reinvest in indigenous foods, and talk to others about what you learn. Share the knowledge, raise awareness; and
- Walk the talk. Be consistent in talking about healthy food choices. Demonstrate healthy behaviors with your own food choices and physical activities. Be a good and intentional role model every day!

CRITICAL NEXT STEPS FOR ACTION BY TRIBES, ORGANIZATIONS, AND ALLIES

- Create a shared vision and plan that integrates each of the program areas (food systems, built environment/physical activity, and youth engagement) to help guide communities, programs, tribal leaders, and other key allies in building effective partnerships to invest in and share resources and efforts to collectively increase results;
- Establish or build on existing groups/partnerships to share data, information, best practices, and support peer-to-peer learning, advocacy, and collaboration regarding these issues;
- Build community and larger capacity of New Mexico Indian Country to address these health issues affecting Native American children by conducting relevant data collection and asset mapping to help develop programs, interventions, and policies;
- Invest in programs and strategies that are working and achieving measurable results;

- Health Media Campaign. Mobilize Native American youth as key champions in the community and ensure that tribal communities and youth are central to all health promotion efforts;
- Strengthen existing community and tribal leadership to develop effective policies. Central to developing effective policies is ensuring that tribes and communities are actively involved, educated, and participating in their data collection and dissemination at the community, local, and state levels; and
- Increase resource development and investment by foundations, federal government, tribes, and private sector to support prevention programs, research, policy development, and advocacy.

Collectively, participants reflected that communication and culturally-based engagement is an absolute necessity to building momentum and supporting success and sustainability.

A funder's panel concluding the day featured representatives from the McCune Foundation, New Mexico Community Foundation, First Nations Development Institute, and Con Alma Health Foundation. Each outlined each their organization's grantmaking priorities and emphasized the importance of relationship/dialogue building and grant-seekers staying true to their programs and actually making the ask.



CONVENING 4: OBSTACLES, CHALLENGES, AND OPPORTUNITIES TO IMPROVE DATA COLLECTION, SHARING, AND MANAGEMENT

On August 21, 2012, nine representatives from state, federal, tribal, and non-profit entities dealing with health data collection pertaining to Native American children and communities convened to discuss barriers, challenges, and opportunities to improve data collection, sharing, and management.

If information is power, then the basis of much information is data that contributes to research, resulting in (optimally) informed policy decisions, program development, and best practices, as well as funding priorities. The topic of this convening followed from next steps recommended during Convening 3 and common action themes developed during Convening 1 and the environmental scan conducted at the beginning of the project.

Underlying much research conducted about Native Americans in the past (and present) is the lack of benefit of the research to Native American communities. Native Americans have been the willing and sometimes unwilling participants to cataloging their circumstances, issues, and lives, often for the personal benefit of the researcher or a non-Native institution. While information about and provided by Native Americans benefits the general good, increased Native American control of, access to, and participation in conducting data collection/research will result in higher quality products and greater relevance. Research and data collection, to maximize quality and benefit, must be conducted in partnership with Native American communities.

Moreover, sharing data/research results with the affected and participating communities will put into community members' hands the knowledge to begin to take charge of their health futures.

Organizations/agencies represented at this convening were the Indian Health Service, New Mexico Kids Count/New Mexico Voices for Children, the Center for Native American Health Policy (CNAHP), housed within the Robert Wood Johnson Foundation (RWJF) Center for Health Policy, Notah Begay III Foundation, and Albuquerque Area Southwest Tribal Epidemiology Center (AASTEC).

The group first reviewed sources of and access to Native American health data related to obesity and type 2 diabetes. Guided by facilitator Lesley Kabotie, participants then considered the following focus questions during morning and afternoon sessions:

What is the current reality with data collection and dissemination? Who is doing it? Where is the data? What are the parameters of accessing what's out there?

What is working well with existing data collection and dissemination?

What is missing or not working well?

What are the strengths, challenges, opportunities, and risks tied to data collection, storage, management, or sharing?

