DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-25-26
Baltimore, Maryland 21244-1850

State Demonstrations Group

May 19, 2025

Todd Richardson
Director
P.O. Box 6500
Jefferson City, MO 65102-6500

Dear Director Richardson:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Summative Evaluation Report, which is required by the Special Terms and Conditions (STCs), specifically STC #48 "Summative Evaluation Report" of Missouri's section 1115 demonstration, "Missouri Gateway to Better Health" (Project No: 11-W-00250/7). The demonstration period was approved beginning January 1, 2018, and effective through December 31, 2022. This Summative Evaluation Report covers the period from January 2017 through June 2022. CMS determined that the Evaluation Report, submitted on June 30, 2023, and revised on June 20, 2024, is in alignment with the CMS-approved Evaluation Design and the requirements set forth in the STCs, and therefore, approves the state's Summative Evaluation Report.

The Summative Evaluation Report noted that both enrollees and providers believed the demonstration was associated with improvements in health. Overall, the findings across the 3 evaluation hypotheses of improved access, utilization rates, and health outcomes were mixed. The report primarily utilized descriptive statistics and pre-post design methodologies for quantitative analysis. An important limitation of the nature of the pre-post analyses presented is that the changes over time cannot be attributed to the demonstration because they may reflect trends unrelated to the demonstration, for example, the COVID-19 Public Health Emergency.

In accordance with STC #50, the approved Evaluation Report may now be posted to the state's Medicaid website within 30 days. CMS will also post the Summative Evaluation Report on Medicaid.gov.

We appreciated our partnership on the Missouri Gateway to Better Health and look forward to our continued partnership with the ongoing Missouri section 1115 demonstrations. If you have any questions, please contact your CMS demonstration team.

Sincerely,

DANIELLE DALY -S

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Date: 2025.05.19 05:14:06 -04'00'

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

cc: Rhonda Gray, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

State of Missouri

Gateway to Better Health Demonstration

Summative Evaluation Report

Number 11-W-00250/7

June 30, 2023

Contents

1

Executive Summary

The Gateway to Better Health demonstration (Gateway) provided a bridge to sustainable health care for safety net providers and their uninsured patients in St. Louis City, Missouri and St. Louis County, Missouri. Gateway has provided outpatient primary care, specialty care, and other services for patients since 2010. Until Medicaid expansion was authorized in the State of Missouri (Missouri or State) in 2021, federal coverage options were not available for these low-income uninsured adults. Gateway started providing substance use treatment services in 2019 and expanded again in 2021 to provide physical function services. The demonstration was approved through the end of 2022. As this evaluation will show, the Gateway to Better Health demonstration continued to meet its three program objectives, which were to:

- Preserve and strengthen the St. Louis City and St. Louis County safety net of health care providers available to serve the uninsured.
- Connect the uninsured to a primary care home, which will enhance coordination, quality, and efficiency of health care through patient and provider involvement.
- Maintain and enhance quality service delivery strategies to reduce health disparities.

St. Louis Regional Health Commission (SLRHC) supported a network of providers that could expect stable revenue from demonstration patients. Summative evaluation results have shown that provider revenue is stable and provider availability has remained consistent. Providers delivered a wide array of outpatient services that were available without long wait times. Providers delivered core services such as primary medical care, dental care, mental health services, substance abuse services, pharmacy, etc.; some providers delivered additional services such as nutrition counseling, youth behavioral health services, community health homeless services, prenatal classes/centering pregnancy, HIV counseling, sexually transmitted disease (STD) clinic services, etc. The total number of available services remained steady throughout the reporting period. **Gateway preserved and strengthened the St. Louis City and St. Louis County safety net of health care providers available to serve the uninsured.**

Before Gateway began to transition members to Medicaid, two-thirds to three-quarters of eligible low-income adults enrolled in Gateway and one-third of eligible low-income adults utilized services through Gateway. Both Gateway patients and providers believed they would have difficulty accessing appropriate medical care (primary care and specialty care) if the Gateway demonstration ended. Reported patient satisfaction with communication and helpfulness was high, and over 70% of new patients were connected with a new patient visit in their first year of enrollment. A steady rate of Gateway patients accessed care at their primary care health home. Prior to 2022, utilization of medical services increased, and utilization of substance use benefits was also increasing. The percentage of enrollees with an Alcohol Use

Disorder (AUD) diagnosis who were prescribed medication to manage alcohol withdrawal symptoms decreased from 14% to 9% prior to 2022, while the percentage of enrollees with an AUD diagnosis who were prescribed maintenance medication to support alcohol use treatment decreased from 15% to 8% prior to 2022. Approximately 5% of enrollees with an Opioid Use Disorder (OUD) diagnosis were prescribed medication to manage withdrawal symptoms from opioids at baseline, and fluctuated around that level in subsequent years. A decreasing percentage, from 40% in 2019 to 23% of enrollees with an OUD diagnosis in 2022 were prescribed maintenance medication to support opioid use treatment under the Medication-Assisted Treatment (MAT) model. Members with a pain diagnosis accessed services in the physical improvement service line at a slightly decreasing rate of 16% to 14% in 2021 to 2022. **Gateway connected the uninsured to primary care homes, which enhanced coordination, quality, and efficiency of health care through patient and provider involvement.**

Value-based purchasing was suspended during the 2019 Novel Coronavirus (COVID-19) pandemic, but historically, provider incentives were consistent during the years of the demonstration. Over 70% of patients and 80% of providers surveyed report that Gateway is having a positive impact on patients' overall health. Some health outcomes, including the tobacco use assessment and cessation intervention, diabetes HbA1c control, weight screening and follow-up, flu shot receipt, and use of appropriate asthma medications improved one or two years after baseline, but were less improved in subsequent years. Weight screening was an exception, with outcomes improved in 2018 through 2022 versus the baseline. Areas of possible health disparities for the outcomes measured have been identified for further study. For example, Black/African American patients are less likely to have controlled blood pressure, controlled HbA1c, or receive a flu shot than White patients. **Gateway maintained and enhanced quality service delivery strategies that reduce health disparities.**

COVID-19 severely disrupted health care delivery systems across the St. Louis region, impacting multiple evaluation measures for the Gateway. The State and SLRHC worked closely alongside the Pilot Program Planning Team, health center partners, and Gateway to Better Health members to respond to this crisis as a collective team, ensuring sustained access to health care for patients. In March 2020, the Missouri Department of Social Services (DSS) suspended disenrollment from the MO HealthNet (Medicaid) program through the end of the Federal Emergency as outlined in the Families First Coronavirus Response Act. This also resulted in a disenrollment suspension for the Gateway, as eligibility and enrollment in the program is determined by DSS. Due to the continued extensions of the Federal Public Health Emergency (PHE), the pause in disenrollment for Gateway to Better Health continued throughout the end of the reporting period and ensured that continuity of care remained stable for Gateway patients throughout this crisis. Irregularities were experienced in Gateway enrollment, finances, and patient access. Any irregularities in expected data collection and outcomes shall be noted throughout the report.

2

General Background Information

Program History and Overview

The closure of the last public hospital in St. Louis in 2001 jeopardized the viability of the St. Louis health care safety net that provided health care services to uninsured and underinsured individuals. The SLRHC was formed and charged with developing strategies to improve the sustainability of the St. Louis health care safety net and improve health care access and delivery to this population in St. Louis. Over the next few years, an area of emerging concern was how to provide health care services for uninsured adults until a longer term solution could be formulated.

In partnership with the State, the SLRHC reviewed options and elected to address the issue with an 1115 demonstration called “Gateway to Better Health” (Gateway). Approved on July 28, 2010, by the Centers for Medicare & Medicaid Services (CMS), the Gateway demonstration provides a bridge to sustainable health care for safety net providers and their uninsured patients in St. Louis City and St. Louis County until coverage options are available through federal health reform. The 1115 demonstration waiver authorizes outpatient care services for uninsured adults in the St. Louis area.

Over the last decade, the work of the safety net providers in St. Louis has focused on helping patients establish a medical home in one of the region’s community health centers in an effort to reduce health disparities and increase the effective utilization of the community’s existing health care resources. The demonstration project is designed to support these efforts while preparing patients and safety net provider organizations for an effective transition to coverage that will be available under health care reform.

Gateway provides up to $30 million annually in funding for primary and specialty care, as well as other outpatient services. It preserves access to primary and specialty health care services for approximately 22,000 low-income, uninsured individuals in St. Louis City and County. Enrollees select a primary care home from five community health centers that coordinate additional outpatient care with covered specialists.

The demonstration was amended in June 2012 to enable the Safety Net Pilot Program to be implemented by July 1, 2012. In February 2015, the State requested authority to amend the Gateway program to provide coverage for brand name insulin and inhalers where a generic alternative was otherwise unavailable. This request was approved with an implementation date of January 1, 2016.

In August 2018, the State requested authority to amend the Gateway program to include a substance use treatment benefit. The amendment request was approved January 31, 2019, with an implementation date of February 1, 2019, to cover outpatient substance use services, including pharmacotherapy, for Substance Use Disorder (SUD) treatment of Gateway enrollees with a SUD-related diagnosis. All office visits and pharmaceuticals are provided by the primary care home and are considered a core primary care service.

In October 2019, the State requested authority to further amend the Gateway program to include a physical function improvement benefit. The amendment request was approved in October 2020, with an implementation date of January 1, 2021, to cover office visits for physical therapy, occupational therapy, chiropractic, and acupuncture services for Gateway enrollees with pain related diagnoses.[1] All physical function services are to be provided by the primary care home and are considered a core primary care service.

CMS approved one-year extensions of the demonstration on September 27, 2013, July 16, 2014, December 11, 2015, and June 16, 2016. On September 2, 2017, a five-year extension of the current demonstration (Number: 11-W-00250/7) was approved that began on January 1, 2018. This program evaluation is designed to assess this demonstration extension, using 2017 as a baseline year for all measures except those associated with SUD treatment and physical function improvement services. The baseline year for measures associated with SUD treatment is 2019. The baseline year for measures associated with physical function is 2021. Other than the implementation of SUD treatment and physical function improvement services as core primary care services, no additional demonstration program changes are planned during the approval period.

In August 2020, Missouri voters approved expansion of MO HealthNet (Missouri Medicaid) benefits to include adults aged 19–64 who meet certain income guidelines, thereby providing Medicaid benefits via the newly established Adult Expansion Group Medicaid category to St. Louis City and St. Louis County residents that are currently receiving Gateway to Better Health. The review process to enroll Gateway members under Medicaid coverage options began October 1, 2021. The Gateway to Better Health program ended December 31, 2022, after Missouri Medicaid benefits were explored and secured for all Gateway members. This evaluation and enrollment process was completed in accordance with the continuous enrollment requirements established under the COVID-19 PHE.

Population Impacted

The demonstration targets low-income uninsured adults, aged 19 to 64, in St. Louis City and St. Louis County who are served by the health care safety net in St. Louis. To be considered “uninsured”, applicants must not be eligible for coverage through the State Medicaid plan. Screening for Medicaid eligibility is the first step of the Gateway eligibility determination.

[1] A list of eligible pain-related diagnoses can be found in “Attachment F. ICD-10-CM Diagnostic Codes for Pain”.

The St. Louis health care safety net is comprised of the five St. Louis area community health centers, including Betty Jean Kerr People's Health Centers, Family Care Health Centers, Affinia Healthcare (formerly known as Grace Hill), CareSTL Health (formerly known as Myrtle Hilliard Davis Comprehensive Health Centers), and the St. Louis County Department of Public Health. These community health centers are the primary care Gateway providers.

3
Evaluation Questions and Hypotheses

Targets for Improvement

Three demonstration objectives have provided the foundation for the design of the Gateway program since its inception.

- Preserve and strengthen the St. Louis City and St. Louis County safety net of health care providers available to serve the uninsured.
- Connect the uninsured to a primary care home, which will enhance coordination, quality, and efficiency of health care through patient and provider involvement.
- Maintain and enhance quality service delivery strategies to reduce health disparities.

Each of these objectives is translated into quantifiable targets for improvement so that the performance of the demonstration in relation to these targets can be measured. These targets for improvement are used to create the aims in the Driver Diagram and to support the hypotheses in the program evaluation design. The primary focus of the first objective is the support of outpatient services to uninsured adults. The focus of the second objective is maintaining or increasing primary care utilization levels. And the primary focus of the last objective is health care quality. The corresponding improvement target for each of the demonstration objectives is identified in the following table.

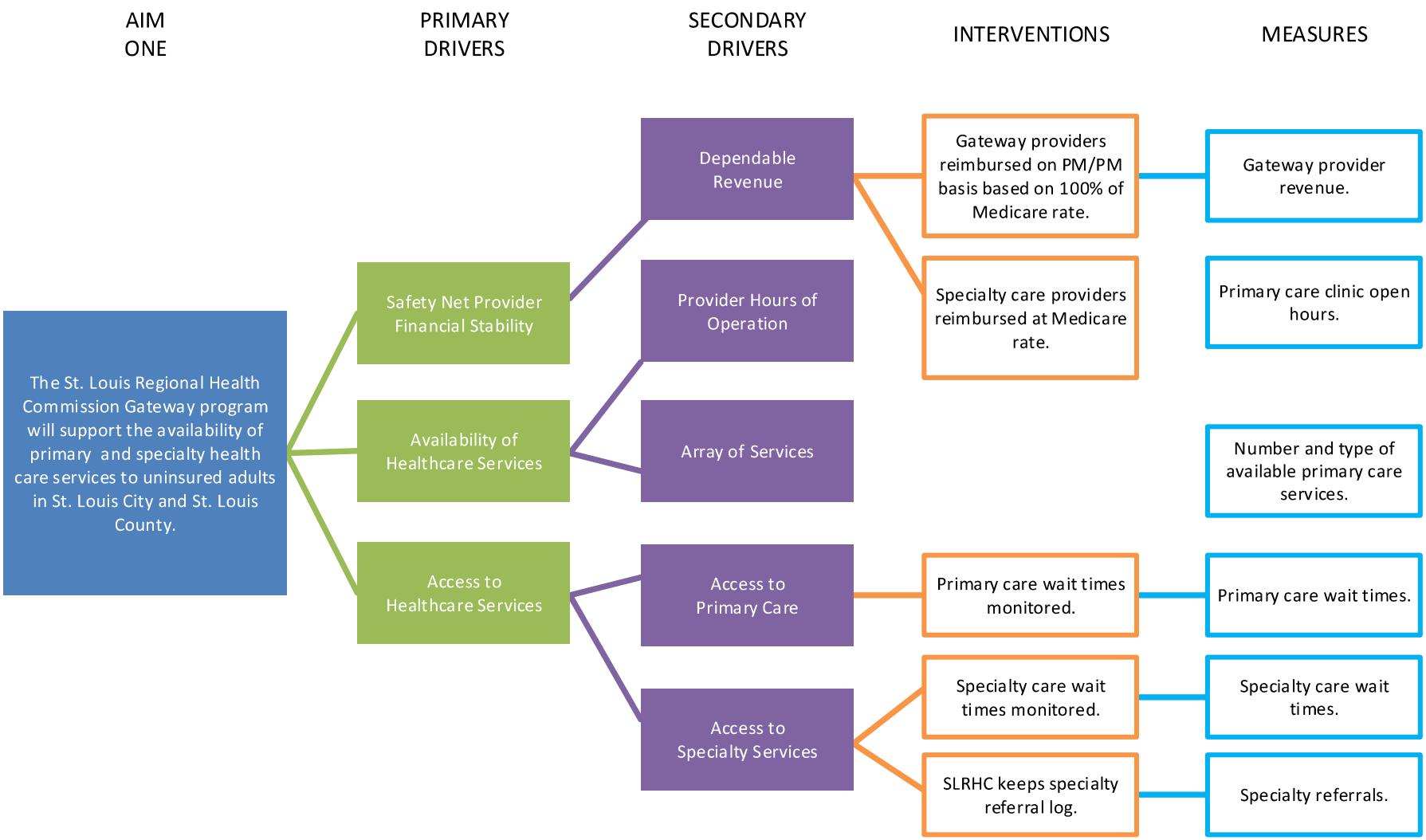
Table 3.1 Program Objectives Translated into Quantifiable Targets for Improvement

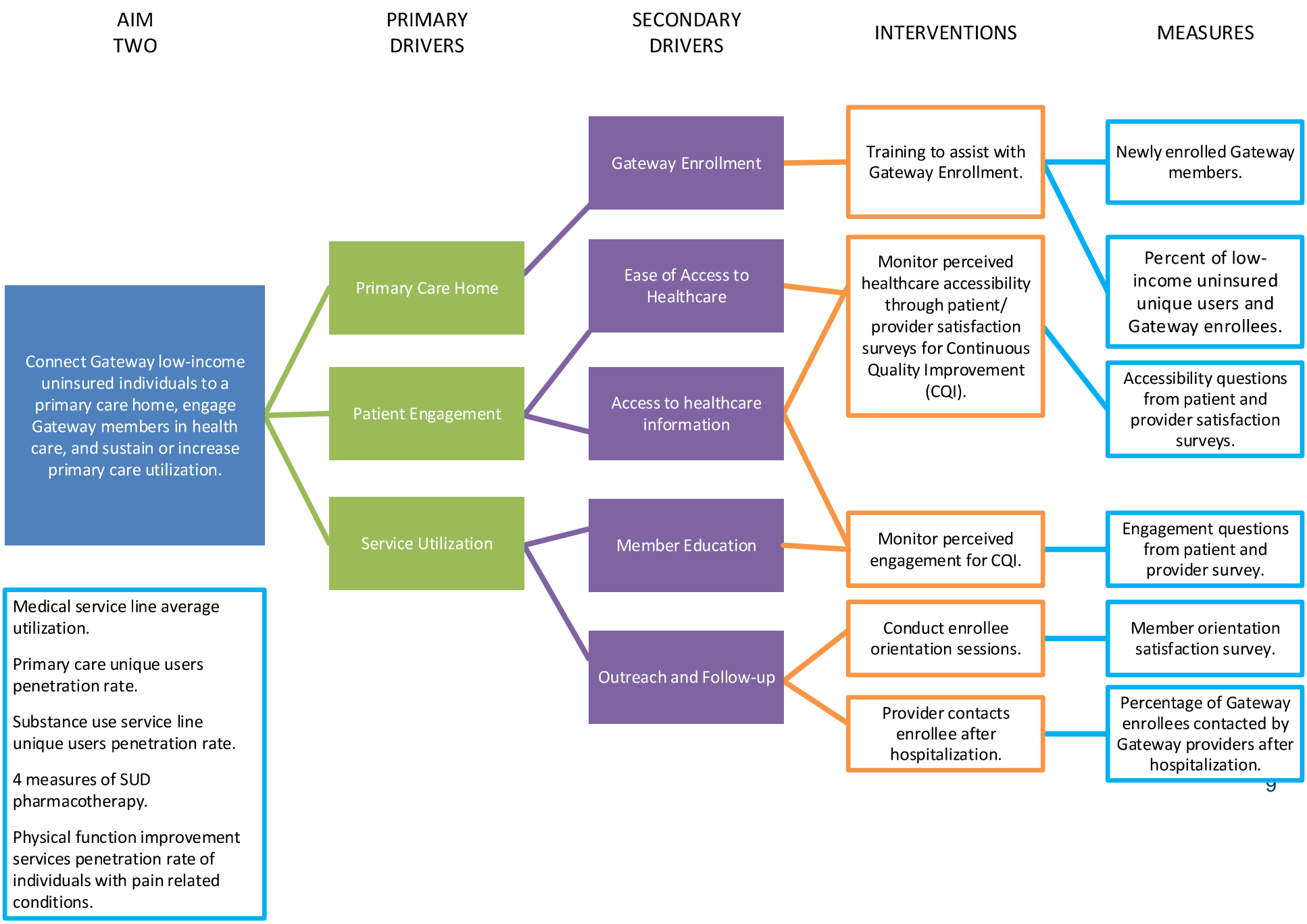
Gateway Objectives	Target for Improvement
I. Preserve and strengthen the St. Louis City and St. Louis County safety net of health care providers available to serve the uninsured.	I. The Gateway program will support the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.
II. Connect the uninsured to a primary care home, which will enhance coordination, quality, and efficiency of health care through patient and provider involvement.	II. Connect Gateway low-income uninsured individuals to a primary care home, engage Gateway members in health care, and sustain or increase primary care utilization and engagement.

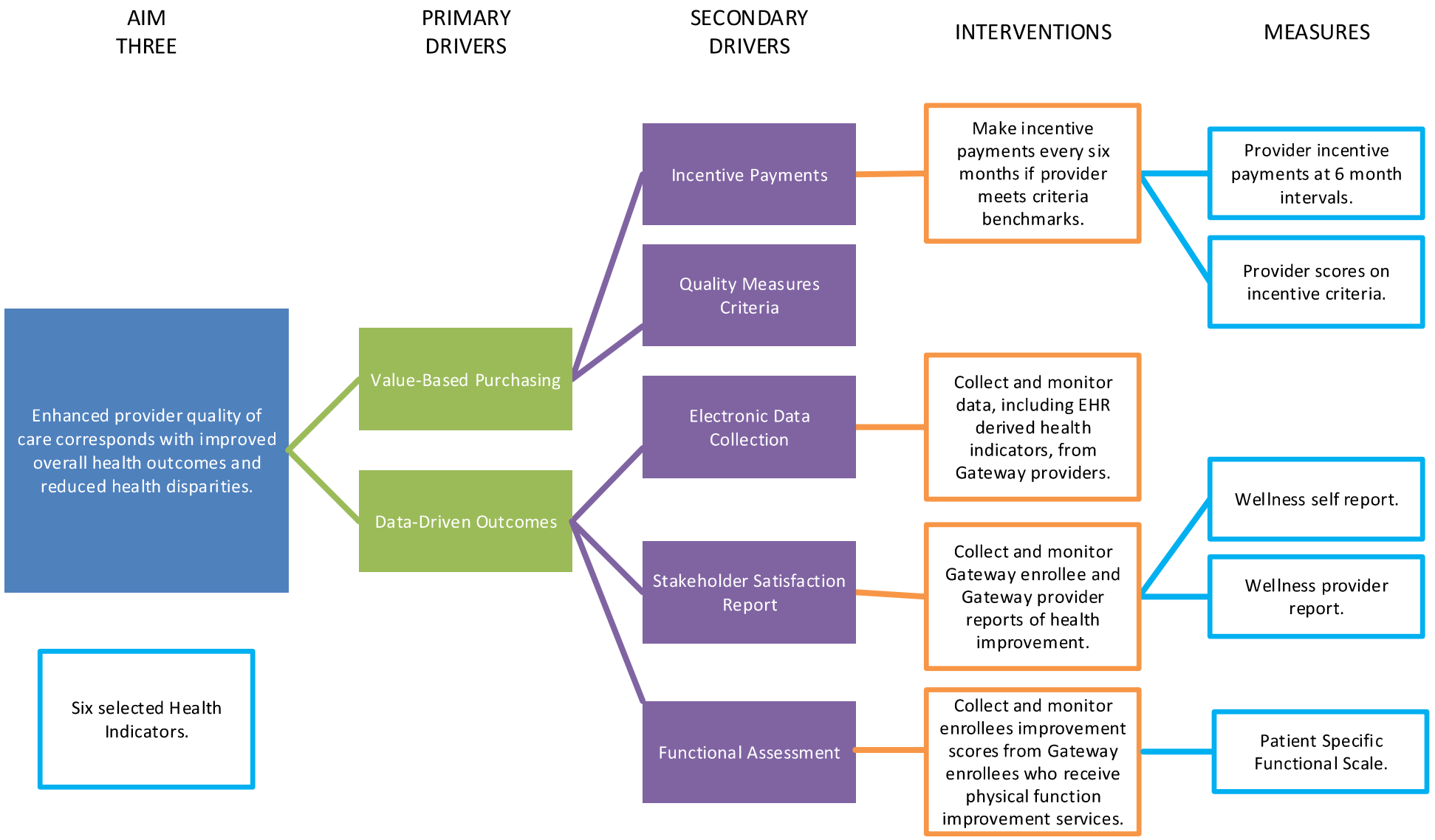
Gateway Objectives	Target for Improvement
III. Maintain and enhance quality service delivery strategies to reduce health disparities.	III. Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.

Driver Diagram

The demonstration's underlying theory of desired change is modeled in the following Driver Diagram. Each of the three targets for improvement constitutes one of the three aims. The diagram models the relationship between the three aims and drivers presumed to support the aims. Specific interventions, identified in the orange boxes, which have been used throughout the demonstration, are postulated to impact the various drivers. Process project measures associated with the interventions are identified in the blue boxes on the right. Outcome measures, utilized in Aims 2 and 3, are also in blue boxes and are positioned under the Aim. While SLRHC historically has tracked numerous measures, only those measures that help to answer the research questions and inform the hypotheses are used in the evaluation design.


AIM ONE
PRIMARY DRIVERS
SECONDARY DRIVERS
INTERVENTIONS
MEASURES
The St. Louis Regional Health Commission Gateway program will support the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.
Safety Net Provider Financial Stability
Availability of Healthcare Services
Access to Healthcare Services
Dependable Revenue
Provider Hours of Operation
Array of Services
Access to Primary Care
Access to Specialty Services
Gateway providers reimbursed on PM/PM basis based on 100% of Medicare rate.
Specialty care providers reimbursed at Medicare rate.
Primary care wait times monitored.
Specialty care wait times monitored.
SLRHC keeps specialty referral log.
Gateway provider revenue.
Primary care clinic open hours.
Number and type of available primary care services.
Primary care wait times.
Specialty care wait times.
Specialty referrals.


AIM
TWO
PRIMARY
DRIVERS
SECONDARY
DRIVERS
INTERVENTIONS
MEASURES
Connect Gateway low-income uninsured individuals to a primary care home, engage Gateway members in health care, and sustain or increase primary care utilization.
Primary Care Home
Patient Engagement
Service Utilization
Gateway Enrollment
Ease of Access to Healthcare
Access to healthcare information
Member Education
Outreach and Follow-up
Training to assist with Gateway Enrollment.
Monitor perceived healthcare accessibility through patient/ provider satisfaction surveys for Continuous Quality Improvement (CQI).
Monitor perceived engagement for CQI.
Conduct enrollee orientation sessions.
Provider contacts enrollee after hospitalization.
Newly enrolled Gateway members.
Percent of low-income uninsured unique users and Gateway enrollees.
Accessibility questions from patient and provider satisfaction surveys.
Engagement questions from patient and provider survey.
Member orientation satisfaction survey.
Percentage of Gateway enrollees contacted by Gateway providers after hospitalization.
Medical service line average utilization.
Primary care unique users penetration rate.
Substance use service line unique users penetration rate.
4 measures of SUD pharmacotherapy.
Physical function improvement services penetration rate of individuals with pain related conditions.


AIM THREE
PRIMARY DRIVERS
SECONDARY DRIVERS
INTERVENTIONS
MEASURES
Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.
Six selected Health Indicators.
Value-Based Purchasing
Data-Driven Outcomes
Incentive Payments
Quality Measures Criteria
Electronic Data Collection
Stakeholder Satisfaction Report
Functional Assessment
Make incentive payments every six months if provider meets criteria benchmarks.
Collect and monitor data, including EHR derived health indicators, from Gateway providers.
Collect and monitor Gateway enrollee and Gateway provider reports of health improvement.
Collect and monitor enrollees improvement scores from Gateway enrollees who receive physical function improvement services.
Provider incentive payments at 6 month intervals.
Provider scores on incentive criteria.
Wellness self report.
Wellness provider report.
Patient Specific Functional Scale.

Hypotheses, Research questions, and Demonstration Objectives

Demonstration goals I, II, and III are supported by the following hypotheses and research questions.

Hypothesis 1: The SLRHC Gateway project supports the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.

1. Does the coverage approach to provider reimbursement and incentive payments provide a stable revenue stream?

2. What variance, if any, exists in primary care provider availability and primary care service array across the evaluation period?

3. What variance, if any, exists in access to primary care across the evaluation period?

Hypothesis 1 identifies specific characteristics associated with demonstration objective I (preserve and strengthen the St. Louis City and St. Louis County safety net of health care providers available to serve the uninsured). A requisite condition for supporting the availability and accessibility of health care services for uninsured individuals is stable revenue that supports provider operations. Research question 1 demonstrates the extent to which the Gateway program provides ongoing revenue for the safety net providers in the Gateway program. Questions 2 and 3 demonstrate variability in access and availability of health care services. This hypothesis and its questions provides the SLRHC the opportunity to monitor core process measures (e.g., revenue, access, and availability of health care) associated with the Gateway program.

Hypothesis 2: Connecting and engaging low-income uninsured individuals to a Gateway primary care home corresponds with sustained or increased primary care utilization.

1. Have low-income uninsured adults in St. Louis City and St. Louis County connected to a primary care home?

2. Has Gateway enrollment reduced the perception of barriers to primary and specialty care for enrollees and providers?

3. Have Gateway members been engaged by their primary care home with member education, outreach, and follow-up?

4. Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient medical services year-to-year?

5. Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient substance use treatment services year-to-year?

6. Do Gateway enrollees with pain-related diagnoses connected to a primary care home demonstrate increased utilization of outpatient physical function improvement services year-to-year?

Hypothesis 2 examines the outcomes of a core component of the Gateway program, the enrollment of low-income uninsured individuals in a primary care home. The presumptive consequence of an increase in Gateway member engagement and the perceived removal of barriers to health care is an increase in primary care utilization. Question 1 evaluates Gateway program enrollment. Questions 2 and 3 consider the perception of barriers to health care research. Questions 4, 5, and 6 assess primary care utilization. This hypothesis and associated research questions allow SLRHC to assess, over time, primary care utilization for Gateway enrollees.

Hypothesis 3: Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.

1. Does using value-based purchasing for provider reimbursement correspond with providers meeting incentive criteria on health and quality of care indicators?

2. Do Gateway members perceive that their health outcomes have improved throughout the demonstration period?

3. Have health outcomes for Gateway members improved each Demonstration Year (DY)?

4. Do health indicators, when calculated separately for African American, Caucasian, and Hispanic Gateway enrollees, exhibit statistically significant differences?

5. Do Gateway enrollees with pain-related diagnoses treated under the physical function improvement service line report perceived improved physical function year-over-year?

Hypothesis 3 examines another important component of the Gateway program, the improvement in provider quality and its relationship with improved health outcomes and reduced health disparities. Research question 1 examines the relationship of incentive payments and health indicator criteria. Questions 2 and 3 assess the change, and the perception of improvement, of health outcomes across time. Research question 4 evaluates health disparities on health indicators between African American, Caucasian, and Hispanic Gateway enrollees. Research question 5 assesses patient perception of functional improvement across time.

Hypotheses/Research Questions Promote Title XIX Objective

A core objective of the Medicaid program is to serve the health and wellness needs of our nation's vulnerable and low-income individuals and families. The Gateway program promotes this core objective by providing access to primary and specialty care to a population of low-income individuals who would not otherwise have access to health care. The Gateway program serves as an important bridge for individuals who may be eligible for Medicaid coverage in Missouri. More than 40,000 individuals, who would otherwise be uninsured, have

transitioned from Gateway coverage into Missouri Medicaid programs since the demonstration project's inception.

The hypotheses and research questions used to evaluate the performance of the Gateway program also support this core objective with their focus on the evaluation of the impact of connecting uninsured, low-income individuals to a primary care home, improving health care utilization in this population, improving health outcome measures, and decreasing health disparities in health indicators for this low-income adult population.

4
Methodology

Evaluation Design

The program evaluation design encompasses an integrated process and outcome evaluation of the Gateway demonstration performance utilizing the three hypotheses associated with the demonstration's three objectives. The focus of the evaluation is to monitor and evaluate change over time to determine if the Gateway program continues to support safety net providers, provide health care to the uninsured, and produce desired health care outcomes.

The *process evaluation* utilizes systemic measures of the safety net health care provider system, which allows ongoing monitoring of the demonstration's operations. These measures consist of a short series of aggregated data such as the number of primary care clinic business hours measured annually from 2017 to 2022. By representing these measures visually in a descriptive time series, any changes in these measures can be readily noted, allowing an opportunity for needed programmatic changes.

The *outcome evaluation* utilizes disaggregated enrollee level data in addition to provider and enrollee summative data. Some outcome measures will also be represented with descriptive time series. Enrollee level of data allows for an analysis to determine any statistically significant differences over time in rates or counts. For a limited number of outcome measures, the analytic approach, multiple logistic regression, and controls for differences in patient characteristics such as gender, race, and age.

This study design does not include an impact evaluation due to data availability constraints discussed in the Methodological Limitations section.

Target and Comparison Populations

The target population for Hypothesis 1 consists of the five Gateway providers. Four of the five providers are Federally Qualified Health Centers: Affinia Healthcare, Betty Jean Kerr People's Health Center, Family Care Health Centers, and CareSTL Health. The fifth Gateway provider is the St. Louis County Department of Public Health. Each of the providers has the following number of clinic locations, all of which may be accessed by Gateway enrollees.

Table 4.1 Number of Gateway Provider Clinic Locations[2]

Provider	Number of Clinic Locations
Affinia Healthcare	5
Betty Jean Kerr People's Health Centers	2
Family Care Health Centers	2
CareSTL Health	4
St. Louis County Department of Public Health	3
Total number of clinic locations	**16**

The target population for Hypotheses 2 and 3 consists of all adults enrolled in the Gateway program. Hypothesis 3 also includes one research question in which the target population is the providers. To qualify for inclusion in the Gateway program and in the Gateway program evaluation, participants must be between 19 and 64 years of age, ineligible for MO HealthNet (Medicaid) or Medicare, have no other insurance, live in St. Louis City or County, and have an income at or below 100% of the federal poverty level ($13,590 per year for an adult living alone or $27,750 per year for a family of four in 2022).

Because data from the entire population of Gateway enrollees will be used in the analyses, no sampling plan is required. The evaluation design does not include a comparison group.[3]

Evaluation Period

The evaluation period is January 1, 2017 through December 31, 2022. The analysis will allow for a three month run out of encounter data for the encounter-based measures. Results across this time period are included in this Summative Evaluation report due to CMS on June 30, 2024.

Interim results derived from a portion of this evaluation period, January 1, 2017 through December 31, 2020 (with a three-month run out of encounter data) were reported in the Interim Evaluation report due to CMS on December 31, 2021.

Because the SUD treatment benefit was implemented February 1, 2019 and the physical function improvement benefit was implemented January 1, 2021, the evaluation period for these services began on the implementation dates of each respective benefit and continued through the end of the evaluation period.

[2] Number of Gateway clinic locations totaled 18 in 2017–2018, 17 in 2019, and 16 from 2020 onward.

[3] See discussion in the Methodological Limitations section.

Evaluation Measures and Data Sources

Primary and specialty care information specific to Gateway enrollees is collected from Gateway providers and their Electronic Health Records (EHR) as well as an encounter claims data. Measures for the program evaluation are derived from data from the following sources:

- **Gateway Provider Survey Data** is collected annually from Gateway primary care providers and specialty care providers. The data is submitted on Excel templates and includes information for clinic enrollees. Templates used to collect data can be found in "Attachment A. Gateway Provider Survey Templates".
- **Quarterly Gateway Provider Wait Time Reports** are submitted by Gateway providers with data pertaining to Gateway enrollees.
- **Gateway Claims Data** is submitted by Gateway providers for payment for services provided to Gateway enrollees and compiled by the Gateway program.
- **EHRs** are the sources of data associated with health indicators, which is collected annually by a SLRHC vendor and used to calculate Gateway-specific health quality measures.
- **Automated Health Systems (AHS)** is the enrollment vendor that extracts data from the provider portal pertaining to enrollment and specialty care referrals.
- **Uniform Data System** is data collected from Federally Qualified Health Centers by the Health Resources and Services Administration.
- **Provider and Enrollee Surveys** are two different surveys requesting information from providers and enrollees pertaining to their experience with the Gateway program. Copies of the surveys may be found in "Attachment C. Enrollee Satisfaction Survey" and "Attachment D. Provider Satisfaction Survey". The Enrollee Satisfaction Survey uses a sample of convenience and is collected over a three-month period from May through July of each year. Gateway enrollees are asked to complete a survey after their clinic visit at each of the five primary care health centers. The Provider Satisfaction survey uses a convenience sample of Gateway medical providers and support staff involved in the referral process at the five primary care health centers. During the month of May, an email with a link is sent to the survey population, inviting them to take an online survey.
- **The Patient-Specific Functional Scale (PSFS)**[4] is an evaluation questionnaire quantifying activity limitation and measuring functional outcomes for patients with orthopedic conditions. A copy of this survey may be found in Attachment E.
- **American Community Survey of the United States (US) Census** is the source for the total number of uninsured individuals in the City and County of St. Louis.

[4] PSFS as developed by: Stratford P, Gill C, Westaway M, Binkley J. (1995). Assessing disability and change on individual patients: a report of a patient specific measure. Physiotherapy Canada, 47, 258-263

The following table identifies proposed evaluation measures, their descriptions, sources, and steward (if applicable). A table of measures with detailed measure specifications, including numerator and denominator information, can be found in "Attachment B. Measure Specifications" of the approved program evaluation design.

Table 4.2 Evaluation Measures[5]

Measure	Measure Description	Data Source	Steward
Gateway provider revenue	Annual gross receipts for Gateway enrollees.	Gateway Program	Not Applicable (NA)
Primary care clinic business hours/week	Number of hours clinic is open during normal business hours (8:00 am–5:00 pm Monday–Friday).	Gateway Program	NA
Primary care clinic non-business hours/week	Number of hours clinic is open outside of normal business hours.	Gateway Program	NA
Total primary clinic hours/week	Total clinic business hours and primary clinic non-business hours.	Gateway Program	NA
Available primary care services	Number and type of primary care services endorsed by Gateway providers on primary care services.	Gateway Program	NA
Primary care non-urgent wait times new patients	Number of days until third next non-urgent appointment for new patients.	Provider Report	NA
Primary care non-urgent wait times established patients	Number of days until third next non-urgent appointment for established patients.	Provider Report	NA
Primary care urgent wait times new patients	Number of days until next urgent appointment[6] for new patients.	Provider Report	NA
Primary care urgent wait times established patients	Number of days until next urgent appointment for established patients.	Provider Report	NA
Specialty care wait times for patients	Number of days until third next non-urgent appointment for patients.	Quarterly Wait Time Report	NA

[5] Measures are presented in the order that aligns with the hypotheses as presented in Table 4.5 Summary Program Evaluation Table.

[6] Gateway providers are required to reserve a portion of open appointments for urgent patients.

Measure	Measure Description	Data Source	Steward
Specialty care referrals	Number of specialty care referrals made by Gateway providers.	Provider Report	NA
Number of low-income uninsured adults newly enrolled in Gateway	Monthly total number of low-income uninsured adults enrolled in the Gateway program.	AHS	NA
Percent low-income uninsured unique users	Percentage of low-income uninsured adults in St. Louis City and County receiving primary care services through the Gateway program.	Provider Survey Data/US Census	NA
Percent low-income uninsured adults enrolled in Gateway	Percentage of low-income uninsured adults in St. Louis City and County who are enrolled in the Gateway program.	Gateway Program/US Census	NA
Barrier to health care self report	Percentage of enrollees who report barriers to health care without the Gateway program.	Enrollee Satisfaction	NA
Barrier to health care provider report	Percentage of providers who report enrollee barriers to health care without the Gateway program.	Provider Satisfaction	NA
Engagement self report	Percentage of Gateway enrollees who report timely information and help from their provider.	Enrollee Satisfaction	NA
Newly enrolled office visit	Percentage of Gateway newly enrolled members who have an office visit.	Provider Report	NA
Medical service line average utilization	Average number of office visits per medical service line unique user.	Provider Survey Data/Gateway Program	NA
Medical service line unique users penetration	Percentage of Gateway enrollees who receive services in the medical service line.	Provider Survey Data/Gateway Program	NA
Substance use service line unique users penetration	Percentage of Gateway enrollees who receives services in the substance use service line.	Provider Survey Data/Gateway Program	NA
Alcohol withdrawal medication management	Percentage enrollees with an AUD diagnosis who receive medication for withdrawal symptoms.	Provider Survey Data	NA
Opioid withdrawal medication management	Percentage enrollees with an OUD diagnosis who receive medication for withdrawal symptoms.	Provider Survey Data	NA

Measure	Measure Description	Data Source	Steward
AUD medication maintenance	Percentage enrollees with an AUD diagnosis who receive maintenance medication.	Provider Survey Data	NA
OUD medication maintenance	Percentage enrollees with an OUD diagnosis who receives maintenance medication.	Provider Survey Data	NA
Physical function improvement service line unique users penetration	Percentage of Gateway enrollees with pain-related diagnoses who receive services in the physical function improvement service line.	Provider Survey Data/Gateway Program	NA
Primary care provider incentive payments	Bi-annual dollar amount paid as incentive payments.	Gateway Program	NA
P4P incentive criteria scores	Percentage of Pay-For-Performance (P4P) criteria benchmarks[7] met.	Gateway Program	NA
Wellness self report	Percentage of Gateway enrollees who report improved health.	Enrollee Satisfaction	NA
Wellness provider report	Percentage of providers who report improved Gateway enrollee health.	Provider Satisfaction	NA
Self reported physical function improvement	Percentage of Gateway enrollees with pain-related diagnoses who report perceived improved physical function year-over-year.	Patient-Specific Functional Scale	NA
Tobacco use assessment and cessation intervention	Percentage of Gateway enrollees assessed for tobacco use and, if identified as a tobacco user, received cessation counseling and/or pharmacotherapy.	EHR Data/ Gateway Program	AMA[8]
Hypertension (HTN): blood pressure control	Percentage of Gateway enrollees with diagnosed HTN whose blood pressure was less than 140/90 (adequate control).	EHR Data/ Gateway Program	NCQA[9] CMS165
Diabetes: HbA1c control	Percentage of Gateway enrollees diagnosed with Diabetes whose HbA1c level during the Measurement Year is less than or equal to 9%.	EHR Data/ Gateway Program	NCQA CMS122

[7] Criteria and Benchmarks found in “Attachment G. Pay for Performance Criteria and Benchmarks”; formula for determining P4P incentive criteria score can be found in Attachment B.

[8] American Medical Association (AMA)-convened Physician Consortium for Performance Improvement.

[9] National Council of Quality Assurance

Measure	Measure Description	Data Source	Steward
Adult weight screening and follow-up	Percentage of Gateway enrollees seen for a visit who had a Body Mass Index (BMI) taken during the most recent visit or within the six months prior to that visit.	EHR Data/ Gateway Program	CMS CMS69
Flu shot for adult patients	Percentage of Gateway enrollees seen for a visit between October 1 and March 31 who receive a flu shot or who reported receipt of a flu shot.	EHR Data/ Gateway Program	NCQA
Use of appropriate medications for asthma	Percentage of Gateway enrollees who were identified as having persistent asthma and were appropriately ordered medication during the measurement period.	EHR Data/ Gateway Program	CMS CMS126
Pain diagnosis with services in the physical function improvement service line	Percentage of Gateway enrollees who receive services in the physical function improvement service line.	Provider Survey Data/Gateway Program	NA
Pain diagnosis reporting improvement in physical function	Percentage of Gateway enrollees with pain diagnosis reporting improvement in physical function.	Provider Survey Data/Gateway Program	NA

Analytic Methods

Two complementary analytic approaches were utilized for the evaluation, a) descriptive time series graphs that provide a visual representation of changes in measures over time, and b) regression based analysis that separates the effect of enrollee demographic characteristic variation from other sources of variability across time.

Descriptive Time Series

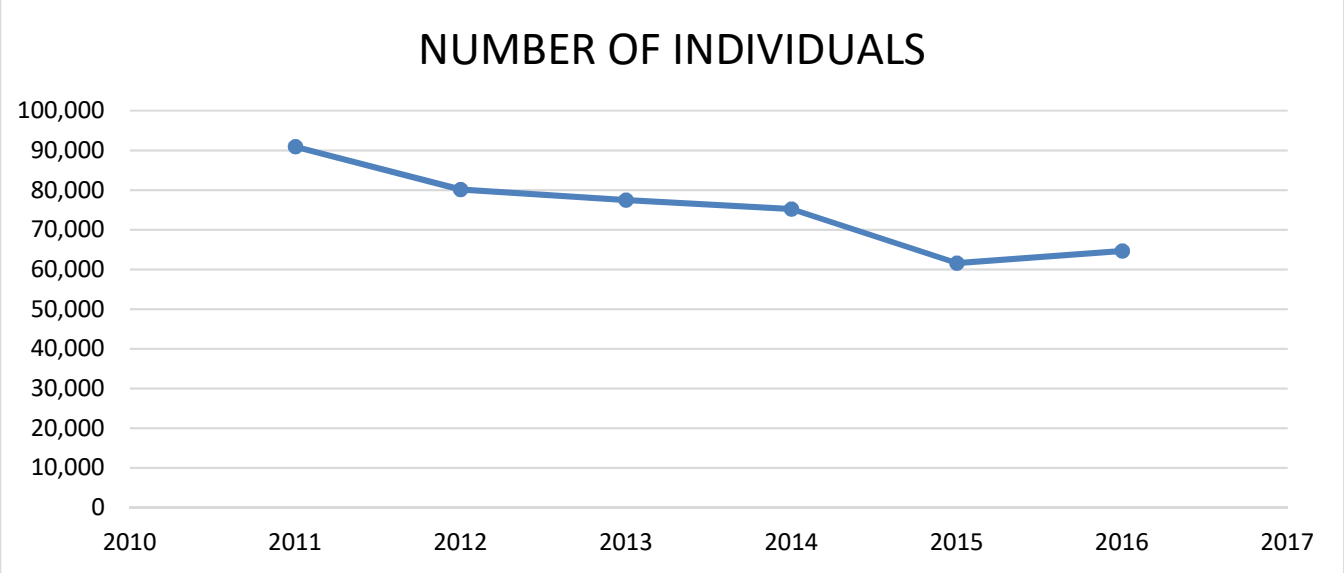
Measures used in the process evaluation (measures of systemic variables of the safety net health care providers), such as: provider revenue, and measure of aggregated data of Gateway enrollees; and outcome measures, such as: medical service line average utilization and unique users penetration rates, were analyzed with descriptive time series graphs. These measures are a single value for each year, or in some cases, each quarter. The following table and graph

illustrates one method of a time series analysis using data from the DY 8 Interim Evaluation report for the number of uninsured individuals served by Gateway primary care providers.[10]

Table 4.3 Uninsured Individuals Served by Gateway Primary Care Providers

Year	Number Individuals Served
2011	90,924
2012	80,193
2013	77,521
2014	75,216
2015	61,618
2016	64,709

Figure 4.1 Uninsured Individuals Served by Gateway Primary Care Providers[11]



In this illustration, the number of uninsured individuals served by Gateway providers presents information on the trend over time as well as the magnitude of the measure in each time period (e.g., 64,709 enrollees in 2016).

Regression Based Analysis

Although a descriptive time series analyzes and displays change over time, it does not provide information on factors contributing to the change. A multiple regression analysis can be used to determine if changes in the measures result from changes in the demographic mix of Gateway

[10] This measure and analysis is not used in the program evaluation, and is offered as an illustration only.

[11] The decrease in the number of patients served by Gateway primary care providers reflects a corresponding decrease in the total number of uninsured adults during this time period.

enrollees, or result from other factors. The multiple regression analysis supplements the time series graphical analysis, and can only be used when enrollee level data, with demographic information, is available.

The following table illustrates the structure and types of required enrollee level data needed for multiple regression analysis for five hypothetical enrollees. The *Flu shot for adult patients*[12] measure reports the percentage of unique users seen for a visit between October 1 and March 31, receiving or reporting to have received flu shots. It is calculated separately by year. In this table of hypothetical data related to flu shot rates, each row of the table corresponds to a single enrollee during a single year. The first variable, *Flu shot*, can have a value of 1 or 0, depending upon whether or not an enrollee received or reported receiving a flu shot. If the enrollee was seen for a visit between October 1 and March 31 and received or reported receiving a flu shot, the value is 1. If the enrollee did not receive or report receiving a flu shot, the value is 0.

The variables 2017, 2018, and 2019 are also binary variables. Each of these variables has a value of 1 if the individual was enrolled in that year, and a 0 if the individual was not enrolled in the Gateway program that year. By definition, exactly one of the three binary year variables has the value 1, since each row corresponds to a single enrollee during a single year. The remaining variables represent the demographic characteristics of the enrollee during the year, with 1 indicating the presence of that characteristic, and 0 indicating the absence of that characteristic.[13]

Table 4.4 Hypothetical Enrollee Level Data for Primary Care Services

Row #	Flu Shot	Enrolled 2017	Enrolled 2018	Enrolled 2019	African American	Caucasian	Male	Female	Age In Years
1	1	1	0	0	1	0	0	1	36
2	1	0	0	1	0	1	0	1	29
3	0	1	0	0	0	1	1	0	45
4	1	0	1	0	1	0	0	1	23
5	0	1	0	0	1	0	1	0	28
6	0	0	1	0	1	0	1	0	57
7	1	0	0	1	0	1	1	0	47
8	1	1	0	0	0	1	1	0	31
9	1	1	0	0	1	0	0	1	42
10	0	0	1	0	1	0	0	1	45

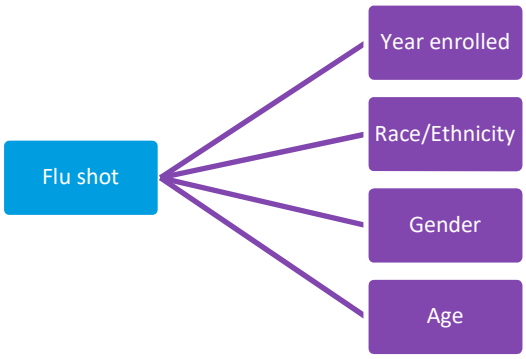
[12] See Attachment B of approved evaluation design.

[13] For simplicity of illustration, other racial/ethnic categories are not included in the example.

In this example, there are five hypothetical enrollees in 2017 (rows 1, 3, 5, 8, and 9), three of whom have received flu shots, resulting in a rate of 60%. For 2018, the hypothetical rate is one of three 2018 enrollees, or 33%. While the comparison of annual rates shows declining use of flu shots, the annual rates do not provide information on why the rate declines between the two years.

One possible explanation for changes in annual rates is a changing demographic mix of Gateway enrollees. Some types of services have large differences in utilization rates between men and women, or between younger or older enrollees. In monitoring the Gateway program, it is helpful to understand if changes in measures over time are associated with a changing demographic mix of enrollees, or other unmeasured factors, such as changes in policies or procedures.

Multiple regression analysis also isolates annual changes in evaluation measures after controlling for changes in the demographic mix of enrollees. In the flu shot rate example, the binary variable Flu Shot is the dependent variable in a linear regression model, and the binary year variables, the binary race and gender variables, and the continuous age variable are all independent variables, as noted in the following diagram.



A linear model of the relationship between the dependent and independent variables can be estimated with multiple regression analysis. The resulting slope coefficient for each independent variable, and their statistical significance, is generated in the analysis. In the case of the 2018 binary variable (flu shot), the corresponding slope coefficient represents the average difference in the dependent variable (flu shot) for 2018 observations as compared to the 2017 base year. The slope coefficient associated with the 2019 binary variable (flu shot) represents the average difference in the dependent variable for 2019 observations as compared to the 2017 base year, again controlling for differences in the demographic variables. These two slope coefficients measure year-to-year change in flu shot rates and provide the statistical significance of the differences.

Using a multiple regression has two key advantages as compared to simply calculating the 60% or 33% rates reported above. First, the estimation of year-to-year change with regression analysis is made *after controlling for differences in the other independent variables, including the race, gender, and age variables.*[14] For program monitoring purposes, it is helpful to know if change is for reasons beyond Gateway's control, such as changing demographics, or if policy changes may have led to observed changes. Second, regression analysis provides the statistical significance of the binary year variables, which may be used to identify if year-to-year change is statistically significant.

The form of the multiple regression analysis used is dependent upon the type of the dependent variable. In the flu shot example, the dependent variable is binary (received or reported receiving flu shot versus did not receive or report receiving flu shot), so the specific form of the regression function is logistic. Finally, multiple regression analysis is also used to address the research question, *do health indicators, when calculated separately for African American, Caucasian, and Hispanic Gateway enrollees, exhibit statistically significant differences?* An example of a health indicator is *Diabetes: HbA1c Control*, which is calculated with the following formula:

$$\frac{\text{[Number of enrollees with a diagnosis of Type I or Type II Diabetes whose most recent hemoglobin A1c level during the measurement year is less than or equal to 9\%]}}{\text{[Number of enrollees with a diagnosis of Type I or Type II Diabetes and; who have been seen in the clinic for medical services at least twice during the reporting year]}}$$

The health indicators are calculated separately for each racial group to identify differences in rates. To determine statistically significant differences in these rates, logistic regression and client level data with a structure analogous to Table 4.4 is used. The data is limited to patients meeting the denominator condition (seen in the clinic twice), and the dependent variable will be a binary indicator satisfying the condition in the numerator (hemoglobin A1c less than or equal to 9%).

Using a logistic regression analysis, the estimated coefficient associated with each of the race variables indicates a change in the odds associated with meeting the health indicator condition, controlling for year of enrollment, gender, and age. The coefficient's statistical significance measures if each of the races have statistically significant differences in the odds of meeting the health condition.

[14] See Wooldridge J. (2002) Econometric Analysis of Cross Sections and Panel Data. Massachusetts Institute of Technology. 170–182

The regression equation for a measure Y is as follows, where the measure Y_{ij} for member i at measurement year j, is the sum of:

$$Y_{ij} = \beta_0 + \boldsymbol{T}'\boldsymbol{\beta}_{time} + \boldsymbol{R}'\boldsymbol{\beta}_{race} + \boldsymbol{G}'\boldsymbol{\beta}_{gender} + A_{ij}\beta_{age} + \varepsilon_{ij}$$

$\boldsymbol{\beta_0}$	Baseline observation of the measure
$\boldsymbol{T}$	Vector of zeros with indictor 1 at time period j
$\boldsymbol{\beta}_{time}$	Vector of changes in measure associated with a time unit increase between baseline and measurement year
$\boldsymbol{R}$	Vector of zeros with indictor 1 at race/ethnicity of member i
$\boldsymbol{\beta}_{race}$	Vector of changes in measure associated with a race/ethnicity group versus a comparison race/ethnicity group
$\boldsymbol{G}$	Vector of zeros with indictor 1 at gender of member i
$\boldsymbol{\beta}_{gender}$	Vector of changes in measure associated with a gender group versus a comparison gender group
A_{ij}	Age of member i at time j
β_{age}	Change in measure associated with a one year increase in age
ε_{ij}	Random error term associated with the measure of member i at time period j

Summary Design Table for the Evaluation of the Demonstration

The following table outlines the core components of the program evaluation. Each of the three hypotheses is followed by supporting research questions as well as the measures and analytic approach for each question. A table with detailed measure specifications can be found in Attachment B of the approved evaluation design.

