Indian Health Service

4-in-1 Grant Program Comprehensive Report

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List of Abbreviations

Word	Abbreviation
American Indian and Alaska Native	AI/AN
Blood pressure	BP
Calendar Year	CY
Cultural and traditional practices	CTPs
Diabetes mellitus	DM
Domestic violence and intimate partner violence	DV/IPV
Fiscal Year	FY
Government Performance and Results Act	GPRA
Health Promotion and Disease Prevention	HP/DP
Indian Health Care Improvement Act	IHCIA
Indian Health Service	IHS
Information Technology	IT
National Immunization Reporting System	NIRS
Office of Urban Indian Health Programs	OUIHP
Practice- and evidence-based approaches	PB/EB
Resource and Patient Management System	RPMS
Screening, brief intervention, and referral to treatment	SBIRT
Social determinants of health	SDOH
Uniform Data System	UDS
Urban Indian Organizations	UIOs

Executive Summary

The Indian Health Service (IHS) Office of Urban Indian Health Programs (OUIHP) conducted an evaluation of the 4-in-1 Grant Program. This program is an essential component of the IHS health care delivery system and provides funding to Urban Indian Organizations (UIOs) to support and expand health services within four health program areas:

1. Health promotion and disease prevention (HP/DP) services
2. Immunization services
3. Alcohol and substance abuse related services
4. Mental health services

The IHS conducted an evaluation for the 4-in1 Grant Program for the following years:

- 2019 Grant Program Year (April 1, 2019 – March 31, 2020)
- 2020 Grant Program Year (April 1, 2020 – March 31, 2021)
- 2021 Grant Program Year (April 1, 2021 – March 31, 2022)

This report presents findings from an evaluation for the 4-in-1 Grant Program during the three program years and across the four health program areas to assess and understand the following:

1. Changes in reporting rates across data sources
2. Changes in new and existing measures
3. Consistency in reporting requirements
4. Programmatic strengths, challenges, barriers and unmet needs, and future planning/next steps
5. Cultural, prevention, and intervention practices
6. Evidence-based and practice-based approaches
7. Available quantitative measures including identification for data opportunities, access to care, and access to quality of care
8. Understand community-level, process evaluation, and interorganizational outcomes

Background

In 1976, Congress passed the Indian Health Care Improvement Act (IHCIA) to improve health care services for all American Indian and Alaska Native (AI/AN) people. This Act provides Title V funding for the IHS OUIHP and the Division of Grants Management to administer the 4-in-1 Grant Program.

There were 33 grantees awarded by OUIHP for the 2019 to 2021 program cycle. These grantees provide several health care service types, including HP/DP, immunization, alcohol and substance abuse related services, and mental health care among other health programs.

Methods
The IHS collaborated with an external contractor to conduct an evaluation of data submitted across the three grant program years, 2019-2021 (noted above). The evaluation incorporated culturally appropriate approaches and quantitative and qualitative data analysis from the following data sources for the purpose of this report:

- Government Performance and Results Act (GPRA)
- National Immunization Reporting System (NIRS)
- Uniform Data System (UDS)
- Grantee quarterly progress reports
- 2019 Grant Program Year unmet needs reports

Quantitative analysis

GPRA - The 2016 to 2021 GPRA data were analyzed by frequencies of performance outcome of grantees to determine what proportion of grantees provided reportable data. Descriptive statistical analyses were used to assess variations in performance, within each grantee and across grantees, on key outcome measures over time. Data were stratified by source into the four health program areas (HP/DP, immunization, alcohol and substance abuse, and mental health) and compared across three program periods.

NIRS - The 2019 to 2021 NIRS data were analyzed to track and assess frequency and consistency of progress report submissions from grantees across three years of data. Detailed analysis of the NIRS data as well as immunization GPRA measures is available in a separate immunization report, located at: https://www.ihs.gov/Urban/4-in-1-grant-program/national-evaluation/.

UDS - The 2016 to 2020 UDS data were analyzed by three health program areas, HP/DP, alcohol/substance abuse, and mental health. The UDS does not cover immunization. UDS data were assessed to determine what proportion of grantees provided reportable data, provide descriptive statistics across key performance metrics, and compare performance over time. In addition, data were stratified by health program area and AI/AN status.

Qualitative analysis
Reports - Qualitative narrative analysis was conducted to complete an inventory of quarterly progress reports across the grantees' four health program areas for the three grant program years. Data were extracted from the quarterly progress reports, and thematic coding was undertaken to unpack and understand grantees' ability to improve quality, safety, and access to health care for their patient populations; current gaps in data; and any other potentially limiting factors. In addition, data were analyzed to gain a deeper understanding of community-level outcomes, interorganizational measures and process evaluation.

Summary of Recommendations

This summary of recommendations provides insights into grantees' program efforts and achievements across the following three program years:

- 2019 Grant Program Year (April 1, 2019 – March 31, 2020)
- 2020 Grant Program Year (April 1, 2020 – March 31, 2021)
- 2021 Grant Program Year (April 1, 2021 – March 31, 2022)

Recommendations are provided below by data source for each of the four programs.

GPRA Recommendations

Health Promotion and Disease Prevention

- Emphasize the importance of screening for preventive purposes, especially for cancer prevention. Pap screening is particularly important to emphasize in a population with relatively low human papillomavirus (HPV) immunization rates (see immunization section).
- Assist grantees in developing preventive screening programs, especially women's health screening, including social marketing campaigns, mobile/pop-up events, and emphasizing the importance of screening during non-primary care service visits (e.g., behavioral health).
- Continue to implement successful initiatives for heart health as success is evident. Consider what practices could be shared as practice-based approaches with other grantees or organizations.
- Assess reasons for the general decrease in rates across measures, particularly from 2019 onward. While much of this may be due to the COVID-19 pandemic, as communities begin the recovery process, there may be opportunities to begin reestablishing care with patients, especially for routine services and screenings. Increase the number of grantees who provide and report breastfeeding support services.

Immunization

- Provide grantees with technical assistance to support the process of entering and exporting visit and registration data from their electronic health records (EHR) to the National Data Warehouse (NDW) to complement GPRA reporting.
- Follow up with grantees who have a history of low reporting rates to better understand the factors that may be contributing to this issue.
- Emphasize the importance of routine vaccinations for all age groups, as well as seasonal vaccinations (e.g., influenza).
- Compare adult vaccination rates with other grantee demographic data to assess the extent to which vaccine program is reaching its eligible adult population as the vaccination rates themselves remain low (less than a third of most adult vaccines).
- Continue to analyze GPRA data over a longer period (5+ years) to better observe trends in immunization rates.

Alcohol and Substance Abuse

- More efforts need to be focused on reaching the national targets for the alcohol and substance abuse (ASA) GPRA indicators across grantees, particularly for tobacco cessation services and Universal Alcohol Screenings.
- Expand screening, brief intervention, and referral to treatment (SBIRT) services to more grantees. There is also an opportunity to explore best practices from the grantees who do offer SBIRT, as it is evident their programs are successful.
- GPRA indicators used to evaluate the ASA program focus area should be re-evaluated. Grantees' ASA activities are more often focused on illicit drug screening, treatment, and service provision; activities which are not captured in the designated indicators.

Mental Health

- More efforts need to be focused on reaching the national targets for the mental health GPRA indicators across grantees, across all measures.
- GPRA indicators used to evaluate the mental health program focus area should be re-evaluated for relevancy. Grantees' mental health activities also include other screenings as well as a variety of therapeutic modalities. It may be useful to explore other GPRA indicators used to evaluate grantees' mental health programs.

NIRS Recommendations

Immunization

- Emphasize routine vaccinations for the youngest (3 months to 3 years) age groups, and importance of receiving additional appropriate vaccines.
- Among adolescents and adults, emphasize importance of completing the entire series of a recommended vaccine, particularly the HPV vaccine.
- Offer influenza vaccines when patients come in for COVID-19 vaccines.
- Create more detailed program guidance for grantees and the program team on immunization indicators and examples of grantee program activities to enhance the quality and increase the quantity of immunization data reported.
- Continue analyzing the NIRS data over a longer period to track relevant trends.
- Compare adult vaccination rates with other grantee demographic data to assess the extent to which vaccine program is reaching its eligible adult population as the vaccination rates themselves remain low (less than a third of most adult vaccines).

UDS Recommendations

Health Promotion and Disease Prevention

- Focus on recruiting and retaining urban AI/AN clients. While visits declined overall, the increase was primarily observed with the AI/AN visits alone. This trend indicates that either fewer AI/AN clients are accessing services overall, or those accessing services are doing so less frequently.
- Emphasize the importance of medical visits for primary care and prevention purposes. This rate declined for both the total population as well as the AI/AN population alone, so this issue is not confined to the urban AI/AN population only.

Alcohol and Substance Abuse

- Explore options to expand grantees' capacity to provide ASA services, through improving infrastructure and expanding the variety of services offered.
- Support grantees in expanding telehealth service offerings, which seem to be accessible to urban AI/AN patients, at least for this program focus area.
- Continue marketing services and service type options (e.g., hybrid, fully virtual sessions) to the urban AI/AN community.

Mental Health

- Explore options to expand grantees' capacity to provide ASA services, through improving infrastructure and expanding the variety of services offered.
- Support grantees in expanding telehealth service offerings, which seem to be accessible to urban AI/AN patients, at least for this program focus area.
- Continue marketing services and service type options (e.g., hybrid, fully virtual sessions) to the urban AI/AN community.

Quarterly Progress Reports and Unmet Needs

Health Promotion and Disease Prevention

- Improve broadband/internet access among urban AI/AN communities so patients can reliably access telehealth services.
- Improve knowledge of and access to appropriate technology so that patients can access virtual/hybrid services and keep up with routine health screenings and appointments.
- Provide more support for efforts that alleviate socioeconomic needs in the community that prevent individuals from accessing routine health services.
    - Economic concerns such as unemployment, increased cost of living, and lack of health insurance all create competing demands on patients' income and time, thus preventing them from prioritizing their health.
    - Lack of access to reliable and affordable personal or public transportation prevents patients from attending in-person visits.

    - Lack of knowledge around insurance use and coverage, as well as lack of support for enrolling in insurance programs was another barrier.
    - Lack of access to quality food and safe spaces to engage in physical activity is a particular barrier in urban environments.
- Increase tailored efforts to reach more vulnerable populations, especially elders and houseless individuals.
- Work with patients unwilling to access services due to concerns of COVID-19, exacerbated among vaccine-hesitant populations.
- Focus on addressing infrastructure concerns expressed by grantees:
    - Improve recruitment and retention processes for clinical and non-clinical staff.
    - Hire clinical staff with AI/AN knowledge, experience, or personal background or provide cultural competence training for non-AI/AN staff.
- Address gaps in support for information technology needs:
    - Improve access to RPMS and/or web-based EHR and client portals.
    - Update or replace outdated EHR systems.
    - Provide training for staff on updated EHR systems so patient data can be entered accurately and efficiently.

Immunization

- Provide grantees with technical assistance to support the process of entering data into the grantee quarterly reports and help grantees understand what has changed in reporting from year to year.
- Add a field to the reporting template to allow grantees to report data from their service-providing partners that support education and with administering immunizations and vaccines.
- Add a field to the reporting template that allows grantees to report vaccine hesitancy outreach efforts.

Alcohol and Substance Abuse

- Improve broadband/internet access among urban AI/AN communities so patients can reliably access telehealth services.
- Improve knowledge of and access to appropriate technology so patients can access virtual/hybrid services and keep up with routine health screenings and appointments.
- Focus on addressing infrastructure concerns expressed by grantees:
    - Improve recruitment and retention processes for clinical and non-clinical staff.
    - Hire clinical staff with AI/AN knowledge, experience, or personal background or provide cultural competence training for non-AI/AN staff.
    - In general, a need to increase the number of substance abuse and mental health clinical staff such as certified alcohol and drug counselors, recovery and relapse staff, integrated care clinicians, and peer recovery specialists.
    - Continue to provide and expand upon the variety of ASA support services, such as Wellbriety and Red Road.

- Continue to improve and expand an integrated health care approach, not only across the ASA/MH programs but also pursue integration across primary care/prevention (HP/DP) services:
  - Employ multi-pronged approach across program focus areas to provide continuity of care for patients, particularly those with co-occurring conditions.
  - Make sure non-clinical support staff positions are filled to support integrated care model.
  - Provide training and education for new and existing staff on integrated care approach.
- Identify other funding sources to support expansion of existing services and infrastructure capacity building.

Introduction

The Indian Health Service (IHS) Office of Urban Indian Health Programs (OUIHP) conducted an evaluation of the 4-in-1 Grant Program (4-in-1) over a three-year period for the 2019 Grant Program Year (April 1, 2019 – March 31, 2020), 2020 Grant Program Year (April 1, 2020 – March 31, 2021), and 2021 Grant Program Year (April 1, 2021 – March 31, 2022). The 4-in-1 is an integral component of the IHS health care delivery system and provides crucial funding to Urban Indian Organizations (UIOs) to strengthen their ability to expand direct services within four health program areas:

1. Health promotion and disease prevention (HP/DP) services
2. Immunization services
3. Alcohol and substance abuse related services
4. Mental health services

This report presents findings from an evaluation of the grantees in which grantees built and expanded their work across these four program areas of three grant program years. The evaluation addressed the following questions to understand key metrics in these areas over time:

1. Changes in reporting rates across data sources
2. Changes in new and existing measures
3. Consistency in reporting requirements
4. Programmatic strengths, challenges, barriers and unmet needs, and future planning/next steps
5. Cultural, prevention, and intervention practices
6. Evidence-based and practice-based approaches
7. Available quantitative measures including identification for data opportunities, access to care, and access to quality of care
8. Understand community-level, process evaluation, and interorganizational outcomes

Background

In 1976, Congress passed the Indian Health Care Improvement Act (IHCIA) to improve the health and well-being of all American Indian and Alaska Native (AI/AN) people. The IHCIA provides Title V funding, under which the IHS OUIHP and the Division of Grants Management administer the 4-in-1.

Presently, OUIHP funds 41 non-profit UIOs across 22 states and 11 of the 12 IHS Areas in the United States. Each Area has a unique group of Tribes that they work with on a day-to-day basis. Together, these grantees comprise one of three core components of the Indian health care delivery system – IHS, Tribal, and Urban (I/T/U). The grantees provide several health care service types, including HP/DP services, immunizations, alcohol and substance abuse related services, and mental health care among other health programs. According to the Uniform Data System (UDS) Summary Trends

Business Intelligence Dashboard, in 2020, more than 66,830 urban Indian patients access services through at least one of these UIO programs.[1]

For the 4-in-1, there were 33 grantees awarded by IHS for the 2019 to 2021 program cycle. The evaluation incorporated culturally appropriate approaches and statistical quantitative and qualitative methods and analyses. Key data sources reviewed and analyzed for the purpose of this report included the Government Performance and Results Act (GPRA), the National Immunization Reporting System (NIRS), and the UDS data sets, as well as the grantee quarterly progress reports and the 2019 Grant Program Year unmet needs reports. This evaluation reviewed data submitted by a cohort of 33 grantees across 2019 to 2021 program cycle.

Methodology

The IHS collaborated with an external contractor to conduct an evaluation of data submitted for all three grant program years. The evaluation incorporated an Indigenous Evaluation Framework, statistical quantitative methods and analyses, and qualitative methods and analyses. This section of the report describes the data utilized and analyses conducted to support overall evaluation of the program.

Data Sources

The overall evaluation consisted of a review and analysis of quantitative data from the GPRA, NIRS and UDS data sets as well as qualitative data from the grantee quarterly progress reports and unmet needs reports. Figure 1 depicts the overall timeline for each data set. Details on each data source, including data type, data label, date, and data period, can be found in Table 1. Beginning in fiscal year (FY) 2018, the GPRA year changed to match the FY from October 1 to September 30. Prior to 2018, the GPRA year was collected from July 1 to June 30. A stand-alone reporting form was used to collect data on unmet needs for the 2019 Grant Program Year. Data on unmet needs were integrated into the grantee quarterly progress reporting form as of April 1, 2020, during the 2020 Grant Program Year and was carried forward into the 2021 Grant Program Year. Full descriptions of each data source can be found in Table 1.

[1] This figure is derived from the UDS Summary Trends Business Intelligence Dashboard. The Office of Urban Indian Health Programs, in collaboration with the National Patient Information Reporting System (NPIRS), generates various end of year reports to support UIO performance metrics and monitoring. Business Intelligence dashboards provide key insight into critical information for national enterprise reporting of UDS Summary Reporting.

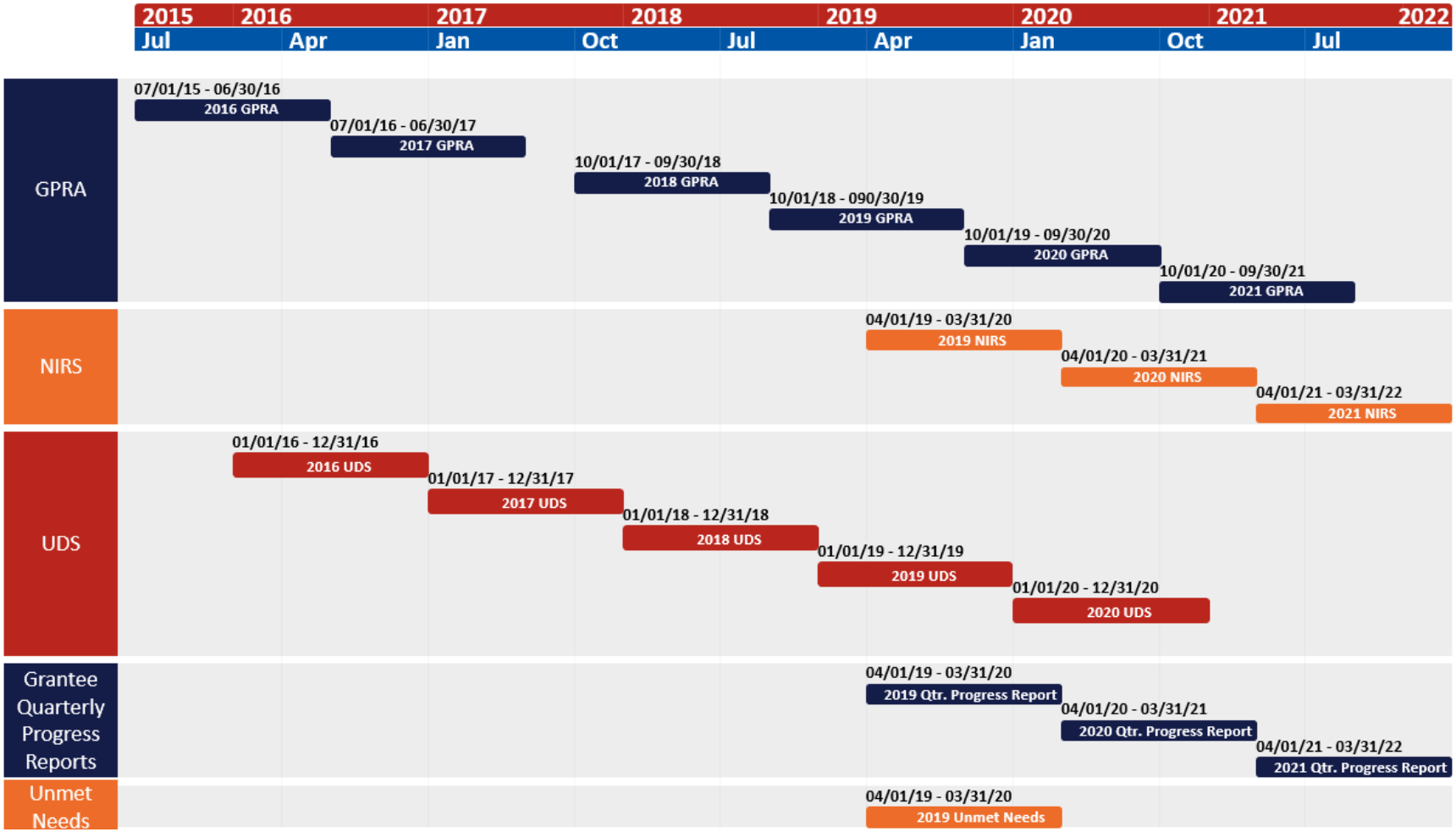


Figure 1: Timeline of data sources

Table 1: Overview of data sources to support evaluation

Data Source	Data Type	Data Label	Date	Data Period
GPRA	Quantitative	2016 GPRA	FY 2016: October 2015 – September 2016	July 1, 2015 – June 30, 2016
		2017 GPRA	FY 2017: October 2016 – September 2017	July 1, 2016 – June 30, 2017
		2018 GPRA	FY 2019: October 2017 – September 2018	Oct 1, 2017 – Sept 30, 2018
		2019 GPRA	FY 2020: October 2018 – September 2019	Oct 1, 2018 – Sept 30, 2019
		2020 GPRA	FY 2021: October 2019 – September 2020	Oct 1, 2019 – Sept 30, 2020
		2021 GPRA	FY 2022: October 2020 – September 2021	Oct 1, 2020 – Sept 30, 2021
NIRS	Quantitative	2019 NIRS	FY 2019 (Q3 – Q4) to FY 2020 (Q1 – Q2)	April 1, 2019 – March 31, 2020
		2020 NIRS	FY 2020 (Q3 – Q4) to FY 2021 (Q1 – Q2)	April 1, 2020 – March 31, 2021
		2021 NIRS	FY 2021 (Q3 – Q4) to FY 2022 (Q1 – Q2)	April 1, 2021 – March 31, 2022
UDS	Quantitative	2016 UDS	CY 2016	January 1, 2016 – December 31, 2016
		2017 UDS	CY 2017	January 1, 2017 – December 31, 2017
		2018 UDS	CY 2018	January 1, 2018 – December 31, 2018
		2019 UDS	CY 2019	January 1, 2019 – December 31, 2019
		2020 UDS	CY 2020	January 1, 2020 – December 31, 2020
Quarterly Progress Reports	Qualitative	2019 Grant Program Year	Q1: April 1, 2019 – June 30, 2019 Q2: July 1, 2019 – September 30, 2019 Q3: October 1, 2019 – December 31, 2019 Q4: January 1, 2020 – March 31, 2020	April 1, 2019 – March 31, 2020
		2020 Grant Program Year	Q1: April 1, 2020 – June 30, 2020 Q2: July 1, 2020 – September 30, 2020 Q3: October 1, 2020 – December 31, 2020 Q4: January 1, 2021 – March 31, 2021	April 1, 2020 – March 31, 2021
		2021 Grant Program Year	Q1: April 1, 2021 – June 30, 2021 Q2: July 1, 2021 – September 30, 2021 Q3: October 1, 2021 – December 2021 Q4: January 1, 2022 – March 31, 2022	April 1, 2021 – March 31, 2022
Unmet Needs (Stand-alone)	Qualitative	2019 Unmet Needs	Q1: April 1, 2019 – June 30, 2019 Q2: July 1, 2019 – September 30, 2019 Q3: October 1, 2019 – December 31, 2019 Q4: January 1, 2020 – March 31, 2020	April 1, 2019 – March 31, 2020

GPRA Data

The GPRA requires Federal agencies to demonstrate they are using their funds effectively in accordance with their mission statements. Under Public Law 103-62 – August 3, 1993, §3.[2], each agency is to have a 5-year Strategic Plan in place and submit Annual Performance Plans that specifically describe what the agency intends to accomplish. The GPRA also requires agencies to have performance measures with specific annual targets.

Every year, the IHS reports on the GPRA performance measures which can be found on the following webpage: https://www.ihs.gov/crs/gprareporting/. The clinical GPRA performance measures include care for patients with diabetes, cardiovascular disease, cancer screening, immunization, behavioral health screening, and other preventive services. Measures of quality of care and safety, as outlined in the IHS Strategic Plan and utilized for this report,[3] include:

- Diabetes management (good glycemic control, controlled blood pressure of <140/90, statin therapy, and nephropathy assessed)
- Cancer screening (Pap screening, mammogram rates, and colorectal cancer)
- Vaccination rates (Influenza - children 6 months to 17 years, adults aged 18 and older; adult composite; and childhood immunizations)
- Alcohol/Substance Abuse (tobacco cessation, universal alcohol screening, and SBIRT)
- HP/DP (mammography screening, colorectal cancer screening, HIV screening ever, childhood weight control, and breastfeeding rates)

UIOs are not required to use the Resource Patient Management System (RPMS) as their patient data management system. Prior to FY 2018, official GPRA and GPRA Modernization Act results were reported via RPMS and the Clinical Reporting System (CRS), a software application that runs off of RPMS. The use of CRS to collect GPRA data prevented non-RPMS health programs from having their GPRA data included in national totals. This is relevant as only 21 out of the 33 4-in-1 grantees (63.6%) are CRS sites. To enable non-RPMS health programs to report for GPRA, IHS switched from utilizing CRS for GPRA data collection to the Integrated Data Collection System (IDCS) Data Mart at the National Data Warehouse (NDW). As with the measure logic in CRS, the logic in the IDCS Data Mart is validated and the measure logic is updated centrally. Therefore, data from sites utilizing non-RPMS EHRs can be combined and

[2] Public Law 103-62 – Aug. 3, 1993. 103d Congress. 107 STAT. 285. https://www.govinfo.gov/content/pkg/STATUTE-107/pdf/STATUTE-107-Pg285.pdf

[3] IHS. (2019). Appendix A: HHS strategic plan and IHS strategic plan crosswalk. https://www.ihs.gov/strategicplan/appendices/

reported as an aggregate rate along with RPMS data. Specific to this report, data assessed were from the 2016 to 2021 GPRA datasets, as outlined in Table 1.

NIRS Data

The NIRS is a web-based system designed to collect quarterly immunization reports from the IHS-funded facilities. Data entered through the NIRS system are used to develop the IHS Area- and the national-level immunization reports. Each quarter, grantees report immunization data for the following groups: children ages 3–27 months, 2-year-old children, adolescents, adults, and patients with influenza. Grantees that do not use RPMS must record their aggregate immunization data on the grantee quarterly reporting form and then enter it into the NIRS. For this report, data from the 2019 to 2021 NIRS were assessed (Table 2).

UDS Data

The UDS reports are an annual calendar year (CY) report, which provide a standardized set of data reported by Federally funded programs such as the IHS UIOs. UIOs funded by the IHS are required to produce annual UDS reports. The UDS standard set of annual reports include aggregate information from various UIOs regardless of the EHR system utilized. These reports provide an overview of patients and visits at a UIO, including aggregated total number, age, gender, zip code of residence, insurance sources, race/ethnicity of patients, number of visits by provider type, by key diagnoses and services, characteristics of special populations, quality of care indicators, health outcomes, and disparities.

The UDS data analyzed include annual clinical visits and patient counts, both for patients in general and Urban Indian patients specifically. The UDS data are provided for only three core program areas because the UDS does not collect immunization data. The UDS data are presented in aggregate and organized by service or patient characteristic. For the purpose of this report, data from the 2016 to 2020 UDS were analyzed.

Grantee Quarterly Progress Reports

The 4-in-1 began after Urban Indian community leaders advocated for Federal funding to address the unmet health care needs of Urban Indians. It is authorized under the Snyder Act, 25 U.S.C. § 13; the Transfer Act, 42 U.S.C. § 2001(a); and Title V of the Indian Health Care Improvement Act (IHCIA), at 25 U.S.C. §§ 1653(c)-(e), 1660a.
As part of the 4-in-1, grantees provide narrative information about each of the four program areas, which include HP/DP, immunization, alcohol and substance abuse related, and mental health services in their quarterly progress reports. In addition, grantees report about integrated cultural interventions and evidence-based approaches in their quarterly progress reports. Grantees also indicate which goals and objectives were met with respect to target measures, program approaches, and cultural interventions and implementation of evidence-based or practice-based approaches. Specific to immunization, grantees that provide only education and outreach must document their immunization service activities on the grantee quarterly progress report template. For the purpose of this report, the grantee quarterly progress reports data

from three program years were analyzed and are referred to as Grant Year 2019, Grant Year 2020, and Grant Year 2021 (Table 1).

Unmet Needs Reports

Grantees are also required to report on unmet needs under statutory requirements consistent with 25 U.S.C. § 1653(a), 1655, and 1657(a). In the 2019 Grant Program Year, grantees completed a separate quarterly unmet needs and recommendations report form, hereafter referred to as 2019 Unmet Needs data, which included demographic information (e.g., grantees' names, reporting quarter, and dates), health outcomes, and broad themes for unmet needs. For the 2020 Grant Program Year, a separate unmet needs form was no longer used. Rather, the 2020 and 2021 Grant Program Year unmet needs were captured through the grantee quarterly progress report template. These were used to report on the following unmet needs: (1) urban AI/AN's identified unmet health needs compared with the resources available to address them; and (2) recommendations to the Secretary, federal, state, local, and other resource agencies on methods to improve health service needs of urban AI/AN people.

Data Analysis

GPRA Data

The frequencies of performance outcomes were assessed on the 2016 to 2021 GPRA data by grantee to determine what proportion of grantees provided reportable data. Statistical analyses, including means and descriptive information to assess variations in performance, within each grantee and across grantees, on key outcome measures over time were conducted. Data were stratified by source into four health program areas and compared between the two data periods. The following GPRA measures assessed:

- **HP/DP:** Controlled BP <140/90, DM Statin Therapy, Nephropathy Assessed, (Cervical) Pap Screening, Mammography, Screening, Colorectal Cancer Screening, HIV Screening Ever, Childhood Weight Control, and Breastfeeding Rates.
- **Immunization**: Influenza Vaccination 6 months to 17years of age, Influenza Vaccination 18 years of age and older, Adult Composite Immunization, and Childhood Immunizations.
- **Alcohol/Substance Abuse**: Tobacco Cessation, Universal Alcohol Screening, and SBIRT.
- **Mental Health**: IPV/DV Screening, Depression Screening (12-17 yrs), Depression Screening 18 years of age and older.

With the approval of IHS, the GPRA analysis excluded:

- Grantee GPRA data that had denominators less than or equal to 20, and
- Grantee GPRA measures that equaled 0%.

These data were excluded because small values can greatly shift the GPRA measure percentages when additional individuals are added or removed. The data where grantees' GPRA percentages equaled 0% present notable effects on aggregate means.

Moreover, the GPRA data at 0% reflect services that were not provided, for which patients did not qualify, or that were provided but not reported. Removing these measures increased the reliability of the GPRA data analysis.

NIRS Data

The frequencies of performance outcomes were assessed on the 2019 to 2021 NIRS data by grantee to determine what proportion of grantees provided reportable data. Statistical analyses, including means and descriptive information to assess variations in performance across grantees on key outcome measures over time were conducted. Data were compared across the data periods. In addition to reporting rates, specific NIRS immunization measures assessed are outlined in Table 2.

Table 2: The NIRS vaccinations by age group

Age Group	Vaccines
Children 3- to 27-months	• Four doses of diphtheria, tetanus, and pertussis (DTaP) • Three doses of inactivated poliovirus (Polio) • Three doses of Haemophilus Influenzae Type B (HIB) • Three doses of Hepatis B (HEPB) • Four doses of pneumococcal conjugate (PCV) • One dose of measles, mumps, rubella (MMR) • One dose of varicella (VAR) at minimum.
Children 2 Years of Age	• Diphtheria, tetanus, and pertussis (4-DtaP) • Polio (3-POLIO) • Haemophilus influenzae type b disease (3-HIB, 4-HIB) • Hepatitis B (3-HEPB) • Varicella (Chickenpox) – 1-VAR • Measles, mumps and rubella (1-MMR) • Hepatitis A (1-HEPA, 2-HEPA) • Pneumococcal disease (3-PCV, 4-PCV) • Influenza (2-FLU)
Adolescents (13- to 17-year-olds)	• Human papillomavirus (HPV): 2 doses (13-15 years) or 3 doses (15+) • Tetanus, diphtheria, and pertussis (TDaP): 1 dose • Meningococcal conjugate (MenACWY): 1 dose (13 years) and 1 booster dose (17 years) • 1-TDaP + 1-MENACWY + HPV-Fully Vaccinated (HPV-FV) • 1-TDAP + 3-HEPB + 2-MMR + 1-MENACWY + 2-VAR + HPV-FV • 1-TDaP + 3-HEPB + 2-MMR + 1-VAR • 1-TDaP + 3HEPB +2-MMR + 1-MENACWY + 2-VAR • 1-TDaP + 1-MENACWY
Adults 18 years and older	• TD Booster <10 years (19+ years) • TDaP Booster <10 years (19+ years) • TDaP + TDaP/TD Booster <10 Years (19-59 years) • Pneumovax (Ever) (19+ years)

Age Group	Vaccines
	• HPV 1 (males, 19-21 years) • HPV 1 (females (19-26 years) • HPV 2 (males, 19-21 years) • HPV 2 (females (19-26 years) • HPV 3 (males, 19-21 years) • HPV 3 (females (19-26 years) • Zostavax (60+ years) • Pneumovax (65+ Years)
Influenza	• 1-FLU children (10- to 23-months) • 1-FLU children (2-to 4-years) • 1-FLU adult (18-49 years) • 1-FLU adult (18-49 years at risk) • 1-FLU adult (65+ years)
Health Care Personnel Immunization	• Mandatory flu vaccination

UDS Data Analysis

The 2016 to 2020 UDS data were analyzed for three health program areas:

1. **HP/DP:** total visit, medical visit, other professional visit, vision visit, and enabling visit
2. **Alcohol/Substance Abuse**: substance abuse visit
3. **Mental Health**: mental health visit

Frequencies of performance outcomes were assessed by grantee to determine what proportion provided reportable data. Means, as well as other descriptive information, were analyzed to assess variation in performance, within each grantee and across grantees, on key outcome measures over time. Data were stratified by source into three service areas and compared between the two data periods. Furthermore, data were analyzed to understand what percentage of patients were urban AI/AN people.

Quarterly Progress Reports

Qualitative narrative analysis was conducted to complete an inventory of grantees' applications as well as the quarterly progress reports from 33 grantees across the four health program areas for Grant Year 2019 to Grant Year 2021. Grantee data were extracted from the grantee quarterly progress reports and thematic coding was undertaken to unpack and understand grantees' ability to improve quality, safety, and access to health care for their patient populations; current gaps in data; and any other potentially limiting factors. In addition, data were analyzed to gain a deeper understanding of community-level outcomes, interorganizational measures for internal use, and process evaluation.

Unmet Needs

Qualitative analysis was conducted to identify and organize the 2019 Grant Program Year unmet needs using a framework focused on health program areas, such as social determinants of health, funding, capacity, data, cultural expertise, and external challenges, including Coronavirus Disease 2019 (COVID-19). Themes were developed by a subject matter expert familiar with grantees' goals and missions. It is important to note that grantees could write in multiple needs and recommendations; therefore, the theme categories are not mutually exclusive. An extensive report of the 2019 Grant Program Year Unmet Needs is available on the 4-in-1 webpage (https://www.ihs.gov/urban/4-in-1-grant-program/national-evaluation/). Unmet needs from the 2020 and 2021 Grant Program Years are incorporated in this report's grantee quarterly progress report section. For this report, 2019 Unmet Needs data obtained during the 2019 Grant Program Year were analyzed and presented under this report section.

IHS 4-in-1 Program Area Analysis, Results, and Recommendations

This section reports evaluation findings based on analyses of the quantitative and qualitative data to highlight successes across the four program areas. This section is organized to provide a summary of reporting rates by key data sources, including the NIRS, GPRA, grantee quarterly reports, and unmet needs. It is then followed by highlighting key findings and recommendations across the four program areas including HP/DP, immunization, alcohol and substance abuse related, and mental health services. Key findings and recommendations will be provided in the following areas:

1. An overview of cultural, prevention, and intervention findings;
2. Evidence-based and practice-based approaches;
3. Quantitative report and data display findings including an assessment of available measures, measurement gaps, access to care, and access to quality of care; and
4. Qualitative report and data display findings including community-level outcome measures, process evaluation outcome measures, and interorganizational formative measures.

Summary Reporting Rates Across Data Sources

To understand the data collected across the three program periods (April 1, 2019 – March 31, 2022), this section provides an overview of aggregate reporting rates across each data source including UDS, NIRS, GPRA, Grantee Quarterly Reports, and Unmet Needs.

Grantee Quarterly Reports Reporting Rates

Table 3 depicts the overall reporting rates by quarter across each of the three program years for all grantees. The frequency of quarterly reports submitted is broken down by IHS Areas and is displayed as counts in Table 3. Reporting rate counts were evaluated for each quarter of the grant reporting period (April 1, 2019 to March 31, 2022) and reflect the number of reports received in that quarter. Generally, the frequency of reporting by grantees across the IHS health system increased from 2019 Grant Program Year to the 2021 Grant Program Year.

