FY 2024

Impact Report

IHS Produce Prescription Pilot Program (P4)

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Food Insecurity in American Indian and Alaska Native (AI/AN) Communities

The United States Department of Agriculture (USDA) defines food insecurity as the lack of consistent access to enough food for an active, healthy life.[1] The prevalence of food insecurity among AI/AN households often exceeds 20%, compared to the national average of 10-12%.[2,3] In 2018, nearly 1 in 4 AI/AN households experienced food insecurity, double that seen in the general US population (24.0% vs.11.8%, respectively).[4] Further, food insecurity is worsened in AI/AN communities by environmental-level factors, such as water insecurity,[5,6] loss of traditional land, forced relocation, and environmental pollution, all which have disrupted the traditional healthy food practices of AI/AN communities.[7,8] Many scholars and AI/AN leaders have called for improved access to traditional foods and food sovereignty to decrease food insecurity in AI/AN communities.[3,9]

Addressing Food Insecurity in Tribal Communities

In September 2022, the White House Conference on Hunger, Nutrition, and Health brought together elected officials, advocates, business and health care leaders, public health, and philanthropy from across America. During the Conference, the Administration announced their goal to "end hunger in America and increase healthy eating and physical activity by 2030 so fewer Americans experience diet-related diseases while reducing related health disparities." Strategies and action items were identified to achieve this goal and split across five pillars. The Indian Health Service (IHS) Produce Prescription Pilot Program (P4) specifically focuses on pillar 2, integrating nutrition and health; to prioritize the role of nutrition and food security in overall health, including disease prevention and management, and ensure that our health care system addresses the nutritional needs of all people.

Congress authorized $3M for the IHS to create and implement a program addressing food insecurity in the AI/AN population.

Over the past 10 years, one strategy to address food insecurity implemented by public health, non-profit, and government organizations, has been produce prescription programming.[10] Produce prescription programs help meet the needs of individuals and families experiencing food insecurity and diet-related health problems by making fruit and vegetables more readily available to communities in need.

The IHS issued a Notice of Funding Opportunity for the P4 inviting tribes, tribal organizations, and Urban Indian Organizations (UIOs) to apply for a 5-year cooperative agreement. The following five tribes/tribal organizations were awarded in 2023 to implement a produce prescription program in their communities:

- Laguna Healthcare Corporation: New Mexico
- Muscogee (Creek) Nation: Oklahoma
- Navajo Health Foundation - Sage Memorial Hospital: Arizona
- Pascua Yaqui Tribe: Arizona
- Rocky Boy Health Center: Montana

Image 1. Map of P4 Sites

The purpose of P4 is to establish produce prescription programs through collaborations with stakeholders from various healthcare and food industries in tribal and urban communities. The aim of P4 is to demonstrate and evaluate the impact of produce prescription programs on AI/AN people and their families, specifically by reducing food insecurity; improving overall dietary health by increasing fruits, vegetables, and traditional food consumption; and improving healthcare outcomes.

Selecting Pilot Programs

The Notice of Funding Opportunity was open for application from April 24, 2023 to June 8, 2023. A total of 60 applications were submitted and scored through an objective review process, in which external reviewers across the U.S. participated in the process led by the IHS Division of Grants Management and the IHS Division of Diabetes Treatment and Prevention (DDTP). Of those applications, 59 met the eligibility criteria for funding, but only 5 were funded due to budget limitations.

Funding for the P4 started July 2023, followed by the P4 Grant Kick-off held in August 2023. See Table 1 for grant years and budget periods related to P4.

Fiscal Year (FY)	P4 Grant Year	Budget Period
FY 2024	1	July 1, 2023 to June 30, 2024
FY 2025	2	July 1, 2024 to June 30, 2025
FY 2026	3	July 1, 2025 to June 30, 2026
FY 2027	4	July 1, 2026 to June 30, 2027
FY 2028	5	July 1, 2027 to June 30, 2028

Table 1. P4 Grant Year and Budget Period

Supporting P4 Grantees

The IHS DDTP is responsible for overseeing the programmatic and administrative aspect of the P4 grant. As part of this responsibility, the DDTP created a grant support team led by the IHS National Nutrition Consultant, who is also the Project Officer of the P4 grant. The P4 support team consists of subject matter experts in the areas of nutrition and produce prescription programming.