Table 4.5 Summary Program Evaluation Table

Research Question	Measure	Population/ Sub-population	Frequency	Analytic Method
Hypothesis 1: The SLRHC Gateway project supports the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.				
Does the coverage approach to provider reimbursement and incentive payments provide a stable revenue stream?	Gateway provider revenue	Gateway Providers	Annually	Descriptive time series
What variance, if any, exists in primary care provider availability and primary care service array across the evaluation period?	Primary care clinic business hours/week	Gateway Providers	Annually	Descriptive time series
	Primary care clinic non-business hours/week	Gateway Providers	Annually	Descriptive time series
	Total primary care clinic hours/week	Gateway Providers	Annually	Descriptive time series
	Available primary care services	Gateway Providers	Annually	Descriptive time series
What variance, if any, exists in access to primary and specialty care across the evaluation period?	Primary care non-urgent and urgent wait times for new and established patients	Gateway Providers	Quarterly	Descriptive time series
	Specialty care wait times for patients	Gateway Providers	Annually	Descriptive time series
	Specialty care referrals	Gateway Providers	Bi-annually	Descriptive time series
Hypothesis 2: Connecting and engaging low-income uninsured individuals to a Gateway primary care home corresponds with sustained or increased primary care utilization.				
Have low-income uninsured adults in St. Louis City and St. Louis County connected to a primary care home?	Low-income uninsured adults newly enrolled in Gateway	Gateway Enrollees	Bi-annually	Descriptive time series

Research Question	Measure	Population/ Sub-population	Frequency	Analytic Method
	Percent low-income uninsured unique users	Gateway Enrollees/All Uninsured Adults	Annually	Descriptive time series
	Percent of low-income uninsured adults enrolled in Gateway	Gateway Enrollees/All Uninsured Adults	Annually	Descriptive time series
Has Gateway enrollment reduced the perception of barriers to primary and specialty care for enrollees and providers?	Barrier to health care self report	Gateway Enrollees	Annually	Descriptive time series
	Barrier to health care provider report	Gateway Providers	Annually	Descriptive time series
Have Gateway members been engaged by their primary care with member education, outreach, and follow-up?	Engagement self report	Gateway Enrollees	Annually	Descriptive time series
	Newly enrolled office visit	Gateway Enrollees	Bi-annually	Descriptive time series
Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient medical services year-to-year?	Medical service line average utilization	Gateway Enrollees	Annually	Descriptive time series
	Medical service line unique users penetration rate	Gateway Enrollees	Annually	Descriptive time series
Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient substance use services year-to-year?	Substance use service line unique users penetration	Gateway Enrollees	Annually	Descriptive time series
	Four AUD and OUD withdrawal and maintenance pharmacotherapies described in Attachment B	Gateway Enrollees	Annually	Descriptive time series

Research Question	Measure	Population/ Sub-population	Frequency	Analytic Method
Do Gateway enrollees with pain-related diagnoses connected to a primary care home demonstrate increased utilization of outpatient physical function improvement services year-to-year?	Physical function improvement service line unique users penetration	Gateway Enrollees	Annually	Descriptive time series
Hypothesis 3: Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.				
Does using value-based purchasing for provider reimbursement correspond with providers meeting incentive criteria on health and quality of care indicators?	Primary care provider incentive payments	Gateway Providers	Bi-annually	Descriptive time series
	P4P incentive criteria score	Gateway Providers	Biannually	Descriptive time series
Do Gateway members perceive that their health outcomes have improved throughout the demonstration period?	Wellness self report	Gateway Enrollees	Annually	Descriptive time series
	Wellness provider report	Gateway Providers	Annually	Descriptive time series
Have health outcomes for Gateway members improved each DY?	1. Tobacco use assessment and cessation intervention 2. HTN: Blood pressure control 3. Diabetes: HbA1c control 4. Adult weight screening and follow-up 5. Flu shot for adult patients 6. Use of appropriate	Gateway Enrollees	Annually	Logistic regression analysis Control variables: gender and age

Research Question	Measure	Population/ Sub-population	Frequency	Analytic Method
	medications for asthma			
Do health indicators, when calculated separately for African American, Caucasian, and Hispanic Gateway enrollees, exhibit statistically significant differences?	1. Tobacco use assessment and cessation intervention 2. HTN: Blood pressure control 3. Diabetes: HbA1c control 4. Adult weight screening and follow-up 5. Flu shot for adult patients 6. Use of appropriate medications for asthma	Gateway Enrollees Sub-populations: Race, Ethnicity	Annually	Logistic regression analysis Control variables: gender and age
Do Gateway enrollees with pain-related diagnoses treated under the physical function improvement service line report perceived improved physical function year-over-year?	Self reported physical function improvement	Gateway Enrollees	Annually	Descriptive time series

5
Methodological Limitations

Several sources of data are used to support the measures in this evaluation, including EHRs, provider self report, census data, enrollment and claims data, and data from survey tools. The data is collected by multiple organizations (e.g., providers and various sub-contractors) and submitted to the SLRHC. The variety of data sources and data suppliers creates risk for inaccuracy. The SLRHC mitigates this risk by providing data collection instructions and requiring standardized collection procedures as well as engaging in data validation activities after the data is collected. To address potential sources of error related to data collection, the SLRHC provides templates and instructions that specify parameters to identify each data type. To address potential errors within the data itself, data validation activities are implemented in which the collected data is compared with historical data and data from external sources, where applicable.

The design of the study does not include a quasi-experimental design, with a comparison group, propensity scoring or other measure of comparison group comparability, and an analytic method to determine demonstration impact and effect size, (e.g., a Difference-in-Difference strategy). Several significant constraints prevent the SLRHC from implementing this type of research design. One challenge is lack of comparable and necessary data on uninsured individuals. For example, the most reasonable comparison group would be uninsured individuals whose income prevents them from enrolling in the Gateway program. However, no source of comparable health care data is available for these individuals.

Insured populations that could conceivably be a source of data do not match the uninsured population on important variables such as age and level of impairment. An additional impediment to comparability is that the Gateway program provides outpatient services, but is not insurance for all levels of care.

A third constraint on the research design is the longevity of the Gateway program, which started in 2012. Even if the barriers to a quasi-experimental design could be resolved, the threat to the validity of any effect size related design is the threat from history. Given the level of socio-economic changes, population movement, and changes in health care, a comparison of current measures with those obtained prior to the implementation of the Gateway program, even if available, would not necessarily reflect the impact of the demonstration.

One strategy used in the current methodology to mitigate the lack of a comparison group and determination of demonstration effect size is the use of enrollee and provider reports of decreased barriers to health care and improved health through particular questions from the satisfaction surveys. Although neither report has the validity of an objective measure such as a health indicator, a consistency in enrollee, and provider reports attesting to the impact of the demonstration provides

useful information about the perception of demonstration impact for the two groups most closely involved in the program: enrollees and providers.

COVID-19, PHE declared on January 31, 2020, and the interruption of services in spring 2020 pose challenges in data collection and interpretation of interim evaluation results. Response to the pandemic has had a substantial impact on data collection measures for the last two years of the demonstration. Provider inability to be held fully to established P4P metrics or oversee the collection of beneficiary satisfaction data, has left gaps in the outlined evaluation design. These gaps will be addressed and noted below as the results are shared.

Gateway Provider Survey Data is collected annually from Gateway primary care providers and specialty care providers. The data is submitted on Excel templates and includes information for clinic enrollees. The data encompasses core medical services, clinic hours, and certain wait time data, and is collected annually from primary care providers. Data is provided for the prior Calendar Year (CY) (January 1–December 31) and is due to the SLRHC for analysis by July of the current CY. Templates used to collect data can be found in the approved evaluation design under "Attachment A. Gateway Provider Survey Templates". Due to COVID-19, clinics requested additional time to meet these access to care reporting requirements. At the time of this report, the SLRHC was able to collect and analyze Gateway Provider Survey Data through December 31, 2022. Gaps in data collection will be noted below.

Provider and Enrollee Surveys are two different surveys requesting information from providers and enrollees pertaining to their experience with the Gateway program. Copies of the surveys may be found in "Attachment C. Enrollee Satisfaction Survey" and "Attachment D. Provider Satisfaction Survey". The Enrollee Satisfaction Survey uses a sample of convenience and is collected over a three-month period from May through July of each year. Gateway enrollees are asked to complete a survey after their clinic visit at each of the five primary care health centers. The Provider Satisfaction Survey uses a convenience sample of Gateway medical providers and support staff involved in the referral process at the five primary care health centers. During the month of May, an email with a link is sent to the survey population, inviting them to take an online survey. In order to collect patient data, the demonstration relies upon support staff at each clinic location to disperse and collect survey materials during the normal course of patient registration. With uncharacteristic patient volumes, enforcement of additional COVID-19 screening measures, and reduced clinic locations and staff, it was determined that the collection of this data would place an undue burden upon clinic partners. The SLRHC and Pilot Program Planning Team determined that the suspension of the survey period for DY 11–13 would be the most sensible course of action. The data collected annually throughout the demonstration has remained consistent over the course of the evaluation period, assuring that the disruption in data collection will not negatively impact the approved evaluation design.

P4P Metrics data is secured through EHR data and self reported information provided by the health centers as part of the P4P metrics established for the program. These metrics require 7% of provider funding to be withheld from Gateway primary care providers. The 7% withhold is tracked and managed on a monthly basis. The SLRHC is then responsible for monitoring the health centers'

performance against the P4P metrics outlined in “Attachment G. Pay for Performance Criteria and Benchmarks”. As a result of COVID-19’s impact on the St. Louis region’s health care delivery systems, criteria measures established for provider incentive payments would reflect COVID-19-related restrictions, rather than provider performance. Consequently, the SLRHC and its stakeholders determined that the suspension of the incentive procedures was essential to bolster health center stability and to ensure that Gateway providers are able to provide primary care services to this vulnerable population throughout the pandemic. The PHE declaration remained in place throughout the closure of the Gateway demonstration in December 2022. Therefore the suspension of this metric continued to be supported by the Pilot Program Planning Team across the service years of 2020, 2021, and 2022. Gaps in data collection will be noted below.

6
Results

This section presents the summative results of the demonstration extension which began on January 1, 2018. The Gateway to Better Health program ended December 31, 2022 after Missouri Medicaid benefits were explored and secured for all Gateway members. Summative results are presented for the years 2018 through program-end in 2022, using 2017 as a baseline year for all measures except those associated with SUD treatment and physical function improvement services. The baseline year for measures associated with SUD treatment is 2019. The baseline year for measures associated with physical function is 2021. Evaluation results are organized by hypothesis and corresponding research questions.

Hypothesis 1: The SLRHC Gateway project supports the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.

Hypothesis 2: Connecting and engaging low-income uninsured individuals to a Gateway primary care home corresponds with sustained or increased primary care utilization.

Hypothesis 3: Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.

Each of these hypotheses is translated into quantifiable targets for improvement so that the performance of the demonstration can be adequately measured. Additionally, each measure has been calculated as described in “Table B. Measure Specifications” of the approved evaluation design. Any irregularities in the calculation methods, primarily due to the COVID-19 pandemic, are noted.

Additionally, the collection period for each metric is noted as either:

- CY for data reflective of January 1 to December 31 of the given year.
- Fiscal Year (FY) for data reflective of July 1 to June 30 of the given year.
- DY, which reflects the federal fiscal year (FFY) period of October 1 to September 30.

Summative Evaluation Measures

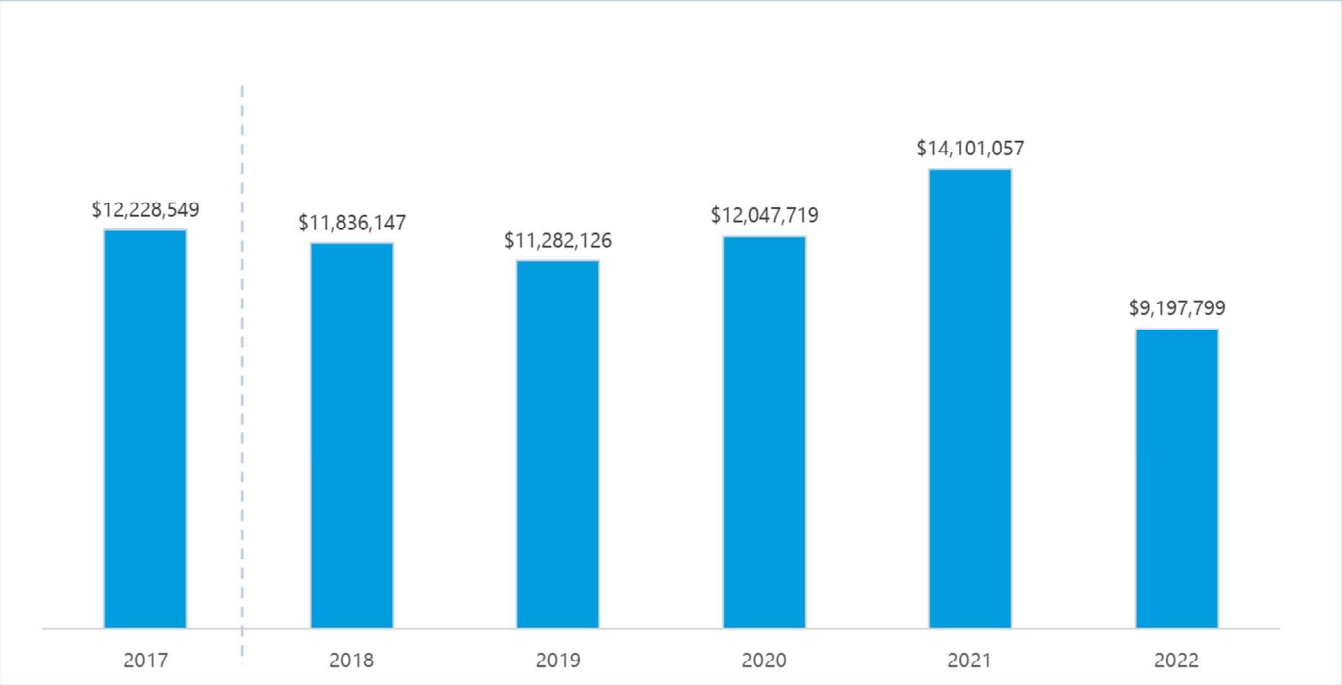
Hypothesis 1: The SLRHC Gateway project supports the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.

The summative evaluation addresses three questions under Hypothesis 1.

Question: Does the coverage approach to provider reimbursement and incentive payments provide a stable revenue stream?

A stable revenue stream for primary care providers enables health centers to support uninsured adults in St. Louis City and St. Louis County. Claims-based revenue for all primary care services received across all Gateway providers is shown in the table below.

Figure 6.1. Gateway Provider Revenue



Provider revenue is reported by FFY.
Reported information based on data as of October 1, 2022. Additional allowable expenses may be incurred for the FFY.

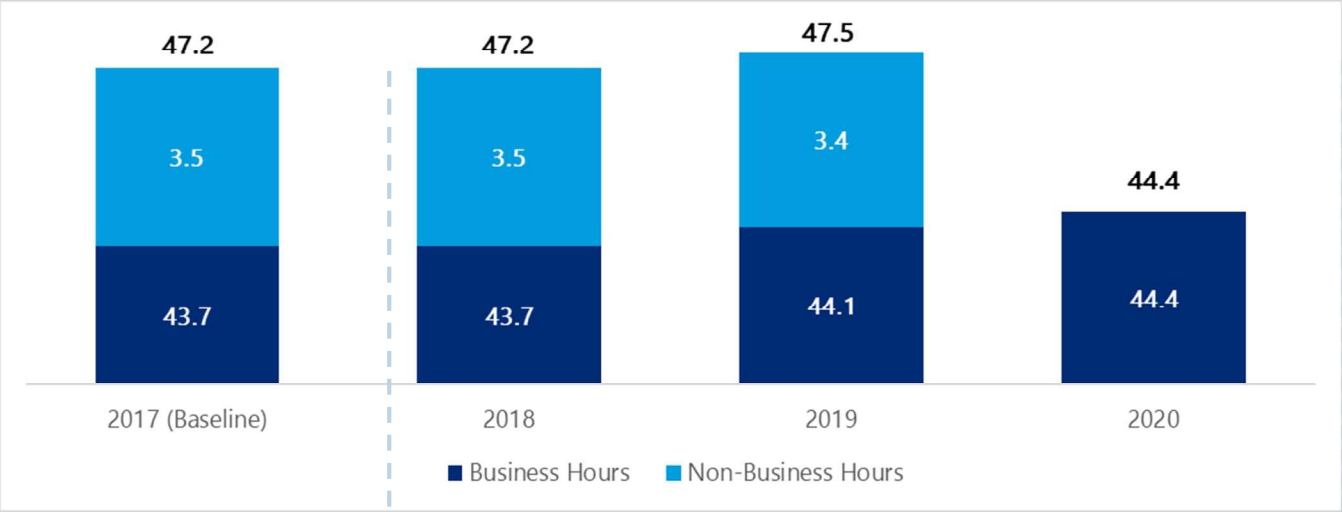
As is shown in Figure 6.1, at most a 7% variance exists between DYs through 2020. Between baseline and 2019, there was less than 5% variance, but between 2019 and 2020 there was a 7% increase in provider revenue. This variance is due to increased program enrollment. Throughout the PHE, disenrollment from the Gateway project has been suspended. Primary care payments to providers increase as enrollment increases. There was a 17% increase in provider revenue between 2020 and 2021 and a 35% decrease in provider revenue between 2021 and 2022. As members began to

transition to Medicaid coverage in 2022, payments from the Gateway project began to decrease. This indicates that the coverage approach to provider reimbursement and incentive payments are providing a stable revenue stream for the number of members covered.

Question: What variance, if any, exists in primary care provider availability and primary care service array across the evaluation period?

Gateway provider survey data that includes core services, clinic hours, and certain wait time data, is collected annually from primary care providers. Data is provided for the prior CY (January 1–December 31) and is due to the SLRHC by July of the current CY templates used to collect data can be found in the approved evaluation design under "Attachment A. Gateway Provider Survey Templates". Due to COVID-19, clinics requested additional time to meet this access to care reporting requirement. Data collection for 2020 (CY) has concluded, while collection for 2021 (CY) and 2022 (CY) has been delayed due to the pandemic response. During analysis of provider survey data for 2020, it was noted that the number of total clinics decreased from 17 to 16 sometime between reporting in 2019 and 2022. This report assumes that the clinic closed in 2020, and impact on any metrics from this assumption are footnoted. Gaps in data collection are noted.

Figure 6.2. Primary Care Clinic Hours per Week[15]



2021 and 2022 reporting delayed due to COVID-19 pandemic.
Ten clinics offer hours outside of 8:00 am–5:00 pm Monday–Friday or weekends in 2017–2019. Non-business hours are averaged over total clinics, n=18 in 2017 and 2018, n=17 in 2019.

As is shown in Figure 6.2, provider availability has remained consistent across the reporting period for available data. On average, clinics are open slightly longer in 2019 than in 2017 and 2018, with

[15] Due to clinic consolidation across providers, the number of clinics is n=18 in 2017 and 2018, n=17 in 2019. There were 16 clinics in 2020, but two providers did not submit data on hours for seven clinics, so n=9 in 2020 for clinic hours charts.

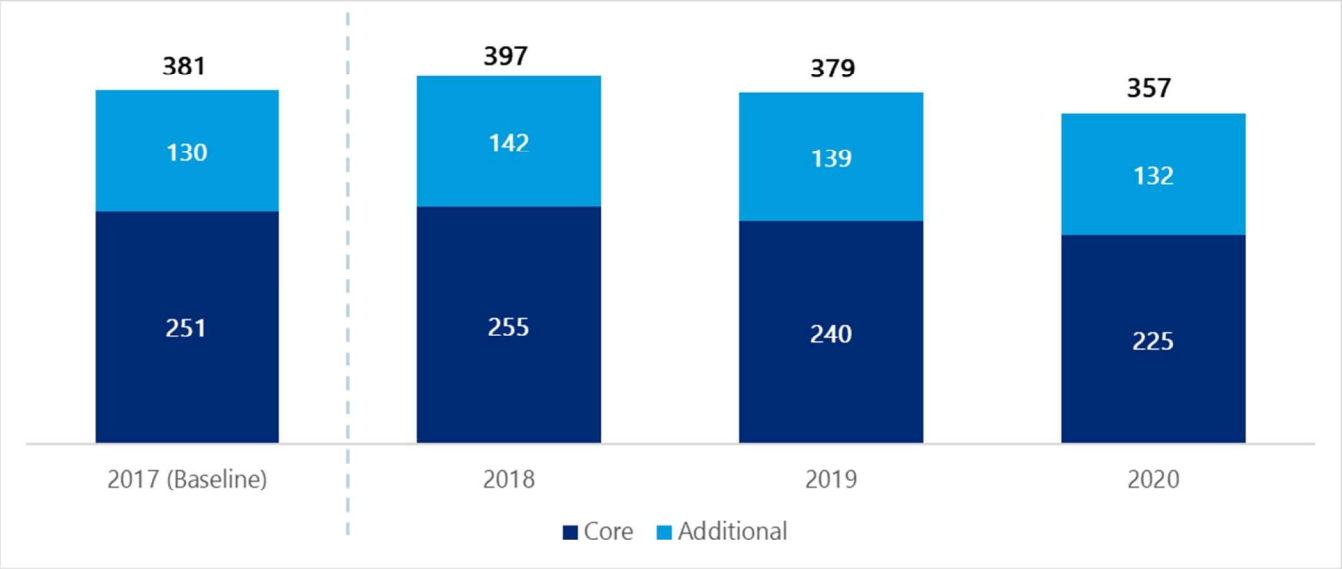
average business hours increasing, and average non-business hours decreasing. On average, clinic hours in 2020 are lower, with no clinics reporting open non-business hours.

Available primary core and additional services are also self reported by clinic partners annually via the Gateway Provider survey. Each provider stipulates which of the primary care service offerings is available at their individual clinic locations. Provider service array is included below.

Table 6.1 Primary Care Provider Network Service Array

Core Services	Additional Services
Primary Medical Care	Nutrition
Dental Care	Youth Behavioral Health Services
Mental Health Services	WIC
Substance Abuse Services	Community Health Homeless Services
Podiatry	Prenatal Classes/Centering Pregnancy
Optometry	HIV Counseling
Enabling Services	Urgent Care
Pharmacy	Specialty Care
Chronic Disease Management	STD Clinic Services
Ophthalmology	Social Services
Case Management	Other: Pain Management
Social Services	Other: Chiropractic
Referral to Specialty Care	Other: Audiology
Eligibility Assistance Services	
Radiology	
Clinical Laboratory Services	

Figure 6.3. Available Primary Care Services[16]



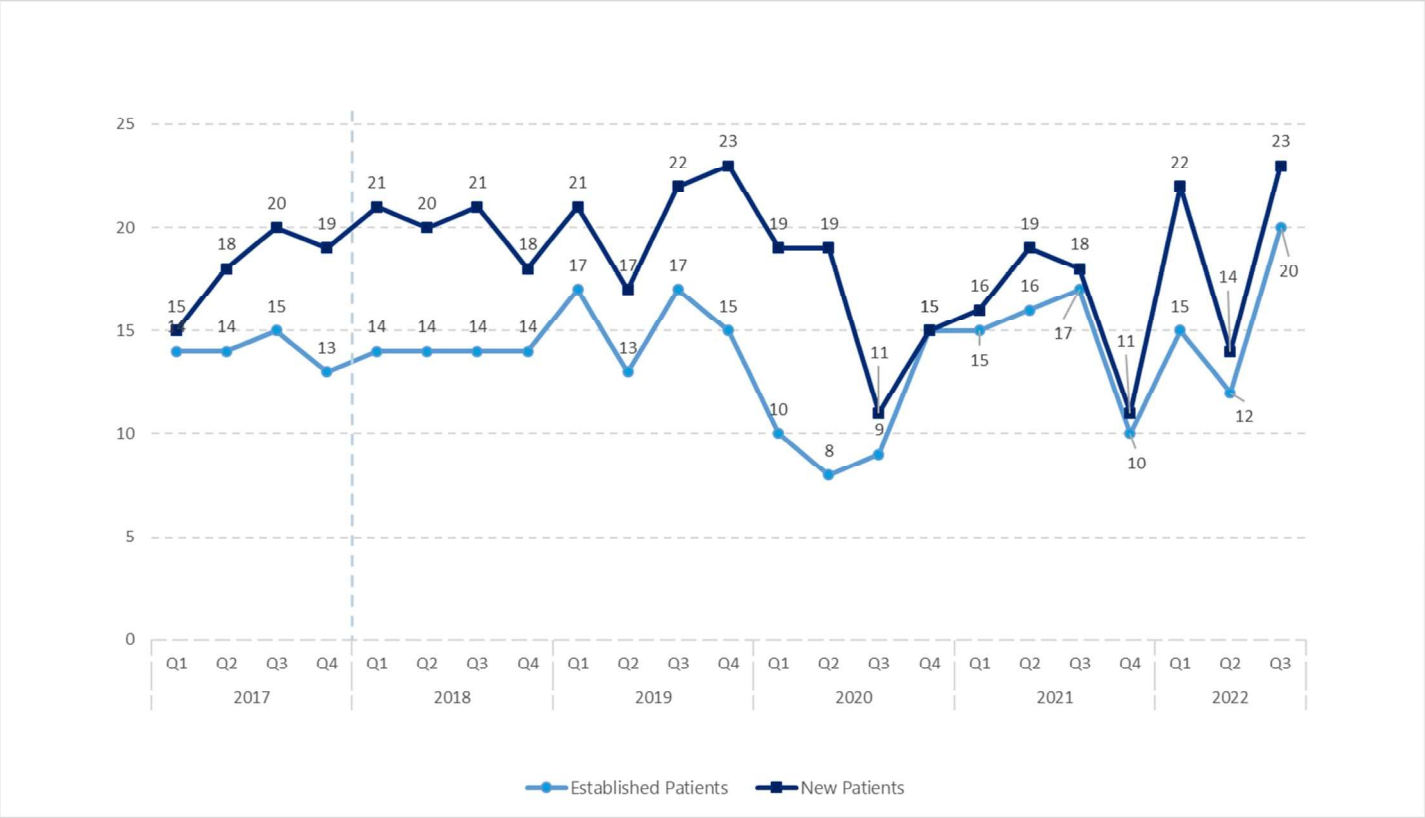
As shown in Figure 6.3, levels of available primary care services, both core services and additional services, were similar throughout the demonstration across all providers. The reduction in clinic sites where Gateway members can access those services has resulted in the slight decrease across the reporting period.

[16] This chart includes an estimated 169 available primary care services in 2020 from seven clinics with two providers, BJK People's and Affinia, based on the 2019 data from the Gateway Provider survey. The self reported 2020 data on primary care services from these two providers was unavailable at the time of annual reporting. Excluding these seven clinics, the remaining nine clinics had 188 primary care services in 2020.

Question: What variance, if any, exists in access to primary and specialty care across the evaluation period?

The following figures compare clinic wait times for new and established patients for primary care services throughout the demonstration. Non-urgent wait times are reported at the close of each quarter, and urgent wait times are provided on an annual basis for Gateway to Better Health patients at each primary care provider home via the Gateway Provider survey.

Figure 6.4. Primary Care Clinic Non-Urgent Wait Times for New and Established Patients (Average Number of Days)[17]



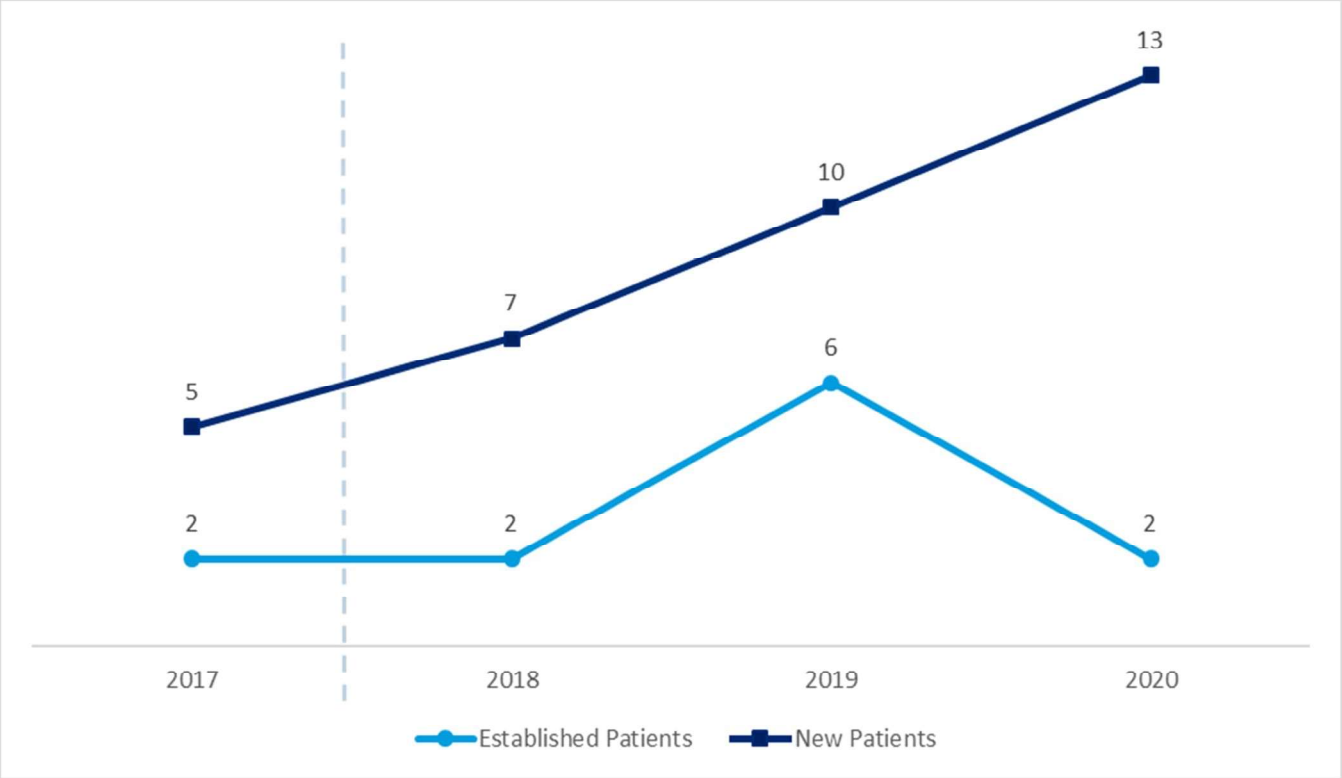
Average number of days until third next non-urgent appointment.
Number of clinics is n=18 in 2017 and 2018, n=17 in 2019, and n=16 in 2020 onward.

For new patients, the longest wait time for non-urgent care was 23 days across the reporting period. For established patients, the longest wait time was approximately 20 days (Figure 6.4). Prior to 2020, the largest variance in wait times for new patients was from 15 to 23 days, an increase of 53%. For

[17] Due to clinic consolidation across providers, the number of clinics is n=18 in 2017 and 2018, n=17 in 2019, and n=16 in 2020 and 2021 for primary care wait times. For 2020, non-urgent wait times were revised from interim evaluation to reflect n=16 clinics instead of n=17.

established patients the largest variance in wait times was from 13 to 17 days, an increase of 31%. Wait times for non-urgent care for both new and established patients decreased for the first three quarters of the COVID-19 pandemic due to adjustments in care, beginning in the first quarter of 2020. Wait times for non-urgent care for both new and established patients showed a return to earlier levels of wait times during the fourth quarter of 2020 through the third quarter of 2021. Wait times for non-urgent care for both new and established patients were more variable and also showed increasing trends in the fourth quarter of 2021 through 2022 as the program was closing down. The largest variance in the demonstration period, including the baseline year of 2017, were increases of 109% for new patients and 150% for established patients from the low points of the PHE to the highest wait times near the close of the program (Figure 6.4).

Figure 6.5 Primary Care Clinic Urgent Wait Times for New and Established Patients (Days)[17]

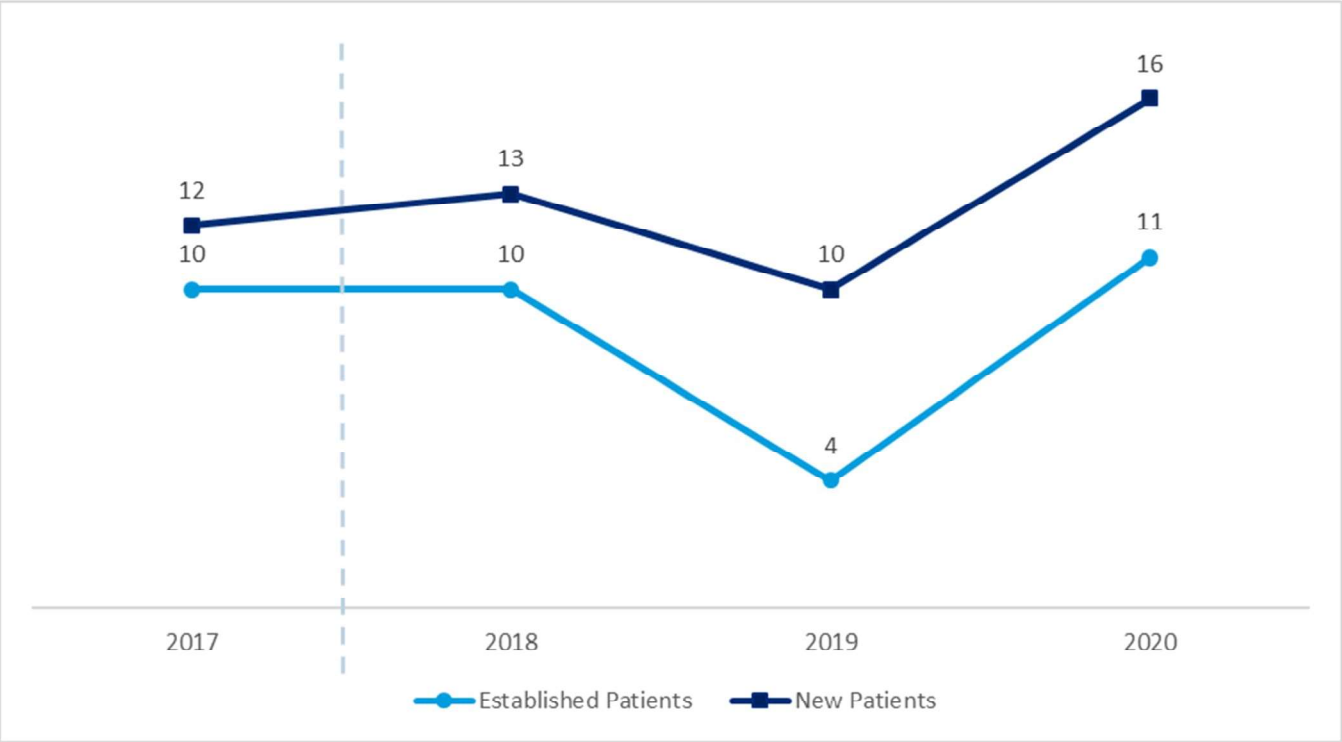


2021 reporting delayed due to COVID-19 pandemic.

Urgent wait times for new patients increased by 2–3 days each year over the demonstration. However, urgent wait times for established patients have remained constant, except 2019. Urgent wait times for established patients decreased to previous levels in 2020 (Figure 6.5).

Specialty care wait times and referrals are also closely monitored to ensure patients receive the additional medical care not available to members within a primary care setting. Non-urgent specialty care wait time data is collected annually via the Gateway Provider survey data process. Referral data is tracked and reported monthly via the Demonstration's call center, AHS.

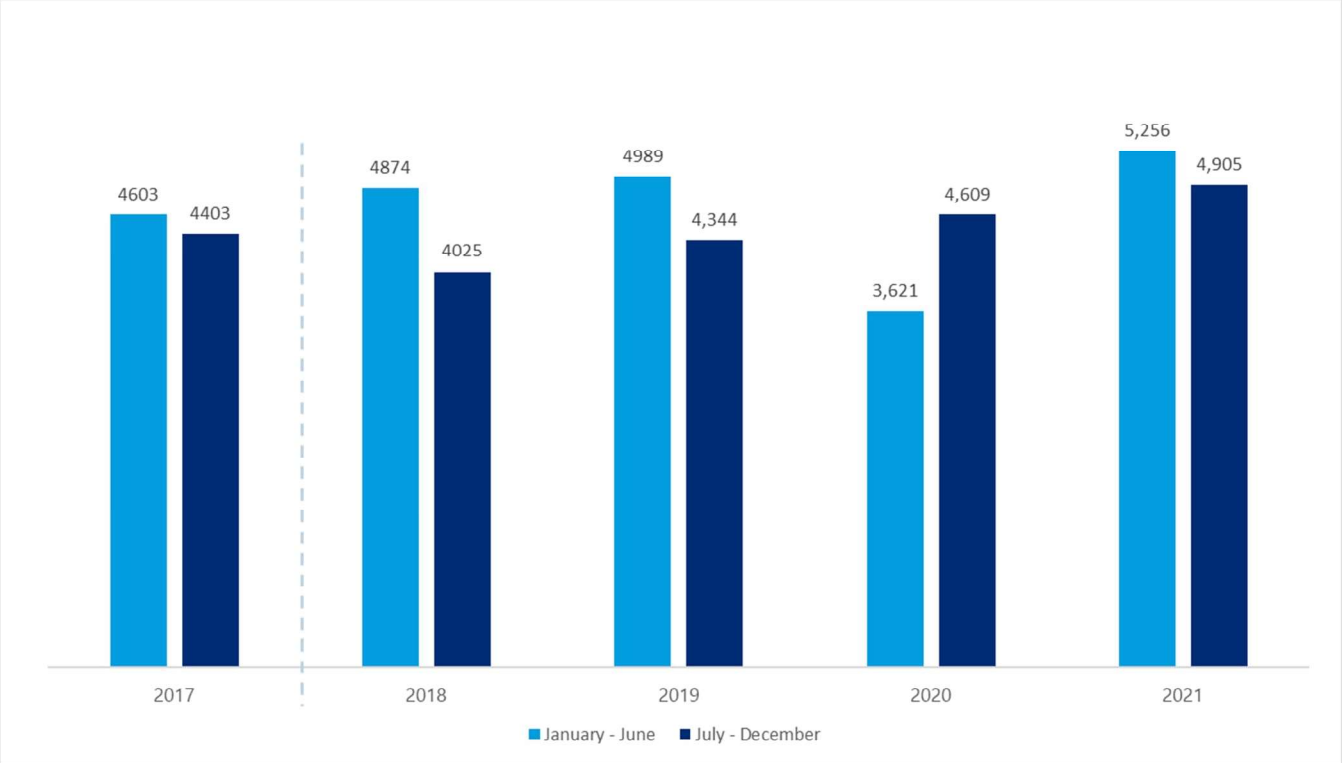
Figure 6.6. Specialty Care Non-Urgent Wait Times for Patients (Days)[17]



2020 reporting delayed due to COVID-19 pandemic.
*2019 data may be incomplete due to the COVID-19 pandemic.

Little variance exists for specialty care non-urgent wait times year-over-year. Patients, on average, were able to see a specialist provider in less than two weeks across each service year through 2019 and in about three weeks in 2020. Increases in wait times were observed in 2020 above baseline levels during the PHE (Figure 6.6). The observed decrease in non-urgent specialty care wait times for established patients between 2018 and 2019 is likely due to incomplete data.

Figure 6.7. Specialty Care Referrals



Reported rates of medical referrals are based on AHS data as of November 4, 2022.

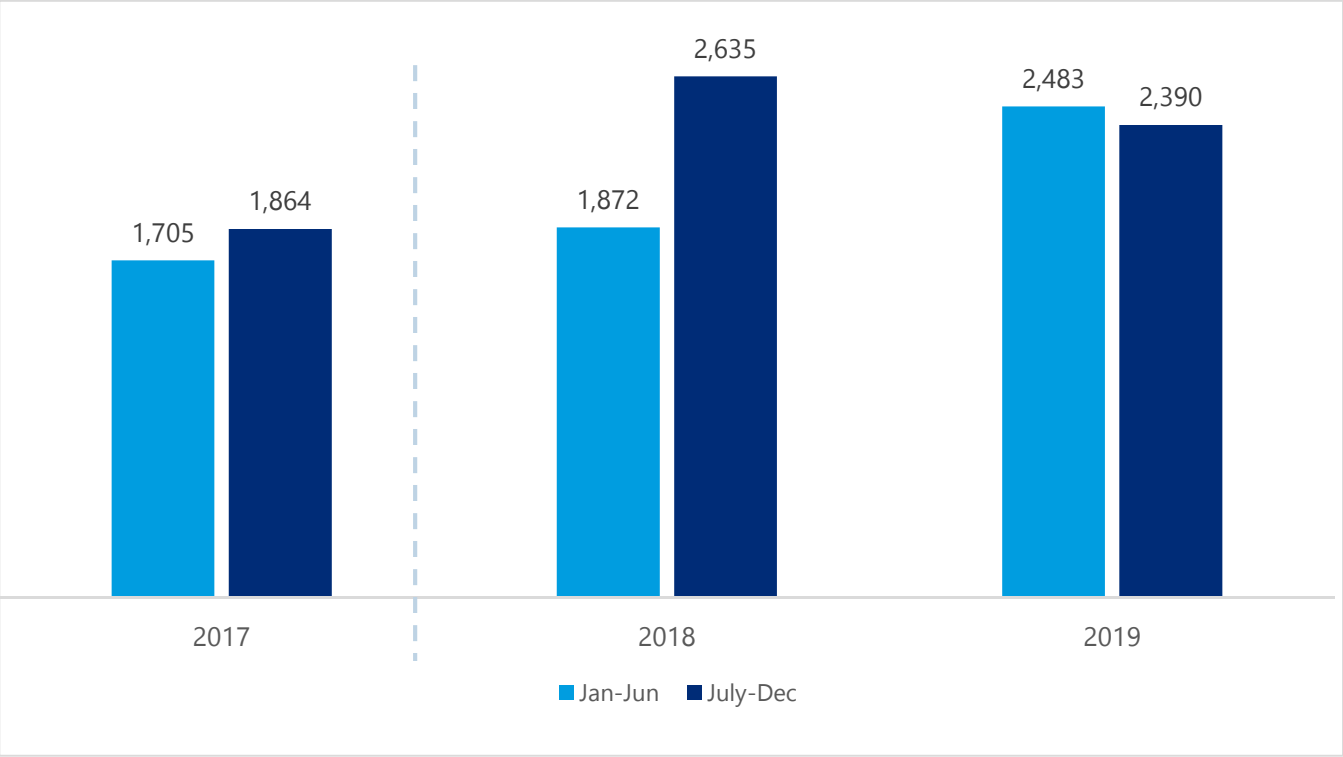
Specialty referrals remained consistent as well from 2017 through 2019, but dropped in the first half of 2020, likely due to the COVID-19 PHE. Specialty referrals have returned to previous levels in the second half of 2020, and increased in the first half of 2021 before dropping again in the second half of 2021. Specialty referrals are usually higher in the first half of the year than in the second half of the year over the demonstration, except for during the COVID-19 PHE in 2020 (Figure 6.7).

Hypothesis 2: Connecting and engaging low-income uninsured individuals to a Gateway primary care home corresponds with sustained or increased primary care utilization.

The summative evaluation addresses six questions under Hypothesis 2.

Question: Have low-income uninsured adults in St. Louis City and St. Louis County connected to a primary care home?

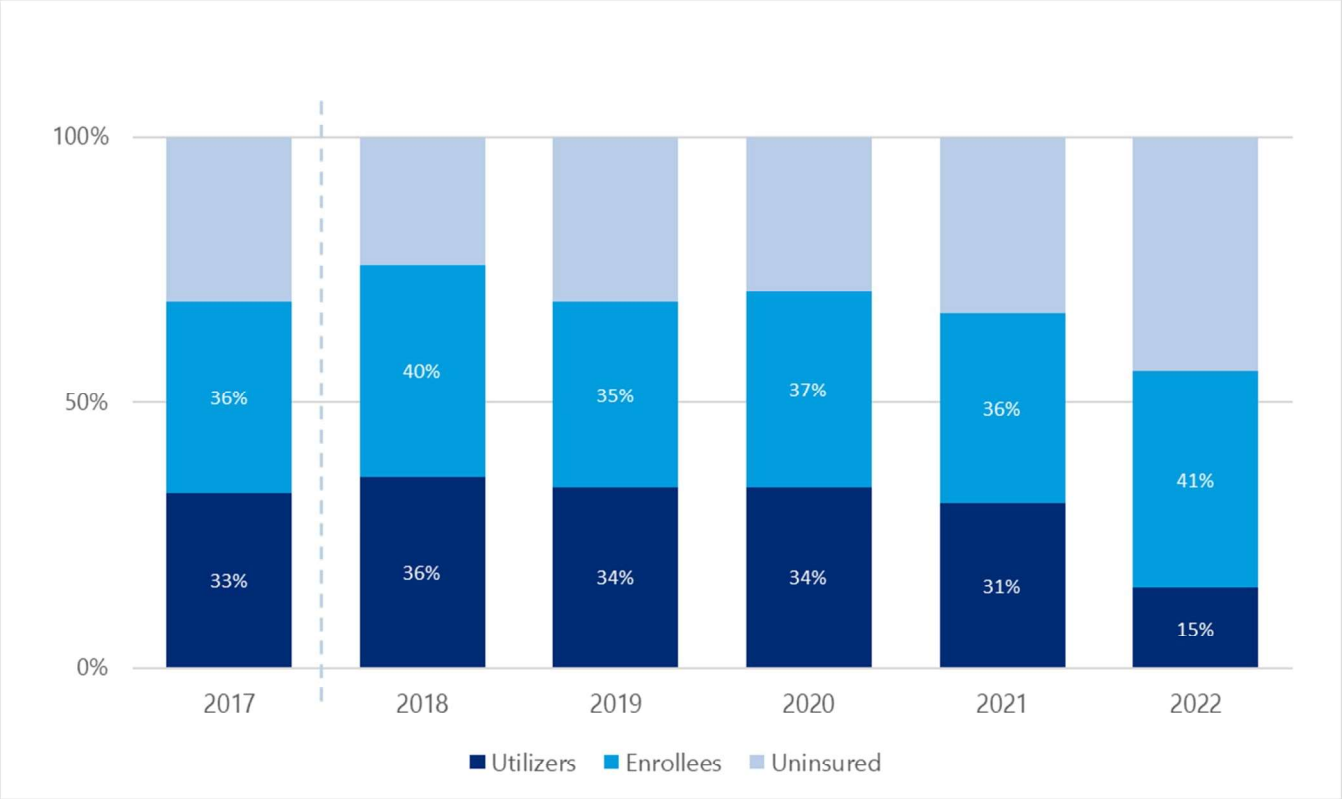
Figure 6.8. Low-Income Uninsured Adults Newly Enrolled in Gateway



Reporting of this P4P metric suspended in 2020 due to COVID-19 pandemic.

The demonstration enrolled between 3,500 and 4,800 new patients into the project annually for the years 2017 to 2019 (Figure 6.8).

Figure 6.9. Percent Low-Income Uninsured Adults in Gateway (Enrollees and Unique Users)



Total number of eligible uninsured adults (ages 19–64, with incomes 100% Federal Poverty Level) per year are reported based on American Community Survey data from the preceding year: 2017 n = 34,245 is 2016 ACS estimate, 2018 n = 28,800 is 2017 ACS estimate, 2019 n = 29,121 is 2018 ACS estimate, 2020 n = 25,387 is 2019 ACS estimate. 2020 ACS data was not available so 2021 and 2022 n = 26,394 is 2021 ACS estimate.

Based on US Census Data for the region, the Gateway to Better Health project provided a medical service to approximately 35% of eligible residents through 2020, decreasing slightly in 2021 and dramatically in 2022 to 15% of eligible residents as the program closed. Meanwhile, approximately 70% to 75% of eligible residents were enrolled into the demonstration through 2020, decreasing slightly in 2021 and dramatically in 2022 to 56% of eligible residents as the program closed. This highlights that outreach efforts to connect with eligible patients were successful before the transition of members to Medicaid began. Penetration rates for both metrics remained consistent with the baseline year until the program began to close (Figure 6.9).

Question: Has Gateway enrollment reduced the perception of barriers to primary and specialty care for enrollees and providers?

On an annual basis, both patients and providers are surveyed to endorse their level of confidence that if the Gateway program ended, patients could continue to access necessary health care.

Question from the patient survey:

5. **If the Gateway program ended**, how confident are you that you could:

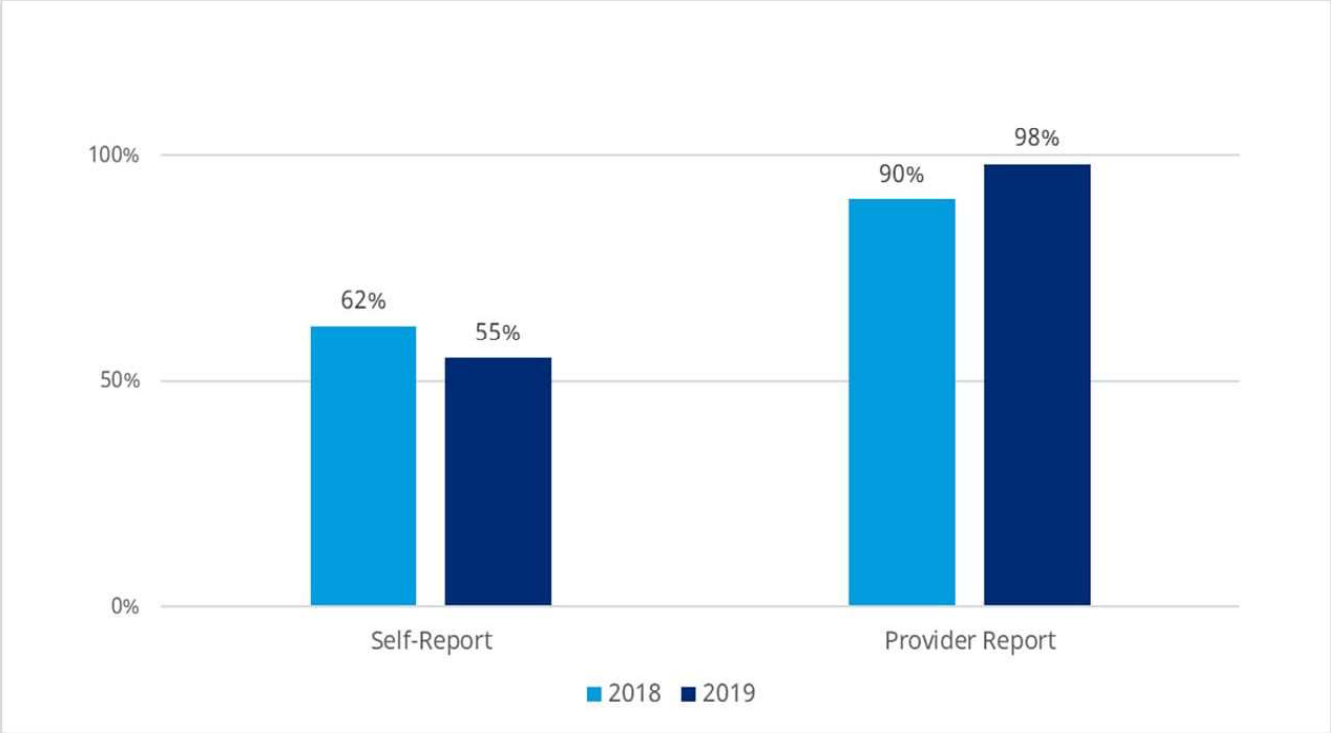
a. Afford to see a doctor	Not at all confident	Not too confident	Somewhat confident	Very confident
b. Afford prescription medicines	Not at all confident	Not too confident	Somewhat confident	Very confident
c. Coordinate all of your health care needs	Not at all confident	Not too confident	Somewhat confident	Very confident
d. Get necessary medical tests	Not at all confident	Not too confident	Somewhat confident	Very confident
e. Follow the treatments your doctor recommends	Not at all confident	Not too confident	Somewhat confident	Very confident

Question from the provider survey:

2. If the Gateway program ended, how confident are you that current Gateway enrollees could:

a. Could keep their overall health the same	Not at all confident	Not too confident	Somewhat confident	Very confident
b. Could access quality medical care	Not at all confident	Not too confident	Somewhat confident	Very confident
c. Could afford to see a primary care provider	Not at all confident	Not too confident	Somewhat confident	Very confident
d. Could afford prescription medicines	Not at all confident	Not too confident	Somewhat confident	Very confident
e. Could afford to see a specialist doctor	Not at all confident	Not too confident	Somewhat confident	Very confident

Figure 6.10. Barrier to Health Care (Self-Report and Provider Report)



Measure was added in 2018. No surveys were conducted in 2020, 2021, or 2022 due to COVID-19 pandemic at provider request. 2018 (Self report n = 1,683, Provider report n = 250) and 2019 (Self report n = 2,936, Provider report n = 155).

Over 50% of patients across the reporting period responded that they were not confident they could continue to access appropriate medical care if the Gateway program ended. By comparison, over 90% of providers across both survey periods indicated that they were not confident patient care could continue at the level established by the demonstration project (Figure 6.10). More patients answered the survey question in 2019, and fewer providers answered the survey questions in 2019 compared with the baseline year of 2018 (Figure 6.10).

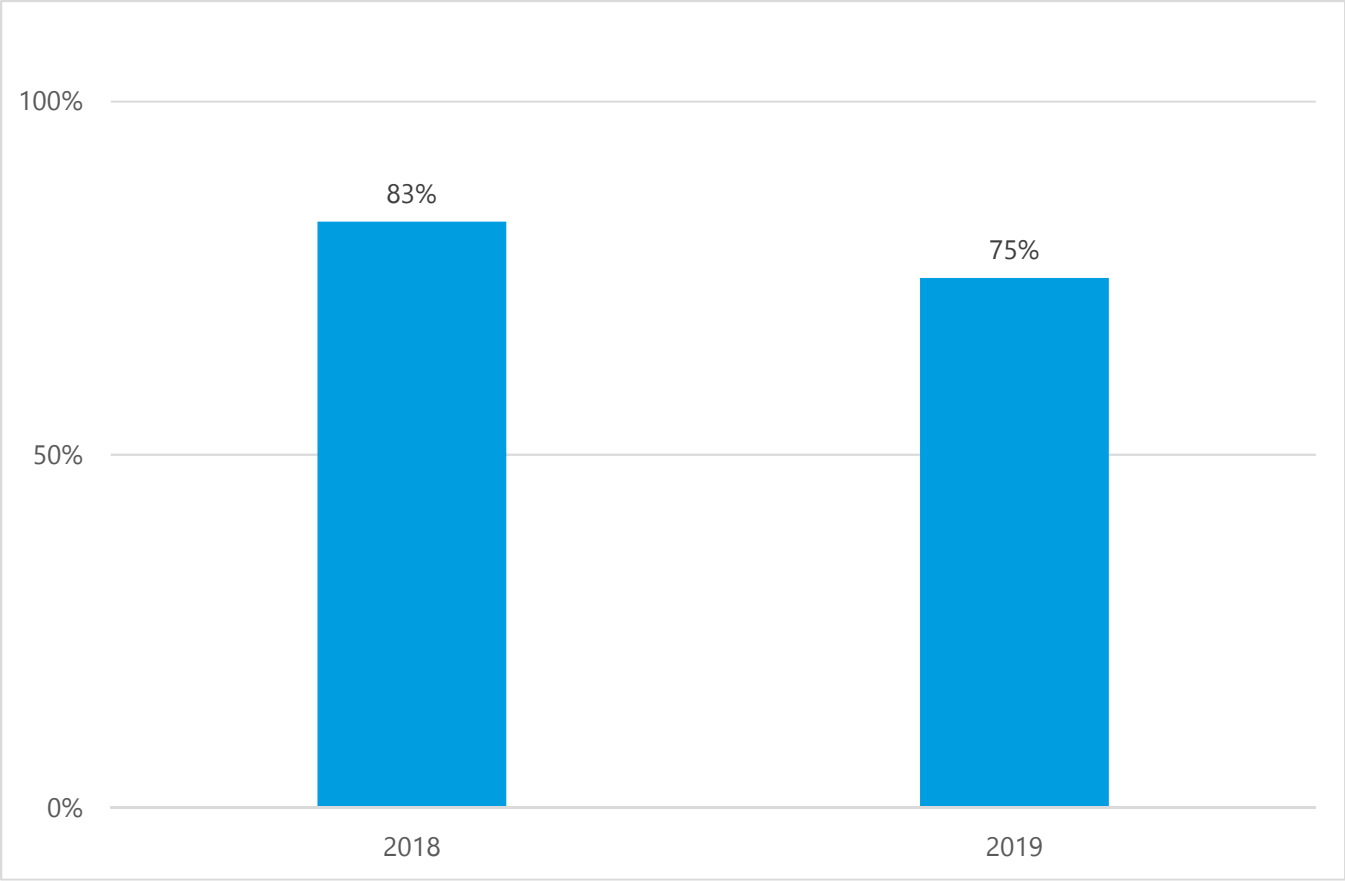
Question: Have Gateway members been engaged by their primary care with member education, outreach, and follow-up?

On an annual basis, patients are asked to endorse their satisfaction with their health center's communication and care.