Table 3: Frequency of Quarterly Report Submission by IHS Area

	2019 Grant Program Year (April 1, 2019 – March 31, 2020)					2020 Grant Program Year (April 1, 2020 – March 31,2021)					2021 Grant Program Year (April 1, 2021 – March 31, 2022)				
	April 1, 2019	July 1, 2019	October 1, 2019	January 1, 2020	Total	April 1, 2020	July 1, 2020	October 1, 2020	January 1, 2021	Total	April 1, 2019	July 1, 2019	October 1, 2019	January 1, 2020	Total
IHS Area	Quarter 1	Quarter 2	Quarter 3	Quarter 4	All Quarters	Quarter 1	Quarter 2	Quarter 3	Quarter 4	All Quarters	Quarter 1	Quarter 2	Quarter 3	Quarter 4	All Quarters
ALBUQUERQUE	0	1	1	0	**2**	1	1	1	1	**4**	2	2	2	2	**8**
BEMIDJI	0	2	2	3	**7**	2	4	3	4	**13**	4	4	4	4	**16**
BILLINGS	0	2	2	2	**6**	3	4	2	4	**13**	4	4	4	4	**16**
CALIFORNIA	0	3	3	1	**7**	7	6	6	4	**23**	8	8	8	8	**32**
GREAT PLAINS	0	0	0	0	**0**	2	1	2	2	**7**	2	2	2	2	**8**
NASHVILLE	0	1	0	0	**1**	2	3	1	0	**6**	2	2	2	2	**8**
NAVAJO	0	0	0	0	**0**	1	0	0	1	**2**	1	1	1	1	**4**
OKLAHOMA CITY	0	0	0	0	**0**	2	2	1	2	**7**	2	2	2	2	**8**
PHOENIX	0	1	1	1	**3**	5	5	5	4	**19**	4	4	4	4	**16**
PORTLAND	0	0	0	0	**0**	3	3	2	3	**11**	3	3	3	3	**12**
TUCSON	1	1	1	1	**2**	1	1	1	1	**4**	1	1	1	1	**4**
Total	**0**	**10**	**10**	**8**	**28**	**29**	**30**	**24**	**26**	**109**	**33**	**33**	**33**	**33**	**132**

Unmet Needs Reporting Rates

During the 2019 Grant Program Year (April 1, 2019 – March 31, 2020), grantees reported their unmet needs in a separate reporting form (Figure 2). A total of 22 grantees reported utilizing the unmet needs reporting form, with an average of 19 reporting for every quarter. Most of the grantees (n=15) reported for all four quarters. Two grantees each reported for three and two of the four quarters, respectively. The remaining three grantees reported for only one of the quarters. As a result, the reporting rate decreased over time from 95.5% during the first quarter to 72.7% during the last quarter.

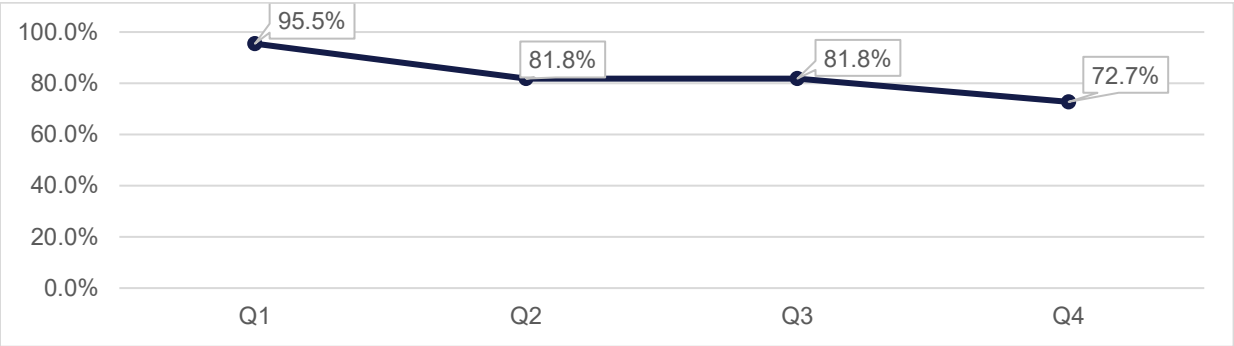


Figure 2: Unmet Needs Reporting Rates by Quarter (2019 Unmet Needs; n=22)

GPRA Reporting Rates

Over three years of grant program reporting (April 1, 2019 – March 31, 2022), GPRA data from 2016 to 2021 were examined. The average reporting rate fell by 34.4% from 87.9% in 2016 to 57.6% in 2021. The lowest reporting rate was observed in 2018 (51.5%).

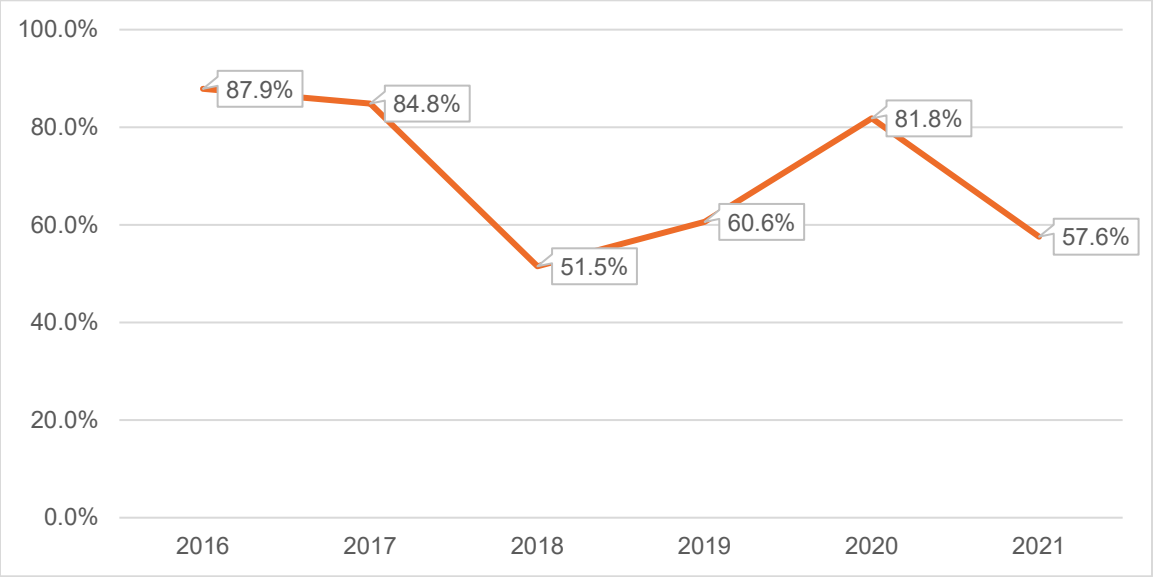


Figure 3: GPRA Annual Aggregate Reporting Rates (2016-2021 GPRA)

NIRS Reporting Rates

To determine which grantees were meeting the reporting requirements for NIRS, rates were calculated for each quarter of the reporting period, from April 1, 2019-March 31, 2022, and is displayed in Figure 4. Between the first quarter (April 1, 2019-June 30, 2019) and the last quarter (January 1, 2022-March 31, 2022), the reporting rate increased by 9.5% (61.4% to 70.9%) (Appendix B, Table 21).

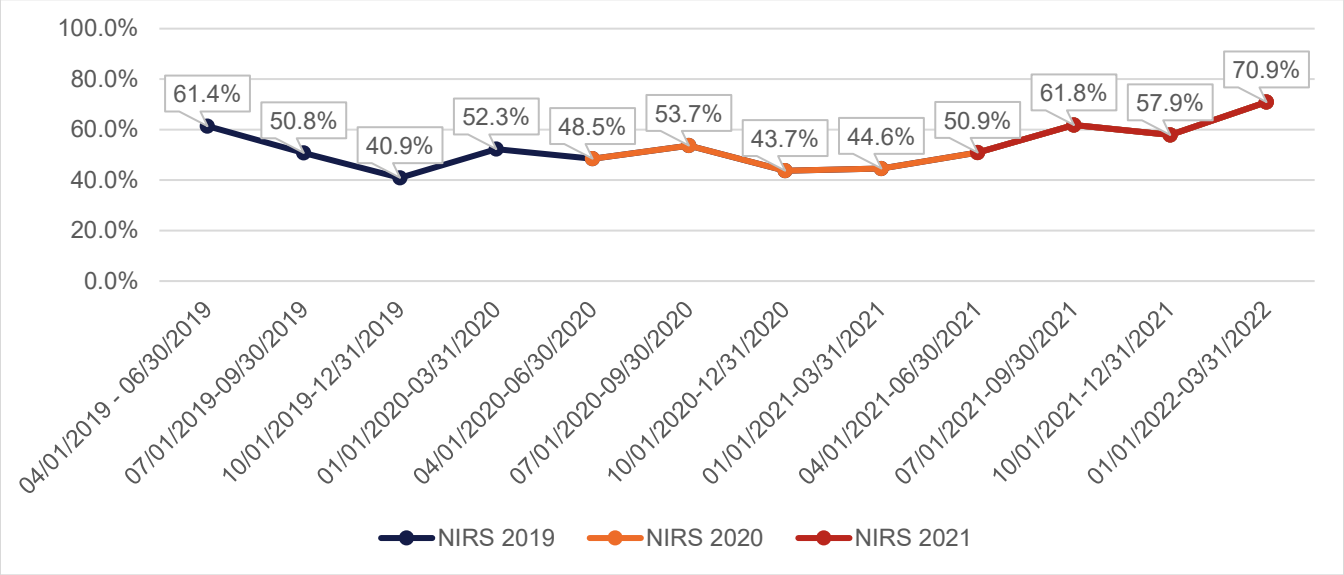


Figure 4: NIRS quarterly aggregate reporting rates across program years (NIRS 2019 - 2021)

UDS Reporting Rates

As depicted in Figure 5: UDS Patient Totals Reporting Rate, 2016-2021 for the UDS patient totals data, the reporting rate for all grantees increased by 5.4% between the 2016 and 2020 UDS. In the 2016 UDS, the reporting rate was 59.8%, which decreased slightly to 58.3% in the 2017 UDS. There was improvement between the 2017 UDS and the 2018 UDS, where the rate increased by 11.4% to 69.7%. In the 2019 UDS, the rate decreased slightly to 67.8%.

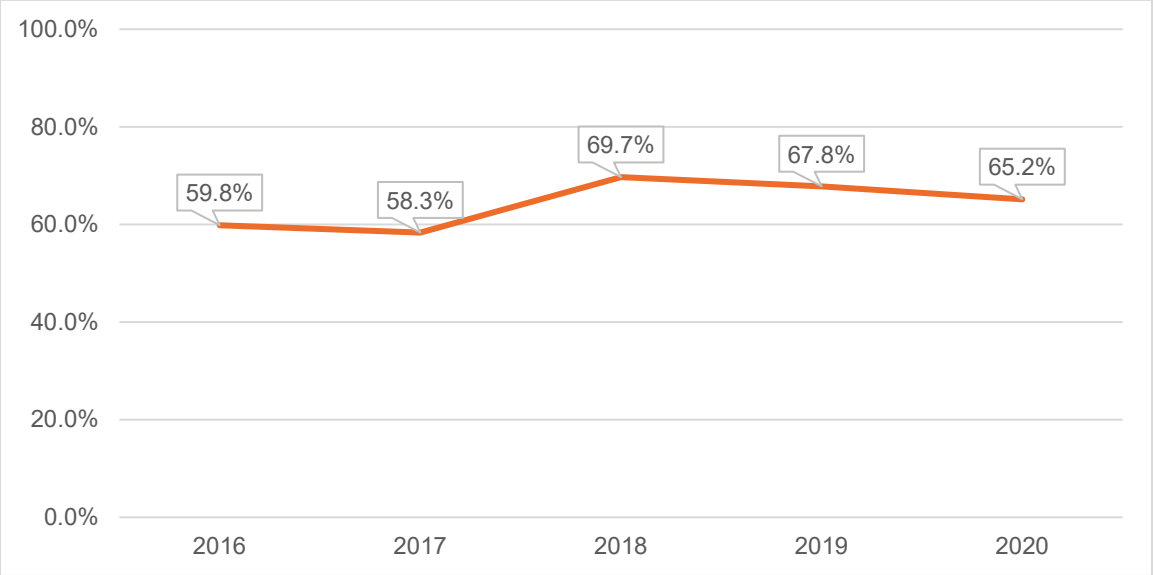


Figure 5: UDS Patient Totals Reporting Rate, 2016-2021

For the UDS visits data, the reporting rate for all grantees increased by 7.4% between the 2016 and 2020 UDS. In the 2016 UDS, the reporting rate was 72.5%, which decreased slightly to 69.2% in the 2017 UDS. There was substantial improvement between the 2017 UDS and the 2018 UDS, where the rate increased by 9.8% to 79.0%. In the 2019 UDS, the rate increased slightly to 79.9%, and remained stable in the 2020 UDS.

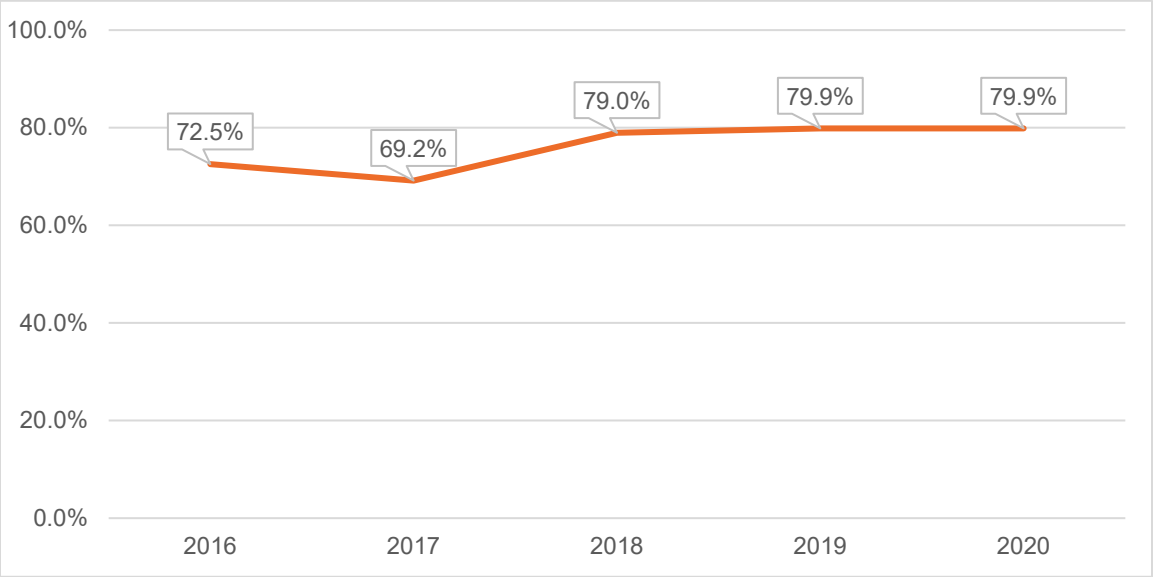


Figure 6: UDS Visits Reporting Rate, 2016-2021

Patient Demographics: UDS Patient Totals AI/AN Ratio by Gender, Specialty, Insurance Type/Status, and Service Type

The UDS patient totals data was used first, to provide an outline of an aggregate demographic profile of the communities that grantees serve, and second, to evaluate outcome measures related to the accessibility of health care services. The analysis is separated into sections by the total number of patients who accessed services over the reporting period, and then patient access by Gender, Specialty, Insurance Type, and Visit Type. Each section is further broken down to depict the total number of patients per year per category and the proportion of those patients who were AI/AN.

Figure 7 displays the total number of UDS patients for each year of the reporting period, by the proportion of AI/AN patients. The total number of patients seen during the reporting period increased by 17.2% across the reporting period, from 143,167 (2016 UDS) to 167,856 (2020 UDS). The total number of patients decreased slightly between the 2016 and 2017 UDS (135,869) before increasing in each subsequent year of the reporting period. Across the reporting period, AI/AN patients represented a minority of total patients seen by grantees. The highest proportion of AI/AN patients was observed in the first year of the reporting period (2016 UDS), a rate that decreased to its lowest value of 29.8% in the 2018 UDS. By the 2020 UDS, AI/AN patients were only 30.8% of the patient population, a 34.0% decrease from the 2016 UDS.

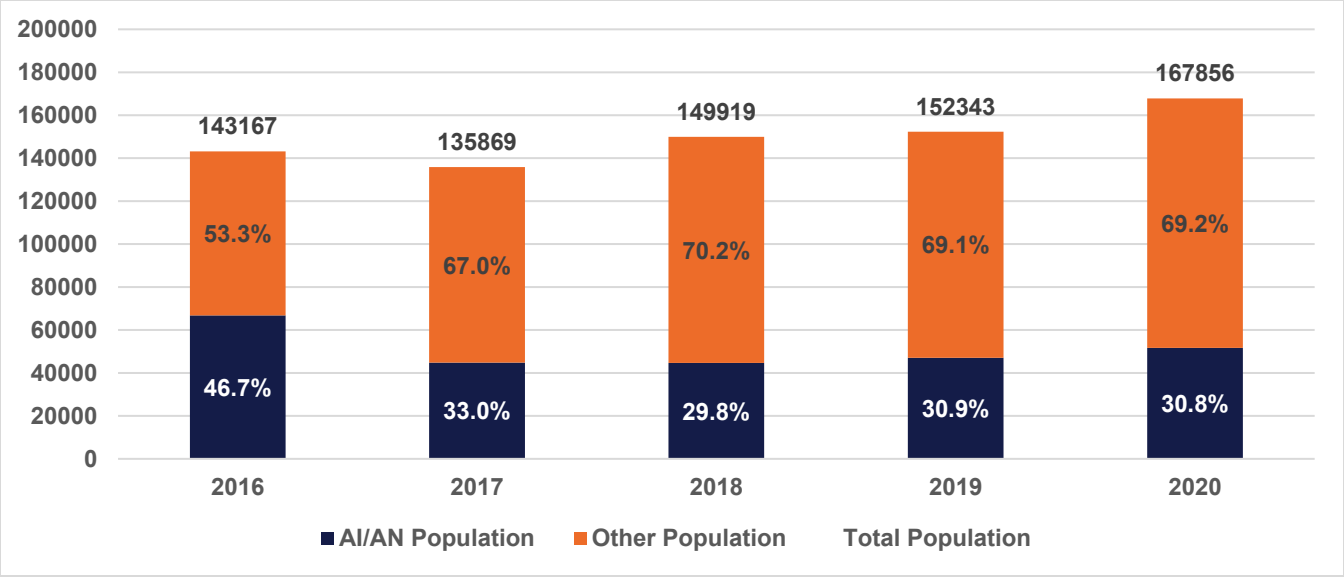


Figure 7: Total UDS Patients per Year by AI/AN Proportion (2016-2020 UDS)

Figure 8 displays the proportion of AI/AN UDS patients by gender (male and female). The total number of female patients seen during the reporting period decreased by 13.5% across the reporting period, from 79,578 (2016 UDS) to 68,807 (2020 UDS). However, the total number of female AI/AN patients decreased by a greater extent (43.1%) from the 2016 to the 2020 UDS. Across the reporting period, female AI/AN patients represented a minority of total patients seen by grantees. The proportion of female AI/AN patients ranged from 30.7% (2019 UDS) to 46.8% (2016 UDS).

For male UDS patients, the total population seen decreased by 13.8% from the 2016 UDS (60,058) to the 2020 UDS (51,774). This decrease was even more prominent among male AI/AN patients, where the number of patients seen in the 2020 UDS (15,225) represented a 35.7% decrease from the 2016 UDS (27,536). In each year of the reporting period, there was a lower proportion of male AI/AN patients in comparison to all other races/ethnicities, with a range of 28.9% (2018 UDS) to 45.8% (2016 UDS).

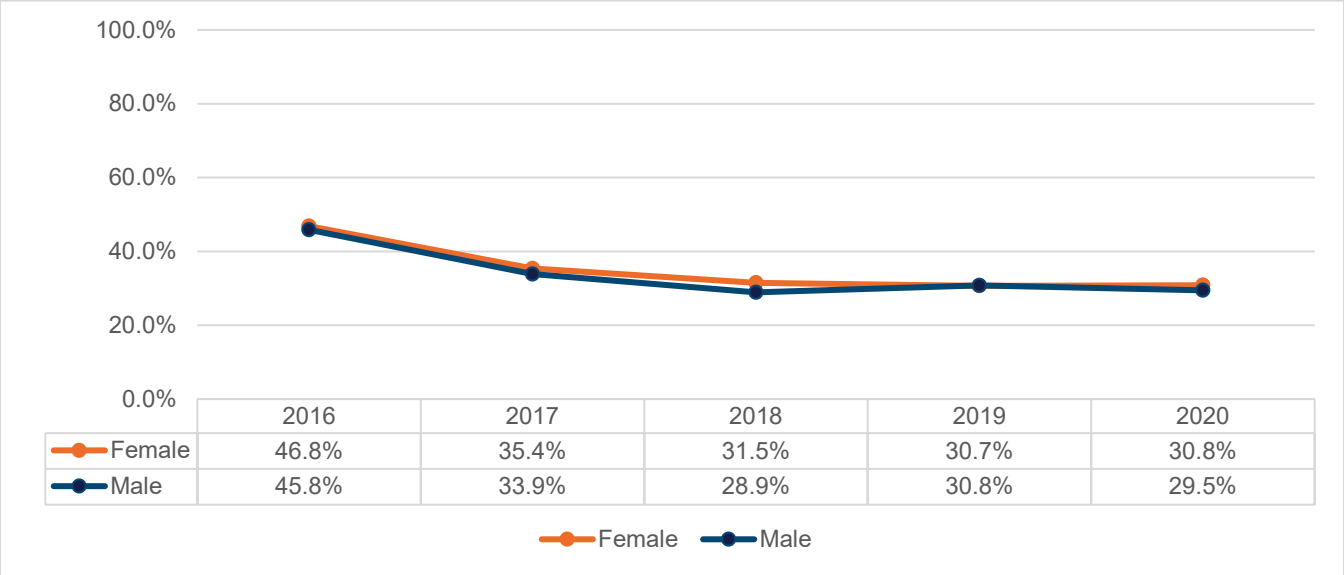


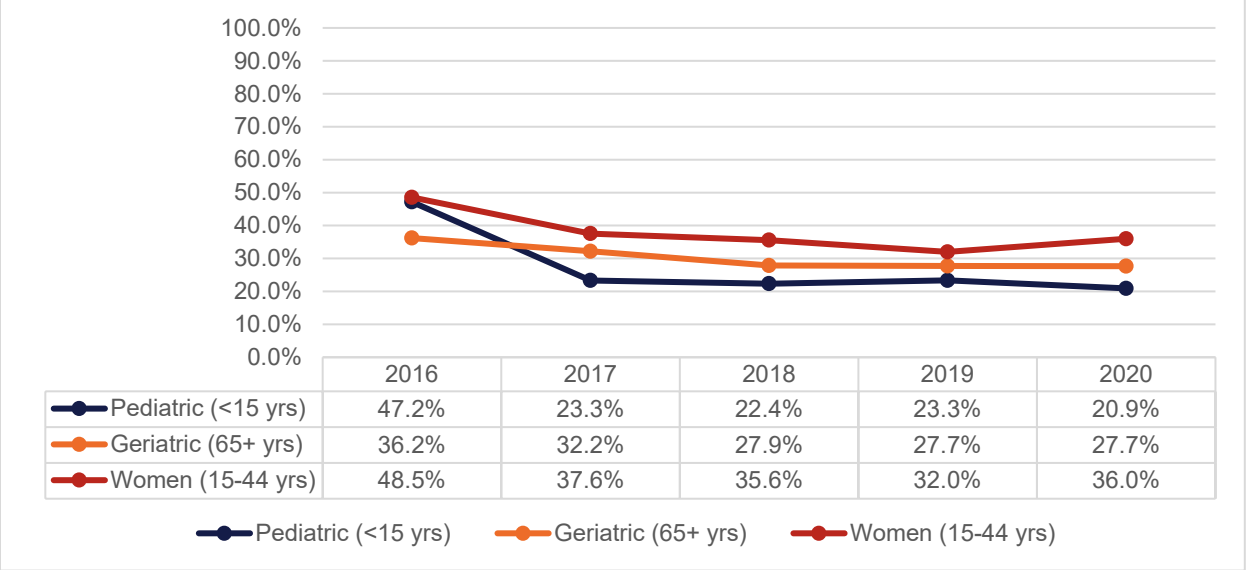
Figure 8: Total UDS Patients by Gender and AI/AN proportion (2016-2020 UDS)

Figure 9 displays the proportion of AI/AN patients by specialty: Pediatric (<15 years), Geriatric (65+ years), and Women (15-44 years). Over the reporting period, the total number of Pediatric patients decreased by 15.5%, from 28,491 (2016 UDS) to 24,061 (2020 UDS). Over the same time period, the number of AI/AN Pediatric patients decreased at a much more rapid rate: going from 13,437 in the 2016 UDS to 6,925 in the 2020 UDS, or a 62.5% decrease. During no year did the proportion of AI/AN Pediatric patients constitute a majority of all patients, with the high proportion (47.2%) observed in the 2016 UDS before decreasing to 20.9% in the 2020 UDS.

A similar trend emerged among the Geriatric patient group. While the total number of Geriatric patients seen increased by 20.1% from 2016 UDS (9,304) to the 2020 UDS (11,172), the number of AI/AN Geriatric patients decreased by 8.2% over the same period (3,367, 2016 UDS; 3,090, 2016 UDS). The proportion of AI/AN Geriatric patients was less than a third of all patients in all years except the 2016 UDS (36.2%). With the total number of patients increasing while the number of AI/AN patients decreased, the proportion of AI/AN Geriatric patients decreased by 23.6%.

For the Women patient group, there were 38,472 patients seen in the 2016 UDS, which decreased by 11.4% to 34,080 in the 2020 UDS. The total number of AI/AN Women patients also decreased over this period by 34.4%: from 18,676 (2016 UDS) to 12,259 (2020 UDS). Over the reporting period, the proportion of Women patients who were AI/AN was higher than it was for the two other Specialty groups, although it also

decreased similarly. In the 2016 UDS, the proportion was 48.5%, before decreasing by 25.9% to 36.0% in the 2020 UDS.



	2016	2017	2018	2019	2020
Pediatric (<15 yrs)	47.2%	23.3%	22.4%	23.3%	20.9%
Geriatric (65+ yrs)	36.2%	32.2%	27.9%	27.7%	27.7%
Women (15-44 yrs)	48.5%	37.6%	35.6%	32.0%	36.0%

Figure 9: Proportion of AI/AN Patients by Specialty (2016-2020 UDS)

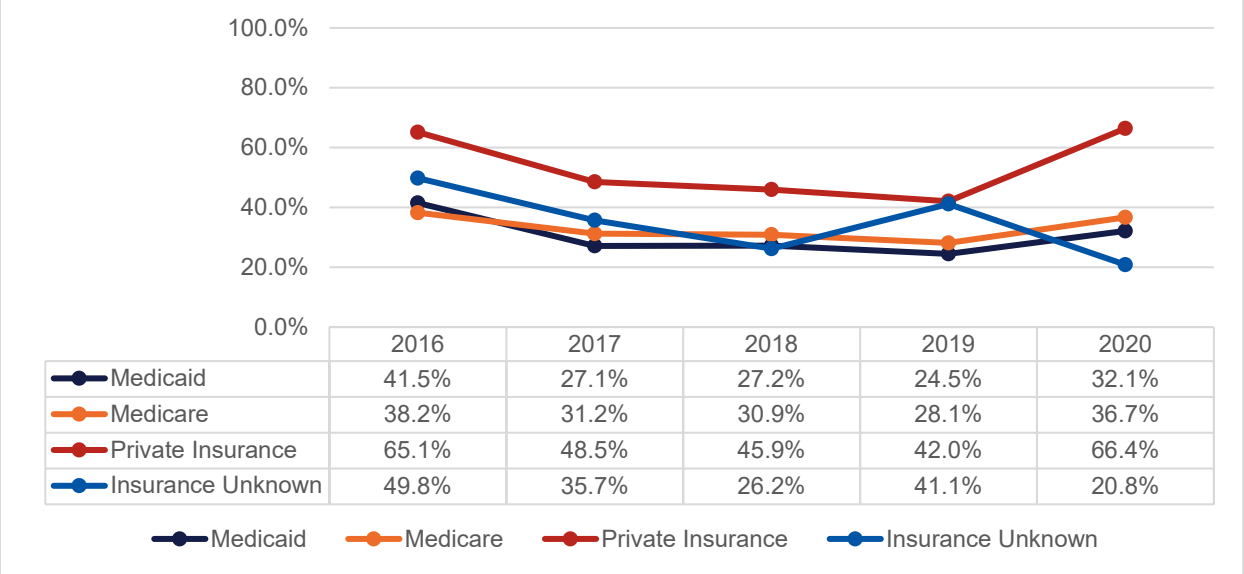
Figure 10 displays the proportion of AI/AN patients by Insurance Type. For those with Medicaid, the proportion of AI/AN patients was highest in the 2016 UDS (41.5%) before decreasing in subsequent years to 24.5% in the 2019 UDS. From the 2019 UDS, this proportion increased slightly to 32.1% in the 2020 UDS. Overall, the proportion of AI/AN patients on Medicaid decreased by 22.6% over the reporting period.

There was a similar trend observed among AI/AN Medicare patients: decreasing from 38.2% (2016 UDS) to 28.1% in the 2019 UDS. Again, the proportion increased between the 2019 and 2020 UDS, to nearly its 2016 UDS ratio (36.7%). Overall, the proportion of AI/AN Medicare patients only decreased by 4.1% over the reporting period.

AI/AN patients represented the largest proportion of patients with private insurance in the 2016 UDS (65.1%). This decreased steeply between the 2016 and 2017 UDS (48.5%), continuing to decrease in the 2018 UDS (45.9%) and the 2019 UDS (42.0%) before increasing back to 66.4% in the 2020 UDS. Overall, there was a 2.0% increase in the proportion of AI/AN patients with private insurance, relative to the first year of the reporting period (2016 UDS).

For patients with an unknown type of insurance, it was roughly evenly divided in the 2016 UDS, with 49.8% AI/AN patients. This proportion varied considerably over the reporting period: decreasing in the 2017 and 2018 UDS (35.7%, 26.2%) before increasing back to 41.1% in the 2019. However, this was not maintained as the proportion decreased by about half to 20.8% in the 2020 UDS. Across the reporting

period, there was a 58.1% decrease in the proportion of AI/AN patients with unknown insurance.



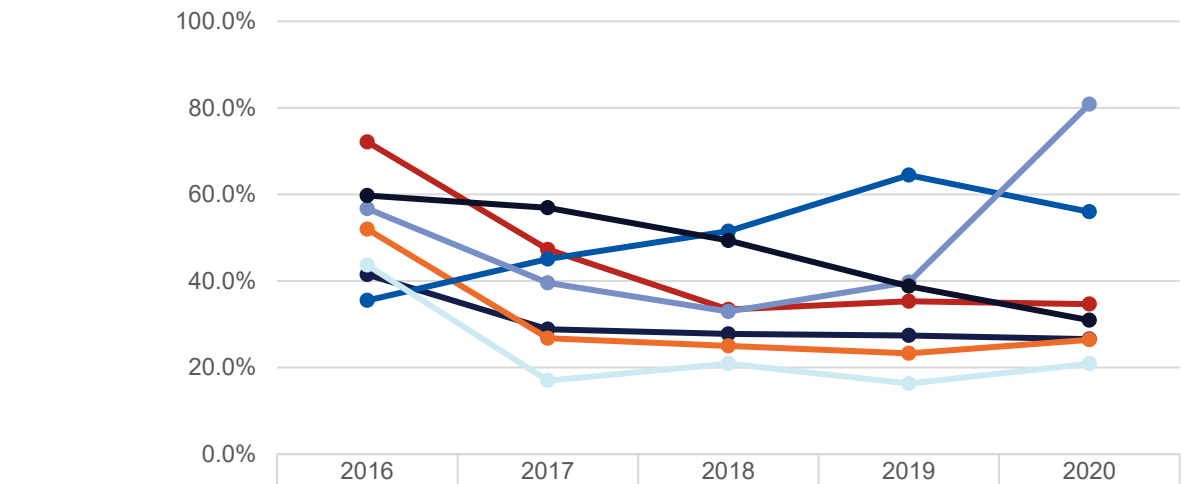
	2016	2017	2018	2019	2020
Medicaid	41.5%	27.1%	27.2%	24.5%	32.1%
Medicare	38.2%	31.2%	30.9%	28.1%	36.7%
Private Insurance	65.1%	48.5%	45.9%	42.0%	66.4%
Insurance Unknown	49.8%	35.7%	26.2%	41.1%	20.8%

Figure 10: Proportion of AI/AN Patients by Insurance Type (2016-2020 UDS)

Figure 11 displays the proportion of AI/AN patients by each Visit Type: Medical, Dental, Mental Health, Substance Abuse, Other Professional, Vision, Enabling Services. Please note that this section differs from the UDS Visit totals data, which is displayed in each respective program focus area section.

For all Visit Types except Substance Abuse and Other Professional, the highest proportion of AI/AN patients was observed in the first year of the reporting period (2016 UDS). The proportion of AI/AN patients accessing Medical services declined by 35.9% from the 2016 UDS (41.5%) to the 2020 UDS (26.6%). For Dental visits, the proportion of AI/AN patients decreased by nearly half (49.1%), from 52.0% (2016 UDS) to 26.4% (2020 UDS). The proportion of Mental Health visits by AI/AN clients decreased by a similar amount (51.9%): from 72.1% in the 2016 UDS to 34.7% in the 2020 UDS. Vision and Enabling Services also experienced similar decreases, with the proportion of AI/AN patients for Vision decreasing by 52.1% (43.7%, 2016 UDS; 20.9%, 2020 UDS) and by 48.2% for Enabling Services (59.8%, 2016 UDS; 30.9%, 2020 UDS).

For Substance Abuse and Other Professional visit types, the proportion of AI/AN patients in comparison to other populations actually increased over the reporting period. AI/AN patients were 35.5% of the patient population for Substance Abuse visits in the 2016 UDS, but increased by 57.7% to be 56.0% of the patient population in the 2020 UDS. Likewise, the proportion of AI/AN patients for Other Professional services increased by 42.6% between the 2016 UDS (56.7%%) and the 2020 UDS (80.9%).



	2016	2017	2018	2019	2020
Medical	41.5%	28.9%	27.8%	27.4%	26.6%
Dental	52.0%	26.8%	25.0%	23.3%	26.4%
Mental Health	72.1%	47.3%	33.4%	35.3%	34.7%
Substance Abuse	35.5%	45.1%	51.5%	64.5%	56.0%
Other Professional	56.7%	39.6%	33.0%	39.8%	80.9%
Vision	43.7%	17.0%	20.9%	16.3%	20.9%
Enabling Services	59.8%	56.9%	49.4%	38.8%	30.9%

Figure 11: Proportion of AI/AN Patients by Visit Type

Telehealth Patient Totals

UDS telehealth patient totals are displayed in Figure 12. As the collection of telehealth data only commenced in the 2020 UDS, and the 2021 UDS data was not included in this analysis, only one year of data is presented.

In the 2020 UDS, there were 23,580 total telehealth patients, of which AI/AN patients constituted 33.8%.

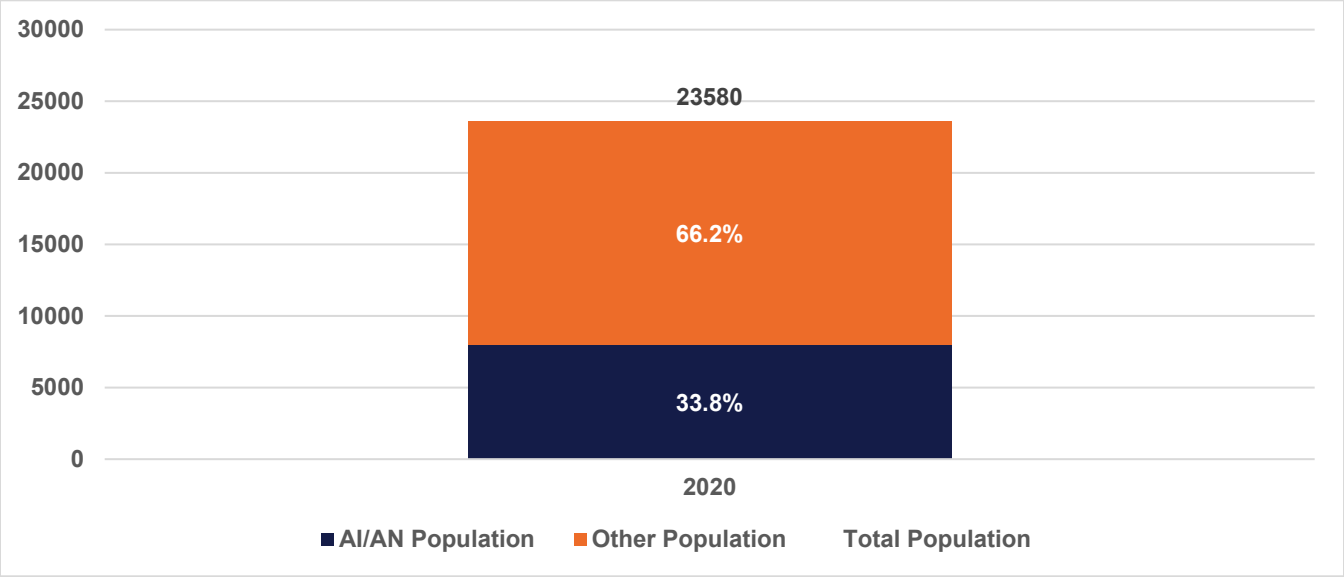


Figure 12: Total Telehealth UDS Patients per Year by AI/AN Proportion (2020 UDS)

Figure 13 displays the 2020 telehealth UDS patient data broken down by AI/AN proportion by the following categories: Gender, Specialty, Insurance Type, and Visit Type. For Gender, Female AI/AN patients represented 35.8% of all patients, while Male AI/AN patients were 31.6%. By Specialty, 34.8% of Pediatric patients were AI/AN, while 37.2% of Geriatric patients were. A slightly higher proportion (42.0%) of Women patients were AI/AN. Looking at the Insurance Type of patients, 35.7% of those with Medicaid were AI/AN, 34.5% of those on Medicare were AI/AN, and 37.0% of those with private insurance were AI/AN. A far greater proportion (59.6%) of patients with unknown insurance types were AI/AN compared to the other categories. For Visit Types, the highest proportions of AI/AN patients were observed for the Enabling Services (75.5%) (e.g., transportation, case management, outreach, eligibility assistance, community health workers), Dental (68.3%), and Other Professional visit types (58.4%) (e.g., acupuncture, naturopathy, podiatry). The lowest proportions of AI/AN patients were observed for the Mental Health (36.8%), Substance Abuse (33.9%), and Medical (33.7%) visit types.