The P4 grantees have received technical support from the support team in a variety of ways including monthly meetings (group and individual), site visits, and programmatic webinars designed to help orient the grantees to the grant administrative requirements.

The P4 support team has fostered meaningful relationships amongst P4 grantees using a cohort model. In Year 1 (FY 2024), P4 grantees met as a cohort nine times allowing them to share ideas, connect with one another, share wins/challenges, and discuss how to overcome barriers they have encountered. This approach to sharing and learning from one another has been a major success. The P4 support team adhered to this approach by closely overseeing the programs and providing P4 grantees with technical support, including troubleshooting ways to improve access to healthy and traditional foods, as well as innovative ideas to incorporate nutrition education.

To provide more individualized assistance, the P4 support team hosted 44 one-on-one grantee calls in the first year. Meeting regularly with each grantee allowed the P4 support team to provide specific technical assistance and foster strong partnerships with one another. The P4 support team also traveled to each grantee's community for an in-person site visit. The intent of these five site visits was to establish a better understanding of how their program operates. Seeing the different site locations helped the P4 support team understand some of the unique barriers/challenges that the grantees were encountering based on their geographical location and infrastructure.

Timeline for P4 Year 1

July 1, 2023 - June 30, 2024
FY 2024

Year 1: Building Program Infrastructure

Developing a produce prescription program is challenging, from establishing new partnerships with food producers, community food organizations, and farmers -- to setting up distribution models and delivery systems. The logistical aspect of launching a produce prescription program requires time, dedicated staff, patience, and collaboration.

The P4 grantees experienced their own unique ways of building their programs' infrastructure during the first year. All five programs started from scratch and did not have pre-existing produce prescription programming or resources. The first step in project development for each grantee was identifying someone to lead the program. Once P4 leads were identified, they began building a team. This was demonstrated in a variety of ways; some programs designated staff from other departments within their organization, while others hired new staff.

The P4 grantees experienced and overcame many obstacles while building their programs' infrastructure during Year 1. As each program began building, they all expressed that they experienced administrative delays related to standard processes for approvals, purchasing, establishing agreements (i.e., Memorandum of Understanding or MOU), and hiring new employees. Developing finance procurement policies between partners and tribal administration was also identified as a time-consuming process throughout Year 1.

Additionally, delays were experienced in developing job descriptions, including approvals, and posting of open positions to fill staffing needs. These delays resulted in delays in the implementation process, including enrolling participants and prescribing produce or vouchers.

Establishing Partnerships

To gain the trust of community members early on, P4 grantees sought partnerships with existing, longstanding community-based programs. Gaining community support is vital to the success of any new program and the P4 grantees all built and strengthened partnerships during their program development. Working through the logistics of building community partnerships, establishing agreements with vendors (e.g., local grocers, farmers, tribal health programs), and developing new procurement and financial processes were experienced by all sites during Year 1. As grantees were building their programs in the first year, they collaborated with partners and leveraged resources, such as strong referral systems and staff.

Locally, each P4 grantee partnered with its respective tribal health care center and community-based programs who have well-established connections to the community, such as the IHS Special Diabetes Program for Indians (SDPI) and the Good Health and Wellness in Indian Country (GHWIC).

P4 grantees also partnered with local farmers and grocers, depending on the identified community needs. To help alleviate barriers to transportation, P4 grantees worked with their tribal Community Health Representative (CHR) program and/or a local transit service. Some programs offered transit vouchers, provided transportation to the store and farmers' market, or made home deliveries.