4. Please rate your health center's communication with you:

a. How promptly we answer your phone calls	Poor	Fair	Okay	Good	Very Good
b. Information from our website and other materials to help you get the healthcare you need	Poor	Fair	Okay	Good	Very Good
c. Getting advice or help from the clinic when needed during office hours	Poor	Fair	Okay	Good	Very Good
d. Helpfulness of our health information materials	Poor	Fair	Okay	Good	Very Good

Figure 6.11. Engagement Self report

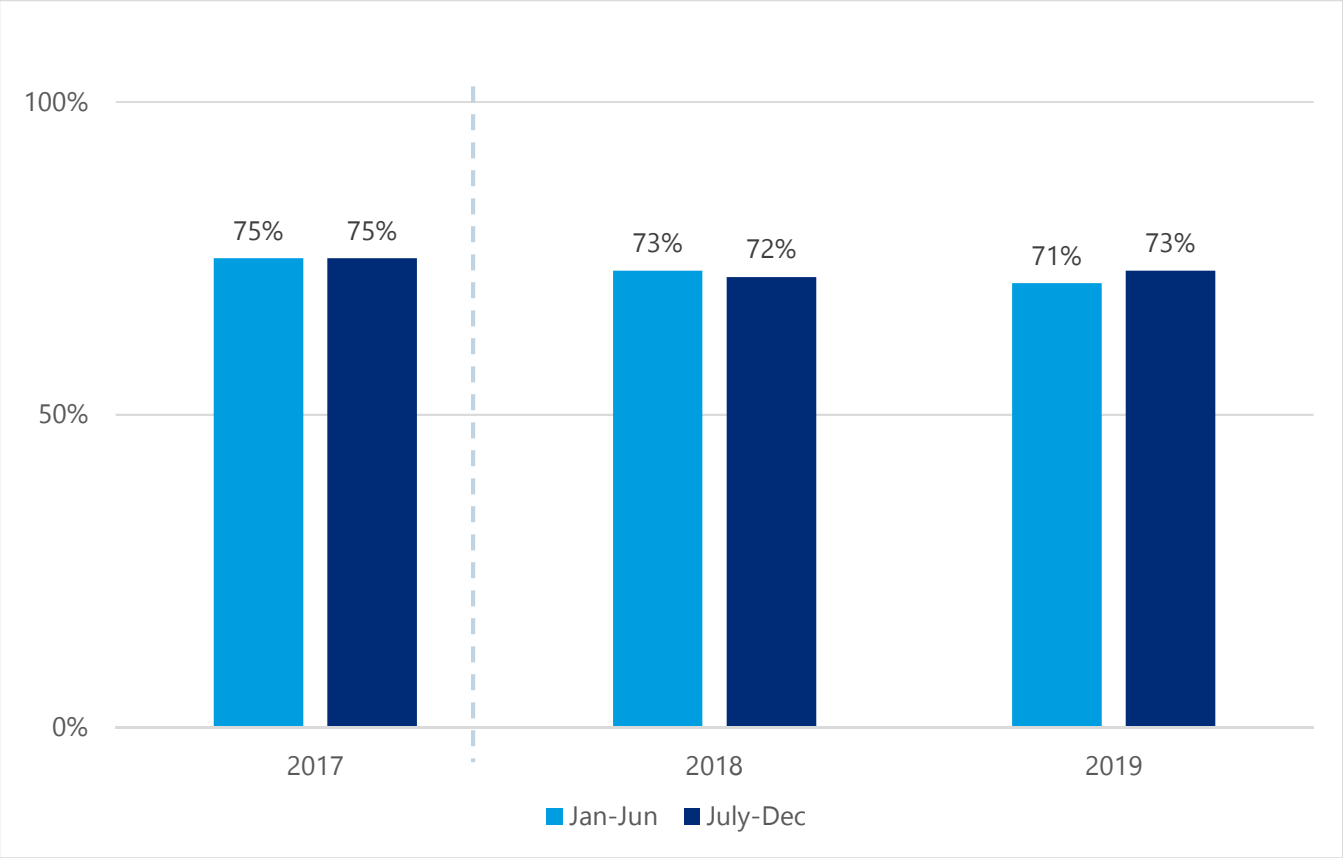


Measure was added in 2018. No surveys were conducted in 2020, 2021, or 2022 due to COVID-19 pandemic at provider request. 2018 n = 1,319 and 2019 n = 2,266.

For the two years of available data, patients report high rates of satisfaction with their health center's helpfulness and communication (Figure 6.11). More patients answered the survey question in 2019, compared with the baseline year of 2018.

The SLRHC also tracks new patients coming into the Gateway program and whether these individuals are engaging with their primary care providers by having an office visit within one year of enrolling. This metric is included in each center's P4P incentive payments to ensure efforts toward outreach and engagement with primary care.

Figure 6.12. Newly Enrolled Office Visit

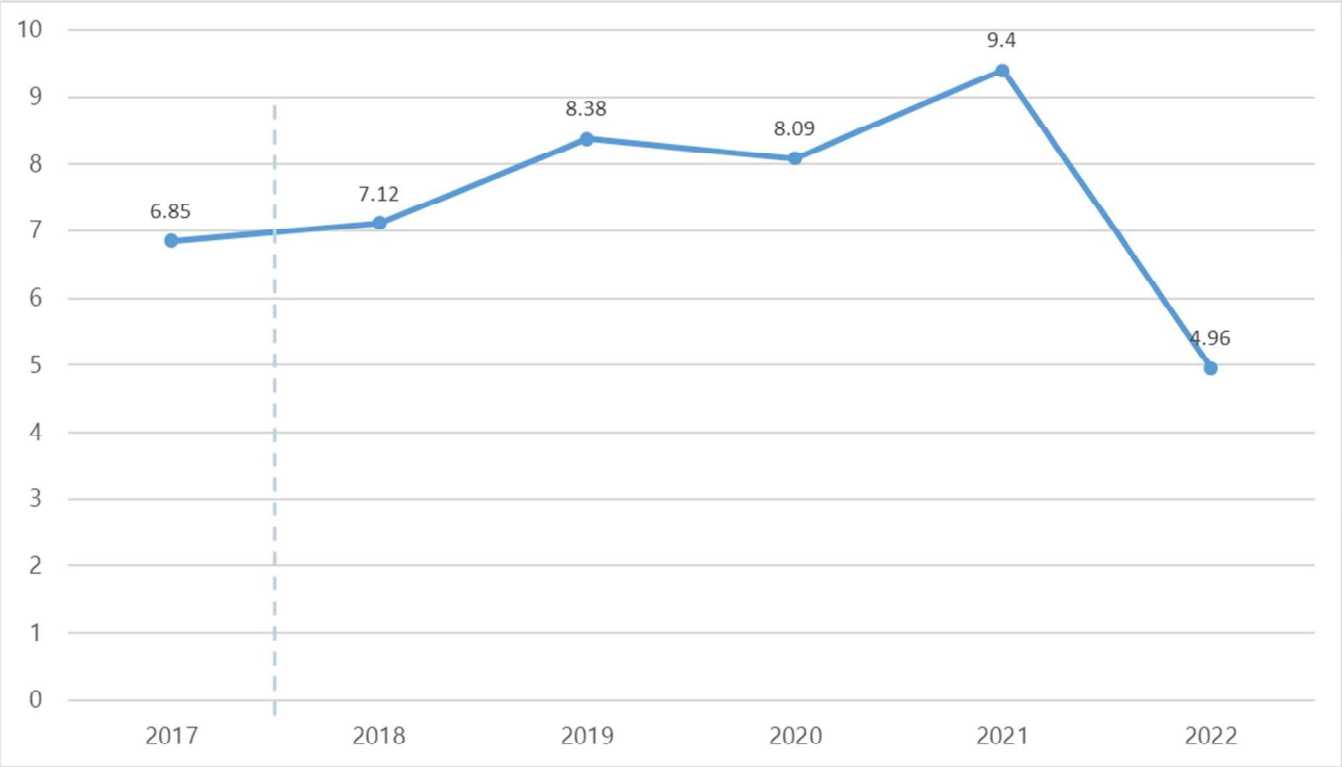


Reporting of this P4P metric suspended in 2020 due to COVID-19 pandemic.

Throughout the reporting period, 71% to 75% of patients have been connected with a new patient visit during their first year of enrollment. This result has remained steady (Figure 6.12).

Question: Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient medical services year-to-year?

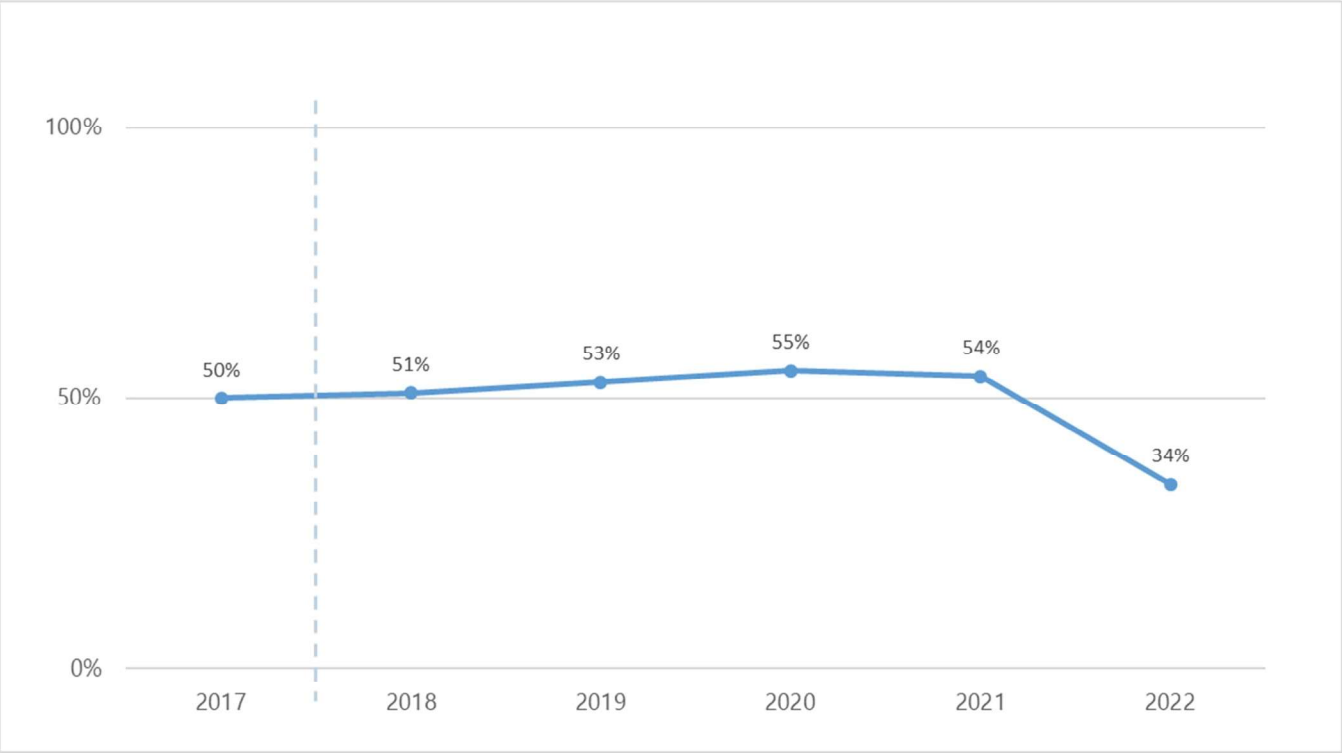
Figure 6.13. Medical Service Line Average Utilization



Claims data as of February 9, 2023.

Gateway claims data reveals an increased level of utilization across the service period when examining the number of medical encounters across a given year by unique members (Figure 6.13). Compared with the baseline year of 2017, 2020 saw an increase of approximately one more encounter per patient, and 2021 saw an increase of approximately two more encounters per patient. A decrease in encounters per patient is observed in 2022 as the program closes.

Figure 6.14. Medical Service Line Unique Users Penetration



Claims data as of February 9, 2023.

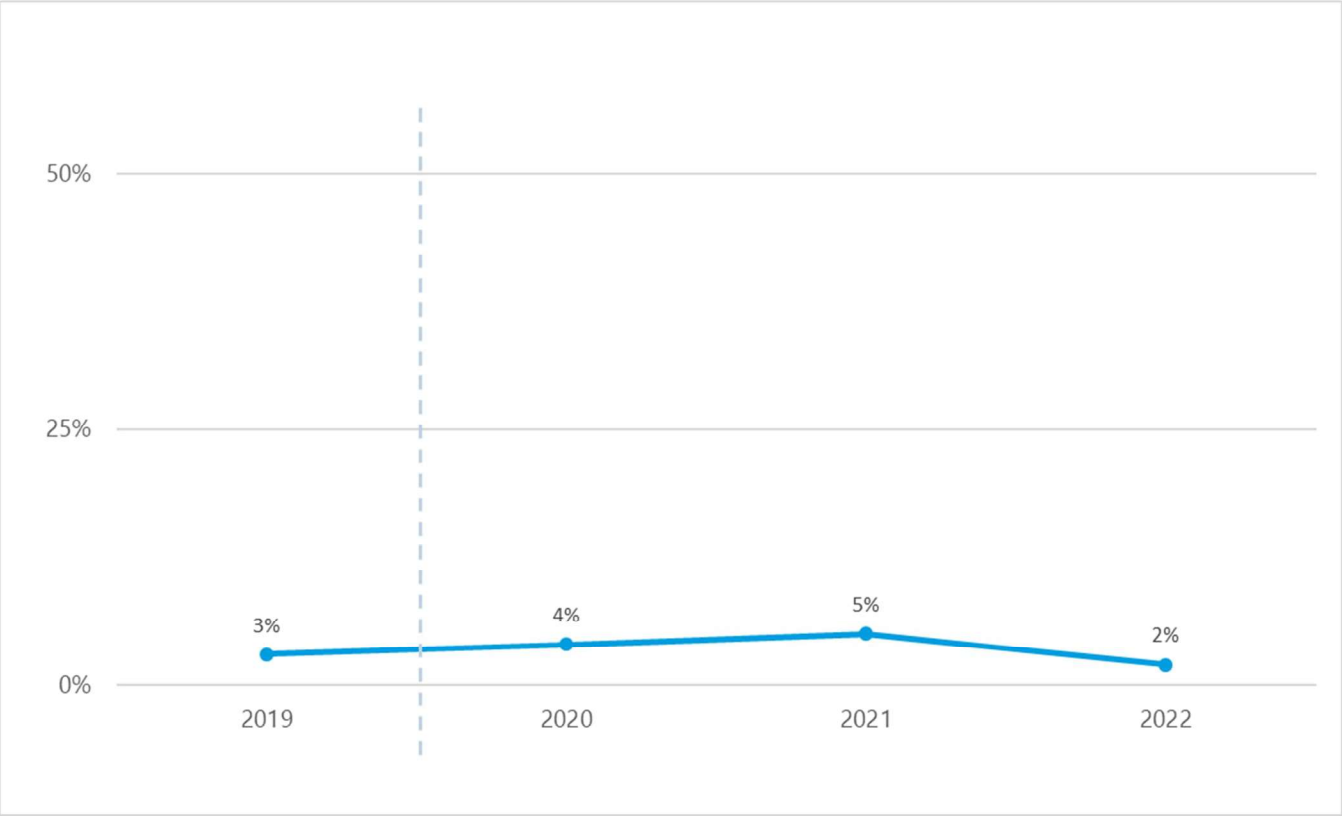
We also see a small steady increase, 50% to 55%, of Gateway members accessing care at their primary care health home from the years 2017 through 2020. A slight decrease in 2021 and then a bigger decrease to 34% of Gateway members accessing care at their primary care health home is seen in 2022 as the program closes (Figure 6.14).

Question: Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient substance use services year-to-year?

In August 2018, the State requested authority to amend the Gateway demonstration to include a SUD treatment benefit. This request was approved by CMS with a February 1, 2019 implementation date. This additional benefit covers outpatient SUD services, including pharmacotherapy, for SUD treatment of Gateway enrollees with an SUD-related diagnosis.[18]. All SUD office visits and generic pharmaceuticals are provided by the primary care home and are considered a core primary care service. The benefit became accessible to Gateway providers and members partway through 2019 for a reduced timeframe of only 11 months out of the year.

[18] F10–F18 are ICD-10 codes for mental and behavioral disorders due to psychoactive substance use.

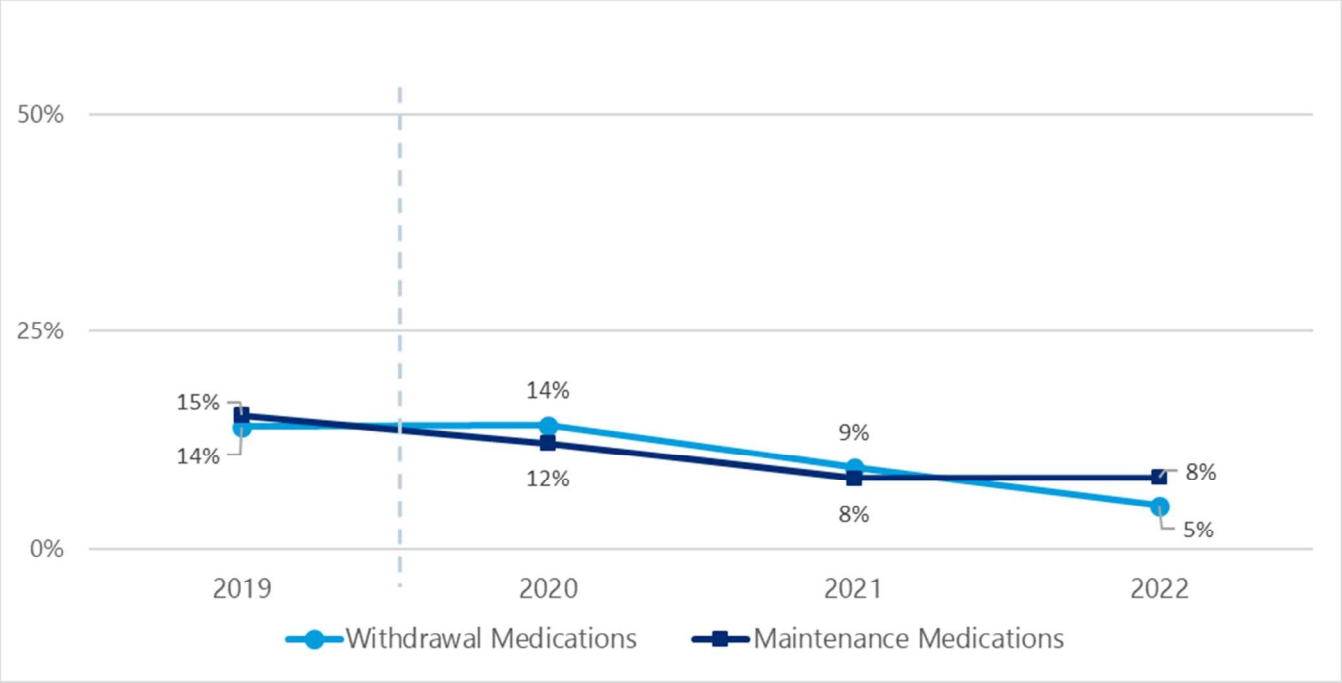
Figure 6.15. Substance Use Service Line Unique Users Penetration



Claims data as of February 9, 2023.
Benefit began on February 1, 2019.

Since the benefit's inception, Gateway enrollees utilizing SUD services increased from 3% to 5% per CY. The percentage of Gateway enrollees utilizing SUD services decreased in 2022 to 2% as the program closed (Figure 6.15).

Figure 6.16. AUD Medication Management (Withdrawal and Maintenance)



Claims data as of February 9, 2023.
Benefit began on February 1, 2019.

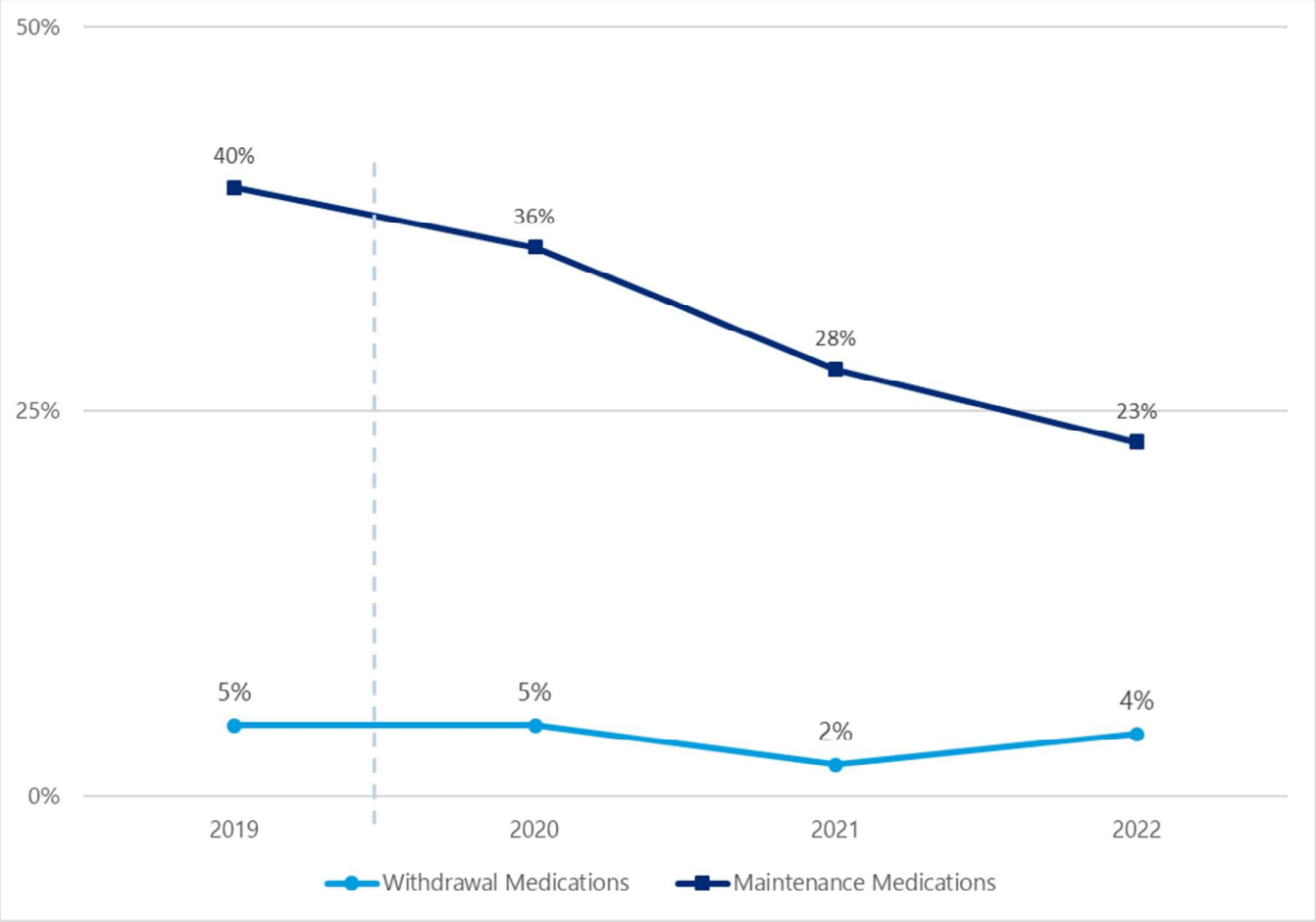
Approximately 14% of enrollees with an AUD diagnosis were prescribed medication to manage alcohol withdrawal symptoms, while approximately 12%–15% of enrollees with an AUD diagnosis were prescribed maintenance medication to support alcohol use treatment between 2019 and 2020. A decrease in prescriptions for maintenance medications and to manage alcohol withdrawal symptoms was observed in 2021 with a further decrease in 2022 for withdrawal medications as the program closed (Figure 6.16).

As the SUD benefit launched in February 2019, the Missouri Opioid State Targeted Response and State Opioid Response (Opioid STR and SOR) project, overseen by the Missouri Department of Mental Health (DMH) and University of Missouri, St. Louis — Missouri Institute of Mental Health (UMSL-MIMH), approached the Gateway Pilot Program Planning Team with an opportunity for partnership aimed at collaboratively, effectively, and efficiently caring for those across the St. Louis region seeking SUD treatment. The primary focus of the Opioid STR/SOR project is multidisciplinary provider training and education on MAT and the provision of evidence-based treatment services to uninsured individuals with OUD that present for care within State-funded programs (Comprehensive Substance Treatment and Rehabilitation [CSTARs] Programs). As patients enroll in treatment under CSTAR programs, the first step is overseeing an individual's safe and medication-assisted withdrawal from opiate drugs. From there, the Gateway SUD benefit becomes an option, providing eligible uninsured adults the opportunity to enroll in the Gateway program and seek ongoing SUD treatment across one of Gateway's five partner clinics. In addition to the oversight of successful referrals

between CSTARs and the Gateway program, the STR/SOR team provided rigorous training to Gateway's primary care physicians on the proper management of MAT for OUD patients.

Since the implementation of the SUD benefit, Gateway primary care providers continue to collaborate with the STR/SOR team, allowing the CSTARs to focus on the earlier and more intensive phase of withdrawal treatment, and Gateway primary care providers to undertake the maintenance SUD treatment phase. While withdrawal medication is still available to those wishing to receive initial treatment at their community health center, more Gateway patients are accessing maintenance medications versus withdrawal medication via the Gateway program, as is evident in Figure 6.15. This concerted partnership ensures patients receive coordinated care, with greater opportunity for successful recovery.

Figure 6.17. OUD Medication Management (Withdrawal and Maintenance)



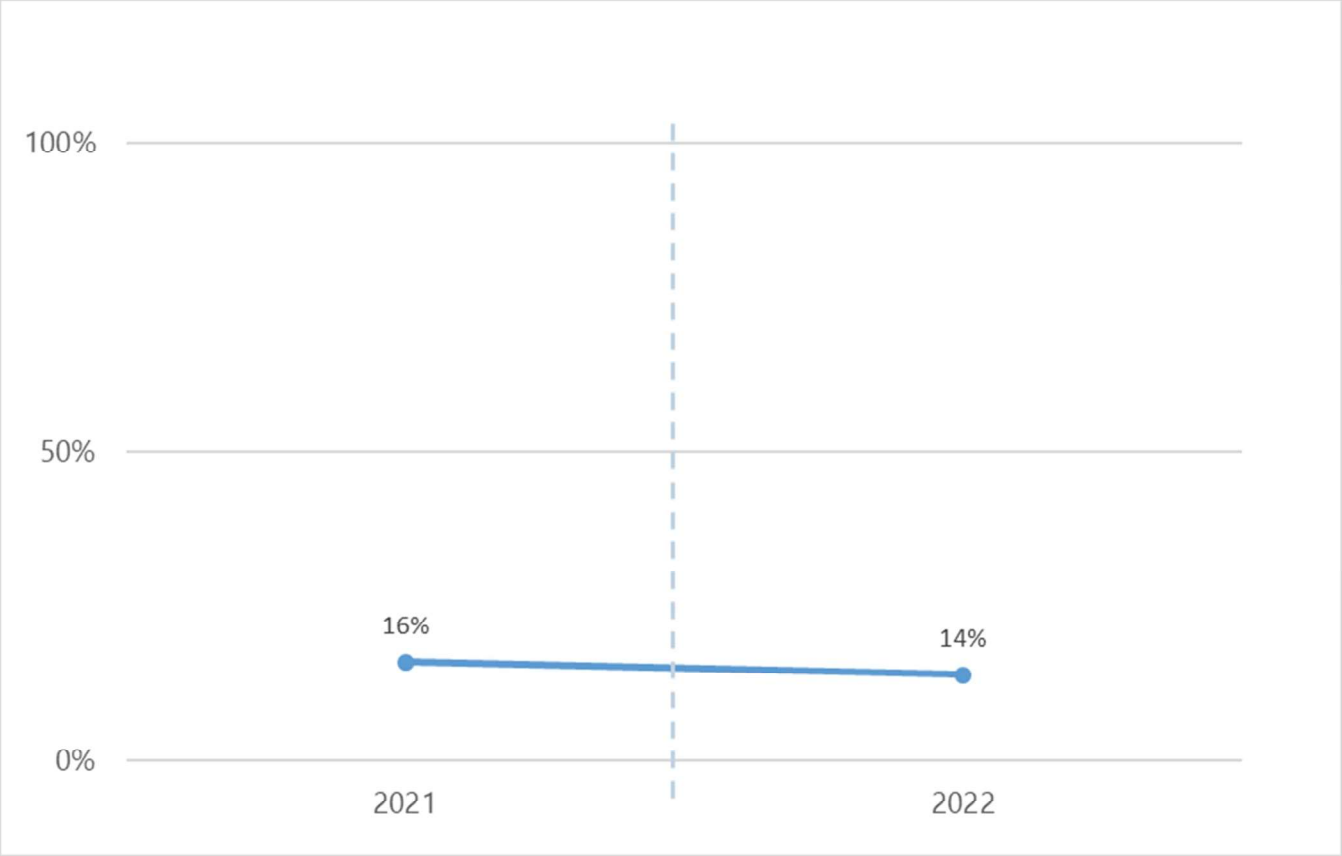
Claims data as of February 9, 2023.
Benefit began on February 1, 2019.

Approximately 4%–5% of enrollees with an OUD diagnosis were prescribed medication to manage withdrawal symptoms from opioids, with a drop in 2021 to 2%. A decreasing number of enrollees with

an OUD diagnosis were prescribed maintenance medication to support opioid use treatment under the MAT model, from 40% in 2019 to 28% in 2021, before declining to 23% in 2022 as the program closed (Figure 6.17).

Question: Do Gateway enrollees with pain-related diagnoses connected to a primary care home demonstrate increased utilization of outpatient physical function improvement services year-to-year?

Figure 6.18. Pain Diagnosis with Services in the Physical Function Improvement Service Line



Claims data as of February 9, 2023.
Benefit began January 1, 2021

We see a slight decrease from 16% to 14% of enrollees with pain diagnosis with services in the physical function improvement service line from 2021 to 2022 (Figure 6.18).

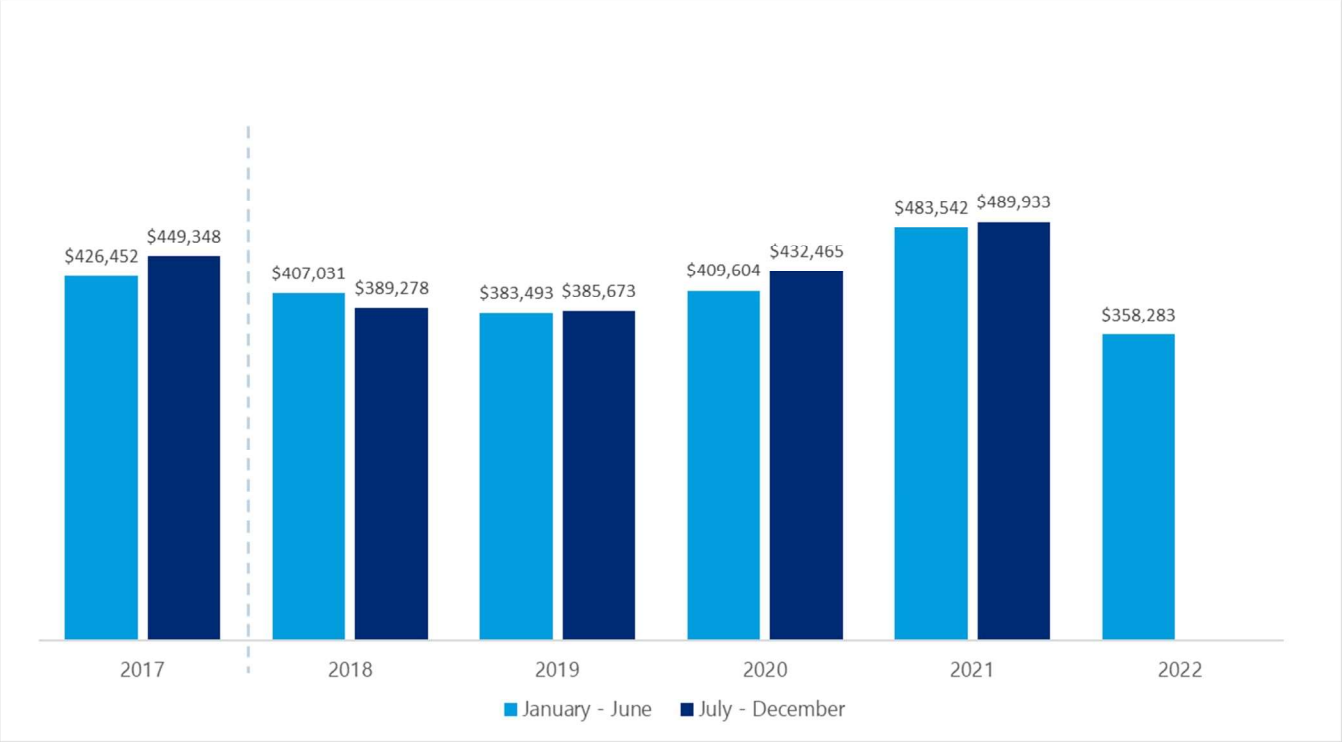
Hypothesis 3: Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.

The summative evaluation addresses five questions under Hypothesis 3.

Question: Does using value-based purchasing for provider reimbursement correspond with providers meeting incentive criteria on health and quality of care indicators?

Community health centers continue to perform well across P4P criteria and earn incentive payments throughout the demonstration.

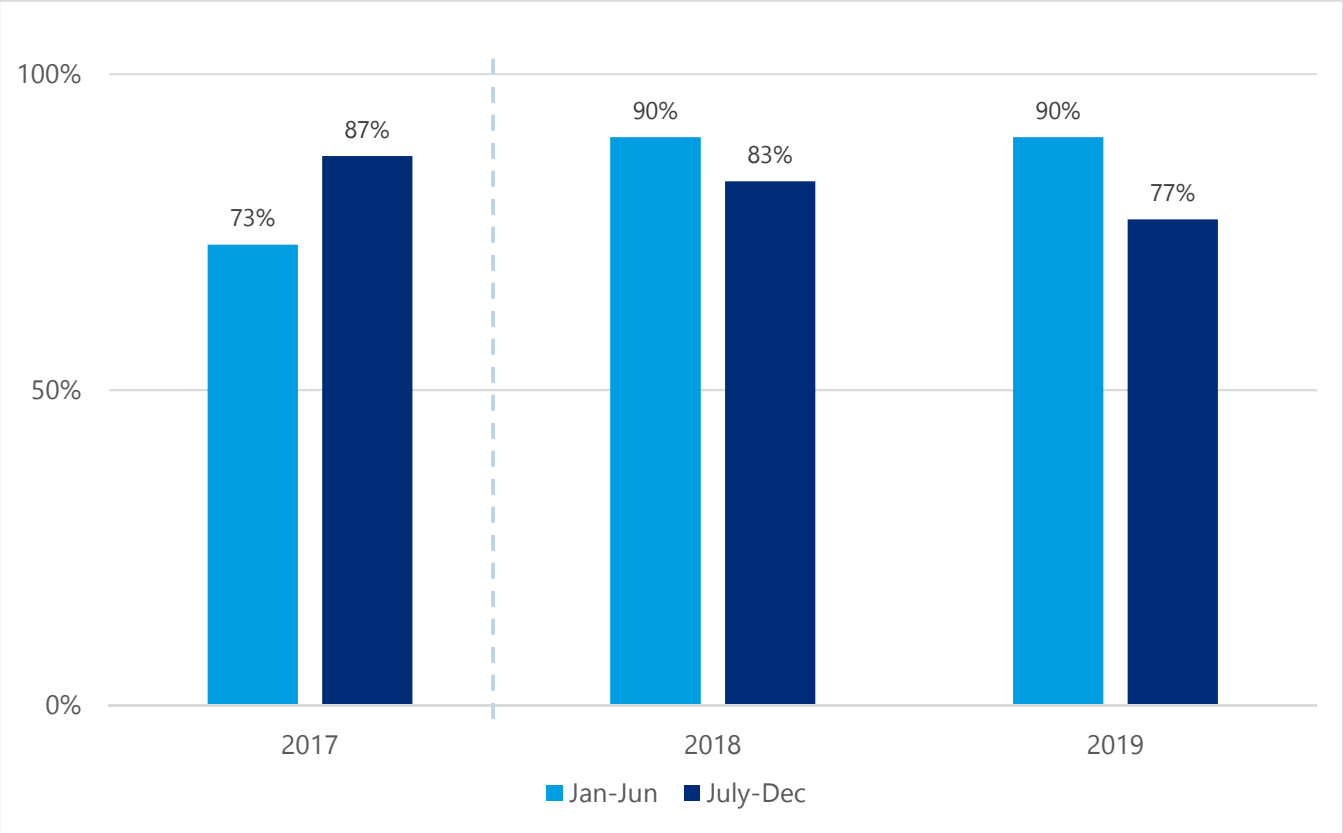
Figure 6.19. Primary Care Provider Incentive Payments



Reporting of this P4P metric suspended since 2020 due to COVID-19 pandemic.

These rates of payment have remained consistent over the reporting period, increasing in 2021 before declining in 2022 while the program closed (Figure 6.19). The P4P incentive protocol, outlined in Attachment G, requires 7% of provider funding to be withheld from Gateway primary care providers and evaluated against value-based performance metrics. Variance seen in incentive payment amounts is tied to decreases or increases in enrollment. Decreases in payment are seen as enrollment decreased from 2017–2019, and increased in 2020 and 2021 as enrollment increased due to the PHE. Providers earned back incentive payments in full (i.e., the 7% of provider funding withheld) across the reporting period.

Figure 6.20. P4P Incentive Criteria Score



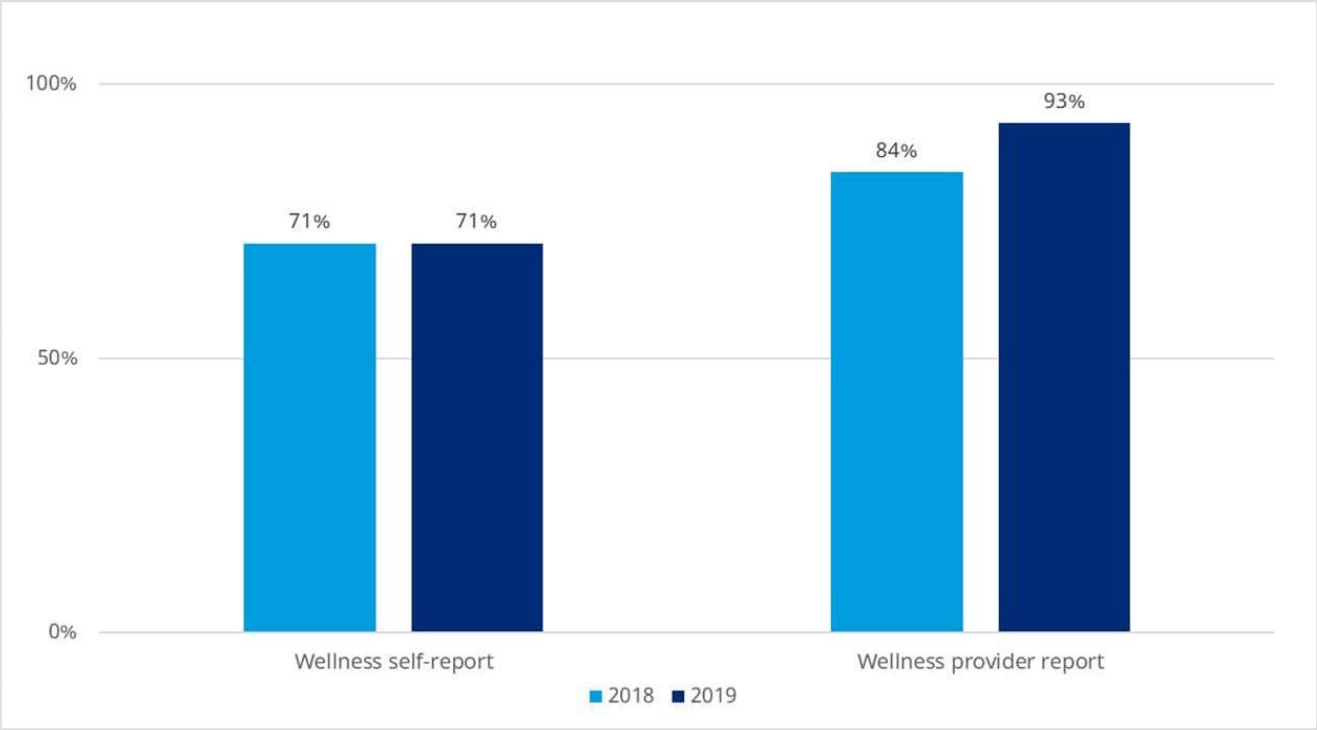
Reporting of this P4P metric suspended since 2020 due to COVID-19 pandemic.

Incentive criteria scores have remained consistent over the reporting period (Figure 6.20).

Question: Do Gateway members perceive that their health outcomes have improved throughout the demonstration period?

On an annual basis, patients and providers are surveyed to endorse whether they believe patients' overall physical health is better, worse, or the same.

Figure 6.21. Wellness (Self-Report and Provider Report)



Measure was added in 2018. No surveys were conducted in 2020, 2021, or 2022 due to COVID-19 pandemic at provider request.
2018 (Self report n = 322, Provider report n = 51) and 2019 (Self report n = 579, Provider report n = 30).

Each year, 71% of patients who responded to the survey reported that their overall health had improved due to enrollment in Gateway to Better Health and access to health care via their primary care health homes. Overwhelmingly, providers who responded to the survey endorsed by 84%–93% that Gateway to Better Health was having a positive impact on patient health (Figure 6.21).

Question: Have health outcomes for Gateway members improved each DY?

The SLRHC partners with the Missouri Primary Care Association (MPCA) to obtain information from the demonstration's five primary care health partners on a set of indicators that are collected at a statewide level. The metrics indicated are found to demonstrate population-level health and support both preventative care and chronic disease improvement for the region. The individual-level data is analyzed with descriptive statistics and multiple regression to identify whether there are overall health improvements each year.

For each metric, data was first summarized by the following categories: year of demonstration or baseline year (2017, 2018, 2019, 2020, 2021, and 2022), gender, age category (under 25, 25–44 years, and over 45 years at end of baseline year), race (Black/African American, White, or

Other/Unspecified), ethnicity (Hispanic/Latino, non-Hispanic/Latino). Years enrolled in Gateway between 2017 and 2022 is also calculated for each member included in metric calculation.

For this question, multiple logistic regression was used to study relationships and test whether statistically significant differences can be detected in the years of the demonstration (2018, 2019, 2020, 2021, and 2022) versus the baseline year of 2017 when controlling for demographic variables of age and gender. Multiple logistic regression was used to study differences between those who met the health outcome measured by the metric, versus those who were included in the study population not meeting the health outcome measured by the metric.

The following figures present the results of the logistic regression analysis in terms of *odds ratios*. The *odds* are the probability of success for one group (meeting the metric for a specific outcome measure) divided by the probability of failure for that same group (not meeting the metric for a specific outcome measures). The odds ratio is the odds of meeting versus not meeting the outcome metric in one group, for example males, divided by the odds of meeting versus not meeting the outcome metric in another group, females. The odds ratio is a number greater than or equal to zero. If the odds ratio is less than one, the interpretation is that the odds of the outcome metric for the group is less than the odds of the outcome metric for the comparison group. If the odds ratio is greater than one, the interpretation is that the odds of the outcome metric for the group is greater than the odds of the outcome metric for the comparison group.

Figure 6.22a. Tobacco Use Assessment and Cessation Intervention (Age Group by Year)

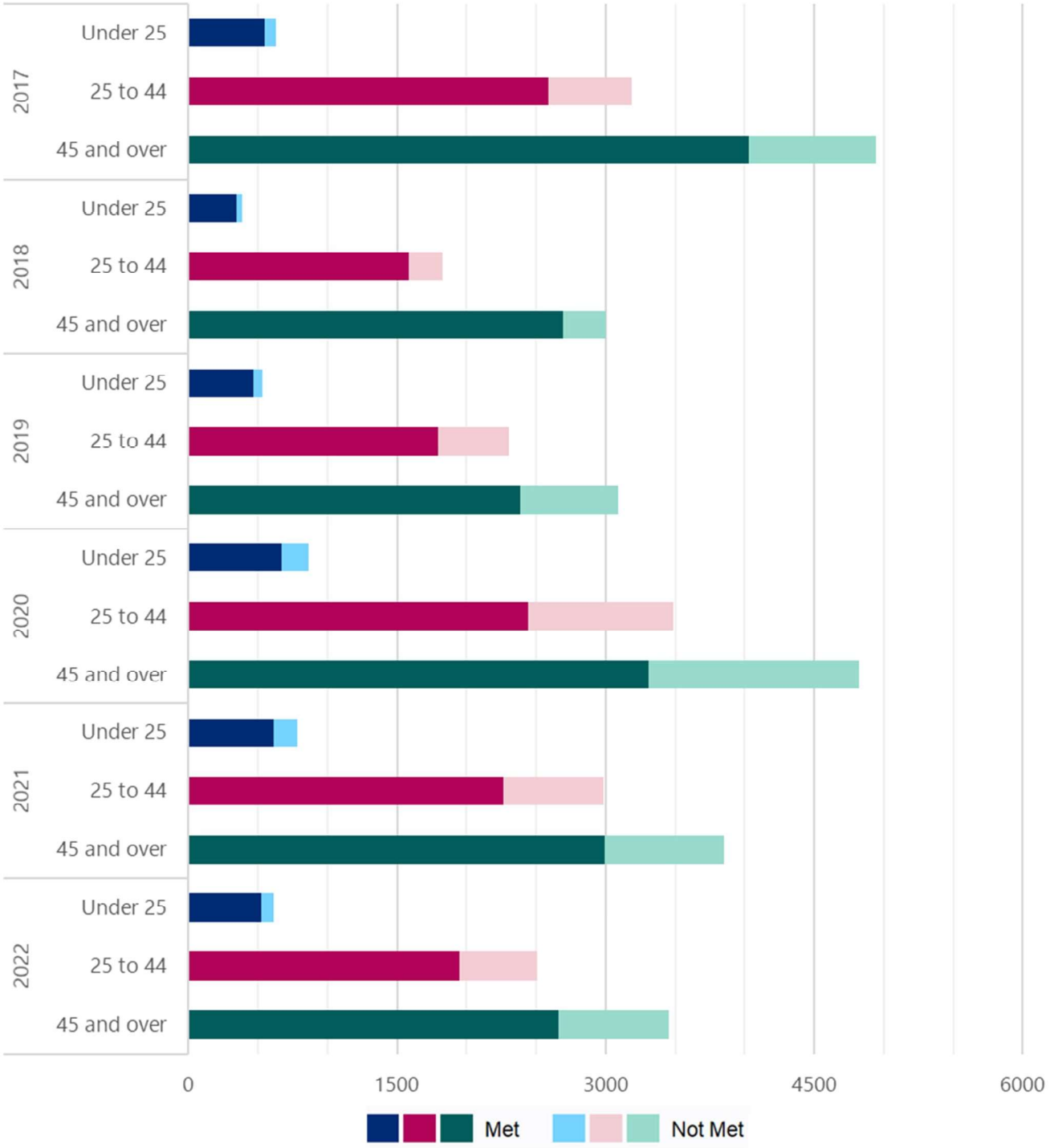


Figure 6.22b. Tobacco Use Assessment and Cessation Intervention (Race by Year)

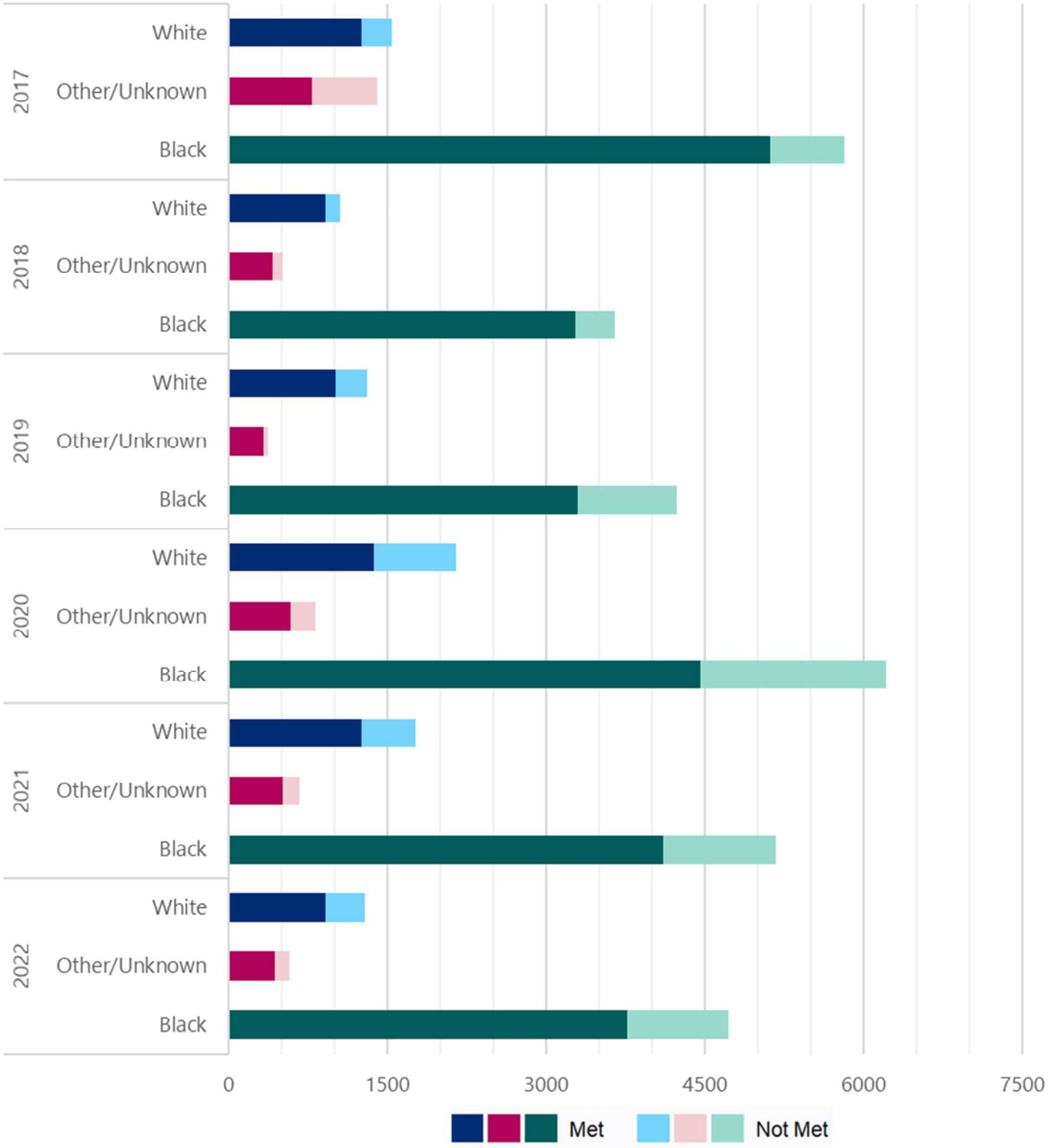


Figure 6.22c. Tobacco Use Assessment and Cessation Intervention (Gender by Year)

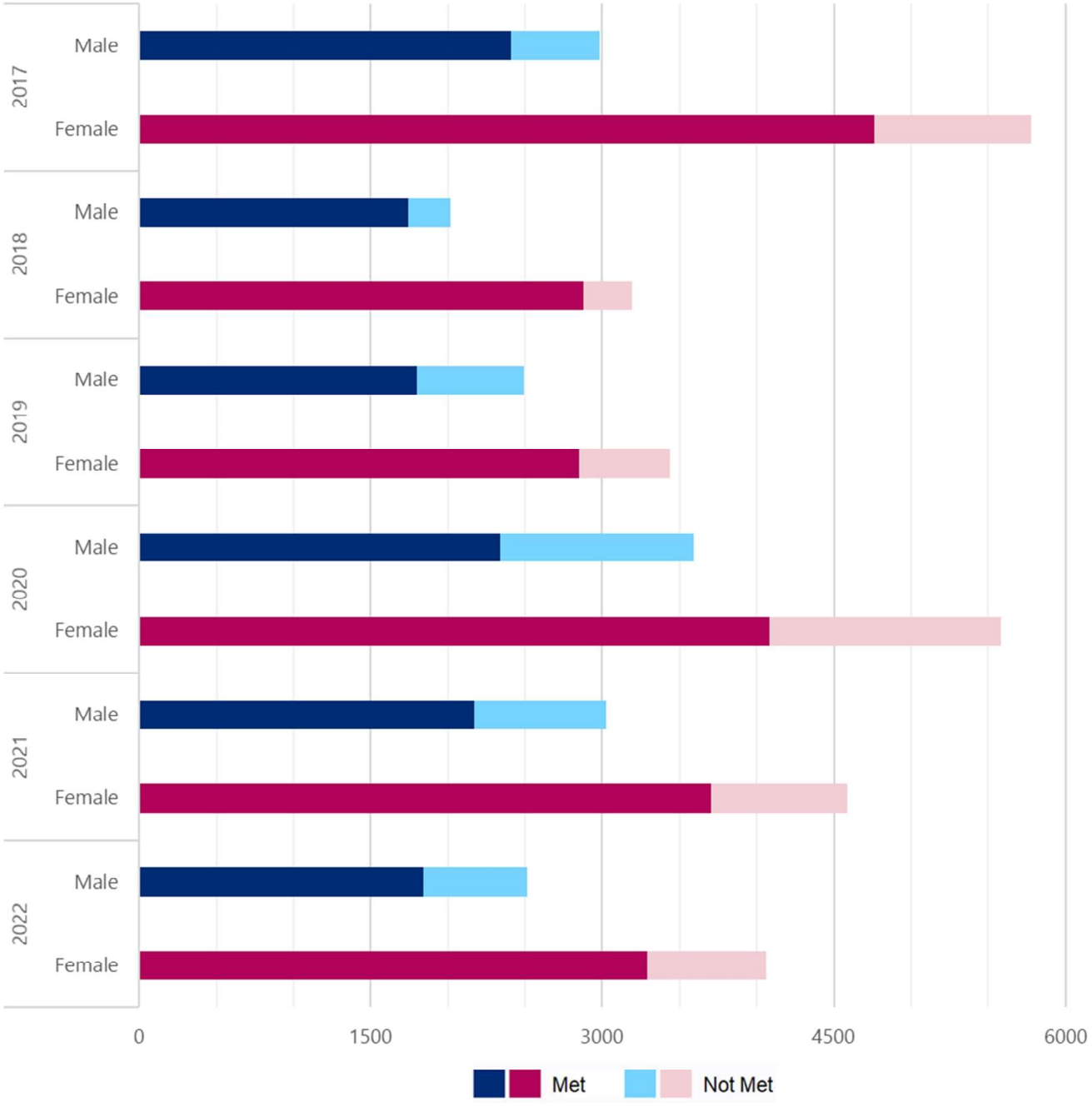
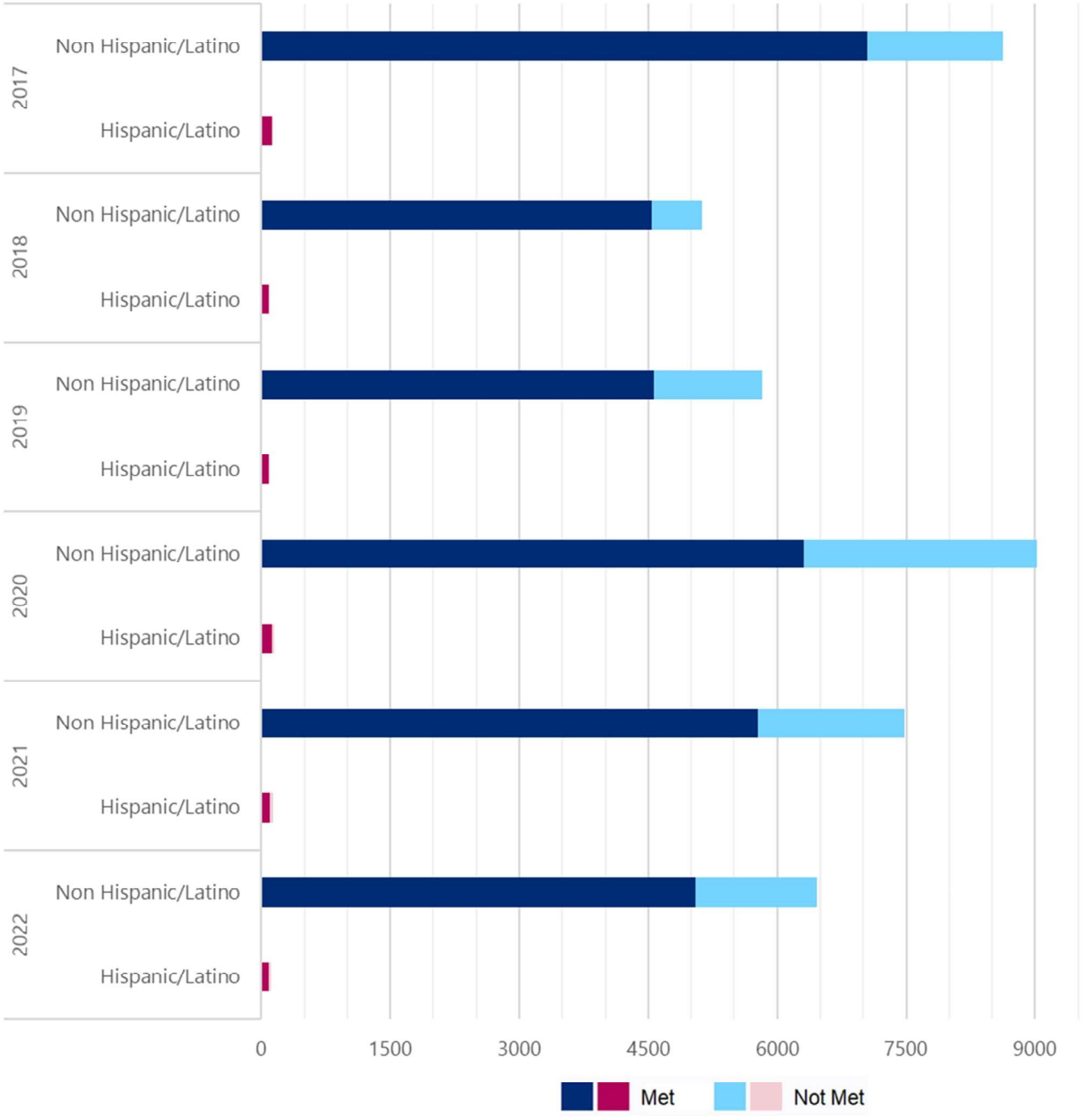
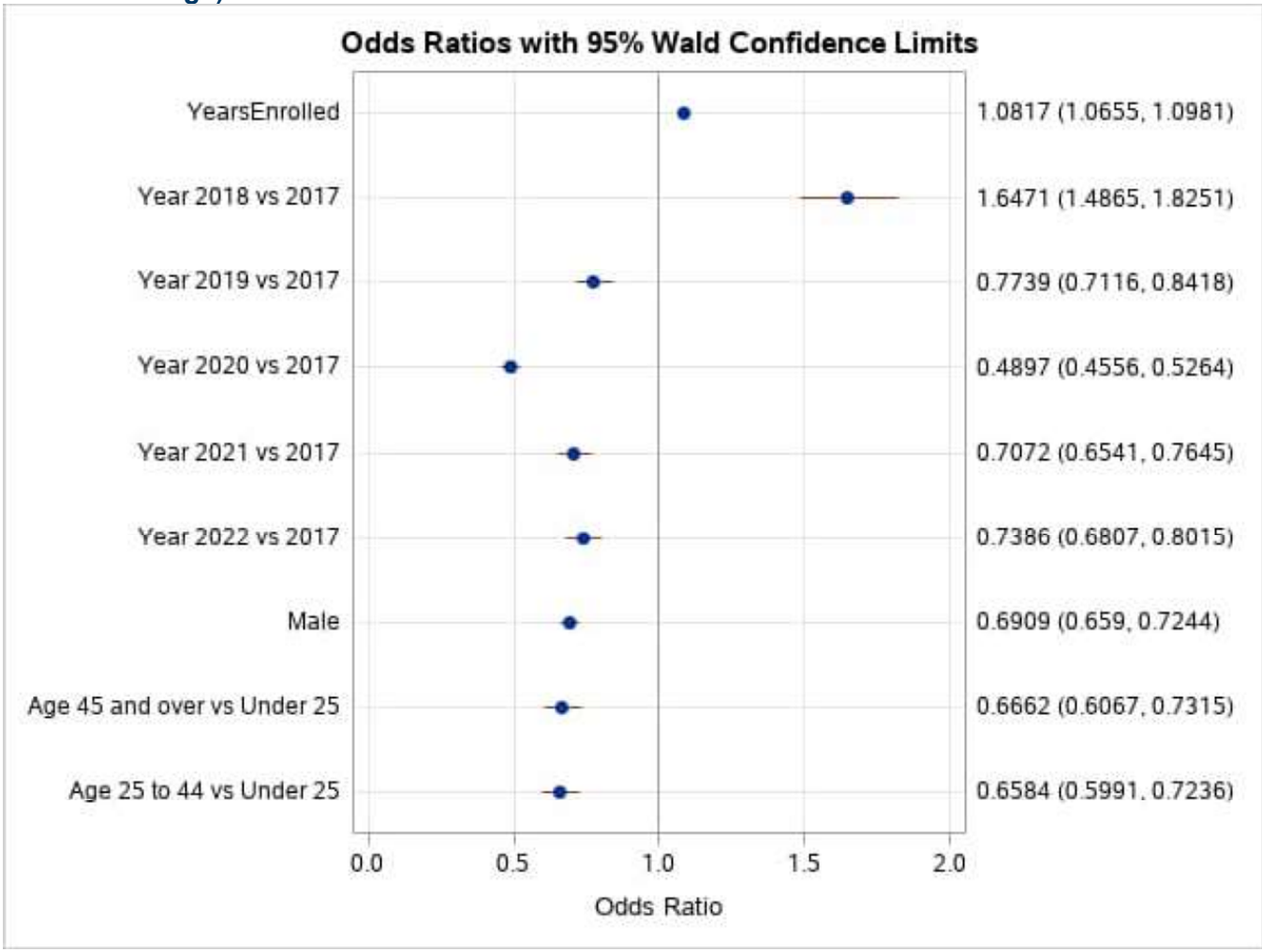


Figure 6.22d. Tobacco Use Assessment and Cessation Intervention (Ethnicity by Year)



In each year, the majority of Gateway patients eligible for the tobacco intervention were age 45 and older, female, Black/African American, and non-Hispanic/Latino (Figure 6.22).

