2019 Diabetes Report

Produced by USET Diabetes Program and Tribal Epidemiology Center
Overview

In accordance with the United States’ (US) trust obligation to provide healthcare to American Indian/Alaska Native (AI/AN) communities, Congress established the Special Diabetes Program for Indians (SDPI) in 1997 to address the growing rate of diabetes and related complications within Tribal Nations. United South and Eastern Tribes, Inc. (USET), an inter-Tribal organization that represents the collective interests of 27 federally recognized Tribal Nations located within the 13-state Indian Health Service (IHS) Nashville Area, is a recipient of SDPI funds. USET administers these funds to many USET Nations and provides consultative diabetes support services. As part of these services the USET Tribal Health Program Support (THPS) team produces a USET Tribal Nation aggregate diabetes report. USET is highlighting the significant gains in the health and wellbeing of USET Tribal Nations and their citizens. These gains would not have been possible without the assistance of SDPI funds. USET shares stories that demonstrate these gains in the spirit of collaboration that has been a hallmark of USET since its inception.

As part of the annual SDPI application process, the USET Area Diabetes Consultant selects areas of improvement from the previous year’s aggregate Diabetes Care and Outcome Audit data in an effort to improve the quality of clinical care for patients with diabetes in the Nashville Area for the upcoming year. The highlighted improvement areas were selected in August 2017 (using 2016 clinical data) and were to be addressed in 2018. This report compares 2016 and 2018 clinical data in order to assess a full year of improvement efforts. Also included is the Nashville Area’s age-adjusted diabetes prevalence rate in comparison to all of IHS and US all races. A snapshot of the Nashville Area’s most important diabetes-related data is also featured in the report.

The USET THPS team is proud to provide a thorough analysis of identified improvement areas and age-adjusted prevalence. USET hopes that this information, along with the snapshot and success stories, will assist Tribal Nation leaders and policy makers in understanding the success and the continued need of SDPI.

“Since 1997, Congress has supported the Special Diabetes Program for Indians (SDPI) to help prevent and treat the deadly epidemic of diabetes across Indian Country. The SDPI investment is consistent with the trust and treaty obligations of the United States to ensure for the overall health and wellness of Native peoples. As a result, while there is still much further to go, the SDPI investment has resulted in a measurable decrease in the onset of diabetes, a reduction in related complications, healthier choices, and lives saved. Without question, the SDPI program has positively contributed to the long term health, wellness, and survival of native peoples.”

- Kitcki Carroll, USET Executive Director
Snapshot

- The burden of diabetes in the AI/AN population is greater than in other racial and ethnic groups. The prevalence rate, or the percentage of a population that is affected with diabetes, was 22.8% for Nashville Area Tribal Nations in 2018.
- The 2019 IHS Diabetes Care and Outcome Audit analyzed the records of 81% of patients diagnosed with diabetes. Based on this sample, USET estimates that 1,385 of the 6,927 (20%) patients in the diabetes registry were classified as severely obese (body mass index [BMI] 40+).
- Managing a patient’s ABCs (A1C, blood pressure, and cholesterol) can lower their risk of heart attack, stroke, or other complications. Nashville Area patients with diabetes continued to manage their ABCs in 2018. Based on the records analyzed in the Audit, USET estimates that:
  - 3,602 of the 6,927 (52%) patients diagnosed with diabetes achieved an A1C less than 8%.
  - 4,710 of the 6,927 (68%) patients diagnosed with diabetes achieved a blood pressure below 140/90 mmHg.
  - 4,156 of the 6,927 (60%) patients diagnosed with diabetes whose low-density lipoprotein (LDL) was tested had a value below 100 mg/dL.
- Diabetes and obesity are major risk factors for cardiovascular disease (CVD), including heart attack and stroke. According to the 2014 USET Mortality Report, CVD was the most common cause of death in the Nashville Area. Statin medication helps prevent heart attack and stroke by lowering cholesterol, and is recommended for patients who have elevated cholesterol. Based on the records analyzed in the Audit, USET estimates that:
  - 2,909 of the 6,927 (42%) patients diagnosed with diabetes were also diagnosed with CVD.
  - 2,065 of the 2,909 (71%) patients diagnosed with both diabetes and CVD were prescribed a statin drug to lower cholesterol.