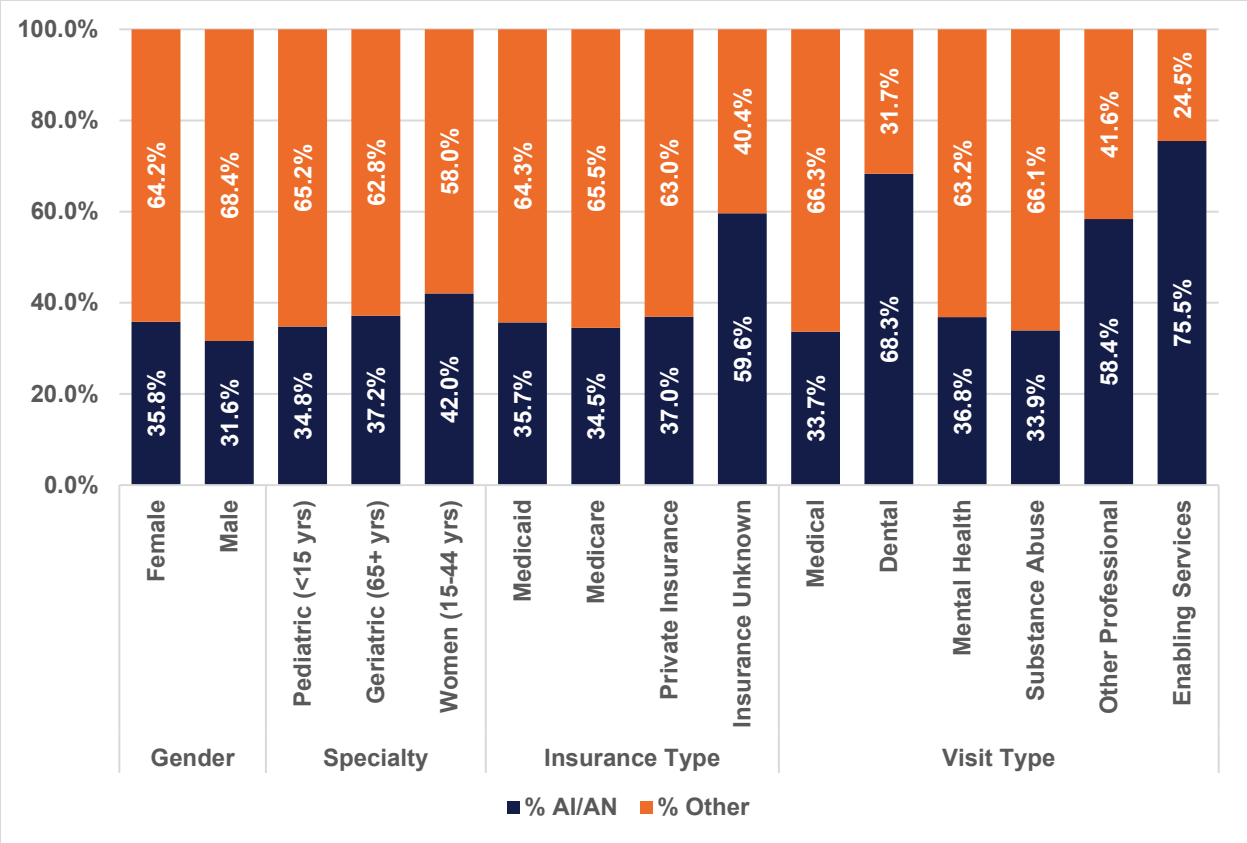


Figure 13: UDS Telehealth Visits by AI/AN Proportion and Gender, Specialty, Insurance, Type or Visit Type (2020 UDS)

Key Findings and Recommendations by 4-in-1 Program Area

Health Promotion and Disease Prevention

The IHS HP/DP addresses challenges related to health conditions and chronic diseases impacted by lifestyle issues such as obesity, physical inactivity, poor diet, substance abuse, and injuries and works to coordinate services aimed at enhancing approaches to preventive health.[4] This section provides an overview of evaluation findings across key sources of data including GPRA, UDS, as well as grantee quarterly reports and unmet needs. A summary of recommendations follows.

GPRA HP/DP Findings

The GPRA data findings are organized to provide an overview of reporting across the 2016 to 2021 GPRA periods and, provide findings organized by the respective GPRA HP/DP-related measures. Based on the 2016 to 2021 GPRA data, the HP/DP measures examined Good Glycemic Control (2016-2018), Poor Glycemic Control (replaced Good Glycemic Control in 2019), Controlled BP <140/90, DM Statin Therapy, Nephropathy Assessed, (Cervical) Pap Screening, Mammography Screening, Colorectal Cancer Screening, HIV Screening Ever, Childhood Weight Control, and Breastfeeding Rates (Appendix B).

In Figure 14, the overall rate for Good Glycemic Control was 48% in the 2016 GPRA, decreasing slightly to 47.8% in the 2017 GPRA, then increasing to 48.7% in the 2018 GPRA. In the 2016 and 2017 GPRA, the national target was nearly met. In the 2018 GPRA, this measure exceeded the national target lowered to 36.2%, resulting in surpassing the national target by 12.5% (Appendix B, Table 5). In 2019, the Poor Glycemic Control measure replaced the Good Glycemic Control measure. It is important to note that the national target measures changed, as noted above, to create a new baseline for this new measure. Subsequently, in the 2019 GPRA, the average rate was 20.1%, which increased to 21.0% in the 2020 GPRA and slightly increased to 21.3% in the 2021 GPRA. Poor Glycemic Control achieved its national targets in each year that it was collected during the reporting period.

Controlled Blood Pressure (BP), defined as BP <140/90, had high rates during the first three years (2016-2018 GPRA), before reporting a decline after 2019. In the 2016 to 2019 GPRA data sets, the overall rate of Controlled BP met or exceeded its national target in each year (Appendix B, Table 7). While the rate dropped from 64.2% in the 2018 GPRA to 53.8% in the 2019 GPRA, the national target was still achieved. The 2020 GPRA marked the first year the national target was not met, a trend that continued in the 2021 GPRA.

The average rate for DM Statin Therapy was 54.0% in 2016, the first year of the reporting period, establishing the baseline. While rates fluctuated between the 2017

[4] Health Promotion Disease Prevention Program: Office of Public Health (OPH). (2023). Retrieved 17 January 2023 from https://www.ihs.gov/california/index.cfm/offices/oph/hpdp/

GPRA (63.7%) and the 2021 GPRA (52.9%), the national targets were met for all five years. This is the only GPRA measure where national targets were met for all years analyzed.

For Nephropathy Assessed, the national target was met in 2018 GPRA. The 2016 GPRA (58.4%) and the 2017 GPRA (57.5%) came close to meeting the national target for each year (61.1%; 63.3%), while this trend was not observed in the last three years of the reporting period. In the 2019 GPRA, the average rate was 31.2%, decreasing to 24.9% in the 2020 GPRA, and decreasing again to 22.7% in the 2021 GPRA.

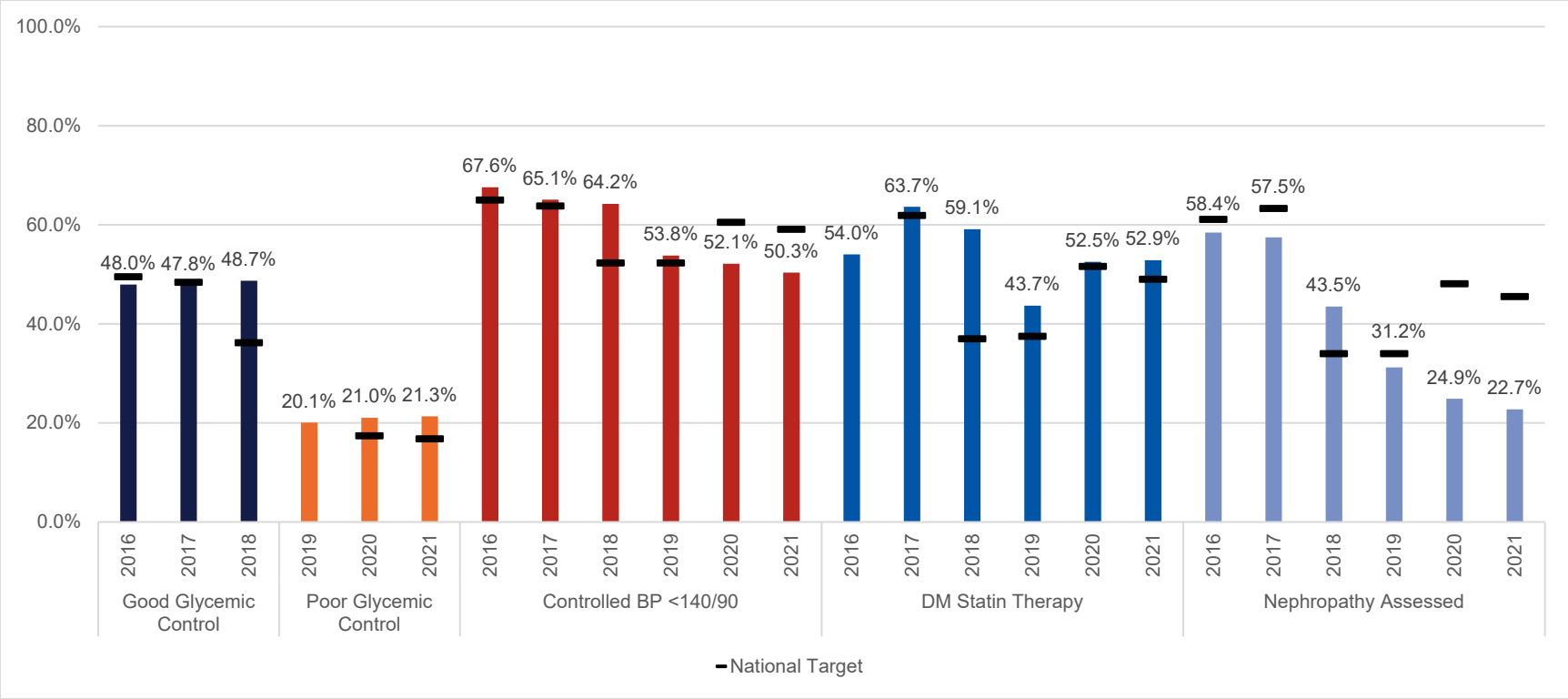


Figure 14: GPRA HP/DP Measures (1 of 2) (2016-2021 GPRA)

As depicted in Figure 15, over the reporting period, there was a downward trend observed among average (Cervical) Pap Screening rates. During the first two years of the reporting period, the rates were higher at 38.2% and 38.9% (2016 and 2017 GPRA), but they had declined to 22.5% by the 2021 GPRA. The 2018 GPRA rate (35.1%) was within a percentage point of achieving its national target (35.9%), however, in no year was the target met.

The average Mammography Screening rate increased from 31.9% (2016 GPRA) to 33.5% (2017 GPRA) and 36.7% (2018 GPRA). In the 2019 GPRA, the rate decreased to 19.9%, before decreasing further still to 13.4% (GPRA 2020) and 9.7% (GPRA 2021). The national target was not met during any year of the reporting period.

The average rate of Colorectal Cancer Screening remained stable between the 2016 and 2017 GPRA (28.9% and 29.5%), before declining to 14.3% in the 2021 GPRA. In no year was the national target met, although rates were within about 10% of the target in the 2016 and 2017 GPRA.

The average HIV Screening Ever rate was 23.3% in 2016, when a baseline was being established. The rate decreased slightly in the 2017 GPRA (20.7%), before increasing throughout the next four years to 34.0% in the 2021 GPRA. In all years except 2017, the national targets were met or exceeded.

The rate for Childhood Weight Control met or exceeded its national target in the first three years of the reporting period. The rate increased slightly from the 2016 GPRA (27.1%) to the 2017 GPRA (32.5%), before decreasing sharply in the 2018 GPRA (24.4%). A gradual decline was observed over the next three years of the reporting period, from 22.0% (2019 GPRA), to 20.2% (2020 GPRA) and 20.3% (2021 GPRA). While the last three years did not achieve their national targets, they were within only two percentage points of doing so.

Breastfeeding Rates were only assessed in a small proportion of grantees. In the 2016 GPRA, the rate was 25.0% and increased to 36.0% in the 2017 GPRA. The 2017 national target (36.4%) was nearly achieved. Similarly, a high rate was reported in the 2019 GPRA, although it did not achieve its national target (39.0%). In the 2018, 2020, and 2021 GPRA data, no grantees were included in the sample due to exclusions applied to the dataset, so rates could not be examined.

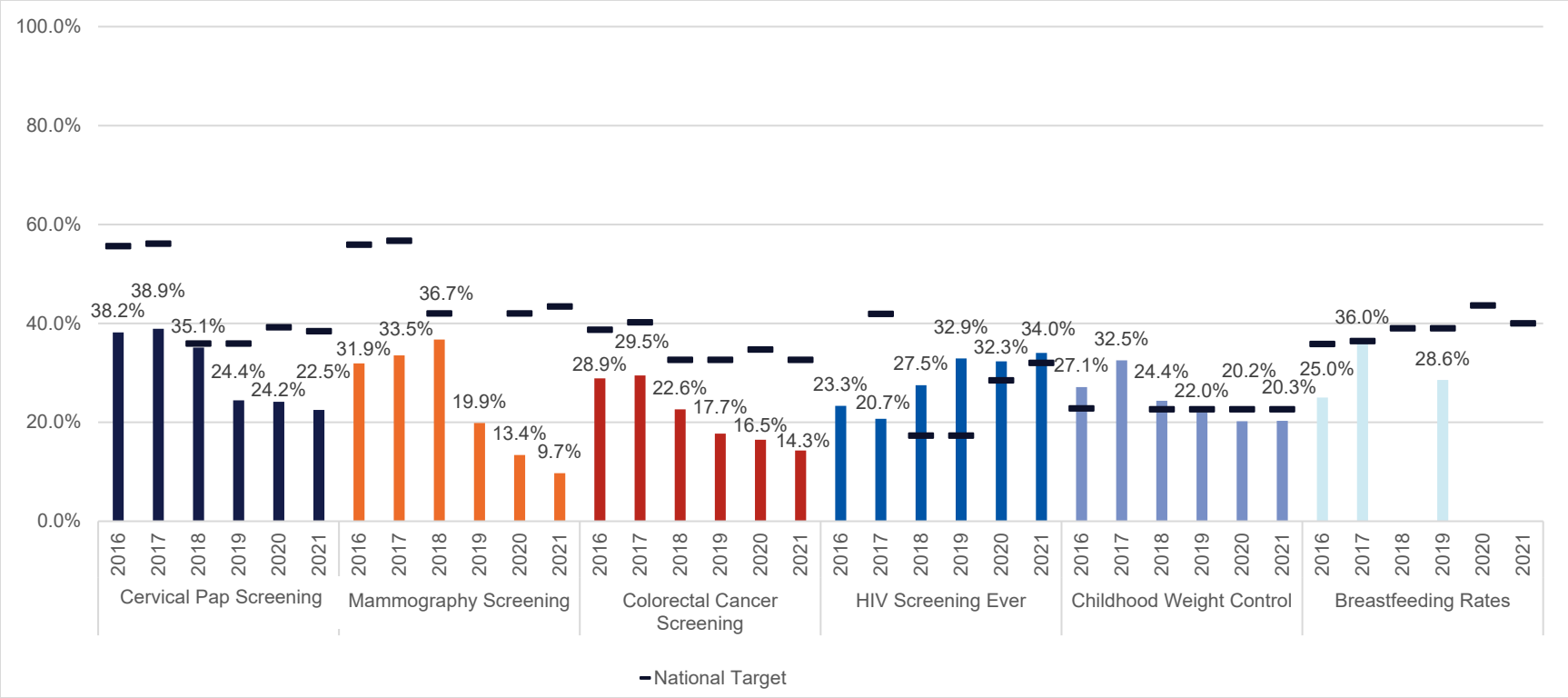


Figure 15: GPRA HP/DP Measures (2 of 2) (2016-2021 GPRA)

UDS HP/DP Findings

The UDS HP/DP findings are organized to illustrate the current access to health care experienced by urban AI/ANs across grantees' communities served. The outcome measures include the total number of patient visits and the proportion of AI/AN patients, as well as by HP/DP visit categories (Medical, Enabling Services, Vision, Other Professional). These are also represented as the total number of patient visits and the proportion of AI/AN patients for each visit category.

Figure 16 displays the total number of UDS patient visits per year across the 2019-2020 Grant Program Years. From the 2016 UDS to the 2020 UDS, the total number of patient visits decreased by 5.1%. During the same time period, the proportion of AI/AN patient visits decreased by 20.1% (Appendix B, Table 8).

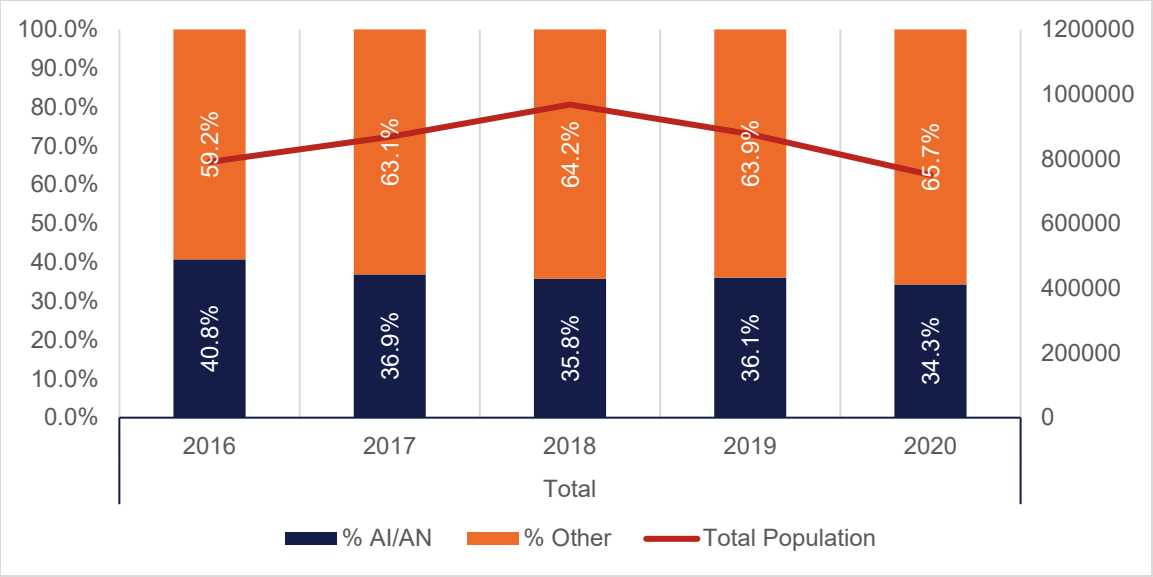


Figure 16: Total UDS Visits by AI/AN Proportion (2016-2020 UDS)

Figure 17 displays UDS visits by HP/DP visit type (Medical, Enabling Services, Vision, Other Professional) and by the proportion of visits from AI/AN patients. For each category, there was an increase in the number of patients from the 2016 UDS to the 2018 UDS, and a similar decrease from the 2019 UDS to the 2020 UDS. From 2016 to the 2020 UDS, the proportion of AI/AN patient visits increased for Vision (59.3%) and Other Professional (9.0%), while the proportion decreased for Medical (17.7%) and Enabling Services (2.8%). Increasing the total number of patients seen per category were observed among all service types except Medical: Vision patient visits increased by 91.0%, Other Professional (41.5%), and Enabling Services by 47.3%. Over the same time period, the total number of patients for Medical visits decreased by 6.9% (Appendix B, Table 8).

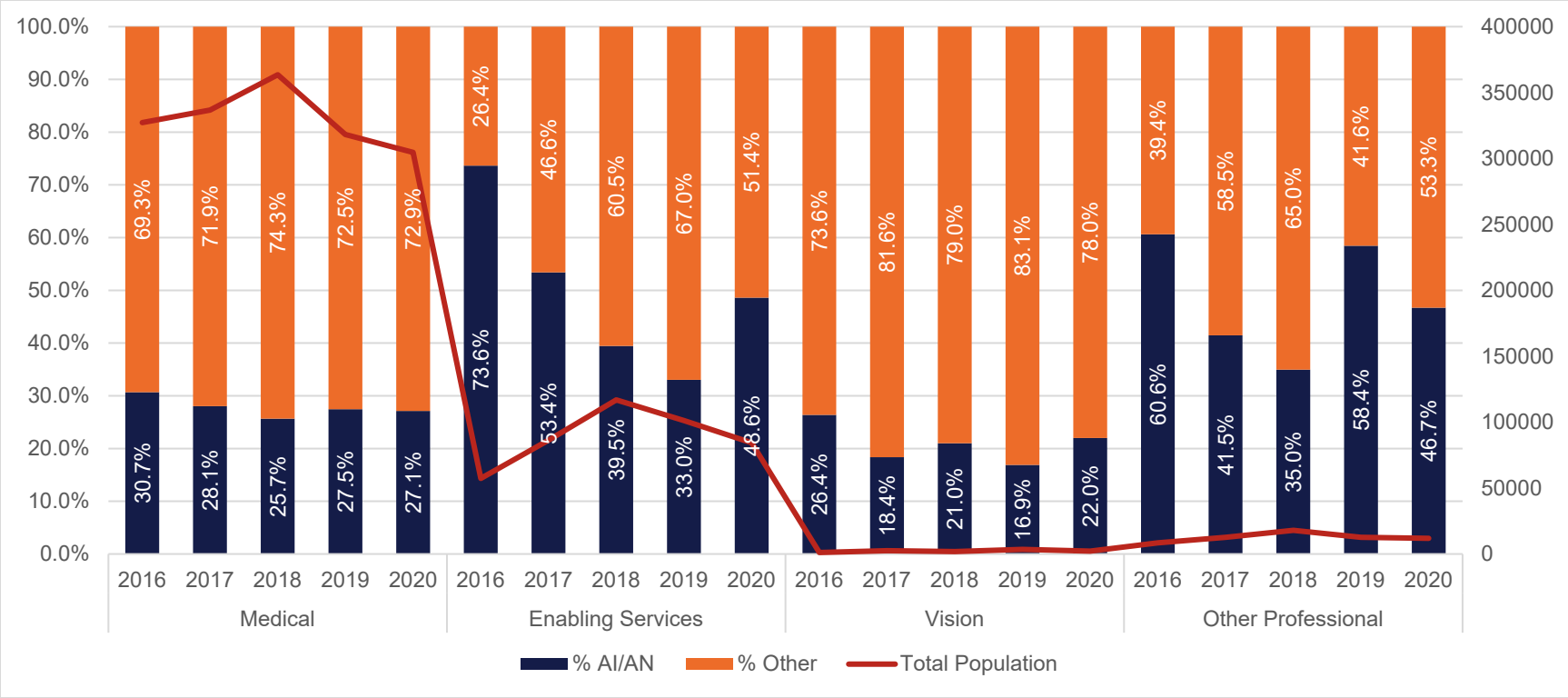
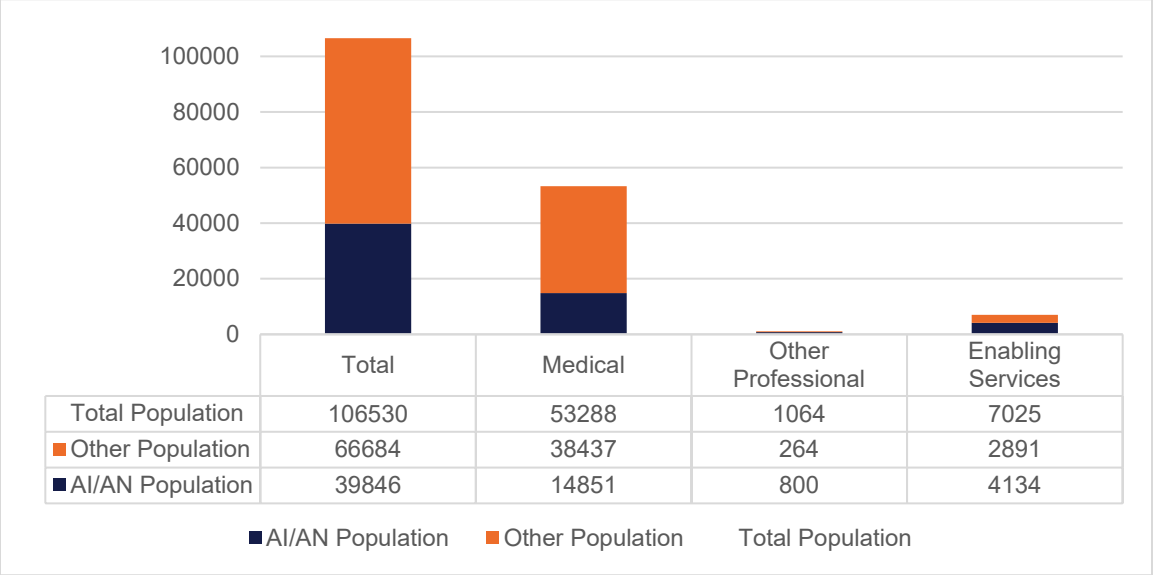


Figure 17: UDS Visits by Visit Type and AI/AN Proportion (2016-2020 UDS)

Figure 18 displays HP/DP visits by type and AI/AN proportion for telehealth services. Data collection for these services established baseline in 2020, so only one year of data is displayed. In the 2020 UDS, the total number of patient telehealth visits was 106,530; 37.4% of visits were made by AI/AN patients. Only 27.9% of the 53,268 Medical telehealth visits made during the 2020 UDS were by AI/AN patients. In contrast, a majority of Other Professional and Enabling Services visits were AI/AN patients, at 75.2% and 58.8%, respectively.



	Total	Medical	Other Professional	Enabling Services
Total Population	106530	53288	1064	7025
Other Population	66684	38437	264	2891
AI/AN Population	39846	14851	800	4134

Figure 18: UDS Telehealth Visits by Visit Type and AI/AN Proportion (2020 UDS)

Health Promotion and Disease Prevention Grantee Quarterly Reports and Unmet Needs

HP/DP Strengths

Various strengths in grantees emerged over the 2019 Grant Program Year (April 1, 2019–March 31, 2020) to the 2021 Grant Program Year (April 1, 2021–March 31, 2022).

For the 2019 and 2020 Grant Program Year, grantees' hours of services varied across the different grantees due to diverse geographic locations, surges in COVID-19 variants, and various COVID-19 restrictions. Grantees constantly kept up with the changing COVID-19 statuses, suspending in-person events and services if their local areas were experiencing surges. Often, grantees switched to offering virtual and hybrid solutions, such as nutrition classes and physical activity programs to help members continue adopting healthier lifestyles throughout the COIVD-19 pandemic.

Despite the challenges of the COVID-19 pandemic, HP/DP programs found workarounds and implemented creative solutions to meet their clients' needs. For example, one grantee reported that their nutritional educational program improved from 27% to 41% through a grocery program. In addition, the grantee was also able to provide contactless delivery of food to homes. Similarly, another grantee provided soup

kits with virtual lessons on traditional ingredients and virtual sessions on mindfulness, physical activity, and traditional and contemporary stories from local Tribal elders. In the 2019 and 2020 Grant Program Years also saw the “Stitch at a Time” program: a grantee initiative that featured traditional knowledge of culturally relevant ingredients used in contemporary recipes as well as traditional arts including sewing, beading, and hand drum making. Grantees also delivered virtual culture classes to continue to engage with their local communities. An additional resource for grantees was their partners from different sectors in the community, including local public health departments, school districts, community organizations, tribes, local and state health departments, health care providers, medical and nursing programs, and private companies.

For the 2021 Grant Program Year, grantees provided HP/DP services while confronting the COVID-19 pandemic head on. Despite barriers posed by COVID-19 pandemic restrictions, grantees continued to provide patient care using a hybrid approach (telehealth, virtual, and, if feasible, in person). They continued with health promotion activities, all while meeting the CDC's COVID-19 safety guidelines. Culturally-specific and culturally-responsive approaches were embedded in patient care, health promotion materials, and community outreach strategies. Through cross-departmental collaboration, many grantees worked to integrate HP/DP services with mental health, alcohol and substance abuse, and immunization programs to improve patient care delivery.

More than half of the 33 grantees reported an increase in in-person patient visits (for those sites that can accommodate in-person services) as well as an increase in the number of patients participating in telehealth/virtual services and programs. All 33 grantees continued to adapt service delivery in response to surges in COVID-19 cases. As COVID-19 outbreaks eased, grantees slowly resumed in-person patient visits while continuing to offer telehealth/virtual services and programs, before switching to hybrid/virtual offerings.

Another common goal during the 2021 Grant Program year was marketing and distributing COVID-19 vaccines/booster shots to increase the immunization rate in the community. Here again, cross-departmental collaboration was key to the success of this goal. For example, one HP/DP program partnered with their immunization program to hold outdoor outreach events that provided “one-stop shopping” for community members to receive health check-ups, screenings, vaccines, and booster shots. Grantees remained committed to providing in-person services when possible, conducting events with social distancing or temporarily suspending in-person events, if the need arose. Still, grantees frequently found themselves switching the care delivery mode from in person to telehealth or hybrid sessions.

Grantees found creative ways to continue with healthy lifestyles and wellness. For instance, a grantee provided kits for community members that included sage, cedar, and sweetgrass so they could continue to hold a ceremony at home. Another grantee delivered their HP/DP physical activity service through a live Zoom session with exercises led by an instructor. The HP/DP program has been held consistently.

As in the 2019 and 2020 Grant Program Years, during the 2021 Grant Program Year, grantees also benefited from their partners from different sectors in the community,

including local public health departments, school districts, community organizations, Tribes, local and state health departments, health care providers, medical and nursing programs, and private companies with limited resources. Approximately 25% to 30% of the grantees continued to partner and collaborate with local and state public health departments.

HP/DP Challenges, Barriers, and Unmet Needs

From the 2019 to 2021 Grant Program Years, the COVID-19 pandemic strained all grantees' access to HP/DP services, care, and programs. The 2020 Grant Program Year comprehensive report analyzed challenges and unmet needs for HP/DP services from both the 2019 Grant Program Year and 2020 Grant Program Year, so trends from these years cannot be separated.

Across all three grant program years, a frequently mentioned barrier to health care access was limited opportunity to meet in person because patients were concerned about COVID-19 exposure. The constant outbreaks of COVID-19 cases resulted in frequent temporary suspensions or reduced in-person services, health, and wellness activities, and cultural and traditional practices. Elders and patients with chronic health conditions were reluctant to schedule in-person visits, and patients expressed concerns about going to the clinics due to COVID-19.

With the increased need for telehealth services, technological barriers in the community became evident. Many patients, especially elders, simply lacked access to and knowledge of computers, laptops, video conferencing platforms, and high-speed internet. The inability to effectively use technology and the internet also affected patients' ability to stay informed of health services, since social media and email became the primary, sometimes sole methods of communication during the pandemic. In addition, patients with access to technology and the internet who participated in virtual care delivery services reported that the virtual services were often impersonal.

Other unmet needs experienced among patients were the external challenges of COVID-19 and the exacerbated unmet needs of community members, such as job loss and loss of health insurance, increased food costs, lack of affordable housing, increased need for employment services, and patient access (transportation) to the clinic for services.

At the organization level, grantees experienced challenges with staff burnout, staff turnover, and staff retention and recruitment of clinical and non-clinical staff. Staff expressed safety concerns with resuming in-person services and programs because some patients had COVID-19 vaccine hesitancy. Another challenge was accessing RPMS and the web-based EHR and client portal, needing updated EHR systems, and a lack of training for grantees with updated EHR systems to enter in patient data. In combination with reduced staff personnel causing limited capacity or suspended services, patients did not receive their routine check-ups and recommended screenings.

Next Steps and Future Planning for HP/DP

This section primarily focused on the 2021 Grant Program Year (April 1, 2021–March 31, 2022) findings to give a sense of grantees' next steps and future planning for the next program year. Key next steps and future planning primarily focused on outreach,

partnerships and collaboration, health education, virtual delivery of programs, technology, electronic health record systems, and staff recruitment and retention. For outreach delivery, partnerships, and collaboration, grantees want to develop further their hybrid delivery of patient care, health education sessions, patient engagement, and relevant programming to their communities. Grantees recognize the need for flexibility, continue to monitor the spread of COVID-19, and continue offering the COVID-19 vaccine to patients. Grantees want to expand their social media outreach, mailings, and website content to inform community members about upcoming events and health information resources. Also, grantees want to improve their information technology (IT) infrastructure, virtual technology platforms, staff training, and technology access for clients. Finally, grantees continue their ongoing clinical and non-clinical staff recruitment and retention efforts.

Summary of Recommendations

Government Performance Rating Act

Across the 2016–2021 GPRA data, decreases were observed for most of the measures, including Controlled BP (<140/90), Nephropathy Assessed, and (Cervical) Pap Screenings. The only rate that did not decrease was that of HIV Screening Ever, a metric that was introduced in the 2016 GPRA. With regard to achieving national targets, only DM Statin Therapy met or exceeded its national target each year of the reporting period. However, HIV Screening Ever did meet its national target in every year except 2017, while Controlled BP met its targets in every year except 2020 and 2021. Most metrics met the national target for at least one year during the reporting period, although three measures did not meet the national target at any point: (Cervical) Pap Screening, Mammography Screening, and Colorectal Cancer Screening.

GPRA recommendations:

- Emphasize the importance of screening for preventive purposes, especially for cancer prevention. (Cervical) Pap Screening is particularly important to emphasize in a population with relatively low HPV immunization rates (see immunization section).
- Assist grantees in developing preventive screening programs, including social marketing campaigns, mobile/pop-up events, and emphasizing the importance of screening during non-primary care service visits (e.g., behavioral health).
- Continue to implement successful initiatives for heart health as success is evident. Consider what practices could be shared as practice-based approaches with other grantees or organizations.
- Assess reasons for the general decrease in rates across measures, particularly from 2019 onward. While much of this may be due to the COVID-19 pandemic, as communities begin the recovery process, there may be opportunities to begin reestablishing care with patients, especially for routine services and screenings.
- Breastfeeding rates were high for the number of grantees who were included in the sample, however, many were excluded due to low values. There is a need to increase the number of grantees who provide and report breastfeeding support services.

Uniform Data System

For the HP/DP program focus area, the UDS visit types included in this area were Medical, Enabling Services, Vision, and Other Professional services. Over the 2016 to the 2020 UDS, the total number of visits made increased through the 2018 UDS, before beginning to decline through the 2020 UDS. On average over this period, the total population visits decreased slightly, while the percentage of visits made by AI/AN clients decreased by a much greater proportion. For the specific visit types, decreases were observed among Medical visits for the total population as well as AI/AN visits alone. Total visits for Enabling Services increased while AI/AN visits alone decreased slightly. Increases were observed for both Vision and Other Professional services, among both total population visits as well as AI/AN visits alone. Across visit types, a common trend was observed in that if the visit type decreased, the margin of decrease was significantly larger for the AI/AN population. Similarly, the increases observed among total population visits were markedly larger than the increases among their respective AI/AN visits. It is possible that one contributing factor to the decreases observed in visits across the 2016 to 2020 UDS is due to issues with data collection and reporting to the system.

UDS recommendations:

- There is a need to focus on recruiting and retaining urban AI/AN clients. While visits declined overall, the increase was primarily observed with the AI/AN visits alone. This trend indicates that either fewer AI/AN clients are accessing services overall, or those accessing services are doing so less frequently.
- There is a need to emphasize the importance of Medical visits for primary care and prevention purposes. This rate declined for both the total population as well as the AI/AN population alone, so this issue is not confined to the urban AI/AN population only.
- Continue to increase the number of Vision visits. While this visit type experienced the highest rate of growth over the reporting period, it is still the least frequently accessed HP/DP service type. This may be an opportunity to assist grantees with developing materials to spread awareness of the importance of routine vision assessments.

Data collection for telehealth services commenced in 2020, so no trend could be displayed. From the 2020 UDS Telehealth visit data, visits by AI/AN clients comprised only slightly more than a third of all visits made. This phenomenon was similar to Medical visits, where less than a third of all visits were made by AI/AN patients. In contrast, a majority of Other Professional and Enabling Services visits were AI/AN patients alone.

- Increase access to telehealth services to all urban AI/AN communities.
- Increase advertising of the types of services offered and their availability to build community awareness.
- Conduct a needs assessment of the urban AI/AN communities' health needs and socioeconomic conditions. This could be an important tool in understanding

where the opportunities for improvement lie (e.g., infrastructure, accessibility, availability).