Figure 6.23. Tobacco Use Assessment and Cessation Intervention Regression (Year, with Gender and Age)



Patients were more likely to receive the tobacco intervention in 2018 than in 2017, but patients were less likely to receive the tobacco intervention in 2019, 2020, 2021, and 2022 than in 2017. Patients were least likely to receive the tobacco intervention in 2020. The percentage of patients receiving the intervention in 2021 and 2022 was similar to 2019. Males were less likely to receive the tobacco intervention than females, and both older age groups, age 25–44 and age 45 and over, are less likely to receive the tobacco intervention than the youngest age group. Patients were more likely to receive the tobacco intervention for each additional year they were enrolled. It can be concluded that as patients gets older, they are less likely to receive treatment (Figure 6.23).

Figure 6.24a. Hypertension: Blood Pressure Control (Year with Age)

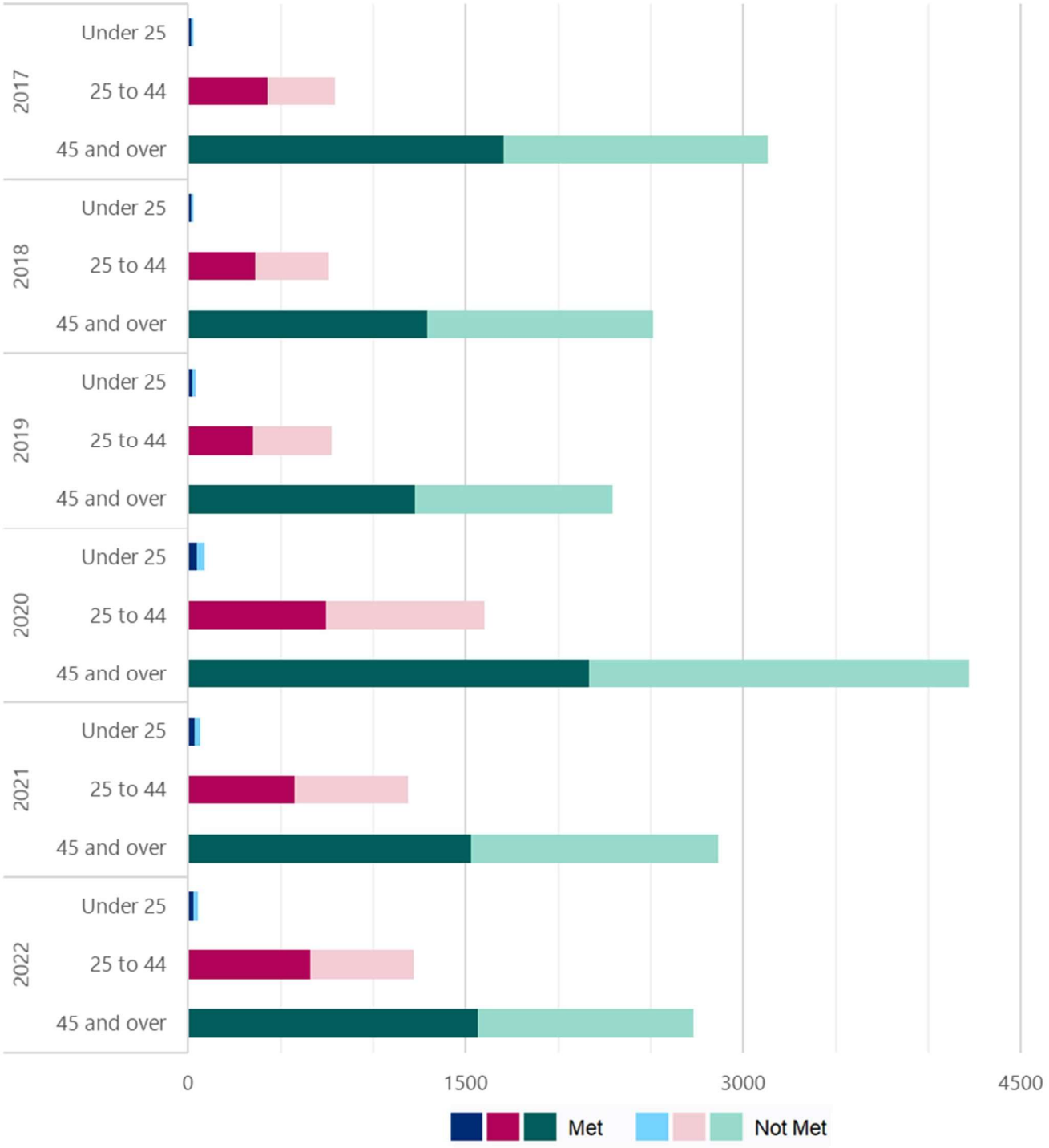


Figure 6.24b. Hypertension: Blood Pressure Control (Year with Race)

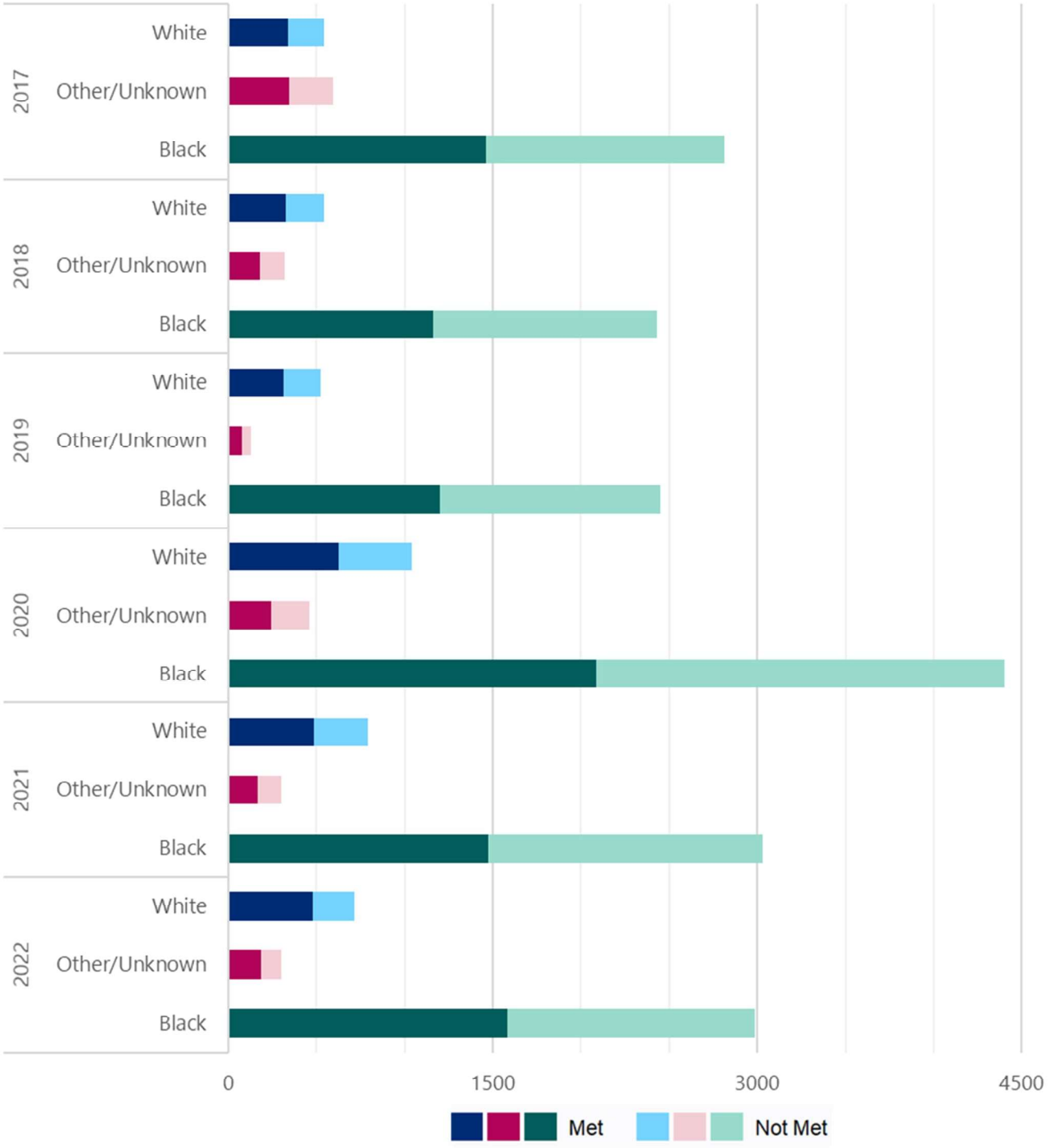


Figure 6.24c. Hypertension: Blood Pressure Control (Year with Gender)

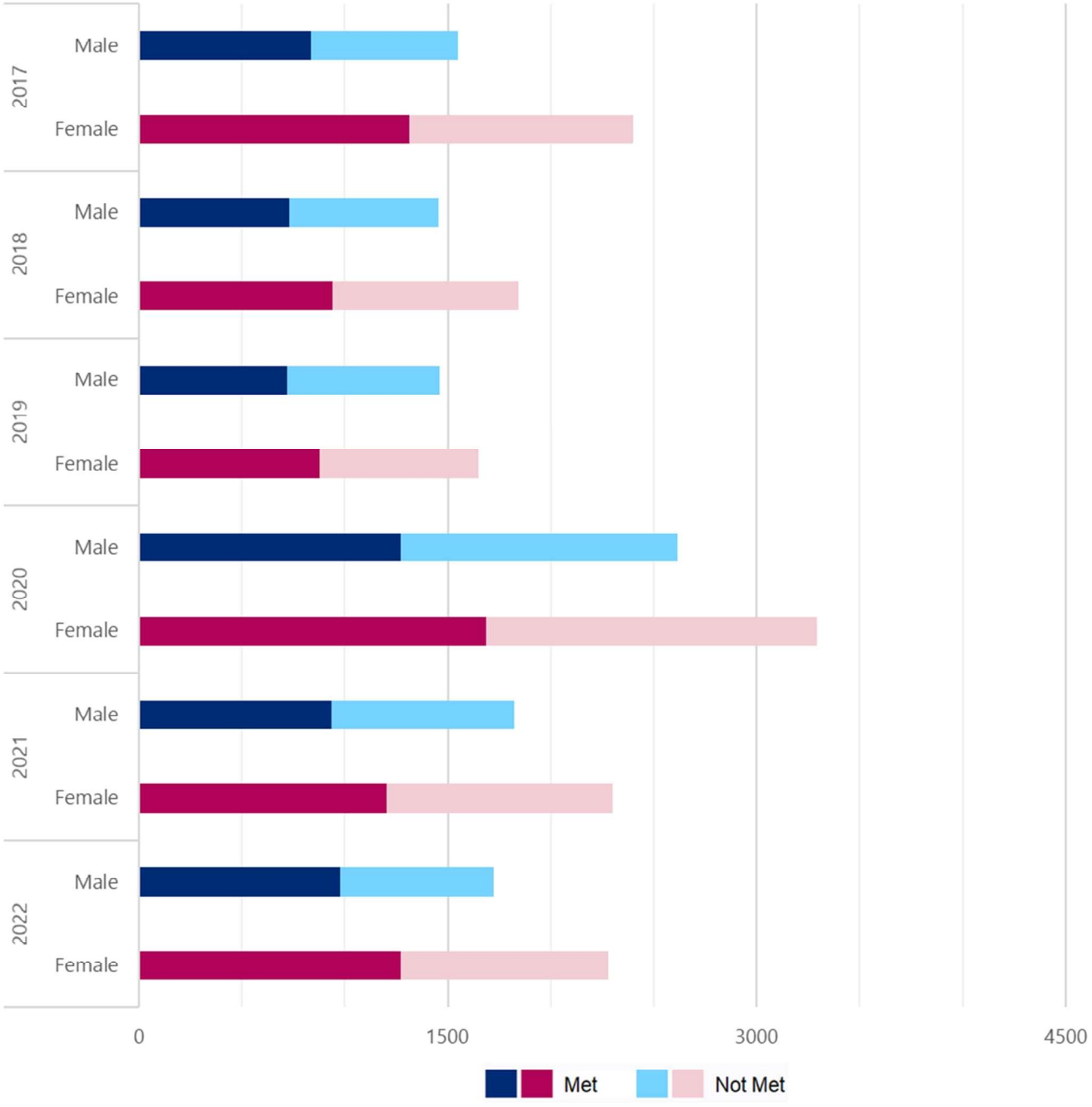
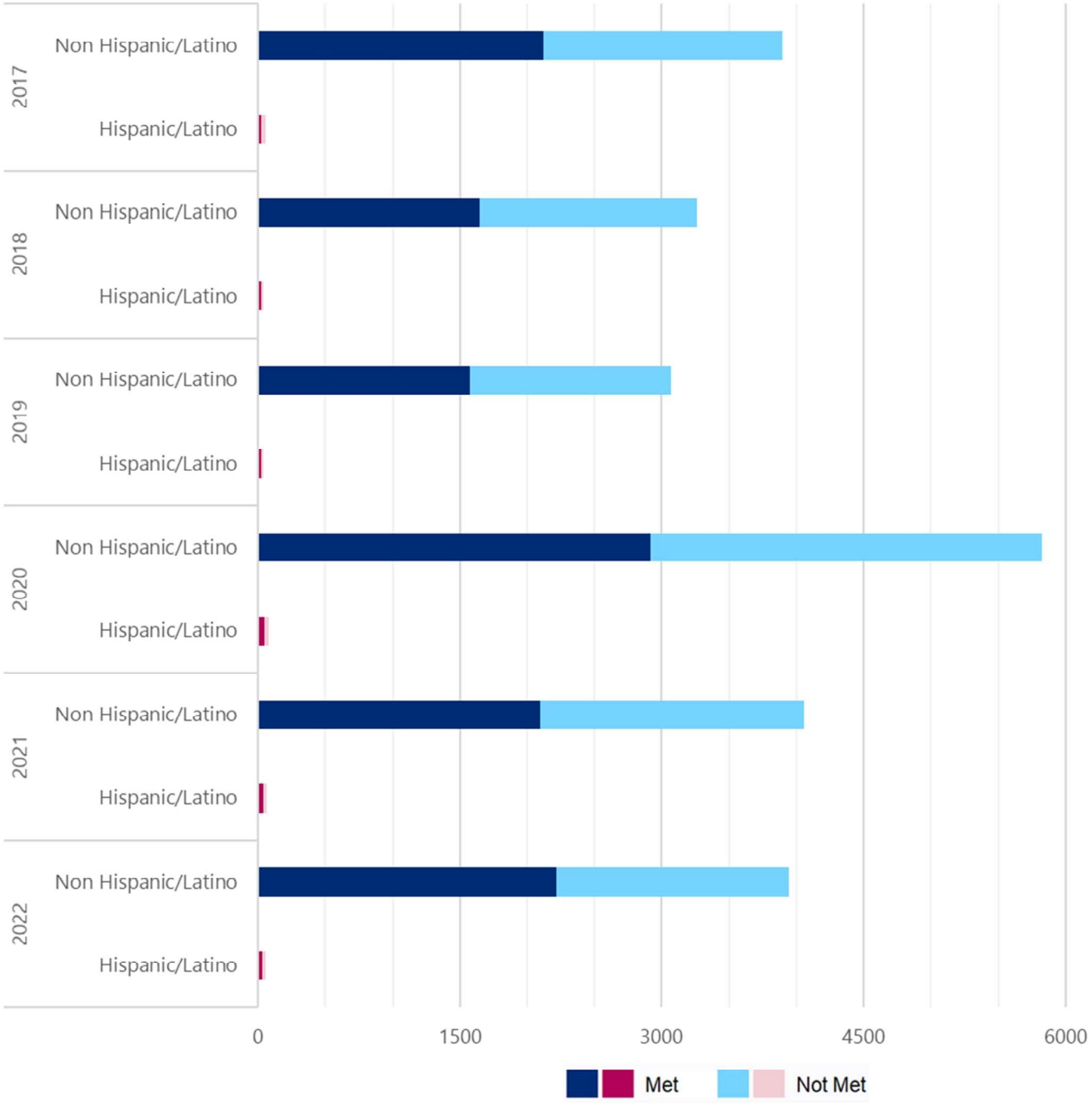
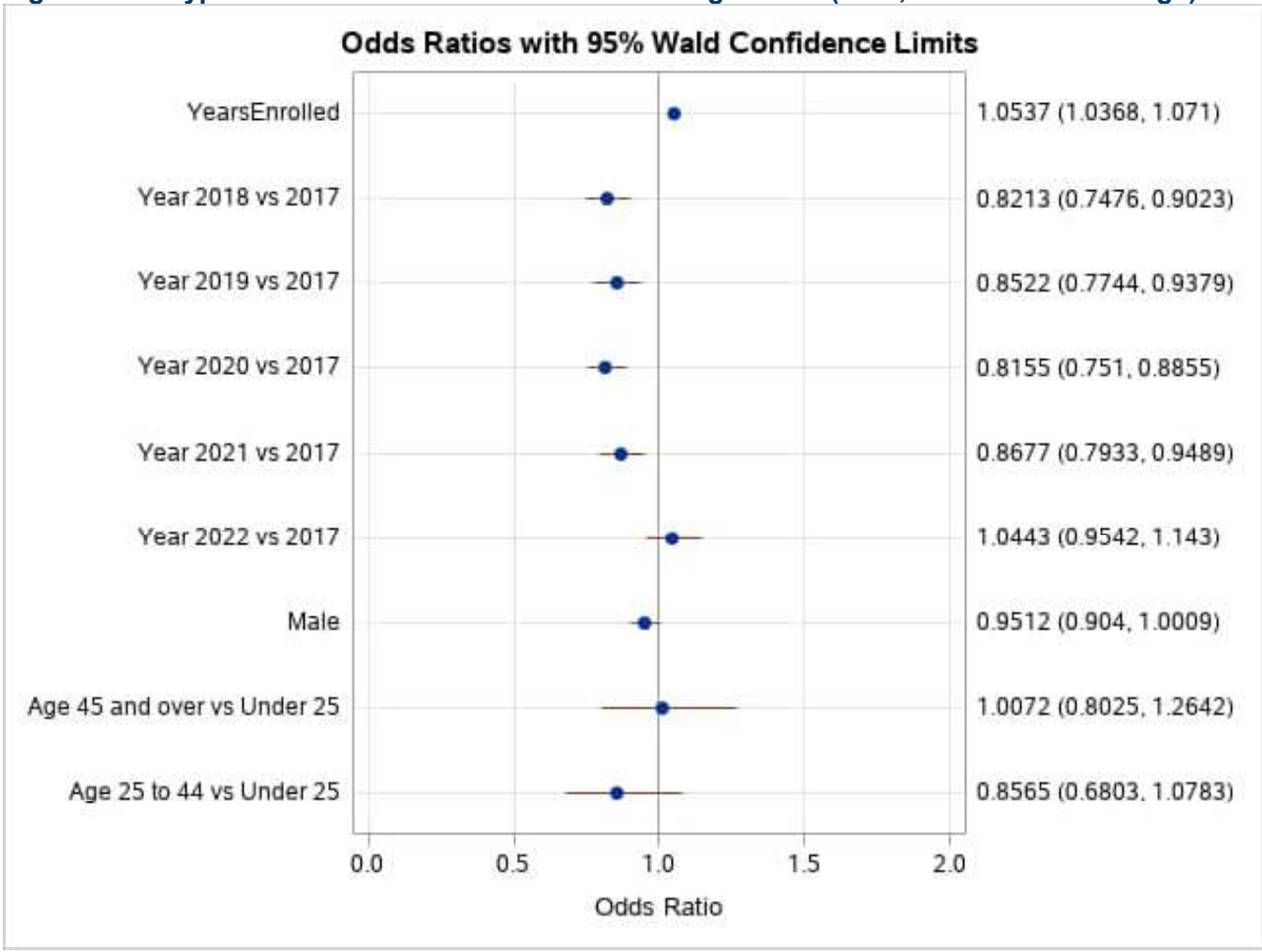


Figure 6.24d. Hypertension: Blood Pressure Control (Year with Ethnicity)



In each year, the majority of Gateway patients diagnosed with HTN (and eligible for the metric) were age 45 and older, female, Black/African American, and non-Hispanic/Latino (Figure 6.24).

Figure 6.25. Hypertension: Blood Pressure Control Regression (Year, with Gender and Age)



Gateway members diagnosed with HTN in the year 2018, 2019, 2020, and 2021 were less likely to have an adequate control blood pressure reading at their next visit compared to 2017. Gateway members diagnosed with HTN in the year 2022 were equally as likely to have an adequate control blood pressure reading at their next visit compared to 2017. If a Gateway member diagnosed with HTN is male, he is less likely to have an adequate control blood pressure reading at his next visit compared to a female. Age group is not a significant effect on the odds of a Gateway member diagnosed with HTN having an adequate control blood pressure reading at his/her next visit. The longer Gateway members are diagnosed with HTN is enrolled, the more likely they are to have an adequate control blood pressure reading at their next visit (Figure 6.25).

Figure 6.26a. Diabetes: HbA1c Control (Year with Age)

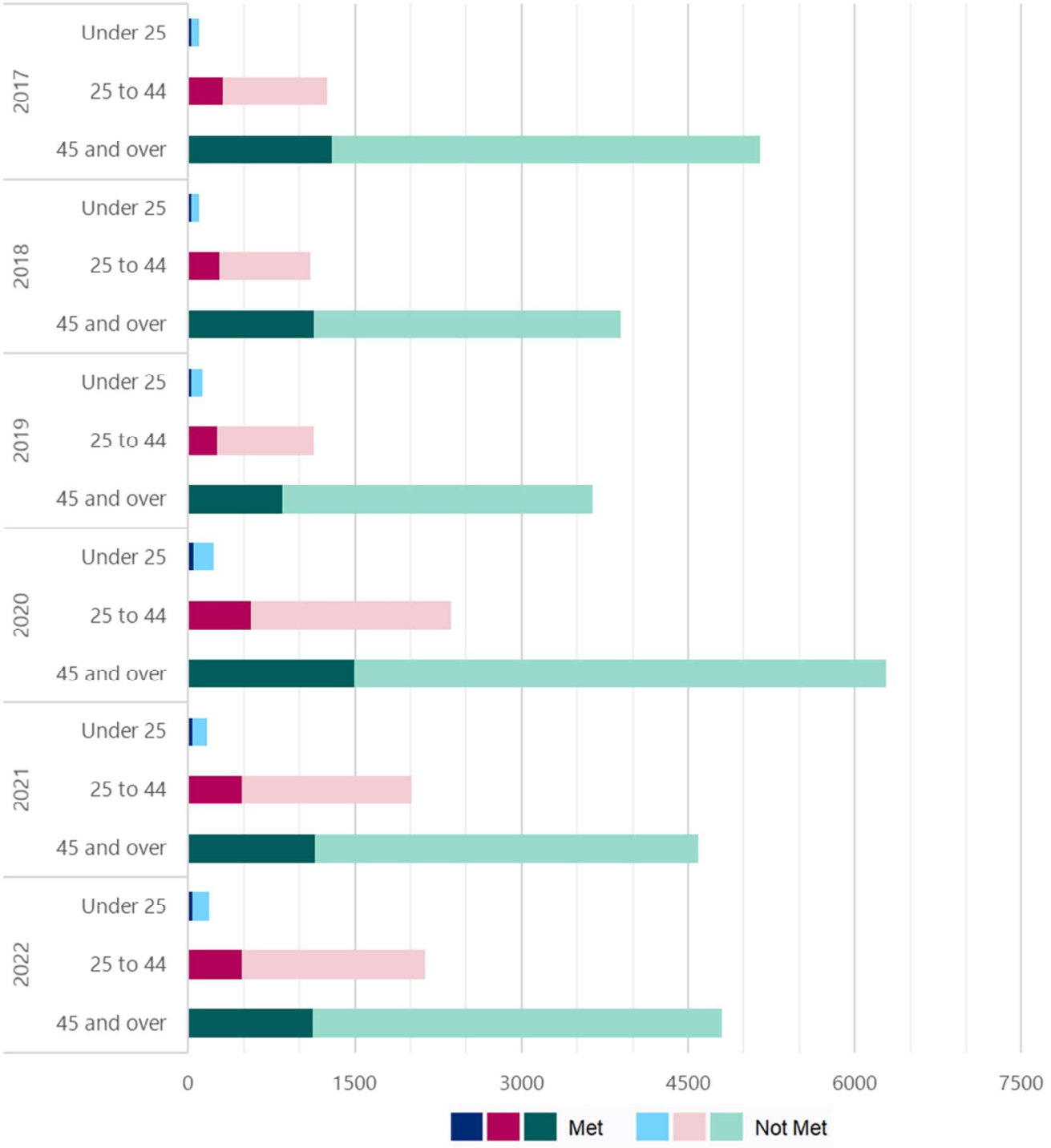


Figure 6.26b. Diabetes: HbA1c Control (Year with Race)

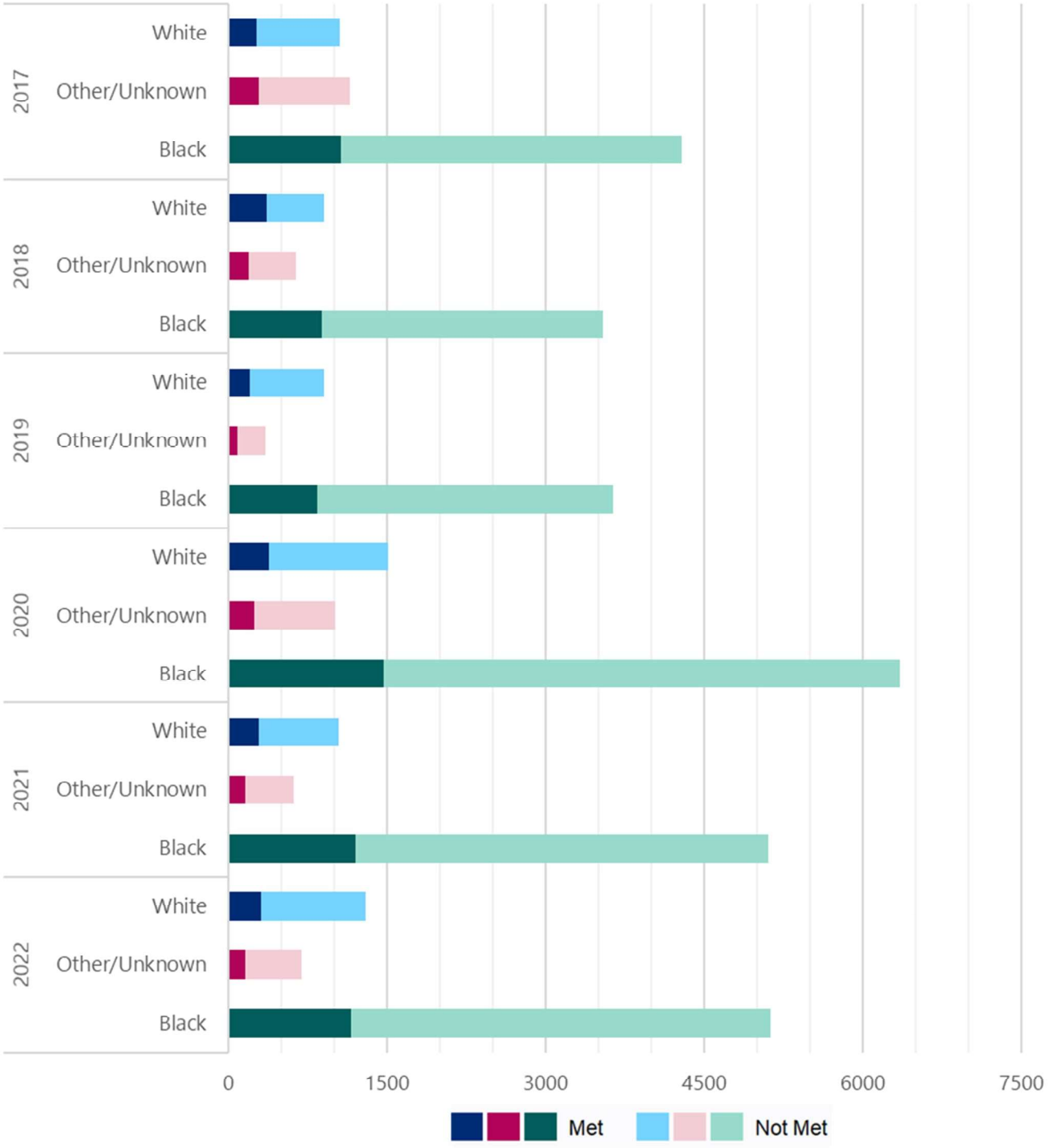


Figure 6.26c. Diabetes: HbA1c Control (Year with Gender)

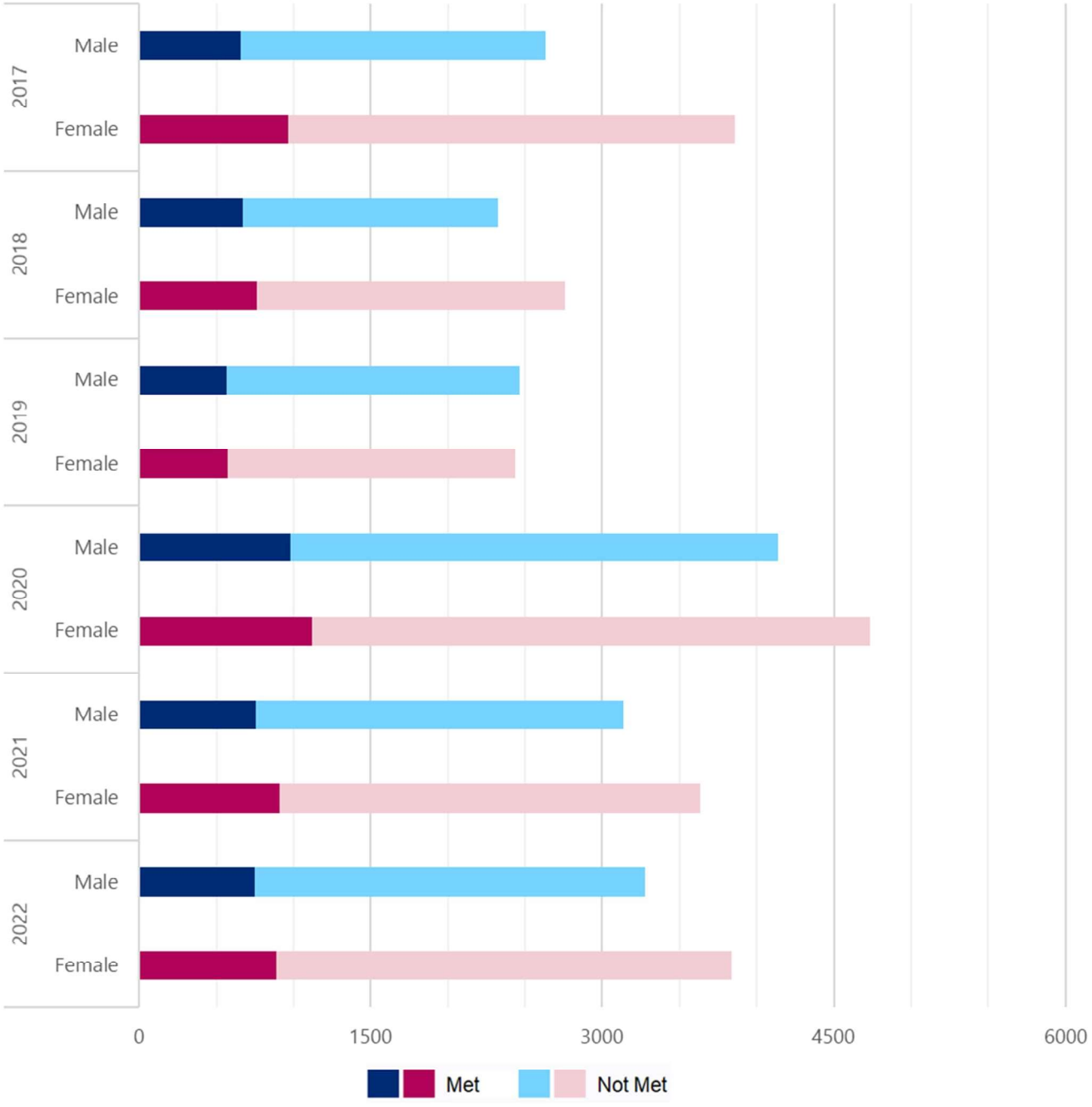
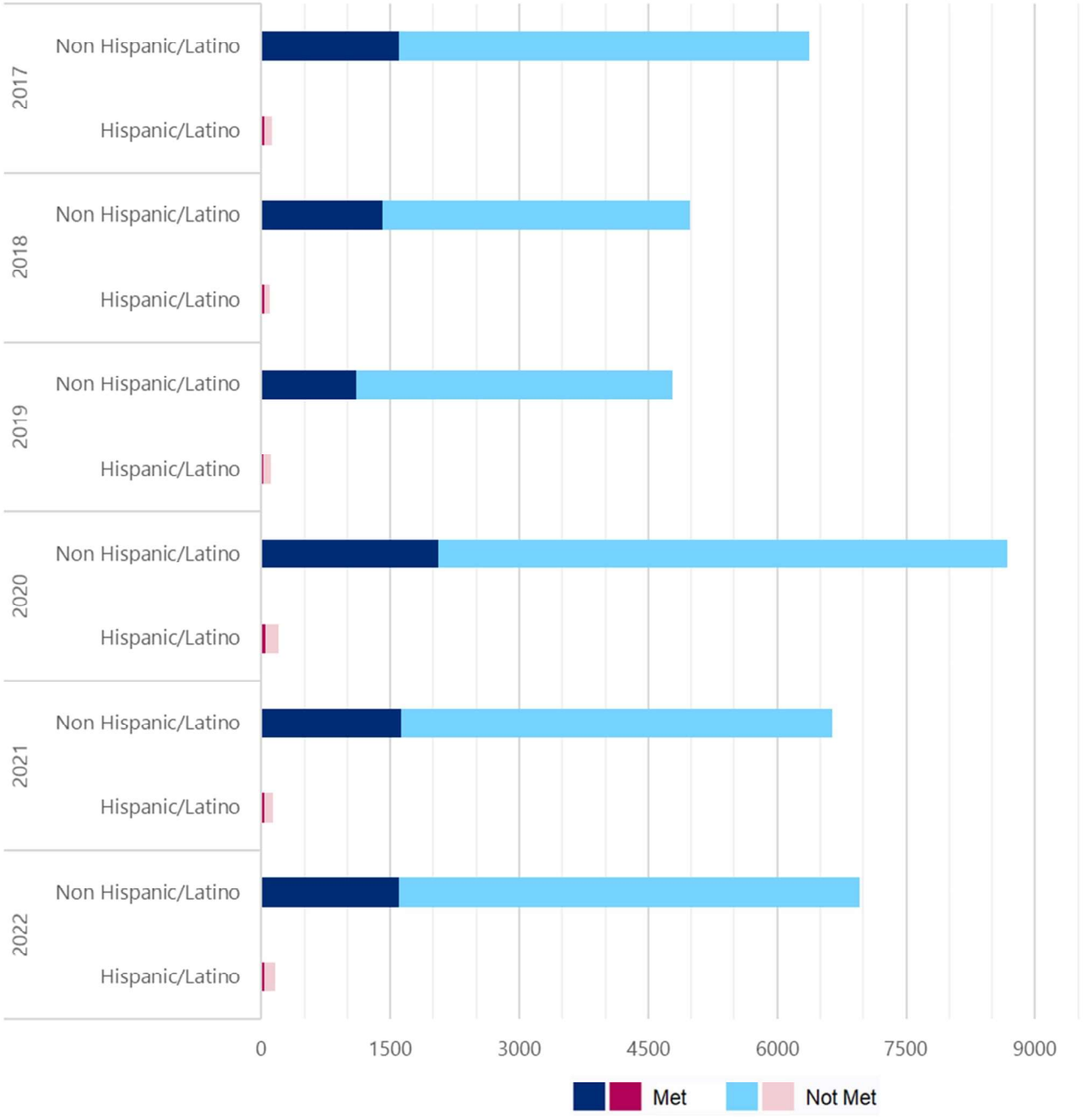
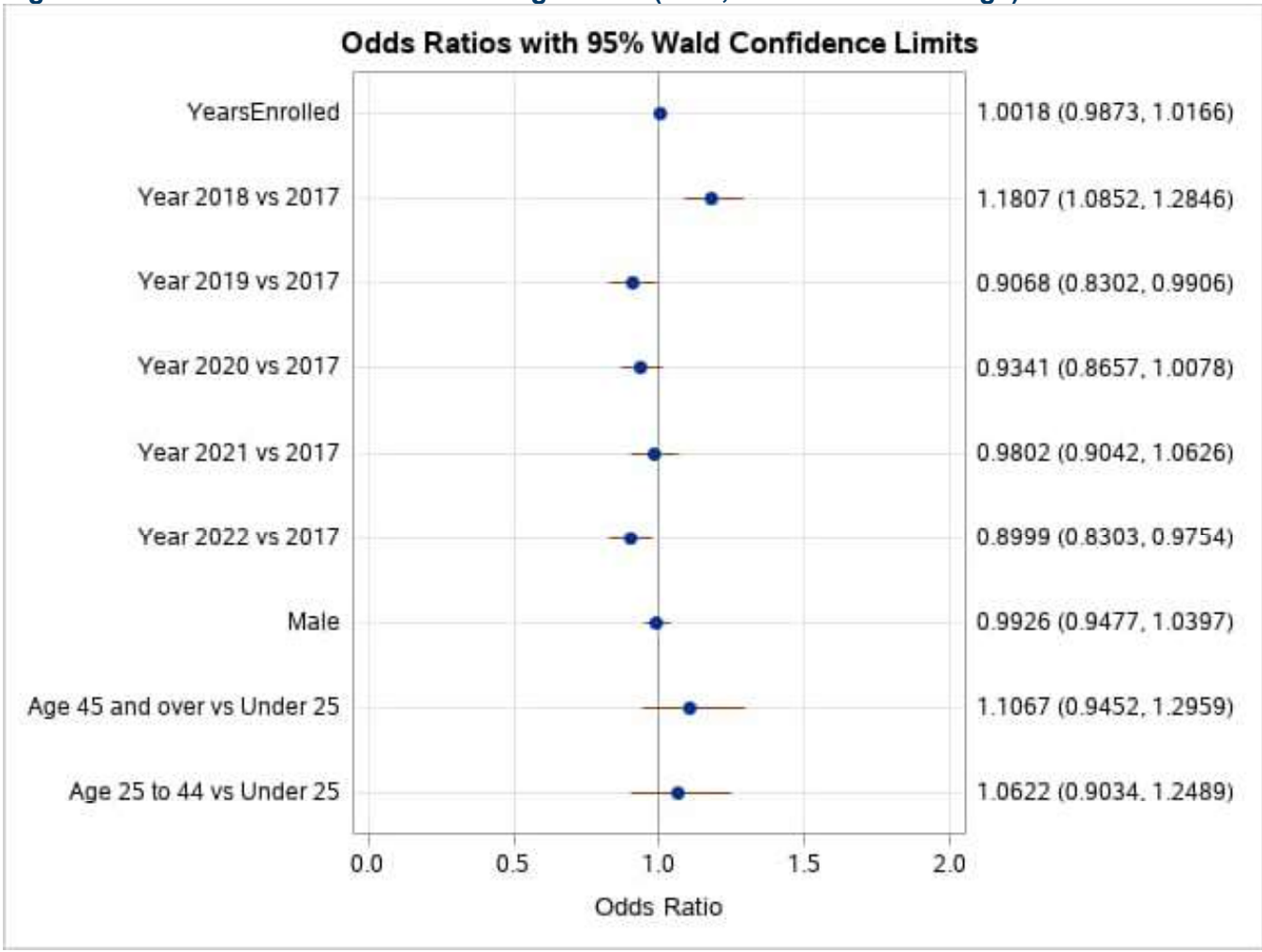


Figure 6.26d. Diabetes: HbA1c Control (Year with Ethnicity)



In 2017, 2018, 2020, 2021, and 2022, the majority of Gateway patients diagnosed with Diabetes (and eligible for the metric) were age 45 and older, female, Black/African American, and non-Hispanic/ Latino. In 2019, there was an approximately even number of male and female patients diagnosed with Diabetes and eligible for the metric (Figure 6.26).

Figure 6.27. Diabetes: HbA1c Control Regression (Year, with Gender and Age)



Patients diagnosed with Diabetes were more likely to have HbA1c control in 2018 than in 2017, and less likely to have HbA1c control in 2019 and 2022 than in 2017. There was no significant difference in patients with HbA1c control between 2020 and 2017 and between 2021 and 2017. There was no significant difference between males and females and no significant difference between age groups in HbA1c control. There was also no significant difference in HbA1c control based on additional years patients were enrolled (Figure 6.27).

Figure 6.28a. Adult Weight Screening and Follow-up (Year with Age)

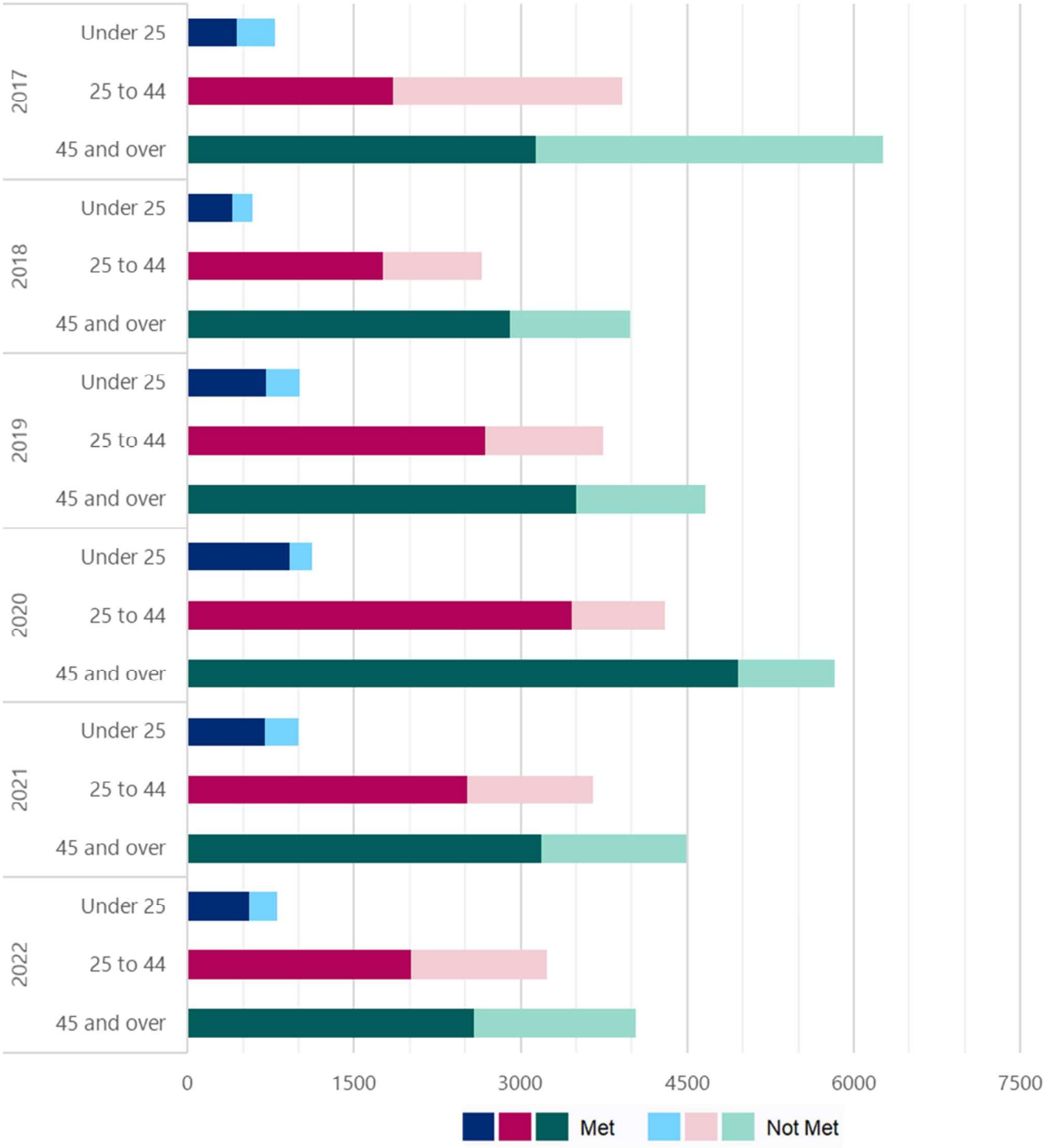


Figure 6.28b. Adult Weight Screening and Follow-up (Year with Race)

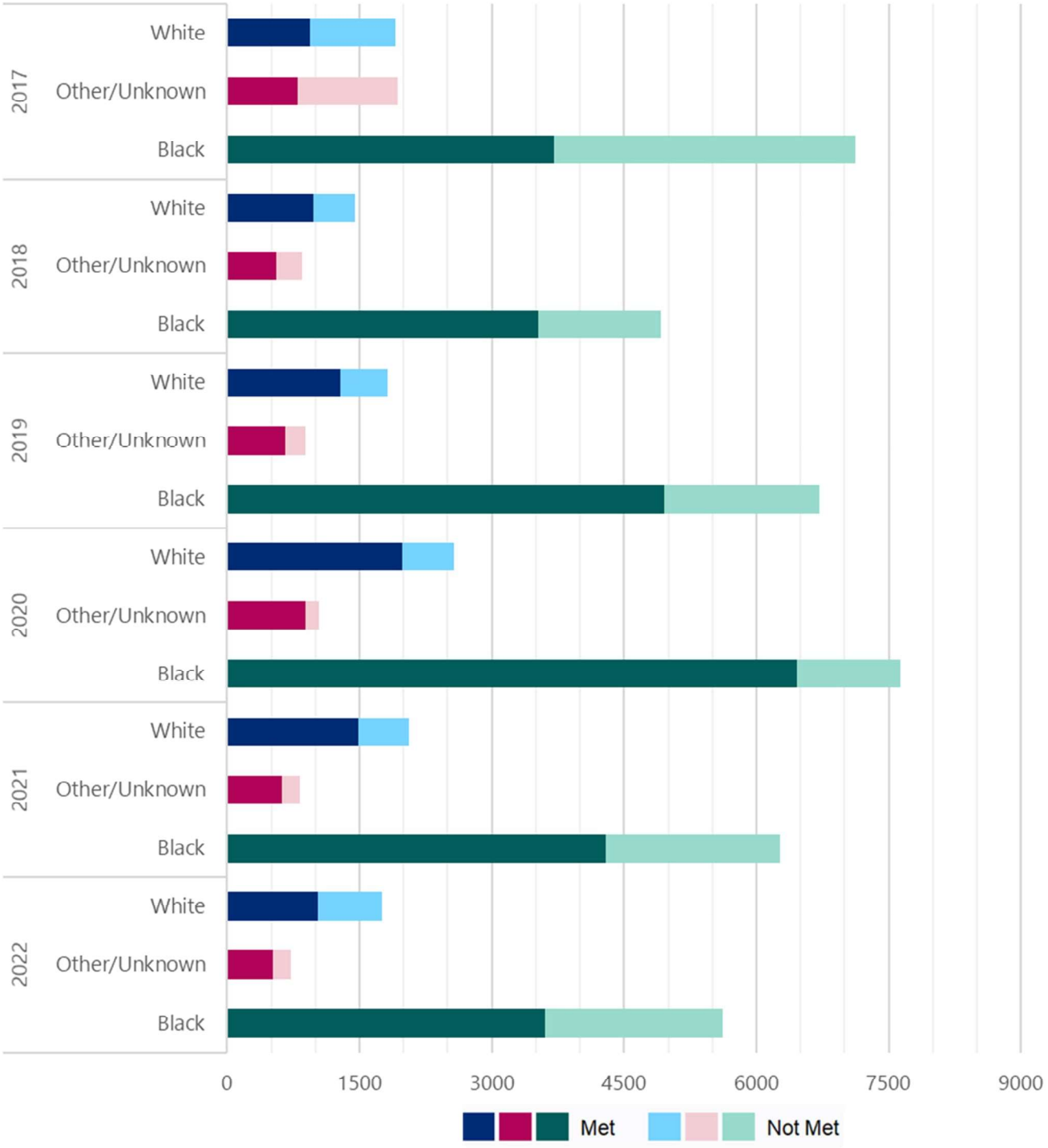


Figure 6.28c. Adult Weight Screening and Follow-up (Year with Gender)

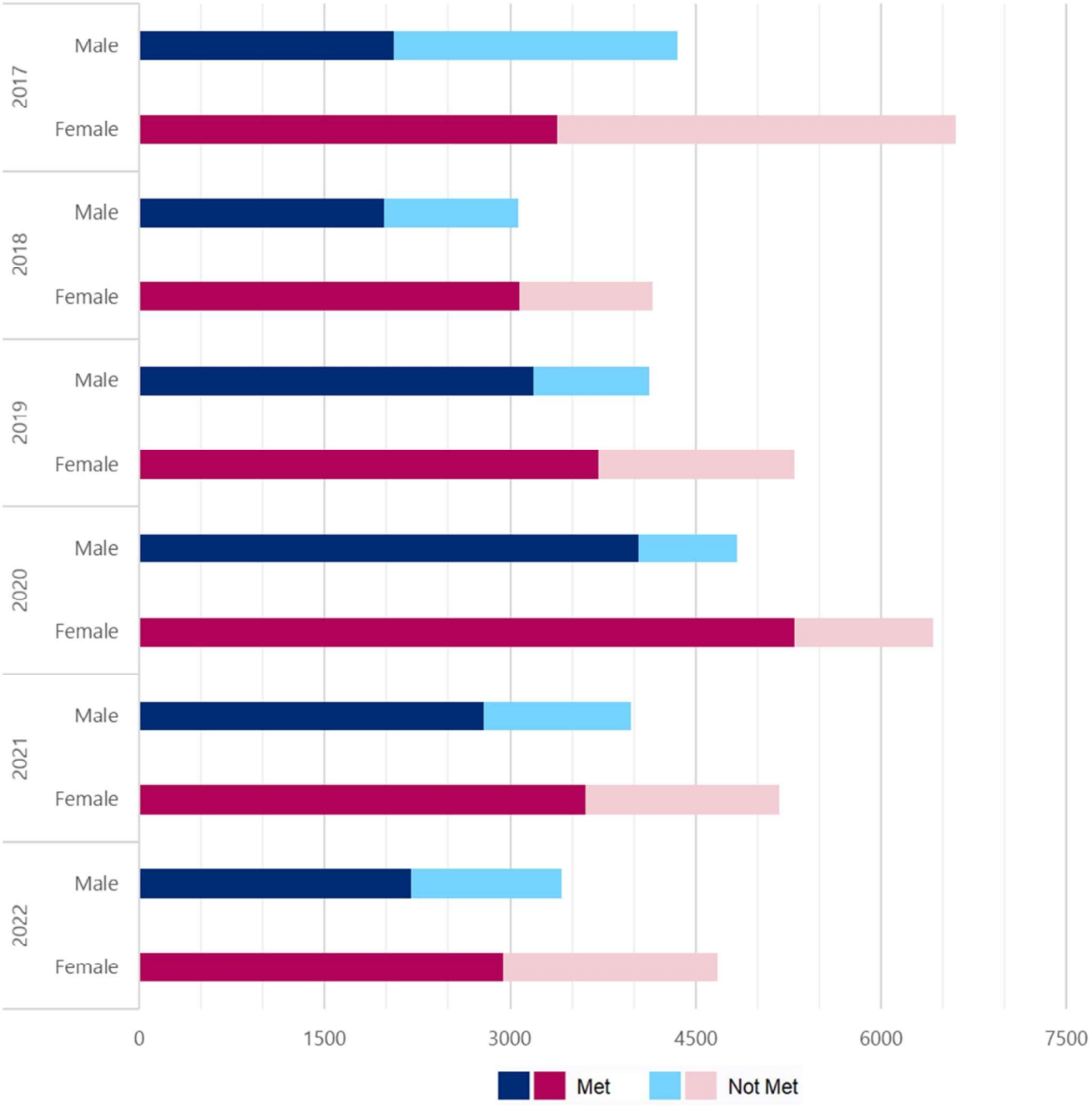
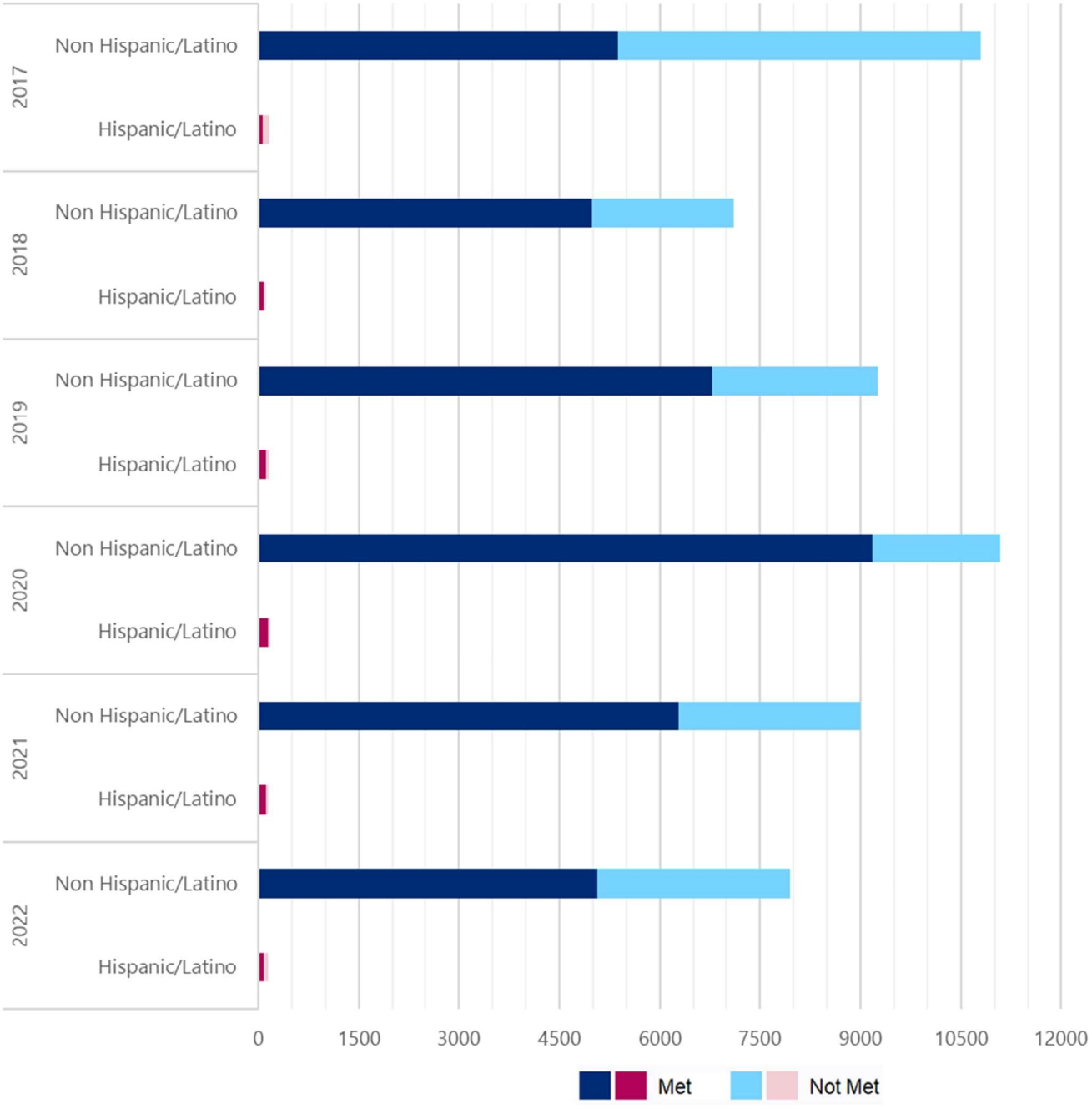


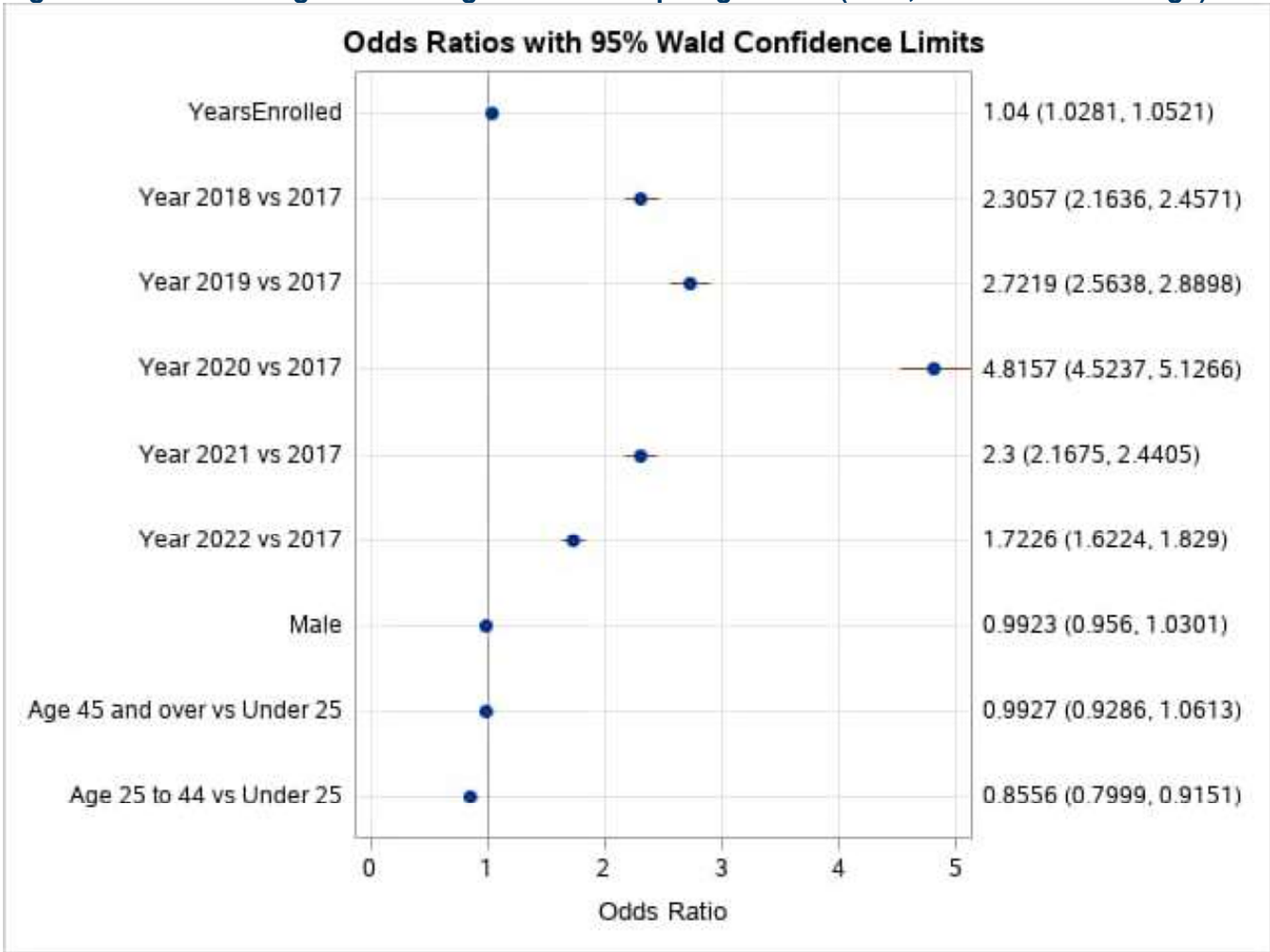
Figure 6.28d. Adult Weight Screening and Follow-up (Year with Ethnicity)



In 2017, 2018, 2019, 2020, 2021, and 2022, the majority of Gateway patients receiving weight screening and follow-up were female, Black/African American, and non-Hispanic/Latino (Figure 6.28). In 2017 and 2018 there the majority of Gateway patients receiving weight screening and follow-up

were over age 45. In 2019, 2020, 2021, and 2022 there were an approximately equal number of Gateway patients receiving weight screening and follow-up who were over age 45 and under age 45.