Building Anchor Teams

The staffing structures at each of the grantee sites vary, and the P4 leads have diverse professional backgrounds (e.g., medical, community health, agriculture). This diversity of backgrounds and experiences have brought different management perspectives and approaches to the programs. While the P4 grantees have an anchor team consisting of a director/coordinator, their team also includes support staff who work in a variety of roles, representing both clinical and community health capacities. The grantees initially recruited staff from other departments in their respective organizations and added P4 duties to their existing roles. For example, some support staff roles included receptionists, medical assistants, nurses, as well as CHR's and wellness center department staff. However, some programs hired full-time staff to solely perform P4 implementation duties. One common theme experienced across all programs was the realization that additional full-time staff were needed to continue program growth.

Setting Up Systems

The process of setting up new procurement and financial procedures included challenges such as difficulty pairing bank accounts with local grocer partners and delays in setting up new systems with vendors. Three of the five programs who partnered with grocers, developed a voucher system which varied by the rurality and types of grocers and program structures. Some of the partners were tribal-owned, small grocery stores, while others were larger, regional, chain grocers. One of the programs worked in partnership with their tribal convenience store to provide fresh produce for the first time to both P4 participants and other tribal community members.

The timeframe to begin program implementation by each grantee varies depending on their individual circumstances. Some took a cautious approach by taking the time to develop policies and procedures to support program infrastructure, while others started implementation right away and relied on a trial-and-error method. Examples of program development include the creation of participant agreement and intake forms, establishing a memorandum of agreement with vendors, communication strategies, recruitment, referral processes, screening procedures, distribution methods, data collection, and the development of an evaluation plan. Distribution and delivery methods varied between issuing vouchers or on-site produce distribution. The grantees using the voucher system provided vouchers to be redeemed at local or tribal-owned grocery stores. For on-site produce distribution, grantees provided pre-filled boxes, or bags for participants to self-select seasonal produce at each distribution site. While one site was not fully implemented in Year 1, their plan included a hybrid model by which participants would have the choice of either having their food order delivered to their home or shopping at a local grocery store vendor with a voucher.

Community-led Priorities

All five P4 grantees were actively engaged with community members in identifying community priorities in the development and implementation of their programs.

Examples of outreach included roundtable discussions, satisfaction surveys, and informational gatherings. The data collected by P4 programs was used to inform their program development processes and was not shared outside of their organization.

Degrees of Implementation

With the premise that P4 is a pilot program, grantees are given autonomy to establish their own unique paths to implementation. Because of this, program implementation started at varying times for each grant program during Year 1. There were 3 core areas of P4 implementation, as shown in the image below.

Both core areas 1 and 2 were dependent on organizational approvals and processes, including establishing legal agreements and time-intensive procedures oftentimes controlled by an external entity. However, implementing nutrition education programming (core area 3) was an activity each individual grantee could fulfill at the program level without needing extensive approvals in order to begin.

The start times of each core area are indicated in the timetables below, shown by quarter.

Q1 = July, Aug, Sept (2023)	Q3 = Jan, Feb, Mar (2024)
Q2 - Oct, Nov, Dec (2023)	Q4 = Apr, May, June (2024)

Core area 1: Recruitment and Enrollment

Program	Q 1	Q 2	Q 3	Q 4
1				
2				
3				
4				
5				

Core area 2: Distribution

Program	Q 1	Q 2	Q 3	Q 4
1				
2				
3				
4				
5				

Core area 3: Nutrition Education Programming

Program	Q 1	Q 2	Q 3	Q 4
1				
2				
3				
4				
5				

P4 Year 1 At-a-Glance

487
screened positive for food insecurity
Using the U.S. Adult Food Insecurity Survey Module