Grantee Quarterly Reports and Unmet Needs

The analysis of the grantee quarterly reports provides a high-level overview of the strengths, barriers, and challenges experienced across grantee HP/DP programs from the 2019 through the 2021 Grant Program Years. Despite numerous challenges due to the COVID-19 pandemic, many grantees reported successes in their HP/DP programs, often through offering hybrid or virtual telehealth services in place of in-person services. By developing new methods of outreach and health care access, grantees were able to continue to provide HP/DP services such as nutrition classes, virtual exercise classes, and outreach clinics for routine health screenings and immunizations. Many grantees also incorporated culturally appropriate approaches into their HP/DP programs.

Although grantees demonstrated astounding flexibility and resilience in the face of the pandemic, many still faced challenges, barriers, and unmet needs. Grantees had trouble pivoting in-person services to virtual/hybrid formats due to COVID-19 restrictions. In addition, many clients experienced difficulty accessing this new service format, due to technological/broadband barriers in reaching their HP/DP goals, especially as staffing issues persisted. Exacerbating this were infrastructure issues experienced across grantees, including high staff turnover and difficulty recruiting new staff, both for clinical and non-clinical support roles. Regardless, grantees continued to be innovative in their efforts to provide HP/DP outreach and services to their communities.

Recommendations:

- Improve broadband/internet access among urban AI/AN communities so patients can reliably access telehealth services.
- Improve knowledge of and access to appropriate technology so patients can access virtual/hybrid services and keep up with routine health screenings and appointments.
- Provide more support for efforts that alleviate socioeconomic needs in the community that prevent individuals from accessing routine health services:
  - Economic concerns such as unemployment, increased cost of living, and lack of health insurance all create competing demands on patients' income and time, thus preventing them from prioritizing their health.
  - Access to reliable and affordable personal or public transportation prevents patients from attending in-person visits.
  - Lack of knowledge around insurance use and coverage, as well as lack of support for enrolling in insurance programs was another barrier.
  - Lack of access to quality food and safe spaces to engage in physical activity is a particular barrier in urban environments.
- Increase tailored efforts to reach more vulnerable populations, especially elders and houseless individuals.
- Work with patients unwilling to access services due to concerns of COVID-19, exacerbated among vaccine-hesitant populations.

- Focus on addressing infrastructure concerns expressed by grantees:
  - Improve recruitment and retention processes for clinical and non-clinical staff.
  - Hire clinical staff with AI/AN knowledge, experience, or personal background or provide cultural competence training for non-AI/AN staff.
- Address gaps in support for IT needs:
  - Improve access to RPMS and web-based EHR and client portals.
  - Update or replace outdated EHR systems.
  - Provide training for staff on updated EHR systems so that patient data can be entered accurately and efficiently

Immunization

The IHS National Immunization Program works to effectively support and strengthen IHS, Tribal, and UIO immunization programs across the country. The overall purpose of the program is to protect AI/AN people from vaccine-preventable diseases through sustaining high immunization coverage levels.[5] This section provides an overview of evaluation findings across key sources of data including NIRS, GPRA, as well as grantee quarterly reports and unmet needs. A summary of recommendations follows. For further information on findings for the Immunization Program can be found in the IHS 4-in-1 Grant Program webpage (https://www.ihs.gov/urban/4-in-1-grant-program/national-evaluation/).

NIRS Immunization Findings

The NIRS data findings are organized to first, provide an overview of reporting rates across the 2019 to 2021 NIRS reporting periods and second, provide more detailed reporting and immunization rates across the following categories: children 3- to 27-months-old, 2-year-old children, adolescents (13- year old and 13- to 17-year old), adults, and influenza vaccination.

NIRS Immunization Rates

Children 3- to 27-month-olds Immunization Rates

Figure 19 displays immunization rates for children 3- to 27-month-olds from 2019-2021. While all vaccines documented for this age group in NIRS are age appropriate, NIRS categorizes those who have received only the minimum recommended immunizations for their age group separately from those who have received all immunizations that are appropriate for their age group (appropriate recommended immunizations).

Over the reporting period, the minimum recommended immunization rate remained stable: increasing to 49.2% in the 2020 NIRS from the 2019 NIRS (46.7%), before decreasing slightly to 48.0% in the 2021 NIRS with an overall percentage change across all years of 2.7% (See Appendix B, Table 11). On average, the minimum recommended immunization rate for 3- to 27-month-olds was 48.0% across the reporting period.

There was an increase observed for appropriate recommended immunizations over the reporting period, with the rate increasing slightly from 31.2% (2019 NIRS) to 32.0% (2020 NIRS) and finally to 37.6% in the 2021 NIRS with an overall percentage change across all years of 17.0% (See Appendix B, Table 11). On average, the appropriate recommended immunization rate for 3-27-month-olds was 33.6% across the reporting period.

[5] Immunization and Vaccine-Preventable Diseases: Division of Epidemiology and Disease Prevention. (2023). Retrieved 15 February 2023 from https://www.ihs.gov/epi/immunization-and-vaccine-preventable-diseases/

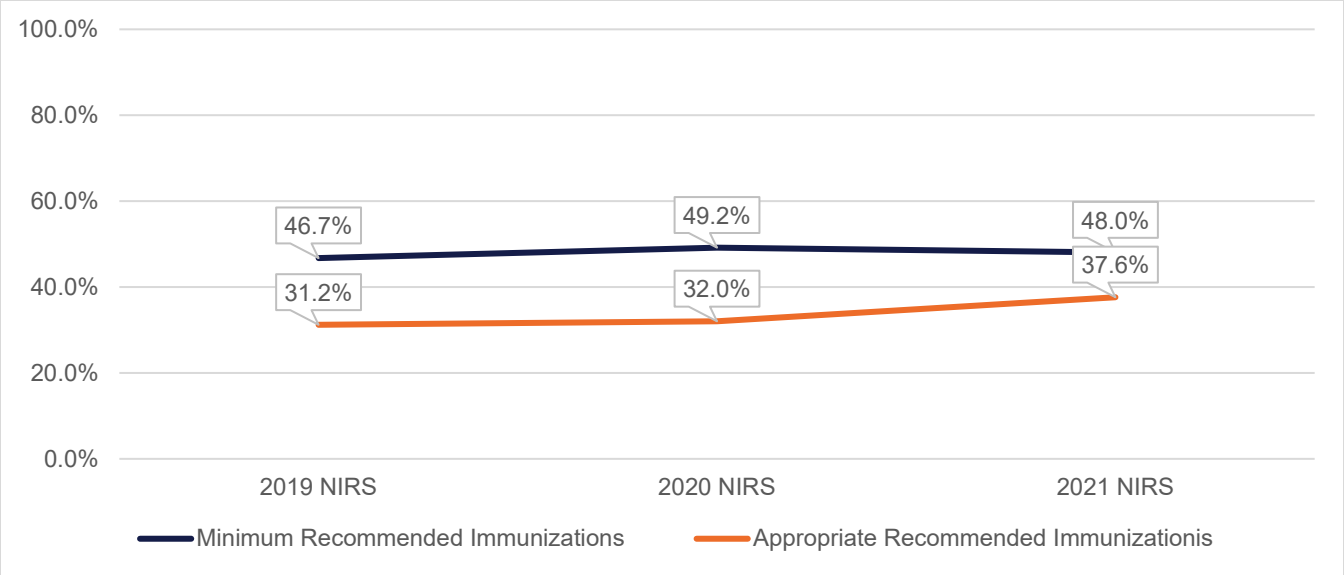


Figure 19: Children 3- to 27-month-old Immunization Rates (2019-2021 NIRS)

2-year-old Children Immunization Rates

The immunization rate among 2-year-olds is displayed in Figure 20. While an increase in rates was observed between the 2019 NIRS (36.6%) and the 2020 NIRS (44.6%), there was a substantial decline in the last year of the reporting period to 34.0% (2021 NIRS). On average, the 2-year-old immunization rate across the entire reporting period was 38.4% with an overall percentage change across all years of -7.4% (See Appendix B, Table 11).

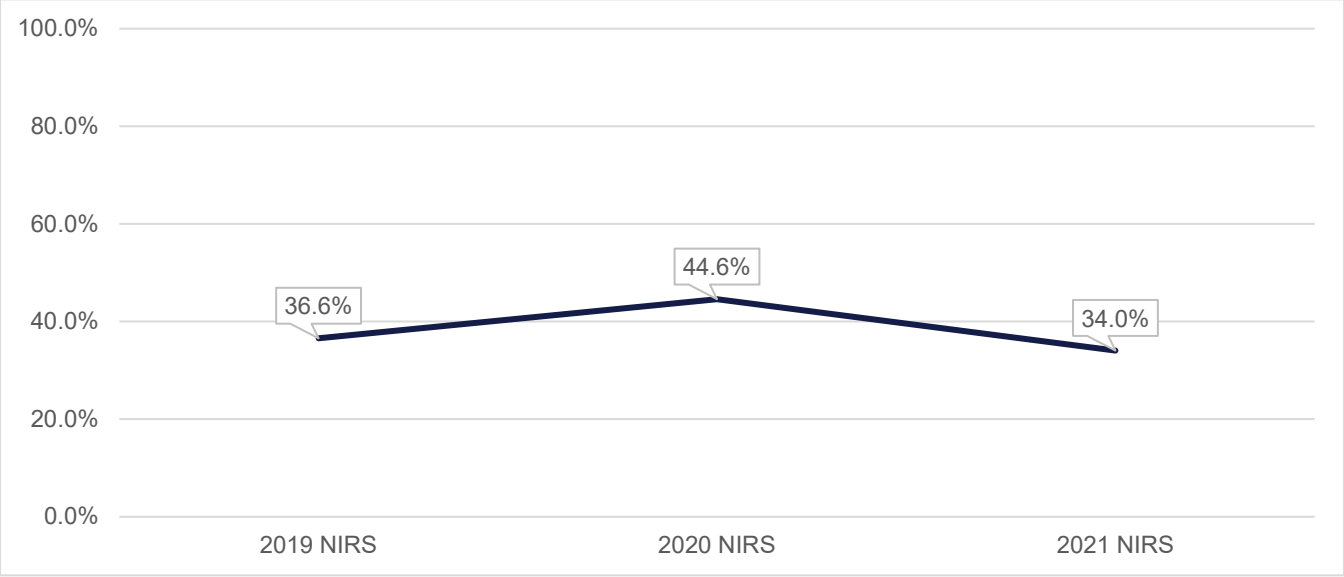


Figure 20: 2-year-old Children Immunization Rate (2019-2021 NIRS)

13-year-old Adolescent Immunization Rates

The NIRS data for adolescents is divided into two age categories: for 13-year-olds and 13- to 17-year-olds. Each age group is broken down further based on vaccine type and gender: for 13-year-olds, there are measures for the total population, by gender (female and male) and by combined gender. For 13- to 17-year-olds, the same groupings were observed. Please note that the combined gender (female and male) category differs from that of the all gender category in that only data on the HPV vaccine is collected. This is likely due to the need to have one aggregate source for information on this vaccine, which was previously only collected separately for males and females prior to the 2020 NIRS, when this combined category was introduced.

Figure 21 displays immunization rates among 13-year-olds by four different groups: for all 13-year-olds (all genders), by gender (male, female), and by combined gender (male female). For the combined gender group, the measures were only introduced in the 2020 Grant Program Year (2020 NIRS), so the trend is not captured in the 2019 NIRS.

For all 13-year-olds, the rate increased from 13.8% (2019) to 16.0% (2020 NIRS), before dropping to 8.4% in the 2021 NIRS. The average immunization rate for 13-year-olds was 12.8%.

Similarly, among 13-year-old males, the rates increased from 27.1% in the 2019 NIRS to 32.4% in the 2020 NIRS before decreasing to 27.9% in the 2021 NIRS. For 13-year-old males, the average immunization rate across the reporting period was 29.1%.

Among 13-year-old females, a decline was observed over the entire reporting period, from 35.6% (2019 NIRS) to 33.6% (2020 NIRS) and decreasing further still to 19.0% in the 2021 NIRS. For 13-year-old females, the average immunization rate across the reporting period was 29.4%.

In the first year that data was collected for 13-year-olds, male and female combined, the rate was 28.8% (2020 NIRS), but declined sharply to 16.2% in the 2021 NIRS. The average immunization rate for this age group was 22.5%. An overview of overall percentage change for each category across all years can be found in (Appendix B, Table 10).

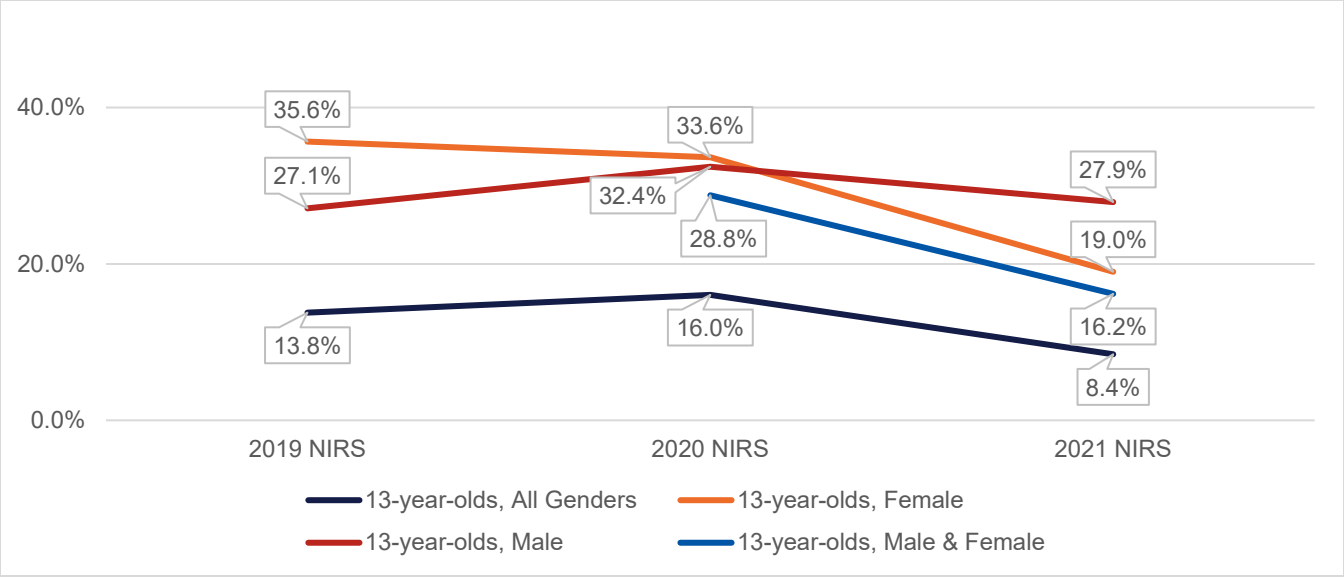
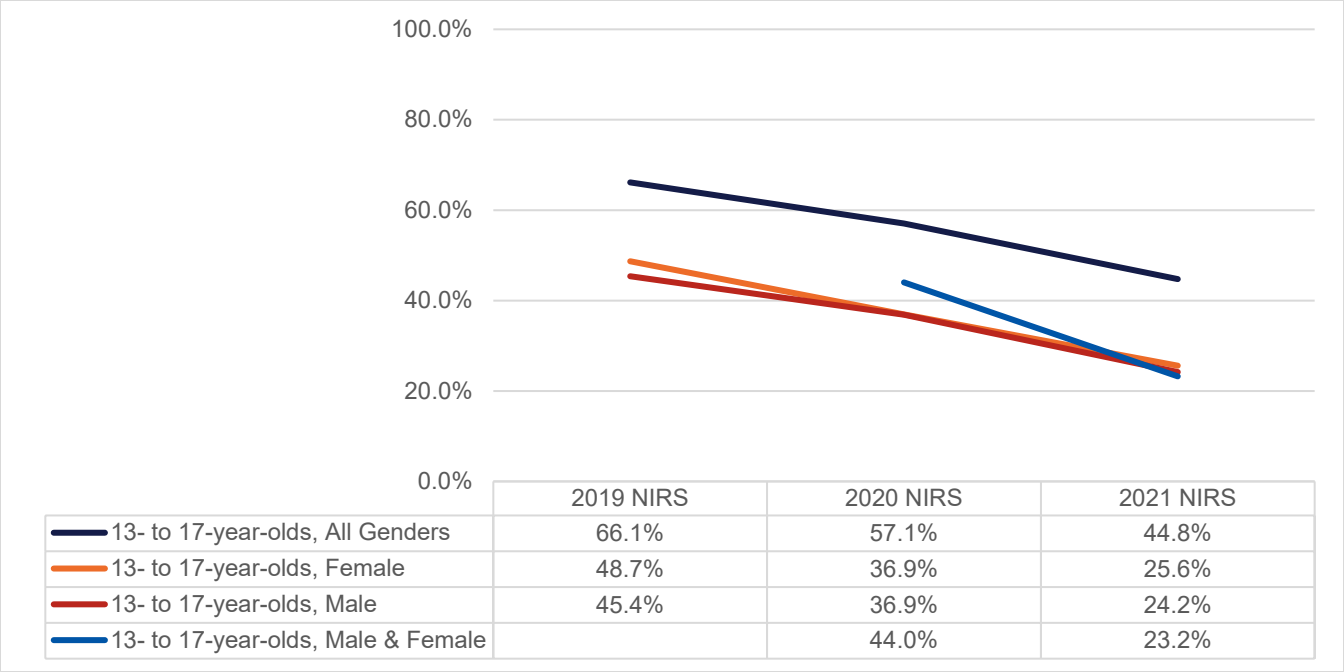


Figure 21: 13-Year-Old Adolescent Immunization Rates by Gender (2019-2021 NIRS)

13- to 17-year-old Adolescent Immunization Rates

As with the 13-year-olds immunization data presented above, the 13- to 17-year-olds age group is broken down further based on vaccine type and gender: there are measures for the total population, by gender (female and male) and by combined gender. Again, please note that the combined gender (female and male) category differs from that of the all-gender category in that only data on the HPV vaccine is collected. This is likely due to the need to have one aggregate source for information on this vaccine, which was previously only collected separately for males and females prior to the 2020 NIRS, when this combined category was introduced.

Figure 22 displays immunization rates among 13- to 17-year-olds by four different groups: for all 13- to 17-year-olds, by gender (male and female), and by combined gender. For the combined gender group, the measures were only introduced in the 2020 Grant Program Year (2020 NIRS). For all 13- to 17-year-olds, the immunization rate declined over the entire reporting period: from 66.1% (2019 NIRS) to 57.1% (2020 NIRS) to 44.8% in the 2021 NIRS. Immunization rates among 13- to 17-year-old males and females were similar, and declines were observed for both gender groups over the reporting period. In the first year that data was collected for 13- to 17-year-olds (male and female combined), the rate was 44.0% (2020 NIRS), but declined sharply to 23.2% in the 2021 NIRS. An overview of overall percentage change for each category across all years can be found in Appendix B, Table 11).



	2019 NIRS	2020 NIRS	2021 NIRS
13- to 17-year-olds, All Genders	66.1%	57.1%	44.8%
13- to 17-year-olds, Female	48.7%	36.9%	25.6%
13- to 17-year-olds, Male	45.4%	36.9%	24.2%
13- to 17-year-olds, Male & Female		44.0%	23.2%

Figure 22: 13-17-Year-Old Adolescent Immunization Rates (2019-2021 NIRS)

Adults

The immunization rate among all adults is displayed in Figure 23. A downward trend was observed over the reporting period, with rates dropping from 34.2% in the 2019 NIRS to 31.1% (2020 NIRS), and finally to 30.4% in the 2021 NIRS. While a decline was observed, the actual decrease between the first year of the reporting period (2019 NIRS) and the last (2021 NIRS), was 3.8% (See Appendix B, Table 10).

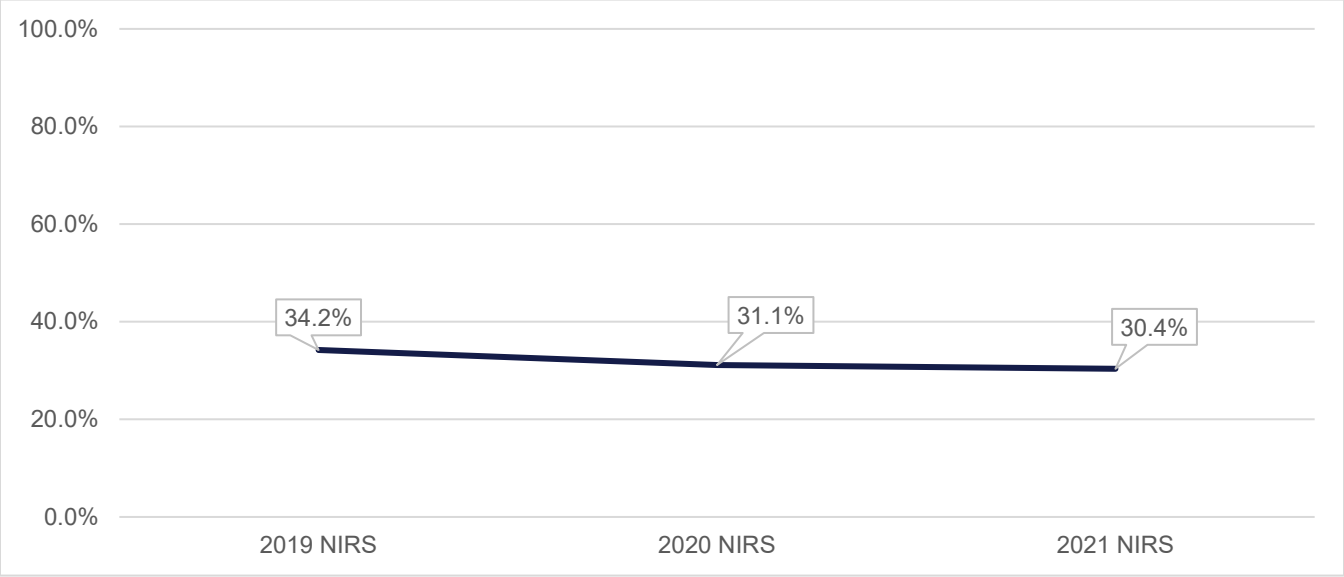
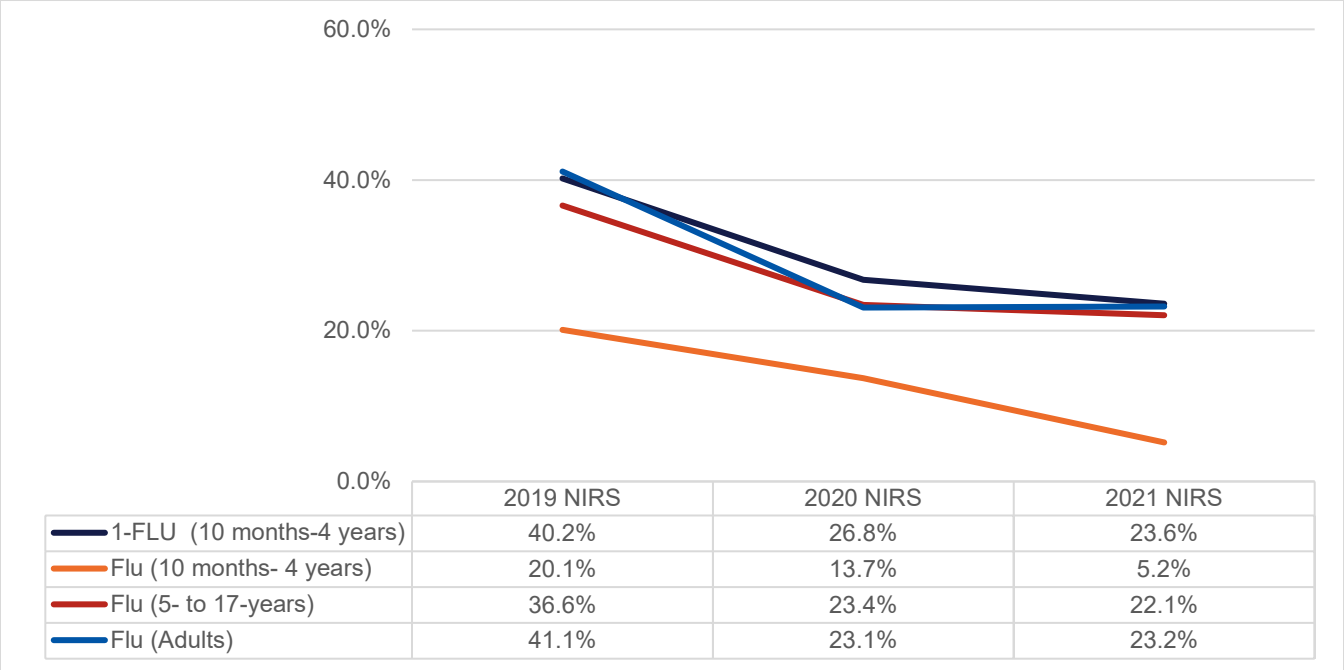


Figure 23: Adult Immunization Rate (2019 to 2021 NIRS)

Influenza Immunization Rates

Figure 24 displays rates for influenza immunizations by age group and vaccination status. The age groups include young children (10 months to 4-years-old) by first flu immunization (1-FLU) and fully vaccinated status (Flu), children and adolescents who are fully vaccinated (5- to 17-years-old), and fully vaccinated adults (18+ years). Declines were observed among all groups between the 2019 NIRS and 2020 NIRS, with the immunization rate among adults decreasing by 18.0% and the rate among 5- to 17-year-olds decreasing by 13.2% (See Appendix B, Table 10). Between the 2019 NIRS and 2020 NIRS, the rate for first influenza immunizations among 10 months to 4-years decreased by 13.4%, and the rate for fully immunized 10 months to 4-year-olds decreased by 6.4%. Less significant declines were observed between the 2020 and 2021 NIRS among all age groups except fully immunized 10 months to 4-year-olds, where the rate declined by 8.5% from 13.7% (2020 NIRS) to 5.2% (2021 NIRS).



	2019 NIRS	2020 NIRS	2021 NIRS
1-FLU (10 months-4 years)	40.2%	26.8%	23.6%
Flu (10 months- 4 years)	20.1%	13.7%	5.2%
Flu (5- to 17-years)	36.6%	23.4%	22.1%
Flu (Adults)	41.1%	23.1%	23.2%

Figure 24: Influenza Immunization Rate by Age and Vaccination Status (2019 to 2021 NIRS)

GPRA Immunization Findings

The GPRA data provide findings organized by the following GPRA immunization measures: Influenza Vaccination (6 months to 17 years old), Influenza Vaccination (18+ years old), Pneumococcal Vaccination (65+ years), Adult Composite Immunization, and Childhood Immunizations. Note that the Adult Composite Immunization measure was introduced in 2018 to replace the previous Pneumococcal Vaccination (65+ years) measure, so data for this measure was only collected during the 2018-2021 GPRA, while data for the Pneumococcal Vaccination (65+ years) was only collected during the 2016 and 2017 GPRA. Table 11 in Appendix B displays rates for GPRA immunization measures over the entire reporting period from 2016 to 2021. GPRA data are presented

as an average rate per year, in comparison to the national target rate, as well as the percentage change between years and total year-over-year change between 2016 and 2021.

Figure 25 illustrates the 2016 to 2021 GPRA reporting rates against the national GPRA targets. Across the 2016 to 2021 GPRA data, no reported rate for childhood (6 months-17 years) influenza immunizations achieved its national target. However, this immunization measure was introduced in 2016, and as such, there was no national target established for that year. The average immunization rate for childhood influenza vaccines decreased over the reporting period, from the 2016 GPRA (28.4%) to 10.7% in the 2021 GPRA (See Appendix B, Table 11).

Although the national target for influenza immunization rates among adults was not met over the reporting period from 2016 to 2021, the target was nearly reached in two out of the six years: the 2018 GPRA (18.0% grantee rate; 18.8% national target) and the 2019 GPRA (18.3% grantee rate; 18.8% national target) (Figure 25). In addition, this immunization measure was introduced in 2016, and as such, there was no national target established for that year.

Childhood immunization rates were reported over the entire 2016 to 2021 GPRA data. While the national target for each year was not met during any one year of the reporting period, the immunization rate during the 2018 GPRA was within 5.2% of meeting its target (40.4% grantee rate; 45.6% national target). Over the entire reporting period, the average rate of childhood immunizations decreased by 19.0% (See Appendix B, Table 11).

Data on the immunization rate for pneumococcal vaccination, recommended for adults 65 years and older, was only collected during the 2016 and 2017 GPRA years (Figure 25). Over this period, the rate stayed stable at 56.0% in 2016 GPRA, and 56.9% in 2017 GPRA, falling short of the national target in each year.

Finally, data on adult composite immunizations were collected during the 2018 to 2021 GPRA reporting period and average yearly immunization rates are displayed in Figure 25. Over this period, the immunization rate decreased by 6.8% (See Appendix B, Table 11). Across each year, the national target was not met. It is important to note that this immunization measure was introduced in 2018 to replace the previous pneumococcal vaccination measure. As a result, there was no national target established for that year.

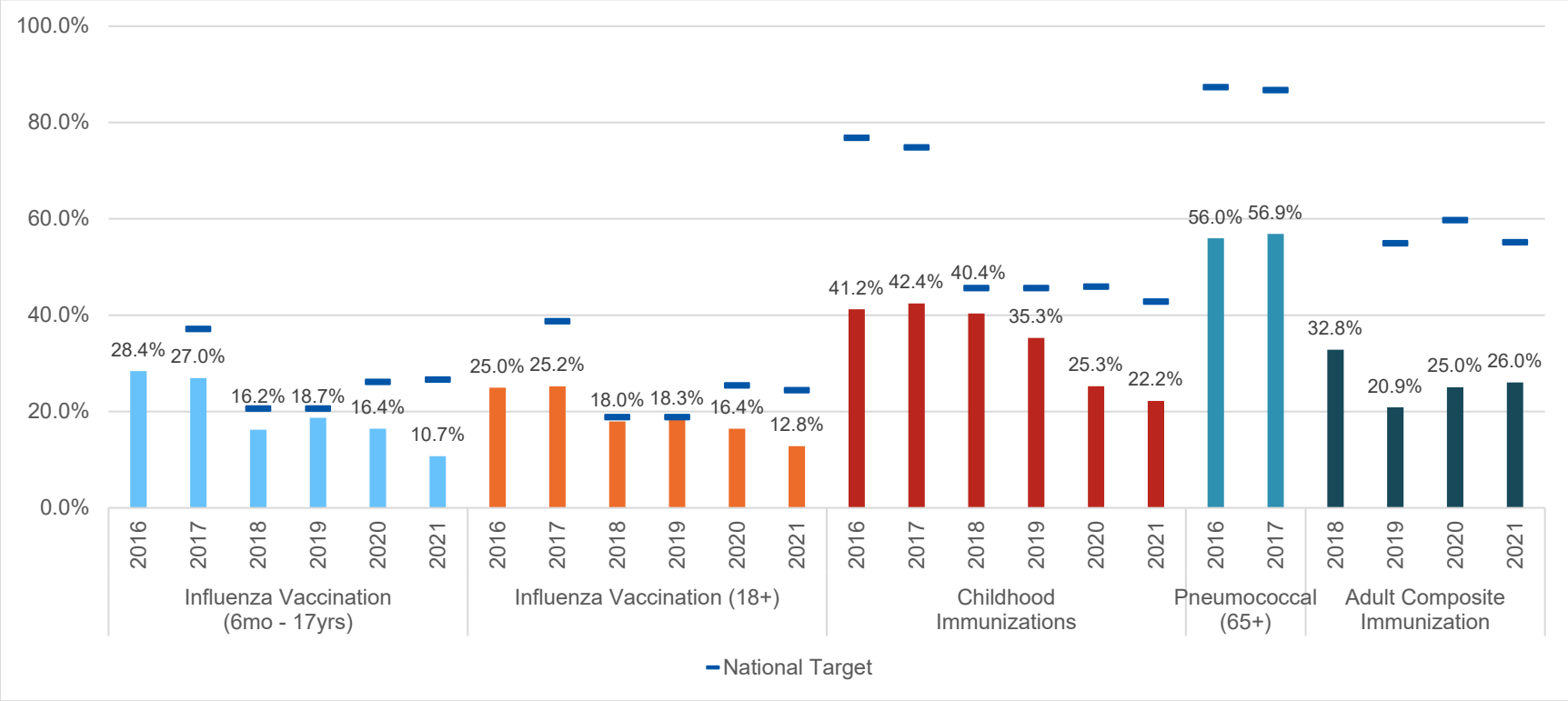


Figure 25: GPRA Immunization Measures (2016-2021 GPRA)

Immunization Grantee Quarterly Report and Unmet Needs Findings

Immunization Strengths

Various strengths in grantees programs emerged over the 2019 Grant Program Year (April 1, 2019–March 31, 2020) to the 2021 Grant Program Year (April 1, 2021– March 31, 2022). During the 2019 Grant Program Year, a grantee successfully negotiated an agreement to become a certified Vaccines for Children (VFC) with the staffing capabilities of the medical director and practitioner licensed to administer pediatric vaccines. A few grantees partnered with their state's VFC program to obtain pediatric vaccines. Other grantees worked to transition and implement new systems. For example, a grantee transitioned from RPMS to the Greenway Health EHR system, providing the necessary training and developing a training protocol for immunization delivery and reporting instructions to their staff. Similarly, another grantee successfully used the eClinicalWorks EHR software patient reminder and notification systems to determine when children are due for their vaccinations and to update immunization records. During Quarter 4 in the 2019 Grant Program Year, some grantees reported the impact of COVID-19 with reduced routine patient care and vaccinations.

For immunization services, grantees planned to continue promoting both routine immunizations and COVID-19 vaccines. Although opportunities to vaccinate may have been missed due to concerns about COVID-19 exposure, grantees intended to address this by encouraging patients to make up for any missed vaccines upon returning to the clinic. Some grantees also began introducing the Shingrix vaccine to patients. Accordingly, grantees requested immunization records from new patients and screened the state registry during patient visits to obtain accurate information about which vaccinations may be due. For similar reasons, it was important for grantees to reduce the backlog of data entry into the state's immunization-information system.
Grantees developed new methods of outreach to continue working toward their targeted outcomes on a range of immunization measures. Strong partnerships with public health agencies and other productive collaborations increased uptake rates. Many grantees leveraged telehealth to combat COVID-19 vaccine hesitancy and misinformation, while others offered in-clinic or mobile vaccination units to make immunization services more available to traditionally underserved populations.

With the ongoing pandemic throughout the 2021 Grant Program Year (April 1, 2021–March 31, 2022), a prominent resource for grantees was their partners from different sectors in the community including local public health departments, school districts, community organizations, tribes, local and state health departments, health care providers, medical and nursing programs, and private companies. Such partnerships supported efforts to:

- Reduce vaccine hesitancy.
- Increase COVID-19 vaccination rates among adults.
- Vaccinate young children (ages 5–11 years) against COVID-19.
- Offer COVID-19 boosters and influenza vaccines.

Across the 33 grantees, the number of registered vaccine sites for children increased, as COVID-19 vaccinations expanded for this age group. Grantees also worked to encourage families to schedule appointments for previously missed routine immunizations and offered back-to-school childhood immunizations. Grantees expanded service offerings to include influenza vaccinations, routine immunizations, and vaccinations against pneumococcal disease and shingles.

Grantees used social media to help decrease vaccine hesitancy and increase awareness of the need for COVID-19 vaccines, influenza vaccines, and routine pediatric immunizations. Grantees developed culturally specific immunization promotion materials for their members to increase vaccination rates.

Immunization Challenges, Barriers, and Unmet Needs

During the 2019 Grant Program Year (April 1, 2019–March 31, 2020), it is important to note that the COVID-19 pandemic emerged in the United States as early as January 2020 (Quarter 4). Prior to Quarter 4 in 2019 Grant Program Year, challenges faced by grantees included a decline in both pediatric and adult immunizations. Grantees provided possible explanations, including vaccine hesitancy, client refusals, a decrease in immunization reminders, and inadequate data management for recording immunizations. Another area of concern was funding support of vaccines that require multiple doses. Even though the 4-in-1 grant funded the purchase of adult vaccines, the challenge was for adult vaccines requiring more than one dose, such as Zoster. Another challenge and unmet need was grantees' limited capacity to support electronic reporting systems (e.g., training, capacity and time to conduct data entry, differences in EHR systems).

In the 2020 Grant Program Year (April 1, 2020–March 31, 2021), a frequently mentioned barrier to service was limited opportunities to meet in person because of concerns about COVID-19 exposure. This was a particular barrier to immunizations, as there were no telehealth alternatives to in-person visits. In addition, logistical barriers were mentioned, including difficulty accessing and pulling patient electronic health records, causing bottlenecks in the data-entry workflow to keep up with COVID-19 vaccinations. At the same time, there were challenges among staff including concerns about exposure to COVID-19 from clients, staff turnover and or burnout resulting in reduced capacity to support immunization services, and difficulty hiring and onboarding new staff. In addition, some grantees were limited in their physical capacity to support social distancing.

To overcome the pandemic's unique challenges with serving patients, grantees engaged in outreach efforts to build awareness of available services and vaccines, and ever changing COVID-19 updates. Many efforts focused on meeting elders' needs during cold and flu season (e.g., distributing a flyer online about supplying elders with firewood). As in-person visits resumed in the latter half of the grant year, grantees attempted to find different pathways to reduce vaccine misinformation and hesitancy such as providing current information on COVID-19 vaccines and physicians providing information about COVID-19 vaccines directly to patients rather than from non-medical staff.