Diabetes Demographics

Data extracted from patient records:

- 59% of persons age 65 and older had been diagnosed with diabetes.
- 43% of persons ages 45-64 had been diagnosed with diabetes.
- 15% of persons ages 20-44 had been diagnosed with diabetes.
- 1% of persons under age 20 had been diagnosed with diabetes.
- 21% of females in the USET user population had been diagnosed with diabetes, which is greater than the percentage of males (19%).
- 42% of USET patients diagnosed with diabetes had been living with the disease for more than 10 years.
Prevalence

Prevalence rates are percentages that measure how often a disease or condition occurs in a population. The AI/AN population tends to have a higher percentage of young people than other populations so simple prevalence rates may not provide accurate comparisons. This is especially true with diseases such as diabetes which do not affect all age groups equally. A technique called age-adjusting allows for accurate comparisons between populations with different age groupings. The graph below shows the Nashville Area age-adjusted diabetes prevalence rate compared to the IHS-wide rate and a similar US all races rate (adults only)\(^1\). Please note, age-adjusted IHS-wide data was not available for 2016-2018.

Evaluation of Improvement Areas Selected for the 2018 Grant Year

Health disparities among American Indians/Alaska Natives (AI/ANs) are well researched and documented. AI/ANs have the highest rates of diabetes among all racial/ethnic groups in the US. With Special Diabetes Program for Indians (SDPI) grant funds, Tribal Nations are able to implement and improve upon prevention and treatment programs that impact diabetes and the complications associated with this chronic disease.

The management of diabetes and its complications is expensive because people living with diabetes are more susceptible to chronic problems such as high blood pressure, cardiovascular disease, and chronic kidney disease. With the assistance of SDPI funds, Tribal Nations are able to invest in prevention activities that can mitigate healthcare costs and improve the quality of life for people living with diabetes.

As part of the SDPI grant application, USET selects several areas of improvement. For the 2018 grant year, USET chose the following three improvement areas:

**Glycemic Control**

Nashville Area Tribal Nations successfully increased the percentage of patients living with diabetes who had an A1C below 8% from 47% in 2016 to 51% in 2018. When patients living with diabetes are able to maintain a healthy A1C, disease complications can be slowed or prevented. Diabetes complications have a substantial impact on the direct medical cost of diabetes.¹

**Obesity**

Obesity is one of the biggest drivers of preventable chronic diseases and healthcare costs in the US. Obesity is associated with job absenteeism, costing approximately $4.3 billion annually² and with lower productivity while at work, costing employers $506 per obese worker per year.³ Nashville Area Tribal Nations were not successful at decreasing the percentage of patients living with diabetes who are severely obese, but they were able to maintain the obesity rate of 19% from 2016 to 2018.

**Diagnosed Cardiovascular Disease and Statin Prescriptions**

Statin medications benefit people who have cardiovascular disease by lowering their risk of heart attack and stroke. Statins help lower low-density lipoprotein (LDL) cholesterol, also known as “bad” cholesterol, in the blood. They draw cholesterol out of plaque and stabilize plaque. Plaque is a waxy substance consisting mainly of cholesterol deposits that can build up within the walls of the arteries, interfering with blood flow to and from the heart and leading to heart attack and stroke. Nashville Area Tribal Nations were successful in increasing the number of patients living with diabetes and cardiovascular disease that were prescribed a statin medication from 68% in 2016 to 71% in 2018.

SUCCESS STORIES: POARCH BAND OF CREEK INDIANS

The Special Diabetes Program for Indians (SDPI) has had an impact for one special group within the Poarch Band of Creek Indians (PBCI). In 2014, Marsha Fendley, a Registered Dietician, and Donna Johnson, a Registered Nurse, both Certified Diabetes Educators, started traveling to the Pensacola, Florida area with intent to engage Tribal citizens that were affected by diabetes. Pensacola is approximately 50 miles from the reservation. Many expressed that the Tribal citizens who lived in the Pensacola area often felt left out of the loop and disconnected from events and classes offered at the main reservation clinic. The PBCI Diabetes Educators had originally wanted to see if they could improve Diabetes Self-Management Education/Training results while also reaching people that lived in the Pensacola communities.