Figure 6.29. Adult Weight Screening and Follow-up Regression (Year, with Gender and Age)



Patients were more likely to receive weight screening and follow-up in 2018, 2019, 2020, 2021, and 2022 than in 2017. Patients in the 25 to 44 age group were less likely than those under 25 to receive weight screening and follow-up. There was no significant difference in those receiving weight screening and follow-up between the youngest age group and the oldest age group, and between males and females. Patients were more likely to receive weight screening and follow-up for each additional year enrolled (Figure 6.29).

Figure 6.30a. Flu Shot for Adult Patients (Year with Age)

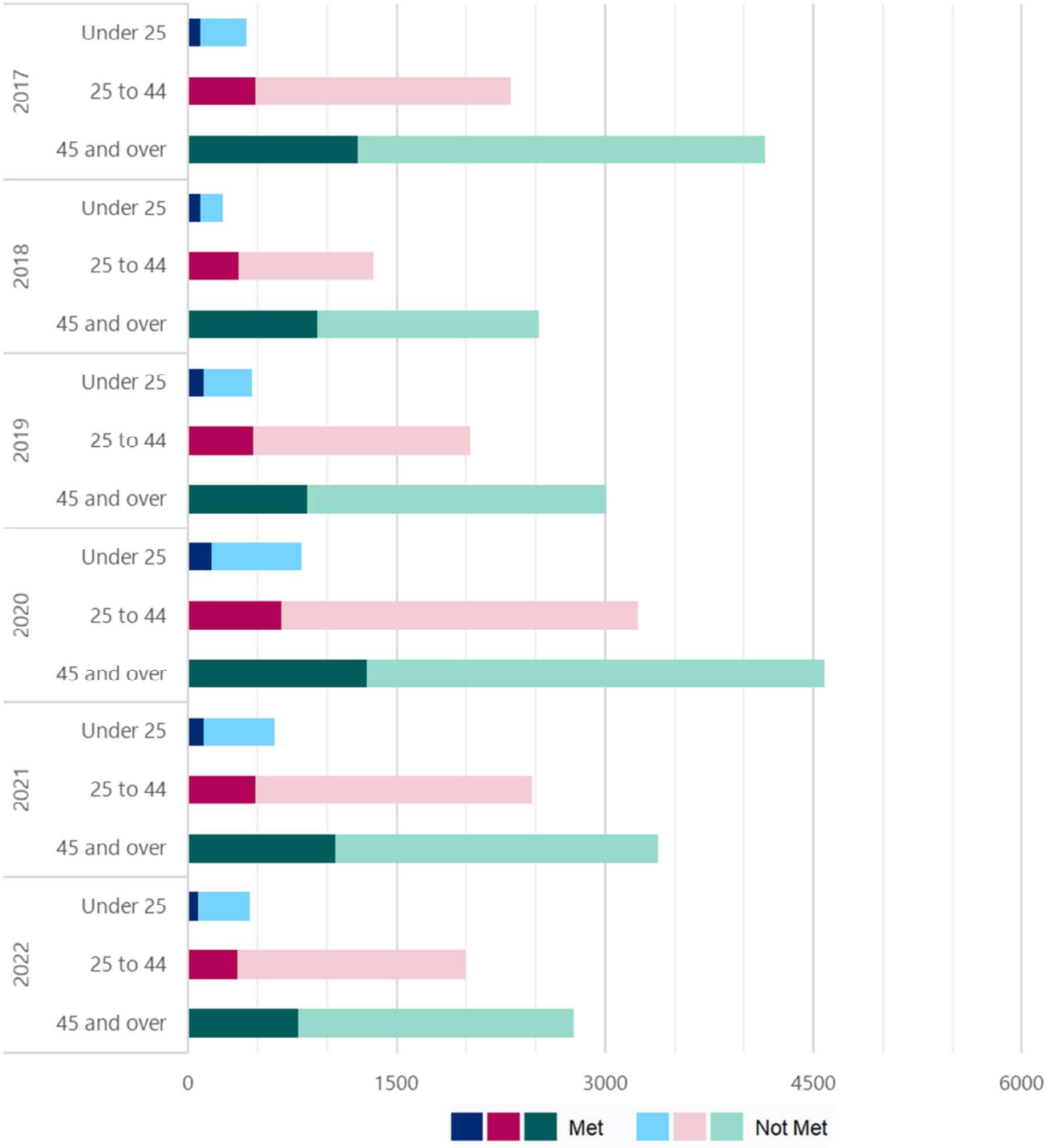


Figure 6.30b. Flu Shot for Adult Patients (Year with Race)

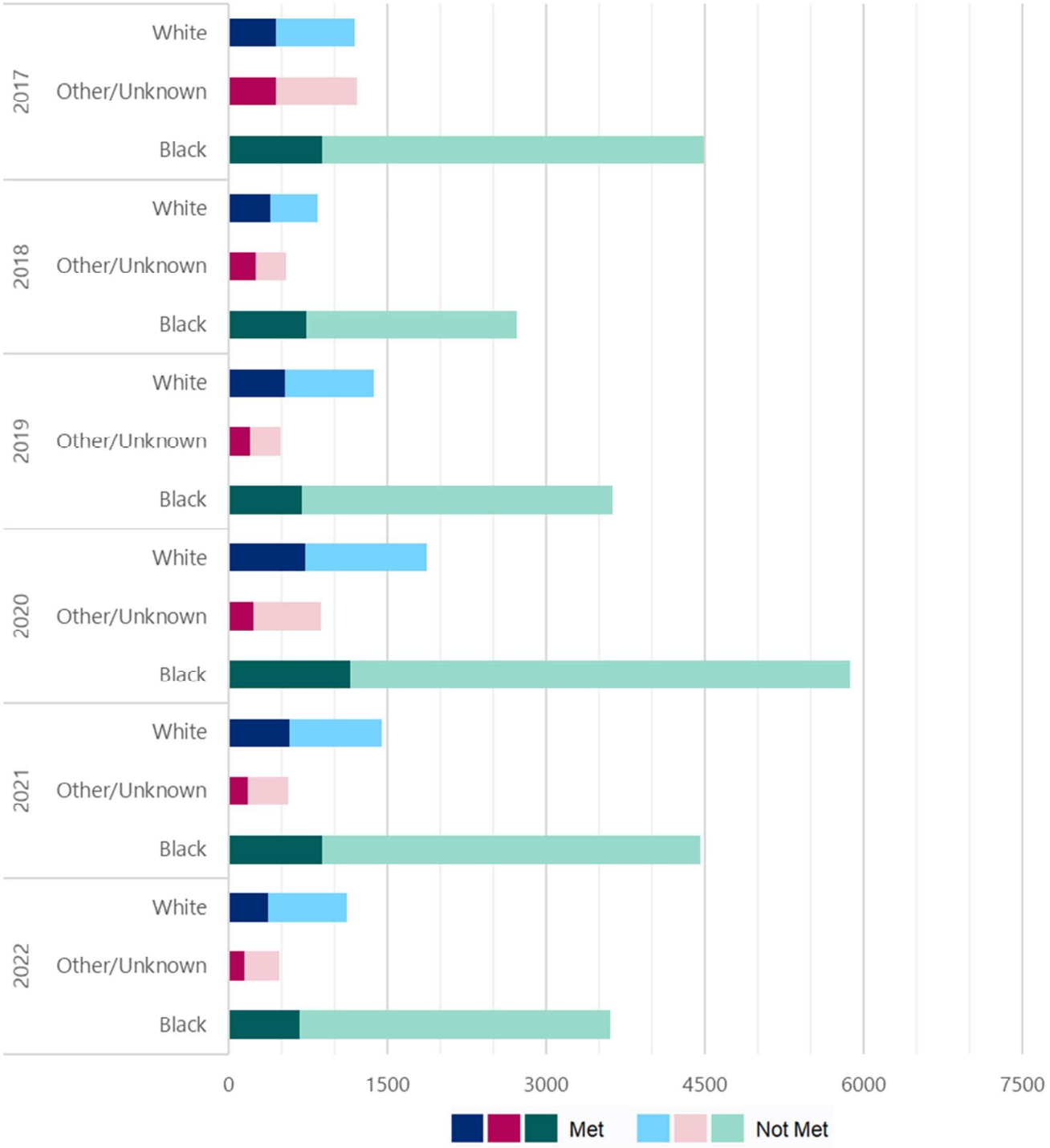


Figure 6.30c. Flu Shot for Adult Patients (Year with Gender)

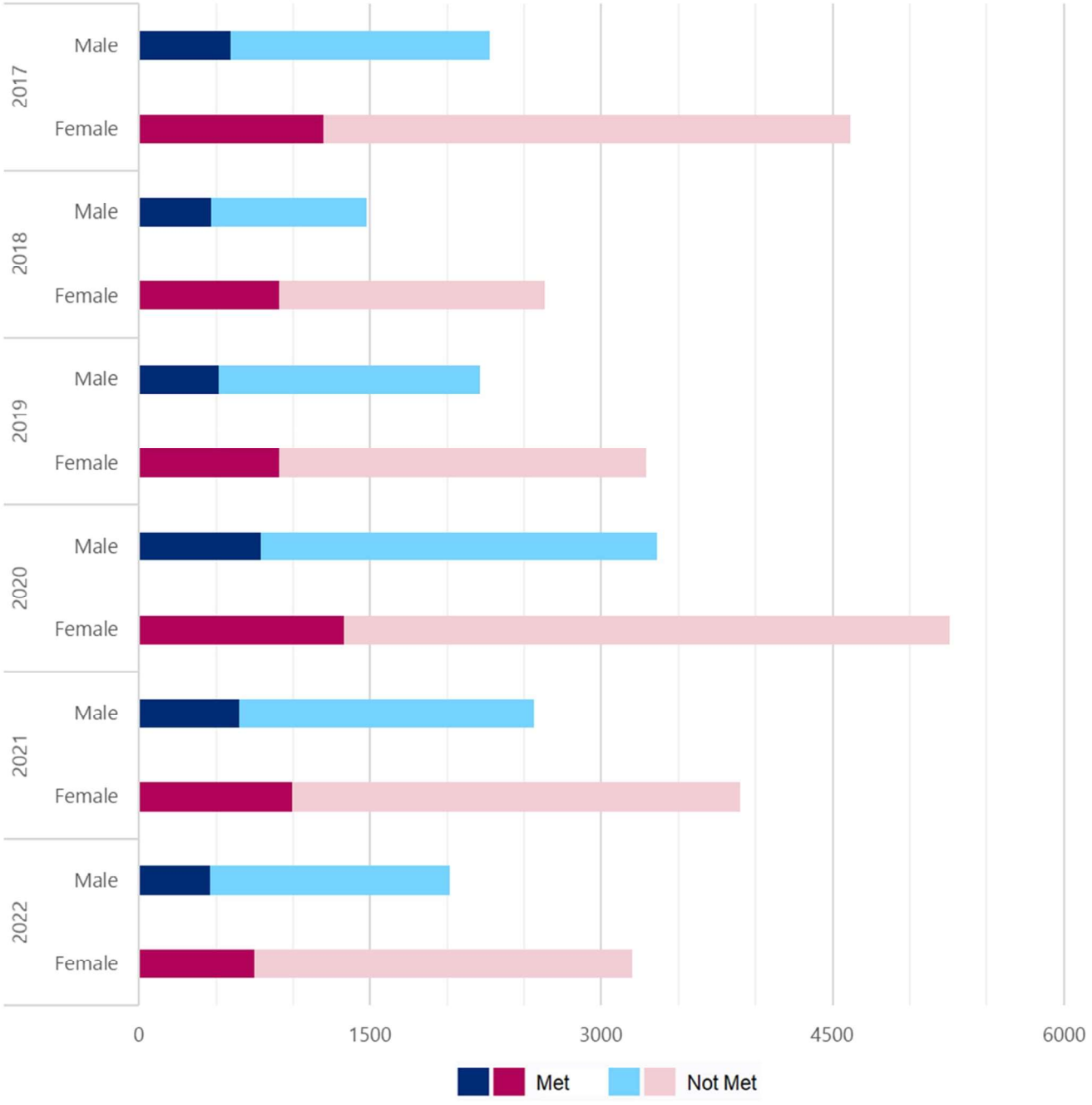
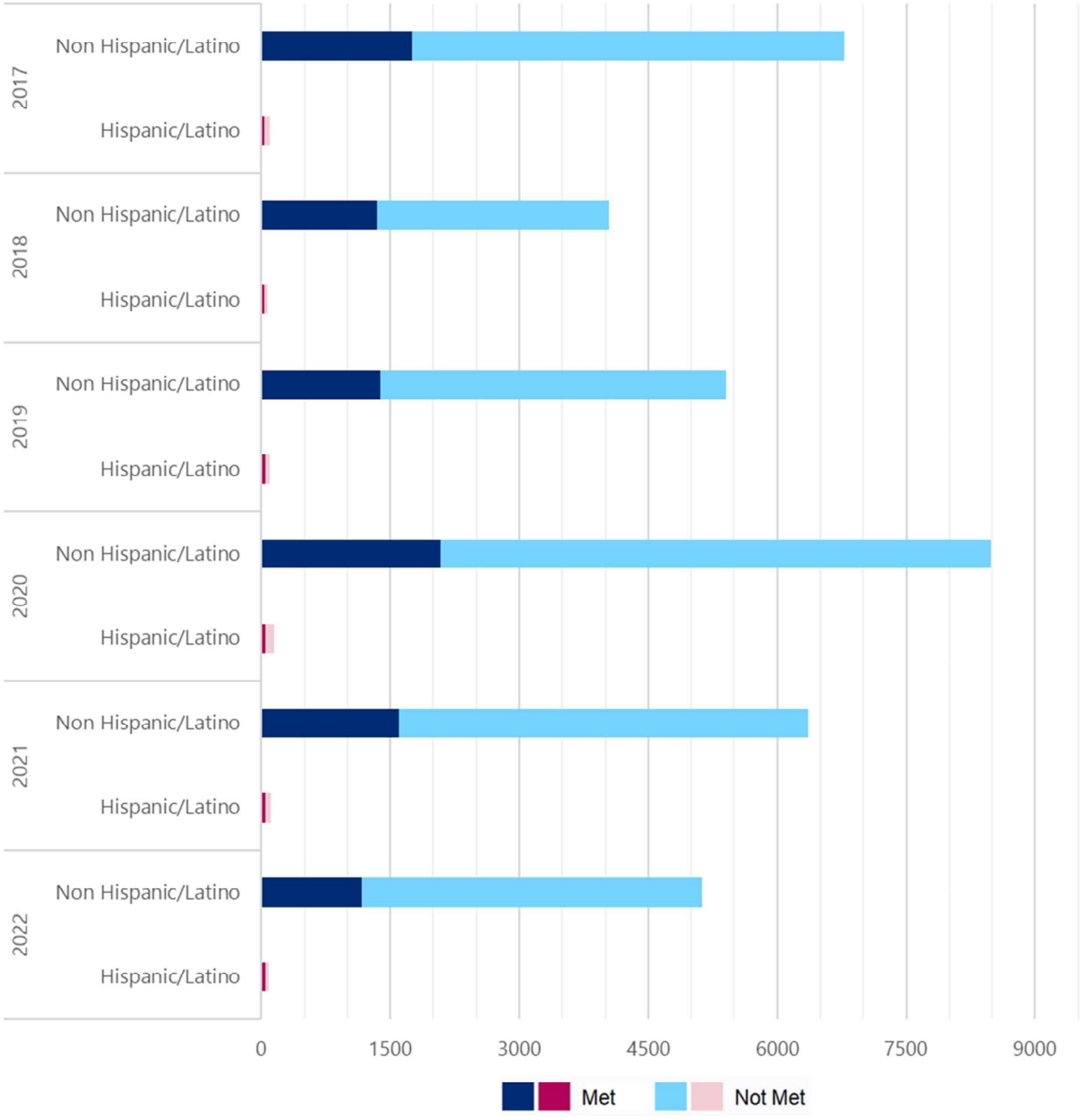
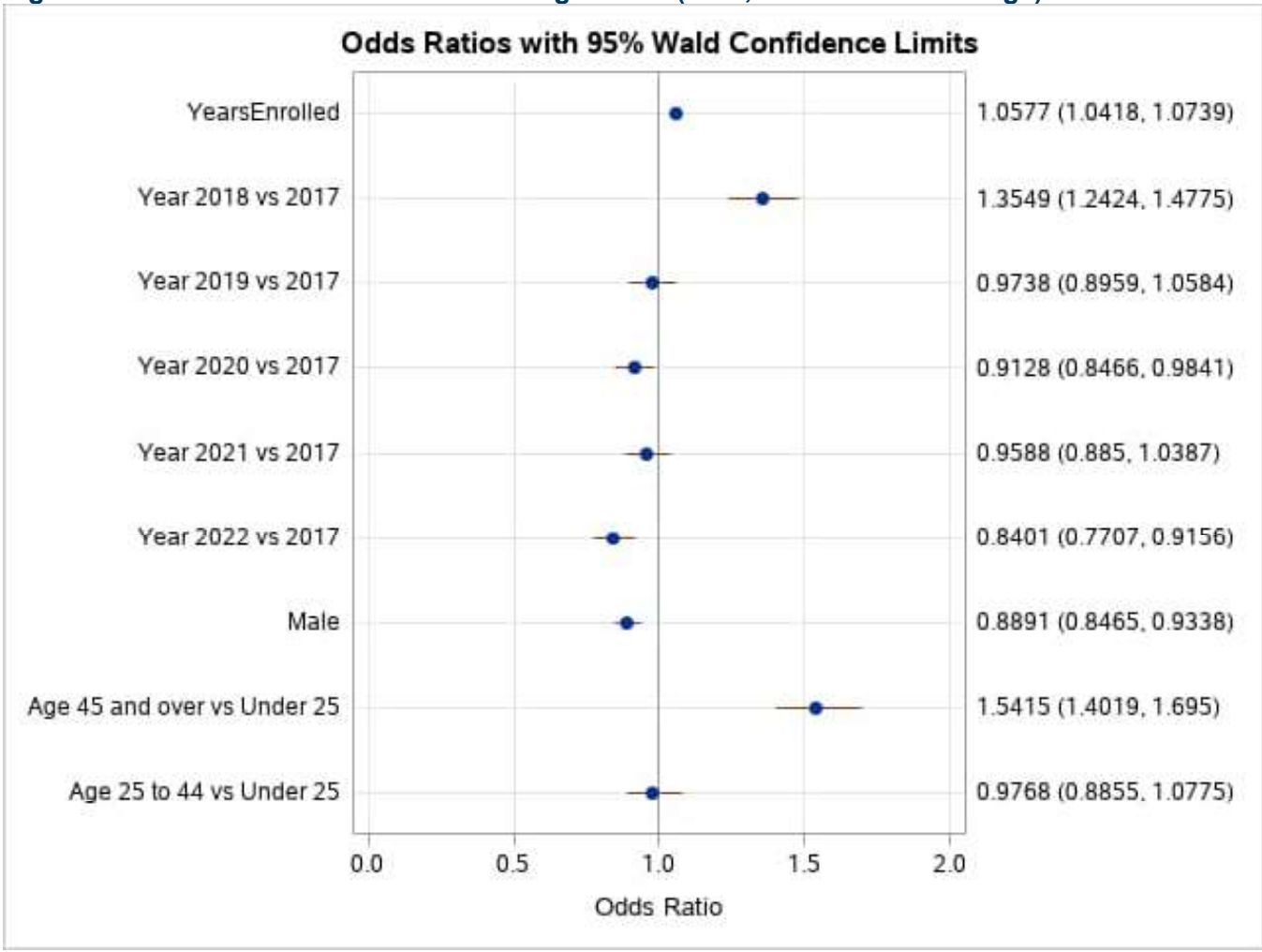


Figure 6.30d. Flu Shot for Adult Patients (Year with Ethnicity)



In all years, the majority of Gateway patients receiving a flu shot (and eligible for the metric) were age 45 and older, female, Black/African American, and non-Hispanic/Latino (Figure 6.30).

Figure 6.31. Flu Shot for Adult Patients Regression (Year, with Gender and Age)



Patients were more likely to receive a flu shot in 2018 than in 2017. There was no significant difference in those receiving a flu shot between 2019 and 2017 and between 2021 and 2017. Patients were less likely to receive a flu shot in 2020 and 2022 than in 2017. Males were less likely than females to receive a flu shot. Patients in the 45 and over age group were more likely to receive a flu shot than patients in the under 25 age group. There was no significant difference in those receiving flu shots between the under 25 age group and the 25 to 44 age group. Patients were more likely to receive a flu shot for each additional year enrolled (Figure 6.31).

Figure 6.32a. Use of Appropriate Medications for Asthma (Year with Age)

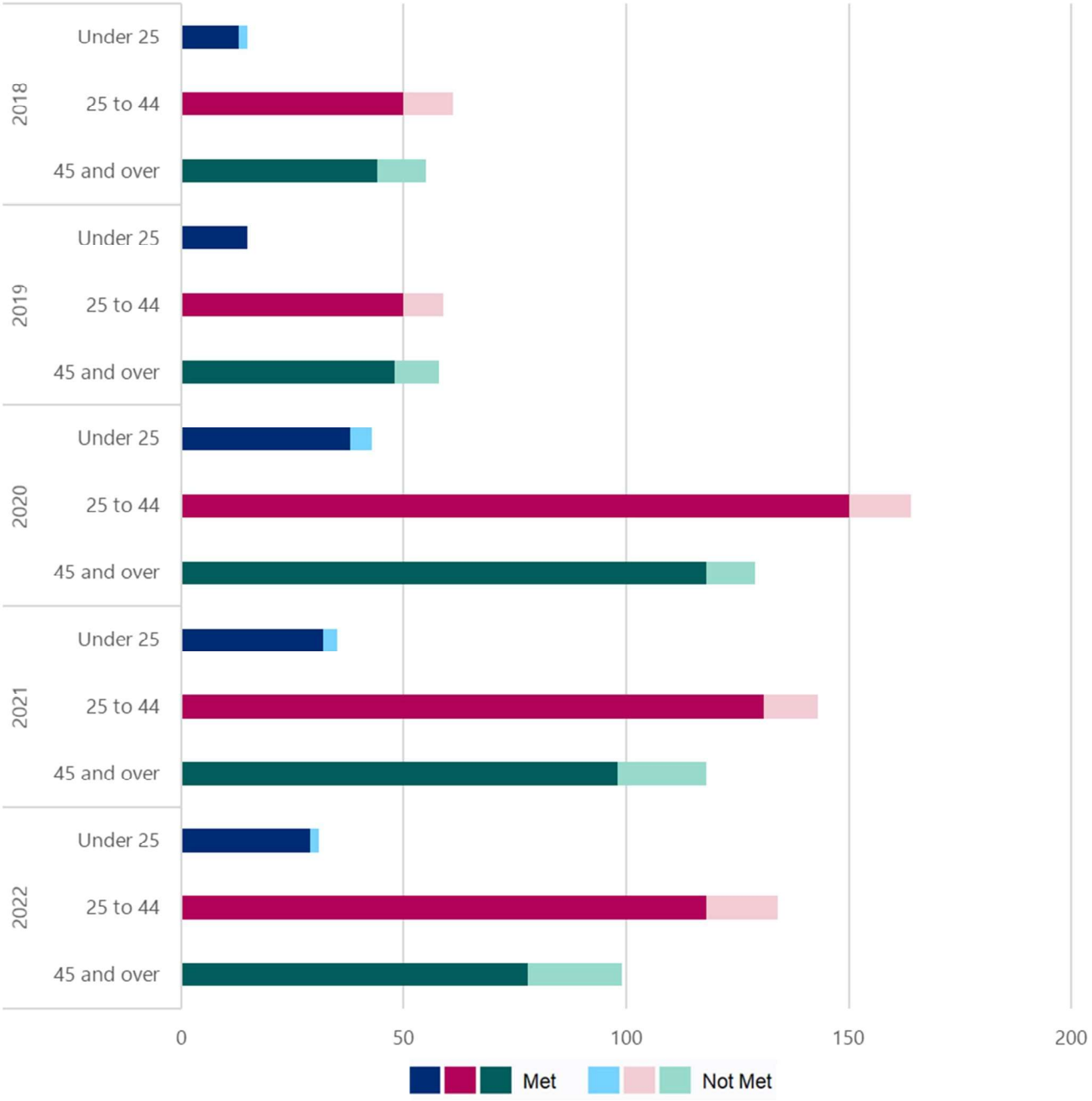


Figure 6.32b. Use of Appropriate Medications for Asthma (Year with Race)

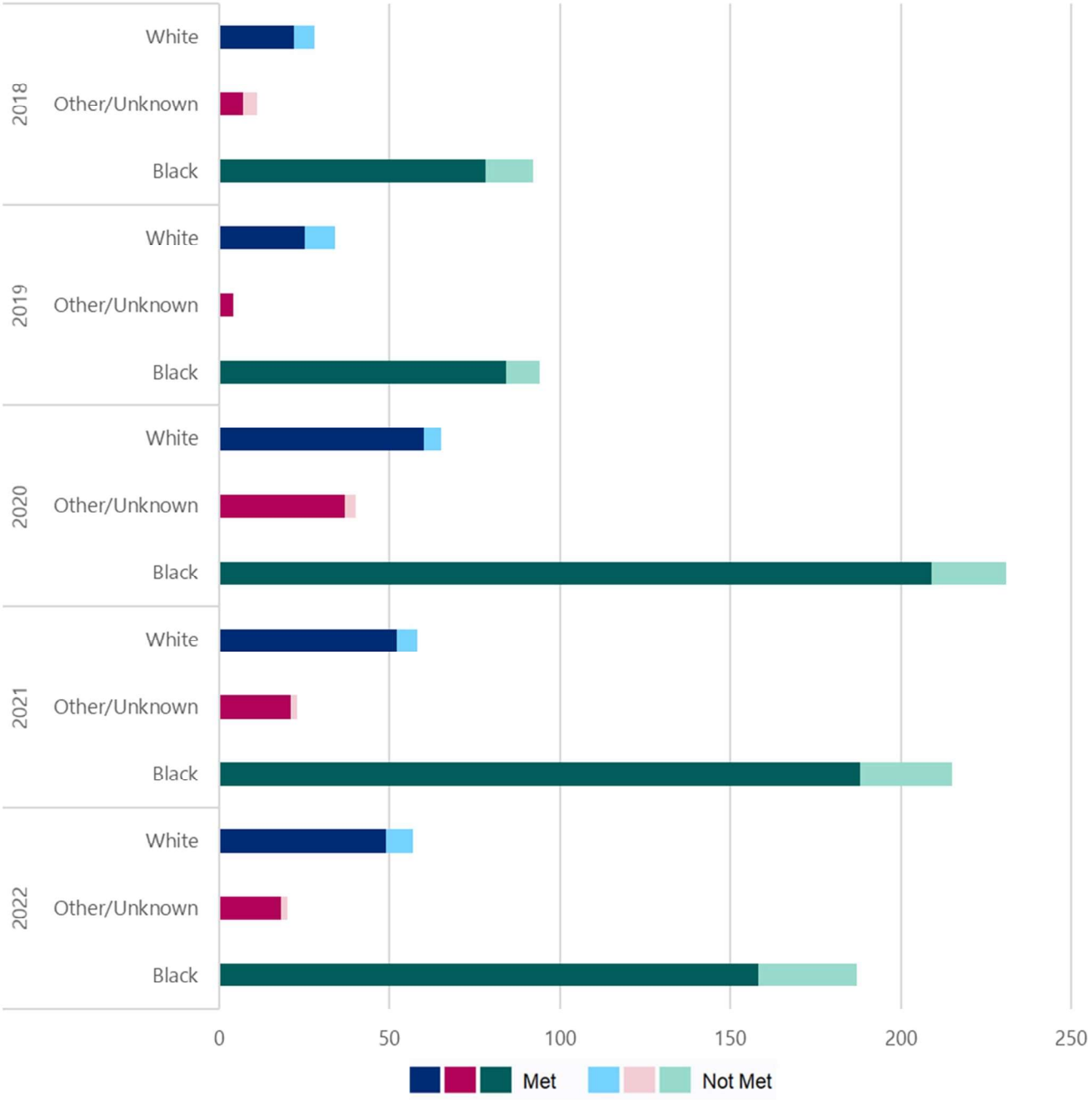


Figure 6.32c. Use of Appropriate Medications for Asthma (Year with Gender)

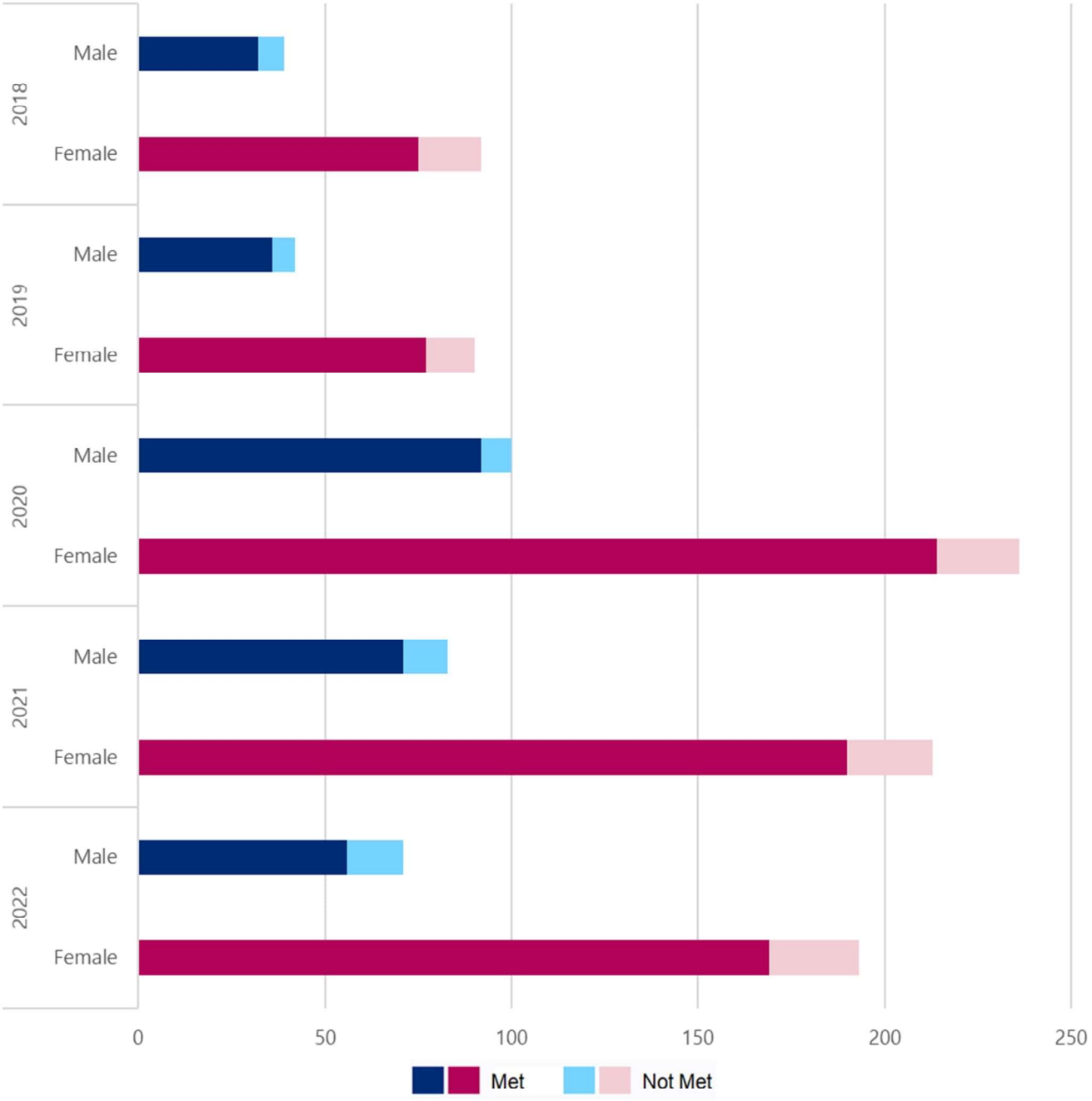
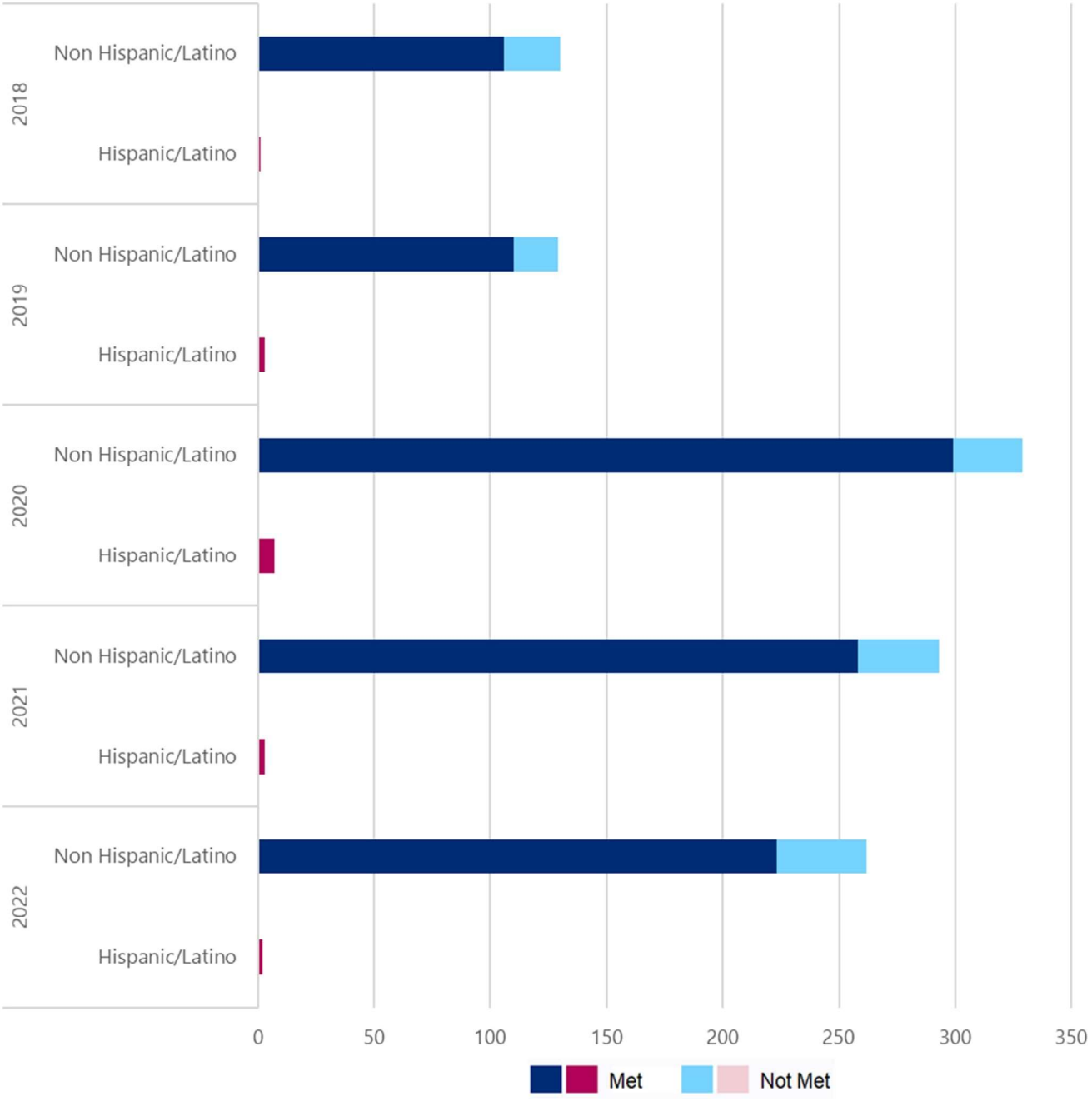
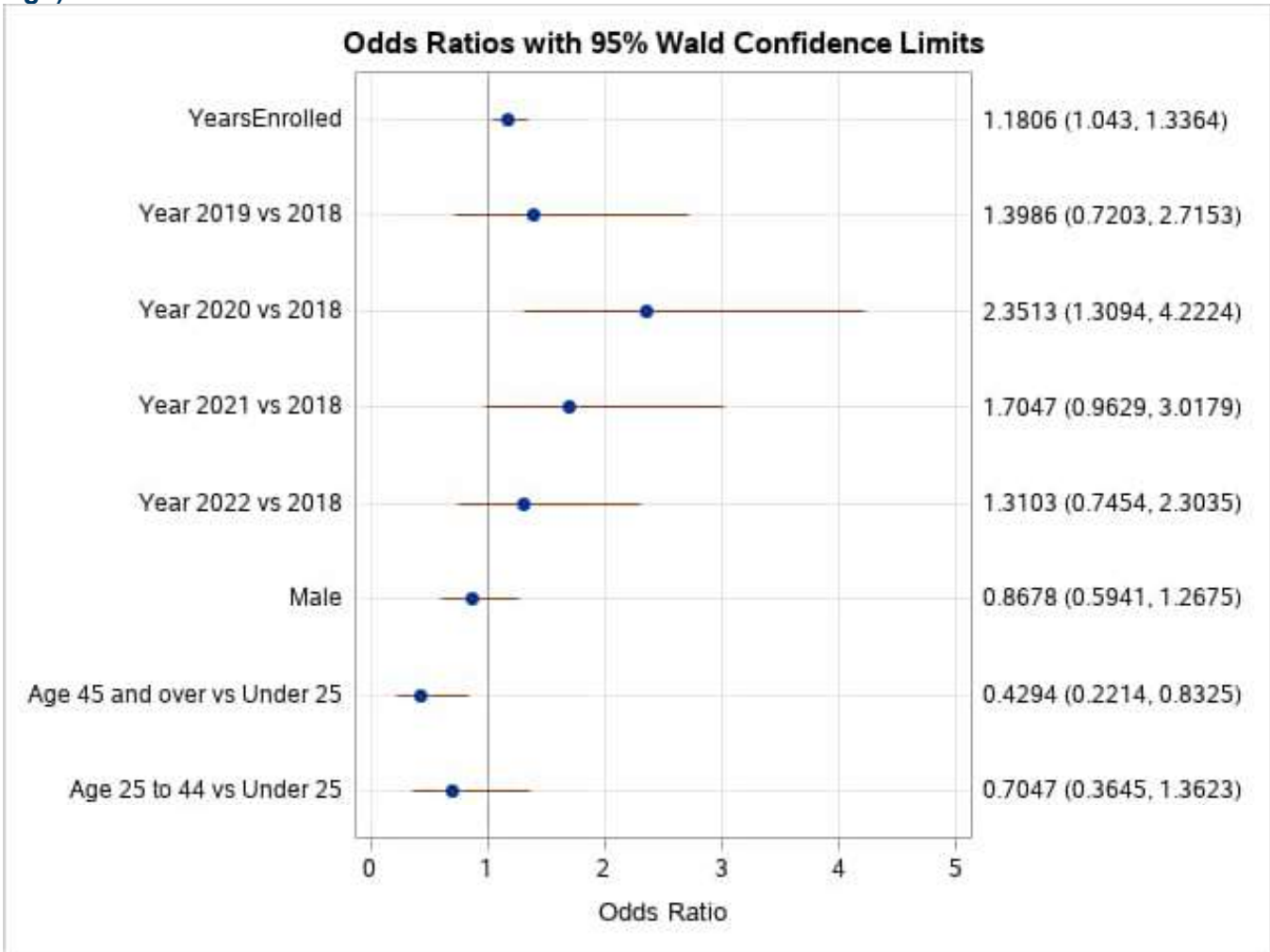


Figure 6.32d. Use of Appropriate Medications for Asthma (Year with Ethnicity)



In all years, the majority of Gateway patients diagnosed with asthma (and eligible for the metric) were age 44 and younger, female, Black/African American, and non-Hispanic/Latino (Figure 6.32). This was a new metric in 2018, so the baseline year for this metric is 2018.

Figure 6.33. Use of Appropriate Medications for Asthma Regression (Year, with Gender and Age)

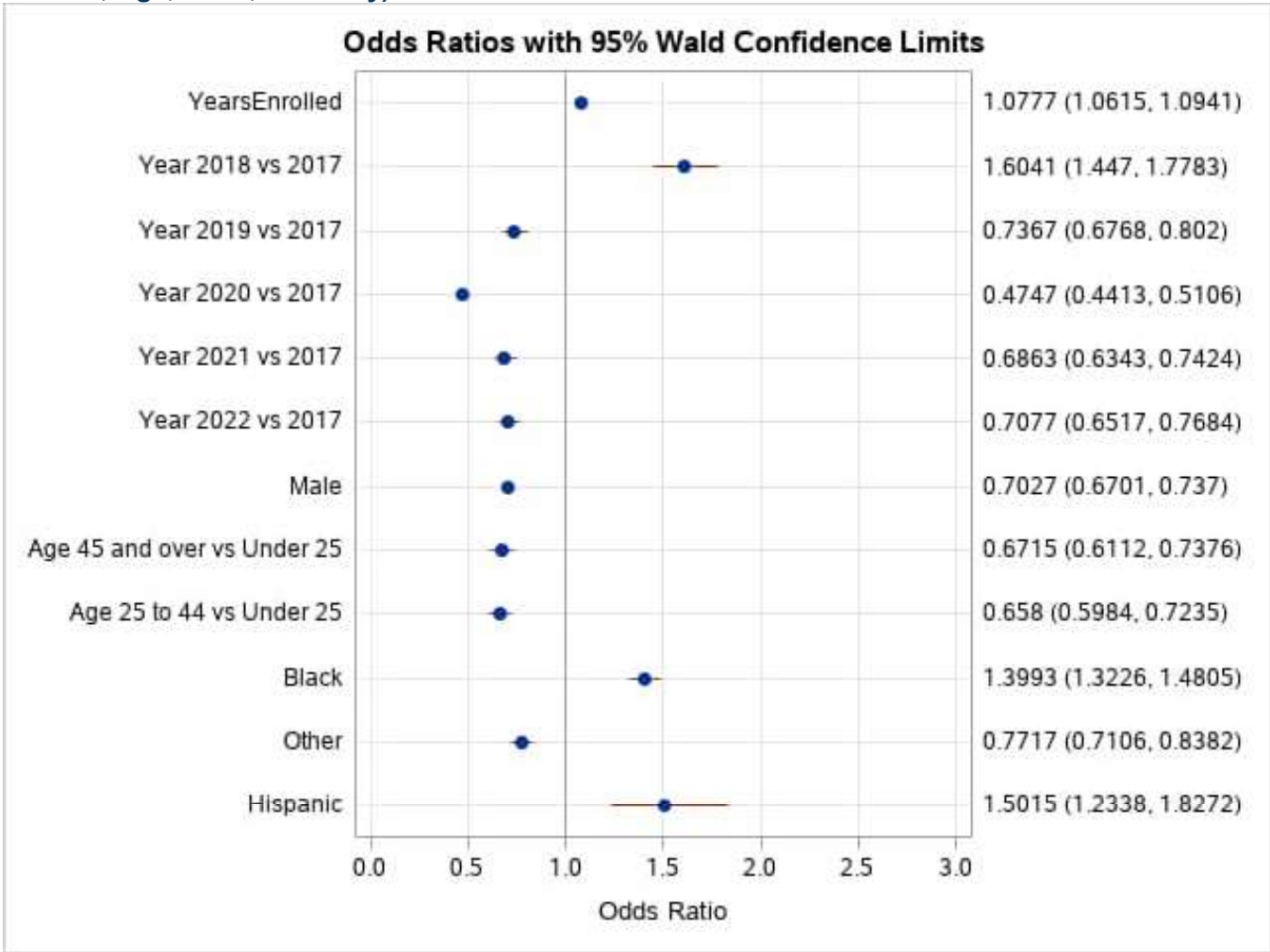


Gateway members in 2020 were more likely to receive asthma medications compared to 2018. However, there were no significant difference between 2019, 2021, and 2022 compared to 2018. Gender does not have a significant effect on the odds of a Gateway member being dispensed an asthma medication. Gateway members in the over 45 age group were less likely to receive asthma medications than members in the under 25 age group. There was no significant difference in those receiving asthma medications between the under 25 age group and the 25 to 44 age group. Gateway members were more likely to receive asthma medications for each additional year enrolled (Figure 6.33).

Question: Do health indicators, when calculated separately for African American, Caucasian, and Hispanic Gateway enrollees exhibit statistically significant differences?

The individual-level health indicator data is also analyzed with multiple regression to identify whether there are health disparities across race and ethnicity categories.

Figure 6.34. Tobacco Use Assessment and Cessation Intervention Regression (Year, with Gender, Age, Race, Ethnicity)



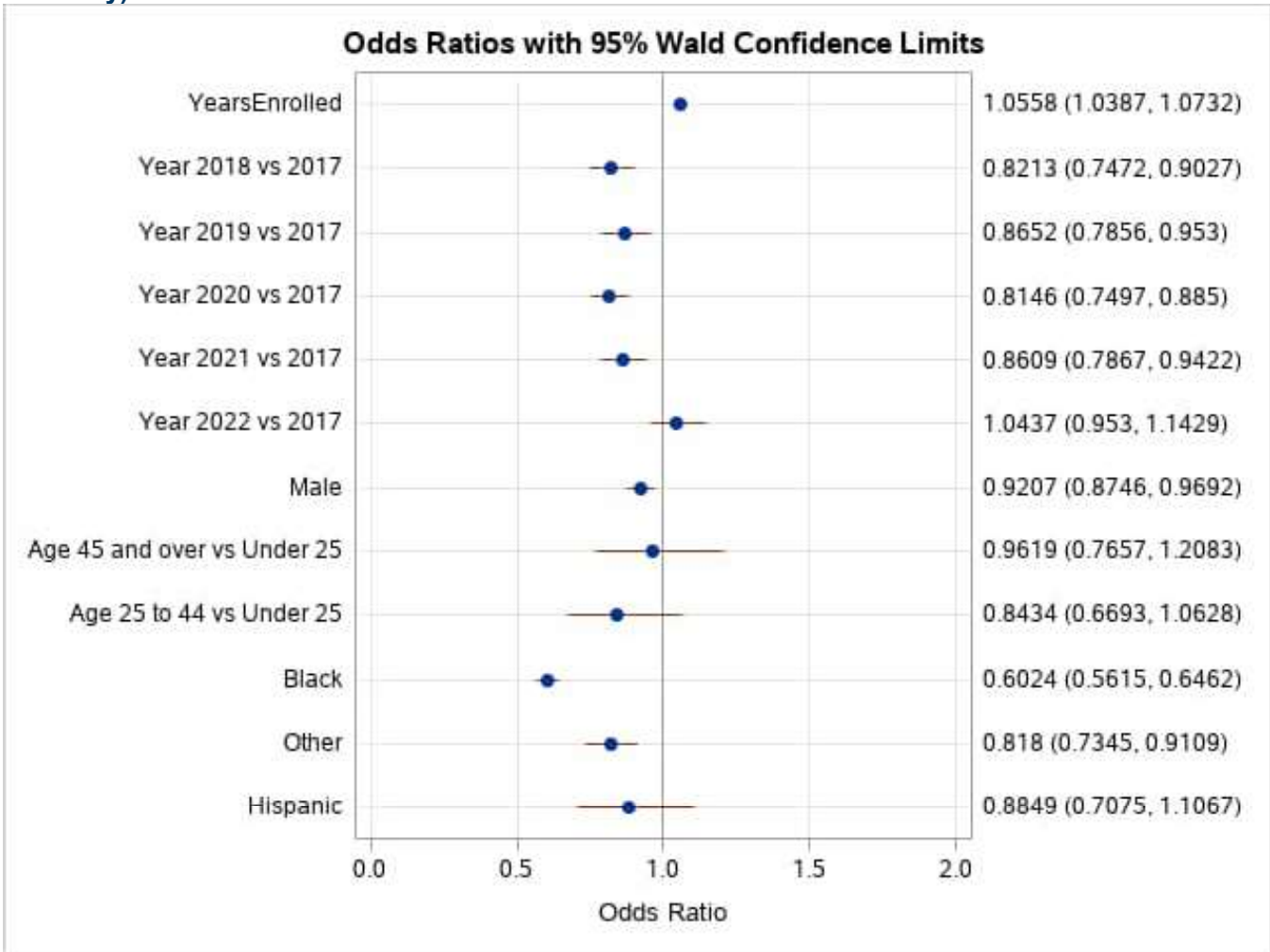
As noted previously, in each year, the majority of Gateway patients eligible for the tobacco intervention were age 45 and older, female, Black/African American, and non-Hispanic/Latino (Figure 6.22).

Patients were more likely to receive the tobacco intervention in 2018 than in 2017, but patients were less likely to receive the tobacco intervention in 2019, 2020, 2021, and 2022 than in 2017. Patients were least likely to receive the tobacco intervention in 2020. The percentage of patients receiving the intervention in 2021 and 2022 was similar to 2019. Males were less likely to receive the tobacco intervention than females, and both older age groups, age 25–44, and age 45 and over, are less likely to receive the tobacco intervention than the youngest age group. Patients were more likely to receive

the tobacco intervention for each additional year they were enrolled. It can be concluded that as patients gets older, they are less likely to receive treatment.

Tobacco users who identify as Black/African American are more likely to receive the tobacco intervention than White tobacco users. Tobacco users who identify with other or unspecified races were less likely to receive the tobacco intervention than White patients. Tobacco users who identify as Hispanic/Latino were more likely to receive the tobacco intervention than non-Hispanic/Latino tobacco users. (Figure 6.34).