By the 2021 Grant Program Year (April 1, 2021–March 31, 2022), challenges, barriers, and unmet needs were related to staffing, vaccine and supply shortages, patients, and technology (e.g., EHR systems and telehealth equipment and technology). For staffing, grantees expressed high turnover rates and difficulty hiring new staff leading to staffing shortages to support the program, especially among pediatric providers. Supply shortages led to grantees experiencing challenges in obtaining influenza vaccines and in obtaining Moderna COVID-19 booster vaccines. Related to supplies, COVID-19 tests became increasingly difficult to procure during surges in variants (e.g., the COVID-19 Omicron variant).

Among patients, grantees faced vaccine hesitancy for recommended vaccinations across all age groups. Particularly among pediatric patients, grantees experienced the following:

- Children missed routine wellness visits and vaccinations.
- Decrease in demand for regular doctor appointments for families and young children due to fear of exposure to COVID-19.

Hesitancy was increasingly challenging for COVID-19 vaccinations in the face of increased circulation of disinformation and misinformation about the vaccines. Grantees also experienced many missed appointments for COVID-19 vaccines impacting staff availability and appointments available for other patients. Grantees learned that many patients continued to have safety concerns about being exposed to COVID-19 and did not want an in-person clinic visit.

Finally, technology was another challenge, barrier, and unmet need faced by grantees. Internet/broadband access was limited or highly variable across populations, affecting patients' ability to engage with telehealth services. Internet/broadband access limited grantees ability to reach their patients to keep them informed on changing clinic hours and services and COVID-19 updates, particularly for vaccine availability. Grantees saw varied levels of digital literacy among patients, especially among those who have limited technology skills (e.g., unable to navigate a web browser, send emails, or use a web camera). During COVID-19 surges (e.g., Delta and Omicron variants), outdated tools and technology impeded grantees' ability to manage, update, and add new electronic health records.

Next Steps and Future Planning for Immunization Programming

To give a sense of grantees' next steps and future planning into the next program year, this section primarily focused on the 2021 Grant Program Year (April 1, 2021–March 31, 2022) findings. Key next steps and future planning primarily focused on outreach, partnerships and collaboration, culture, and communication. For outreach, partnerships, and collaboration, grantees are looking forward to increasing health education outreach to address vaccine hesitancy in support of increasing vaccination rates in the communities they serve. As some grantees work to increase interservice collaborations, such as combining wellness visits and vaccine promotion efforts with the health promotion and disease prevention service team, others are looking outward to promote

vaccines with community organizations, tribes, local and state health departments, school districts, health care providers, and private companies. To increase access across their communities, some grantees plan to use mobile vans to deliver immunizations.

Grantees also plan to increase communication to build awareness about vaccines in their communities through social media, print mail, and follow-up phone calls. At the same time, grantees are working to make sure messaging is culturally appropriate and relevant for people of all ages.

Summary and Recommendations

National Immunization Reporting System

The analysis of the 2019 to 2021 NIRS data revealed, that in general, immunization rates decreased among most age groups and vaccine types. This is likely at least partially the result of the COVID-19 pandemic; despite challenges due to the pandemic, the decrease in rates was not substantial. Decreases were not observed among all groups: for the youngest (3-27 months), rates stayed the same or increased, while among adults, the rate for all adults (19+ years) increased as well. In addition, more grantees were reporting to NIRS on average at the end of the 2021 Grant Program Year, than were reporting at the beginning of the 2019 Grant Program Year. This is consistent across all age groups (3- to-27-month-olds, 2-year-olds, adolescents, and adults). The more grantees reporting to NIRS consistently increases the confidence in the quality and accuracy of the data being analyzed.

Recommendations:

- Emphasize routine vaccinations for the youngest (3 months to 3 years) age groups, and importance of receiving additional appropriate vaccines.
- Among adolescents and adults, emphasize importance of completing the entire series of a recommended vaccine, particularly the HPV vaccine. In addition, significant work is needed towards improving adult immunization rates, particularly among the older age group (60+).
- Influenza vaccination rates have historically had low uptake rates across the country. With the circulation of COVID-19, there is even more reason to encourage influenza vaccination. At the same time, there may be more opportunity to give influenza vaccines when patients come in for COVID-19 vaccines or boosters as there is no contraindication for giving both vaccines at the same time.
- Create more detailed program guidance for grantees and the program team on immunization indicators and examples of grantee program activities to enhance the quality and increase the quantity of immunization data reported.
- Continue analyzing the NIRS data over a longer period to track relevant trends.
- Compare adult vaccination rates with other grantee demographic data to assess the extent to which vaccine program is reaching its eligible adult population as the vaccination rates themselves remain low (less than a third of most adult vaccines).

Government Performance Rating Act

Across the 2016–2021 GPRA data, decreases were observed for most of the immunization metrics, including child and adult influenza immunizations, childhood immunizations, and adult composite immunizations. The only immunization rate that did not decrease was that of pneumococcal immunizations, a metric that was only collected until 2017 when it was replaced with the adult composite immunization metric. No immunization measure reached its national target during the reporting period.

Recommendations:

- Provide grantees with technical assistance to support the process of entering and exporting visit and registration data from their EHRs to the NDW to complement GPRA reporting.
- Follow up with grantees who have a history of low reporting rates, to better understand the factors that may be contributing to this issue.
- Emphasize the importance of routine vaccinations, for all age groups, as well as the season vaccinations (influenza).
- Compare adult vaccination rates with other grantee demographic data to assess the extent to which vaccine program is reaching its eligible adult population as the vaccination rates themselves remain low (less than a third of most adult vaccines).
- Continue to analyze GPRA data over a longer period (5+ years) to better observe trends in immunization rates.

Grantee Quarterly Reports and Unmet Needs

The analysis of the grantee quarterly reports highlighted contextual emerging themes in strengths and barriers/challenges across the immunization service program area. In terms of strengths, many grantees reported developing new methods of outreach, such as through social media, to encourage individuals to receive both routine vaccinations and the COVID-19 vaccine. More registered vaccine sites for children were opened, with grantees working with families to help their children receive routine vaccines they had missed due to the pandemic. Many grantees relayed the importance of their partnerships with community organizations, Tribes, local and state health departments, and schools in helping them reach their immunization goals. The use of culturally-appropriate messaging was employed by many grantees in communications, particularly those around immunizations, and COVID-19 information.

Grantees still faced challenges, barriers, and unmet needs, often due to the constraints of the COVID-19 pandemic. Grantees had trouble reaching their immunization goals, especially as staffing issues persisted. Many explanations were offered, including vaccine hesitancy, client refusals, a decrease in immunization reminders, inadequate data management for recording immunizations, and difficulty obtaining funding for vaccines. In addition, the inability to meet in person due to the pandemic was a particular barrier as there is no telehealth alternative for immunizations. Patients' access to technology, including the internet, and technological literacy was another barrier

grantees faced when ensuring the most up-to-date immunizations were distributed to their community, especially among elders.
Regardless, grantees continued to be innovative and plan to improve immunization rates by increasing health education outreach that address vaccine hesitancy in their communities. They also aim to improve joint efforts between immunization and HP/DP program areas to capitalize on the overlap between the services offered across these areas.

Recommendations:

- Provide grantees with technical assistance to support the process of entering data into the grantee quarterly reports and help grantees understand what has changed in reporting from year to year.
- Add a field to the reporting template to allow grantees to report data from their service-providing partners that support education and with administering immunizations and vaccines.
- Add a field to the reporting template that allows grantees to report vaccine hesitancy outreach efforts.

Alcohol and Substance Abuse

The objective of the Alcohol and Substance Abuse Program is to reduce the incidence and prevalence of alcohol and substance abuse among AI/AN people to a level at or below the general U.S. population.[6] This section provides an overview of evaluation findings across four (4) key sources of data: GPRA, UDS, grantee quarterly reports, and unmet needs. A summary of recommendations follows.

GPRA Alcohol and Substance Abuse Findings

The GPRA data results are organized by the respective GPRA ASA measures. Based on the 2016 to 2021 GPRA data, the ASA measures examined include Tobacco Cessation (2016-2021), Universal Alcohol Screening (2016-2021), and SBIRT Screening (2017-2021) (Appendix B, Table 12).

Three GPRA measures fall under the ASA category: Tobacco Cessation; Universal Alcohol Screening; and SBIRT Screening. The SBIRT Screening was only introduced in 2017, so data was only collected between the 2017 and 2021 GPRA reporting periods.

For Tobacco Cessation, rates were highest during the first two years of the reporting period, in the 2016 GPRA (38.0%) and the 2017 GPRA (42.5%). In the 2018 GPRA, the rate dropped to 23.6%, which remained essentially stable at 23.8% in the 2019 GPRA, and 23.6% in the 2020 GPRA. In the 2021 GPRA, the rate dropped substantially to 14.1%. In no year of the reporting period did the average Tobacco Cessation rate achieve its national target, although, in the 2018 and 2019 GPRA, the rate was within 5.0% of achieving its target.

The rate for Universal Alcohol Screening was reported at 0.0% in the 2016 GPRA since, due to data exclusions, no grantees who reported data for that measure in that year were included in the final data set. The rate was highest over the reporting period during the 2017 GPRA at 52.2%, before decreasing to 38.2% in the 2018 GPRA. The trend of decreasing continued for the remainder of the reporting period, with the Universal Alcohol Screening rate decreasing to 36.0% in the 2019 GPRA, 31.9% in the 2020 GPRA, and finally 30.3% in the 2021 GPRA. In the 2016 and 2017 GPRA, baseline national targets were still being established so there was no target to achieve. In the 2018 GPRA, the national target was surpassed by 1.2% and it was within one percentage point of the target in 2019. However, the rates in the 2020 and 2021 GPRA were not close to achieving their national targets.

The rate for SBIRT Screening was reported at 0.0% in the 2017 and the 2019 GPRA since, due to data exclusions, no grantees who reported data for that measure in that year were included in the final data set. In the 2018 GPRA, the rate was 21.9%, which surpassed the national target of 8.9%. This increased to 33.2% in the 2020 GPRA, where the national target 12.2% was also surpassed substantially. This trend continued

[6] Alcohol and Substance Abuse Program. (2023). Retrieved 2 March 2023 from https://www.ihs.gov/asap/.

in the 2021 GPRA, with the rate of 17.1% again surpassing the national target of 14.3%. However, it should be noted that the 2021 GPRA rate only included data from one grantee, as others were excluded due to data exclusions.

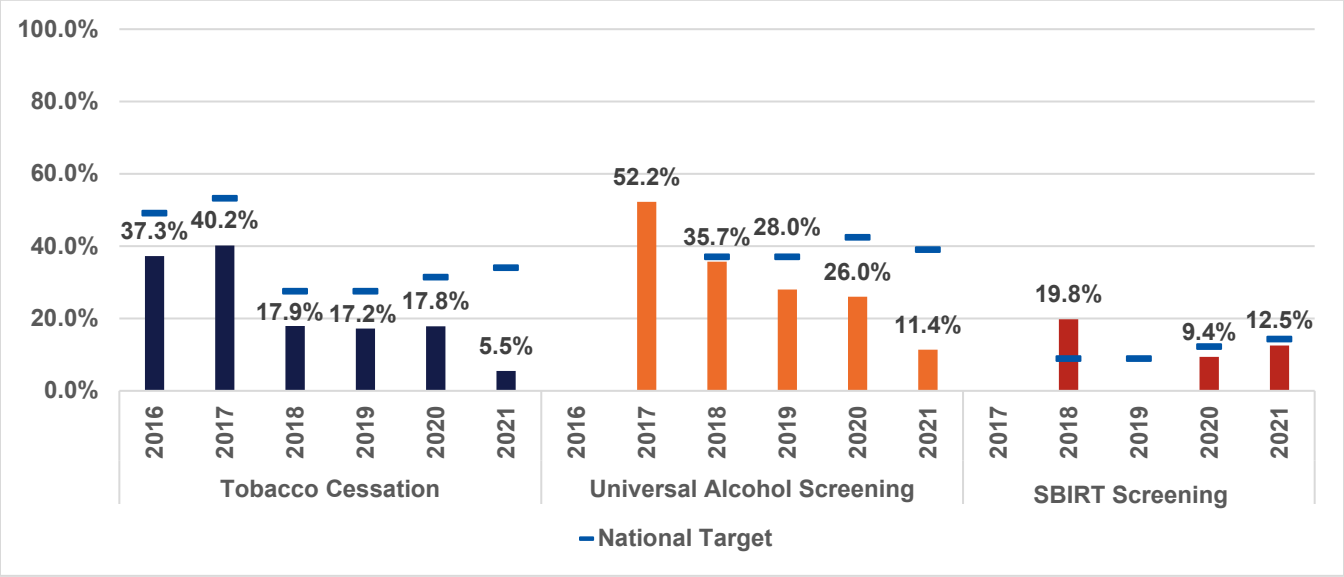


Figure 26: GPRA Alcohol and Substance Abuse Measures (2016-2021 GPRA)

UDS Alcohol and Substance Abuse Results

The UDS ASA results are organized to illustrate access to ASA services accessed by urban AI/AN patients across the UIOs. The outcome measures include the total number of patient visits and the proportion of those who are AI/AN patients.

Figure 27 displays the total number of UDS visits per year across the 2019-2021 Grant Program Years. The total population, depicted as a red line, demonstrates that the total number of patients rose considerably and nearly doubled from 2017 to 2018, before decreasing again during the following years. From the 2016 UDS to the 2020 UDS, the total number of patient visits increased by 52.9%. During the same time period, the proportion of AI/AN patient visits increased by 48.8% (Appendix B, Table 13). Since the total population of patient visits increased slightly more than those for AI/AN visits alone, the proportion of AI/AN visits decreased slightly between the 2016 and 2020 UDS, from 55.5% to 54.1%.

Across the reporting period, AI/AN patient visits comprised a higher proportion of visits in comparison to all other racial groups combined. The highest proportion for AI/AN mental health visits was 64.1% (2019 UDS). Between the 2016 and 2020 UDS, there was a 54.1% increase in the proportion of mental health visits made by AI/AN patients.

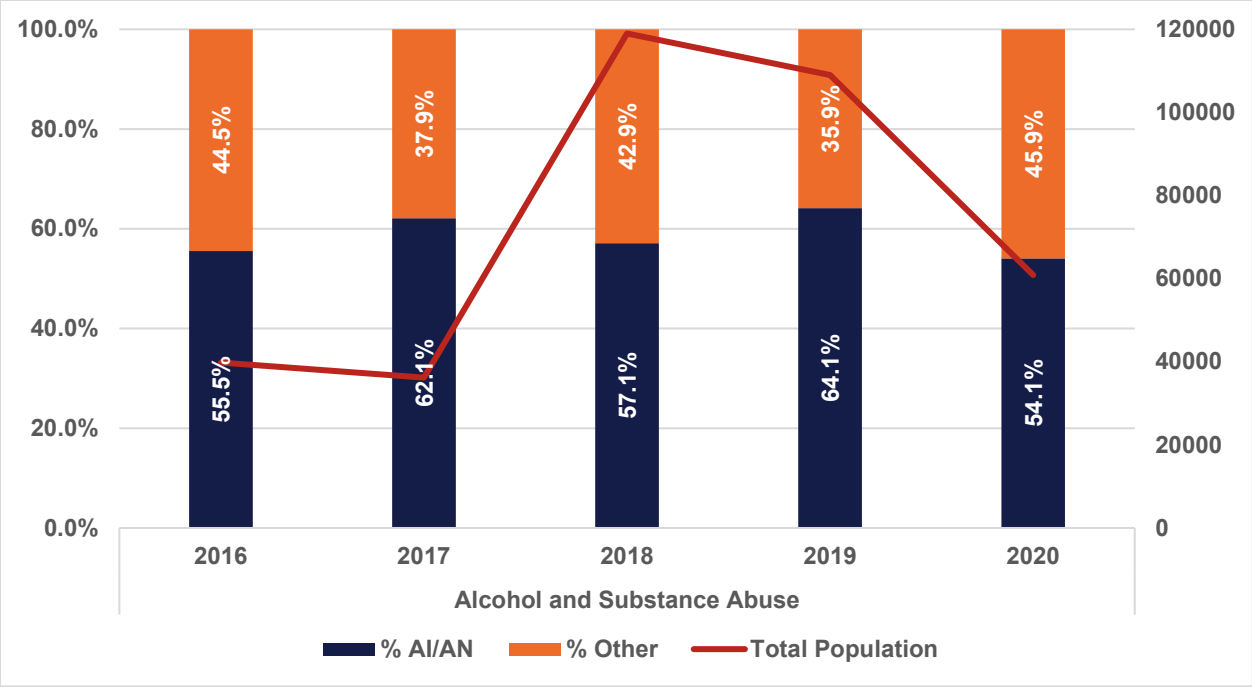


Figure 27: Total UDS Visits by Visit Type and AI/AN Proportion (2016-2020 UDS)

UDS Telehealth Alcohol and Substance Abuse Visit Findings

Figure 28 displays the total telehealth UDS visits for the ASA visit type by AI/AN proportion. Only data from the 2020 UDS is displayed as the 2021 UDS data was not included in this analysis. It is also important to note that the 2020 UDS was the first year that IHS included a Telehealth component in the UDS system. During the 2020 UDS, there were 10,995 total telehealth visits for ASA services. Of these, 50.0% (n=5,499) of visits were made by AI/AN clients, while another 50.0% (n=5,496) were other populations (Appendix B, Table 14).

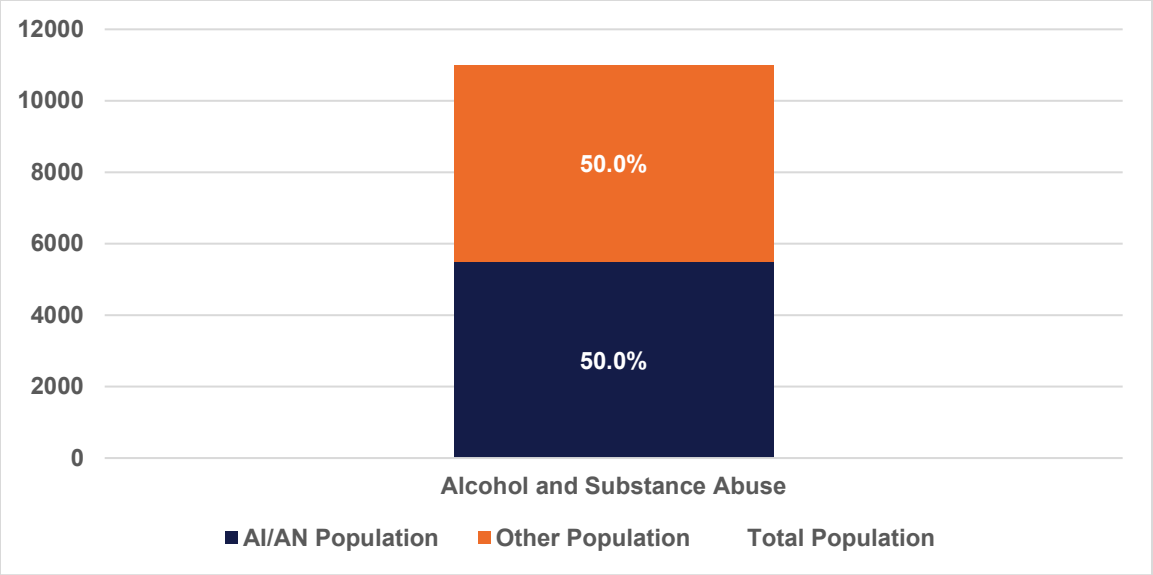


Figure 28: Telehealth UDS Visits by Visit Type and AI/AN Proportion (2020 UDS; N=10,995)

Alcohol and Substance Abuse Grantee Quarterly Reports & Unmet Needs

Alcohol and Substance Abuse Strengths

Various strengths from grantees emerged over the 2019 Grant Program Year (April 1, 2020–March 31, 2020), 2020 Grant Program Year (April 1, 2020–March 31, 2021), and 2021 Grant Program Year (April 1, 2021–March 31, 2022), within the area of Alcohol and Substance Abuse Related Services.

For the 2020 Grant Program Year, service hours varied across the grantees due to diverse geographic locations, surges in COVID-19 variants, and various levels of COVID-19 restrictions. Grantees were required to constantly keep up with and respond to changing COVID-19 restrictions and surges, often suspending in-person events and services in their local areas. Due to this, many grantees switched to a virtual format and offered hybrid and telehealth solutions to ensure continuity of care. Areas of focus across grantees' ASA programs included family and youth engagement efforts for prevention and healthy lifestyles.

Another highlight from the 2020 Grant Program Year was implementing integrated, coordinated care between the ASA and Mental Health programs. For example, mental health staff would conduct telehealth visits and facilitate clients' enrollment into residential treatment programs. To better support ASA clients, mental health staff continued expanding their knowledge by attending a monthly webinar and other educational learning capacity opportunities.

With the unpredictable nature of COVID-19, grantees recognized that they had to be flexible and pivoted to meet the needs of their clients quickly. In many ways, the

strengths that emerged from the 2020 Grant Program Year prepared grantees for the challenges of COVID-19 that they would continue to face during the next grant program year.

For the 2021 Grant Program Year, grantees continued demonstrating flexibility using virtual and hybrid solutions. For instance, a grantee provided individual counseling, the Twelve Steps, and Alcoholics Anonymous on web-based video platforms (Zoom, Facetime, Google Duo, and the telehealth platform, Doxy.me) while delivering group and one-on-one follow-up counseling sessions. Another example of grantees delivering virtual and hybrid options is the Virtual Generation Red Road (VGRR), a group talking circle focusing on relapse prevention. Grantees also offered in-person and telehealth delivery of AI/AN cultural practices, including traditional healing such as sweetgrass, sage, and cedar; Red Road Wellbriety; Red Road Relapse Prevention; Spiritual Solutions Talking Circle, storytelling, drumming, and dancing. They continued offering hybrid and virtual options for outpatient treatment and outreach events.

Grantees recognized the need to support families and youth, especially with the added stressors of dealing with COVID-19. Grantees developed creative approaches such as drive-thru youth and family events focused on ASA education and tobacco/vaping cessation materials. Some grantees received ASA funding for family engagement cultural prevention programs and activities and conducted virtual culture classes for K-12 AI/AN youth. Other youth and family programming include events promoting healthy lifestyles, such as a walking club, beach day event, back-to-school initiative, and substance abuse prevention youth summer camps for ages 5 to 18 years.

Grantees also applied evidence-based practices designed for working with AI/AN populations and combined them with traditional healing practices. Examples include practice-based curricula for Sons of Tradition, nine Tribes' best practices of Oregon across all substance use disorder (SUD) programs, White Bison's Medicine Wheel, and 12 Steps for Men and Women. (Please see Appendix F for a complete list of evidence-based-approaches.)

At an organizational level, grantees continued to engage in cross-departmental collaboration across the mental health, immunization, and HP/DP service areas to improve the delivery of ASA services. The integrated care model allows a grantee to blend HP/DP and mental health approaches to addressing SUDs during routine medical visits. They also provided same-day assessments and brief interventions for patients who screened positive for SUDs in their medical appointments.

Despite staff hiring and retention challenges, some grantees successfully hired additional staff. Staff hires included medical staff, coordinator positions, licensed alcohol counselors, alcohol/substance abuse counselors, addiction counselors, a traditional health coordinator, a licensed addiction counselor, and a substance abuse/suicide prevention case manager. Another grantee added medical staff for the supervising physician position that completed the requirements to qualify for a State of Wisconsin certification that would improve the grantees' capacity to increase referrals for mandated services for operating while intoxicated and court-ordered treatments.

All grantees acknowledged the significance of support partnerships provided for their ASA program. Partnering organizations included community organizations, youth organizations, and residential and in-patient treatment centers.

Alcohol and Substance Abuse Challenges, Barriers, and Unmet Needs

From the 2019 to 2021 Grant Program Years, the COVID-19 pandemic strained all grantees' ability to provide ASA care, treatment, and programs. The 2020 Grant Program Year comprehensive report analyzed challenges and unmet needs for ASA services from the 2019 and 2020 Grant Program Year, so trends from these years cannot be separated.

Across all three grant program years, a frequently mentioned barrier to ASA access was the limited opportunity to meet in person because patients were concerned about COVID-19 exposure. The constant outbreaks of COVID-19 resulted in frequent temporary suspensions or reduced in-person services, often but not always replaced by virtual or hybrid services. As a result, technological barriers in the community became evident, with many community members struggling to access equipment or high-speed internet. However, a challenge for the group and individual telehealth sessions is the lack of confidentiality, high-speed Wi-Fi, and privacy for clients from their family members when participating from home.

Grantees experienced increased demand for ASA services, thus contributing to a shortage of available referrals due to the limited availability of appointments. Clients had limited access to the chemical dependency program and drug treatment court, as COVID-19 safety protocols had caused limited in-person sessions.

For residential treatment services, other COVID-19-related challenges include how the required quarantine period extends the intake process for residential services, the lack of mobile telephone access for clients makes telehealth services inaccessible, and patients' experience integrating back into the community due to the pandemic.

Grantees experienced a lack of availability of hours for substance abuse and mental health counselors to meet with clients. In hiring new counselors, it was challenging to identify substance abuse and mental health counselors who can demonstrate cultural sensitivity to AI/AN clients. With a 4–6-week backlog for appointments with substance abuse or mental health counselors, a subsequent decline in substance abuse counseling requests was observed due to the extended wait times.

Next Steps and Future Planning for Alcohol and Substance Abuse

This section primarily focused on the 2021 Grant Program Year (April 1, 2021–March 31, 2022) findings to give a sense of grantees' next steps and future planning for the next program year. Key next steps and future planning primarily focused on outreach, partnerships, and collaboration, integrated cross-departmental model with health services, immunization, and mental health, virtual delivery of programs, technology, EHR systems, and staff recruitment and retention.

Grantees will continue to stay responsive and updated on current COVID-19 safety guidelines. Grantees recognize the need to continue to be flexible with service delivery models because of the unpredictable nature of COVID-19. Despite the challenges of COVID-19, grantees continued developing hybrid models and different options to offer

clinic-based telephone/telehealth to decrease COVID-19 exposure and provide ASA services.

Importantly, this hybrid approach allows grantees to continue to provide ASA services, 12-step counseling, Wellbriety, SMART (self-management and recovery training) recovery groups, individual and group counseling sessions, cultural consultations, and screenings no matter the COVID-19 trends. At the same time, grantees can leverage their partnerships with local and state public health agencies, recovery services, and local SUD treatment facilities to support their work.

Grantees plan to focus on staff recruitment and retention for certified alcohol and drug counselors, recovery and relapse staff, integrated care clinicians, and peer recovery specialists. In addition, grantees are focused on providing professional development and staff capacity building alongside supervision and training through courses such as the ethics, certification training for Red Road facilitators, Driving Under the Influence/Prime for Life, and White Bison program staff training.

One goal of grantees for the future is the expansion of their social media outreach, mailings, and website content to inform community members about upcoming events and health information resources. Also, grantees want to improve their IT infrastructure, virtual technology platforms, staff training, and technology access for clients.

Summary and Recommendations

GPRA Summary

Over the three grant program years, there was a varied success in achieving the national targets for each of the GPRA ASA measures (Tobacco Cessation, Universal Alcohol Screening, and SBIRT Screening). In terms of performance, in no year of the reporting period did the average Tobacco Cessation rate achieve its national target. Similarly, there was only one year of the reporting period (2018) in which the Universal Alcohol Screening national target was achieved. In the three years in which SBIRT data was available, the national target was achieved or surpassed in all three years of the reporting period (2018, 2020, and 2021 GPRA).

Recommendations:

- More efforts need to be focused on reaching the national targets for the ASA GPRA indicators across grantees, particularly for Tobacco Cessation services and Universal Alcohol Screenings.
- There is a need to expand SBIRT services to more grantees. There is also an opportunity to explore best practices from the grantees who do offer SBIRT, as it is evident their programs are successful.
- GPRA indicators used to evaluate the ASA program focus area should be re-evaluated. Grantees' ASA activities are more often focused on illicit drug screening, treatment, and service provision. These activities are not captured in the designated indicators.

UDS Summary

The UDS ASA findings were evaluated to understand the current access to ASA services experienced by urban AI/AN clients across grantees' communities. Across the three grant program years, the total number of patient visits and the proportion of AI/AN patient visits increased at a similar rate. This may indicate that there is an increasing need for ASA services within the population at large, as well as the urban AI/AN community. While a trend could not be established for telehealth ASA patient data, due to having only one year of data, it seems that this was a much-used platform for ASA. Here, there was an even split between the proportion of patients who were AI/AN and patients who identified otherwise. Clearly, there is a significantly increased need among the population for ASA services and health care, possibly as a consequence of the COVID-19 pandemic.

Recommendations

- Explore options to expand grantees' capacity to provide ASA services, through improving infrastructure and expanding the variety of services offered.
- Support grantees in expanding telehealth service offerings, which seem to be accessible to urban AI/AN patients, at least for this program focus area.
- Continue marketing services and service type options (e.g., hybrid, fully virtual sessions) to the urban AI/AN community.

Quarterly Reports and Unmet Needs Summary

While grantees faced many challenges during the reporting period, many strengths of their programs were also displayed. In particular, the use of hybrid or virtual telehealth to offer ASA services emerged as a solution in response to the COVID-19 pandemic and subsequent limitations on in-person services. While this mode of delivery offered a solution to some challenges (e.g., COVID-19, limited access to transportation), it came with its own issues such as lack of access to technology among the patient population. Grantees also experienced limited capacity to respond to an increasing need for ASA services during the pandemic, often due to staff limitations. Finally, many grantees have implemented or are in the process of implementing integrated care models that allow patients to receive continuity of care across program areas.

Recommendations:

- Improve broadband/internet access among urban AI/AN communities so patients can reliably access telehealth services.
  - Improve knowledge of and access to appropriate technology so patients can access virtual/hybrid services and keep up with routine health screenings and appointments.
  - Focus on addressing infrastructure concerns expressed by grantees:
    - Improve recruitment and retention processes for clinical and non-clinical staff.
    - Hire clinical staff with AI/AN knowledge, experience, or personal background, or provide cultural competence training for non-AI/AN staff.

    - In general, a need to increase the number of substance abuse and mental health clinical staff such as certified alcohol and drug counselors, recovery and relapse staff, integrated care clinicians, and peer recovery specialist.
    - Continue to provide and expand upon the variety of ASA support services, such as Wellbriety and Red Road.
- Continue to improve and expand an integrated health care approach, not only across the ASA/MH programs but also pursue integration across primary care/prevention (HP/DP) services.
    - Employ multi-pronged approach across program focus areas to provide continuity of care for patients, particularly those with comorbid conditions.
    - Make sure non-clinical support staff positions are filled to support integrated care model.
    - Provide training and education for new and existing staff on integrated care approach.
- Identify other funding sources to support the expansion of existing services and infrastructure capacity building.

Mental Health

The IHS Mental Health Program is a community-based clinical and preventive service program that provides access to vital outpatient mental health counseling, dual diagnosis services, mental health crisis response and triage teams, case management services, community-based prevention programming, outreach, and health education activities.[7] This section provides an overview of evaluation findings across key sources of data including GPRA, UDS, grantee quarterly reports, and unmet needs. A summary of recommendations follows.

GPRA Mental Health Findings

The GPRA data findings are organized by the respective GPRA Mental Health measures. Based on the 2016 to 2021 GPRA data, the Mental Health measures examined include Domestic Violence/Interpersonal Violence (DV/IPV) Screening (2016-2021), Depression Screening 12-17 Years (2017-2021), and Depression Screening 18+ (2016-2021) (Appendix B, Table 15).

The Depression Screening (12-17 years) was introduced in 2017, so data was only collected between the 2017 and 2021 GPRA reporting period. Figure 29 depicts screening data for Mental Health GPRA measures for the years 2016 to 2021. Each measure includes the number of screenings conducted for a given reporting year. In addition, the national target for each reporting year, gross change between years, and the change that occurred between years are also displayed and reflected as percentages.

The average rate for DV/IPV Screening was 49.6% in the 2016 GPRA, increasing to 52.0% in the 2017 GPRA. The rate decreased to 30.7% in the 2018 GPRA and stayed stable through the 2019 GPRA (30.2%). A slight decrease was observed between the 2019 GPRA and the 2020 GPRA (20.4%), which continued in the 2021 GPRA (20.4%). In the 2016 GPRA, a baseline national target was being established, so there was no target rate to achieve. In no other years was the national target achieved.

In the first year that the Depression Screening (12-17 years) was introduced, no grantees were included due to data exclusions (See data exclusion explanation under GPRA Data Sources). Over the next four years of the reporting period, the rate fluctuated, with the 2018 GPRA rate being the highest at 34.0%. In the 2019 GPRA, the rate decreased to 21.8% before increasing back to 29.9% in the 2020 GPRA. A substantial decrease was observed between the 2020 and the 2021 GPRA rate, where it fell to 13.6%. The national target was not achieved during any year during which data was reported.

The 2016 GPRA rate for Depression Screening (18+) was 52.9% and increased slightly to 53.9% in the 2017 GPRA. In the 2018 GPRA, the rate decreased substantially to

[7] Mental Health. (2023). Retrieved 2 March 2023 from https://www.ihs.gov/mentalhealth/

36.9%. The decreasing trend continued through the 2019 GPRA, dropping to a rate of 24.3%. The rate increased in the 2020 GPRA to 28.2%, before decreasing to the lowest measured rate over the reporting period of 21.6% in the 2021 GPRA. In no year was the national target for Depression Screening (18+ years) achieved.

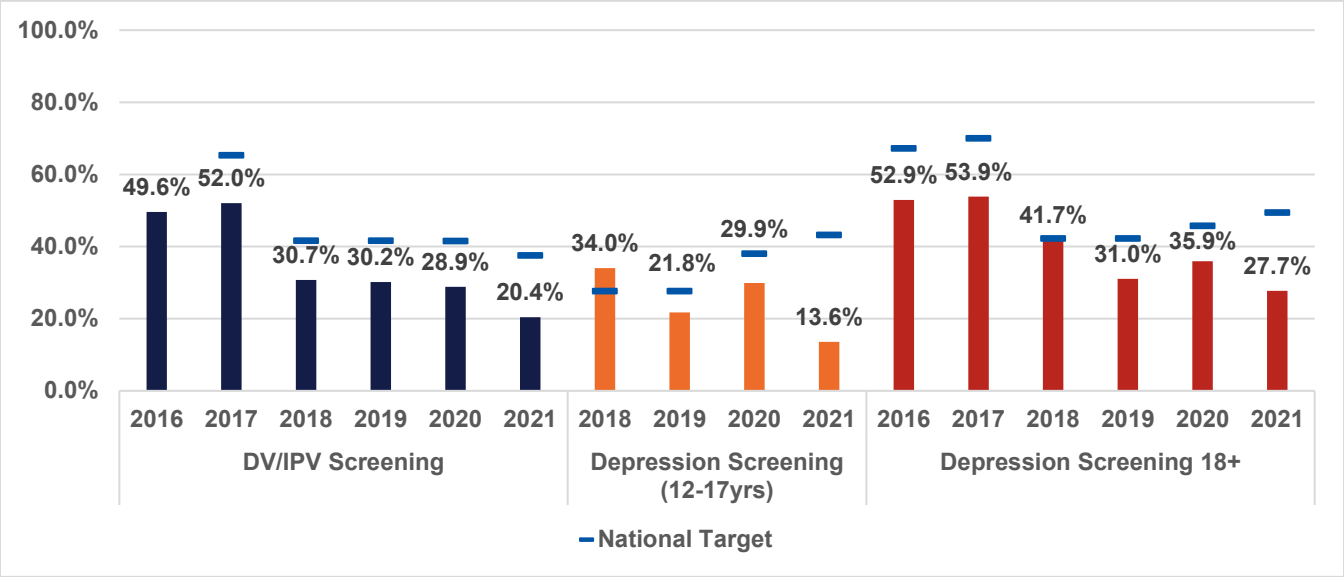


Figure 29: GPRA Mental Health Measures (2016-2021 GPRA)

Mental Health UDS Visit Findings

The UDS Mental Health findings are organized to illustrate the current access to mental health services experienced by urban AI/AN clients across grantees' communities. The outcome measures include the total number of patient visits and the proportion of AI/AN patients, for the UDS Mental Health visit category. These are also represented as the total number of patient visits and proportion of AI/AN patients for each category (Appendix B, Table 16).

Figure 30 displays the total number of UDS visits by AI/AN proportion (2016-2020 UDS) and encompasses the 2019-2021 Grant Program Years. The total population, depicted as a red line, demonstrates that the total number of patients increased significantly between 2017 to 2018, and remained constant during the following years. From the 2016 UDS to the 2020 UDS, the total number of patient visits nearly doubled increasing by 97.6%. During the same time period, the proportion of AI/AN patient visits increased by 54.2%. Since the number of AI/AN visits alone did not increase at the same rate as total population visits, the proportion of UDS Mental Health visits by AI/AN patients decreased from 48.2% (2016 UDS) to 37.6% (2020 UDS).

Across the reporting period, AI/AN patient visits comprised a lower proportion in comparison to all other racial groups combined. The highest proportion for AI/AN mental health visits was during the 2016 UDS at 48.2%. Since the 2016 UDS, there was a 22.0% total decrease in the AI/AN proportion of visits.