The first couple of meetings were met with little success, sometimes with only one or two participants attending. It was easy to become discouraged. One participant’s response on their survey gave them the motivation to continue: “I enjoyed the class and I will be back!!”

After a couple of months, the Diabetes Educators began to see something awesome happen. Attendance was improving and participants began to bring in their family members, friends and caregivers. One participant brought in her family member that had a hemoglobin A1C greater than 10% in July 2017, and by April 2018 he had reduced his A1C to 7.5%. In turn he became an educator and advocate for another family member, and she lowered her hemoglobin A1C from 11.3% to 7.3%.

The Diabetes Educators utilized motivational interviewing with each of their class presentations. They incorporated skits, props and a lot of visuals into all their classes. Before long they were having to bring in chairs to accommodate everyone. Participants wanted to know more, so they began to discuss dementia and diabetes, what role the liver plays in diabetes, newest technologies and many more detailed topics, all taught in a way that was easily understood.

Feedback from participants constantly provided opportunities for improvement and challenged the Diabetes Educators to be better. “Ms. Donna/Marsha are such good instructors. Everything they discuss with us is so informative. Today’s lesson was so interesting. Scary to think our medicine affects our liver.” The Diabetes Educators started seeing the participants become advocates for their own disease process and educators for others in their communities. This class has become such a force that they have morphed into essentially one big group of community representatives for the SDPI grant funding. The participants are interested and give feedback on how to keep improving life for Tribal citizens with diabetes. The students have now become the teachers. The participants are teaching the Diabetes Educators ways to reach others in the Tribal Nation that need education in order to control their disease process and prevent or delay the diagnosis of diabetes.

The participants that live in Pensacola can now participate in traditional Native American Cultural Arts offered after the monthly diabetes class. The education space is rented by the day, so after the diabetes class, participants can learn Cultural Arts to reduce stress and deal with depression, while embracing traditional art forms. In the future, the Diabetes Educators hope to bring even more opportunities to the participants in the Pensacola area. It may take a village to raise a child, but it takes a Tribal Nation to manage diabetes.
SUCCESS STORIES: SEMINOLE TRIBE OF FLORIDA

Mary Lou Alvarado

Mary Lou is a 55-year-old woman who was diagnosed a few years ago with pre-diabetes and this year was diagnosed with type 2 diabetes. Although she has familial and personal risk factors for diabetes, she indicated that she was going to make changes to her lifestyle so that she can control her health outcomes, and she has done so.

Her first change was to return to walking in the evenings after work. Often times she will walk with a trainer from the Fitness Department or sometimes with the Health Educator, but she will also go walking on her own. A few months ago, she had arthroscopic knee surgery but made a full recovery and is back to her walking routine. She did not let the surgery/recovery down-time rob her of her motivation. Mary Lou also began eating healthier by incorporating fruit bowls, oatmeal, omega-3 fatty acids, and healthy fish into her diet.

Mary Lou has always been an active participant in the Special Diabetes Program for Indians (SDPI) programs and activities, year after year. She is a strong and committed supporter of the SDPI integrative health and nutrition services that are provided by Seminole and is always willing to learn new things. Mary Lou participated in the Pathways Walking Program Fitbit Challenge last fall. She finished the program in fourth place (out of 32) in total number of steps. It is worth noting that the other finalists in the top five were younger than Mary Lou—in their 20s and 30s. In addition, every year, Mary Lou volunteers as Immokalee Reservation Team Captain for the SDPI Tribal-wide annual Rez Rally 5K event. She promotes the event, recruits participants, and competes in the event with enthusiasm each year. She is one of the energized team captains that have tirelessly inspired Tribal citizens of all ages to participate in this SDPI walking competition, now going into its 19th year.

Clinically, Mary Lou’s health markers have shown improvement, mainly because of her commitment to take her health into her own hands. All of her lipid markers have gone down from 2017 to 2018 and are within normal limits. Her vitamin D has increased to normal levels for the first time since 2013. Furthermore, and possibly most importantly, her A1C levels have decreased continuously, with her reading being 5.9 as of December 2018.