Figure 6.35. Hypertension: Blood Pressure Control Regression (Year, with Gender, Age, Race, Ethnicity)



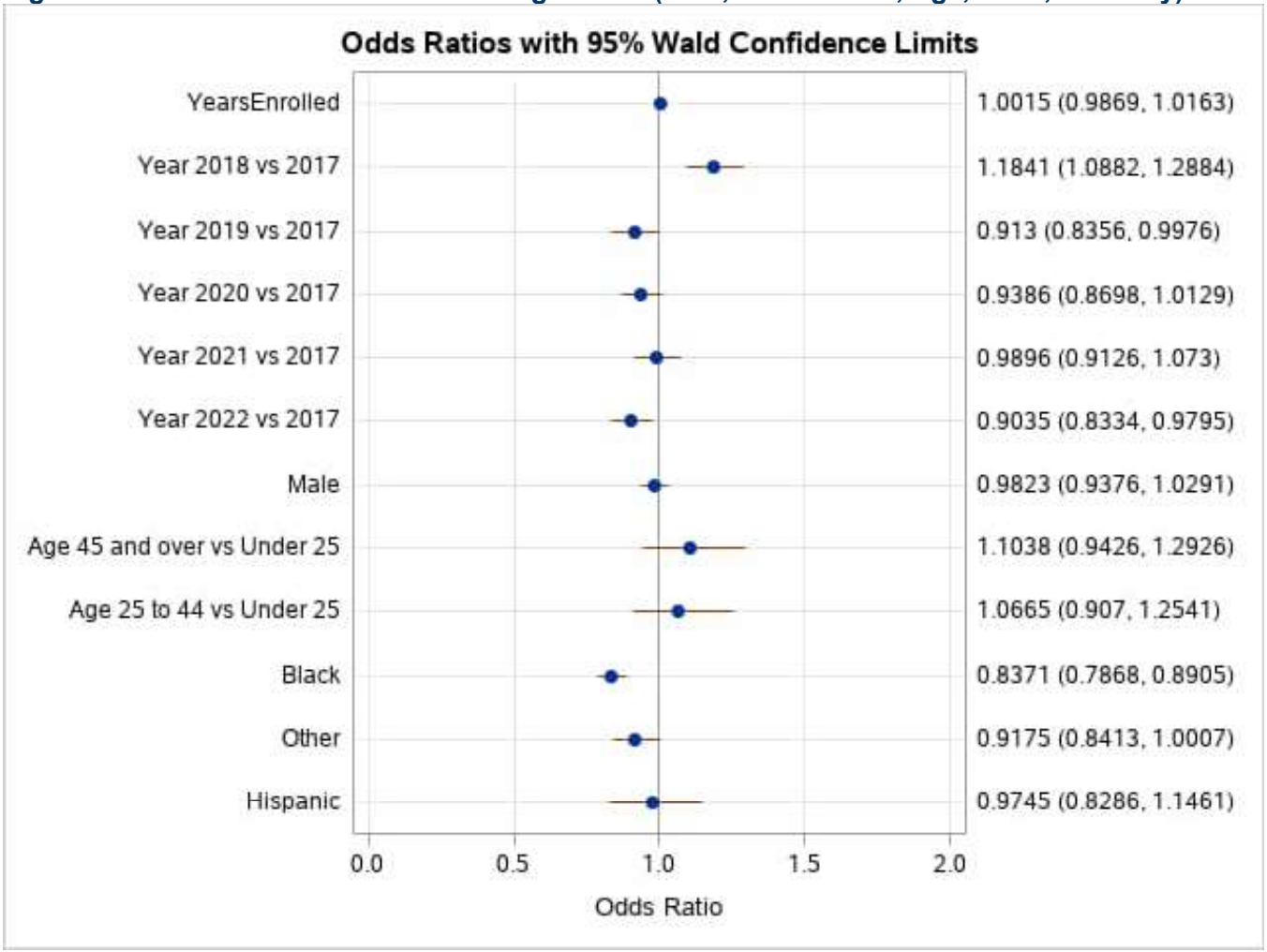
As noted previously, in each year, the majority of Gateway patients diagnosed with HTN (and eligible for the metric) were age 45 and older, female, Black/African American, and non-Hispanic/Latino (Figure 6.24).

Gateway members diagnosed with HTN in the year 2018, 2019, 2020, and 2021 were less likely to have an adequate control blood pressure reading at their next visit compared to 2017. Gateway members diagnosed with HTN in the year 2022 were equally as likely to have an adequate control blood pressure reading at their next visit compared to 2017. If a Gateway member diagnosed with HTN is male, he is less likely to have an adequate control blood pressure reading at his next visit compared to a female. Age group is not a significant effect on the odds of a Gateway member diagnosed with HTN having an adequate control blood pressure reading at his/her next visit.

The longer a Gateway member diagnosed with HTN is enrolled, the more likely he/she is to have an adequate control blood pressure reading at their next visit.

Gateway members diagnosed with HTN who identified as Black/African American or of other or unspecified races were less likely to have an adequate control blood pressure reading at their next visit compared to White members. Ethnicity is not a significant effect on the odds of a Gateway member diagnosed with HTN having an adequate control blood pressure reading at his/her next visit (Figure 6.35).

Figure 6.36. Diabetes: HbA1c Control Regression (Year, with Gender, Age, Race, Ethnicity)



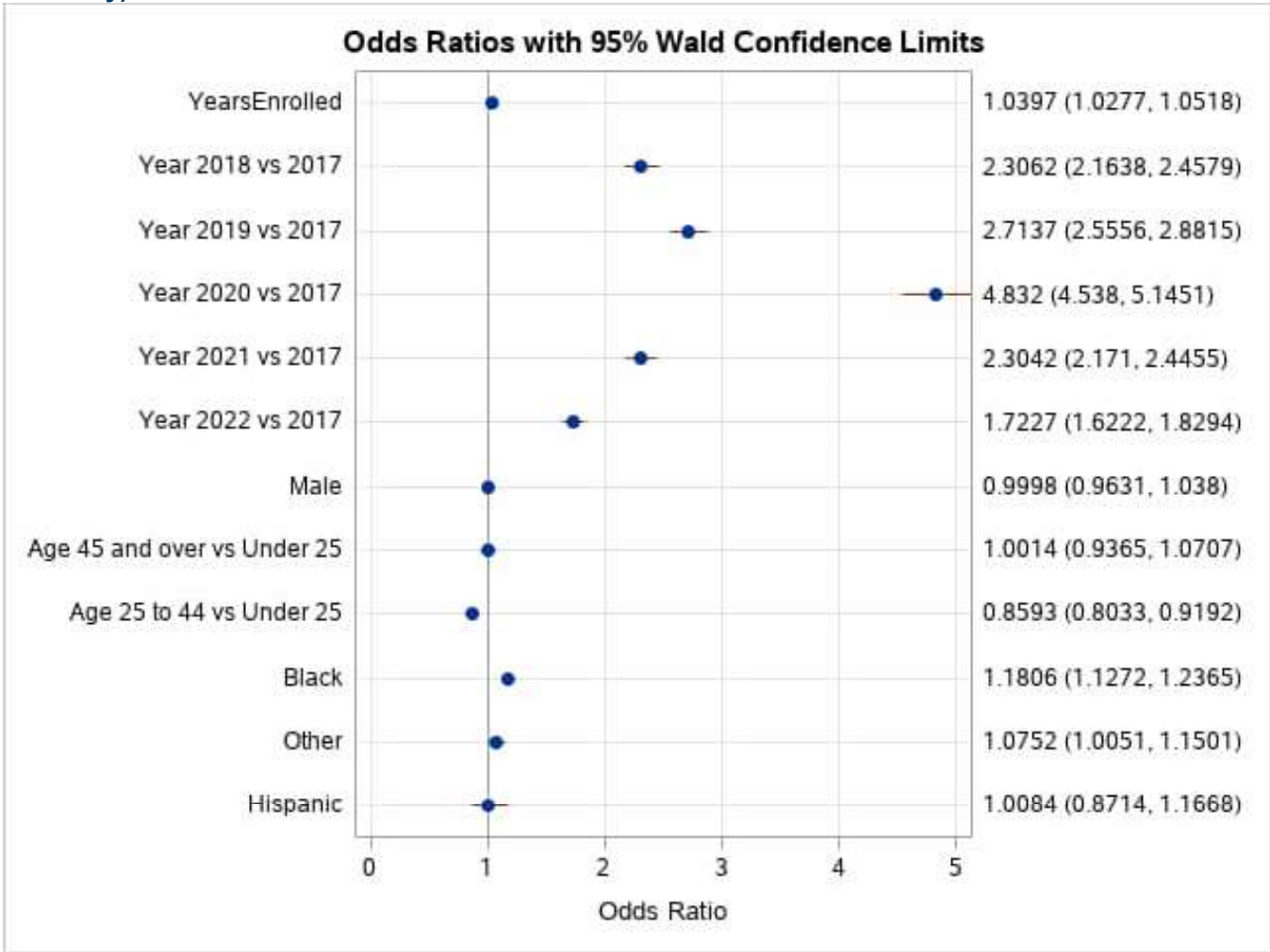
In 2017, 2018, 2020, 2021 and 2022, the majority of Gateway patients diagnosed with Diabetes (and eligible for the metric) were age 45 and older, female, Black/African American, and non-Hispanic/ Latino. In 2019, there were an approximately even number of male and female patients diagnosed with Diabetes and eligible for the metric (Figures 6.26).

Patients diagnosed with Diabetes were more likely to have HbA1c control in 2018 than in 2017, and less likely to have HbA1c control in 2019 and 2022 than in 2017. There was no significant difference in patients with HbA1c control between 2020 and 2017, and between 2021 and 2017. There was also no significant difference between males and females and no significant difference between age groups in HbA1c control. There was no significant difference in HbA1c control based on additional years patients were enrolled.

Black/African American patients were less likely to have HbA1c control than White patients. Patients of other or unspecified race were equally likely to have HbA1c control as White patients. There is no

significant difference between Hispanic/Latino and non-Hispanic/Latino patients in HbA1c control (Figure 6.36).

Figure 6.37. Adult Weight Screening and Follow-up Regression (Year, with Gender, Age, Race, Ethnicity)



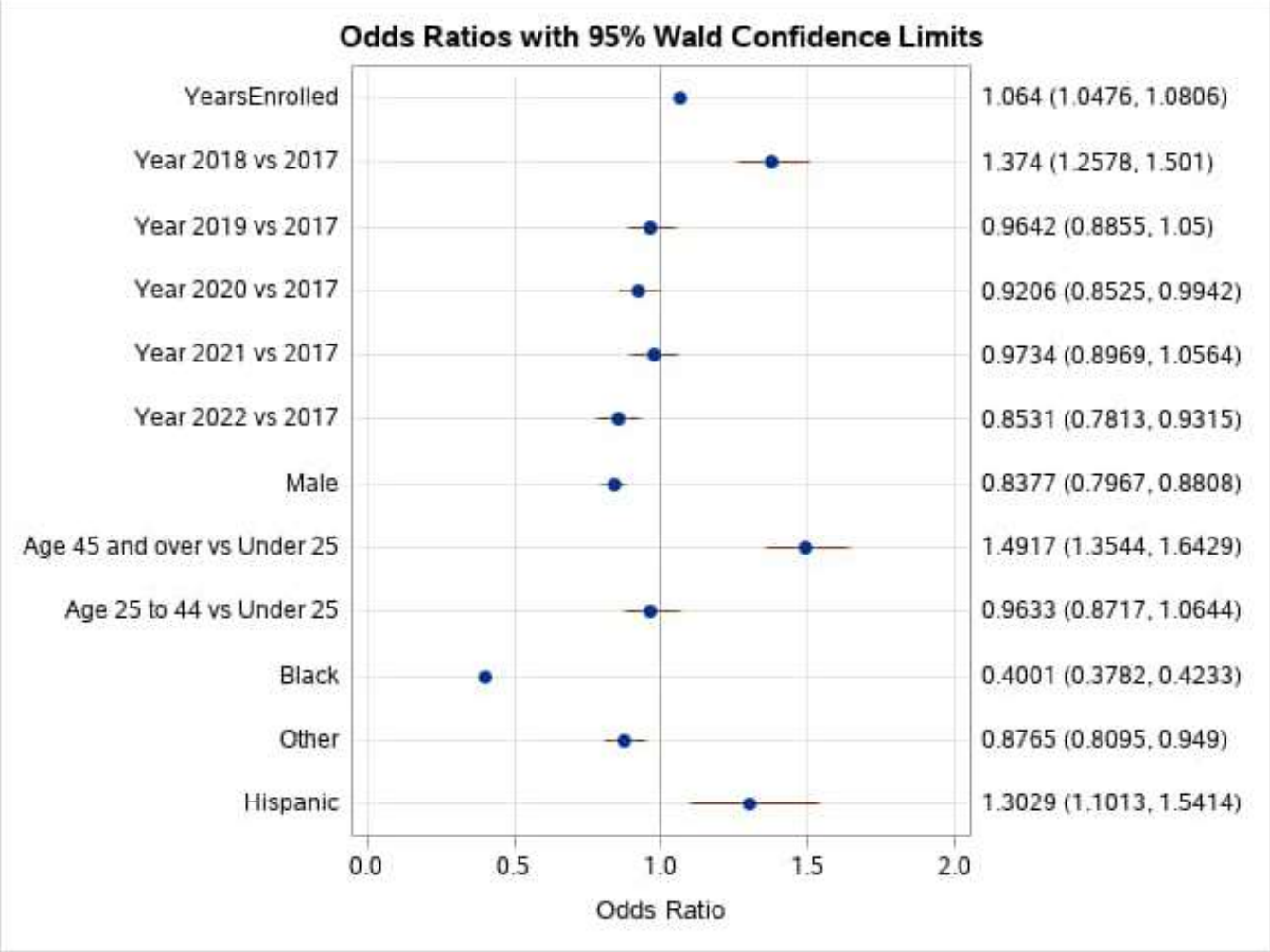
As previously described, in 2017, 2018, 2019, 2020, 2021, and 2022, the majority of Gateway patients receiving weight screening and follow-up were female, Black/African American, and non-Hispanic/ Latino. In 2017 and 2018 the majority of Gateway patients receiving weight screening and follow-up were over age 45. In 2019, 2020, 2021, and 2022 there were an approximately equal number of Gateway patients receiving weight screening and follow-up who were over age 45 and under age 45 (Figure 6.28).

Patients were more likely to receive weight screening and follow-up in 2018, 2019, 2020, 2021, and 2022 than in 2017. Patients in the 25 to 44 age group were less likely than those under 25 to receive weight screening and follow-up. There was no significant difference in those receiving weight

screening and follow-up between the youngest age group and the oldest age group, and between males and females. Patients were more likely to receive weight screening and follow-up for each additional year enrolled.

Black/African American patients were more likely to receive weight screening and follow-up than White patients. Patients of other or unspecified race were more likely to receive weight screening and follow-up than White patients. There is no significant difference between Hispanic/Latino and non-Hispanic/Latino patients in receiving weight screening and follow-up (Figure 6.37).

Figure 6.38. Flu Shot for Adult Patients (Year, with Gender, Age, Race, Ethnicity)



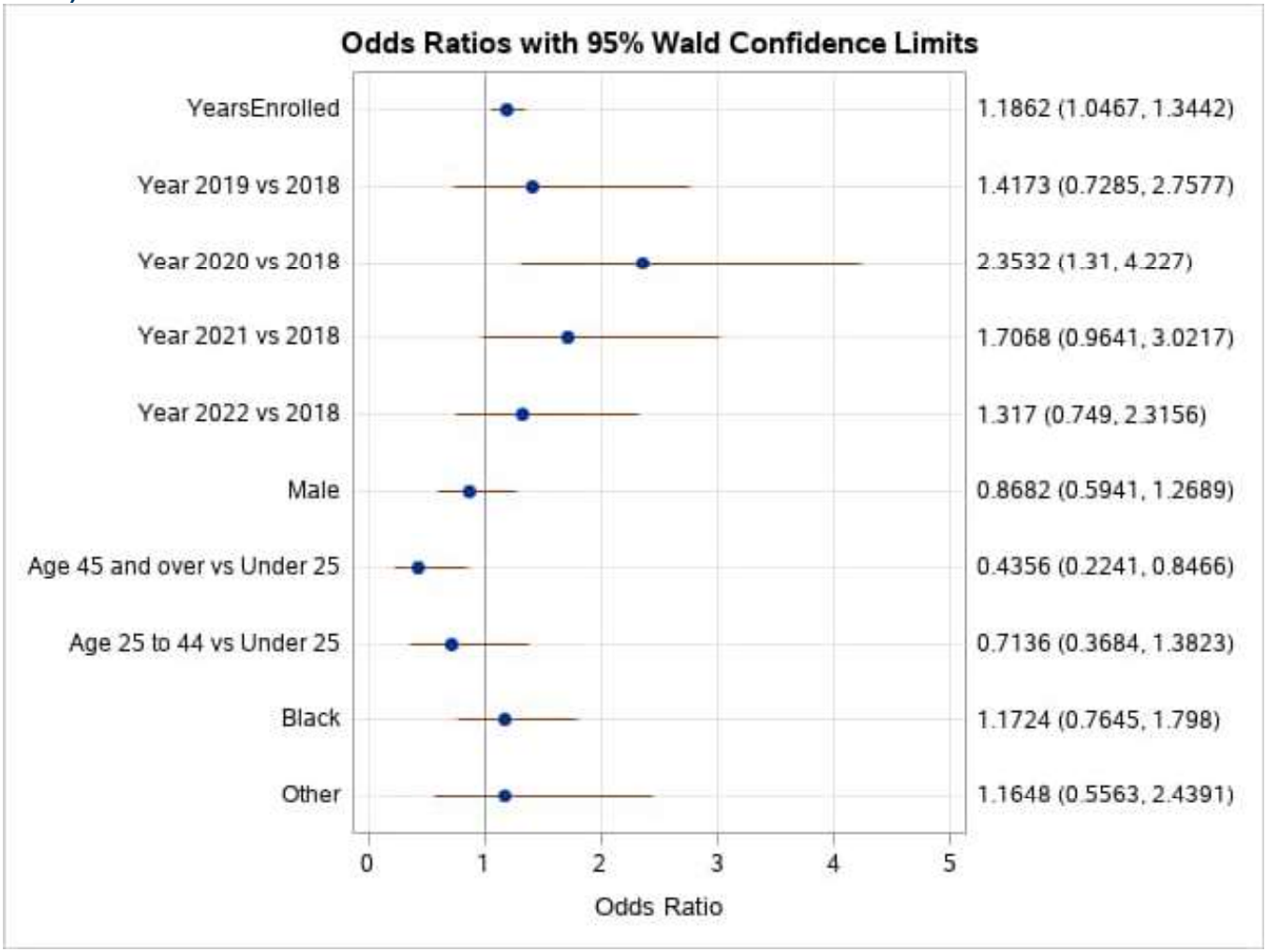
In all years, the majority of Gateway patients receiving a flu shot (and eligible for the metric) were age 45 and older, female, Black/African American, and non-Hispanic/Latino (Figure 6.30).

Patients were more likely to receive a flu shot in 2018 than in 2017. There was no significant difference in those receiving a flu shot between 2019 and 2017 and between 2021 and 2017. Patients

were less likely to receive a flu shot in 2020 and 2022 than in 2017. Males were less likely than females to receive a flu shot. Patients in the 45 and over age group were more likely to receive a flu shot than patients in the under 25 age group but there was no significant difference in those receiving flu shots between the under 25 age group and the 25 to 44 age group. Patients were more likely to receive a flu shot for each additional year enrolled.

Black/African American patients were less likely to receive a flu shot than White patients. Patients of other or unspecified race were less likely to receive a flu shot than White patients. Hispanic/Latino patients were more likely than non-Hispanic/Latino patients to receive a flu shot (Figure 6.38).

Figure 6.39. Use of Appropriate Medications for Asthma Regression (Year, with Gender, Age, Race)



In all years, the majority of Gateway patients diagnosed with asthma (and eligible for the metric) were age 44 and younger, female, Black/African American, and non-Hispanic/Latino (Figure 6.32). This was a new metric in 2018, so the baseline year for this metric is 2018.

Gateway members in 2020 were more likely to receive asthma medications compared to 2018. However, there were no significant difference between 2019, 2021, and 2022 compared to 2018. Gender does not have a significant effect on the odds of a Gateway member being dispensed an asthma medication. Gateway members in the over 45 age group were less likely to receive asthma medications than members in the under 25 age group. There was no significant difference in those receiving asthma medications between the under 25 age group and the 25 to 44 age group. Gateway members were more likely to receive asthma medications for each additional year enrolled.

Gateway members who identify as Black/African American or other or unspecified races do not show a significant difference to White members for asthma medication prescription. The model was unable to estimate differences between Hispanic/Latino patients and non-Hispanic/Latino patients dispensed asthma medication, because all Hispanic/Latino patients eligible for the measure were dispensed asthma medication (Figure 6.39).

Table 6.2. Comparison of Odds Ratios across Health Outcome Models (Year, with Gender, Age, Race, Ethnicity)

	Years Enrolled	2018 vs 2017	2019 vs 2017	2020 vs 2017	2021 vs 2017	2022 vs 2017	Male vs Female	Ages 25-44 compared to <25	Ages 45+ compared to <25	African American vs White	Other Races vs White	Hispanic vs Non-Hispanic
Tobacco	1.078	1.604	0.737	0.475	0.686	0.708	0.703	0.658	0.671	1.399	0.772	1.501
Hypertension	1.056	0.821	0.865	0.815	0.861	1.044	0.921	0.843	0.962	0.602	0.818	0.885
Diabetes	1.002	1.184	0.913	0.939	0.990	0.904	0.982	1.067	1.104	0.837	0.918	0.975
Weight	1.040	2.306	2.714	4.832	2.304	1.723	1.000	0.859	1.001	1.181	1.075	1.008
Flu	1.064	1.374	0.964	0.921	0.973	0.853	0.838	0.963	1.492	0.400	0.876	1.303
Asthma	1.186		1.417	2.353	1.707	1.317	0.868	0.714	0.436	1.172	1.165	

*Baseline year is 2018 for Asthma outcome.

Positive effect Negative effect No significant effect

In Table 6.2, blue/gray boxes indicate that the factor (years enrolled, year, gender, age, race, and ethnicity) was not significant in predicting whether the outcome measure was met. Green boxes indicate that the level of factor is predictive of a greater odds of meeting the measure, and pink boxes indicate that the level of factor is predictive of a lower odds of meeting the measure.

Being enrolled for more years is predictive of higher odds of receiving the tobacco use assessment and cessation intervention, having HTN blood pressure control, receiving weight screening and follow-up, receiving a flu shot, and receiving asthma medication.

Some health outcomes, including the tobacco use assessment and cessation intervention, Diabetes HbA1c control, weight screening and follow-up, and receipt of flu shot, improved (i.e., had a higher odds ratio) from baseline in 2018, but then did not improve further in subsequent years. Weight screening and asthma medication were exceptions with outcomes improved in 2020 versus the baseline. Weight screening also improved in 2021 and 2022 versus the baseline.

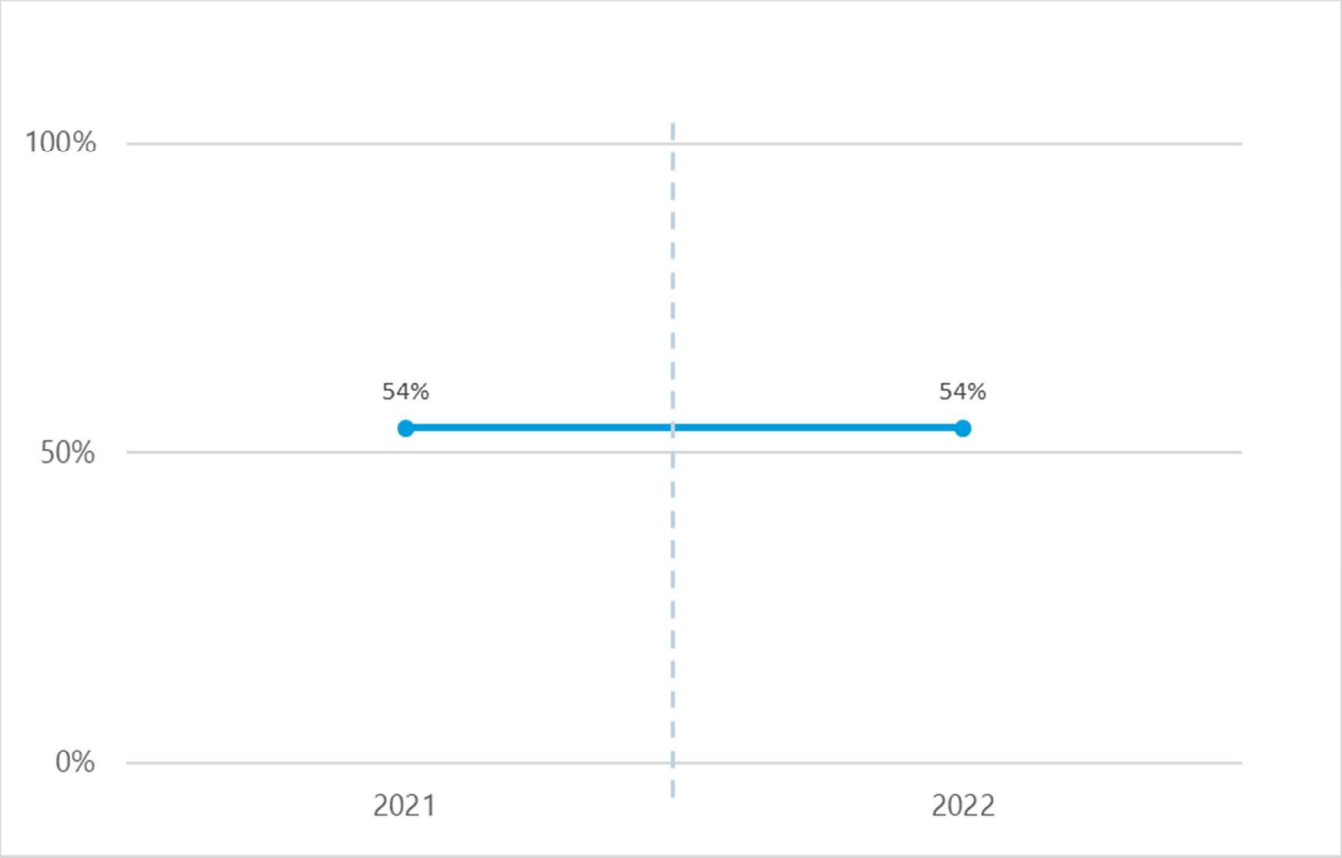
Health outcomes for subsets of the Gateway population have been identified for further study. Differences are apparent by race: Black/African American patients are less likely to have blood pressure control, Diabetes HbA1c control, or receive a flu shot than White patients. However,

Black/African American patients are more likely to receive the tobacco intervention, and more likely to receive weight screening and follow-up than White patients.

There were also health outcomes differences by ethnicity. Hispanic patients were more likely to receive the tobacco use assessment and cessation intervention and the flu shot than non-Hispanic patients.

Question: Do Gateway enrollees with pain-related diagnoses treated under the physical function improvement service line report perceived improved physical function year-over-year?

Figure 6.40. Pain Diagnosis reporting improvement in physical function



Benefit began January 1, 2021

We see a steady percentage of 54% of enrollees with pain diagnosis reporting improvement in physical function in 2021 and 2022 (Figure 6.40).

Summary of Key Findings

Table 6.3 summarizes the key findings of the evaluation.

Table 6.3. Summary of Key Findings

Goal	Research Question	Measure	Key Findings
The Gateway program will support the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.	Does the coverage approach to provider reimbursement and incentive payments provide a stable revenue stream?	Gateway Provider Revenue	Provider revenue is stable; reimbursement and incentives are a stable revenue stream.
	What variance, if any, exists in primary care provider availability and primary care service array across the evaluation period?	Primary Care Clinic Hours per Week	Provider availability during business hours has remained consistent across the reporting period. Provider availability during non-business hours decreased in 2020.
		Available Primary Care Services	Total number of available services was slightly lower in 2020 with the reduction in clinic sites, but similar throughout the reporting period prior to 2020.
	What variance, if any, exists in access to primary and specialty care across the evaluation period?	Primary Care Clinic Non-Urgent Wait Times for New and Established Patients	Pre-2020, the largest variance for new and established patients was an increase of 53% and 31% respectively. In the first three quarters of the pandemic, wait times for both new and established patients dropped by 50% before resuming earlier levels at the end of 2020. Wait times for both new and establish patients were more variable and show increasing trends in fourth quarter 2021 and 2022 as the program closed. The largest variance were increases of 109% for new patients and 150% for established patients from the low points of the PHE to the highest times near the close of the program.

Goal	Research Question	Measure	Key Findings
		Primary Care Clinic Urgent Wait Times for New and Established Patients	Urgent primary care wait times for new and established patients increased from 2018 to 2019. Wait times for new patients continued to increase in 2020, but decreased for established patients to previous levels.
		Specialty Care Clinic Non-Urgent Wait Times for New and Established Patients	Non-urgent specialty care wait times for new patients decreased from baseline to 2019 and then increased in 2020 above baseline levels.
		Specialty Care Referrals	Specialty care referrals dropped in the first half of 2020, likely due to the pandemic. Specialty care referrals increased in the first half of 2021. Otherwise, they have remained relatively consistent across the reporting period.
Connect Gateway low-income uninsured individuals to a primary care home, engage Gateway members in health, and sustain or increase primary care utilization.	Have low-income uninsured adults in St. Louis City and St. Louis County connected to a primary care home?	Low-Income Uninsured Adults Newly Enrolled in Gateway	The demonstration enrolled between 3,500 and 4,800 new patients into the project annually during 2017 to 2019. The number of new patients increased each year. Reporting of this P4P metric was suspended in 2020 due to the PHE.
		Percent Low-Income Uninsured Adults in Gateway (Enrollees and Unique Users)	70% to 75% of eligible residents were enrolled into Gateway before 2021. Approximately 35% of eligible residents were utilizing medical services through Gateway clinics before 2021. This is consistent with the baseline year of 2017. In 2021 there was a slight decrease in eligible

Goal	Research Question	Measure	Key Findings
			residents utilizing medical services through Gateway, and in 2022 there was a dramatic decrease to only 56% of eligible residents enrolled in Gateway, and only 15% utilizing services.
	Has Gateway enrollment reduced the perception of barriers to primary and specialty care for enrollees and providers?	Barrier to Health Care (Self report and Provider Report)	A majority of patients and over 90% of providers believe patients would have difficulty in accessing appropriate medical care if the Gateway program ended. No surveys conducted in 2020, 2021, or 2022 due to the PHE.
	Have Gateway members been engaged by their primary care with member education, outreach, and follow-up?	Engagement Self report	Patients report over 75% satisfaction with health center's helpfulness and communication, which is down slightly from 2018 (83%). No surveys conducted in 2020, 2021, or 2022 due to the PHE.
		Newly Enrolled Office Visit	Throughout the reporting period, 71% to 75% of patients have been connected with a new patient visit during their first year of enrollment. This result has remained steady. Reporting of this P4P metric was suspended in 2020 due to the PHE.
	Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient medical services year-to-year?	Medical Service Line Average Utilization	Compared with the baseline year of 2017, 2020 saw an increase of approximately one encounter per patient and 2021 saw an increase of approximately two encounters per patient (from approximately seven to eight encounters and nine encounters, respectively). Encounters per patient

Goal	Research Question	Measure	Key Findings
			decreased to approximately five in 2022 as the program closed.
		Medical Service Line Unique Users Penetration	A steady rate, 50% to 55%, of Gateway members accessed care at their primary care health home across a given year, except in 2022 when only 34% of Gateway members accessed care at their primary care health home.
	Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient substance use services year-to-year?	Substance Use Service Line Unique Users Penetration	An increased percentage, from 3% to 5%, of Gateway enrollees utilized treatment from 2019 through 2021. Only 2% of Gateway enrollees utilized treatment in 2022.
		AUD Medication Management (Withdrawal and Maintenance)	Approximately 14% of enrollees with an AUD diagnosis were prescribed medication to manage alcohol withdrawal symptoms, while approximately 12%–15% of enrollees with an AUD diagnosis were prescribed maintenance medication to support alcohol use treatment in 2019 and 2020. Prescriptions for withdrawal medications and maintenance medications decreased in 2021, to 9% and 8%, respectively. Prescriptions for withdrawal medications also decreased in 2022 to 5%.
		OUD Medication Management (Withdrawal and Maintenance)	Approximately 5% of enrollees with an OUD diagnosis were prescribed medication to manage withdrawal symptoms from opioids, while approximately 36%–40% of enrollees

Goal	Research Question	Measure	Key Findings
			with an OUD diagnosis were prescribed maintenance medication to support opioid use treatment under the MAT model in 2019 and 2020. 2021 showed a decrease in prescriptions for withdrawal medications to 2% and then a slight increase in 2022 back to 4%. Prescriptions for maintenance medications decreased in both 2021 and 2022 to 28% and 23%, respectively.
	Do Gateway enrollees with pain-related diagnoses connected to a primary care home demonstrate increased utilization of outpatient physical function improvement services year-to-year?	Pain Diagnosis with Services in the Physical Function Improvement Service Line	Members with pain-related diagnoses treated with services in the physical function improvement service line decreased slightly from 16% to 14% in 2021 and 2022.
Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.	Does using value-based purchasing for provider reimbursement correspond with providers meeting incentive criteria on health and quality of care indicators?	Primary Care Provider Incentive Payments	Incentive payments remained relatively consistent, with lows in 2019 and 2022, and highest levels in 2021, but were suspended in 2020 due to the PHE.
		P4P Incentive Criteria Score	Incentive criteria scores have remained consistent over the reporting period from 2017 and 2019. Reporting of this P4P metric was suspended in 2020 due to the PHE.
	Do Gateway members perceive that their health outcomes have improved	Wellness (Self report and Provider Report)	Each year, 71% of patients endorsed that their overall health had improved due to enrollment in Gateway to Better Health and access to health

Goal	Research Question	Measure	Key Findings
	throughout the demonstration period?		care via their primary care health homes. Overwhelmingly, providers endorsed, by 84%–93%, that Gateway to Better Health was having a positive impact on patient health. No surveys conducted in 2020, 2021, or 2022 due to the PHE.
	Have health outcomes for Gateway members improved each DY?	• Tobacco use assessment and cessation intervention • HTN: Blood pressure control • Diabetes: HbA1c control • Adult weight screening and follow-up • Flu shot for adult patients • Use of appropriate medications for asthma	• Tobacco — patients most likely to receive intervention in 2018. Odds of receiving interventions in 2019, 2020, 2021, and 2022 are lower than baseline. Youngest patients and female patients most likely to receive intervention, and patients enrolled longer. • HTN — patients less likely to have blood pressure control in 2018, 2019, 2020, and 2021 than in baseline year. Patients equally as likely to have blood pressure control in 2022 as baseline. Males less likely to have blood pressure control. Patients enrolled longer more likely to have blood pressure control. • Diabetes — fluctuation in odds across years for HbA1c control. Patients most likely to have HbA1c control in 2018, then 2017/2020/2021, then 2019/2022. No other significant differences in odds ratios observed. • Weight screening and follow-up — more likely to have had screening

Goal	Research Question	Measure	Key Findings
			and follow-up in 2018, 2019, 2020, 2021, and 2022 than baseline. Patients age 25–44 less likely to receive screening and follow-up than younger patients under age 25. Patients enrolled longer more likely to have screening and follow-up. • Flu shot — patients more likely to receive flu shot in 2018 than 2017. Patients less likely to receive flu shot in 2020 and 2022 than 2017. Other years do not show significant difference. Males less likely to receive a flu shot. Patients in age group 45 and over more likely to receive flu shot than patients age under 25. Patients enrolled longer more likely to receive flu shot. • Asthma medication — patients more likely to receive prescription in 2020 than in 2018. Other years do not show significant difference. Patients in age group 45 and over less likely to receive asthma medication prescription than patients under age 25. Patients enrolled longer more likely to receive prescription.
	Do health indicators, when calculated separately for African American, Caucasian, and Hispanic Gateway	• Tobacco use assessment and cessation intervention	• Tobacco — African American patients more likely to receive tobacco intervention than Caucasian patients. Patients of

Goal	Research Question	Measure	Key Findings
	enrollees, exhibit statistically significant differences?	• HTN: Blood pressure control • Diabetes: HbA1c control • Adult weight screening and follow-up • Flu shot for adult patients • Use of appropriate medications for asthma	other/unspecified race less likely to receive intervention than Caucasian patients. Hispanic patients more likely to receive intervention than non-Hispanic patients. • HTN — African American patients and patients of other/unspecified race less likely to have blood pressure control than Caucasian patients. • Diabetes — African American patients and patients of other/unspecified race less likely to have HbA1c control than Caucasian patients. • Weight screening and follow-up — African American patients and patients of other or unspecified races more likely to receive weight screening and follow-up than Caucasian patients. • Flu shot — African American patients and patients of other or unspecified races less likely to receive flu shot than Caucasian patients. Hispanic patients more likely than non-Hispanic patients to receive flu shot. • Asthma medication — No significant difference across race groups in receiving asthma medication prescription.

Goal	Research Question	Measure	Key Findings
	Do Gateway enrollees with pain-related diagnoses treated under the physical function improvement service line report perceived improved physical function year-over-year?	Pain Diagnosis Reporting Improvement in Physical Function	Members with pain-related diagnoses reporting improvement in physical function is steady at 54% in 2021 and 2022.

7
Conclusions

Key Findings

Gateway met its three program objectives through its targets for improvement.

The Gateway program will support the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.

SLRHC supported a network of providers that could expect stable revenue from demonstration patients, which in turn provided a wide array of outpatient services that were available without long wait times. Primary care clinic business hours remained stable over the demonstration period compared to baseline. Primary clinic non-business hours were stable over the demonstration prior to 2020, which saw a decrease. The total number of available primary care services was similar throughout the reporting period, with a slight decrease in 2020 due to a reduction in clinic sites.

For appointment wait times, there were increases in non-urgent primary care wait times for both new and established patients prior to the COVID-19 pandemic, but then an approximate 50% drop in non-urgent primary care wait times during the first three quarters of 2020. Non-urgent primary care wait times resumed earlier levels by the end of 2020, and increased with more variability into 2021 and 2022 as the program ended. Urgent primary care wait times for established patients increased from 2018 to 2019, and decreased to baseline levels again in 2020. Urgent primary care for new patients increased from 2018 to 2019 and again in 2020. Non-urgent specialty care wait times for new patients decreased from baseline to 2019 and then increased in 2020 above baseline levels. Specialty care referrals dropped in the first half of 2020, likely due to the COVID-19 pandemic, and increased in the first half of 2021. Otherwise, they remained relatively stable.

Connect Gateway low-income uninsured individuals to a primary care home, engage Gateway members in health care, and sustain or increase primary care utilization.

The demonstration enrolled between 3,500 and 4,800 new patients into the project annually, and increased each year during 2017 to 2019. Two-thirds to three-quarters of eligible low-income adults enroll in Gateway and one-third of eligible low-income adults utilized services through Gateway prior to 2021. This was consistent with the levels of enrollees and service utilizers in the baseline year. Starting in 2021 there was a small decrease in Gateway members utilizing services, and in 2022 there was a larger drop in eligible residents enrolling and utilizing services through Gateway as members were transitioned to Medicaid.

Both Gateway patients and providers believed patients would have difficulty accessing primary and specialty care services if the Gateway demonstration ended prior to Medicaid expansion. Between 2018 and 2019, the percentage of patients surveyed believing they would have difficulty accessing services without Gateway went down from 62% to 55%. Over 90% of providers surveyed believed patients would have difficulty accessing primary care services without Gateway. Patient and provider surveys were suspended in 2020 due to the COVID-19 pandemic, and did not resume before the program ended.

Reported patient satisfaction with clinics' communication and helpfulness was high at over 75% of patients surveyed in 2018 and 2019. Over 70% of new patients were connected with a new patient visit in their first year of enrollment, slightly down from 75% in the baseline year, but relatively consistent.

Primary care medical services were consistently accessed by between 50% and 55% of members during the demonstration, except in 2022 when only 34% accessed those services. Compared with the baseline year of 2017 where the average was seven encounters per patient, average encounters per patient increased to eight in 2020 and increased to nine encounters per patient in 2021 in the medical service line. Average encounters per patient in the medical service line decreased to five in 2022 as members transitioned to Medicaid.

Unique users of substance use treatment services were increasing, from 3% of Gateway patients in 2019 to 5% of Gateway patients in 2021. In 2022 only 2% of Gateway patients used substance use treatment services. Out of enrollees with an AUD diagnosis, the percentage prescribed medication to manage alcohol withdrawal symptoms was steady at 14% in 2019 and 2020, and then decreased in both 2021 and 2022 down to 5%, The percentage of enrollees with an AUD diagnosis who were prescribed maintenance medication to support alcohol use treatment decreased from 15% in 2019 to 12% in 2020, and then leveled out at 8% in both 2021 and 2022. Out of enrollees with an OUD diagnosis, between 2% to 5% were prescribed medication to manage withdrawal symptoms from opioids from 2019 to 2022. Enrollees with an OUD diagnosis who were prescribed maintenance medication to support opioid use treatment under the MAT model dropped from 40% in 2019 to 23% in 2022.

Members with a pain diagnosis accessed services in the physical improvement service line at a slightly decreasing rate of 16% in 2021 to 14% in 2022.

Gateway maintains and enhances quality service delivery strategies to reduce health disparities.

Value-based purchasing was suspended during the COVID-19 pandemic, but in 2018 and 2019, provider incentives were consistent during the years of the demonstration.

Of patients surveyed in 2018 and 2019, 71% in each year reported that Gateway had a positive impact on their overall health. The percentage of providers agreeing that Gateway had a positive effect on

patients' health increased from 84% in 2018 to 93% in 2019. Patient and provider surveys were suspended in 2020 due to the COVID-19 pandemic.

Some health outcomes improved from baseline in 2018, including the tobacco use assessment and cessation intervention, Diabetes HbA1c control, weight screening and follow-up, and flu shot, but then did not improve further in subsequent years. Use of appropriate asthma medications was improved in 2020 versus the baseline, but then did not improve further in subsequent years. Weight screening was the exception with improvements in all years of the demonstration versus the baseline.

Select outcomes by demographic characteristic have been identified for further study and consideration as potential health disparities include:

- Black/African American patients are less likely to have blood pressure control, Diabetes HbA1c control, or receive a flu shot than White patients. However, Black/African American patients are more likely to receive the tobacco intervention, and more likely to receive weight screening and follow-up than White patients.

- Hispanic patients are more likely to receive the tobacco intervention and appropriate asthma medications when compared with non-Hispanic patients.

In further research, demographic differences and potential health disparities could be studied in detail with interaction factors in the regression models. This could help identify if disparities are more prevalent in certain years of the demonstration, or if there are significant disparities in age/gender groupings, or race/gender groupings, etc.

Impact of Demonstration

1. Based on the findings, discuss the outcomes and impacts of the demonstration and identify the opportunities for improvements. Specifically:

    A. If the State did not fully achieve its intended goals, why not? What could be done in the future that would better enable such an effort to more fully achieve those purposes, aims, objectives, and goals?

8

Interpretations, Policy Implications, and Interactions with Other State Initiatives

The Gateway demonstration was designed to provide a bridge to sustainable health care for safety net providers and their uninsured patients in St. Louis City and St. Louis County until coverage options were available through federal health reform. The Missouri legislature did not opt to expand Medicaid eligibility during its 2013–2020 legislative sessions, rendering the Gateway project invaluable to patients across the St. Louis region who would be left without an affordable option for care.

Anecdotally, one key interaction noted by the SLRHC between the Gateway to Better Health population and other Missouri Medicaid coverage plans, was the overlap between MO HealthNet for Pregnant Women and Newborns and this demonstration project. Pregnant women were able to access health care coverage, including 60-day postpartum coverage, through MO HealthNet. If these individuals did not qualify for extended Medicaid coverage benefits after their pregnancy benefits concluded, for example via MO HealthNet for Families, Gateway to Better Health became an option to ensure continuity of care for mothers at their chosen health center. This vacillation between coverage options for women in their childbearing years, created sustained support to cultivate healthy families. With the move of Gateway members to Medicaid, the Regional Health Commission (RHC) continues to advocate for the State to expand postpartum coverage from 60 days to 12 months. It should also be noted that Gateway to Better Health was the only option for male patients that did not qualify for other forms of coverage under Medicaid. As the program proceeded through time, enrollment was slightly higher for male enrollees than females. Without the support of this project, low-income adult patients would struggle to access care, or simply not seek it. Additionally, regional providers would bear the burden of supplementing the increase in uncompensated care.

In August of 2020, Missouri voters passed a ballot measure enabling an expansion of Missouri Medicaid (MO HealthNet) eligibility, allowing members covered under the Gateway demonstration to likely qualify for insurance options available under MO HealthNet. The review process to enroll Gateway members under Medicaid coverage options began October 1, 2021. The Gateway to Better Health program ended December 31, 2022 after Missouri Medicaid benefits were explored and secured for all Gateway members. This evaluation and enrollment process was completed in accordance with the continuous enrollment requirements established under the COVID-19 PHE. Furthermore, this expansion of services will provide care for an estimated 230,000 adults across Missouri who previously did not qualify for coverage.

As the project comes to a close, it is compelling to observe how the consistent funding provided through the primary care payment structure of Gateway to Better Health transitions to the Managed Care and Medicaid payment model for these members. For patients, their coverage and provider options improved exponentially. For providers, the funding stream provided by Gateway to Better Health was converted to a similar structure observed in the rest of the State's covered populations. What can be discerned at this juncture, is Gateway to Better Health has subsidized care for the St. Louis region for nearly a decade, positioning both clinics and patients to be prepared for a successful existence under Medicaid expansion.

9

Lessons Learned and Recommendations

In July 2012, the Gateway demonstration transitioned from a block grant structure to its existing coverage model. The Pilot Program Planning Team can deduce by qualitative accounts, as well as via the data provided above, that enrolling a patient in an insurance plan seems to empower patients to utilize the health care options available to them more fully than can be observed in a block grant structure. Continuity of their chosen provider, steady and reliable access to medications, and full knowledge of what medical options are available to them throughout their enrollment, creates patient security. This in turn increases the likelihood that individuals will access the essential preventative health care known to prevent more serious illness.

Furthermore, by targeting a small patient base, the Gateway pilot has created space for greater innovation and flexibility in its modes of care that can then be applied at larger scales. One example of this is paying specialty care providers via a fee-for-service model at the existing Medicare rate for Gateway outpatient hospital visits. The Gateway program was already successfully piloting this model under the demonstration, specifically through the payment of Hospital Outpatient Prospective Payment System (OPPS) rates, when non-related Missouri legislation mandated that the State incorporate a similar fee-based schedule into its other Medicaid plans. Lessons learned from the Gateway program were likely able to inform this transition of operations for other Medicaid services as the State implemented the new policy. While not directly linked, Gateway's infrastructure could be applied to other programs because of the State's experience running this demonstration.

Finally, the most impactful lesson learned in the St. Louis region is simply around cooperative efforts. Specifically the strengthening of relationships between community health centers and specialty care providers through coordinated targeted responses to continuity of care issues experienced by this patient population.

Through the Gateway to Better Health payor mechanism, the SLRHC was able to streamline patient care across disparate disciplines in a number of ways:

The first example of this streamlining function is the Gateway Provider Portal operated by AHS, which allowed for easy communication between health centers and specialty care providers. Appointment scheduling, patient consultation notes, and access to streamlined referrals information, all made the necessary transactions between providers seamless. This ease of communication not only creates fluidity between the providers, but also ensures patients experience top-notch service as their care transfers between separate medical teams.

As has been mentioned in previous reports, the development of Gateway's Pilot Program Planning Team established a multidisciplinary table comprised of primary and specialty care providers, clinic and hospital administrators, and community health advocates, all working together toward the common goals outlined in the demonstration's evaluation design. The relationships formed around the Gateway project fostered an environment for conveying shared learnings, connecting around other initiatives, and continuing to support the SLRHC's work toward eliminating existing health disparities present across our region. This foundation will maintain long after the project concludes, furthering the mission of an improved and cohesive St. Louis safety net.

Additionally, patient experiences observed via the Gateway to Better Health population have paved the way for necessary operational changes that will also maintain upon the closure of this payor mechanism. An example of this is the SLRHC's work with Washington University Physicians Streamlined Referrals department. SLRHC staff worked closely with this provider to coordinate the routing all of Washington University's specialty care referrals coming from the Gateway program into their Streamlined Referrals department, staffed with referral specialists whose are tasked with finding the right physician for the determined medical need, and securing the patient a timely appointment. Prior to this simple operational change, patients experienced longer specialty care wait times, which were occasionally aggravated by referrals to the incorrect department, further delaying necessary care. Furthermore, the intervention into the way referrals are funneled to one of the region's most utilized specialty care providers, helps community health center clinic administrators successfully connect other patients to care as well. This department not only works with Gateway patients but can provide scheduling and referral assistance for patients that are covered under Medicaid, uninsured, or are private pay. Because of the relationships fostered through Gateway to Better Health operations, department staff in the Streamlined Referrals department became well acquainted with community health center referral staff. Department staff provided in-house trainings to these clinics directly, offering training on specialty care department referral requirements, anticipated wait times, and best practices for a successful hand-off from the primary care space to the specialty care environment.

Finally, these bridges in communication allowed the project to remain reflexive and responsive in the development of modifications to treatment protocols. The SLRHC's Chronic Pain Initiative was precipitated by increased specialty care pain referrals in Gateway patients. This led to developed partnerships with Washington University's Orthopedic, Physiatry, and Pain Management departments, setting the groundwork for more issue-based collaboration between health center primary care providers and specialty care providers outside of Gateway-centric considerations. This partnership also led to Missouri's 2019 amendment request to incorporate physical function improvement benefits into the primary care home. Data collected by the program encourages discussion and collaboration that can be responsive to any identified gaps in care.

Missouri encourages other states that hope to implement a similar program, to begin first by bridging the gaps in communication between siloed organizations, patients, and medical staff.

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Attachments

Evaluation Design: Provide the CMS-approved Evaluation Design

State of Missouri

Gateway to Better Health Demonstration

Number 11-W-00250/7

Amended Evaluation Design

MAY 28, 2021

Table of Contents

I. General Background Information

A. Program History and Overview

The closure of the last public hospital in St. Louis in 2001 jeopardized the viability of the St. Louis healthcare safety net that provided healthcare services to uninsured and under insured individuals. The St. Louis Regional Health Commission (SLRHC) was formed and charged with developing strategies to improve the sustainability of the St. Louis healthcare safety net and improve health care access and delivery to this population in St. Louis. Over the next few years, an area of emerging concern was how to provide healthcare services for uninsured adults until a longer term solution could be formulated.

In partnership with the State of Missouri, the SLRHC reviewed options and elected to address the issue with an 1115 demonstration called "Gateway to Better Health" (Gateway). Approved on July 28, 2010, by the Centers for Medicare and Medicaid Services (CMS), the Gateway demonstration provides a bridge to sustainable health care for safety net providers and their uninsured patients in the St. Louis City and St. Louis County until coverage options are available through federal health reform. The 1115 demonstration waiver authorizes outpatient care services for uninsured adults in the St. Louis area.

Over the last decade, the work of the safety net providers in the St. Louis region has focused on helping patients establish a medical home in one of the community health centers in an effort to reduce health disparities and increase the effective utilization of the community's health care resources. The demonstration project is designed to support these efforts while preparing patients and safety net provider organizations for an effective transition to coverage that will be available under health care reform.

Gateway provides up to $30 million annually in funding for primary and specialty care, as well as other outpatient services. It preserves access to primary and specialty healthcare services for approximately 22,000 low-income, uninsured individuals in St. Louis City and County. Enrollees select a primary care home from five community health centers that coordinate additional outpatient care with covered specialists.

The demonstration was amended in June 2012 to enable the Safety Net Pilot Program to be implemented by July 1, 2012. In August 2018, the State of Missouri, Department of Social Services, requested authority to amend the Gateway program to include a substance use treatment benefit. The amendment request was approved January 31, 2019, with an implementation date of February 1, 2019, to cover outpatient substance use services, including pharmacotherapy, for Substance Use Disorder (SUD) treatment of Gateway enrollees with a primary or secondary diagnosis of ICD-10 Codes F10-F18. All office visits and pharmaceuticals are provided by the primary care home and are considered a core primary care service.

In October 2019, the State of Missouri, Department of Social Services, requested authority to further amend the Gateway program to include a physical function improvement benefit. The amendment request was approved in October 2020, with an implementation date of January 1,

2021, to cover office visits for physical therapy, occupational therapy, chiropractic, and acupuncture services for Gateway enrollees with pain related diagnoses[1]. All physical function services are to be provided by the primary care home and are considered a core primary care service.

CMS approved one-year extensions of the demonstration on September 27, 2013, July 16, 2014, December 11, 2015 and June 16, 2016. On September 2, 2017, a five-year extension of the current demonstration (Number: 11-W-00250/7) was approved that began on January 1, 2018. This program evaluation is designed to assess this demonstration extension, using 2017 as a baseline year for all measures except those associated with SUD treatment and physical function improvement services. The baseline year for measures associated with SUD treatment is 2019. The baseline year for measures associated with physical function is 2021. Other than the implementation of SUD treatment and physical function improvement services as core primary care services, no additional demonstration program changes are planned during the approval period.

B. Population Impacted

The demonstration targets low-income uninsured adults, aged 19 to 64, in St. Louis City and St. Louis County who are served by the health care safety net in St. Louis. To be considered "uninsured," applicants must not be eligible for coverage through the State Medicaid Plan. Screening for Medicaid eligibility is the first step of the Gateway eligibility determination.

The St. Louis health care safety net is comprised of the five St. Louis area community health centers, including Betty Jean Kerr People's Health Centers, Family Care Health Centers, Affinia Healthcare (formerly known as Grace Hill), CareSTL Health (formerly known as Myrtle Hilliard Davis Comprehensive Health Centers) and the St. Louis County Department of Public Health. These community health centers are the primary care Gateway providers.

[1] A list of eligible pain-related diagnoses can be found in Attachment F. ICD-10-CM Diagnostic Codes for Pain.

II. Evaluation Questions and Hypothesis

A. Targets for Improvement

Three demonstration objectives have provided the foundation for the design of the Gateway Program since its inception.

I. Preserve and strengthen the St. Louis City and St. Louis County safety net of health care providers available to serve the uninsured.
II. Connect the uninsured to a primary care home which will enhance coordination, quality and efficiency of health care through patient and provider involvement.
III. Maintain and enhance quality service delivery strategies to reduce health disparities.

Each of these objectives is translated into quantifiable targets for improvement so that the performance of the demonstration in relation to these targets can be measured. These targets for improvement are used to create the aims in the Driver Diagram and to support the hypotheses in the program evaluation design. The primary focus of the first objective is the support of outpatient services to uninsured adults. The focus of the second objective is maintaining or increasing primary care utilization levels. And the primary focus of the last objective is healthcare quality. The corresponding improvement target for each of the demonstration objectives is identified in the following table.

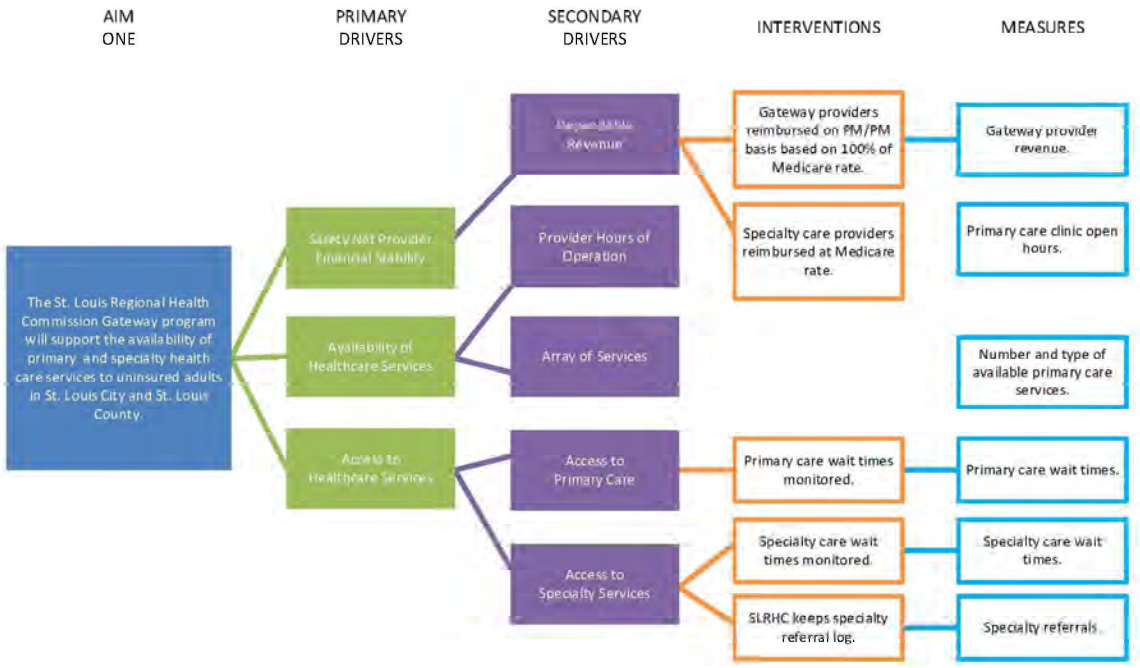
Table A. Program Objectives Translated into Quantifiable Targets for Improvement

GATEWAY OBJECTIVES	TARGET FOR IMPROVEMENT
I. Preserve and strengthen the St. Louis City and St. Louis County safety net of health care providers available to serve the uninsured.	I. The Gateway program will support the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.
II. Connect the uninsured to primary care home which will enhance coordination, quality and efficiency of health care through patient and provider involvement.	II. Connect Gateway low-income uninsured individuals to a primary care home, engage Gateway members in health care and sustain or increase primary care utilization and engagement.
III. Maintain and enhance quality service delivery strategies to reduce health disparities.	III. Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.