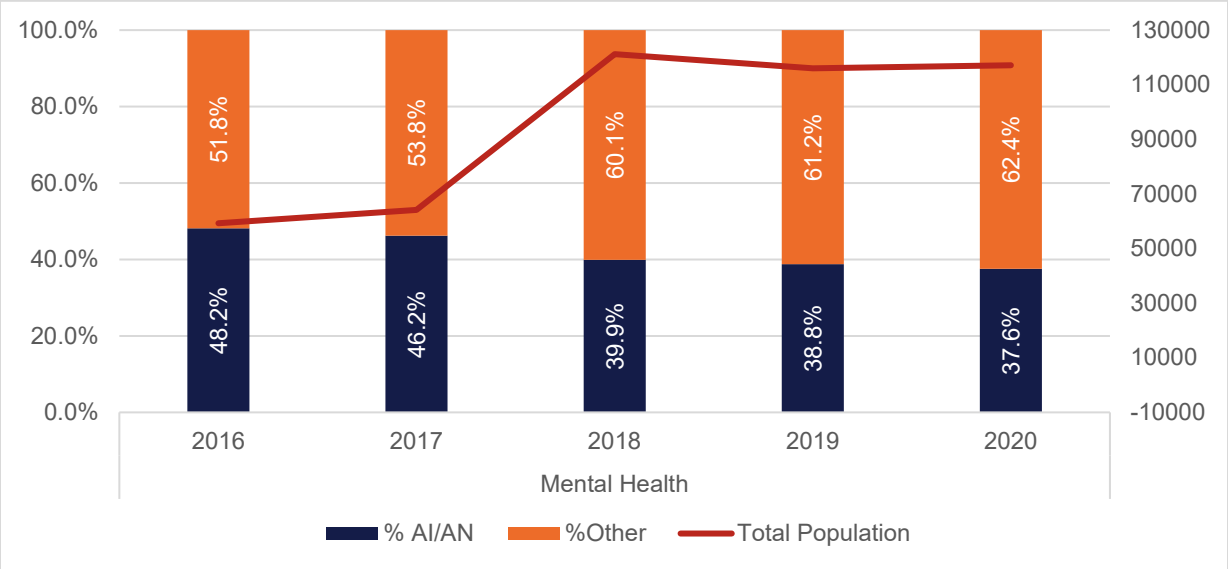


Figure 30: Total UDS Visits by AI/AN Proportion (2016-2020 UDS)

UDS Telehealth Mental Health Visit Findings

Figure 31 displays telehealth UDS visits for the mental health visit type and by AI/AN proportion. Only data from the 2020 UDS is displayed as the 2021 UDS data was not included in this analysis. During the 2020 UDS, there were 31,374 total telehealth visits for mental health services. Of these, 42.8% (13,440) of visits were made by AI/AN clients, while 57.2% (17,934) were other populations (Appendix B, Table 17).

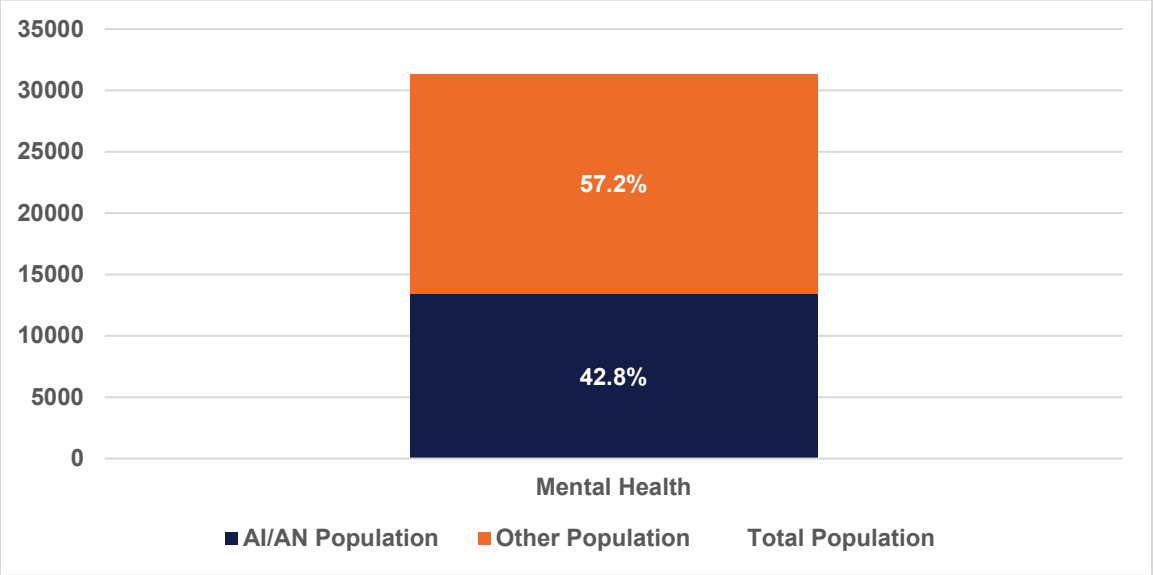


Figure 31: UDS Telehealth Mental Health Visits by AI/AN Proportion (2020 UDS; N=31,374)

Mental Health Grantee Quarterly Reports and Unmet Needs

Mental Health Strengths

Various strengths in grantees emerged over the 2019 Grant Program Year (April 1, 2020–March 31, 2020), 2020 Grant Program Year (April 1, 2020–March 31, 2021), and 2021 Grant Program Year (April 1, 2021–March 31, 2022), within the area of Mental Health Services.

For the 2020 Grant Program Year, the type of services, support, and available resources of grantees was often determined by their service type, location, and local COVID-19 situation. Grantees were required to constantly keep up with changing COVID-19 statuses, suspending in-person events and services if their local area was experiencing surges. At the same time, many grantees also switched to virtual formats or offered hybrid solutions so they could continue to meet the increased needs of community members. Accordingly, grantees reported increased demand for mental health services around the same time as COVID-19, with many clients reporting they felt socially isolated due to restrictions such as social distancing.

Approximately half of all grantees are at varying levels of implementing an integrated health care approach for improved interdepartmental coordination across the four core program areas of care, staff, and resources. Grantees attribute their ability to collaborate across service areas to its practicality as an approach for providing essential services to clients.

Approximately 60 percent of the grantees continued to strive for excellence by increasing their in-house mental health staff capacities. For example, grantees hired mental health providers who were equipped with advanced mental health degrees and trained in various evidence-based and practice-based therapeutic approaches (e.g., motivational interviewing, trauma therapy, cognitive behavior therapy). For a full list, see Appendix F. Another example of increasing in-house mental health staff capacity was through hiring or retaining dually credentialed mental health and chemical dependency staff with varying levels of experience and different areas of expertise. Grantees continued to provide mental health services, including support, assessments, outpatient treatment, individual/group/family/youth counseling services, and referrals by telephone and telehealth, through different virtual platforms such as Doxy.me, Google Duo, and Zoom video conferencing.

Mental Health Challenges, Barriers, and Unmet Needs

From the 2019 to 2021 Grant Program Years, the COVID-19 pandemic strained all grantees' ability to provide mental health care, treatment, and programs. The 2020 Grant Program Year Mental Health Services from the 2019 and 2020 Grant Program Year were analyzed together and, so trends from these years cannot be separated.

Across all three grant program years, a frequently mentioned barrier to mental health access was the limited opportunity to meet in person because patients were concerned about COVID-19 exposure. The constant outbreaks of COVID-19 surge due to the Omicron variant, and previously Delta variant, resulted in frequent temporary suspensions or reduced in-person services, often but not always replaced by virtual or hybrid services. As a result, technological barriers in the community became evident

with many community members struggling to access equipment or high-speed internet. Digital literacy is another barrier for patients who do not know how to tackle everyday tasks, such as navigating a web browser, sending and receiving emails, and using a webcam. However, a challenge for the group and individual telehealth sessions is the lack of confidentiality, high-speed Wi-Fi, limited mobile data, and privacy for clients from their family members when participating from home. Some patients experienced video conferencing and telehealth fatigue, and impersonal interaction. Some mental health counselors experienced challenges maintaining regular communication with patients with unreliable technology access and internet connectivity.

Grantees experienced increased demand for mental health services, thus contributing to a shortage of available referrals due to the limited availability of appointments. With the changing CDC COVID-19 safety and local safety protocols, grantees could not conduct in-person assessments, intakes, referrals, and traditional cultural practices (e.g., smudging, sweat lodge ceremony, drumming, praters, talking circles, dancing, and cultural arts)—thus reducing the capacity for in-person group sessions to comply with COVID-19 safety protocols. For patients, transportation issues remain an issue affecting their access to care.

At an organizational level, grantees experienced staff turnover, reduced staff capacity, pandemic fatigue for staff and providers, staff vacancies, and transitions in crucial leadership grantee roles. Grantees experienced limited funding for additional staff and space for mental health staff and the need for building technology upgrades.

Next Steps and Future Planning for Mental Health Services

Next Steps for mental health are to continue with the recruitment and retention of mental health care professionals (case managers, clinical staff, IT, dual licensure in mental health and chemical dependency, and recovery and support specialist).

Grantees will continue to stay responsive and updated to current COVID-19 safety guidelines. Grantees recognize the need to continue to be flexible with service delivery models because of the unpredictable nature of COVID-19. Despite the challenges of COVID-19, grantees continued developing hybrid models and different options to offer clinic-based telephone/telehealth to decrease COVID-19 exposure and provide mental health services.

Of note, the hybrid approach allows grantees to continue to provide integrated, coordinated mental health, ASA, and HP/DP patient care. Examples include a mental health provider collaborating with a practitioner about a mental health patient with chronic health conditions. Additional programming includes individual, family, youth, and group counseling sessions, cultural consultations, and depression screenings, regardless of COVID-19 trends.

Grantees will continue integrating cultural and traditional practices with mental health services (traditional elder health and wellness and trauma-informed coping skills group). Grantees will increase tele-behavioral health services for elders concerned about their health and safety with COVID-19 variants. Grantees recognized the need to design and expand in-person and virtual mental health counseling and healthy lifestyle activities and events targeted to adolescents/youth and families.

Next steps for mental health are to continue with the recruitment and retention of mental health care professionals (case managers, clinical staff, IT, dual licensure in mental health and chemical dependency, and recovery and support specialist).

Summary and Recommendations

GPRA Summary

The GPRA mental health analysis looked at three measures: Domestic Violence/Interpersonal Violence (DV/IPV) Screening, Depression Screening for adolescents (12-17 years), and Depression Screening for adults (18+ years). For DV/IPV Screening and Depression Screening for adults, the national target was not achieved in any of the reporting years. Depression Screening for adolescents was slightly more successful: surpassing the national target in the 2018 GPRA. While rates fluctuated for all three measures across the reporting period, on average, they decreased across the years.

Recommendations:

- More efforts need to be focused on reaching the national targets for the Mental Health GPRA indicators across grantees, across all measures.
- GPRA indicators used to evaluate the mental health program focus area should be re-evaluated for relevancy. Grantees' mental health activities also include other screenings as well as a variety of therapeutic modalities.

UDS Summary

The UDS Mental Health findings include measures meant to provide an overview of the number of visits made by AI/AN patients and all patients per year for mental health, as well as the proportion of those visits made by AI/AN patients. Over the three years of the reporting period, the number of patient visits essentially doubled from the 2016 to the 2020 UDS. While the number of AI/AN patient visits increased, it was not at the same substantial rate, leading to a decrease in the proportion of visits made by AI/AN patients from the 2016 to 2020 UDS. Across the reporting period, AI/AN patient visits comprised a lower proportion in comparison to all other racial groups combined. For telehealth visits for mental health, the trend could not be observed, however, there was an even divide between the proportion of visits made by AI/AN patients and those made by other populations.

Recommendations

- With total patient visits almost doubling between the first and last year of the reporting period, there is a clear need to increase the capacity to provide mental health services across grantees.
- Support grantees in expanding telehealth service offerings, which seem to be accessible to urban AI/AN clients, at least for this program focus area.
- Continue marketing services and service type options (e.g., hybrid, fully virtual sessions) to the urban AI/AN community

Quarterly Reports and Unmet Needs Summary

During the three grant program years, grantees indicated that they experienced numerous challenges, often as a consequence of the COVID-19 pandemic. Some of these included the need for constant flexibility and adaptation, particularly in the mode of service delivery. Many grantees offered virtual or hybrid services as an alternative to typical in-person services; they used platforms such as Zoom or Doxy.me to offer telehealth counseling, therapy, and support groups. Grantees also worked on implementing an integrated model of care, collaborating with other departments to provide mental health patients with continuity of care across their health needs. Despite the many challenges, grantees demonstrated creativity and flexibility in how they continued to provide mental health services to their communities during the pandemic.

Recommendations:

- Improve broadband/internet access among urban AI/AN communities so patients can reliably access telehealth services.
  - Improve knowledge and access to appropriate technology so patients can access virtual/hybrid services.
  - Offer opportunities for patients to improve their digital literacy as a means to access virtual/hybrid services.
  - Focus on addressing infrastructure concerns expressed by grantees:
    - Improve recruitment and retention for mental health staff.
    - Hire clinical staff with AI/AN knowledge, experience, or personal background or provide cultural competence training for non-AI/AN staff.
- Continue to improve and expand an integrated health care approach, not only across the ASA/MH programs but also pursue integration across primary care/prevention (HP/DP) services:
  - Employ multi-pronged approach across program focus areas to provide continuity of care for patients, particularly those with co-occurring conditions.
  - Make sure non-clinical support staff positions are filled to support integrated care model.
  - Provide training and education for new and existing staff on integrated care approach.
- Identify other funding sources to support expansion of existing services and infrastructure capacity building.

Cultural Practices and Evidence- and Practice-based Approaches Findings

This section provides an overview of evaluation findings based on analyses of the qualitative data sources including grantee quarterly reports and unmet needs. It is organized to provide a summary of overall themes and a summary of cultural and traditional practices (CTPs) and practice- and evidence-based (PB/EB) approaches utilized by grantees within the 2019 to 2021 grant program years. According to a report from the National Indian Health Board, evidenced-based practices are “Practices that integrate the best research evidence with clinical expertise and patient values.” In contrast, cultural and traditional practices constitute a “range of treatment approaches and support derived from, and supportive of, the positive culture of the local society and traditions.”[8] The 2020 Grant Program Year comprehensive report analyzed CTPs used by grantees from both the 2019 Grant Program Year and 2020 Grant Program Year. This section is organized to provide an overview of findings for CTPs, PB/EB approaches, and the use of each across the four program areas, followed by a summary of recommendations.

Cultural and Traditional Practices

Across the three grant program years, a variety of CTPs were mentioned by 30 of the 33 grantees. All of the grantees indicated they would use CTPs in at least one focus area in their applications. Almost 90% of grantees reported integrating CTPs in at least one focus area. Sixteen key themes were identified across these practices:

- Culturally relevant activities
- Culturally relevant services
- Dancing
- Drumming
- Food, Food sovereignty
- Indigenous identity
- Place-based Tribal history
- Pow-wows
- Prayer
- Smudging
- Storytelling
- Sweat lodge
- Talking circles
- Traditional arts
- Traditional healing
- Traditional plants/medicine

Figure 32 depicts the top 12 CTPs in order of most to least reported. Grantees used a variety of terms, including "culturally relevant activities," "culturally relevant care," "culturally relevant services," or "cultural competence" as a general descriptor. "Culturally relevant activities" refers to events hosted by grantees, whereas "culturally relevant services" refers to grantees providing care to their community members.

[8] National Indian Health Board. (2012). *Traditional and Evidence Based Practices in Public Health*

Some of the cultural offerings integrated into programs included:

- Traditional art forms (e.g., beading, singing, and drumming)
- Traditional physical activities (e.g., dancing, peeling bark from teepee poles, pow-wows for cardiovascular health, and sweat lodge ceremonies)
- Discussion activities (e.g., Talking Circles and storytelling, which encourage respect and help participants learn about healing through their culture)

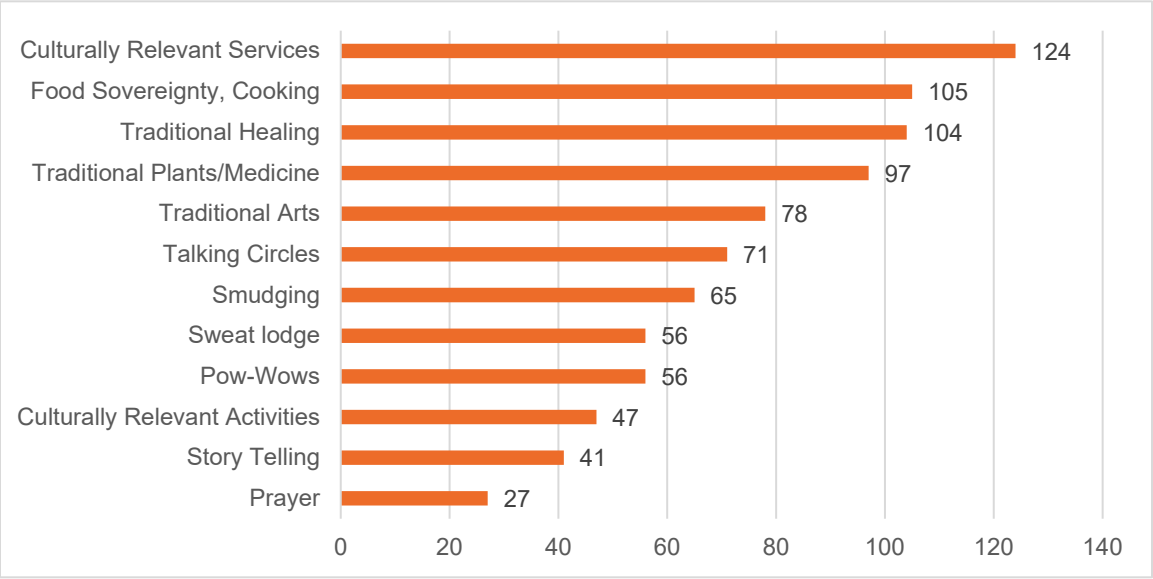


Figure 32: Top 12 Cultural and Traditional Approaches Used by Grantees

Practice- and Evidence-based Approaches

Across each grant program year, quarterly progress reports from grantees were reviewed to identify if CTPs were integrated into PB/EB approaches and program offerings. It is important to note that an updated quarterly progress report form began during the 2020 Grant Program Year, allowing grantees to capture more detail on their PB/EB approaches. For the 2019 Grant Program Year, reports did not specifically request this information, so the findings primarily apply to the 2020 and 2021 Grant Program Years. For PB/EB, 93% of grantees in the 2020 Grant Program Year and the 2021 Grant Program Year reported using PB/EBs in at least one focus area. Cumulatively, grantees reported approximately 90 different PB/EB approaches, and the top 12 practice/evidence-based approaches are depicted in Figure 33. A full list of all 93 PB/EB approaches can be found in Appendix F. Most PB/EB approaches were applied within the Alcohol/Substance Abuse and Mental Health programs.

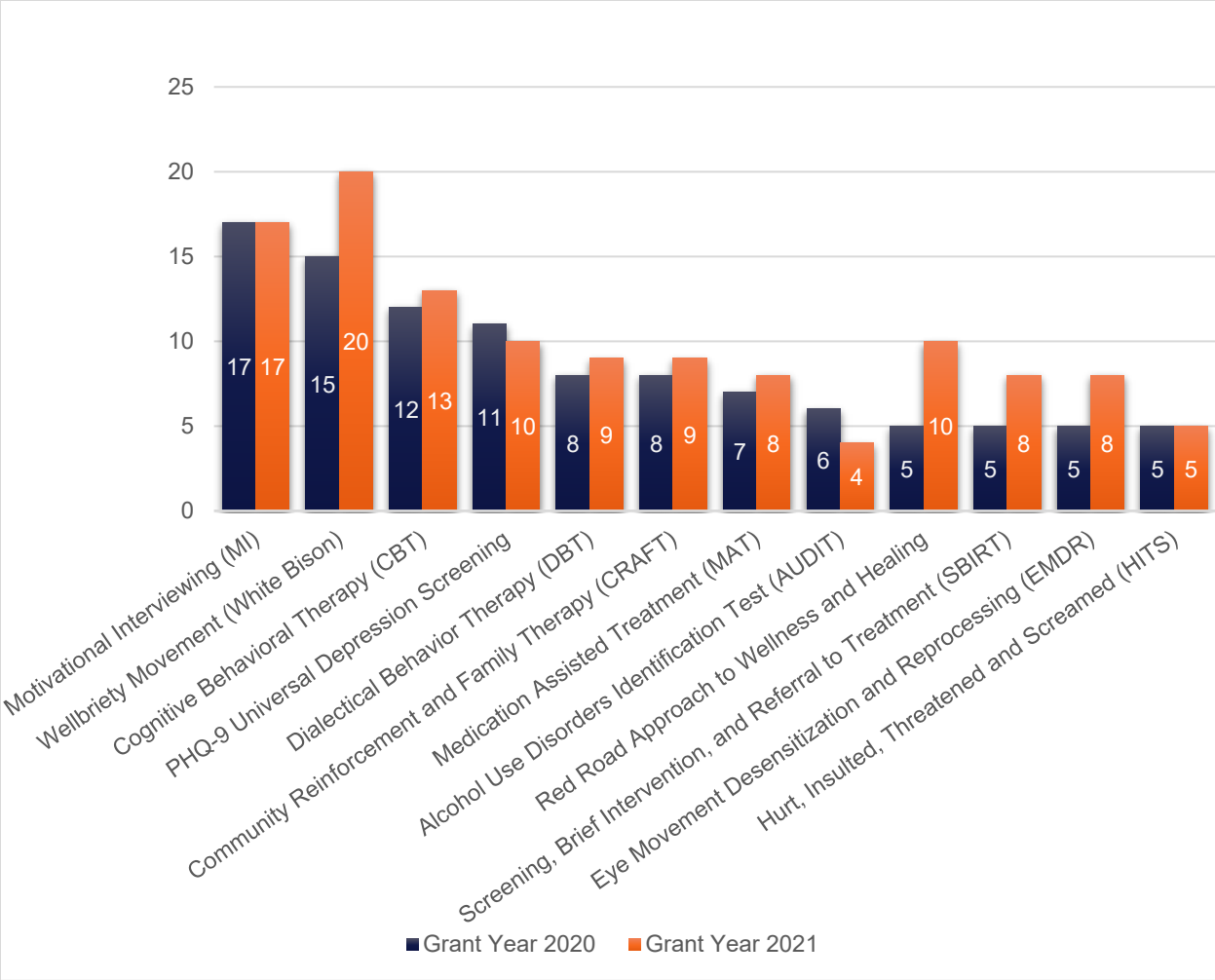


Figure 33: Frequency of PB/EB Approaches Used by Grantees

Integration of CTPs and PB/EB Approaches in HP/DP

The use of CTPs in HP/DP programs, services, and activities varied across the grantees: from using community messaging and branding for Native communities to integrating cultural or traditional practices with PB/EB approaches. For example, grantees integrated CTPs with foodways and food sovereignty to engage community members and educate them on nutrition, diabetes prevention, and cardiovascular health. As another example, a grantee implemented a “Food is Medicine” program, which incorporated stories about traditional AI/AN cooking, herbs, and plants to support traditional food cooking demonstrations. Many grantees used place-based cultural practices and activities such as offering Lushootseed language classes, dancing (e.g., Prairie chicken dance, fancy shawl), ribbon dressmaking, and sewing groups.

Integration of CTPs and PB/EB Approaches in Immunization

To support Immunization programming, grantees continued to apply up to date PB/EB approaches, especially in adherence to the COVID-19 pandemic-related protocols.

CTPs were integrated into these approaches through storytelling and outreach/promotional materials targeted at AI/AN audiences to increase awareness of the importance of regular immunizations and the COVID-19 vaccine. This approach was important, particularly to combat vaccine hesitancy, resistance, and misinformation as a means to increase vaccination rates.

Integration of CTPs and PB/EB Approaches in Alcohol and Substance Abuse

Grantees integrated culture into their Alcohol/Substance Abuse programs to varying degrees, such as through using Native artwork and messaging to engage with community members. Grantees also incorporated CTPs with PB/EP interventions to provide a holistic approach to wellness. Examples included sweat lodge ceremonies, talking circles, smudging, and prayer, combined with PB/EP approaches such as Medication-Assisted Treatment, Motivational Interviewing, Screening/Brief intervention/referral to Treatment screenings, and Moral Reconation Therapy. Grantees also applied culture-based approaches such as the Red Road, Wellbriety, White Bison, Seven Grandfathers, and Horse as Medicine (equine-assisted therapy). It is important to note that the integration of CTPs to PB/EB approaches within the Alcohol/Substance Abuse program often overlapped with those approaches in the Mental Health program.

Integration of CTPs and PB/EB Approaches in Mental Health

Within the Mental Health program, grantees emphasized holistic PB/EB approaches such as spirituality, group healing, social connection, identity, and relationships to land and place. Several grantees indicated that during their initial meeting/assessment with clients, they considered their cultural needs while using PB/EB approaches. Treatments and therapeutic modalities utilized within the Mental Health program included:

- Cognitive Behavioral Therapy
- Motivational Interviewing
- Dialectical Behavior Therapy
- Patient Health Questionnaire-9 Depression Screenings
- Eye Movement Desensitization and Reprocessing
- Hurt, Insult, Threaten and Scream

It is important to note that the integration of CTPs to PB/EB approaches in the Mental Health program often overlapped with that of the ASA program.

Summary and Recommendations

Overall, a variety of CTPs and PB/EB approaches were increasingly applied across the three grant program years. For CTPs, grantees integrated a variety of practices across all four 4-in-1 program areas. A critical way the grantees incorporated culture and traditions was by having culturally competent staff and offering culturally appropriate services to support patients. Examples of implemented approaches included sweat lodge ceremonies, traditional healing, smudging, and talking circles.

For PB/EB approaches, most grantees learned of these approaches from presentations, the Federal government, and through published work/research. Integrating cultural and

traditional practices into the grantees' work across the four 4-in-1 Program focus areas was necessary to ensure that services were appropriate for and resonated with the grantees' communities.

The quarterly grantee progress report prompted grantees to indicate if they applied CTPs to PB/EB approaches and, if so, to highlight these cultural practices. To enhance understanding of CTPs and PB/EB approaches, the following recommendations are provided:

- The quarterly grantee progress report needs to allow grantees to expand and reflect on the broader spectrum and implications of this work and approach, especially across the four program areas. Adding additional categories of CTPs and PB/EBs to the quarterly grantee progress report of the different types of PB/EB would help to build out a more extensive resource that can be shared across grantees.

- In addition, aside from the more commonly used cultural practices and programming, there are also lesser-used practices across the grantees that could be documented and later shared across grantees.

- Develop and create a web-based portal for the quarterly progress report that includes the top PB/EB approaches and CTPs in the report.

- Provide clear definitions with examples of PB/EB to grantees because there are many similar terms grantees use interchangeably throughout quarterly progress reports and proposals (e.g., "evidence-based practice," "promising-based approaches," "cultural practices," "culturally relevant").

- There is a need to give the grantees more guidance, such as examples of the type of information grantees are expected to provide when reporting on their PB/EB and CTPs. For example, grantees could be encouraged to provide supplemental materials, such as posters, informational flyers, or educational toolkits that are distributed to their communities. This can also include links to grantees' social media posts, as well as their social media analytics to understand the reach and uptake of information across communities.

- To enhance data collection and quality, the quarterly grantee progress report should separate the PB/EB questions with a prompt to indicate which of the four program areas PB/EBs were applied. At present, it is difficult to differentiate and quantify in which program areas PB/EBs were applied. Further, it is difficult to differentiate by program area which of these approaches were culturally modified.

Quantitative Report and Data Display Findings

The quality of the data was evaluated to understand gaps and limitations of the data sources used. This involved the exploration of the three key quantitative data sources included in this analysis: GPRA, UDS, and NIRS. Data sources were evaluated first to establish which grantees were using which systems, or who was reporting at all, and secondly, to assess completeness of the data provided. For grantees who reported on a data source but did not report for all measures, the missing measures were recorded and assessed for similarities. Table 4 displays the measures used for each section: Access to Care, Quality of Care, and Affordability of Care. An exploration by each section is included.

Table 4: Measures of Access to Care, Quality of Care, and Affordability of Care

	Domain	Outcome Measure	Data Source
Quality of Care and Safety	Health promotion/disease prevention	Good Glycemic Control (A1C <9.0) Poor Glycemic Control (A1c >9.0) Controlled BP <140/90 DM Statin Therapy Nephropathy Assessed (Cervical) Pap Screening Mammography Screening Colorectal Cancer Screening HIV Screening (Ever) Childhood Weight Control Breastfeeding Rates	GPRA
	Immunizations	Immunization rates by age group Influenza immunizations, childhood immunizations Adult immunizations	NIRS, GPRA
	Alcohol and Substance Abuse	Tobacco Cessation Universal Alcohol Screening SBIRT Screening	GPRA
	Mental Health	DV/IPV Screening Depression Screening (12-17 Years) Depression Screening (18+)	GPRA
	Access to culturally appropriate care	Number of programs using culturally tailored PB/EB Type of culturally tailored PB/EB	Quarterly Progress Reports Qualitative Database
Access to Care	Demographics	Number of patients total Number of AI/AN patients AI/AN proportion of all patients Number of visits total Number of AI/AN visits	UDS

	Domain	Outcome Measure	Data Source
	Insurance coverage Proximity to facility type by available services	AI/AN proportion of all visits Number of visits by visit type Number of visits by insurance type Number of visits by specialty Number of grantees offering telehealth services (2020) Description of facility type by grantee	
Affordability of Care	Patient Payor Mix	Percentage of patients under FPL (no data) 3rd party payor mix (no cost data)	UDS

A total of 12 out of 33 grantees reported for each data source (2020 GPRA, 2020 UDS, 2021 NIRS). All grantees reported UDS data for the 2020 Grant Program Year, while 27 grantees reported 2020 GPRA data. The data source most frequently unreported were the 2021 NIRS, with only 15 grantees reporting all measures. For GPRA, grantees who reported at all, also reported for each measure. In contrast, for NIRS, grantees frequently only reported for some measures: Five grantees did not report to NIRS at all, but 13 reported on some or most measures.

Figure 34 displays the number and type of missing fields found through the data quality evaluation. The most common missing field was any of the influenza immunization categories for NIRS, with 11 out of 33 grantees not reporting any influenza measures to NIRS. The second most frequent missing field is for GPRA: six grantees did not report any GPRA data, although only two of these did not report at all while four did not report as a consequence of IDCS level data not being available. Five grantees did not report any NIRS data at all. Three grantees each did not report NIRS data for the 3-27 month and 2-year-olds measures, respectively, while one grantee did not report any NIRS data for adolescent measures. Details are available in Appendix D, Table 22.

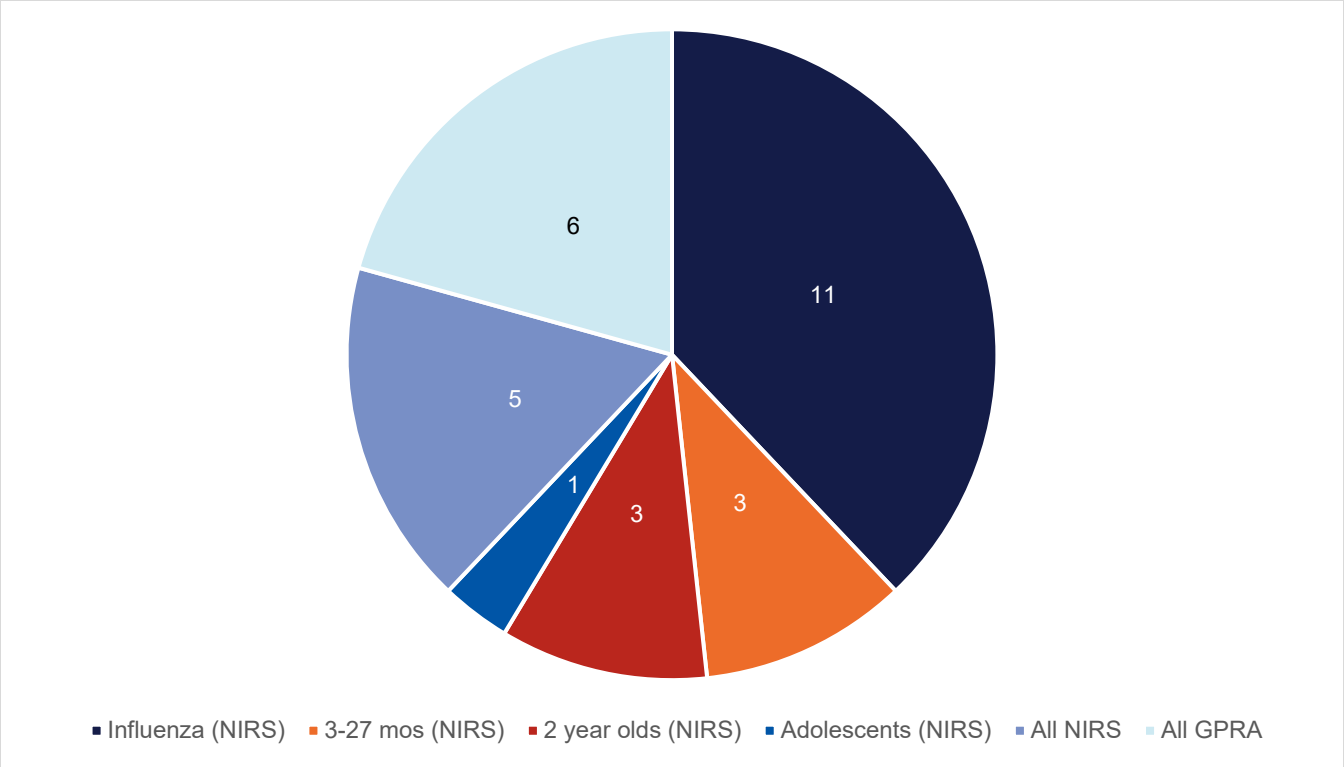


Figure 34: Data Quality Measures by Number and Type of Missing Fields

Assessment of Access to Care

Access to care among urban AI/AN patients was evaluated through quantitative data sources, specifically GPRA and UDS. The indicators were chosen to reflect the demand for services in grantees' communities as well as the specific demand among urban AI/AN patients. In addition, the need for specialty care, including pediatric and geriatric services, is reflected in the number of visits by specialty and AI/AN proportion. Furthermore, the ability to access health care is not merely dependent on the presence or absence of services in an individual's area, but rather a combination of socioeconomic factors, such as the ability to physically access services (i.e., transportation) and importantly, the ability to afford to pay for services. While the extent of such barriers cannot be quantified through the data sources provided, indicators were chosen that could provide a limited illustration of these: such as the number of grantees providing telehealth services which could overcome transportation barriers, and the insurance coverage used to cover services.

Access to care is also dependent on the type of services available in an individual's area. Facility type and services offered differ across grantees, with some offering limited services and others operating a full range of services across program focus areas. Figure 35 displays the facility type of each grantee and the number of each type across all grantees. While the majority of grantees (63.6%) were full ambulatory locations, 18.2% and 15.2% of grantees were outreach and referral or limited ambulatory locations

only. Finally, one grantee only offered outpatient and residential substance abuse services. Details are available in Appendix D, Table 23.

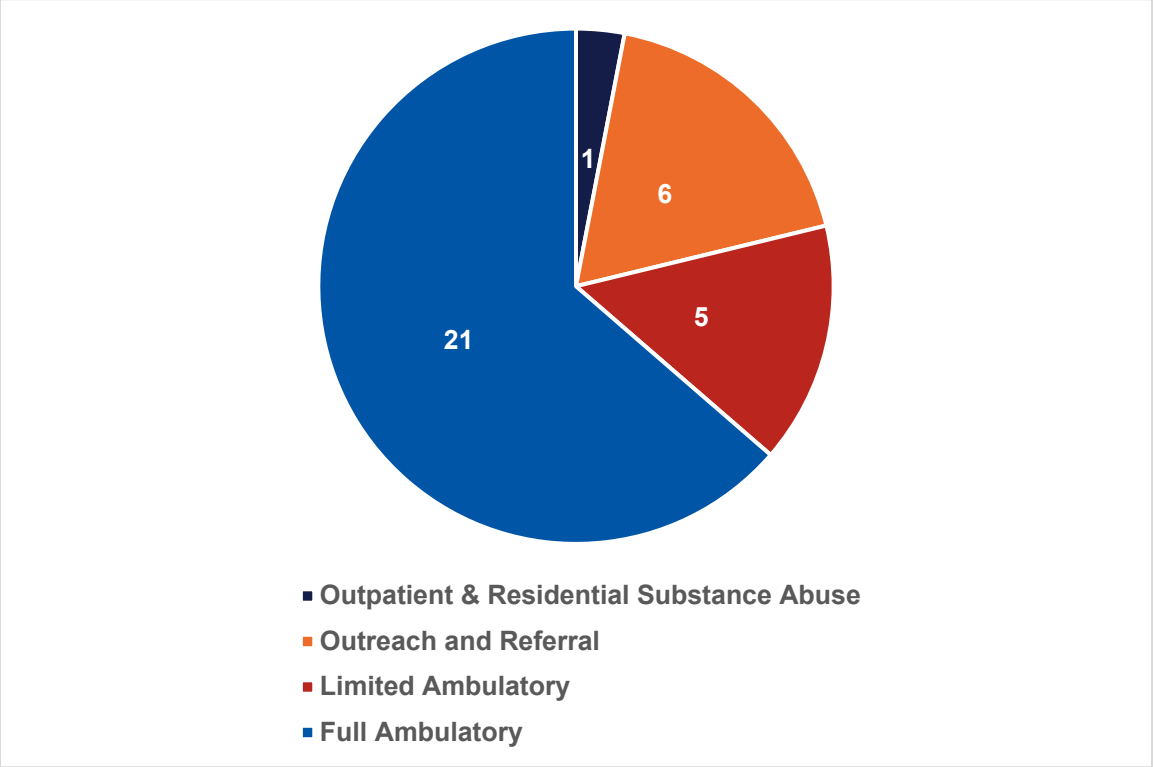


Figure 35: Access to Care across Grantees by Facility Type and Number

Findings and recommendations:

- While the total number of patients actually increased over the reporting period, the total number of AI/AN patients decreased. Therefore, the proportion of AI/AN patients in comparison to other populations decreased over the reporting period.
- This trend held across each patient type: gender, specialty, insurance, visit type, with a few notable exceptions. For insurance, the proportion of AI/AN patients with private insurance increased while the proportion of AI/AN patients with unknown insurance coverage decreased. The proportion of AI/AN patients for ASA and other professional services also increased over the reporting period.
- Across visit types for each program area, the proportion of visits made by AI/AN clients was much lower than the proportion of visits made by other populations. One notable exception to this trend was observed among visits for ASA services, where AI/AN patients comprised the majority of visits made in each year of the reporting period.
- While this phenomenon was preserved among telehealth visits as well, it was to less of an extent. For all visit types, there was a more even distribution between the number of visits made by AI/AN clients and those made by other populations, in contrast to the UDS visits above.