Mary Lou’s success shows that taking control of one’s health is possible and positive change can be realized even when there are risk factors and/or challenges along the way. Taking small but consistent steps has been the key to her health success and she knows that SDPI activities and programs in 2019 will keep her on her wellness track.
SUCCESS STORIES: ALABAMA-COUSHATTA TRIBE OF TEXAS

The Alabama-Coushatta Tribe of Texas (ACOT) was able to apply their Special Diabetes Program for Indians (SDPI) funds to interact with youth and teach healthy behaviors all year long. First, they had a youth marathon. The marathon allowed youth to track their 25 miles for two months under the supervision of their parent or guardian. The Tribal Nation came together to walk the last 1.2 miles of the marathon and offered snacks and water to the finishers. They had 36 participants for this second annual event and intend to continue it in the years to come.

Next, they hosted a Health Camp. This week-long day camp was targeted for youth ages 6-13 and had over 50 youth participants. Every day, the camp had physical activity, learning, cooking and return demonstrations. The children were taught about healthy food choices, portion sizes, signs of hypoglycemia and hyperglycemia. The youth enjoyed this activity and were sad when the camp ended. Shortly after completion of the Health Camp, a youth who recognized the signs and symptoms of hypoglycemia in his family member alerted another family member to call 911.

SDPI funds allowed ACOT to collaborate with the Sam Houston State University Nursing Program on several projects. The students helped expand ACOT’s garden beds by 500%. The youth enjoyed assisting with the garden. They planted potatoes and peanuts and helped harvest many of the vegetables grown. The strawberries were a big hit! The nursing students have also been doing group exercises with the after-school youth program to learn about various other healthy behaviors.

ACOT also sponsored a Kids’ Fair. A generous donation of kids’ bikes from a community member allowed for new bikes for ACOT youth. The Tribal Nation had various departments set up booths with helpful information directed at the kids. Several topics were covered, such as car seat safety, the importance of drinking water as opposed to sugary beverages, and the importance of self-care. The reaction on the youth’s face was priceless as they won brand new bikes and helmets.

Normalizing healthy behaviors is the Chief Kina Health Clinic’s mission to citizens of all federally recognized Tribal Nations. ACOT views their youth as one of the most important populations to ensure receipt of this information, as they are the future. You can love your body by taking care of it and taking care of your body is showing your body love.
SUCCESS STORIES: SAINT REGIS MOHAWK TRIBE

Tsitewatakari:tat – The Let’s Get Healthy Program

One of the most successful activities of the Saint Regis Mohawk Tribe’s Let’s Get Healthy Program has been their Move for Health (MFH) fitness class, which is funded by the Special Diabetes Program for Indians.

MFH is a fitness class held Monday through Thursday from 8:00 a.m. to 12:00 p.m. and 3:00 p.m. to 4:00 p.m. The class is supervised by a Nurse Case Manager (NCM) and a Health Promotion Specialist. After participants receive fitness clearance from a Medical Provider and complete their fitness assessment, they choose a time slot. When the participant attends, the NCM measures their blood pressure, heart rate, and blood glucose and records the measurements. The participant exercises, then measurements are taken again and recorded. The patient visually witnesses the effect physical activity has on clinical measurements. The MFH class has become an innovative teaching tool. It opens the avenue for education between patient and NCM. The participants love the informal education sessions, which are designed to teach self-management skills. MFH also provides the instant gratification that enforces the message the Tribal Nation is trying to send: exercise is beneficial!

Participant attendance in 2013 was 2,309. That nearly doubled in 2014 to 4,069! In 2017, attendance was approximately 5,000 visits.

MFH has grown to a thriving, supportive learning environment. Participants have experienced such positive outcomes from the program that they have become the Tribal Nation’s best advocates. Many support systems have grown from this program. There are teams of husbands and wives, and immediate family members who encourage each other to participate in classes, activities and educational events, help address any barriers, and consistently portray a positive, healthy outlook.
SUCCESS STORIES: SEMINOLE TRIBE OF FLORIDA

Patrick Doctor, Sr.