470
enrolled
based on individual program requirements

Food prescription VALUE ranged from
$50 - $240
per month / per participant

263
received
nutrition education

Nutrition Education Programming

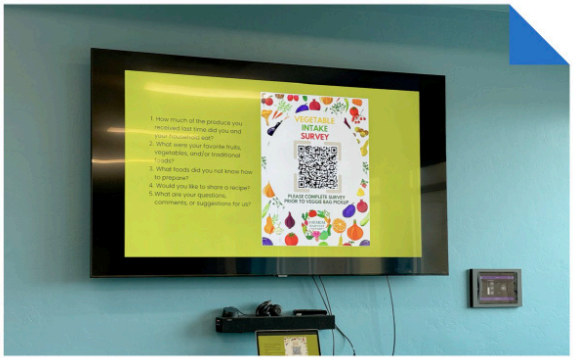
All grantees are required to implement a nutrition education program that teaches program participants about healthful nutrition and the impact it has on disease risk reduction. Not only was nutrition education a requirement of the grant, but it was often requested by community members. The grantees adapted nutrition education programs to meet their community's specific needs and incorporated nutrition education topics highlighting local, traditional foods. These classes taught participants about the cultivation, preparation, and ways to integrate traditional foods into meals. Some programs demonstrated the importance of nutrition education and prioritized the launch of their program, even before the logistics of food distribution were finalized.

Collaboration and Leveraging

Some communities already had community health programming that included a nutrition education component. P4 grantees found that leveraging existing partnerships, such as their SDPI and elder nutrition programs, was an efficient way to extend the reach of these efforts. Some also contracted with Registered Dietitians who led classes on how nutritious foods can help prevent and manage chronic diseases. Others relied on health educators and CHRs to help support nutrition education and outreach.

Improving Access to Education

Most P4 grant programs are in remote and rural settings. Staff make nutrition education activities more accessible to attend by offering a wide range of formats such as virtual, group, and one-on-one settings. They also offer classes at various sites where community members gather (e.g., Navajo Nation chapter houses, satellite clinics, community buildings) and offer options to assist with transportation since transportation is a large barrier for many participants. Offering a variety of options to enhance access to education is a promising practice to take into future years of P4.



Nutrition Topics of Focus

P4 grantees developed education plans to offer nutrition lessons on a monthly cadence, while also offering special topic workshops periodically. The most covered topics in P4 nutrition education activities included *how* to:

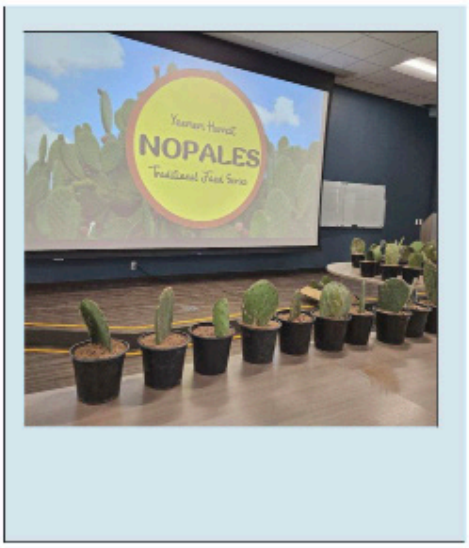
- Prepare traditional foods
- Use fresh produce
- Cook healthy recipes

Below are some examples of innovative ways P4 grantees have implemented nutrition education programming.

Preparing Traditional Foods	Making deer jerky	Partnered with tribal members who hunt to provide game meat for workshop
Using Fresh Produce	Trying new foods and recipes	Offered food tastings and creative recipes for foods, such as Bok choy, eggplant, and sushi
Cooking Healthy with Traditional Foods	Cooking traditional Navajo recipes	Contracted with a local, Diné dietitian to offer cooking demonstrations using traditional Navajo foods and recipes

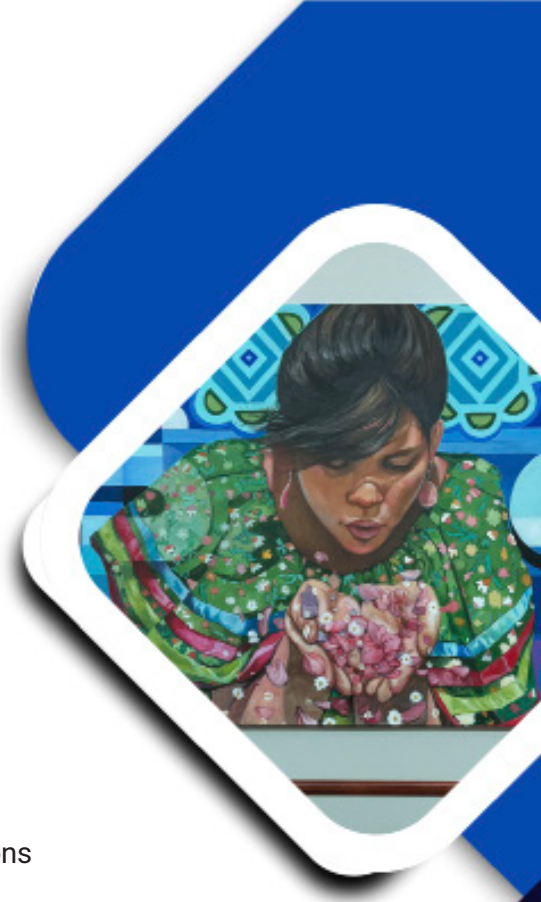
Additional topics included:

- Benefits of increasing fruit and vegetable intake
- Food safety basics
- Gardening
- Cooking plant-based meals
- Making vegetable and fruit smoothies



Key Findings for Year 1

The key findings from the Year 1 Annual Progress Reports included shared themes, such as common issues during implementation, how barriers were addressed, emerging best practices, P4 support team observations, and future technical assistance needs.



Finding 1: Shared Challenges

Screening and Eligibility

The first challenge grantees shared early in the implementation phase was the screening process for food insecurity. One of the initial steps in enrolling participants was to determine if they were eligible to enroll. To be eligible for services at each P4 site, participants would need to screen positive for food insecurity using the U.S. Adult Food Security Survey Module. The grantees shared that this screening process seemed irrelevant given the high rates of food insecurity in tribal communities. Additionally, the survey module has not been validated for the AI/AN population and the survey questions were not culturally relevant for their community members, resulting in inaccurate screening results. To address the challenges reported by the programs, some P4 grantees added additional questions, and some administered the screening individually by walking each participant through the questions to ensure clarity and understanding.

Transportation

Most sites experienced transportation barriers getting participants to clinic visits and nutrition education classes, grocery store trips to use vouchers, or picking up food boxes. To help alleviate these barriers, programs partnered with local transit programs and offered transportation vouchers to participants, where applicable. Additional ways grantees addressed transportation barriers included partnering with their CHR's to transport participants to the grocery store, clinic, or delivering food boxes to their homes.

Establishing New Partners

Working through the logistics of building community partnerships, establishing agreements with vendors (e.g., local grocers, farmers, tribal health programs), and developing new procurement policies were also common challenges.

Grantees who collaborated with grocers worked through various issues as they built their partnership and procurement policies. However, one grantee was successful in developing streamlined processes while building new programs into vendor software. There were multiple examples of newly developed policies and procedures that emerged during Year 1 of P4.

Quality Control

One community voiced their concern about a local grocery vendor not offering quality, fresh produce for P4 participants to use with their vouchers. The P4 grantee in this situation met with community members and started working closely with the store management to troubleshoot methods to ensure better quality fresh produce was available for participants.

Access to a Registered Dietitian

There were additional challenges for some sites regarding limited access to a Registered Dietitian (RD). For example, one site only had access to an RD two days per month for individual medical nutrition therapy appointments. The lack of access to an RD also led to some programs administering all nutrition education activities and classes, without assistance from a nutrition professional. The sites have addressed the lack of RD access by exploring ways they can contract with RD's for telehealth visits and group nutrition education classes. Additional ways grantees have worked through this challenge are by training CHR's and other P4 staff in health coaching.

Finding 2: Peer Learning and Technical Assistance

The P4 grantees have gained meaningful insight from one another throughout Year 1. The valuable, shared experiences led to establishing best practices through peer learning with each other and the P4 support team. One emerging theme across all sites included the tailored approaches to design community-led programs that were based on community input/feedback and local partnerships. The grantees kept the community engaged and informed throughout the implementation of each of the programs.

Community engagement activities included surveys administered periodically throughout participation, and round table discussions.

There were multiple examples of changes to programming based on community identified needs and input. For example, some sites began opening their voucher and delivery system to include farmers' market options based on community identified requests. One site began engaging and partnering with local farmers and opened their community's first ever farmers' market, while another site partnered with vendors at a local farmers' market to accept P4 vouchers from participants.