Assessment of Access to Quality of Care

Access to quality of care among urban AI/AN patients was assessed through both quantitative and qualitative data sources. The quantitative indicators chosen were selected to reflect the type of services provided across the four programs focus areas and grantees' success at providing those services. In addition, the ability to access culturally tailored services can greatly impact the quality of care experienced by urban AI/AN clients. Therefore, qualitative measures drawn from the quarterly reports were included to provide an overview of the services and number of grantees who provided culturally tailored, EB/PB services.

Findings and recommendations:

- On average across all grantees, about half of all HP/DP measures met or exceeded their national targets. This was particularly evident among cardiovascular health measures, such as blood pressure and statin therapy.
- However, screening rates, particularly for preventative cancer screenings, remained low across program years. High quality health care should ensure that such preventative services are not only available but advertised. Patients should be encouraged to access such services and be easily able to do so.
- Immunization rates were low across the reporting period for all age groups and immunization types. In particular, there is a need to encourage receiving all routine childhood immunizations. Adult immunization rates were also low, and there is a need to educate adult patients on the importance of receiving age-appropriate booster shots and or immunizations as soon as they are eligible. Finally, influenza immunization rates were low among those grantees who reported influenza data: with the continued circulation of COVID-19, it is extremely important to maximize vaccinations for seasonal respiratory illness in order to prevent serious illness.
- MH and ASA service rates declined over the reporting period, and rarely met their annual national targets. There is a need to fully evaluate these services, where the demand for services is growing (see the previous section) but the services offered are not meeting their targets. Possibly there is a need to expand indicators used to better capture grantees ASA and MH programs' true capacities.
- Qualitative measures showed that the majority of grantees offered culturally tailored PB/EB approaches within their program services. There was also a variety of culturally tailored PB/EB, across program focus areas. Grantees should continue to integrate culturally tailored PB/EB within their programs and expand services where possible to make sure urban AI/AN clients can access culturally appropriate and effective care solutions.

Assessment of Affordability of Care

Within the current data sources, there was no measure of patient payor information. Therefore, it was not possible to assess affordability of care provided by grantees to their communities.

Qualitative Report Data Display Findings

Qualitative narrative analysis was conducted from the data entered into a qualitative database, including grantee program narrative applications and quarterly grantee reports across the 2019 Grant Program Year (April 1, 2019–March 31, 2020) to the 2021 Grant Program Year (April 1, 2021–March 31, 2022). The qualitative data were arranged into three primary categories of measures (1) community-level outcomes; (2) process evaluation; and (3) interorganizational measures for internal use.

Community-level Outcome Measures

Outreach efforts of the grantees as described in their quarterly grantee reports. For some grantees this included examples of program flyers, program posters, YouTube videos, and photos to illustrate the grantees as a formative measure to document the process of the efforts, activity, program, and services. With the global pandemic, social media has played an essential role in maintaining connections and communication with community members. For the most part, grantees integrated their healthy lifestyle messaging, COVID-19 safety protocol updates, and available services across different social media platforms, Facebook, Instagram, TikTok, and Twitter. Grantees used email and snail mail with the communications because not all community members have mobile phones with internet access, computer, laptop, tablet, and high-speed internet access (rather than rely upon using their personal mobile data plans).

The updated quarterly report forms available to grantees during the 2020 Grant Program Year provided additional data fields to report on the PB/EB approaches. The updated report template also allows grantees to include supporting program information highlighting the range of community outreach and engagement efforts with event flyers, social media posts, and links to videos.

Grantees want to share successes with their community members, partner organizations, local and state public health agencies, immunization, and vaccine registries. Because of the three-year IHS 4-in-1 grant period, grantees could not share their long-term outcomes and impact because of the short timeframe. However, grantees could report their short-term and intermediate outcomes across the four focus areas.

Patient satisfaction data sources are limited to a few quotes of community members included in the quarterly report or sharing informal feedback provided by community members on select events, activities, and programs. The stories and informal feedback are not provided regularly to provide insight into trends or themes about patient satisfaction. Some grantees indicated in the quarterly reports that they conducted satisfaction surveys to obtain participant feedback but did not necessarily report the key findings of their surveys in the reports. In the grantee proposals, grantees include different data sources that measure patient satisfaction—specifically pre/post surveys

and other data sources to measure their patient/community member outcomes with detailed information. However, the survey results are not shared for the program/events/activities updated in the reports.

The current quarterly grantee report form does not include quality of service measures and cannot be evaluated.

Process Evaluation Outcome Measures

The different examples of how grantees gathered the necessary information for the process evaluation include data collection forms and surveys, rosters and attendance sheets, satisfaction surveys, post-session meetings with staff, volunteers for their observations, and fidelity tracking—primarily for evidence-based programs.

Over three years of process evaluation and monitoring, grantees found more user-friendly EHR software than the outdated RPMS system. Grantees are transitioning from RPMS for electronic health records to other EHR software. Grantees are creating improvements and transitioning software in various stages for the quantitative data. The updated EHR systems can accommodate and integrated health care approach by monitoring and tracking tools across HP/DP, immunization, alcohol and substance abuse, and mental health. EHR systems transitioned or were in various stages of the transition to other EHR systems (e.g., eClinicalWorks) because they captured the measurements with quarterly goals.

The internal monitoring of the progress of grantees' events/programs/activities included qualitative and quantitative data sources. Grantees used analog, digital, and virtual monitoring tools to accurately document the state of such events/programs/activities, such as rosters and event sign-in sheets. The primary tool for regular monitoring is an EHR.

The progression toward an integrated health care model seemed necessary, and even natural, for grantees due to the unique challenges of COVID-19. Before COVID-19, monitoring and reporting tools were separated between departments. However, there was much overlap and redundancy between departments. During the pandemic, sharing resources, including staff, between departments to reduce gaps exacerbated by illness, low vaccination rates, and high staff turnover became necessary. This led to grantees strategizing how different departments could combine their efforts, such as co-sponsoring a COVID-19 vaccine drive-through event by the HP/DP and immunization programs. In turn, this integrated approach reduced existing redundancies, improved the efficiency of care, and ensured that the pre-pandemic quality of care was preserved.

Another example of an integrated health care approach is an integrated behavioral health (IBH) model that combines medical, behavioral health, mental health, and alcohol and substance abuse to coordinate efforts to treat the whole patient and address their health concerns. As with the integrated health care model, the IBH model reduces redundancies and overlap of care. Grantees using an IBH model reported the ability to pivot, strategize, and mitigate coordinated efforts to address an uptick in mental health and alcohol and substance abuse services and programs and increased staff workload.

Data sources for qualitative monitoring include patient feedback, patient-satisfaction surveys, and patients sharing their observations and reflections. Internally, staff met

regularly to review the data collected and tracked and get feedback about how things were going. More so, senior managers from the different service areas also convened to coordinate the patient care delivery and make recommendations and necessary changes to adjust the program and services and to be discussed with leadership and board members. Another source of monitoring and reporting was the new grantee quarterly report. Grantees referenced the quarterly reports, and the immunization progress reports from Year 1. The revised grantee quarterly report includes both quantitative and qualitative data, such as opportunities to include more narrative about their observations of their progress in each of the four different areas, strengths, challenges, next steps, program impact, evidence-based and culturally traditional practices. Grantees continued to elaborate and describe their efforts by adding CTPs to existing approaches across the four areas and a big emphasis on documenting how they adapted, used, encouraged, and supported CTPs.

Grantees frequently mentioned the limited opportunity to meet in person as a barrier to care because patients were concerned about COVID-19 exposure. Elders and patients with chronic health conditions, especially, were reluctant to schedule in-person visits, expressing concerns about going to the clinics due to possible exposure to COVID-19.

Grantees reported many barriers due to technological limitations, which became more apparent with the increased need for telehealth instead of in-person services. Specifically, lack of access to and knowledge of computers, laptops, video conferencing platforms, and high-speed internet prevented many of the most vulnerable patients (youth, elders, and those with chronic health conditions or disabilities) from accessing telehealth services.

Organizationally, grantees reported frequent and high levels of staff burnout and turnover, compounded by difficulty recruiting or retaining clinical and non-clinical staff for the HP/DP program. As such, the ability to train new staff or educate existing staff on web-based electronic medical record systems, among other technology, was minimal. This could ultimately impact the quality of the data provided.

Grantees reported engaging in various outreach efforts to build awareness of available services, provide education on COVID-19 and COVID-19 vaccines, and distribute COVID-19 vaccines. Grantees were mainly focused on addressing vaccine hesitancy and misinformation in the community to begin resuming in-person services. Many grantees expressed that they were engaged in efforts to promote routine immunizations and promote and provide COVID-19 vaccines. Some grantees provided mobile clinics, and others concentrated on encouraging immunizations during routine primary care visits.

Finally, grantees reported that they experienced infrastructure challenges that hampered their ability to provide immunizations and meet their program focus area goals. These challenges included high staff turnover rates, supply shortages, lack of vaccine funding, and difficulty using or accessing EHR systems. Across grantees, there was an increased demand for ASA services, straining already limited-service capacity. Grantees reported that clients had limited access to many ASA services typically

provided in person, such as the chemical dependency program and drug treatment court, due to COVID-19. This is a challenge for ASA services, mainly because many of these services do not have established alternative delivery modes, such as telehealth.

Another challenge experienced across grantees and throughout the program focus areas was the limited access to and knowledge of technology among community members. This adds another barrier to access to treatment for ASA, possibly deterring community members from seeking treatment on their own or referring others to treatment. Finally, grantees reported that the increased demand for ASA services exacerbated the limited availability of substance abuse and mental health counselors. Many grantees indicated issues with retention, often due to staff burnout, and had difficulty hiring new counselors who could demonstrate cultural sensitivity to AI/AN clients.

As a result of limited in-person services due to COVID-19, technological barriers in the community became evident, with many community members struggling to access equipment or high-speed internet. While this was evident across program areas, a particular challenge for the MH area was providing group and individual telehealth sessions to clients who often lacked private, confidential settings to participate from home. Grantees shared that they experienced increased demand for mental health services, a challenge compounded by the shortage of available referrals and limited staff capacity. The increased need for services is evident through quantitative data sources, such as UDS. In general, grantees all struggled with capacity due to staffing challenges. Recruiting and retaining staff was an issue across all program areas, particularly within high-stress fields such as mental health and ASA. In response, some grantees explored options to address staff burnout.

Interorganizational Formative Measures

Interorganizational formative measures were evaluated based on what individual grantees shared in their grant applications and quarterly reports. Measures included information shared about pending staff changes, recruitment and retention efforts, and more efficient use of interdepartmental coordination of efforts and shared resources. Grantees could display either quantitative and qualitative formative measures, or both, based on the grantees' SMART objectives and goals. Regarding workforce capacity/growth, grantees experienced significant clinical and administrative personnel fluctuation over the past three years due to the pandemic. A constant challenge for grantees was the struggle to recruit and retain medical personnel for many reasons, such as the inability of grantees to provide competitive salaries.

In response to COVID-19, with an unexpected shift of resources to meet the health needs of their community members, grantees reevaluated and streamlined their delivery of care services and patient scheduling. For some grantees, the pandemic accelerated the process of adapting their patient care delivery system to the COVID-19 environment and abiding by local health safety protocols in response to strains on staff resources such as staff burnout, self-quarantine, and the need to adapt to the ever-changing surge of COVID-19 variants. Grantees transitioned, expanded, or refined an integrated health care approach, and for some grantees, an integrated behavioral model rather than

operating in silos. An integrated health care approach can be used with integrated practice management EHR software to share health care information with primary care providers, mental health, alcohol and substance abuse, immunization services, and cultural traditional practice providers.

Data quality control, data use, and interorganizational information sharing are priorities for all grantees—there is a critical need for staff to convene regularly to review patient progress reports. Grantees described a vital component of a strong organization as collaboration, such as weekly and bimonthly meetings to discuss patient care, activities, and events across the four core areas. Obtaining qualitative and quantitative data from different data sources supports tracking progress in real time with the ability to modify them through an iterative approach to achieve their short-, mid-, and long-term outcomes.

Finally, grantees reported workforce capacity changes, staffing/issues, and recruitment and retention efforts in the quarterly reports.

Recommendations:

- The community level outcome sub-measures: outreach efforts, impact on changes in the community, patient satisfaction, quality of services, and cultural relevance need to be reviewed and updated to align with the data currently collected and modify the measures. For example, there was insufficient data to evaluate the quality of services, patient satisfaction, and impact on changes.
- The process evaluation sub-measures are planning, program implementation, monitoring/timeline, and mitigation/elimination. The quarterly grantee report provides grantees opportunities to describe their implementation process, monitor progress, and report challenges/barriers and mitigation strategies. Yet, the current grantee report does not allow grantees to report the progress for all goals and objectives included in their grant applications. The quarterly report includes data fields describing each focus area's strengths and reporting updates limited to two objectives per focus area. These include a field to describe the objective and progress and provide quantitative data with the percent completed, established target, and the actual. Based on the grant applications, grantees provided a range from two goals/objectives up top to seven goals and objectives per focus area, but the current reporting form cannot accommodate this.
- The quantitative data quality reported through quarterly reports (percent completed, established target, and actual) varied at the activity level with attendance information. Some grantees reported on a program level, but the number of programs provided did not always reflect the progress of a specific objective and the units of analysis. As a result, this made it difficult to accurately compare the progress trends of grantees reaching their target goals. To better accommodate grantees the quarterly progress should be expanded so grantees can provide a complete scope of their proposed goals and objectives and percent completed, established target, and actual. In addition, to provide a SMART goal

and objective refresher to grantees at the beginning of the next grant cycle to ensure quality control.

- Interorganizational formative measures: The quarterly report does not allow for reporting short-term, and proximal outcomes at the individual/patient, family, or community levels.

Conclusion

The 4-in-1 Grant Program began after Urban Indian community leaders advocated for additional Federal funding to address the unmet health care needs of Urban Indians in four health program areas: HP/DP services, immunization services, alcohol and substance abuse related services, and mental health services. The foundation for identifying gaps between the unmet health needs of Urban Indians and the resources available to meet those needs was established in Title V of the IHCIA, at 25 U.S.C. 1653(c)-(e), and 1660a of 1976. This investment in the health of AI/AN people residing in urban areas is as important as ever due to the fact that over 74% of AI/AN people now reside in urban areas. In 2020, more than 66,830 Urban Indian patients accessed services through at least one of these UIO programs.[9]

This is the first time in almost fifty years, the 4-in-1 grant program has been evaluated with key recommendations provided based on evaluation findings. This evaluation reviewed data submitted by a cohort of 33 grantees for the 2019 Grant Program Year (April 1, 2019–March 31, 2020), 2020 Grant Program Year (April 1, 2022–March 31, 2021) and 2021 Grant Program Year (April 1, 2021–March 31, 2021). Key data sources reviewed and analyzed for the purpose of this report included the GPRA, NIRS, and UDS data sets, as well as the grantee quarterly reports and unmet needs reports. In addition, this evaluation highlighted successes and areas where further investigation is warranted to better understand 4-in-1 program grantees, their reporting, and services. The series of recommendations identified through the evaluation support the continued efforts of IHS to improve upon their program and support grantees in their efforts to enhance service delivery and access to care. These efforts, in turn, will improve the overall health and well-being of AI/AN people.

Overall, findings from the grantee quarterly reports provided a deeper understanding of the rich scope of services UIOs provided including an understanding of (1) community-level outcomes, (2) interorganizational measures for internal use, and (3) process evaluation. Most notably, the evaluation findings clearly illuminated UIOs ability to respond in a public health emergency. The data revealed how, at the community level, each health center adapted to meet its community's shifting needs over the course of

[9] This figure is derived from the UDS Summary Trends Business Intelligence Dashboard. The Office of Urban Indian Health Programs, in collaboration with the National Patient Information Reporting system (NPIRS), generates various end of year reports to support UIO performance metrics and monitoring. Business Intelligence dashboards provide key insight into critical information for national enterprise reporting of UDS Summary Reporting.

the COVID-19 pandemic, with a special focus on physical, mental, and spiritual wellness. Given the pandemic's unique challenges, grantees engaged in outreach efforts to build awareness, increase knowledge, and encourage active engagement in UIO services.

Grantees also faced barriers to care because of community members' limited internet access and technological capabilities, which made accessing telehealth services for clients, especially elders, difficult. Gaps in health care, mental health care, and health insurance coverage were also major challenges faced by grantees. In the area of HP/DP, grantees' strength was the ability to host events focusing on cultural traditions. In the area of immunization services, grantees continued to provide routine immunizations and COVID-19 vaccinations, despite the limitations with in-person visits due to the COVID-19 pandemic.

Grantees also worked on strengthening partnerships with their local public health departments to promote immunizations. Many grantees reported on their efforts to address vaccination hesitancy through various education efforts, outreach, and partnerships. Grantees' ASA programs were successful as a hybrid model, reducing barriers to care. Mental health services were impacted by turnover in workforce due to burnout and staff's concern about exposure to COVID-19. However, UIOs continued to successfully recruit and staff their programs with well-trained providers and deliver culturally competent services and trauma-informed care.

UIOs were able to adopt telehealth services and implement hybrid models of care to ensure access to care during the pandemic. The 2020 UDS report showed there were 23,580 telehealth patients, of which almost 34% were AI/AN. This percentage was consistent with the percentage of AI/AN patients served by all UIOs, regardless of delivery model, reinforcing the ability of UIOs to implement new and innovative service delivery models to meet the needs of their patients.

The UIOs provide essential preventative care, as the analysis of GPRA data revealed. National targets for screening that were achieved included glycemic control, DM statin therapy, and HIV screening. Improvements need to be made, however, in women's health care screening for (Cervical) Pap and mammograms and for colorectal cancer screening.

Even more important, this evaluation shed light on cultural practices used by 4-in-1 grantees. From an analysis of the quarterly grantee progress reports, evaluation findings showed a variety of culturally traditional practices were increasingly applied across the three grant program years. Integration of cultural practices into service delivery was a priority for all grantees, which improved health care, primary care, and social-support services. The majority of grantees incorporated culture into their program offerings, and their applications included rich descriptions of the UIOs and their communities, along with clear and detailed visions of program implementation. Some grantees support the concept that incorporating culture improves clients' emotional, mental, and physical health. Examples of the cultural offerings integrated into programs included: Traditional art forms (e.g., beading, singing, and drumming); traditional physical activities (e.g., dancing, peeling bark from teepee poles, a powwow for cardiovascular health, and sweat lodge ceremonies); and discussion activities (e.g.,

talking circles, which promote respectful sharing, and elders' storytelling, which helps participants learn about healing through their language). The grantee progress report needs to continue to allow grantees to expand and reflect on the broader spectrum and implications of this work and approaches across the four program areas.

The results of this evaluation support the ongoing investment in this highly valuable grant program that supports important preventative, needed services for AI/AN people residing in urban areas. Data across all three grant years from the grantee quarterly reports were analyzed along with key data sets to help understand the scope of HP/DP, immunization, alcohol and substance abuse, and mental health services. There are still unmet needs for this population; however, grantees were able to respond with innovation and agility, even during a pandemic. More importantly, this evaluation provided new data on cultural practices that were integrated into services provided by grantees. Ongoing evaluation of this grant program will continue to provide valuable knowledge about UIO demonstrated and promising practices to address the health care needs of Urban AI/AN people.

Appendices

Appendix A: UDS Patient Totals (Demographics)

Table 5: UDS Patient Totals by Gender, Specialty, Insurance Type/Status, and Service Type (2016-2020 UDS)

UDS Patient Description	2016			2017			2018			2019			2020			2016-2020		
	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN Percentage Change	Total Percentage Change	% AI/AN Percentage Change
Total	66828 (n=29)	143167 (n=29)	46.7%	44836 (n=28)	135869 (n=28)	33.0%	44636 (n=32)	149919 (n=32)	29.8%	47091 (n=33)	152343 (n=33)	30.9%	51699 (n=33)	167856 (n=33)	30.8%	-22.6%	17.2%	-34.0%
Female	37269 (n=29)	79578 (n=29)	46.8%	25761 (n=28)	72838 (n=28)	35.4%	25910 (n=32)	82276 (n=32)	31.5%	25506 (n=32)	83170 (n=32)	30.7%	21224 (n=33)	68807 (n=33)	30.8%	-43.1%	-13.5%	-34.1%
Male	27536 (n=29)	60058 (n=29)	45.8%	19075 (n=28)	56351 (n=28)	33.9%	18348 (n=32)	63478 (n=32)	28.9%	20332 (n=32)	66036 (n=32)	30.8%	15255 (n=33)	51774 (n=33)	29.5%	-44.6%	-13.8%	-35.7%
Pediatric (<15 yrs)	13437 (n=27)	28491 (n=27)	47.2%	5922 (n=27)	25392 (n=27)	23.3%	6871 (n=30)	30739 (n=30)	22.4%	6925 (n=32)	29664 (n=32)	23.3%	5034 (n=29)	24061 (n=29)	20.9%	-62.5%	-15.5%	-55.6%
Geriatric (65+ yrs)	3367 (n=28)	9304 (n=28)	36.2%	2997 (n=28)	9308 (n=28)	32.2%	3241 (n=29)	11634 (n=29)	27.9%	3414 (n=31)	12320 (n=31)	27.7%	3090 (n=31)	11172 (n=31)	27.7%	-8.2%	20.1%	-23.6%
Women (15-44 yrs)	18676 (n=29)	38472 (n=29)	48.5%	13254 (n=28)	35292 (n=28)	37.6%	14040 (n=32)	39467 (n=32)	35.6%	14101 (n=32)	44065 (n=32)	32.0%	12259 (n=33)	34080 (n=33)	36.0%	-34.4%	-11.4%	-25.9%
Medicaid	30333 (n=28)	73108 (n=28)	41.5%	15928 (n=26)	58681 (n=26)	27.1%	19919 (n=27)	73227 (n=27)	27.2%	20498 (n=31)	83774 (n=31)	24.5%	14585 (n=27)	45392 (n=27)	32.1%	-51.9%	-37.9%	-22.6%
Medicare	3826 (n=26)	10005 (n=26)	38.2%	3024 (n=26)	9689 (n=26)	31.2%	3424 (n=26)	11091 (n=26)	30.9%	3041 (n=30)	10811 (n=30)	28.1%	2657 (n=26)	7242 (n=26)	36.7%	-30.6%	-27.6%	-4.1%
Private Insurance	20513 (n=28)	31498 (n=28)	65.1%	13157 (n=26)	27121 (n=26)	48.5%	13748 (n=27)	29922 (n=27)	45.9%	11039 (n=27)	26255 (n=27)	42.0%	11696 (n=25)	17612 (n=25)	66.4%	-43.0%	-44.1%	2.0%
Insurance Unknown	21687 (n=29)	43567 (n=29)	49.8%	19451 (n=28)	54482 (n=28)	35.7%	13245 (n=31)	50550 (n=31)	26.2%	12067 (n=29)	29330 (n=29)	41.1%	9404 (n=31)	45127 (n=31)	20.8%	-56.6%	3.6%	-58.1%
Medical	41057 (n=27)	98974 (n=27)	41.5%	25659 (n=25)	88888 (n=25)	28.9%	30303 (n=28)	109132 (n=28)	27.8%	28253 (n=28)	103009 (n=28)	27.4%	24907 (n=27)	93740 (n=27)	26.6%	-39.3%	-5.3%	-35.9%
Dental	17331 (n=13)	33352 (n=13)	52.0%	7223 (n=12)	26981 (n=12)	26.8%	10384 (n=17)	41531 (n=17)	25.0%	10211 (n=15)	43856 (n=15)	23.3%	8818 (n=15)	33370 (n=15)	26.4%	-49.1%	0.1%	-49.1%
Mental Health	7487 (n=27)	10379 (n=27)	72.1%	4515 (n=26)	9547 (n=26)	47.3%	7015 (n=29)	20989 (n=29)	33.4%	9283 (n=30)	26291 (n=30)	35.3%	7454 (n=27)	21503 (n=27)	34.7%	-0.4%	107.2%	-51.9%
Substance Abuse	2743 (n=21)	7724 (n=21)	35.5%	2400 (n=20)	5325 (n=20)	45.1%	4098 (n=25)	7956 (n=25)	51.5%	7232 (n=27)	11220 (n=27)	64.5%	3865 (n=26)	6902 (n=26)	56.0%	40.9%	-10.6%	57.7%
Other Professional	1640 (n=14)	2892 (n=14)	56.7%	1601 (n=14)	4046 (n=14)	39.6%	2076 (n=19)	6300 (n=19)	33.0%	1699 (n=14)	4274 (n=14)	39.8%	1626 (n=14)	2011 (n=14)	80.9%	-0.9%	-30.5%	42.6%
Vision	474 (n=3)	1085 (n=3)	43.7%	255 (n=2)	1501 (n=2)	17.0%	350 (n=4)	1674 (n=4)	20.9%	400 (n=3)	2451 (n=3)	16.3%	388 (n=3)	1856 (n=3)	20.9%	-18.1%	71.1%	-52.1%

UDS Patient Description	2016			2017			2018			2019			2020			2016-2020		
	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN Percentage Change	Total Percentage Change	% AI/AN Percentage Change
Enabling Services	15391 (n=20)	25758 (n=20)	59.8%	13158 (n=16)	23114 (n=16)	56.9%	7561 (n=23)	15319 (n=23)	49.4%	7889 (n=22)	20331 (n=22)	38.8%	5731 (n=16)	18519 (n=16)	30.9%	-62.8%	-28.1%	-48.2%

Table 6: UDS Telehealth Patient Totals by Gender, Specialty, Insurance Type/Status, and Service Type (2016-2020 UDS)

UDS Patient Description	2020		
	AI/AN Population	Total Population	% AI/AN
Total	7970 (n=18)	23580 (n=18)	33.8%
Female	4921 (n=18)	13728 (n=18)	35.8%
Male	3120 (n=17)	9869 (n=17)	31.6%
Pediatric (<15 yrs)	534 (n=11)	1535 (n=11)	34.8%
Geriatric (65+ yrs)	763 (n=12)	2053 (n=12)	37.2%
Women (15-44 yrs)	2698 (n=16)	6417 (n=16)	42.0%
Medicaid	4297 (n=15)	12033 (n=15)	35.7%
Medicare	804 (n=12)	2330 (n=12)	34.5%
Private Insurance	1752 (n=14)	4741 (n=14)	37.0%
Insurance Unknown	1113 (n=9)	1866 (n=9)	59.6%
Medical	6334 (n=14)	18813 (n=14)	33.7%
Dental	843 (n=4)	1234 (n=4)	68.3%
Mental Health	1559 (n=15)	4231 (n=15)	36.8%
Substance Abuse	418 (n=10)	1232 (n=10)	33.9%
Other Professional	80 (n=1)	137 (n=1)	58.4%

UDS Patient Description	2020		
	AI/AN Population	Total Population	% AI/AN
Vision	0	0	0.0%
Enabling Services	74 (n=2)	98 (n=2)	75.5%

Appendix B: GPRA, NIRS, UDS Visit Data by Program Focus Area

Table 7: GPRA HP/DP Measures (2016-2021 GPRA)

HP/DP Measures	GPRA Year (n)	National Target	Average	Gross Change Between Years	Percentage Change Between Years
Good Glycemic Control	2016 (26)	49.5%	48.0%	-	-
	2017 (26)	48.4%	47.8%	0.1%	0.3%
	2018 (9)	36.2%	48.7%	-0.9%	-1.8%
Poor Glycemic Control	2019 (10)	Baseline	20.1%	-	-
	2020 (17)	17.4%	21.0%	1.0%	5%
	2021 (11)	16.8%	21.3%	0.3%	1.3%
Controlled BP <140/90	2016 (28)	65.0%	67.6%	-	-
	2017 (28)	63.8%	65.1%	-2.5%	-3.7%
	2018 (10)	52.3%	64.2%	-0.8%	-1.3%
	2019 (13)	52.3%	53.8%	-10.4%	-16.2%
	2020 (19)	60.5%	52.1%	-1.6%	-3.0%
	2021 (12)	59.1%	50.3%	-1.8%	-3.5%
DM Statin Therapy	2016 (23)	Baseline	54.0%	-	-
	2017 (22)	61.9%	63.7%	9.6%	17.8%
	2018 (7)	37.0%	59.1%	-4.5%	-7.1%
	2019 (11)	37.5%	43.7%	-15.4%	-26.1%
	2020 (16)	51.6%	52.5%	8.9%	20.3%
	2021 (9)	49.0%	52.9%	0.3%	0.6%

HP/DP Measures	GPRA Year (n)	National Target	Average	Gross Change Between Years	Percentage Change Between Years
Nephropathy Assessed	2016 (26)	61.1%	58.4%	-	
	2017 (25)	63.3%	57.5%	-1.0%	-1.7%
	2018 (9)	34.0%	43.5%	-14.0%	-24.3%
	2019 (10)	34.0%	31.2%	-12.3%	-28.3%
	2020 (17)	48.1%	24.9%	-6.3%	-20.2%
	2021 (11)	45.5%	22.7%	-2.2%	-8.7%
(Cervical) Pap Screening	2016 (28)	55.6%	38.2%	-	-
	2017 (28)	56.1%	38.9%	0.7%	2.0%
	2018 (11)	35.9%	35.1%	-3.8%	-9.8%
	2019 (16)	35.9%	24.4%	-10.7%	-30.4%
	2020 (19)	39.2%	24.2%	-0.3%	-1.1%
	2021 (13)	38.4%	22.5%	-1.7%	-6.9%
Mammography Screening	2016 (27)	55.9%	31.9%	-	-
	2017 (26)	56.7%	33.5%	1.6%	5.1%
	2018 (10)	42.0%	36.7%	3.2%	9.6%
	2019 (13)	Baseline	19.9%	-16.9%	-45.9%
	2020 (17)	42.0%	13.4%	-6.5%	-32.6%
	2021 (11)	43.4%	9.7%	-3.7%	-27.4%
Colorectal Cancer Screening	2016 (27)	38.7%	28.9%	-	-
	2017 (27)	40.2%	29.5%	0.6%	2.0%
	2018 (11)	32.6%	22.6%	-6.8%	-23.2%

HP/DP Measures	GPRA Year (n)	National Target	Average	Gross Change Between Years	Percentage Change Between Years
	2019 (15)	32.6%	17.7%	-4.9%	-21.7%
	2020 (17)	34.7%	16.5%	-1.2%	-7.0%
	2021 (13)	32.6%	14.3%	-2.2%	-13.2%
HIV Screening Ever	2016 (29)	Baseline	23.3%	-	-
	2017 (27)	41.9%	20.7%	-2.6%	-11.2%
	2018 (12)	17.3%	27.5%	6.8%	32.8%
	2019 (16)	17.3%	32.9%	5.4%	19.6%
	2020 (23)	28.4%	32.3%	-0.6%	-1.7%
	2021 (16)	32.0%	34.0%	1.7%	5.2%
Childhood Weight Control	2016 (12)	22.8%	27.1%	-	-
	2017 (15)	NA	32.5%	5.4%	20.0%
	2018 (6)	22.6%	24.4%	-8.2%	-25.2%
	2019 (4)	22.6%	22.0%	-2.3%	-9.5%
	2020 (8)	22.6%	20.2%	-1.8%	-8.3%
	2021 (2)	22.6%	20.3%	0.1%	0.4%
Breastfeeding Rates	2016 (2)	35.8%	25.0%	-	-
	2017 (23)	36.4%	36.0%	11.0%	44.0%
	2018 (0)	39.0%	0.0%	-36.0%	0.0%
	2019 (1)	39.0%	28.6%	28.6%	0.0%
	2020 (0)	43.6%	0.0%	-28.6%	-100.0%
	2021 (0)	40.0%	0.0%	0.0%	0.0%

Table 8: UDS Visits by AI/AN Proportion and HP/DP Program Area (2016-2020 UDS)

Visit Type	2016			2017			2018			2019			2020			2016-2021		
	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN Percentage Growth	Total Percentage Growth	% AI/AN Percentage Growth
Total	322235 (n=29)	790379 (n=29)	40.8%	320305 (n=28)	867908 (n=28)	36.9%	346185 (n=32)	967713 (n=32)	35.8%	316312 (n=33)	876539 (n=33)	36.1%	257391 (n=32)	750407 (n=32)	34.3%	-20.1%	-5.1%	-15.9%
Medical	100420 (n=26)	327207 (n=26)	30.7%	94467 (n=24)	336746 (n=24)	28.1%	93290 (n=27)	363529 (n=27)	25.7%	87386 (n=28)	318214 (n=28)	27.5%	82602 (n=28)	304620 (n=28)	27.1%	-17.7%	-6.9%	-11.6%
Vision	300 (n=3)	1137 (n=3)	26.4%	464 (n=2)	2527 (n=2)	18.4%	380 (n=4)	1809 (n=4)	21.0%	588 (n=3)	3482 (n=3)	16.9%	478 (n=3)	2172 (n=3)	22.0%	59.3%	91.0%	-16.6%
Other Professional	5108 (n=15)	8424 (n=15)	60.6%	5237 (n=16)	12626 (n=16)	41.5%	6265 (n=21)	17923 (n=21)	35.0%	7377 (n=16)	12622 (n=16)	58.4%	5569 (n=16)	11920 (n=16)	46.7%	9.0%	41.5%	-23.0%
Enabling Services	42187 (n=21)	57287 (n=21)	73.6%	46090 (n=18)	86306 (n=18)	53.4%	46135 (n=25)	116932 (n=25)	39.5%	33419 (n=25)	101200 (n=25)	33.0%	41013 (n=18)	84358 (n=18)	48.6%	-2.8%	47.3%	-34.0%

Table 9: UDS Telehealth Visits by AI/AN Proportion and HP/DP Program Area

Visit Type	2020		
	AI/AN	Total	% AI/AN
Total	39846 (n=20)	106530 (n=20)	37.4%
Medical	14851 (n=16)	53288 (n=16)	27.9%
Other Professional	800 (n=6)	1064 (n=6)	75.2%
Enabling Services	4134 (n=7)	7025 (n=7)	58.8%
Vision	0	0	0.0%

Table 10: Immunization Rates Across All Five NIRS Categories (2019-2021 NIRS)

Age Group	2019 NIRS	2020 NIRS	2021 NIRS	Average Immunization Rate - All Years	Gross Change 2019 NIRS – 2020 NIRS	Gross Change 2020 NIRS - 2021 NIRS	Gross Change Per Year	Percentage Change – All Years
3- to 27-month-olds (Minimum) (n=25)	46.7%	49.2%	48.0%	48.0%	2.4%	-1.1%	0.7%	2.7%
3- to 27-month-olds (Appropriate) (n=25)	31.2%	32.0%	37.6%	33.6%	0.8%	5.6%	3.2%	17.0%
2-year-olds (n=25)	36.6%	44.6%	34.0%	38.4%	8.0%	-10.5%	-1.3%	-7.4%
13-year-olds, All Genders (n=27)	13.8%	16.0%	8.4%	12.8%	2.3%	-7.6%	-2.7%	16.5%
13-year-olds, Females (n=27)	35.6%	33.6%	19.0%	29.4%	-2.0%	-14.6%	-8.3%	-5.6%
13-year-olds, Males (n=27)	27.1%	32.4%	27.9%	29.1%	5.3%	-4.5%	0.4%	19.6%
13-year-olds, Female and Male (n=27)	0.0%	28.8%	16.2%	22.5%	0.0%	-12.6%	-12.6%	0.0%
13- to 17-year-olds, All Genders (n=27)	66.1%	57.1%	44.8%	56.0%	-9.1%	-12.3%	-10.7%	-13.7%
13- to 17-year-olds, Females (n=27)	48.7%	36.9%	25.6%	37.1%	-11.8%	-11.3%	-11.5%	-24.2%
13- to 17-year-olds, Males (n=27)	45.4%	36.9%	24.2%	35.5%	-8.5%	-12.7%	-10.6%	-18.7%
13- to 17-year-olds, Female and Male (n=27)	0.0%	44.0%	23.2%	33.6%	0.0%	-20.8%	-20.8%	0.0%
Adults (n=27)	34.2%	31.1%	30.4%	31.9%	-3.1%	-0.8%	-1.9%	-9.0%
1-FLU (10 months-4 years) (n=17)	40.2%	26.8%	23.6%	30.2%	-13.5%	-3.2%	-8.3%	-33.4%

Age Group	2019 NIRS	2020 NIRS	2021 NIRS	Average Immunization Rate - All Years	Gross Change 2019 NIRS – 2020 NIRS	Gross Change 2020 NIRS - 2021 NIRS	Gross Change Per Year	Percentage Change – All Years
Flu (10 months-4 years) (n=17)	20.1%	13.7%	5.2%	13.0%	-6.4%	-8.5%	-7.5%	-31.9%
Flu (5-17 years) (n=17)	36.6%	23.4%	22.1%	27.4%	-13.2%	-1.4%	-7.3%	-36.0%
Flu (Adults) (n=17)	41.1%	23.1%	23.2%	29.1%	-18.1%	0.1%	-9.0%	-43.9%

Table 11: GPRA Immunization Measures (2016-2021 GPRA)

Immunization Measures	GPRA Year (n) *	National Target **	Average	Gross Change Between Years	Percentage Change Between Years
Influenza Vaccination for Children Ages 6 mo-17 y	GPRA 2016 (n = 27)	Baseline	28.4%	-	-
	GPRA 2017 (n = 27)	37.1%	27.0%	-1.4%	-5.1%
	GPRA 2018 (n = 11)	20.6%	16.2%	-10.7%	-39.8%
	GPRA 2019 (n = 14)	20.6%	18.7%	2.5%	15.4%
	GPRA 2020 (n = 19)	26.1%	16.4%	-2.3%	-12.2%
	GPRA 2021 (n = 15)	26.6%	10.7%	-5.7%	-34.8%
Influenza Vaccination for Adults Ages 18 and Older	GPRA 2016 (n = 29)	Baseline	25.0%	-	-
	GPRA 2017 (n = 27)	38.7%	25.2%	0.3%	1.1%
	GPRA 2018 (n = 12)	18.8%	18.0%	-7.3%	-28.8%
	GPRA 2019 (n = 15)	18.8%	18.3%	0.4%	2.1%
	GPRA 2020 (n = 19)	25.4%	16.4%	-1.9%	-10.3%
	GPRA 2021 (n = 14)	24.4%	12.8%	-3.6%	-22.1%
Childhood Immunizations	GPRA 2016 (n = 20)	76.8%	41.2%	-	-
	GPRA 2017 (n = 22)	74.8%	42.4%	1.2%	2.9%
	GPRA 2018 (n = 5)	45.6%	40.4%	-2.1%	-4.9%
	GPRA 2019 (n = 3)	45.6%	35.3%	-5.1%	-12.6%
	GPRA 2020 (n = 20)	45.9%	25.3%	-10.0%	-28.4%

Immunization Measures	GPRA Year (n) *	National Target **	Average	Gross Change Between Years	Percentage Change Between Years
	GPRA 2021 (n = 3)	42.8%	22.2%	-3.1%	-12.1%
Pneumococcal Vaccination 65+	GPRA 2016 (n = 29)	87.3%	56.0%		-
	GPRA 2017 (n = 28)	86.7%	56.9%	0.9%	1.6%
Adult Composite Immunization[8]	GPRA 2018 (n = 12)	Baseline National Target	32.8%	-	-
	GPRA 2019 (n = 15)	54.9%	20.9%	-12.0%	-35.4%
	GPRA 2020 (n = 20)	59.7%	25.0%	4.2%	20.0%
	GPRA 2021 (n = 17)	55.1%	26.0%	1.0%	3.9%

*GPRA Year (n) - The "(n)" includes the # of UIOs that reported that year, after data exclusions were applied.