Patrick’s path to healthy living started when he was diagnosed with type 2 diabetes. Patrick follows healthy habits, such as eating lots of fruits and vegetables every day to reduce his risk of diabetes complications and reports, “I am more aware of what I eat now, thanks to health and nutrition programs and activities.” Despite having sight and hearing impairments, Patrick says, “I like to run on the baseball field. And ever since my late brother, Joe Doctor, got me into weight lifting, I lift weights every day after my morning runs.” In the recent Fall Fitbit Challenge, Patrick placed in the top three in the male competitor – individual category, averaging well over 100,000 steps a day!

Part of Patrick’s lifestyle changes also includes his road to recovery/sobriety and he states, “I have been clean and sober since November 2011.” Patrick enjoys being part of community activities and regularly attends the Special Diabetes Program for Indians health events and activities including community walks, health fairs, and farmers’ markets. He also keeps his stress low with a positive attitude and counting his blessings every day. All of his hard work and dedication has paid off as he has kept his A1C at 6%. He continues to encourage others and demonstrate that diet and exercise can improve overall well-being.

Wade Osceola

Wade Osceola reported experiencing symptoms of constant thirst and frequent urination, which are common symptoms for diabetes, but for Wade, this was all new. He came to the Hollywood Health Clinic for answers and was diagnosed in 2007 with type 2 diabetes. Wade said, “I was fortunate to have experienced health care providers.” Wade sought out the assistance of the Health Educator, Nutritionist, Medical Social Worker and the many Special Diabetes Program for Indians-sponsored activities and programs to provide support and guidance on his healthy lifestyle journey. “I would not have been able to do it on my own,” he says, “the Seminole clinic helped me reach my goals of managing diabetes to prevent complications and losing a total of 15 pounds.”

In September of 2011, Wade started his path to living drug and alcohol-free. He was prepared to move when he learned he had to have heart surgery in December 2011. Wade’s motto is “I want to live.” He is an active participant in Coffee & Chat, a casual but informative gathering for people living with diabetes that meets monthly at the Hollywood Health Center for Diabetes Day. Wade encourages family and community members to follow a healthy lifestyle, as he has done. He can be seen walking the streets of the Hollywood Reservation, usually with a dog leash in hand. Wade is an inspiration to all those who feel change is difficult and is a true example that it is possible.
SUCCESS STORIES: SEMINOLE TRIBE OF FLORIDA

Brian Billie

Brian Billie is an avid participant in the Special Diabetes Program for Indians Pathways programs and enjoys getting involved in the variety of events that are hosted throughout the year. Brian immerses himself in all activities. He participates in competitive annual walks and runs throughout the year, and practices Tai Chi Stretching with the Big Cypress Seniors to help with stress reduction and encourage low impact physical activity. Brian is well rounded in his approach to health and well being. He is well versed in the Diabetes Self-Management Education curriculum and even though he has completed it, he always seeks out Seminole health programming to continue to increase his health knowledge and stay on the path of wellness. No matter if it is just an activity for one day or a six-week Pathways Program, Brian is always excited to participate and encourage others to join in as well. Recently Brian completed the 2018 Fitbit Challenge, a six-week walking program. Throughout the program, he consistently reached over 60,000 steps each week and met his goal of reaching over 100,000 steps in a week. Because of this program, Brian not only accumulated 418,723 steps (which equivalents to approximately 209 miles), but he also managed to increase his physical activity level, improve his sleep, increase his fruit and vegetable intake, improve his water intake, and has lost approximately 10 pounds in the past year.

“I enjoy participating in these programs because they help me reach the goals I set for my health. They have not only helped me with my diabetes, high blood pressure, high cholesterol, and weight, but they have also improved my self-confidence. I appreciate all of the positive benefits that I have received through participating in these programs and the opportunity they provide me to set new goals for my health.”

- Brian Billie, Seminole Tribe of Florida
SUCCESS STORIES: WAMPANOAG TRIBE OF GAY HEAD (AQUINNAH)

The Special Diabetes Program for Indians (SDPI) program success this year was due to a multi-pronged approach that incorporated both clinical and community programs. These programs, guided by a Registered Dietitian, included individual nutrition counseling, cooking classes, and nutritious dinners. The diabetes cooking classes taught participants about counting carbohydrates, correct portion size, meal selection, meal preparation, and creating a healthy menu for a person with diabetes. Participants were able to see and try all the foods prepared at each class and many reported incorporating them into their weekly menus at home.