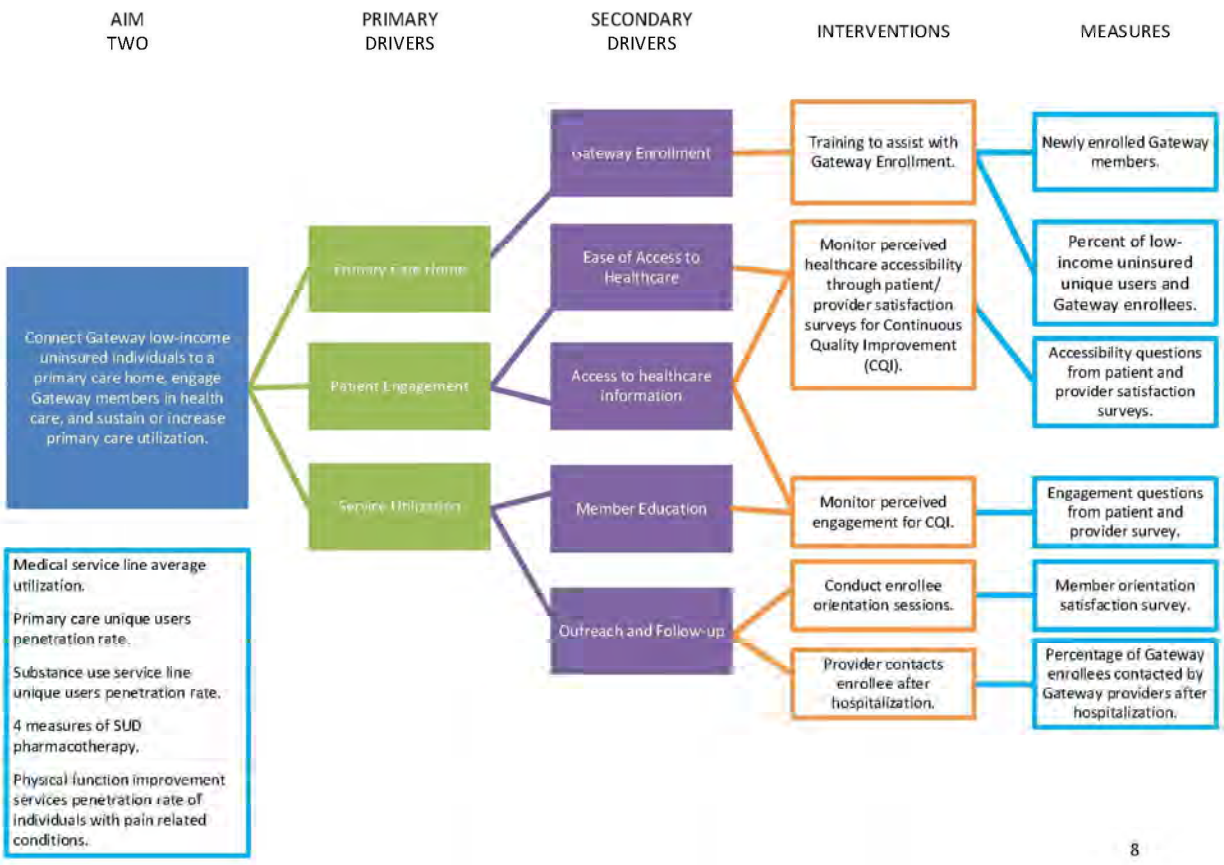
B. Driver Diagram

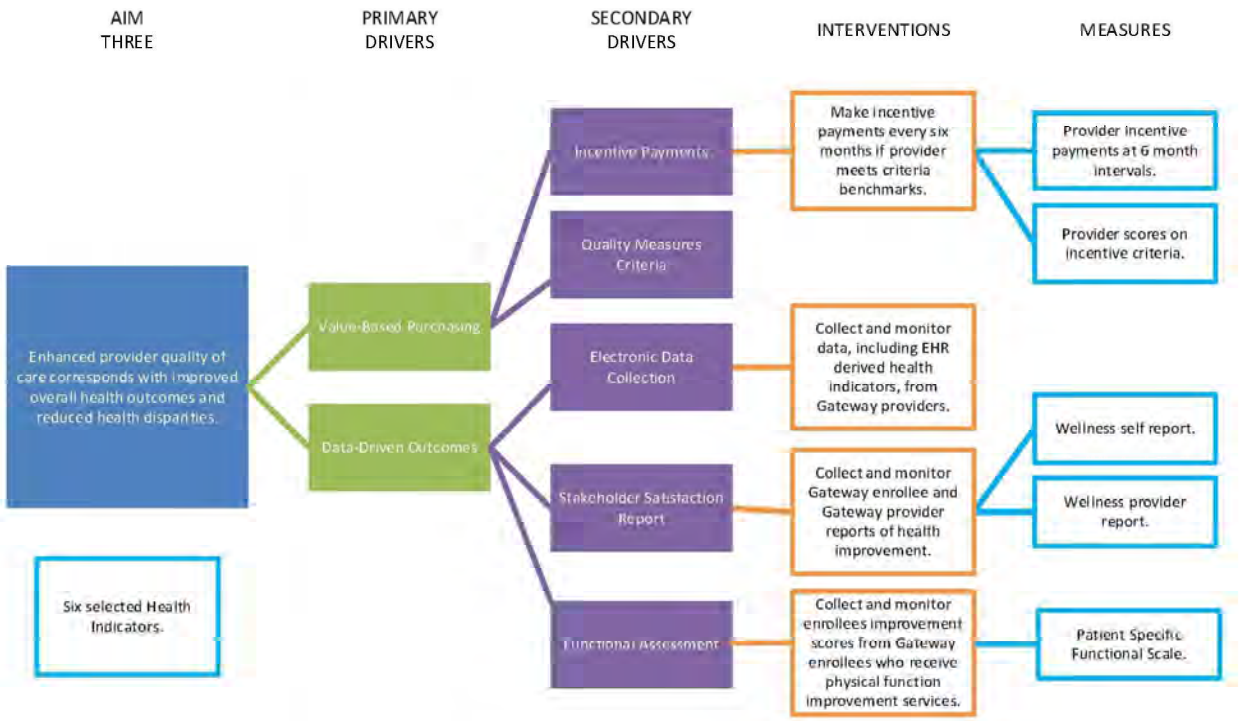
The demonstration's underlying theory of desired change is modeled in the following Driver Diagram. Each of the three targets for improvement constitutes one of the three aims. The diagram models the relationship between the three aims and drivers presumed to support the aims. Specific interventions, identified in the orange boxes, which have been used throughout the demonstration, are postulated to impact the various drivers. Process project measures

associated with the interventions are identified in the blue boxes on the right. Outcome measures, utilized in Aims 2 and 3, are also in blue boxes and are positioned under the Aim. While SLRHC historically has tracked numerous measures, only those measures that help to answer the research questions and inform the hypotheses are used in the evaluation design.


AIM ONE
PRIMARY DRIVERS
SECONDARY DRIVERS
INTERVENTIONS
MEASURES
The St. Louis Regional Health Commission Gateway program will support the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.
Safety Net Provider Financial Stability
Availability of Healthcare Services
Access to Healthcare Services
Revenue
Provider Hours of Operation
Array of Services
Access to Primary Care
Access to Specialty Services
Gateway providers reimbursed on PM/PM basis based on 100% of Medicare rate.
Specialty care providers reimbursed at Medicare rate.
Primary care wait times monitored.
Specialty care wait times monitored.
SLRHC keeps specialty referral log.
Gateway provider revenue.
Primary care clinic open hours.
Number and type of available primary care services.
Primary care wait times.
Specialty care wait times.
Specialty referrals.

7


AIM TWO
PRIMARY DRIVERS
SECONDARY DRIVERS
INTERVENTIONS
MEASURES
Connect Gateway low-income uninsured individuals to a primary care home, engage Gateway members in health care, and sustain or increase primary care utilization.
Primary Care Home
Patient Engagement
Service Utilization
Gateway Enrollment
Ease of Access to Healthcare
Access to healthcare information
Member Education
Outreach and Follow-up
Training to assist with Gateway Enrollment.
Monitor perceived healthcare accessibility through patient/ provider satisfaction surveys for Continuous Quality Improvement (CQI).
Monitor perceived engagement for CQI.
Conduct enrollee orientation sessions.
Provider contacts enrollee after hospitalization.
Newly enrolled Gateway members.
Percent of low-income uninsured unique users and Gateway enrollees.
Accessibility questions from patient and provider satisfaction surveys.
Engagement questions from patient and provider survey.
Member orientation satisfaction survey.
Percentage of Gateway enrollees contacted by Gateway providers after hospitalization.
Medical service line average utilization.
Primary care unique users penetration rate.
Substance use service line unique users penetration rate.
4 measures of SUD pharmacotherapy.
Physical function improvement services penetration rate of individuals with pain related conditions.
8


AIM
THREE
PRIMARY
DRIVERS
SECONDARY
DRIVERS
INTERVENTIONS
MEASURES
Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.
Six selected Health Indicators.
Value-Based Purchasing
Data-Driven Outcomes
Incentive Payments
Quality Measures Criteria
Electronic Data Collection
Stakeholder Satisfaction Report
Functional Assessment
Make incentive payments every six months if provider meets criteria benchmarks.
Collect and monitor data, including EHR derived health indicators, from Gateway providers.
Collect and monitor Gateway enrollee and Gateway provider reports of health improvement.
Collect and monitor enrollees improvement scores from Gateway enrollees who receive physical function improvement services.
Provider incentive payments at 6 month intervals.
Provider scores on incentive criteria.
Wellness self report.
Wellness provider report.
Patient Specific Functional Scale.

9

C. Hypotheses, Research questions and Demonstration Objectives

As noted in Table E (Summary Program Evaluation Table), demonstration goals I, II and III are supported by hypotheses and research questions as noted in the following paragraphs.

Hypothesis 1: The SLRHC Gateway project supports the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.

1. Does the coverage approach to provider reimbursement and incentive payments provide a stable revenue stream?
2. What variance, if any, exists in primary care provider availability and primary care service array across the evaluation period?
3. What variance, if any, exists in access to primary care across the evaluation period?

Hypothesis 1 identifies specific characteristics associated with demonstration objective I (preserve and strengthen the St. Louis City and St. Louis County safety net of health care providers available to serve the uninsured). A requisite condition for supporting the availability and accessibility of healthcare services for uninsured individuals is stable revenue that supports provider operations. Research question 1 demonstrates the extent to which the Gateway program provides ongoing revenue for the safety net providers in the Gateway program. Questions 2 and 3 demonstrate variability in access and availability of healthcare services. This hypothesis and its questions provides the SLRHC the opportunity to monitor core process measures (revenue, access and availability of healthcare) associated with the Gateway program.

Hypothesis 2: Connecting and engaging low-income uninsured individuals to a Gateway primary care home corresponds with sustained or increased primary care utilization.

1. Have low-income uninsured adults in St. Louis City and St. Louis County connected to a primary care home?
2. Has Gateway enrollment reduced the perception of barriers to primary and specialty care for enrollees and providers?
3. Have Gateway members been engaged by their primary care home with member education, outreach and follow-up?
4. Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient medical services year to year?
5. Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient substance use treatment services year to year?
6. Do Gateway enrollees with pain-related diagnoses connected to a primary care home demonstrate increased utilization of outpatient physical function improvement services year to year?

Hypothesis 2 examines the outcomes of a core component of the Gateway program, the enrollment of low-income uninsured individuals in a primary care home. The presumptive

consequence of an increase in Gateway member engagement and the perceived removal of barriers to healthcare is an increase in primary care utilization. Question 1 evaluates Gateway program enrollment. Questions 2 and 3 consider the perception of barriers to healthcare, research. Questions 4, 5 and 6 assess primary care utilization. This hypothesis and associated research questions allow SLRHC to assess, over time, primary care utilization for Gateway enrollees.

Hypothesis 3: Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.

1. Does using value-based purchasing for provider reimbursement correspond with providers meeting incentive criteria on health and quality of care indicators?
2. Do Gateway members perceive that their health outcomes have improved throughout the demonstration period?
3. Have health outcomes for Gateway members improved each demonstration year?
4. Do health indicators, when calculated separately for African American, Caucasian and Hispanic Gateway enrollees exhibit statistically significant differences?
5. Do Gateway enrollees with pain-related diagnoses treated under the physical function improvement service line report perceived improved physical function year over year?

Hypothesis 3 examines another important component of the Gateway program, the improvement in provider quality and its relationship with improved health outcomes and reduced health disparities. Research question 1 examines the relationship of incentive payments and health indicator criteria. Questions 2 and 3 assess the change, and the perception of improvement, of health outcomes across time. Research question 4 evaluates health disparities on health indicators between African American, Caucasian and Hispanic Gateway enrollees. Research question 5 assesses patient perception of functional improvement across time.

Hypotheses/research questions promote Title XIX objective

A core objective of the Medicaid program is to serve the health and wellness needs of our nation's vulnerable and low-income individuals and families. The Gateway program promotes this core objective by providing access to primary and specialty care to a population of low-income individuals who would not otherwise have access to health care. The Gateway program serves as an important bridge for individuals who may be eligible for Medicaid coverage in the State of Missouri. More than 40,000 individuals, who would otherwise be uninsured, have transitioned from Gateway coverage into Missouri Medicaid programs since the demonstration project's inception.

The hypotheses and research questions used to evaluate the performance of the Gateway program also support this core objective with their focus on the evaluation of the impact of connecting uninsured, low-income individuals to a primary care home, improving healthcare utilization in this population, improving health outcome measures and decreasing health disparities in health indicators for this low-income adult population.

III. Methodology

A. Evaluation Design

The program evaluation design encompasses an integrated process and outcome evaluation of the Gateway demonstration performance utilizing the three hypotheses associated with the demonstration's three objectives. The focus of the evaluation is to monitor and evaluate change over time to determine if the Gateway program continues to support safety net providers, provide healthcare to the uninsured and produce desired healthcare outcomes.

The *process evaluation* utilizes systemic measures of the safety net health care provider system, which allows ongoing monitoring of the demonstration's operations. These measures consist of a short series of aggregated data such as the number of primary care clinic business hours measured annually from 2017 to 2022. By representing these measures visually in a descriptive time series, any changes in these measures can be readily noted, allowing an opportunity for needed programmatic changes.

The *outcome evaluation* utilizes disaggregated enrollee level data in addition to provider and enrollee summative data. Some outcome measures will also be represented with descriptive time series. Enrollee level of data allows for an analysis to determine any statistically significant differences over time in rates or counts. For a limited number of outcome measures, the analytic approach, multiple logistic regression, controls for differences in patient characteristics such as gender, race and age.

This study design does not include an impact evaluation due to data availability constraints discussed in the Methodological Limitations section.

B. Target and Comparison Populations

The target population for Hypothesis 1 consists of the five Gateway providers. Four of the five providers are Federally Qualified Health Centers: Affinia Healthcare, Betty Jean Kerr People's Health Center, Family Care Health Centers and CareSTL Health. The fifth Gateway provider is the St. Louis County Department of Public Health. Each of the providers has the following number of clinic locations, all of which may be accessed by Gateway enrollees.

Table B. Number of Gateway Provider Clinic Locations

PROVIDER	NUMBER OF CLINIC LOCATIONS
Affinia Healthcare	6
Betty Jean Kerr People's Health Centers	4
Family Care Health Centers	2
CareSTL Health	4
St. Louis County Department of Public Health	3
Total number of clinic locations	**19**

The target population for Hypotheses 2 and 3 consists of all adults enrolled in the Gateway program. Hypothesis 3 also includes one research question in which the target population is the providers. To qualify for inclusion in the Gateway program and in the Gateway program evaluation, participants must be between 19 and 64 years of age, ineligible for MO HealthNet (Medicaid) or Medicare, have no other insurance, live in St. Louis City or County and have an income at or below 100% of the federal poverty level ($12,760 per year for an adult living alone or $26,200 per year for a family of four in 2020).

Because data from the entire population of Gateway enrollees will be used in the analyses, no sampling plan is required. The evaluation design does not include a comparison group.[2]

C. Evaluation Period

The evaluation period is January 1, 2017 through December 31, 2022. The analysis will allow for a three month run out of encounter data for the encounter-based measures. Results across this time period will be included in the final evaluation report due to CMS on June 30, 2024.

Interim results derived from a portion of this evaluation period, January 1, 2017 through December 31, 2020 (with a three month run out of encounter data) will be reported in the Interim Evaluation report due to CMS on December 31, 2021.

Because the SUD treatment benefit was implemented February 1, 2019 and the physical function improvement benefit was implemented January 1, 2021, the evaluation period for these services will begin on the implementation dates of each respective benefit and continue through the end of the evaluation period.

D. Evaluation Measures and Data Sources

Primary and specialty care information specific to Gateway enrollees is collected from Gateway providers and their Electronic Health Records (EHR) as well as an encounter claims data. Measures for the program evaluation are derived from data from the following sources:

- **Gateway Provider Survey Data** is collected annually from Gateway primary care providers and specialty care providers. The data is submitted on excel templates and includes information for clinic enrollees. Templates used to collect data can be found in Attachment A. Gateway Provider Survey Templates.
- **Quarterly Gateway Provider Wait Time Reports** are submitted by Gateway providers with data pertaining to Gateway enrollees.
- **Gateway Claims Data** is submitted by Gateway providers for payment for services provided to Gateway enrollees and compiled by the Gateway Program.
- **EHRs** are the sources of data associated with health indicators which is collected annually by a SLRHC vendor and used to calculate Gateway-specific health quality measures.
- **Automated Health Systems (AHS)** is the enrollment vendor that extracts data from the provider portal pertaining to enrollment and specialty care referrals.

[2] See discussion in the Methodological Limitations section

- **Uniform Data System** is data collected from Federally Qualified Health Centers by the Health Resources and Services Administration.
- **Provider and Enrollee Surveys** are two different surveys requesting information from providers and enrollees pertaining to their experience with the Gateway program. Copies of the surveys may be found in "Attachment C. Enrollee Satisfaction Survey" and "Attachment D. Provider Satisfaction Survey." The Enrollee Satisfaction Survey uses a sample of convenience and is collected over a three-month period from May through July of each year. Gateway enrollees are asked to complete a survey after their clinic visit at each of the five primary care health centers. The Provider Satisfaction survey uses a convenience sample of Gateway medical providers and support staff involved in the referral process at the five primary care health centers. During the month of May, an email with a link is sent to the survey population, inviting them to take an online survey.
- **The Patient-Specific Functional Scale (PSFS)**[3] is an evaluation questionnaire quantifying activity limitation and measuring functional outcomes for patients with orthopedic conditions. A copy of this survey may be found in Attachment E.
- **American Community Survey of the United States (US) Census** is the source for the total number of uninsured individuals in the city and county of St. Louis.

The following table identifies proposed evaluation measures, their descriptions, sources and steward (if applicable). A table of measures with detailed measure specifications, including numerator and denominator information, can be found in "Attachment B. Measure Specifications."

Table C. Evaluation Measures[4]

MEASURE	MEASURE DESCRIPTION	DATA SOURCE	STEWARD
Gateway provider revenue	Annual gross receipts for Gateway enrollees	Gateway Program	NA
Primary care clinic business hours/week	Number of hours clinic is open during normal business hours (8:00 a.m. – 5:00 p.m. Monday-Friday).	Gateway Program	NA
Primary care clinic non business hours/week	Number of hours clinic is open outside of normal business hours.	Gateway Program	NA
Total primary clinic hours/week	Total clinic business hours and primary clinic non business hours.	Gateway Program	NA
Available primary care services	Number and type of primary care services endorsed by Gateway providers on primary care services.	Gateway Program	NA

[3] Patient Specific Functional Scale (PSFS) as developed by: Stratford, P., Gill, C., Westaway, M., & Binkley, J. (1995). Assessing disability and change on individual patients: a report of a patient specific measure. Physiotherapy Canada, 47, 258-263

[4] Measures are presented in the order that aligns with the hypotheses as presented in Table E. Summary Program Evaluation Table.

MEASURE	MEASURE DESCRIPTION	DATA SOURCE	STEWARD
Primary care non-urgent wait times new patients	Number of days until third next non-urgent appointment for new patients.	Provider Report	NA
Primary care non urgent wait times established patients	Number of days until third next non urgent appointment for established patients.	Provider Report	NA
Primary care urgent wait times new patients	Number of days until next urgent appointment [5] for new patients.	Provider Report	NA
Primary care urgent wait times established patients	Number of days until next urgent appointment for established patients.	Provider Report	NA
Specialty care wait times for patients	Number of days until third next non-urgent appointment for patients.	Quarterly Wait Time Report	NA
Specialty care referrals	Number of specialty care referrals made by Gateway providers.	Provider Report	NA
Number of low-income uninsured adults newly enrolled in Gateway	Monthly total number of low-income uninsured adults enrolled in the Gateway program.	AHS	NA
Percent low-income uninsured unique users.	Percentage of low-income uninsured adults in St. Louis city and county receiving primary care services through Gateway program.	Provider Survey Data/ US Census	NA
Percent low-income uninsured adults enrolled in Gateway.	Percentage of low-income uninsured adults in St. Louis city and county who are enrolled in the Gateway program.	Gateway Program/ US Census	NA
Barrier to healthcare self-report	Percentage of enrollees who report barriers to healthcare without Gateway program.	Enrollee Satisfaction	NA
Barrier to healthcare provider report	Percentage of providers who report enrollee barriers to healthcare without Gateway program.	Provider Satisfaction	NA
Engagement self-report	Percentage of Gateway enrollees who report timely information and help from their provider.	Enrollee Satisfaction	NA
Newly enrolled office visit	Percentage of Gateway newly enrolled members who have an office visit.	Provider Report	NA
Medical service line average utilization	Average number of office visits per medical service line unique user.	Provider Survey Data/	NA

[5] Gateway providers are required to reserve a portion of open appointments for urgent patients.

MEASURE	MEASURE DESCRIPTION	DATA SOURCE	STEWARD
		Gateway Program	
Medical service line unique users penetration	Percentage of Gateway enrollees who receive services in the medical service line.	Provider Survey Data/ Gateway Program	NA
Substance use service line unique users penetration	Percentage of Gateway enrollees who receives services in the substance use service line.	Provider Survey Data/ Gateway Program	NA
Alcohol withdrawal medication management	Percentage enrollees with an Alcohol Use Disorder (AUD) diagnosis who receive medication for withdrawal symptoms.	Provider Survey Data	NA
Opioid withdrawal medication management	Percentage enrollees with an Opioid Use Disorder (OUD) diagnosis who receive medication for withdrawal symptoms.	Provider Survey Data	NA
AUD medication maintenance	Percentage enrollees with an AUD diagnosis who receive maintenance medication.	Provider Survey Data	NA
OUD medication maintenance	Percentage enrollees with an OUD diagnosis who receives maintenance medication.	Provider Survey Data	NA
Physical function improvement service line unique users penetration	Percentage of Gateway enrollees with pain-related diagnoses who receive services in the physical function improvement service line.	Provider Survey Data/ Gateway Program	NA
Primary care provider incentive payments	Bi-annual dollar amount paid as incentive payments.	Gateway Program	NA
P4P incentive criteria scores	Percentage of Pay-For-Performance (P4P) criteria benchmarks[6] met.	Gateway Program	NA
Wellness self-report	Percentage of Gateway enrollees who report improved health.	Enrollee Satisfaction	NA
Wellness provider report	Percentage of providers who report improved Gateway enrollee health.	Provider Satisfaction	NA
Self-reported physical function improvement	Percentage of Gateway enrollees with pain-related diagnoses who report perceived improved physical function year over year.	Patient-Specific Functional Scale	NA

[6] Criteria and Benchmarks found in Attachment G. Pay for Performance Criteria and Benchmarks; formula for determining P4P incentive criteria score can be found in Attachment B.

MEASURE	MEASURE DESCRIPTION	DATA SOURCE	STEWARD
Tobacco use assessment and cessation intervention	Percentage of Gateway enrollees assessed for tobacco use and, if identified as a tobacco user, received cessation counseling and/or pharmacotherapy.	EHR Data/ Gateway Program	AMA[7]
Hypertension (HTN): blood pressure control	Percentage of Gateway enrollees with diagnosed HTN whose blood pressure was less than 140/90 (adequate control).	EHR Data/ Gateway Program	NCQA[8] CMS165
Diabetes: HbA1c Control	Percentage of Gateway enrollees diagnosed with Diabetes whose HbA1c level during the measurement year is less than or equal to 9%.	EHR Data/ Gateway Program	NCQA CMS122
Adult Weight Screening and Follow-Up	Percentage of Gateway enrollees seen for a visit who had a Body Mass Index (BMI) taken during the most recent visit or within the 6 months prior to that visit.	EHR Data/ Gateway Program	CMS CMS69
Flu Shot for Adult Patients	Percentage of Gateway enrollees seen for a visit between October 1 and March 31 who receive flu shot or who reported receipt of flu shot.	EHR Data/ Gateway Program	NCQA
Use of Appropriate Medications for Asthma	Percentage of Gateway enrollees who were identified as having persistent asthma and were appropriately ordered medication during the measurement period.	EHR Data/ Gateway Program	CMS CMS126

E. Analytic Methods

Two complementary analytic approaches will be utilized for the evaluation, a) descriptive time series graphs that provide a visual representation of changes in measures over time, and b) regression based analysis that separates the effect of enrollee demographic characteristic variation from other sources of variability across time.

Descriptive Time Series

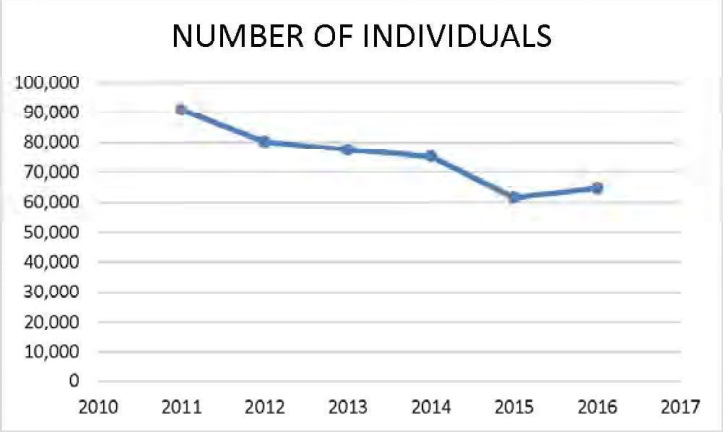
Measures used in the process evaluation (measures of systemic variables of the safety net health care providers), such as: provider revenue, and measure of aggregated data of Gateway enrollees; and outcome measures, such as: Medical service line average utilization and unique users penetration rates, are analyzed with descriptive time series graphs. These measures are a single value for each year, or in some cases, each quarter. The following table and graph illustrates one method of a time series analysis using data from the Demonstration Year 8 Interim Evaluation Report for the number of uninsured individuals served by Gateway primary care providers[9].

[7] AMA-convened Physician Consortium for Performance Improvement
[8] National Council of Quality Assurance
[9] This measure and analysis is not used in the program evaluation, and is offered as an illustration only.

Table D. Uninsured Individuals Served by Gateway Primary Care Providers

YEAR	NUMBER INDIVIDUALS SERVED
2011	90,924
2012	80,193
2013	77,521
2014	75,216
2015	61,618
2016	64,709

Graph 1. Uninsured Individuals Served by Gateway Primary Care Providers [10]



In this illustration, the number of uninsured individuals served by Gateway providers presents information on the trend over time as well as the magnitude of the measure in each time period (e.g. 64,709 enrollees in 2016).

Regression Based Analysis

Although a descriptive time series analyzes and displays change over time, it does not provide information on factors contributing to the change. A multiple regression analysis can be used to determine if changes in the measures result from changes in the demographic mix of Gateway enrollees, or result from other factors. The multiple regression analysis supplements the time series graphical analysis, and can only be used when enrollee level data, with demographic information, is available.

The following table illustrates the structure and types of required enrollee level data needed for multiple regression analysis for five hypothetical enrollees. The *Flu Shot for adult patients*[11]

[10] The decrease in the number of patients served by Gateway primary care providers reflects a corresponding decrease in the total number of uninsured adults during this time period.
[11] See Attachment B

measure reports the percentage of unique users seen for a visit between October 1 and March 31, receiving or reporting to have received flu shots. It is calculated separately by year. In this table of hypothetical data related to flu shot rates, each row of the table corresponds to a single enrollee during a single year. The first variable, *Flu Shot*, can have a value of 1 or 0, depending upon whether or not an enrollee received or reported receiving a flu shot. If the enrollee was seen for a visit between October 1 and March 31 and received or reported receiving a flu shot, the value is 1. If the enrollee did not receive or report receiving a flu shot, the value is 0.

The variables 2017, 2018 and 2019 are also binary variables. Each of these variables has a value of 1 if the individual was enrolled in that year, and a 0 if the individual was not enrolled in the Gateway program that year. By definition, exactly one of the three binary year variables has the value 1, since each row corresponds to a single enrollee during a single year. The remaining variables represent the demographic characteristics of the enrollee during the year, with 1 indicating the presence of that characteristic, and 0 indicating the absence of that characteristic. [12]

Table F. Hypothetical Enrollee Level Data for Primary Care Services

Row #	Flu Shot	Enrolled 2017	Enrolled 2018	Enrolled 2019	African American	Caucasian	Male	Female	Age In Years
1	1	1	0	0	1	0	0	1	36
2	1	0	0	1	0	1	0	1	29
3	0	1	0	0	0	1	1	0	45
4	1	0	1	0	1	0	0	1	23
5	0	1	0	0	1	0	1	0	28
6	0	0	1	0	1	0	1	0	57
7	1	0	0	1	0	1	1	0	47
8	1	1	0	0	0	1	1	0	31
9	1	1	0	0	1	0	0	1	42
10	0	0	1	0	1	0	0	1	45

In this example, there are five hypothetical enrollees in 2017 (rows 1, 3, 5, 8 and 9), three of whom have received flu shots, resulting in a rate of 60%. For 2018, the hypothetical rate is one of three 2018 enrollees, or 33%. While the comparison of annual rates shows declining use of flu shots, the annual rates do not provide information on why the rate declines between the two years.

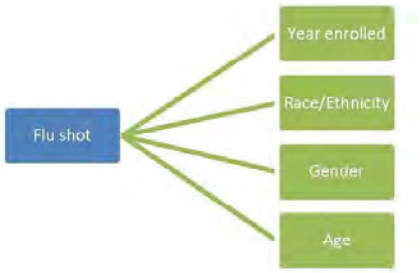
One possible explanation for changes in annual rates is a changing demographic mix of Gateway enrollees. Some types of services have large differences in utilization rates between men and women, or between younger or older enrollees. In monitoring the Gateway program, it is

[12] For simplicity of illustration, other racial/ethnic categories are not included in the example.

helpful to understand if changes in measures over time are associated with a changing demographic mix of enrollees, or other unmeasured factors, such as changes in policies or procedures.

Multiple regression analysis also isolates annual changes in evaluation measures after controlling for changes in the demographic mix of enrollees. In the flu shot rate example, the binary variable *Flu Shot* is the dependent variable in a linear regression model, and the binary year variables, the binary race and gender variables, and the continuous age variable are all independent variables, as noted in the following diagram.

Dependent Variable **Independent Variables**



A linear model of the relationship between the dependent and independent variables can be estimated with multiple regression analysis. The resulting slope coefficient for each independent variable, and their statistical significance, is generated in the analysis. In the case of the 2018 binary variable (flu shot), the corresponding slope coefficient represents the average difference in the dependent variable (flu shot) for 2018 observations as compared to the 2017 base year. The slope coefficient associated with the 2019 binary variable (flu shot) represents the average difference in the dependent variable for 2019 observations as compared to the 2017 base year, again controlling for differences in the demographic variables. These two slope coefficients measure year to year change in flu shot rates and provide the statistical significance of the differences.

Using a multiple regression has two key advantages as compared to simply calculating the 60% or 33% rates reported above. First, the estimation of year to year change with regression analysis is made *after controlling for differences in the other independent variables, including the race, gender and age variables.* [13] For program monitoring purposes, it is helpful to know if change is for reasons beyond Gateway's control, such as changing demographics, or if policy changes may have led to observed changes. Second, regression analysis provides the statistical

[13] See Wooldridge, J.(2002) Econometric Analysis of Cross Sections and Panel Data. Massachusetts Institute of Technology. 170-182

significance of the binary year variables, which may be used to identify if year to year change is statistically significant.

The form of the multiple regression analysis used is dependent upon the type of the dependent variable. In the flu shot example, the dependent variable is binary (received or reported receiving flu shot vs. did not receive or report receiving flu shot), so the specific form of the regression function is logistic. Finally, multiple regression analysis is also used to address the research question, *do health indicators, when calculated separately for African American, Caucasian and Hispanic Gateway enrollees, exhibit statistically significant differences?* An example of a health indicator is *Diabetes: HbA1c Control*, which is calculated with the following formula:

$$\frac{\text{[Number of enrollees with a diagnosis of Type I or Type II diabetes whose most recent hemoglobin A1c level during the measurement year is less than or equal to 9\%]}}{\text{[Number of enrollees year with a diagnosis of Type I or II diabetes and; who have been seen in the clinic for medical services at least twice during the reporting year]}}$$

The health indicators are calculated separately for each racial group to identify differences in rates. To determine statistically significant differences in these rates, logistic regression and client level data with a structure analogous to Table F is used. The data is limited to patients meeting the denominator condition (seen in the clinic twice), and the dependent variable will be a binary indicator satisfying the condition in the numerator (hemoglobin A1c less than or equal to 9%).

Using a logistic regression analysis, the estimated coefficient associated with each of the race variables indicates a change in the odds associated with meeting the health indicator condition, controlling for year of enrollment, gender and age. The coefficient's statistical significance measures if each of the races have statistically significant differences in the odds of meeting the health condition.

The regression equation for a measure Y is as follows, where the measure Y_{ij} for member i at measurement year j, is the sum of:

$$Y_{ij} = \beta_0 + \boldsymbol{T}'\boldsymbol{\beta}_{time} + \boldsymbol{R}'\boldsymbol{\beta}_{race} + \boldsymbol{G}'\boldsymbol{\beta}_{gender} + A_{ij}\beta_{age} + \varepsilon_{ij}$$

β_0	Baseline observation of the measure
$\boldsymbol{T}$	Vector of zeros with indictor 1 at time period j
$\boldsymbol{\beta}_{time}$	Vector of changes in measure associated with a time unit increase between baseline and measurement year
$\boldsymbol{R}$	Vector of zeros with indictor 1 at race/ethnicity of member i
$\boldsymbol{\beta}_{race}$	Vector of changes in measure associated with a race/ethnicity group versus a comparison race/ethnicity group

$\boldsymbol{G}$	Vector of zeros with indictor 1 at gender of member i
$\boldsymbol{\beta}_{gender}$	Vector of changes in measure associated with a gender group versus a comparison gender group
A_{ij}	Age of member i at time j
β_{age}	Change in measure associated with a one year increase in age
ε_{ij}	Random error term associated with the measure of member i at time period j

F. Summary Design Table for the Evaluation of the Demonstration

The following table outlines the core components of the program evaluation. Each of the three hypotheses is followed by supporting research questions as well as the measures and analytic approach for each question. A table with detailed measure specifications can be found in Attachment B.

Table E. Summary Program Evaluation Table

RESEARCH QUESTION	MEASURE	POPULATION /SUB-POPULATION	FREQUENCY	ANALYTIC METHOD
Hypothesis 1: The St. Louis Regional Health Commission Gateway project supports the availability of primary and specialty health care services to uninsured adults in St. Louis City and St. Louis County.				
Does the coverage approach to provider reimbursement and incentive payments provide a stable revenue stream?	Gateway provider revenue	Gateway Providers	Annually	Descriptive time series
What variance, if any, exists in primary care provider availability and primary care service array across the evaluation period?	Primary care clinic business hours/week	Gateway Providers	Annually	Descriptive time series
	Primary care clinic non-business hours/week	Gateway Providers	Annually	Descriptive time series
	Total primary care clinic hours/week	Gateway Providers	Annually	Descriptive time series
	Available primary care services	Gateway Providers	Annually	Descriptive time series
What variance, if any, exists in access to primary and specialty care across the evaluation period?	Primary care non-urgent and urgent wait times for new and established patients	Gateway Providers	Quarterly	Descriptive time series
	Specialty care wait times for patients	Gateway Providers	Annually	Descriptive time series
	Specialty care referrals	Gateway Providers	Biannually	Descriptive time series

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Hypothesis 2: Connecting and engaging low-income uninsured individuals to a Gateway primary care home corresponds with sustained or increased primary care utilization.				
Have low-income uninsured adults in St. Louis City and St. Louis County connected to a primary care home?	Low-income uninsured adults newly enrolled in Gateway	Gateway enrollees	Biannually	Descriptive time series
	Percent low-income uninsured unique users	Gateway enrollees/All uninsured adults	Annually	Descriptive time series
	Percent of low-income uninsured adults enrolled in Gateway	Gateway enrollees/All uninsured adults	Annually	Descriptive time series
Has Gateway enrollment reduced the perception of barriers to primary and specialty care for enrollees and providers?	Barrier to healthcare self-report	Gateway enrollees	Annually	Descriptive time series
	Barrier to healthcare provider report	Gateway providers	Annually	Descriptive time series
Have Gateway members been engaged by their primary care with member education, outreach and follow-up?	Engagement self-report	Gateway Enrollees	Annually	Descriptive time series
	Newly Enrolled Office Visit	Gateway Enrollees	Biannually	Descriptive time series
Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient medical services year to year?	Medical service line average utilization	Gateway Enrollees	Annually	Descriptive time series

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	Medical service line unique users penetration rate	Gateway Enrollees	Annually	Descriptive time series
Do Gateway enrollees connected to a primary care home demonstrate sustained or increased utilization of outpatient substance use services year to year?	Substance use service line unique users penetration	Gateway Enrollees	Annually	Descriptive time series
	Four AUD and OUD withdrawal and maintenance pharmacotherapies described in Attachment B	Gateway Enrollees	Annually	Descriptive time series
Do Gateway enrollees with pain-related diagnoses connected to a primary care home demonstrate increased utilization of outpatient physical function improvement services year to year?	Physical function improvement service line unique users penetration	Gateway Enrollees	Annually	Descriptive time series
Hypothesis 3: Enhanced provider quality of care corresponds with improved overall health outcomes and reduced health disparities.				
Does using value-based purchasing for provider reimbursement correspond with providers meeting incentive criteria on health and quality of care indicators?	Primary care provider incentive payments	Gateway providers	Biannually	Descriptive Time Series
	P4P incentive criteria score	Gateway providers	Biannually	Descriptive Time Series
Do Gateway members perceive that their health outcomes have improved throughout the demonstration period?	Wellness self-report	Gateway enrollees	Annually	Descriptive Time Series
	Wellness provider report	Gateway providers	Annually	Descriptive Time Series

Have health outcomes for Gateway members improved each demonstration year?	1. Tobacco use assessment and cessation intervention 2. Hypertension: Blood Pressure Control 3. Diabetes: HbA1c control 4. Adult weight screening and follow-up 5. Flu Shot for adult patients 6. Use of appropriate medications for asthma	Gateway enrollees	Annually	Logistic Regression Analysis Control variables: Gender and Age
Do health indicators, when calculated separately for African American, Caucasian and Hispanic Gateway enrollees, exhibit statistically significant differences?	1. Tobacco use assessment and cessation intervention 2. Hypertension: Blood Pressure Control 3. Diabetes: HbA1c control 4. Adult weight screening and follow-up 5. Flu Shot for adult patients	Gateway enrollees Sub-populations: Race, Ethnicity	Annually	Logistic Regression Analysis Control variables: Gender and Age

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	6. Use of appropriate medications for asthma			
Do Gateway enrollees with pain-related diagnoses treated under the physical function improvement service line report perceived improved physical function year over year?	Self-reported physical function improvement	Gateway Enrollees	Annually	Descriptive Time Series

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IV. Methodological Limitations

Several sources of data are used to support the measures in this evaluation, including EHRs, provider self-report, census data, enrollment and claims data, and data from survey tools. The data is collected by multiple organizations (e.g. providers and various sub-contractors) and submitted to the SLRHC. The variety of data sources and data suppliers creates risk for inaccuracy. The SLRHC mitigates this risk by providing data collection instructions and requiring standardized collection procedures as well as engaging in data validation activities after the data is collected. To address potential sources of error related to data collection, the SLRHC provides templates and instructions that specify parameters to identify each data type. To address potential errors within the data itself, data validation activities are implemented in which the collected data is compared with historical data and data from external sources, where applicable.

The design of the study does not include a quasi-experimental design, with a comparison group, propensity scoring or other measure of comparison group comparability, and an analytic method to determine demonstration impact and effect size, (e.g. a Difference-in-Difference strategy). Several significant constraints prevent the SLRHC from implementing this type of research design. One challenge is lack of comparable and necessary data on uninsured individuals. For example, the most reasonable comparison group would be uninsured individuals whose income prevents them from enrolling in the Gateway program. However, no source of comparable healthcare data is available for these individuals.

Insured populations that could conceivably be a source of data do not match the uninsured population on important variables such as age and level of impairment. An additional impediment to comparability is that the Gateway program provides outpatient services, but is not insurance for all levels of care.

A third constraint on the research design is the longevity of the Gateway program, which started in 2012. Even if the barriers to a quasi-experimental design could be resolved, the threat to the validity of any effect size related design is the threat from history. Given the level of socio-economic changes, population movement and changes in healthcare, a comparison of current measures with those obtained prior to the implementation of the Gateway program, even if available, would not necessarily reflect the impact of the demonstration.

One strategy used in the current methodology to mitigate the lack of a comparison group and determination of demonstration effect size is the use of enrollee and provider reports of decreased barriers to healthcare and improved health through particular questions from the satisfaction surveys. Although neither report has the validity of an objective measure such as a health indicator, a consistency in enrollee and provider reports attesting to the impact of the demonstration provides useful information about the perception of demonstration impact for the two groups most closely involved in the program: enrollees and providers.

Attachments

A. Gateway Provider Survey Templates

Primary Care Template

Primary Care Data Request

Please provide the information requested for your institution for **calendar year 2016**. Please submit your responses electronically to mjohns@stlrhc.org by **July 31, 2017**. For questions, contact Marquisha Johns at 314-446-6454 x 1103 or mjohns@stlrhc.org.

Organization Information	
Name:	
Site	
Street:	
City:	
Zip:	

Survey Contact Person	
Name:	
Title:	
Phone/Ext.:	
Email:	

Key Definitions & Guidelines

When completing this survey, please follow the definitions and guidelines outlined below:

- **Encounter:** Encounters (or "visits") are defined as documented, face-to-face contacts between a patient and a provider who exercises independent professional judgement in the provision of services to the patient.
- **User:** Users (or "patients") are individuals who have had at least one encounter during the reporting year. Within a service category (i.e. medical, dental, etc.), an individual can only be counted once as a user. A person who received multiple types of services should be counted once (and only once) for each service.
- **Adult:** Users aged 18 and above.
- **Pediatric:** Users between the ages of 0-17.
- **Enabling Services:** Enabling services are non-clinical services that enable individuals to access health care and improve health outcomes, but do not include direct patient services. Enabling services can include case management, referrals, translation/interpretation, transportation, eligibility assistance, health education, environmental health risk reduction, health literacy, and outreach.
- The number of encounters should be greater than or equal to the number of users.
- Volumes provided should be unduplicated counts. If duplication exists, please note this for each line affected.
- **Volumes provided should match those submitted for calendar year 2016 UDS reporting** (for community health centers)

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Primary Care Data Request

Reporting for RHC
<Insert Institution Name>
Statistical Information for the 12 Months Ending December 31, 20XX

Duplication permitted across columns (i.e. on rows 18-24, in columns), please provide unique users only	Primary medical care	Dental	Mental health (primary or secondary diagnosis)	Substance Use (primary or secondary diagnosis)	Other	Clinical Total
Number of Users by Type:						
Pediatric (0-17)						
Obstetrics/Prenatal Care**						
Gynecology						
All other adult						
Total Users	-	-	-	-	-	-
New Users (office visit codes 99201-99205)						
All Users by Payor Category:						
Medicare (including Dual Eligibles)						
Medicaid (Traditional FFS/Managed Medicaid)						
Private/Commerical						-
Uninsured						
Gateway to Better Health						-
All Other Uninsured						-
Total Uninsured						
Total Users						
Number of Encounters by Type:						
Pediatric (0-17)						
Preventative (ICD codes [illegible])						-
All Other E/M Codes						-
OF ALL OTHER E/M CODES, how many enocunters were related to asthma management (J45 ICD10 Codes and/or 493.xx ICD9 Codes for ages 0-17)						-
Obstetrics/Prenatal Care						
Gynecology						
All other adult						
Preventative (ICD codes 99381–99423)						
All Other E/M Codes						
OF ALL OTHER E/M CODES, how many encounters were related to chronic disease management for diabetes, hypertension, COPD/asthma, CVD/CHF/Heart Disease (see table 1 for diagnosis codes)						
[illegible]						
[illegible]						
[illegible]						
[illegible]						
[illegible]						
Total						
All Encounters by Payor Category:						
Medicare (including Dual Eligibles)						
Medicaid (Traditional FFS/Managed Medicaid)						
Private/Commercial						
[illegible]						
Gateway to Better Health						
All Other Uninsured						
Total Uninsured						
Total						
Cost per User & Encounter*:						
User						
Encounter						

Table 1. Diagnosis Categories for Chronic [illegible]

Chronic Conditions	ICD9 Category	ICD10 Category
Diabetes	250	E08 - E11, E13
Hypertension	401-405	I10-I15
COPD	490-496	J40-J47
Heart Disease	[illegible]	[illegible]

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Primary Care Data Request

Reporting for RHC
<Insert Institution Name>
Statistical Information for the 12 Months Ending December 31, 2016

Physical Plant Capacity	Site 1 <Enter Name>	Site 2 <Enter Name>	Site 3 <Enter Name>	Site 4 <Enter Name>	Total
Patient exam room					
Patient procedure room					
Patient counseling room					
Dental chairs					
Health education room					

Hours of Operation (excluding urgent care):	Site 1 <Enter Name>	Site 2 <Enter Name>	Site 3 <Enter Name>	Site 4 <Enter Name>
Monday Hours of Operation				
Time of Last Available Appointment for NEW Patients				
Time of Last Available Appointment for ESTABLISHED Patients				
Tuesday Hours of Operation				
Time of Last Available Appointment for NEW Patients				
Time of Last Available Appointment for ESTABLISHED Patients				
Wednesday Hours of Operation				
Time of Last Available Appointment for NEW Patients				
Time of Last Available Appointment for ESTABLISHED Patients				
Thursday Hours of Operation				
Time of Last Available Appointment for NEW Patients				
Time of Last Available Appointment for ESTABLISHED Patients				
Friday Hours of Operation				
Time of Last Available Appointment for NEW Patients				
Time of Last Available Appointment for ESTABLISHED Patients				
Saturday Hours of Operation				
Time of Last Available Appointment for NEW Patients				
Time of Last Available Appointment for ESTABLISHED Patients				
Sunday Hours of Operation				
Time of Last Available Appointment for NEW Patients				
Time of Last Available Appointment for ESTABLISHED Patients				

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Primary Care Data Request

Reporting for RHC
<Insert Institution Name>
Statistical Information for the 12 Months Ending December 31, 2016

Please complete wait time data as close to July 1, 2017 as possible.

Days until THIRD next NON-URGENT appointment as of DATE (please enter DATE as of):	New Patient	Established Patient
Pediatric		
Obstetrical		
Adult		
Dental		
Days until next URGENT appointment as of DATE (please enter DATE as of):	**New Patient**	**Established Patient**
Pediatric		
Obstetrical		
Adult		
Dental		
Number of Clinical FTEs* by Provider Type	**Non-Resident**	**Residents & Students**
Family Practicioner		
General Practicioner		
General Internist**		
General Internist (with subspecialties)*** <please specify which subspecialties>		
Obstetrician/Gynocologist		
Pediatrician		
Registered Nurse		
Nurse Practicioner		
Physician Assistant		
Certified Nurse Midwife		
Dentist		
Dental Hygienist		
Psychiatrist		
Psychologist		
Other Licensed Mental Health Provider (e.g., LCSW, LPC, etc.)		
Other Mental Health/Substance Use Staff		
Podiatrist		
Optometrist		
Pharmacist		
Chiropractor/Pain Management		
All Other		
What positions have been the most difficult to fill?		
How long have these positions been open?		

*Please provide method used to calculate FTE count.
**May be board certified in other subspecialties but only practice as an internist.
***Practices both subspecialty and as an internist.

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Primary Care Data Request

Reporting for BHC
<Insert Institution Name>
Statistical Information for the 12 Months Ending December 31, 2016

Users by Payor Category:	Hispanic							Non-Hispanic							Unknown/ Refused Race and Ethnicity	Clinical Total
	White	Black/ African American	Asian	American Indian/Alaska Native	Native Hawaiian/ Other Pacific Islander	More than one race	Unknown Race	White	Black/ African American	Asian	American Indian/Alaska Native	Native Hawaiian/ Other Pacific Islander	More than one race	Unknown Race		
Medicare (including Dual Eligibles)																-
Medicaid (Traditional FFS/Managed Medicaid)																-
Private/Commerical																-
Uninsured																
Gateway to Better Health																-
All Other Uninsured																-
Total Uninsured																-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number of Babies Delivered* *This data is only required of the community health centers and BJH OB/GYN.	Hispanic							Non-Hispanic							Unknown/ Refused Race and Ethnicity	Clinical Total
	White	Black/ African American	Asian	American Indian/Alaska Native	Native Hawaiian/ Other Pacific Islander	More than one race	Unknown Race	White	Black/ African American	Asian	American Indian/Alaska Native	Native Hawaiian/ Other Pacific Islander	More than one race	Unknown Race		
Number of live births																-
Very Low Birth Weight (<1500 grams)																-
Low Birth Weight (1500 - 2499 grams)																-
Normal Birth Weight (>2499)																-
Number of non-live births																-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Primary Care Data Request

Reporting for BHC
<Insert Institution Name>
Statistical Information for the 12 Months Ending December 31, 2016

*This data is only required for Myrtle Hilliard Davis, Affinia Healthcare and SSM Urgent Care.

	Hispanic							Non-Hispanic								
	White	Black/ African American	Asian	American Indian/Alaska Native	Native Hawaiian/ Other Pacific Islander	More than one race	Unknown Race	White	Black/ African American	Asian	American Indian/Alaska Native	Native Hawaiian/ Other Pacific Islander	More than one race	Unknown Race	Unknown/ Refused Race and Ethnicity	Clinical Total
Number of URGENT CARE Users by Type:																
Pediatric (0-18)																
Adult																
Total																
Number of total existing health commitments users who've used urgent care at least once during 2016 calendar year																
URGENT CARE Users by Payor Category																
Medicare (including Dual Eligibles)																
Medicaid (Traditional FFS/Managed Medicaid)																
Private/Commerical																
Uninsured																
Gateway to Better Health																
All Other																
Total Uninsured																
Total																

Number of URGENT CARE Encounters by Type:	
Urgent	
Non-Urgent (Preventative Care) (see table 2 below for codes)	
STI Screening	
Immunizations	
Physical Exams	
Other, please specify	
Total	
URGENT CARE Encounters by Payor Category:	
Medicare (including Dual Eligibles)	
Medicaid (Traditional FFS/Managed Medicaid)	
Private/Commerical	
Uninsured	
Gateway to Better Health	
All Other	
Total Uninsured	
Total	
URGENT CARE Left Without Being Seen Rates by Payor	**Total**
Medicare (including Dual Eligibles)	
Medicaid (Traditional FFS/Managed Medicaid)	
Private/Commerical	
Uninsured	
Gateway to Better Health	
All Other	
Total Uninsured	
Unknown Payor	
Total	
URGENT CARE Fees	
Do you advertise your urgent care prices?	Y or N
What is your base rate for urgent care services for those patients who are uninsured (self-pay) or with high deductible plans?	
Hours of Operation:	
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Saturday	
Sunday	
What day/time of day is the busiest (in terms of patient volume) for your urgent care site?	

Table 2. Codes for Preventative Visits

Preventative	CPT Codes/Diagnosis Codes
Immunizations	90281, 90283, 90287, 90291, 90296, 90371, 90375,
Physical Exams	99381-99425
STI Screening	CD9: V74, V73.8, V73.9; ICD10: Z11.3, Z11.4, Z11.5

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Primary Care Data Request

Reporting for RHC
<Insert Institution Name>
Statistical Information for the 12 Months Ending December 31, 2016

Policies		
	In dollars, how much medical care did your organization write off as "bad debt" (see definition below) in 2016?	
	In dollars, how much medical care did your organization write off as "charity care"/"sliding fee scale" (see definition below) in 2016?	
Scheduling		
	Do you require payor information to schedule an appointment?	__Yes __N
	What is the policy for scheduling appointments for patients with an outstanding balance? (Attach separate document, if necessary)	
	Do you have a missed appointment/no-show policy?	__Yes __N
	If yes, what is your missed appointment/no-show policy? (Attach separate document, if necessary)	
Financial Assistance		
	What is the process for applying for financial assistance and/or sliding fee schedule, including documentation requirements? (Attach separate document, if necessary)	
	What documents do you require?	
	Do you require uninsured/self-pay patients to apply for financial assistance and/or coverage?	__Yes __N
	Does your institution require a patient receive an invoice for services before applying for financial assistance?	__Yes __N
	Does the application for financia assistance include information on the patient's medical condition?	__Yes __N
	Is financial assistance and/or sliding fee scale schedule available to individuals with high deductible insurance plans?	__Yes __N
	If yes, what is the policy for accessing this assistance? (Attach separate document, if necessary)	
	How many applications were collected in CY2016 for financial assistance, charity care and/or sliding fee schedule?	
	How many were approved for charity care or financial assistance?	
	Is staff available assist patients with completing applications for coverage (Medicaid, Marketplace, Gateway to Better Health)?	__Yes __N
	If so, how many patients did you assist in applying for coverage during CY2016?	
	Is staff available to assist patients in completing financial assistance applications?	__Yes __N
Interpreter Use		
	Do you have a written policy around language access?	__Yes __N
	If yes, what is your language access policy? (Attach separate document, if necessary)	
	Interpreter services available for limited English proficient (LEP) or Deaf/Hard of Hearing (DHH) patients (Enter "X" next to YES or NO)	__Yes __N
	Contracted	__Yes __N
	If contracted, please list organization.	
	How much notice is needed to acquire interpreter services?	
	Employed In-House	__Yes __N
	How many FTE in-house interpreters available?	
	Number of clinical staff with non-English language skills	
	Written materials available for non-English speakers (Enter "X" next to YES or NO)	__Yes __N
	Are financial assistance policies and/or sliding fee schedules available in languages other than English?	__Yes __N
	Are interpreters available to explain financial assistance policies and assist patients in completing financial assistance applications?	__Yes __N
	Total number of interpreter encounters	
	Phone Encounters	
	Video Encounters	
	In Person Encounters	
Pharmacy Services		
	Do you have an on-site pharmacy?	__Yes __N
	If multiple locations, which of your locations have pharmacies on-site?	
	Number of UNIQUE customers at your pharmacy	
	Number of prescriptions filled during the calendar year at your pharmacy	
	Do you have a retail pharmacy partner that offers your patients 340B pricing?	__Yes __N
	If so, who and where are they located? (e.g., Walgreens)	
	Do you assist patients in completing applications for prescription assistance programs?	__Yes __N
	If yes, number of patients assisted?	

Charity Care and/or sliding fee
Charges for supplies and/or services that a healthcare provider or institution would normally expect collection, but due to an individual's indigent status (per the institution's charity care/sliding fee scale policy) the provider or institution has voluntarily chosen to write off. The organization has deemed that the patient meets certain financial criteria and is unable to pay for all or a portion of the services. Services that were written off during the reporting year (CY2016), regardless of when the service was provided, should be included. In addition, any automatic discounts applied to uninsured patients (self-pay discount), regardless of meeting certain charity care criteria, may be included. Also, include non-reimbursable expenses that are deemed as eligible for coverage by the organization's charity care policy.