What are practical approaches to overcoming hurdles tied with data collection and management? What are the next steps in forging efforts to overcome these hurdles together?

Sources of data discussed by the group were the New Mexico Department of Health, Indian Health Service, the Centers for Disease Control (particularly the Youth Risk Behavior Surveillance System), U.S. Census, Robert Wood Johnson Foundation, Johns Hopkins Center for American Indian Health, and AASTEC.

The group's discussion revealed the limitation of some data sources and methodologies. Some other sources of data (e.g., Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), Child Care Centers, Head Start programs, and home visiting programs) may not collect Native American-specific data. Other data-based reports may not include a statistically relevant representation of the Native American population. Still yet, a lack of consistency in data collection and context may not allow for effective comparison and tracking of trends. Some health-related data focus on chronic diseases that have already manifested and are at reportable levels and so may not show developing trends.

Complicated or sometimes entire lack of procedures to share data limits its access. As stated above in the Laying the Groundwork section, Indian Health Service data about specific tribes may be shared with Indian Health Service units, tribal grantees, or individual tribes, but only through a formal request process. Individual tribes electing to share data with allies would need to either sign a data sharing agreement or pass a tribal resolution for NB3 or others to access the data. Lack of understanding by tribes about this process and how it would benefit Indian Country is widespread. Even within small communities, data may not be shared due to lack of awareness of what other departments need to know and/or a lack of accessibility process in place.

Those convened considered the following considerations:

Is the lack of access to data because we just don't ask/ know we can ask/know how to ask? Is the process of asking for data understandable for tribes and other key stakeholders? Are there administrative changes in the Indian Health Service's or state processes to make data more transparent/accessible?

The group itemized the following needs:

- Data gathered should encompass qualitative fields as well as quantitative (e.g., behavioral and attitude changes, etc.);
- Both tribal leaders and tribal community members need to deepen their understanding of how to use data; why it is important (e.g., how data influences philanthropic and federal funding priorities, policy direction); and how comprehensive evaluation processes can influence the development of holistic programs that have the overall goal of reducing rates of overweight/ obesity. Tribal leaders need to understand how they can use the data to educate their communities and federal/philanthropic funding sources. Empowering community members with this enhanced understanding will help override the short tenure/turnover issues of tribal leadership;
- Beyond the tribal level, available data needs to be synthesized/analyzed to show the forest for the trees. Data systems are rich, but need to make associations between the existing data for deeper analysis; and
- Tribal government capacity and tribal program capacity needs to be built (along with any needed infrastructure enhancement) to improve access to/understanding of the Indian Health Service's Resource and Patient Management System (RMPS) and ability to collect/store data.

The following are the group's resulting recommendations/next steps:

- Small-scale model development, supported with financial assistance and capacity-building technical assistance that will include a component about data collection and evaluation;
- Leveraging of developed models for a "big picture" understanding of grassroots data-related capacity-building needs and the resulting trends presented by captured data;
- A map of all the various Native American data sources and how to access them;
- Training Indian Health Service staff about which of its data is able to be shared and how to communicate effectively with tribes regarding data access;
- Training tribes about how to create data sharing agreements to make accessible Indian Health Service data related to their tribe; and
- Convening tribal leaders to educate them about the importance of/effective collection of health resource data and to solicit their concerns regarding the collection, storage, analysis, sharing, and use of data.

FINAL RECOMMENDATIONS FOR NEXT STEPS TOWARD CREATING A

COMPREHENSIVE RESPONSE TO THE CRISIS OF CHILDHOOD OBESITY AND TYPE 2 DIABETES AMONG NATIVE AMERICAN CHILDREN



The following are several themes that continued to surface throughout the process of this project:

- Initiatives must be community-driven, not merely community-based;
- Culturally-relevant and culturally-based strategies (e.g., program design, implementation, and policy development) that incorporate the importance and power of Native American cultures, traditions, history, and languages;
- Collaboration and effective communication within communities and among tribes and other allies to create and move toward a shared vision;
- Involvement with/engagement of tribal youth;
- Acknowledgement of efforts already underway, while supporting new models;
- Leadership needed both from the top down (tribal leaders) and from the community up; and
- Need for more resource development and investment by foundations, the federal government, tribes, and the private sector to support needed prevention strategies, education, network building, collaboration, policy, and advocacy on the issue.