Individual clinical measures showed positive results including reduced fasting blood sugar, reduced hemoglobin A1C, and reduced usage of both oral diabetes medications and insulin. Overall, there was a reduction in diabetes-related complications, and participating Tribal citizens reported weight loss. The success of the program is best defined by the positive feedback from both the staff and the community.
SUCCESS STORIES: CATAWBA INDIAN NATION

The Catawba Indian Nation Diabetes Program has started many community activity programs in the past few years, including activity challenges, 3-on-3 basketball tournaments, kids’ running programs, an annual 5k on the reservation, and more. The Special Diabetes Program for Indians (SDPI) supports these initiatives through staff time, referrals, nutritious refreshments and useful health-related incentives. SDPI has a strong community partner with the Tribal Nation’s Wellness Department. Being a small program, partners are key.

Each year, the numbers of participants in activity programs goes up. Community changes—other than numbers of participants—can be hard to measure. The Catawba Cultural Center’s Director, Dr. Wenonah Haire, credits all the community initiatives with making it more common to see people out walking on their work breaks, hearing people comparing steps, and the growing number of people coming out for events. Wenonah said, “Now when you go to meetings, you see groups of people out walking. You used to never see that, now it’s everywhere, even with people I would never think would. It’s been a huge cultural shift.” Wenonah feels that the community opportunities and support have changed her into a more active person than she was. She says that the community program has “caught on and got its’ own life, I’m glad to see it’s becoming more of a lifestyle change for others too.”

Wenonah and her family are a great example of how changes can spread throughout a family and the larger community. Her daughters, Chrystal Frank and Caitlin Rogers have been avid runners for a long time. Caitlin is now one of the coaches for the kids’ running program, Spirit Sprinters. Chrystal was a State running champion in high school and is now a Clinical Dietitian at Cherokee Indian Hospital in NC. Caitlin’s daughter, Maddie, has been in Spirit Sprinters since she was old enough to join. Caitlin’s husband won the step challenge this year.

Training for and running the Catawba 5k has become a family affair, as shown in this picture of three generations: Coach Caitlin, Wenonah, Caitlin’s daughter Maddie, Chrystal, and Wenonah’s husband, Jeff. The family regularly places in races with top times. They are an inspiration!
SUCCESS STORIES: PENOBSCOT INDIAN NATION

People with diabetes are faced with many challenges. The self-management of diabetes is complex, and the techniques for diabetes self-management are imperfect. While diet, exercise, and medications are great tools to help people control this disease, people’s lives are complicated, and the path to gain control over this disease is not easily won. Diabetes is a lifelong disease, and the people that have it need constant, dynamic support, tutelage, education, re-education, inspiration, care, encouragement, and motivation. The Special Diabetes Program for Indians (SDPI) gives the Penobscot Indian Nation the resources to be able to reach people in unique and compelling ways and to help people find their path to control.

In 2018, SDPI funded a diabetes educational series titled “Diabetes Theater and Dinner” which featured weekly sessions crafted from the audiobook by Barbara Mora, “Using Our Wit and Wisdom.” This series was a fun and different way to re-learn about diabetes by telling a story and asking questions about diabetes that can change perspective and behaviors. The session also involved hands-on nutrition education through food sampling, discussion, and preparation.

SDPI funded many nutrition education sessions at the food pantry with the goal of improving the food choices of people who have the highest diabetes risk. Nutrition education provided hands-on food sampling, as well as ideas and inspiration for how to create healthy meals from nutrient-rich, low-cost foods. Examples of healthy foods that people liked included cauliflower “fried” rice, lentil soup, avocado macaroni, hummus, and black bean salsa.

SDPI funded a fitness room for the community and fitness activities, like Zumba Kids and a walking club. A weight-loss support group called TOPS (Take Off Pounds Sensibly) was started with over 14 people committing to eating mindfully and making their health a priority.