**National Target is the established goal based on all GPRA users, not merely UIOs.

Table 12: GPRA Alcohol and Substance Abuse Measures (2016-2020 GPRA)

	GPRA Year (n)*	National Target**	Average	Gross Change Between Years	Percentage Change Between Years
Tobacco Cessation	2016 (28)	49%	38.0%	*	
	2017 (27)	53.20%	42.5%	4.5%	11.9%
	2018 (11)	27.50%	23.6%	-18.9%	-44.4%
	2019 (14)	27.50%	23.8%	0.2%	0.8%
	2020 (17)	31.40%	23.6%	-0.2%	-0.8%
	2021 (10)	34.00%	14.1%	-9.5%	-40.4%
Universal Alcohol Screening	2016 (0)	Baseline	0.0%	*	*
	2017 (28)	Baseline	52.2%	52.2%	0.0%
	2018 (14)	37.00%	38.2%	-14.0%	-26.8%
	2019 (15)	37.00%	36.0%	-2.3%	-5.9%
	2020 (23)	42.40%	31.9%	-4.1%	-11.4%
	2021 (15)	39.00%	30.3%	-1.6%	-5.0%
SBIRT Screening (251UP)	2017 (0)	Baseline	0.0%	*	*
	2018 (5)	8.90%	21.9%	*	*
	2019 (0)	8.90%	0.0%	-21.9%	-100.0%
	2020 (5)	12.20%	33.2%	33.2%	0.00%
	2021 (1)	14.30%	17.1%	-16.1%	-48.4%

*GPRA Year (n) - The "(n)" includes the # of UIOs that reported that year, after data exclusions were applied.

**National Target is the established goal based on all GPRA users, not merely UIOs.

Table 13: UDS Visits by AI/AN Proportion and ASA Program Area (2016-2020 UDS)

Visit Type	2016			2017			2018			2019			2020			2016-2021		
	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN Percentage Growth	Total Percentage Growth	% AI/AN Percentage Change
Alcohol and Substance Abuse	22122 (n=22)	39825 (n=22)	55.5%	22478 (n=21)	36186 (n=21)	62.1%	67971 (n=26)	118999 (n=26)	57.1%	69910 (n=28)	108983 (n=28)	64.1%	32908 (n=29)	60875 (n=29)	54.1%	48.8%	52.9%	-2.7%

Table 14: UDS Telehealth Visits by AI/AN Proportion and ASA Program Area (2020 UDS)

Visit Type	2020		
	AI/AN Population	Total Population	AI/AN Population
Alcohol and Substance Abuse	5499 (n=14)	10995 (n=14)	50.0%

Table 15: GPRA Mental Health Measures (2016-2021 GPRA)

	GPRA Year (n)*	National Target**	Average	Gross Change Between Years	Percentage Change Between Years
DV/IPV Screening	2016 (29)	Baseline	49.6%	*	
	2017 (28)	65.30%	52.0%	2.4%	4.9%
	2018 (15)	41.60%	30.7%	-21.3%	-40.9%
	2019 (20)	41.60%	30.2%	-0.6%	-1.9%
	2020 (32)	41.50%	28.9%	-1.3%	-4.3%
	2021 (32)	37.50%	20.4%	-8.5%	-29.3%
Depression Screening (12-17yrs)	2017 (0)	Baseline		*	
	2018 (13)	27.60%	34.0%	*	
	2019 (20)	27.60%	21.8%	-12.3%	-36.1%
	2020 (32)	38.00%	29.9%	8.2%	37.5%
	2021 (32)	43.20%	13.6%	-16.3%	-54.6%
Depression Screening 18+	2016 (29)	67.20%	52.9%	*	
	2017 (28)	70.00%	53.9%	0.9%	1.7%
	2018 (14)	42.20%	36.9%	-17.0%	-31.5%
	2019 (20)	42.20%	24.3%	-12.6%	-34.2%
	2020 (32)	45.70%	28.2%	3.9%	16.2%
	2021 (18)	49.40%	21.6%	-6.7%	-23.6%

*GPRA Year (n) - The "(n)" includes the # of UIOs that reported that year, after data exclusions were applied.
**National Target is the established goal based on all GPRA users, not merely UIOs.

Table 16: UDS Visits by AI/AN Proportion and MH Program Area (2016-2020 UDS)

Visit Type	2016			2017			2018			2019			2020			2016-2020		
	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN	Total	% AI/AN	AI/AN Percentage Change	Total Percentage Change	% AI/AN Percentage Change
Mental Health	28536 (n=27)	59264 (n=27)	48.2%	29659 (n=27)	64162 (n=27)	46.2%	48345 (n=29)	121203 (n=29)	39.9%	44993 (n=31)	115984 (n=31)	38.8%	44000 (n=29)	117111 (n=29)	37.6%	54.2%	97.6%	-22.0%

Table 17: UDS Telehealth Visits by AI/AN Proportion and MH Program Area (2020 UDS)

Visit Type	2020		
	AI/AN Population	Total Population	% AI/AN
Mental Health	13440 (n=18)	31374 (n=18)	42.8%

Appendix C: Reporting Rates by Data Source

Table 18: GPRA Reporting Rates per Year by Grantee

Grantee Name	City	State	2016	2017	2018	2019	2020	2021	Average
All Nations Health Center- (formerly Missoula Urban Indian Health)	Missoula	MT	●	●		●	●		66.7%
American Indian Health & Family Services	Detroit	MI	●	●		●	●	●	83.3%
American Indian Health & Services	Santa Barbara	CA	●		●	●	●	●	83.3%
American Indian Health Service of Chicago, Inc.	Chicago	IL	●	●					33.3%
Bakersfield American Indian Health Project	Bakersfield	CA	●	●	●	●	●	●	100.0%
Billings Urban Indian Health and Wellness Center	Billings	MT							0.0%
Denver Indian Health & Family Services, Inc.	Denver	CO	●	●		●	●		66.7%
First Nations Community Healthsource	Albuquerque	NM	●	●	●		●		66.7%
Fresno American Indian Health Project	Fresno	CA	●	●	●	●	●	●	100.0%
Gerald L. Ignace Indian Health Center	Milwaukee	WI	●	●					33.3%
Helena Indian Alliance - Leo Pocha Clinic	Helena	MT	●	●		●	●	●	83.3%
Hunter Health	Wichita	KS	●	●	●		●	●	83.3%
Indian Family Health Clinic of Great Falls, Inc.	Great Falls	MT	●	●		●	●	●	83.3%
Indian Health Board of Minneapolis, Inc.	Minneapolis	MN	●	●					33.3%
Indian Health Center of Santa Clara Valley	San Jose	CA	●	●	●	●	●	●	100.0%
Native American Connections	Phoenix	AZ					●		16.7%
Native American Health Center	Oakland	CA	●	●	●	●	●	●	100.0%
Native American Lifelines of Baltimore and Boston	Baltimore	MD			●	●	●	●	66.7%
Native American Rehabilitation Association of the Northwest, Inc.	Portland	OR	●	●	●				50.0%
Native Americans for Community Action, Inc.	Flagstaff	AZ	●	●	●	●	●	●	100.0%
Native Health	Phoenix	AZ	●	●		●	●		66.7%
Nebraska Urban Indian Health Coalition, Inc.	Omaha	NB	●	●					33.3%
Nevada Urban Indians Inc.	Reno	NV	●	●		●	●		66.7%
New York Indian Council Inc.	Long Island City	NY					●	●	33.3%

Grantee Name	City	State	2016	2017	2018	2019	2020	2021	Average
Sacramento Native American Health Center	Sacramento	CA	●	●	●		●	●	83.3%
San Diego American Indian Health Center	San Diego	CA	●	●	●	●	●	●	100.0%
Seattle Indian Health Board	Seattle	WA	●	●			●	●	66.7%
South Dakota Urban Indian Health, Inc.	Sioux Falls	SD	●	●	●	●	●	●	100.0%
The NATIVE Project	Spokane	WA	●	●	●		●		66.7%
Tucson Indian Center	Tucson	AZ	●	●	●	●	●	●	100.0%
United American Indian Involvement Inc.	Los Angeles	CA	●	●	●	●	●	●	100.0%
Urban Indian Center of Salt Lake	Salt Lake City	UT	●	●			●		50.0%
Texas Native Health	Dallas	TX	●	●	●	●	●	●	100.0%

Table 19: UDS Visits Reporting Rates per Year by Grantee

Grantee Name	City	State	2016	2017	2018	2019	2020	Average
All Nations Health Center-Missoula Urban Indian Health	Missoula	MT	●	●	●	●	●	100.0%
American Indian Health & Family Services	Detroit	MI	●	●	●	●	●	100.0%
American Indian Health & Services	Santa Barbara	CA	●	●	●	●	●	100.0%
American Indian Health Service of Chicago, Inc.	Chicago	IL	●	●	●	●	●	100.0%
Bakersfield American Indian Health Project	Bakersfield	CA	●	●	●	●	●	100.0%
Billings Urban Indian Health and Wellness Center	Billings	MT				●	●	40.0%
Denver Indian Health & Family Services, Inc.	Denver	CO	●	●	●	●	●	100.0%
First Nations Community Healthsource	Albuquerque	NM	●	●	●	●	●	100.0%
Fresno American Indian Health Project	Fresno	CA	●	●	●	●	●	100.0%
Gerald L. Ignace Indian Health Center	Milwaukee	WI	●	●	●	●	●	100.0%
Helena Indian Alliance - Leo Pocha Clinic	Helena	MT	●	●	●	●	●	100.0%
Hunter Health	Wichita	KS	●	●	●	●	●	100.0%
Indian Family Health Clinic of Great Falls, Inc.	Great Falls	MT	●	●	●	●	●	100.0%
Indian Health Board of Minneapolis, Inc.	Minneapolis	MN	●	●	●	●	●	100.0%
Indian Health Center of Santa Clara Valley	San Jose	CA	●	●	●	●	●	100.0%
Native American Connections	Phoenix	AZ			●	●	●	60.0%

Grantee Name	City	State	2016	2017	2018	2019	2020	Average
Native American Health Center	Oakland-	CA	●	●	●	●	●	100.0%
Native American Lifelines of Baltimore and Boston	Baltimore	MD			●	●	●	60.0%
Native American Rehabilitation Association of the Northwest, Inc. (Portland)	Portland	OR	●	●	●	●	●	100.0%
Native Americans for Community Action, Inc.	Flagstaff	AZ	●	●	●	●	●	100.0%
Native Health	Phoenix	AZ	●	●	●	●	●	100.0%
Nebraska Urban Indian Health Coalition, Inc.	Omaha	NB	●	●	●	●	●	100.0%
Nevada Urban Indians Inc.	Reno	NV	●	●	●	●	●	100.0%
New York Indian Council Inc.	Long Island City	NY			●	●		40.0%
Sacramento Native American Health Center	Sacramento	CA	●	●	●	●	●	100.0%
San Diego American Indian Health Center	San Diego	CA	●	●	●	●	●	100.0%
Seattle Indian Health Board	Seattle	WA	●	●	●	●	●	100.0%
South Dakota Urban Indian Health, Inc.	Sioux Falls	SD	●	●	●	●	●	100.0%
The NATIVE Project	Spokane	WA	●	●	●	●	●	100.0%
Tucson Indian Center	Tucson	AZ	●	●	●	●	●	100.0%
United American Indian Involvement, Inc.	Los Angeles	CA	●	●	●	●	●	100.0%
Urban Indian Center of Salt Lake	Salt Lake City	UT	●	●	●	●	●	100.0%
Texas Native Health (Formerly known as the Urban Inter-Tribal Center of Texas)	Dallas	TX	●	●	●	●	●	100.0%

Table 20: UDS Patient Totals Reporting Rate per Year by Grantee

Grantee Name	City	State	2016	2017	2018	2019	2020	Average
All Nations Health Center-	Missoula	MT	●	●	●	●	●	100.0%
American Indian Health & Family Services (Detroit)	Detroit	MI	●	●	●	●	●	100.0%
American Indian Health & Services (Santa Barbara)	Santa Barbara	CA	●	●	●	●	●	100.0%
American Indian Health Service of Chicago, Inc.	Chicago	IL	●	●	●	●	●	100.0%
Bakersfield American Indian Health Project	Bakersfield	CA	●	●	●	●	●	100.0%
Billings Urban Indian Health and Wellness Center	Billings	MT				●	●	40.0%
Denver Indian Health & Family Services, Inc.	Denver	CO	●	●	●	●	●	100.0%
First Nations Community Healthsource (ABQ)	Albuquerque	NM	●	●	●	●	●	100.0%
Fresno American Indian Health Project	Fresno	CA	●	●	●	●	●	100.0%
Gerald L. Ignace Indian Health Center (Milwaukee)	Milwaukee	WI	●	●	●	●	●	100.0%
Helena Indian Alliance - Leo Pocha Clinic	Helena	MT	●	●	●	●	●	100.0%
Hunter Health (Wichita)	Wichita	KS	●	●	●	●	●	100.0%
Indian Family Health Clinic of Great Falls, Inc.	Great Falls	MT	●	●	●	●	●	100.0%
Indian Health Board of Minneapolis, Inc.	Minneapolis	MN	●	●	●	●	●	100.0%
Indian Health Center of Santa Clara Valley (San Jose)	San Jose	CA	●	●	●	●	●	100.0%
Native American Connections (Phoenix)	Phoenix	AZ			●	●	●	60.0%
Native American Health Center	Oakland	CA	●	●	●	●	●	100.0%
Native American Lifelines of Baltimore and Boston	Baltimore	MD			●	●	●	60.0%
Native American Rehabilitation Association of the Northwest, Inc. (Portland)	Portland	OR	●	●	●	●	●	100.0%
Native Americans for Community Action, Inc. (Flagstaff)	Flagstaff	AZ	●	●	●	●	●	100.0%
Native Health (Phoenix)	Phoenix	AZ	●	●	●	●	●	100.0%
Nebraska Urban Indian Health Coalition, Inc.	Omaha	NB	●	●	●	●	●	100.0%
Nevada Urban Indians Inc. (Reno)	Reno	NV	●	●	●	●	●	100.0%
New York Indian Council	Long Island City	NY					●	20.0%
Sacramento Native American Health Center	Sacramento	CA	●	●	●	●	●	100.0%

Grantee Name	City	State	2016	2017	2018	2019	2020	Average
San Diego American Indian Health Center	San Diego	CA	●	●	●	●	●	100.0%
Seattle Indian Health Board	Seattle	WA	●	●	●	●	●	100.0%
South Dakota Urban Indian Health, Inc.	Sioux Falls	SD	●	●	●	●	●	100.0%
The NATIVE Project (Spokane)	Spokane	WA	●	●	●	●	●	100.0%
Tucson Indian Center	Tucson	AZ	●	●	●	●	●	100.0%
United American Indian Involvement, Inc. (Los Angeles)	Los Angeles	CA	●	●	●	●	●	100.0%
Urban Indian Center of Salt Lake	Salt Lake City	UT	●	●	●	●	●	100.0%
Texas Native Health	Dallas	TX	●	●	●	●	●	100.0%

Table 21: NIRS Reporting Rates by Year and Quarter

NIRS 2019				NIRS 2020				NIRS 2021			
April 1, 2019 - March 31, 2020				April 1, 2020 - March 31, 2021				April 1, 2021 - March 31, 2022			
04/01/2019 to 06/30/2019	07/01/2019 to 09/30/2019	10/01/2019 to 12/31/2019	01/01/2020 to 03/31/2020	04/01/2020 to 06/30/2020	07/01/2020 to 09/30/2020	10/01/2020 to 12/31/2020	01/01/2021 to 03/31/2021	04/01/2021 to 06/30/2021	07/01/2021 to 09/30/2021	10/01/2021 to 12/31/2021	01/01/2022 to 03/31/2022
61.4%	50.8%	41.0%	52.2%	48.5%	53.7%	43.7%	44.6%	50.9%	61.8%	57.9%	70.9%

Appendix D: Measures of Access to Care, Quality of Care, and Affordability of Care

Table 22: Missing Fields by Data Source (GPRA, UDS, NIRS) and Grantee

Grantee	City	GPRA	UDS	NIRS	Missing Fields
All Nations Health Center-	Missoula	X	X	X	
American Indian Health & Family Services	Detroit	X	X	NO	NIRS
American Indian Health & Services (Santa Barbara)	Santa Barbara	X	X	No influenza	NIRS influenza
American Indian Health Service of Chicago, Inc.	Chicago	no IDCS	X	X	GPRA
Bakersfield American Indian Health Project	Bakersfield	X	X	X	
Billings Urban Indian Health and Wellness Center	Billings	NO	X	No influenza	GPRA, NIRS influenza
Denver Indian Health & Family Services, Inc.	Denver	X	X	X	
First Nations Community Healthsource (ABQ)	Albuquerque	X	X	No influenza	NIRS influenza
Fresno American Indian Health Project	Fresno	X	X	X	
Gerald L. Ignace Indian Health Center (Milwaukee)	Milwaukee	no IDCS	X	NO	GPRA, NIRS
Helena Indian Alliance - Leo Pocha Clinic	Helena	X	X	No 3-27 months, 2 year olds	NIRS 3-27 months, 2 year olds
Hunter Health (Wichita)	Wichita	X	X	X	
Indian Family Health Clinic of Great Falls, Inc.	Great Falls	X	X	X	
Indian Health Board of Minneapolis, Inc.	Minneapolis	NO	X	X	GPRA
Indian Health Center of Santa Clara Valley (San Jose)	San Jose	X	X	No influenza	NIRS influenza
Native American Connections (Phoenix)	Phoenix-NAC	X	X	No adolescents, influenza	NIRS adolescents, influenza
Native American Health Center (Oakland)	Oakland-SF	X	X	No 3-27 months, 2 year olds	NIRS 3-27 months, 2 year olds
Native American Lifelines of Baltimore and Boston	Baltimore	X	X	NO	NIRS

Grantee	City	GPRA	UDS	NIRS	Missing Fields
Native American Rehabilitation Association the Northwest, Inc. (Portland)	Portland	no IDCS	X	No influenza	GPRA, NIRS influenza
Native Americans for Community Action, Inc. (Flagstaff)	Flagstaff	X	X	X	
Native Health (Phoenix)	Phoenix-NH	X	X	No 3-27 months, 2 year olds, influenza	NIRS 3-27 months, 2 year olds, influenza
Nebraska Urban Indian Health Coalition, Inc.	Omaha	no IDCS	X	X	GPRA
Nevada Urban Indians Inc. (Reno)	Reno	X	X	No influenza	NIRS influenza
New York Indian Council	New York	X	X	NO	NIRS
Sacramento Native American Health Center	Sacramento	X	X	No influenza	NIRS influenza
San Diego American Indian Health Center	San Diego	X	X	No influenza	NIRS influenza
Seattle Indian Health Board	Seattle	X	X	X	
South Dakota Urban Indian Health, Inc.	Sioux Falls	X	X	No influenza	NIRS influenza
Texas Native Health*	Dallas	X	X	X	
The NATIVE Project (Spokane)	Spokane	X	X	X	
Tucson Indian Center	Tucson	X	X	NO	NIRS
United American Indian Involvement, Inc. (Los Angeles)	Los Angeles	X	X	X	
Urban Indian Center of Salt Lake	Salt Lake City	X	X	X	
*Formerly known as the Urban Inter-Tribal Center of Texas					

Table 23: 4 in 1 Grantees by Service Type

GRANTEE	CITY	STATE	AREA OFFICE	SERVICE TYPE
All Nations Health Center-Missoula Urban Indian Health	Missoula	MT	BILLINGS	Outreach and Referral

GRANTEE	CITY	STATE	AREA OFFICE	SERVICE TYPE
American Indian Health & Family Services (Detroit)	Detroit	MI	BEMIDJI	Full Ambulatory
American Indian Health & Services (Santa Barbara)	Santa Barbara	CA	CALIFORNIA	Full Ambulatory
American Indian Health Service of Chicago, Inc.	Chicago	IL	BEMIDJI	Limited Ambulatory
Bakersfield American Indian Health Project	Bakersfield	CA	CALIFORNIA	Outreach and Referral
Billings Urban Indian Health and Wellness Center	Billings	MT	BILLINGS	Full Ambulatory
Denver Indian Health & Family Services, Inc.	Denver	CO	ALBUQUERQUE	Full Ambulatory
First Nations Community Healthsource (ABQ)	Albuquerque	NM	ALBUQUERQUE	Full Ambulatory
Fresno American Indian Health Project	Fresno	CA	CALIFORNIA	Outreach and Referral
Gerald L. Ignace Indian Health Center (Milwaukee)	Milwaukee	WI	BEMIDJI	Full Ambulatory
Helena Indian Alliance - Leo Pocha Clinic	Helena	MT	BILLINGS	Full Ambulatory
Hunter Health (Wichita)	Wichita	KS	OKLAHOMA CITY	Full Ambulatory
Indian Family Health Clinic of Great Falls, Inc.	Great Falls	MT	BILLINGS	Limited Ambulatory
Indian Health Board of Minneapolis, Inc.	Minneapolis	MN	BEMIDJI	Full Ambulatory
Indian Health Center of Santa Clara Valley (San Jose)	San Jose	CA	CALIFORNIA	Full Ambulatory
Native American Connections (Phoenix)	Phoenix1NAC	AZ	PHOENIX	Outpatient & Residential Substance Abuse
Native American Health Center (Oakland)	Oakland-San Francisco	CA	CALIFORNIA	Full Ambulatory
Native American Lifelines of Baltimore and Boston	Baltimore	MD	NASHVILLE	Outreach and Referral
Native American Rehabilitation Association the Northwest, Inc. (Portland)	Portland	OR	PORTLAND	Full Ambulatory
Native Americans for Community Action, Inc. (Flagstaff)	Flagstaff	AZ	NAVAJO	Full Ambulatory
Native Health (Phoenix)	Phoenix2NH	AZ	PHOENIX	Full Ambulatory
Nebraska Urban Indian Health Coalition, Inc.	Omaha	NB	GREAT PLAINS	Full Ambulatory
Nevada Urban Indians Inc. (Reno)	Reno	NV	PHOENIX	Limited Ambulatory

GRANTEE	CITY	STATE	AREA OFFICE	SERVICE TYPE
New York Indian Council	Long Island City	NY	NASHVILLE	Outreach and Referral
Sacramento Native American Health Center	Sacramento	CA	CALIFORNIA	Full Ambulatory
San Diego American Indian Health Center	San Diego	CA	CALIFORNIA	Full Ambulatory
Seattle Indian Health Board	Seattle	WA	PORTLAND	Full Ambulatory
South Dakota Urban Indian Health, Inc.	Sioux Falls	SD	GREAT PLAINS	Full Ambulatory
The NATIVE Project (Spokane)	Spokane	WA	PORTLAND	Full Ambulatory
Texas Native Health*	Dallas	TX	OKLAHOMA CITY	Full Ambulatory
Tucson Indian Center	Tucson	AZ	TUCSON	Outreach and Referral
United American Indian Involvement, Inc. (Los Angeles)	Los Angeles	CA	CALIFORNIA	Limited Ambulatory
Urban Indian Center of Salt Lake	Salt Lake City	UT	PHOENIX	Limited Ambulatory
*Formerly known as the Urban Inter-Tribal Center of Texas				

Appendix E: Data Analysis Formulas

Name	Formula
GPRA annual aggregate reporting rate	Number of grantees who reported by year/total number of grantees (N=33)
NIRS quarterly aggregate reporting rate	Average number of grantees who reported for each age group/total number of grantees (33)
UDS patient totals annual reporting rate	Number of grantees who reported by year/total number of grantees (N=33)
UDS visits annual reporting rate	Number of grantees who reported by year/total number of grantees (N=33)
UDS patient totals (all measures)	Sum of patients in each category by included grantees/Sum of patients total by included grantees
UDS visit totals (all measures)	Sum of patients in each category by included grantees/Sum of patients total by included grantees
Average immunization rate	Sum of annual immunization rate*/total number of years for which immunization rate data were available
GPRA average	Sum of each grantee's rate/total number of grantees for which rate data was available
Gross change between years	Annual rate in given year – annual rate of the prior year
GPRA National Targets	From Urban CRS reports for all locations, not merely 4-in-1 grantees

Appendix F: List of Practice- and Evidence-Based Approaches

- 12 Wisdom Steps for Men and Women
- Acceptance and Commitment Therapy (ACT)
- Acupuncture Treatment for Detox
- Addiction Severity Index (ASI)
- Adolescent Community Reinforcement Approach (A-CRA)
- Alcohol Use Disorders Identification Test (AUDIT)
- Art therapy
- Attachment Theory
- BrainWise for Youth
- Breathing
- Bullying prevention
- CDC Advisory Committee on Immunization Practices Vaccine Recommendations
- Celebrating Families
- Centers for Medicare & Medicaid Services (CMS) and IHS health insurance patient guidance
- Chemical Dependency (A/SA)
- Chiropractic Therapy
- Circle of Security
- Cognitive Behavioral Therapy (CBT)
- Cognitive Processing Therapy (CPT)
- Community Reinforcement and Family Therapy (CRAFT)
- COVID-19 State and Federal Safety and Best Practices
- Cultural Values Reinforcement Approach (CVRA)
- Cut, Annoyed, Guilty, and Eye (CAGE-AID)
- Dialectical Behavior Therapy (DBT)
- Domestic Abuse Intervention Program (DAIP)
- Drug Abuse Screening Test (DAST-10)
- Duluth model
- Emotion Focused Therapy (EFT)
- Eye Movement Desensitization and Reprocessing (EMDR)
- Family Counseling
- Gathering of Native Americans (GONA)
- Gender Differences and Culture
- Generalized Anxiety Disorder 7-Item Scale (GAD-7)
- Healing Cultural Trauma with Internal Family Systems (IFS)
- Healthy Conflict Resolution
- Hurt, Insult, Threaten, Scream (HITS) screening
- Indigenous (formerly Aboriginal) Focusing-Oriented Therapy (IFOT)
- Individual Counseling
- Integrated Behavior Healthcare (IBH)
- Learning About Healthy Living
- Life Course Framework
- Living in Balance Curriculum
- Massage therapy
- Matrix Model of Addicted Treatment
- Medication Assisted Treatment (MAT)
- Meditation Mending Broken Hearts
- Men's and Women's Society
- Motivational Interviewing (MI)
- MRT (Moral Reconation Therapy)
- My Native Plate
- Native Students Together Against Negative Decisions (NATIVE STAND)
- Pain & fatigue management
- Parenting with Love and Limits
- Patient Health Questionnaire-9 (PHQ-9) Universal Depression Screening
- Peer Mentoring and Support
- Peer-mentoring, Sources of Strength
- Peer-to-Peer services (PPs)
- Play therapy
- Positive Indian Parenting
- Project Venture for Youth
- Question, Persuade, Refer (QPR) Suicide Prevention
- Rational Emotive Therapy (RET)
- Reality Therapy

• Red Road Approach to Wellness and Healing • Relapse prevention and resources • Relaxation • Screening, Brief Intervention, and Referral to Treatment (SBIRT) • Screenings for Anxiety • Screenings for Depression • Seeking Safety • Seven Grandfathers Teachings • Sexual assault prevention • Signs of Suicide training for youth	• Solution-Focused Brief Therapy • SOS Parenting • Strategies for Teaching based on Autism Research (STAR) curriculum • Systemic therapy • The Leading the Next Generations Healthy Relationships Curriculum • Tobacco and You • Trauma-focused cognitive behavioral therapy (TF-CBT) • Trauma-Informed Care and Suicide Prevention	• Trauma-Informed Care with Cognitive Behavioral Therapy (CBT) • Trauma-Informed-Care • Urban Resilience • Warrior Down • Wellbriety Movement (White Bison) • Women's Full Medicine Wheel

Appendix G: Qualitative Database Supporting Dictionary

• 1. Program Description Set	
• Field_Name	• Field_Description
• **Summary:** An overview of the grantee is important to more deeply understand the detailed information provided in the database. This set provides an overview of the context of the program and general approaches taken in each program.	
• **Program_Description_Context**	• This field provides the grantee location and community context of the programs such as history (source: Grantee proposal)
• **Program_Management_Coordination**	• The methods and management functions utilized to oversee the various components of the program. (Source: Grantee proposal)
• **Program_Description_Cultural** • **_Integration**	• Cultural and traditional practices may be integrated into program services. This field describes how cultural practices (e.g., storytelling, medicinal plants, etc.) and traditions (e.g., sweats, ceremony, etc.) were incorporated into the program services and activities. (Source: Grantee quarterly reports)
• **Program_Description_Evidence** • **_Based_Practices**	• This field contains a description of how evidence or practice-based approaches were used in the program. (Source: Grantee quarterly reports)
• **Program_Description_Evidence** • **_Based_Source**	• This field, from a drop-down menu of pre-determined choices, describes the origin of the evidence or practice- based approach used in the program. (Source: Grantee quarterly reports)

• 2. Program Update Set	
• **Field_Name**	• **Field_Description**
• **Summary:** As grants are implemented, there may be a need to make program updates. This set holds detailed information about the program updates made over time.	
• **Program_Update_Change**	• This field, from a list of choices, describes the update type including staffing, responsible parties, partners, and timeline. (Source: Grantee quarterly reports)
• **Program_Update_Description**	• For each update type chosen, this field provides a detailed description of the program update. (Source: Grantee quarterly reports)
• **3. Community Set**	
• **Field_Name**	• **Field_Description**
• Summary: UIOs may dedicate time to building relationships that lead to greater involvement of the community in programs. Community involvement and input are proximal outcomes that can lead to programs that successfully meet the needs of individuals. This set documents the ways the community is recruited and involved.	
• **Community_Relationship_Building**	• UIOs have stated that in urban areas, there are many choices of places to receive care. Some UIOs are actively working to design events and activities specifically to attract and build a long-term relationship with Urban AI/ANs. This field describes these community events.
• **Community_Involvement_Settng_Goals**	• Building community ideally involves the community in setting meaningful relevant program goals. This field narrates the ways the community have been involved in helping to set the program goals.
• **Community_Dissemination**	• Two-way communication demonstrates that a UIO is also giving back to the community. This field documents how and what has been shared with the community including resources, publications, YouTube links, eblast, etc.

• 4. Evaluative Capacity Set	
• **Field_Name**	• **Field_Description**
• **Summary:** This set includes grantee evaluation-related data to gauge capacity. The data provides insight into grantee knowledge and capacity that supports internal evaluative dialogue about the program including reflection, modification of program inputs, lessons learned, etc.	
• **Evaluation_Barriers_Challenges**	• Barriers and challenges are faced in all programs. This field describes them. (Source: Grantee quarterly reports)
• **Evaluation_Next_Steps**	• An action plan and next steps outlined to mitigate barriers and challenges encourages progress toward the outcomes. Reflection and team dialogue about challenges may reveal more efficient and effective ways of providing services. This field outlines the next steps in the action plan to mitigate challenges. (Source: Grantee quarterly reports)
• **Evaluation_Logic_Model**	• A logic model or theory of change exists for each program. Documenting the logic model and testing assumptions supports the continuous improvement of a program. This field contains a picture or image of the logic model or theory of change for each program.
• **Evaluation_Internal_Tracking_System**	• Grantees may have an internal tracking system they use to monitor progress toward the outcomes on a more frequent time schedule, such as weekly or monthly. This field describes the internal system such as software used (e.g., Excel), formulas (e.g., percentage), and the process used to enter the data into the internal tracking system.
• **Evaluation_Data_Quality_Control**	• Data quality control procedures help ensure data entered into the internal tracking system and/or the reporting template are valid and reliable. This field describes the quality control procedures in place that staff follow.
• 5. Program Impact Set	
• **Field_Name**	• **Field_Description**
• **Summary:** The impacts of programs are far-reaching at both the individual and community levels. Positive impacts can also be realized internally. This set supports the multimedia documentation of impacts, effects and influencing factors.	
• **Impact_Program_Participants**	• UIO programs have impacts and effects on participants that are not able to be documented in standard federal

• 5. Program Impact Set	
• **Field_Name**	• **Field_Description**
•	• systems. This field will document program impact on groups served including elders, LGBT+, mothers, etc. and include photo images, digital stories, links to multimedia, publications, statistical analysis, etc.
• **Impact_Community**	• UIO programs have impacts and effects on the community such as the development of strong support networks. This field will document program impact on groups served including elders, LGBT+, and mothers. This field includes photo images, digital stories, links to multimedia, publications, statistical analysis, etc.
• **Impact_UIO_Grantee**	• Programs have the potential to not only affect participants but also the UIOs. This field describes the ways the UIO has experienced positive change internally such as efficiencies, organizational behavior, and workforce outcomes.
• **Impact_Cultural_Integration**	• This field is a brief description of the UIOs perceived influence of the integration of culture into the program activities such as attendance, patient satisfaction, etc. (Source: Grantee quarterly reports)
• **Impact_Quality_of_Services**	• High quality services and patient satisfaction lead to positive impacts. This field contains feedback received from individuals regarding the quality of services, resources, etc.
• **6. Program Sustainability Set**	
• **Field_Name**	• **Field_Description**
• **Summary:** Succession and sustainability planning to continue programs represents best practices in program management. This process encourages organizations to explore local assets and expand partnerships, etc. This may result in augmented, leveraged funding as well as the ability to offer important services beyond the funding years.	
• **Sustainability_Succession_Plan**	• This field consists of a succession plan which may include how institutional knowledge of the programs is archived, maintained, and transferred to new staff. Additionally, plans to build capacity of staff.

• 6. Program Sustainability Set	
• **Field_Name**	• **Field_Description**
• **Sustainability_Plan**	• This field consists of a plan for sustainability which may include partnerships, memorandums of understanding, donations, diversification of funding, tasks, activities, and a timeline.
• **Sustainability_Strengths**	• Strong programs are poised for sustainability. This describes each programs' strengths. (Source: Grantee quarterly reports)
• **Sustainability_Risk_Assessment**	• Risk assessment is key to program sustainability as well as the identification of strategies to reduce or eliminate potential risks. This field outlines UIO's risk assessment.