Bad debt
Charges for supplies and/or services that a healthcare provider or institution would normally expect to collect from the patient, but was unable to collect, and as a result had to write off, either in part or in its entirety. Services that were written off during the reporting year (CY2016), regardless of when the service was provided, should be included. This includes unpaid non-reimbursable expenses, for which the patient was responsible (excluding those services eligible for charity care coverage). Bad debt expenses should be net of any recoveries received to date for debt written off during CY2016.

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Primary Care Data Request

Reporting for RHC
<Insert Institution Name>
Statistical Information for the 12 Months Ending December 31, 2016

For community health centers only, please duplicate this exhibit and complete a table for each individual site within your organization.

Safety Net Users by Zip Code and Payor* (to be reported in aggregate across all reporting organizations)

Zip Code of Residence (please list all St. Louis City and County zip codes)	Medicare	Private/Commerical	Medicaid	Uninsured		Total
				Gateway to Better Health	All Other Uninsured	
63001						-
63005						-
63006						-
63011						-
63017						-
63021						-
63022						-
63024						-
63025						-
63026						-
63031						-
63032						-
63033						-
63034						-
63038						-
63040						-
63042						-
63043						-
63044						-
63045						-
63074						-
63088						-
63099						-
63101						-

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Primary Care Data Request

Zip Code of Residence (please list all St. Louis City and County zip codes)	Medicare	Private/Commerical	Medicaid	Uninsured		Total
				Gateway to Better Health	All Other Uninsured	
63102						-
63103						-
63104						-
63105						-
63106						-
63107						-
63108						-
63109						-
63110						-
63111						-
63112						-
63113						-
63114						-
63115						-
63116						-
63117						-
63118						-
63119						-
63120						-
63121						-
63122						-
63123						-
63124						-
63125						-
63126						-
63127						-
63128						-
63129						-
63130						-
63131						-
63132						-

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Primary Care Data Request

Zip Code of Residence (please list all St. Louis City and County zip codes)	Medicare	Private/Commerical	Medicaid	Uninsured		Total
				Gateway to Better Health	All Other Uninsured	
63133						-
63134						-
63135						-
63136						-
63137						-
63138						-
63139						-
63140						-
63141						-
63143						-
63144						-
63145						-
63146						-
63147						-
63150						-
63151						-
63155						-
63156						-
63157						-
63158						-
63160						-
63163						-
63164						-
63166						-
63167						-
63169						-
63171						-
63177						-
63178						-
63179						-
63180						-

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Primary Care Data Request

Zip Code of Residence (please list all St. Louis City and County zip codes)	Medicare	Private/Commerical	Medicaid	Uninsured		Total
				Gateway to Better Health	All Other Uninsured	
63182						-
63188						-
63190						-
63195						-
63196						-
63197						-
63198						-
63199						-
All Other MO Zip Codes						-
All IL Zip Codes						-
All Other Zip Codes						-
TOTAL			-	-	-	-

**This data should only include those patients seen within the calendar year using their last known address as of December 31, 2016 or the time of their last encounter. Add additional rows as necessary or attach a separate document.*

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Primary Care Data Request

Reporting for RHC
<Insert Institution Name>
Statement of Revenue and Expense for the year ending December 31, 2016

**This data is only required of the community health centers.*

	Clinical Operations Total Clinical	Other Programs (optional) [Name]	Total
Revenues			
HRSA Grants			
Other Federal Revenue			
Medicaid/Medicare			
Other Patient Revenue			
Gateway to Better Health			
Other Funding			
Contributed Services			
Total Revenues			
Expenses			
Salaries, employee benefits and payroll taxes			
Professional and contractual services			
Supplies			
Insurance			
Pharmaceuticals			
Occupancy			
Depreciation			
Contributed services			
Other			
Total Expenses			
Surplus / (Deficit)			

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Specialty Care Template

Specialty Care Data Request

Please provide the information requested for your institution for **calendar year 2016**. Please submit your responses electronically to mjohns@stlrhc.org by **July 31, 2017**. For questions, contact Marquisha Johns at 314-446-6454 x 1103 or mjohns@stlrhc.org.

Organization Information	
Name:	
Site	
Street:	
City:	
Zip:	

Survey Contact Person	
Name:	
Title:	
Phone/Ext.:	
Email:	

Key Definitions & Guidelines

When completing this survey, please follow the definitions and guidelines outlined below:

- **Encounter:** Encounters (or "visits") are defined as documented, face-to-face contacts between a patient and a provider who exercises independent professional judgement in the provision of services to the patient.
- **User:** Users (or "patients") are individuals who have had at least one encounter during the reporting year. Within a service category (i.e. medical, dental, etc.), an individual can only be counted once as a user. A person who received multiple types of services should be counted once (and only once) for each service.
- The number of encounters should be greated than or equal to the number of users.
- Volumes provided should be unduplicated counts. If duplication exists, please note this for each line affected.

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Specialty Data Request

Specialty Care Template

Statistical Information for the 12 Months Ending December 31, 2016

	Hispanic							Non-Hispanic								
All Years by Payor Category and Race:	White	Black/ African American	Asian	American Indian/Alaska Native	Native Hawaiian/ Other Pacific Islander	More than one race	Unknown Race	White	Black/ African American	Asian	American Indian/Alaska Native	Native Hawaiian/ Other Pacific Islander	More than one race	Unknown Race	Unknown/ Refused Race and Ethnicity	Clinical Total
Medicare (including Dual Eligibles)																-
Medicaid (Traditional FFS/Managed Care Medicaid)																-
Private/Commerical																-
Uninsured																
Gateway to Better Health																-
All Other																-
Total Uninsured																-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

All Encounters by Payor Category	Total
Medicare (including Dual Eligibles)	
Medicaid (Traditional FFS/Managed Care Medicaid)	
Private/Commerical	
Uninsured	
Gateway to Better Health	
All Other	
Total Uninsured	
Total	-
STANDARD Hours of Operation:	
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Do some specialties consistently offer **evening** hours for appointments?	
If so, which specialties?	
Are these appointments available for safety net patients (Medicaid, Uninsured, Gateway to Better Health)?	
Do some specialties consistently offer **weekend** hours for appointments?	
If so, which specialties?	
Are these appointments available for safety net patients (Medicaid, Uninsured, Gateway to Better Health)?	

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Specialty Care Template

Statistical Information for the 12 Months Ending December 31, 2016

Number of Clinical FTE's by Specialty:	Non-Resident	Resident
Cardiology		
Dermatology		
Endocrinology		
Endoscopy		
ENT/Otolaryngology		
Gastroenterology (GI)		
Gynecology ONLY		
Obstetrics/Prenatal Care ONLY		
Obstetrics/Gynecology		
Hematology		
Hepatology		
Infectious Disease		
Mental/Behavioral Health		
Nephrology		
Neurology		
Neurosurgery		
Oncology		
Ophthalmology/Eye Care		
Orthopedics		
Pain Management		
Physical Therapy		
Podiatry		
Pulmonology		
Rheumatology		
Surgery -- General		
Urology		
All Other		

*Please limit to those providers geographically located in St. Louis City and County AND provide method used to calculate FTE count.

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Specialty Care Template

Statistical Information for the 12 Months Ending December 31, 2016

Please complete wait time data as close to July 1, 2017 as possible.

Days until THIRD next available appointment as of DATE (please enter DATE as of):	New Patient	Returning Patient	Urgent Patient*
Cardiology			
Dermatology			
Endocrinology			
Endoscopy			
ENT/Otolaryngology			
Gastroenterology (GI)			
Gynecology ONLY			
Obstetrics/Prenatal Care ONLY			
Obstetrics/Gynecology			
Hematology			
Hepatology			
Infectious Disease			
Adult Psychiatry			
Pediatric/Youth Psychiatry			
Nephrology			
Neurology			
Neurosurgery			
Oncology			
Ophthalmology/Eye Care			
Orthopedics			
Pain Management			
Physical Therapy			
Podiatry			
Pulmonology			
Rheumatology			
Surgery -- General			
Urology			
All Other			

*Patients who need immediate access to assistance due to medical necessity, not urgent care or emergency dept.

Specialty Care Template

Statistical Information for the 12 Months Ending December 31, 2016

Policies, as of TODAY	
In dollars, how much medical care did your organization write off as "bad debt" (see definition below) in 2016?	
In dollars, how much medical care did your organization write off as "charity care"/"sliding fee scale" (see definition below) in 2016?	
Scheduling	
Do you require payor information to schedule an appointment?	__Y or __N
Do any of your specialty departments require uninsured patients to pay a deposit or upfront fee prior to or during check in for their appointment?	__Y or __N
If yes, which departments and how much is the standard fee?	
Are different appointments available to safety net patients -- defined as uninsured, Medicaid or Gateway patients -- compared to commercially insured patients?	Y or __N
What is the policy for scheduling appointments for patients with an outstanding balance? (Attach separate document, if necessary)	
Do you have a missed appointment/no-show policy?	__Y or __N
If yes, what is your missed appointment/no-show policy? (Attach separate document, if necessary)	
If yes, does it vary by specialty?	__Y or __N
Financial Assistance (discounted fee structure)/Charity Care Policies (payment slides to zero dollars)	
What is the process for applying for financial assistance and/or sliding fee schedule, including documentation requirements? (Attach separate document, if necessary)	
What documents do you require for financial assistance?	
Are patients applying for financial assistance required to receive a bill before applying?	__Y or __N
What is the process for applying for charity care, if different from financial assistance, including documentation requirements? (Attach separate document, if necessary)	
What documents do you require for charity care?	
Are patients applying for charity care required to receive a bill before applying?	__Y or __N
Do individual departments have the ability to establish their own patient financial policies or opt out of institutional charity care/financial assistance policies?	__Y or __N
Does the application for financial assistance and/or charity care include information about the applicant's medical condition?	__Y or __N
Is financial assistance available to individuals with high deductible insurance plans?	__Y or __N
If yes, what is the policy for accessing this assistance? (Attach separate document, if necessary)	
Do "self pay" patients receive an automatic discount from billed charges?	__Y or __N
If yes, is there a standard discount for all "self pay" patients who do not receive financial assistance?	__Y or __N
If yes, what percentage of billed charges is the a standard discount for all "self pay" patients who do not receive financial assistance?	
If a patient qualifies for financial assistance with your institution, do your facility partners require additional documentation to qualify for their financial assistance?	__Y or __N
Do partnering providers (e.g. physician groups, lab services, radiology, etc.) offer financial assistance?	__Y or __N or __N/A
Are your partnering providers (e.g. lab, radiology) obligated to honor your financial assistance program for the services they provide to qualifying patients?	__Y or __N
Do you provide cost estimates to patients in advance of delivering care?	__Y or __N
How many applications were collected in CY2016 for financial assistance, charity care and/or sliding fee schedule?	
How many were approved for charity care?	
How many were approved for financial assistance (including sliding fee scale)?	
Patient Navigation	
Are financial assistance policies publically available online?	__Y or __N
Do ALL patients receive basic information about financial assistance?	__Y or __N
Is staff available to assist patients in understanding financial assistance policies?	__Y or __N
Is staff available to assist patients in completing financial assistance applications?	__Y or __N
Is staff available to assist patients in applying for insurance coverage?	__Y or __N
If so, how many patients did you assist in applying for coverage during CY2016?	
Do you inform patients about the availability of prescription assistance programs?	__Y or __N
If yes, do you assist patients in completing applications for prescription assistance programs?	__Y or __N
How many people did you assist in CY 2016?	
Interpreter Use	
Do you have a written policy around language access?	__Y or __N
If yes, what is your language access policy? (Attach separate document, if necessary)	
Interpreter services available for limited English proficient (LEP) or Deaf/Hard of Hearing (DHH) patients (Enter "X" next to YES or NO)	__Y or __N
Contracted (Enter "X" next to the appropriate option)	
If contracted, please list organization.	
Employed In-House (Enter "X" next to the appropriate option)	
How many FTEs in-house interpreters available?	
Written materials available for non-English speakers (Enter "X" next to YES or NO)	__Y or __N
Are financial assistance policies available in languages other than English?	__Y or __N
Are interpreters available to explain financial assistance policies and assist patients in completing financial assistance applications?	__Y or __N
Total number of interpreter encounters	
Phone Encounters	
Video Encounters	
In Person Encounters	

Charity Care and/or sliding fee

Charges for supplies and/or services that a healthcare provider or institution would normally expect collection, but due to an individual's indigent status (per the institution's charity care/sliding fee scale policy) the provider or institution has voluntarily chosen to write off. The organization has deemed that the patient meets certain financial criteria and is unable to pay for all or a portion of the services. Services that were written off during the reporting year (CY2016), regardless of when the service was provided, should be included. In addition, any automatic discounts applied to uninsured patients (self-pay discount), regardless of meeting certain charity care criteria, may be included. Also, include non-reimbursable expenses that are deemed as eligible for coverage by the organization's charity care policy.

Bad debt

Charges for supplies and/or services that a healthcare provider or institution would normally expect to collect from the patient, but was unable to collect, and as a result had to write off, either in part or in its entirety. Services that were written off during the reporting year (CY2016), regardless of when the service was provided, should be included. This includes unpaid non-reimbursable expenses, for which the patient was responsible (excluding those services eligible for charity care coverage). Bad debt expenses should be net of any recoveries received to date for debt written off during CY2016.

Specialty Care Template

Statistical Information for the 12 Months Ending December 31, 2016

Safety Net Users by Zip Code and Payor* (to be reported in aggregate across all reporting organizations)

Zip Code of Residence (please list all St. Louis City and County zip codes)	Medicare	Private/Commerical	Medicaid	Uninsured		Total
				Gateway to Better Health	All Other Uninsured	
63001						-
63005						-
63006						-
63011						-
63017						-
63021						-
63022						-
63024						-
63025						-
63026						-
63031						-
63032						-
63033						-
63034						-
63038						-
63040						-
63042						-
63043						-
63044						-
63045						-
63074						-
63088						-
63099						-
63101						-
63102						-
63103						-
63104						-
63105						-
63106						-
63107						-
63108						-
63109						-
63110						-
63111						-
63112						-
63113						-
63114						-
63115						-
63116						-
63117						-
63118						-
63119						-
63120						-
63121						-
63122						-
63123						-
63124						-
63125						-
63126						-
63127						-
63128						-
63129						-
63130						-
63131						-
63132						-
63133						-
63134						-
63135						-
63136						-
63137						-
63138						-
63139						-
63140						-
63141						-

Zip Code of Residence (please list all St. Louis City and County zip codes)	Medicare	Private/Commerical	Medicaid	Uninsured		Total
				Gateway to Better Health	All Other Uninsured	
63143						-
63144						-
63145						-
63146						-
63147						-
63150						-
63151						-
63155						-
63156						-
63157						-
63158						-
63160						-
63163						-
63164						-
63166						-
63167						-
63169						-
63171						-
63177						-
63178						-
63179						-
63180						-
63182						-
63188						-
63190						-
63195						-
63196						-
63197						-
63198						-
63199						-
All Other MO Zip Codes						-
All IL Zip Codes						-
All Other Zip Codes						-
TOTAL	-	-	-	-	-	-

**This data should only include those patients seen within the calendar year using their last known address as of December 31, 2016 or the time of their last encounter. Add additional rows as necessary or attach a separate document.*

B. Measure Specifications

MEASURE	MEASURE SPECIFICATION
Gateway provider revenue	Total amount of claims-based revenue for all primary care services received across all Gateway providers from January 1 through December 31.
Primary clinic business hours/week	[Sum of open clinic hours between 8:00 a.m. and 5:00 p.m. Monday-Friday] / [Total number of clinic locations across all Gateway providers].
Primary clinic non business hours/week	[Sum of clinic hours before 8:00 a.m. and after 5:00 p.m. Monday-Friday] + [Sum of open clinic hours on Saturday and Sunday]
Total primary clinic hours/week	[Total number of primary clinic business hours open clinic hours] + [Total number of primary clinic non-business hours]
Available primary care services[14]	Sum [Number of "core" primary care services X number of clinics] + Sum [Number of "additional" primary care services X number of clinics]
Primary care non-urgent wait times new patients	[Sum of all non-urgent wait times for new patients for primary care services in one quarter] / [Total number of clinics]
Primary care non-urgent wait times established patients	[Sum of all non-urgent wait times for established patients for primary care services in one quarter] / [Total number of clinics]
Primary care urgent wait times new patients	[Sum of all urgent wait times for new patients for primary care services in one quarter] / [Total number of clinics]
Primary care urgent wait times established patients	[Sum of all urgent wait times for established patients for primary care services in one quarter] / [Total number of clinics]
Specialty care wait times for patients	[Sum of all non-urgent wait times for patients for specialty services reported annually] / [Total number of clinics]
Specialty care referrals	Total number of specialty referrals made by primary care providers in one year
Number of low-income uninsured adults newly enrolled in Gateway	Total number of low-income uninsured adults newly enrolled in Gateway program in one year
Percent low-income uninsured unique users	[Total number of unique users who received at least one primary care service in the Gateway program between January 1 and December 31] / [Total number of eligible[15] uninsured adults between 19 and 64 years of age in St. Louis city and county between January 1 and December 31]
Percent uninsured adults enrolled in Gateway	[Total number of adults enrolled in the Gateway program between January 1 and December 31] / [Total number of eligible uninsured adults between 19

[14] See full service array options below
[15] Adults whose incomes are 100% of the FPL

MEASURE	MEASURE SPECIFICATION
	and 64 years of age in St. Louis city and county between January 1 and December 31]
Barrier to healthcare self-report	[Total number of responses that endorse "not at all confident" and "not too confident" on each components of item five of the Enrollee Satisfaction survey] / [Total number of responses on each component of item five on the Enrollee Satisfaction survey]
Barrier to healthcare provider report	[Total number of responses that endorse "not at all confident" and "not too confident" on each component of item two of the Provider survey] / [Total number of responses on each component of Provider survey]
Engagement self-report	[Total number of responses that endorse "good" and "very good" on each components of item four of the Enrollee Satisfaction survey] / [Total number of responses on each component of item four on the Enrollee Satisfaction survey]
Newly Enrolled Office Visit	[Number of newly enrolled Gateway members who receive at least one office visit, within one year (6 months before or after reporting period start date)] / [Total number of newly enrolled Gateway members]
Medical service line average utilization	[Number of medical service line encounters for Gateway members for services received between January 1 and December 31] / [Total number of medical service line unique users between January 1 and December 31]
Medical service line unique users penetration	[Number of medical service line unique users between January 1 and December 31]/ [Number of Gateway enrollees between January 1 and December 31]
Substance use service line unique users penetration	[Number of substance use service line unique users between January 1 and December 31]/ [Number of Gateway enrollees between January 1 and December 31]
Alcohol withdrawal medication management	[Number of enrollees prescribed at least one medication[16] to manage withdrawal from alcohol between January 1 and December 31]/ [Number of enrollees with AUD diagnosis between January 1 and December 31]
Opioid withdrawal medication management	[Number of enrollees prescribed at least one medication[17] to manage withdrawal from opioids between January 1 and December 31]/ [Number of enrollees with OUD diagnosis between January 1 and December 31]
AUD medication maintenance	[Number of enrollees prescribed Disulfiram or Naltrexone HCL between January 1 and December 31]/ [Number of enrollees with AUD diagnosis between January 1 and December 31]
OUD medication maintenance	[Number of enrollees prescribed Buprenorphine HCl or Naltrexone HCL between January 1 and December 31]/ [Number of enrollees with OUD diagnosis between January 1 and December 31]

[16] Baclofen, Desipramine HCL, Mirtazapine, Paroxetine CR, Paroxetine ER, Paroxetine HCL, and Gabapentin.
[17] Baclofen, Desipramine HCL, Mirtazapine, Paroxetine CR, Paroxetine ER, and Paroxetine HCL.

MEASURE	MEASURE SPECIFICATION
Physical function improvement service line unique users penetration	[Number of unique users with a primary pain-related diagnosis[18] who received at least one service under the physical function improvement service line between January 1 and December 31]/ [Number of unique users with a primary pain-related diagnosis[18] between January 1 and December 31]
Primary care provider incentive payments	Total amount of revenue from incentive payment received across all Gateway providers from January 1 through December 31.
P4P incentive criteria scores	[Sum of all criteria met by Gateway providers across one year]/ [Total number of providers]
Wellness self-report	[Total number of responses that endorse "better" on item six of the Enrollee Satisfaction survey] / [Total number of responses on each component of item six on the Enrollee Satisfaction survey]
Wellness provider report	[Total number of responses that endorse "improved" on item one of the Provider survey] / [Total number of responses on each component of item one on the Provider Satisfaction survey]
Self-reported physical function improvement	[Total number of patients with a primary pain-related diagnosis[18] with an overall score indicating a positive detectable change[19] on the PSFS between January 1 and December 31][21] / [Total number of patients with a primary pain-related diagnosis[18] that completed[20] the PSFS between January 1 and December 31][21]
Tobacco use assessment and cessation intervention	[Number of enrollees for whom documentation demonstrates that patients were queried about their tobacco use at least once within 24 months of their last visit (during measurement year) about any and all forms of tobacco use AND received tobacco cessation counseling intervention and/ or pharmacotherapy if identified as a tobacco user]/ [Number of Gateway enrollees during the measurement year with at least one medical visit during the reporting year, and with at least two medical visits ever]
Hypertension: Blood Pressure Control	[Number of enrollees whose last systolic blood pressure measurement was less than 140 mm Hg and whose diastolic blood pressure was less than 90 mm Hg] / [Number of enrollees with a diagnosis of hypertension (HTN); who were first diagnosed by the health center as hypertensive at some point before June 30 of the measurement year, and; who have been seen for medical services at least twice during the reporting year.
Diabetes: HbA1c control	[Number of enrollees with a diagnosis of Type I or Type II diabetes whose most recent hemoglobin A1c level during the measurement year is less than or equal to 9%]/ [Number of enrollees year with a diagnosis of Type I or II

[18] Gateway enrollees with a primary pain-related diagnosis as specified in Attachment F
[19] Initial patient assessment and most recent patient assessment will be assessed for change. Comparison assessment score must fall within 6 months of initial assessment. Minimum positive detectable change for single activity score is defined as a 3 point increase or greater, and minimum positive detectable change for average score (more than one defined activity) is defined as a 2 point increase or greater, as defined by Stratford, P., Gill, C., Westaway, M., & Binkley, J. (1995). Assessing disability and change on individual patients: a report of a patient specific measure. Physiotherapy Canada, 47, 258-263.
[20] A completed PSFS is defined as a patient being assessed at least 2 times between January 1 and December 31.
[21] This measure is based on patient reports. One patient may make multiple reports.

MEASURE	MEASURE SPECIFICATION
	diabetes and; who have been seen in the clinic for medical services at least twice during the reporting year]
Adult weight screening and follow-up	[Number of enrollees who had their BMI (not just height and weight) documented during their most recent visit or within 6 months of the most recent visit and if the most recent BMI is outside parameters, a follow-up plan is documented]/ [Number of enrollees who had at least one medical visit during the reporting year]
Flu Shot for adult patients	[Number of enrollees who received an influenza immunization OR who reported previous receipt of an influenza immunization]/ [Number of enrollees seen for a visit between October 1 and March 31 of the measurement year]
Use of appropriate medications for asthma	[Number of enrollees with asthma diagnosis who were ordered at least one prescription for a preferred therapy during the measurement period] / [Number of Gateway enrollees with persistent asthma and a visit during the measurement period EXCEPT enrollees with a diagnosis of emphysema, COPD, obstructive chronic bronchitis, cystic fibrosis or acute respiratory failure that overlaps the measurement period]

Service Array

Core Services
Primary Medical Care
Dental Care
Mental Health Services, *(please specify types of services available)*
Substance Abuse Services, *(please specify types of services available)*
Podiatry
Optometry
Enabling Services
Pharmacy
Chronic Disease Management
Ophthalmology
Case Management
Social Services
Referral to Specialty Care
Eligibility Assistance Services
Radiology
Clinical Laboratory Services, *(please indicate whether in-house or contracted)*

Additional Services
Nutrition
Youth Behavioral Health Services, *(please specify types of services available)*
WIC
Community Health Homeless Services
Prenatal classes/Centering Pregnancy
HIV Counseling
Urgent Care
Specialty Care, *(please specify specialties available)*
STD Clinic Services
Social Services
Other not listed, *(please specify)*

C. Enrollee Satisfaction Survey

Today's Date:

As you think about your visit today, how would you rate the following:

1. How well the staff and doctor listened to your needs and explained things in a way that was easy to understand	Poor	Fair	Okay	Good	Very Good
2. The quality of services received	Poor	Fair	Okay	Good	Very Good

3. Would you recommend [insert Health Center] to a family member or friend?	Yes	No

In an effort to better understand your Gateway experience and health center relationship, we want to know how you would answer the following:

4. Please rate your health center's communication with you:

a. How promptly we answer your phone calls	Poor	Fair	Okay	Good	Very Good
b. Information from our website and other materials to help you get the healthcare you need	Poor	Fair	Okay	Good	Very Good
c. Getting advice or help from the clinic when needed during office hours	Poor	Fair	Okay	Good	Very Good
d. Helpfulness of our health information materials	Poor	Fair	Okay	Good	Very Good

5. **<u>If the Gateway program ended</u>**, how confident are you that you could:

a. Afford to see a doctor	Not at all confident	Not too confident	Somewhat confident	Very confident
b. Afford prescription medicines	Not at all confident	Not too confident	Somewhat confident	Very confident
c. Coordinate all of your health care needs	Not at all confident	Not too confident	Somewhat confident	Very confident
d. Get necessary medical tests	Not at all confident	Not too confident	Somewhat confident	Very confident
e. Follow the treatments your doctor recommends	Not at all confident	Not too confident	Somewhat confident	Very confident

6. Since you have been enrolled in the Gateway program, do you think your overall physical health is:	Worse	Stayed the same	Better

(Continue on Back)

In an effort to better understand chronic pain in our community, we want to know how you would answer the following:

1. In the past six months, how often did you have pain?
   a. Never
   b. Some days
   c. Most days
   d. Every day

If you answered **NEVER** to question #1, please skip the remaining questions

2. In the past six months, how often did pain make personal or work activities harder to complete? (Examples: working at your job, cooking, cleaning, taking care of children, etc.)
   a. Never
   b. Some days
   c. Most days
   d. Every day

3. Does your pain ever make you feel anxious or depressed?
   a. Never
   b. Some days
   c. Most days
   d. Every day

NOTE
If your pain causes anxiety or depression, please tell someone at your health center today if you feel comfortable doing so.

4. Does your pain **get worse** when you feel anxious or depressed?
   a. Yes
   b. No
   c. N/A – I never get anxious or depressed

5. How often do you move for at least 30 minutes? (Examples: walking, stretching, swimming, etc.)
   a. Almost never
   b. 1-2 times a **month**
   c. 1-2 times a **week**
   d. 3 or more times a **week**

6. Have you talked to your doctor about your pain?
   a. No. Why not? _____
   b. Yes, and I did feel understood and supported
   c. Yes, but I did **NOT** feel understood and supported

7. What do you wish your doctor understood about your pain?

_____

_____

_____

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D. Provider Survey

GBH 2018 and 2019 Referring Provider Survey

Medical Provider Survey Changes:

Continue prompting for written feedback when a provider is rated as "average" or "needs improvement"

Add Mercy cardiology and GI/hepatology to the list of providers.

Remove Dr. Theordore Otti from the list of providers.

The following questions address Gateway's impact on patient health and access to care:

1. Do you think the overall health of your patients has improved, worsened or stayed the same after enrolling in Gateway?
   - Improved
   - Worsened
   - Stayed the same

2. If the Gateway program ended, how confident are you that current Gateway enrollees could:

a. Could keep their overall health the same	Not at all confident	Not too confident	Somewhat confident	Very confident
b. Could access quality medical care	Not at all confident	Not too confident	Somewhat confident	Very confident
c. Could afford to see a primary care provider	Not at all confident	Not too confident	Somewhat confident	Very confident
d. Could afford prescription medicines	Not at all confident	Not too confident	Somewhat confident	Very confident
e. Could afford to see a specialist doctor	Not at all confident	Not too confident	Somewhat confident	Very confident

2018 - The following questions are designed to better understand the provider's perspective on chronic pain in our community:

1. Approximate the percentage of your adult encounters in which chronic pain (pain persisting for at least 3 months) is a major focus of the visit?
   - 0-25%
   - 26-50%
   - 51-75%
   - 75-100%

2. Which of the following methods do your patients utilize, in order to manage chronic pain and increase function? Choose any/all that apply:
   - Primary Care Encounters
   - Behavioral Health Consultant Encounters
   - Prescription Medication
   - Physical Therapy
   - Exercise Program with Trainer
   - Pain Doctor for Injection Therapies
   - Orthopedist or Physical Medicine
   - Chronic Pain Therapy & Support Group
   - Comprehensive Multidisciplinary Pain Management Program
   - Other (Ex: Rheumatologist, Chiropractic, Acupuncture, Massage, Weight Loss Management, Family/Friend/Community Support/Counseling/Validation)
     - Open Text Box for Comments

3. What else do you still need to help your patients in chronic pain? Choose the top 3:
   - Physical Therapy
   - Exercise Program with Trainer
   - Pain Doctor for Injection Therapies
   - Orthopedist or Physical Medicine
   - Chronic Pain Therapy & Support Group
   - Comprehensive Multidisciplinary Pain Management Program
   - Other (Ex: Massage, Rheumatologist, Chiropractic, Acupuncture, Weight Loss Management, Family/Friend/Community Support/Counseling/Validation)
     - Open Text Box for Comments

4. If you could integrate one more professional in your health home model in order to help with chronic pain, what would be your top priority?

5. If your patients had greater access to services you prioritized in questions 3 and 4, would this result in you prescribing fewer controlled substances for pain such as opioids?

2019 Additions/Changes: ***The following additional questions are designed to better understand the provider's perspective on chronic pain in our community:***

1. Approximately how many of your Gateway patients experience chronic pain? (Chronic pain is defined as pain on most days or every day in the past 6 months
   a. 0%
   b. 1-25%
   c. 26-50%
   d. 51-75%
   e. 76-100%

If you answered 0%, please skip the remaining questions

2. For what percentage of your encounters for patients with chronic pain do you request a behavioral health expert and/or community health worker to work with the patient as well??
    a. 0%
    b. 1-25%
    c. 26-50%
    d. 51-75%
    e. 76-100%

3. For what percentage of your encounters for patients with chronic pain do you refer to a chiropractor for care within your health center? (Affinia & CareSTL)
    a. 0%
    b. 1-25%
    c. 26-50%
    d. 51-75%
    e. 76-100%

4. For your patients presenting with chronic pain, do you feel you have adequate ***time*** to address their pain?
    a. Yes
    b. No

5. For your patients presenting with chronic pain, do you feel you have adequate ***training*** to address their pain?
    a. Yes
    b. No

6. Which specialty care departments presented access barriers to pain treatment services? Check all that apply:

    a. Neurology - SLUCare
    b. Neurology - WUSM
    c. Neurosurgery - SLUCare
    d. Neurosurgery - WUSM
    e. Orthopedic/Physiatry/Sports-Medicine - SLUCare
    f. Orthopedic/Physiatry/Sports-Medicine - WUSM
    g. Pain Management – WUSM
    h. Rheumatology - SLUCare
    i. Rheumatology - WUSM
    j. SLUCare Other: SLUCare Other: GI, Gynecology, Surgery, Urology
    k. WUSM Other: GI, Gynecology, Surgery, Urology
    l. Other - Write In
    m. Not Applicable/Unknown

7. Any specifics or examples you'd like to share about specialty care departments presenting access barriers to pain treatment services for your patients?

8. What do you wish specialty care providers knew about your chronic pain patients?

Support Staff Survey Changes:

Continue prompting for written feedback when a provider is rated as "average" or "needs improvement."

For Washington University, notate that we are asking for feedback on the Streamlined Referrals Department for two questions: overall ease of scheduling and helpfulness and courtesy of staff when scheduling.

Remove Dr. Theodore Otti from the list of providers.

2019 Additions/Changes: ***The following questions are designed to better understand the provider's perspective on chronic pain in our community:***

1. Which specialty care departments presented access barriers to pain treatment services? Check all that apply:

    a. Neurology - SLUCare
    b. Neurology - WUSM
    c. Neurosurgery - SLUCare
    d. Neurosurgery - WUSM
    e. Orthopedic/Physiatry/Sports-Medicine - SLUCare
    f. Orthopedic/Physiatry/Sports-Medicine - WUSM
    g. Pain Management – WUSM
    h. Rheumatology - SLUCare
    i. Rheumatology - WUSM
    j. **SLUCare Other**: SLUCare Other: GI, Gynecology, Surgery, Urology
    k. **WUSM Other:** GI, Gynecology, Surgery, Urology
    l. Other - Write In
    m. Not Applicable/Unknown

2. If you've been given feedback from specialty care departments as to why there are access barriers to pain treatment services, please share that feedback here. (Example: Specialty care provider requires physical therapy prior to an intervention)

Medical Providers

NOTE: Only answer questions about providers that you actively use for GBH patient referrals.

For questions contact us at GBHISSUES@stlrhc.org.

1. BJC Medical Group (ENT, cardiology & orthopedics) @ Christian NE Hospital

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○
Report from consultation provider, did you receive it?	○	○	○	○	○
Report from consultation provider, was it meaningful?	○	○	○	○	○
Rendering specialist, available to speak with you?	○	○	○	○	○

2. Washington University

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○
Report from consultation provider, did you receive it?	○	○	○	○	○
Report from consultation provider, was it meaningful?	○	○	○	○	○
Rendering specialist, available to speak with you?	○	○	○	○	○

3. Barnes-Jewish Hospital Resident Clinic

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○
Report from consultation provider, did you receive it?	○	○	○	○	○

	N/A	Needs Improvement	Average	Above Average	Excellent
Report from consultation provider, was it meaningful?	○	○	○	○	○
Rendering specialist, available to speak with you?	○	○	○	○	○

4. Saint Louis University (SLU) Care

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○
Report from consultation provider, did you receive it?	○	○	○	○	○
Report from consultation provider, was it meaningful?	○	○	○	○	○
Rendering specialist, available to speak with you?	○	○	○	○	○

5. Eye Associates

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○
Report from consultation provider, did you receive it?	○	○	○	○	○
Report from consultation provider, was it meaningful?	○	○	○	○	○
Rendering specialist, available to speak with you?	○	○	○	○	○

6. Dr. Mwintshi (nephrology) @ Nephrology & Hypertension Associates, LLC

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○
Report from consultation provider, did you receive it?	○	○	○	○	○
Report from consultation provider, was it meaningful?	○	○	○	○	○
Rendering specialist, available to speak with you?	○	○	○	○	○

7. SSM (cardiology & GI) @ St. Mary's & DePaul

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○
Report from consultation provider, did you receive it?	○	○	○	○	○
Report from consultation provider, was it meaningful?	○	○	○	○	○
Rendering specialist, available to speak with you?	○	○	○	○	○

8. Dr. Theodore Otti (nephrology) @ St. Mary's & St. Alexius

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○
Report from consultation provider, did you receive it?	○	○	○	○	○
Report from consultation provider, was it meaningful?	○	○	○	○	○
Rendering specialist, available to speak with you?	○	○	○	○	○

9. Mercy (cardiology & GI/hepatology)

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○
Report from consultation provider, did you receive it?	○	○	○	○	○
Report from consultation provider, was it meaningful?	○	○	○	○	○
Rendering specialist, available to speak with you?	○	○	○	○	○

9. Is there anything else you'd like us to know about GBH today?

Submit

Support Staff

NOTE: Only answer questions about providers that you actively use for GBH patient referrals.

For questions contact us at GBHISSUES@stlrhc.org.

1. BJC Medical Group (ENT, cardiology & orthopedics) @ Christian NE Hospital

	N/A	Needs Improvement	Average	Above Average	Excellent
Overall ease of scheduling a consultation	○	○	○	○	○
Ease of contacting the rendering provider	○	○	○	○	○
Helpfulness and courtesy of staff when scheduling	○	○	○	○	○
Timeliness of available appointments	○	○	○	○	○

2. Washington University

	N/A	Needs Improvement	Average	Above Average	Excellent
Overall ease of scheduling a consultation	○	○	○	○	○
Ease of contacting the rendering provider	○	○	○	○	○
Helpfulness and courtesy of staff when scheduling	○	○	○	○	○
Timeliness of available appointments	○	○	○	○	○

3. Barnes-Jewish Hospital Resident Clinic

	N/A	Needs Improvement	Average	Above Average	Excellent
Overall ease of scheduling a consultation	○	○	○	○	○
Ease of contacting the rendering provider	○	○	○	○	○
Helpfulness and courtesy of staff when scheduling	○	○	○	○	○
Timeliness of available appointments	○	○	○	○	○

4. Saint Louis University (SLU) Care

	N/A	Needs Improvement	Average	Above Average	Excellent
Overall ease of scheduling a consultation	○	○	○	○	○
Ease of contacting the rendering provider	○	○	○	○	○
Helpfulness and courtesy of staff when scheduling	○	○	○	○	○

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○

5. Eye Associates

	N/A	Needs Improvement	Average	Above Average	Excellent
Overall ease of scheduling a consultation	○	○	○	○	○
Ease of contacting the rendering provider	○	○	○	○	○
Helpfulness and courtesy of staff when scheduling	○	○	○	○	○
Timeliness of available appointments	○	○	○	○	○

6. Dr. Mwintshi (nephrology) @ Nephrology & Hypertension Associates, LLC

	N/A	Needs Improvement	Average	Above Average	Excellent
Overall ease of scheduling a consultation	◉	○	○	○	○
Ease of contacting the rendering provider	○	○	○	○	○
Helpfulness and courtesy of staff when scheduling	○	○	○	○	○
Timeliness of available appointments	○	○	○	○	○

7. Mercy (cardiology & GI/hepatology)

	N/A	Needs Improvement	Average	Above Average	Excellent
Overall ease of scheduling a consultation	○	○	○	○	○
Ease of contacting the rendering provider	○	○	○	○	○
Helpfulness and courtesy of staff when scheduling	○	○	○	○	○
Timeliness of available appointments	○	○	○	○	○

8. SSM (cardiology & GI) @ St. Mary's & DePaul

	N/A	Needs Improvement	Average	Above Average	Excellent
Overall ease of scheduling a consultation	○	○	○	○	○
Ease of contacting the rendering provider	○	○	○	○	○
Helpfulness and courtesy of staff when scheduling	○	○	○	○	○
Timeliness of available appointments	○	○	○	○	○

9. Dr. Theodore Otti (nephrology) @ St. Mary's & St. Alexius

	N/A	Needs Improvement	Average	Above Average	Excellent
Overall ease of scheduling a consultation	○	○	○	○	○
Ease of contacting the rendering provider	○	○	○	○	○
Helpfulness and courtesy of staff when scheduling	○	○	○	○	○

	N/A	Needs Improvement	Average	Above Average	Excellent
Timeliness of available appointments	○	○	○	○	○

10. On the following scale, how would you rate Logisticare's scheduling process?

	1	2	3	4	5	
Very difficult	○	○	○	○	○	Not difficult

11. On the following scale, how would you rate your overall satisfaction with Logisticare's services?

	1	2	3	4	5	
Not satisfied	○	○	○	○	○	Very satisfied

12. Is there anything else you'd like us to know about GBH today?

Next

E. The Patient Specific Functional Scale

The Patient-Specific Functional Scale

This useful questionnaire can be used to quantify activity limitation and measure functional outcome for patients with any orthopaedic condition.

Clinician to read and fill in below: Complete at the end of the history and prior to physical examination.

Initial Assessment:

I am going to ask you to identify up to three important activities that you are unable to do or are having difficulty with as a result of your _____ problem. Today, are there any activities that you are unable to do or having difficulty with because of your _____ problem? (Clinician: show scale to patient and have the patient rate each activity).

Follow-up Assessments:

When I assessed you on (state previous assessment date), you told me that you had difficulty with (read all activities from list at a time). Today, do you still have difficulty with: (read and have patient score each item in the list)?

Patient-specific activity scoring scheme (Point to one number):

0 1 2 3 4 5 6 7 8 9 10

Unable to perform activity

Able to perform activity at the same level as before injury or problem

(Date and Score)

Activity	Initial					
1.						
2.						
3.						
4.						
5.						
Additional						
Additional						

Total score = sum of the activity scores/number of activities
Minimum detectable change (90%CI) for average score = 2 points
Minimum detectable change (90%CI) for single activity score = 3 points

PSFS developed by: Stratford, P., Gill, C., Westaway, M., & Binkley, J. (1995). Assessing disability and change on individual patients: a report of a patient specific measure. Physiotherapy Canada, 47, 258-263.

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F. ICD-10-CM Diagnostic Codes for Conditions Commonly Associated with Chronic Pain

ICD-10-CM Diagnosis Code	Code Description
M545	Low back pain
M549	Dorsalgia, unspecified
M25562	Pain in left knee
M25561	Pain in right knee
M542	Cervicalgia
M1990	Unspecified osteoarthritis, unspecified site
M25511	Pain in right shoulder
M79672	Pain in left foot
M79671	Pain in right foot
M25512	Pain in left shoulder
M25569	Pain in unspecified knee
G894	Chronic pain syndrome
M25572	Pain in left ankle and joints of left foot
M25551	Pain in right hip
M2550	Pain in unspecified joint
M25552	Pain in left hip
M797	Fibromyalgia
G8929	Other chronic pain
M25571	Pain in right ankle and joints of right foot
M79641	Pain in right hand
M5430	Sciatica, unspecified side
M722	Plantar fascial fibromatosis
M179	Osteoarthritis of knee, unspecified
M79642	Pain in left hand
M5432	Sciatica, left side
M5442	Lumbago with sciatica, left side
M5412	Radiculopathy, cervical region
M5441	Lumbago with sciatica, right side
M25531	Pain in right wrist
M25519	Pain in unspecified shoulder
M5416	Radiculopathy, lumbar region
M79605	Pain in left leg
M25532	Pain in left wrist
M1712	Unilateral primary osteoarthritis, left knee
M170	Bilateral primary osteoarthritis of knee
M5136	Other intervertebral disc degeneration, lumbar region
M79604	Pain in right leg
R52	Pain, unspecified
M9903	Segmental and somatic dysfunction of lumbar region
M5440	Lumbago with sciatica, unspecified side
M79644	Pain in right finger(s)
M79674	Pain in right toe(s)
M25579	Pain in unspecified ankle and joints of unspecified foot
M130	Polyarthritis, unspecified
M7661	Achilles tendinitis, right leg
M5030	Other cervical disc degeneration, unsp cervical region
M79652	Pain in left thigh
M76822	Posterior tibial tendinitis, left leg
M654	Radial styloid tenosynovitis [de Quervain]
M1711	Unilateral primary osteoarthritis, right knee
M1710	Unilateral primary osteoarthritis, unspecified knee
M7662	Achilles tendinitis, left leg
M259	Joint disorder, unspecified
M169	Osteoarthritis of hip, unspecified
M79662	Pain in left lower leg
M79606	Pain in leg, unspecified
M79601	Pain in right arm
M25521	Pain in right elbow
M25559	Pain in unspecified hip
M222X2	Patellofemoral disorders, left knee
M4807	Spinal stenosis, lumbosacral region
M479	Spondylosis, unspecified

ICD-10-CM Diagnosis Code	Code Description
G8921	Chronic pain due to trauma
M1289	Oth specific arthropathies, NEC, multiple sites
M62838	Other muscle spasm
M25522	Pain in left elbow
M79675	Pain in left toe(s)
M79651	Pain in right thigh
M79621	Pain in right upper arm
M546	Pain in thoracic spine
M79673	Pain in unspecified foot
M79609	Pain in unspecified limb
M19011	Primary osteoarthritis, right shoulder
M1991	Primary osteoarthritis, unspecified site
M5431	Sciatica, right side
M9902	Segmental and somatic dysfunction of thoracic region
M4802	Spinal stenosis, cervical region
S86911A	Strain of unsp musc/tend at lower leg level, right leg, init
M7061	Trochanteric bursitis, right hip
M62830	Muscle spasm of back
M75101	Unsp rotatr-cuff tear/ruptr of right shoulder, not trauma
M129	Arthropathy, unspecified
M7520	Bicipital tendinitis, unspecified shoulder
M5000	Cervical disc disorder with myelopathy, unsp cervical region
M5116	Intervertebral disc disorders w radiculopathy, lumbar region
M5117	Intvrt disc disorders w radiculopathy, lumbosacral region
M7712	Lateral epicondylitis, left elbow
M7740	Metatarsalgia, unspecified foot
S83241D	Oth tear of medial meniscus, current injury, r knee, subs
S83204D	Oth tear of unsp meniscus, current injury, left knee, subs
M5489	Other dorsalgia
M7582	Other shoulder lesions, left shoulder
M7581	Other shoulder lesions, right shoulder
M5380	Other specified dorsopathies, site unspecified
M79645	Pain in left finger(s)
M79622	Pain in left upper arm
M79643	Pain in unspecified hand
M79659	Pain in unspecified thigh
M25539	Pain in unspecified wrist
M150	Primary generalized (osteo)arthritis
M5410	Radiculopathy, site unspecified
M419	Scoliosis, unspecified
M9901	Segmental and somatic dysfunction of cervical region
M9904	Segmental and somatic dysfunction of sacral region
M4800	Spinal stenosis, site unspecified
M47816	Spondylosis w/o myelopathy or radiculopathy, lumbar region
S39012S	Strain of muscle, fascia and tendon of lower back, sequela
M7062	Trochanteric bursitis, left hip
M1611	Unilateral primary osteoarthritis, right hip
S46002S	Unsp inj musc/tend the rotator cuff of l shoulder, sequela
M7500	Adhesive capsulitis of unspecified shoulder
M7521	Bicipital tendinitis, right shoulder
M160	Bilateral primary osteoarthritis of hip
M7551	Bursitis of right shoulder
M719	Bursopathy, unspecified
M5093	Cervical disc disorder, unspecified, cervicothoracic region
S300XXA	Contusion of lower back and pelvis, initial encounter
M539	Dorsopathy, unspecified
M7710	Lateral epicondylitis, unspecified elbow
M7701	Medial epicondylitis, right elbow
M7742	Metatarsalgia, left foot
M7741	Metatarsalgia, right foot
M189	Osteoarthritis of first carpometacarpal joint, unspecified
M12862	Oth specific arthropathies, NEC, left knee

ICD-10-CM Diagnosis Code	Code Description
M7501	Adhesive capsulitis of right shoulder
M12812	Oth specific arthropathies, NEC, left shoulder
M12811	Oth specific arthropathies, NEC, right shoulder
M24812	Oth specific joint derangements of left shoulder, NEC
M216X2	Other acquired deformities of left foot
M216X1	Other acquired deformities of right foot
M7071	Other bursitis of hip, right hip
M71562	Other bursitis, not elsewhere classified, left knee
M5033	Other cervical disc degeneration, cervicothoracic region
M5020	Other cervical disc displacement, unsp cervical region
M7752	Other enthesopathy of left foot
M4185	Other forms of scoliosis, thoracolumbar region
M4127	Other idiopathic scoliosis, lumbosacral region
M238X2	Other internal derangements of left knee
M238X9	Other internal derangements of unspecified knee
M5137	Other intervertebral disc degeneration, lumbosacral region
M5186	Other intervertebral disc disorders, lumbar region
M5187	Other intervertebral disc disorders, lumbosacral region
M13861	Other specified arthritis, right knee
M67814	Other specified disorders of tendon, left shoulder
M0680	Other specified rheumatoid arthritis, unspecified site
M4712	Other spondylosis with myelopathy, cervical region
M4722	Other spondylosis with radiculopathy, cervical region
M47896	Other spondylosis, lumbar region
M79632	Pain in left forearm
M79661	Pain in right lower leg
M25529	Pain in unspecified elbow
M79629	Pain in unspecified upper arm
M222X9	Patellofemoral disorders, unspecified knee
M19071	Primary osteoarthritis, right ankle and foot
M19041	Primary osteoarthritis, right hand
M19031	Primary osteoarthritis, right wrist
M5417	Radiculopathy, lumbosacral region
M24411	Recurrent dislocation, right shoulder
M2211	Recurrent subluxation of patella, right knee
M533	Sacrococcygeal disorders, not elsewhere classified
M153	Secondary multiple arthritis
M19272	Secondary osteoarthritis, left ankle and foot
M4317	Spondylolisthesis, lumbosacral region
M25642	Stiffness of left hand, not elsewhere classified
M25641	Stiffness of right hand, not elsewhere classified
S46811A	Strain of musc/fasc/tend at shldr/up arm, right arm, init
S46012A	Strain of musc/tend the rotator cuff of left shoulder, init
S39012A	Strain of muscle, fascia and tendon of lower back, init
S96912A	Strain of unsp msl/tnd at ank/ft level, left foot, init
S46919S	Strain unsp musc/fasc/tend at shldr/up arm, unsp arm, sqla
M1612	Unilateral primary osteoarthritis, left hip
S46009A	Unsp inj musc/tend the rotator cuff of unsp shoulder, init
M21949	Unspecified acquired deformity of hand, unspecified hand
M67912	Unspecified disorder of synovium and tendon, left shoulder
M2392	Unspecified internal derangement of left knee
S4990XA	Unsp injury of shoulder and upper arm, unsp arm, init encntr

G. Pay for Performance Criteria and Benchmarks

PERFORMANCE CRITERIA	BENCHMARK
All Newly Enrolled Patients – Minimum of at least 1 office visit within 1 year (6 months before/after enrollment date).	80%
Patients with Diabetes, Hypertension, CHF or COPD – Minimum of at least 2 office visits within 1 year (6 months before/after reporting period start date).	80%
Patients with Diabetes – Have one HgbA1c test within 6 months of reporting period start date.	85%
Patients with Diabetes – Have a HgbA1c less than or equal to 9% on most recent HgbA1c test within the reporting period. (estimated start date for change to metric January 1, 2021)	70%
Patients with Pain-Related Diagnoses[22] – Have received a service under the physical function improvement service line and completed a patient specific functional scale questionnaire[23] (estimated start date for new metric January 1, 2021)	40%
Patients with Substance Use Diagnoses[24] – Are prescribed a maintenance medication[25] under the substance use service line (estimated start date for new metric January 1, 2021)	50%
Hospitalized Patients – Among enrollees whose primary care home was notified of their hospitalization by the Gateway Call Center, the percentage of patients who have been contacted (i.e. visit or phone call for status/triage, medical reconciliation, prescription follow up, etc.) by a clinical staff member from the primary care home within 7 days after hospital discharge.	50%
Rate of Referral to Specialist among Tier 1/Tier 2 Enrollees	680/1000

[22] Gateway enrollees with a primary pain-related diagnosis as specified in Attachment F
[23] Patient Specific Functional Scale Questionnaire can be found in Attachment E
[24] Gateway enrollees with a diagnosis of ICD 10 Code F11
[25] Buprenorphine HCL or Naltrexone HCL

H. Independent Evaluator

As part of the Standard Terms and Conditions (STCs), as set forth by the Centers for Medicaid and Medicare Services (CMS), the demonstration project is required to hire an independent party to conduct an evaluation of the program and to ensure that the necessary data is collected to research approved hypotheses and evaluation questions. To fulfill this requirement, the SLRHC released a request for proposals (RFP) on August 23, 2017. Proposals were due back to the SLRHC by October 31, 2017. Below is the list of qualifications for the external evaluator, as expressed in the RFP.

Desired Qualifications

- Experience working with federal programs and/or demonstration waivers
- Experience with evaluating effectiveness of complex, multi-partnered programs
- Familiarity with CMS federal standards and policies for program evaluation
- Familiarity with nationally-recognized data sources
- Analytical skills and experience with statistical testing methods

A total of six proposals were submitted to the RHC and were ranked based on the following criteria: cost, experience, evaluation approach, and overall flexibility and culture fit. Based on these criteria, Mercer Government Human Services Consulting was selected as the external evaluator.

Mercer developed the final evaluation design for the 2018-2022 approval period. SLRHC staff will implement the research design, calculate the results of the study, evaluate the results for conclusions, and write the Interim and Summative Evaluation Reports. Mercer will review the research, results and report for its alignment with the research design and verify the appropriateness of the reported results.

Mercer has over 25 years assisting state governments with the design, implementation and evaluation of publicly sponsored health care programs. Mercer currently has over 25 states under contract and has worked with over 35 different states in total. They have assisted states like Arizona, Connecticut, Missouri and New Jersey in performing independent evaluations of their Medicaid programs; many of which include 1115 demonstration waiver evaluation experience. Mercer also has unique knowledge of the State of Missouri given they're experience with the MO HealthNet Division, where they provide annual evaluation reports for the Children's Health Insurance Program (CHIP) and the 1115 demonstration Women's Health program. These evaluations include the collection and analysis of eligibility, enrollment, encounter and financial data and production of year-over-year comparisons. Additionally, they have extensive experience in conducting 1915(b) waiver design and cost effectiveness analyses. In 2010, in cooperation with MO HealthNet staff, the Commission selected Mercer to perform the initial Gateway to Better Health program evaluation. Given their previous work with the Gateway program and their current work the MO HealthNet, the Mercer team is well-equipped to work effectively as the external evaluator for the Gateway program. Below is contact information for the lead coordinators from Mercer for the Gateway to Better Health evaluation:

Wendy Woske
Engagement Leader
Wendy.Woske@mercer.com

Heather Huff, MA
Program Manager
Heather.Huff@mercer.com

Brenda Jenney, PhD
Lead Evaluator
Brenda.Jenney@mercer.com

I. Conflict of Interest Statement

The St. Louis Regional Health Commission has taken steps to ensure that the selected external evaluator does not have any conflicts of interest in completing an impartial evaluation of the Gateway to Better Health program. Mercer is a national company, with contracts for multiple State Medicaid programs and demonstration waivers. Mercer has no vested interest in the State of Missouri, the St. Louis Regional Health Commission or the Gateway to Better Health demonstration wavier. Additionally, Mercer has signed a contract with the SLRHC that includes a "no conflict" clause, as outlined below:

"No Conflict. MERCER currently does not have or has not had a business or other relationship with any entity or individual that (i) could give rise to an economic or ethical conflict, or (ii) could reasonably be determined to impact the independence of MERCER."

J. Evaluation Budget

Appendix III
Evaluation Budget

GATEWAY TO BETTER HEALTH
Evaluation Budget
2018-2022

	2018	2019	2020	2021	2022	Total
Salaries, Benefits & Taxes						
Total Salaries, Benefits & Taxes	$ 214,570	$ 225,300	$ 236,570	$ 248,390	$ 260,820	$ 1,185,650
Office Expense						
Occupancy	$ 16,600	$ 17,100	$ 17,610	$ 18,140	$ 18,680	$ 88,130
Supplies & Printing	$ 3,000	$ 3,150	$ 3,310	$ 3,480	$ 3,650	$ 16,590
Technology & Equipment	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 5,000	$ 25,000
Total Office Expense	$ 24,600	$ 25,250	$ 25,920	$ 26,620	$ 27,330	$ 129,720
Professional fees						
Mercer	$ 125,000	$ 51,000	$ 51,000	$ 51,000	$ 51,000	$ 329,000
MPCA	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 50,000
AHS	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 750,000
Accounting	$ 27,000	$ 28,350	$ 29,770	$ 31,260	$ 32,820	$ 149,200
Total Professional Fees	$ 312,000	$ 239,350	$ 240,770	$ 242,260	$ 243,820	$ 1,278,200
Total Cost	$ 676,170	$ 540,900	$ 554,260	$ 568,270	$ 582,970	$ 2,922,570

K. Timeline and Major Milestones

The table below highlights key milestones evaluation milestones and activities for the Gateway program and their timelines for completion.

Milestone	STC Reference	Date
Procure external vendor for evaluation services	Section XI (#39)	12/1/2017
Submit Amended Evaluation Design	Section XI (#40)	12/30/2017
Finalize Evaluation Design	Section XI, (#41)	4/30/2018
Submit Quarterly Reports	Section IX (#34)	Ongoing – due 60 days at the end of each quarter
Submit Draft Annual Report for DY9 (October 2017 – September 2018)	Section IX (#34/#35)	- 12/31/2018
Submit Draft Annual Report for DY10 (October 2018 – September 2019)	Section IX (#34/#35)	- 12/31/2019
Submit Draft Annual Report for DY11 (October 2019 – September 2020)	Section IX (#34/#35)	- 12/31/2020
Submit Interim Evaluation (January 2018 – December 2020)	Section XI (#47)	12/31/2021
Submit Draft Annual Report for DY12 (October 2020 – September 2021)	Section IX (#34/#35)	- 12/31/2021
Submit Draft Annual Report for DY13 (October 2021 – September 2022)	Section IX (#34/#35)	- 12/31/2022
Submit Summative Evaluation Report	Section XI (#48)	6/30/- 2024
Submit Draft Final Report	Section IX (#34/#35)	9/1/2022