Moving forward from these underpinnings, participants acknowledged several needs to address:

- The need for real and effective information about what is happening on the ground in tribal communities to better inform them about what can be done;
- Public awareness and education of tribal leaders, community members, philanthropic organizations, and decision-makers about the obesity epidemic and the ensuing health crisis that is negatively affecting Native American children and their families;
- Investment in programs, data collection and management systems, community assessments, evaluation, policy development, and advocacy;
- Capacity-building technical assistance and training for tribal organizations and communities, including a focus on evaluation and data systems; and
- Strong and effective policy development at the federal, state, and tribal levels to help support obesity prevention strategies and efforts.

The following recommendations will positively influence the various components developed by project participants: food systems and healthy food access; youth empowerment and engagement; built environment and physical activity; capacity-building of tribes, organizations and programs; data collection and evaluation; and policy development. Collectively, the recommendations will have positive outcomes on Native American childhood obesity and type 2 diabetes.

Recommendations are to:

- 1. Conduct tribal/community socioeconomic and environmental assessments to truly understand the existing challenges and opportunities in conducting effective obesity prevention strategies for individual tribes.
- These assessments would include demographic, socioeconomic, and environmental data. For example, this type of mapping could gather information on the community environment, looking at the built environment (access to parks, walking trails) and proximity to healthy food (the number of tribal members involved in agriculture, the nearest supermarket, the number of fast food restaurants). This in turn would provide a better understanding of how these factors influence the health of Native American children and would help to develop key strategies.
- 2. Implement a strong, clear, culturally relevant and consistent national and locally-focused health communication campaign to raise awareness of the obesity epidemic affecting Native American children and communities. A key part of this campaign message will be to focus on:
- How place matters (social determinants of health) and the unique environment in which most tribal communities live;
- The strong connection to culture and language, revitalization of Native American healthy eating and physical activity; and
- Raising awareness and focused action by tribal leadership and leadership within the field, philanthropy, federal institutions, and policymakers that have a role and responsibility for Native American health and children.

- 3. Encourage collaboration and create opportunities for technical assistance, education, and training. Develop a statewide collaborative network/ structure to foster peer-to-peer learning, support cross-sector collaboration, promote evidencebased program evaluation and research, feed into data collection and build on what works across tribal and non-tribal programs, communities, and organizations within the core areas.
- Participants advocated creating a shared vision and plan within each of the areas (food systems development, physical activity/built environment programs, and youth leadership development) to help guide communities, programs, tribal leaders, and other key allies in building effective partnerships to invest and share resources and efforts that will collectively increase results. As part of this network and helping to develop the approach, participants advocated building on existing research and key models to develop this network.
- 4. Increase resource development and invest in targeted models to strengthen Indian Country's efforts to prevent childhood obesity.
- Strong recommendations were made to find ways to increase federal, state, philanthropic, and tribal funding to support obesity and diabetes prevention for Native American children that includes supporting programs, development of best practices, research, policy development, technical assistance, network building, communications, advocacy, and capacity-building within tribal programs and non-profits to administer and evaluate effective programs.
- 5. Explore and identify ways of increasing advocacy and appropriate policy development at the community, tribal, state and federal levels to support obesity and diabetes prevention strategies and efforts.
- Invest in and support community, informal and culturally-based policies that work;
- Work to overcome challenges of leadership changes in tribal communities to policy development and implementation; and
- Invest in training to promote advocacy and policy development.