The P4 grantees are required to report on the participants' use of services offered by their programs such as changes in consumption of produce. Grantees identified difficulties in determining whether participants have increased their consumption of fresh produce and traditional foods. Consumption of fresh fruits and vegetables is a time-intensive, self-reported survey measure, and P4 grantees found it challenging to monitor changes in consumption because participants often share food with other members of their household. To improve information accuracy and participant experience, grantees have suggested measuring participants' access to fresh produce and traditional foods rather than consumption. In response to this challenge, one grantee site developed a survey tool to measure fruit and vegetable access and shared this tool with the cohort.

Finding 3: Community is Key

The P4 support team experienced many unique observations during Year 1 of the pilot program. For example, P4 outreach to tribal communities to offer increased access to nutrition education classes and workshops. There were a large variety of classes and workshops provided by all programs, but one similarity they all shared was that they were inclusive and open to the entire community.

Community Impact

Practicing the inherent value of upholding family and community interconnectedness, P4 grantees knew nutrition education activities needed to be widespread to better sustain behavior and lifestyle change for participants. Therefore, nutrition education activities were not just for the participants but included all members of their household, with many households being multi-generational. It's evident that adopting a community-wide approach to nutrition education helps initiate and support behavior change with an extended reach.

Recruitment and Outreach

Grantees screened and recruited participants through a variety of community events to create widespread buy-in and support of the program. Recruitment activities included hosting the following:

- Community health fairs
- Walk or run events
- Movie night to watch a film on tribal food sovereignty

Local Partners

Grantees have partnered with dedicated, local grocery retailers for collaboration and support providing produce and supplementary foods for P4 participants. Additionally, some grantees cultivated relationships with their local farmers and hunters to help source fresh produce and traditional foods to participants.

Finding 4: Importance of Multidisciplinary Care

P4 grantees worked with their tribal health clinic teams and had the ability to obtain clinical markers such as hemoglobin A1c (A1C) and blood pressure. The grantees shared stories about how working closely with participants and monitoring health outcomes brought enhanced understanding of the importance of providing nutrition education to their participants. They were able to provide real-time education, based on clinical measures.

For example, while participants enjoyed improved access and consumption of fruit, some with diabetes experienced an increase in their A1C numbers. The grantee was able to make the connection between a rise in carbohydrate consumption from increased intake of fresh fruits and the effects on elevated blood sugar levels. This turned into a two-fold learning opportunity. First, for the P4 grantee, to enhance their nutrition education programming to include preventative education when discussing with participants which produce to select with their produce prescription voucher. Second, for the participant, to improve diabetes management by understanding the effect of carbohydrates and portion sizes on blood sugar.

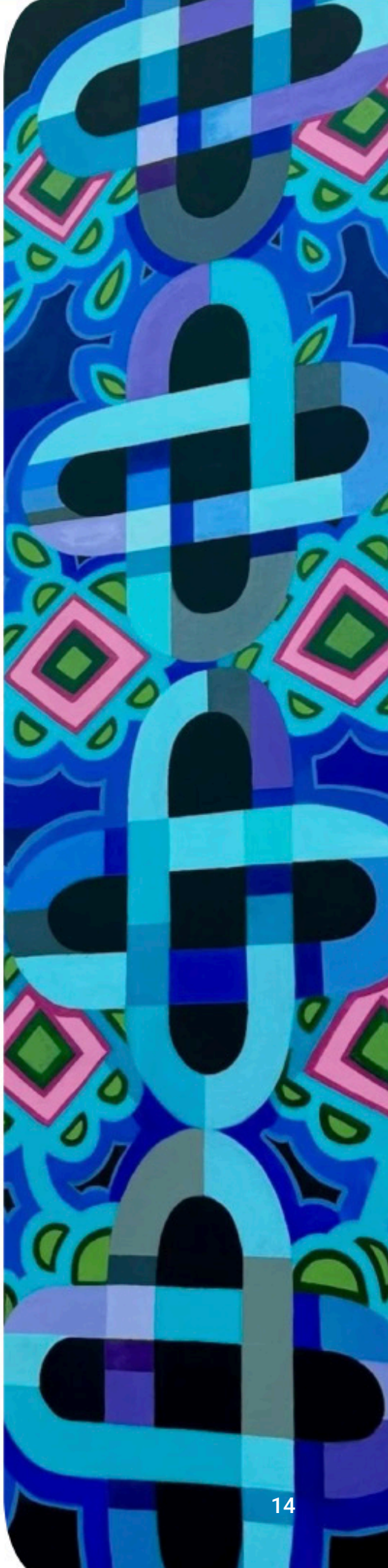
Knowledge Gaps and Opportunities for Year 2