SDPI also gave the Tribal Nation the ability to afford costly diabetes medications and devices that would otherwise be cost-prohibitive. Because of SDPI, the Tribal Nation can offer their patients a variety of treatment options including insulin pumps! The Tribal Nation has five people on insulin pumps, and they all report better quality of life and better glycemic control.
SUCCESS STORIES: CHITIMACHA TRIBE OF LOUISIANA

Some planted, others watered, and the Chitimacha Tribe of Louisiana Community Garden was established. This garden provided Tribal citizens with fresh vegetables and an opportunity to see their labor was not in vain. The community garden project has provided health clinic and human services staff, Tribal adults and children the pleasure of working in the garden, caring for the plants, harvesting, and enjoying fresh vegetables. This project is made possible through the Special Diabetes Program for Indians, staff, and community volunteers.

It has been amazing, as well as rewarding, to see the community labor of love for the community garden project, by those helping with the garden, and those benefitting in receiving vegetables. In Louisiana, the Tribal Nations witnessed snow after planting their garden, and Tribal citizens were concerned about their harvest. They immediately went to the community garden and picked as many of the vegetables as they could to make sure they did not lose all of it.

To encourage the Tribal citizens to eat healthier, the Tribal Nation provided a basket of fresh vegetables in their health clinic lobby for patients to take freely. The community health staff delivered vegetables to Tribal elders and shared them with Tribal citizens that attended the diabetes breakfast.

The community garden has indeed been a successful project that the Chitimacha Tribe of Louisiana citizens can be proud of and a project that has included assistance from the Tribal Chairman and Council Members, Tribal School students, Health and Human Services staff, Public Works staff, youth workers, community volunteers and a rehab technician with the Houma Nation Vocational Rehabilitation Program.
**Methodology**

Each year the USET Tribal Nations, IHS, and Urban Indian health care facilities participate in an electronic or manual audit of medical records for patients with diabetes. Participating facilities submit their data to the IHS Division of Diabetes for centralized processing and analysis. The data is cleaned by the IHS Division of Diabetes for outliers and then sent to the USET Diabetes Consultant.

Data used in this report were obtained from the IHS Diabetes Care and Outcome Audit for years 2016-2018 for participating USET Tribal Nations. The audit analyzed a sample population of 5,608 from the 6,927 (81%) patients with diabetes.

Prevalence data in this report was calculated from Resource and Patient Management System (RPMS) data using the age-adjusted method. The age-adjusted method calculated rates specific to 11 age groups and then multipled these rates by the weighted adjustments from the US Census Bureau 2000 standard population.

There are a few limitations to note. First, the data in this report is only based on patients who are in the diabetes registry, which is a part of the electronic health record, who had at least one visit to a primary care clinic in the reporting years, and who are AI/AN. Second, patients who are pregnant, have died before the end of the audit period, have pre-diabetes, and those who are on dialysis and receive most of their primary care at the dialysis facility are excluded from the report.

**References**


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The contributing USET staff members for the 2019 USET Diabetes Report include Christy Duke, Bryan Hendrix, Dietrich Taylor, Mark Withers, Vicki French, and Angela Snell.

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1. Eastern Band of Cherokee Indians
2. Miccosukee Tribe of Indians of Florida
3. Mississippi Band of Choctaw Indians
4. Seminole Tribe of Florida
5. Chitimacha Tribe of Louisiana
6. Seneca Nation of Indians
7. Coushatta Tribe of Louisiana
8. Saint Regis Mohawk Tribe
9. Penobscot Indian Nation
10. Passamaquoddy Tribe at Indian Township
11. Passamaquoddy Tribe at Pleasant Point
12. Houlton Band of Maliseet Indians
13. Tunica-Biloxi Tribe of Louisiana
14. Poarch Band of Creek Indians
15. Narragansett Indian Tribe
16. Mashantucket Pequot Tribal Nation
17. Wampanoag Tribe of Gay Head (Aquinnah)
18. Alabama-Coushatta Tribe of Texas
19. Oneida Indian Nation
20. Aroostook Band of Micmacs
21. Catawba Indian Nation
22. Jena Band of Choctaw Indians
23. Mohegan Tribe of Connecticut
24. Cayuga Nation*
25. Mashpee Wampanoag Tribe
26. Shinnecock Indian Nation*
27. Pamunkey Indian Tribe*
28. USET Headquarters
29. USET Sovereignty Protection Fund Office

*This Tribal Nation did not receive SDPI funding in 2018.