- 6. Invest in Native American-led organizations, tribes, communities and initiatives to lead this work.
- Invest in the leadership and organizational development within Indian Country to help lead change in their communities and state;
- Foster opportunities for collaboration with non-Native American strategic partners and collaborations around research and best practices; and
- Consult with tribal communities and include them in program design and implementation.
- 7. Respect and Invest in the Strengthening of Native American cultures as a necessity to reducing childhood obesity and type 2 diabetes.
- Language and traditional cultural values and lifeways regarding food, physical activity and other types of activities must be strengthened and reinforced.
- 8. Create a model for collaboration in New Mexico that is inclusive and has a shared vision for reducing childhood obesity and type 2 diabetes, to pursue new programs and policies. Characteristics of such a model would include:
- A common agenda where all participants have a shared vision for change, a common understanding of the problems, and a joint approach to solving the issues through agreed-upon actions;
- A shared measurement system where participants develop a system for consistent data collection and measurement that ensures that all efforts, however varied, remain aligned and accountable;
- Mutually reinforcing activities that allow participants to engage in different activities according to their organizational strengths while being coordinated through a mutually reinforcing plan of action;
- A method of continuous communication that allows open, consistent, and continuous communication between participants to foster trust, common motivation, and a common vocabulary; and
- A backbone support organization with staff with specific skills dedicated solely to the planning, management, facilitation, data collection and reporting, and logistics of the initiative. This final component, while requiring resources to implement, was cited multiple times by interviewees as necessary to successful collaboration.

These recommendations derived from convening participants also provided a strong basis to reiterate recommendations found in the initial phase of the environmental scan.

Based on the findings from the 2011 New Mexico Childhood Obesity Report, NB3 recommends considering prevention programs starting in early childhood and Pre-K, as statistics show that overweight and obesity among Native American children begin before elementary school.

Additional recommendations cited:

- Resources to provide parental education about healthy eating and cooking;
- Greater flexibility in the funding to allow tribes to design programs appropriate for their communities;
- Greater access to New Mexico-specific data through the Indian Health Service and the Southwest Tribal Epidemiology Center;
- Technical assistance in techniques and models for collaboration across tribal programs; changing federal, tribal, and state health policies; using data effectively; community engagement tools and strategies; and increasing healthy and local foods in schools, tribal facilities, and communities;
- Resources to improve the built environment like safe roads and sidewalks, safe places to play, and community facilities;
- Addressing the economic factors of obesity and type 2 diabetes by working to address poverty and to increase enrollment among qualified applicants for federal nutrition programs (WIC, SNAP, and FDPIR). Work with the state WIC program to expand voucher programs to purchase food at local farmers' markets and co-ops;
- Resources to support expansion of local food systems and increasing access to fresh foods in rural tribal areas and urban areas and where food access is an issue for off-reservation populations through expanding programs such as farmers' markets, food co-ops, Mo-Gro (Mobile Grocery) program, and community gardens;
- Removing sweetened beverages and highly-processed foods from school concessions and/or support legislation to implement a tax on sweetened beverages;
- Working with tribes to create a community health profile and tribal/community-specific strategic

plans to implement wellness programs and policies in the tribal community if they have not already done so. Such policies could include implementing tribal farm-to-school initiatives to increase the availability of fresh foods at tribal schools;

- Promoting tribal wellness policies that encourage physical activity and healthy behaviors in schools, such as nutrition education and requiring participation in a physical activity during the school day or in school sponsored activities for all grade levels;
- Creating alignment between BIE, federal, and state education policies to promote physical activity and wellness, such as changing the BIE policy to allow afterschool programs in BIE facilities;
- Increasing tribal access to hunting opportunities in New Mexico;
- Creating an online, managed data portal for New Mexico-specific data on overweight, obesity, and diabetes that includes data from IHS, Southwest Tribal Epidemiology Center, and the New Mexico Department of Health;
- Collaborating with IHS to implement SDPI community-based initiatives that improve surveillance and prevention of obesity and type 2 diabetes among young Native American children (ages 0 to 10 years) in New Mexico, both on and off-reservation;
- Investing in the evaluation of innovative community-based programs in New Mexico with the goal learning from and replicating successful initiatives; and
- Increasing resource development and investment in the above recommendations and prevention programs in Native American communities beyond IHS.