During FY 2025 (year 2 of the 5-year grant program), the IHS will modify the P4 enrollment criteria to include a larger pool of participants into the P4. Participants may no longer be required to have a positive "food insecurity" score to enroll into the program. The U.S. Adult Food Security Survey Module will continue to be administered to all participants, but their score may not determine eligibility for the program. Additionally, the grantees have requested a better, culturally adapted food insecurity screening tool appropriate for AI/AN communities. The P4 grantees are interested in participating in the development process for the new tool.

The P4 support team will work with grantees regarding ways to enhance nutrition education for participants as an opportunity to provide technical assistance. Additional gaps to be addressed include identifying ways to assess and track changes in nutrition knowledge in each of the P4 sites' nutrition education classes.

To further assess program outcomes, the IHS is working with grant programs to capture the following metrics:

- Food insecurity rates over time, according to the U.S. Adult Food Security Survey Module
- Number of produce prescriptions issued and redeemed
- Consumption of and/or access to produce and traditional foods
- Change in health care outcomes
- Participation in nutrition education programming



Area to Monitor: Economic Impact

The programs stimulated local economic growth supporting hunters, farmers, and other food retailers. While the direct impact was not captured in Year 1, the P4 is exploring ways to measure the economic impact in future years.

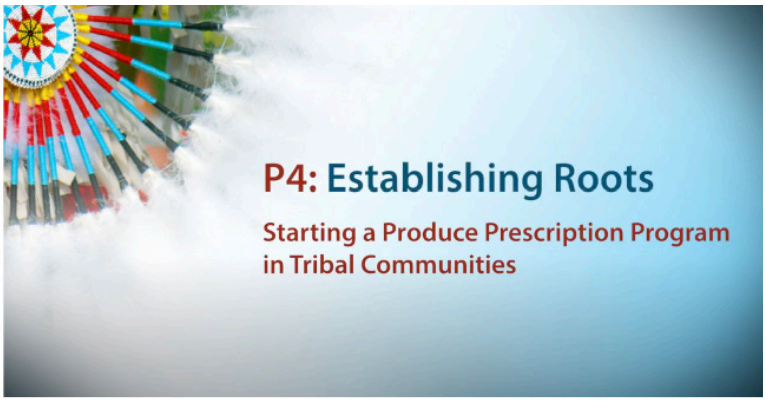
The P4 support team found that the majority of P4 grantees experienced an overall lack of quality and robust data collected due to limited resources, capacity, and coordination. The grantees shared that the data collection process they developed was very time-consuming and labor intensive. Therefore, they are exploring other options, such as seeking out additional resources and software that would be more efficient. However, two sites had developed a data collection and tracking system by the end of Year 1. Opportunities for the P4 support team will include working with those grantees who have developed efficient data collection and analysis best practices and share those practices with other P4 grantees.

Conclusion

P4 grantees are already witnessing the positive impact P4 has had on their communities. Although challenges may continue as program implementation progresses, grantees have expressed that they feel supported by local organizational leadership, as well as the P4 support team. The capacity building achieved during Year 1 has been instrumental in the success of each individual program. The P4 support team and grantees will continue to learn from one another and share how P4 impacts tribal communities.

P4 StoryBraid

Watch this brief video to learn more about the grant recipients' experiences in their inaugural year of the P4 grant program.



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Acknowledgments

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