CONCLUSION

To move forward, NB3 plans to help foster these discussions and provide ongoing support to the best of its ability and resources to continue the project's momentum in response to the strong interest and need across New Mexico Native American communities for investment in their children's health. NB3's goal is to help serve as a catalyst, bridge builder, and partner in a broader, comprehensive, consensus-based movement dedicated to informed and concerted action to turn the tide on the epidemics of childhood obesity and type 2 diabetes that New Mexico's Native American children are facing.

NB3 has been honored to be both a steward and a protégé on this amazing journey in learning more about the barriers, challenges, and opportunities collectively confronted in fighting for the health and future of New Mexico's Native American children. NB3 looks forward to engaging partners and all the stakeholders about this issue to foster meaningful and comprehensive steps that will produce measurable results, achievements and long-term change in the health and lives of Native American children, their families, and their communities.

ENDNOTES

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3 The United States Constitution specifically mentions the relationship between the United States federal government and Native American tribes three times. These Constitutional provisions, and subsequent interpretations by the Supreme Court, are today often summarized in three principles of U.S. Indian law:

- Territorial Sovereignty. Tribal authority on Indian land is organic and is not granted by the states in which Indian lands are located.
- Plenary Power Doctrine. Congress, and not the Executive Branch, has ultimate authority regarding matters affecting the Indian tribes. Federal courts give greater deference to Congress on Indian matters than on other subjects.
- Trust Relationship. The federal government has a duty to protect the tribes, implying courts have found) the necessary legislative and executive authorities to effect that duty.

4 Under the authority of the Commerce Clause (Article I, § 8, clause 3), which authorizes Congress to regulate commerce "with foreign Nations, and among the several States, and with Indian Tribes" and under the Treaty Clause (Article II, § 2, clause 2), which grants exclusive authority to the federal government to make treaties on behalf of the United States.

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APPENDIX: ADDITIONAL PROJECT BIBLIOGRAPHY



COMMUNICATIONS OR PROMOTIONS:

http://www.nb3foundation.org/august-convening.html. A page from the NB3 Foundation website to report about the August 2012 convening, provide a list of critical next steps for action, and share speaker presentations. The site had 686 visits through August 31, 2012 hosted by the Notah Begay III Foundation based at Santa Ana Pueblo, New Mexico.

Facebook page on Notah Begay III Foundation regarding Convening to combat childhood obesity and type 2 diabetes, which will take place at the Institute of American Indian Arts with First Nations Development Institute. *http://www.facebook.com/notahbegayfoundation*, 429 share/like/comment actions as of August 7th, 2012.

MEETINGS AND CONVENINGS:

Alvin Warren and Christina Stick, *Environmental Scan of Childhood Obesity and Type 2 Diabetes in New Mexico Native American Communities* presented at the April 19, 2012 convening by the Notah Begay III Foundation, April 19, 2012, Santa Ana Pueblo, New Mexico.

April 19, 2012 Agenda: Collaborative Convening about Reducing Diabetes and Obesity Among Native American Youth, hosted by the Notah Begay III Foundation. Santa Ana Pueblo, New Mexico.

June 19 and 20, 2012 Agenda: Tribal Leaders Forum on Youth Obesity and Diabetes held at the All Indian Pueblo Council and Santa Ana Pueblo, New Mexico.

August 7, 2012 Agenda: Convening about Combatting Childhood Obesity and Type 2 Diabetes in New Mexico: Pathways Forward Through Native American Food Systems, Youth Leadership Development, and Physical Activity, Santa Fe, New Mexico.

August 21, 2012 Agenda: Data Convening about Childhood Obesity and Type 2 Diabetes in Native American Children in New Mexico, Santa Ana Pueblo, New Mexico.

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REPORTS:

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