

**Medicaid CHIP Data
Analytics Unit Quarterly
Report of Activities State
Fiscal Year 2022,
Quarter 3**

**As Required by
2022-23 General Appropriations Act,
Senate Bill 1, 87th Legislature, Regular
Session, 2021 Texas Health and Human
Services
(Article II, HHSC, Rider 7)**

**Texas Health and Human Services
Commission**

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TEXAS
Health and Human
Services

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1. Executive Summary

The 2022-23 General Appropriations Act, Senate Bill (HB) 1, 87th Legislature, Regular Session, 2021 (Article II, HHSC, Rider 7), directs the Health and Human Services Commission (HHSC) to submit a quarterly report on activities and findings of the Data Analysis Unit established pursuant to Government Code, §531.0082. In compliance with this rider, this report focuses on the quarterly activities, the status of major projects, and the findings of the Medicaid CHIP Data Analytics Unit (MCDA).

Highlights this quarter include:

- MCDA presented its new fully automated workflow for producing time and distance standards used to monitor Medicaid managed care network adequacy, to the Managed Care Organizations (MCOs), increasing transparency and accountability in how HHSC evaluates MCO performance to ensure client access to sufficient numbers of providers.
- This quarter, MCDA began partnering with the Performance Management and Analytics System (PMAS) teams within the Office of Data, Analytics, and Performance (DAP) and HHSC Information Technology (IT), to integrate and automate the data systems required to monitor provider network adequacy in a more efficient and holistic manner.
- To improve the use of teleservices to provide and enhance mental and behavioral healthcare for children placed in conservatorship, MCDA worked with the Department of Family and Protective Services (DFPS) and HHSC's Medicaid and CHIP Services (MCS) division to analyze STAR Health clients utilization pursuant to Senate Bill 1896, 87th Legislature, Regular Session, 2021.
- MCDA provided analyses on Medicaid and CHIP clients' utilization of teleservice services to help MCS update the biennial Telemedicine, Telehealth, and Home Telemonitoring Services in Texas Medicaid Report as directed by SB 789, 77th Legislature, Regular Session, 2001.
- MCDA has been working with DAP and the Department of State Health Services (DSHS) to create analytical files to model COVID-19 changes in utilization and health outcomes.

2. Introduction

The 2022-23 General Appropriations Act, Senate Bill (HB) 1, 87th Legislature, Regular Session, 2021 (Article II, HHSC, Rider 7), directs HHSC to “report to the Legislative Budget Board on a quarterly basis the activities and findings of the Data Analysis Unit” created by Government Code, §531.0082. The following report fulfills this requirement for the third quarter of State Fiscal Year 2022 (SFY22 Q3).

During SFY22 Q3, MCDA within the Office of Data, Analytics, and Performance (DAP) completed 44 projects supporting the direction of the Government Code to “...(1) improve contract management, (2) detect data trends, and (3) identify anomalies relating to service utilization, providers, payment methodologies, and compliance with requirements...” in the state's Medicaid and CHIP programs. The status of major projects and activities, along with findings, is described in three sections of this report: 1) Monitoring MCO Contract Compliance, 2) Tracking Service Utilization and Related Data, and 3) Enhancing Data Infrastructure.

MCDA collaborates closely with many units within the MCS division. At the most recent quarterly Service Utilization Workgroup meeting, where MCDA presents its findings of service utilization trends and anomalies, 22 MCS staff members participated. Units represented included the Medical Director’s Office, Policy and Program, Operations Management, Quality Assurance, and Utilization Review (UR). Several Actuarial Analysis staff also attended the Service Utilization Workgroup meeting. MCDA continues to meet with the Director of Actuarial Analysis on a monthly basis to exchange observations of data variations of interest.

In addition, Rider 7 directs that “...any anomalies identified related to service utilization, providers, payment methodologies, and compliance with the requirements in Medicaid and CHIP shall be reported to the Office of the Inspector General (OIG) for further review.” MCDA and the OIG communicate monthly to exchange updates on respective analyses. MCDA continues to assist the OIG with documentation related to the analysis as the OIG investigates further.

3. Monitoring MCO Contract Compliance

Extract, Transform, and Load Automation

MCDA is a key partner in HHSC's efforts to increase the data-driven efficiency of monitoring MCO contract compliance. Due to the extract, transform, and load (ETL) automation developed by MCDA, MCS has been able to redirect Managed Care Compliance & Operations (MCCO) staff resources that would otherwise have been spent manually processing thousands of reports MCOs formerly submitted in Excel format. The ETL processes have also facilitated MCDA's handling of MCO deliverable data for purposes of responding to ad hoc data requests and creating data visualizations in the form of compliance dashboards.

Several of the deliverables that MCOs once reported at an aggregated level via a legacy computer system are now being collected at a more detailed level through TexConnect, a web-based portal. This change has allowed MCDA to conduct more thorough quality assurance. Data quality checks by MCDA have identified problems in certain MCO data, such as pending appeals not being carried over into the next monthly report or reporting duplicate ID numbers. MCDA provides MCCO staff with lists of MCO reporting errors and helps them build tools and strategies to address these errors in time for MCOs to resubmit corrected data.

The TexConnect portal currently lacks the functionality to allow MCCO staff to download complete sets of submitted data at the MCO level. MCDA has read access to the TexConnect Oracle database and can provide that level of detail for MCCO staff when needed. MCCO is reviewing the possibility of adding that functionality to the TexConnect portal in a future enhancement. In SFY22 Q3, MCDA has provided MCCO staff with complete data extracts for quality review of two of the deliverables (network adequacy and provider termination) by extracting data directly from the TexConnect database.

In SFY2022 Q1 MCDA staff began assisting STAR+PLUS and STAR KIDS policy staff in automating report production for MCO self-reported data submitted per Uniform Managed Care Manual chapters 5.4.5.3 and 5.4.5.6. This work has continued in SFY22 Q3. The deliverables referenced in these chapters collect information about number of members authorized to receive Personal Care Services (PCS) and number of members who received those services, as well as the number of units authorized and received. MCDA staff worked with STAR+PLUS and STAR KIDS

policy staff in redesigning the deliverable to provide for quality review of the submissions and to improve data analysis between MCOs.

Compliance Dashboards

The goal of the MCDA compliance dashboards is to enhance contract oversight by trending MCOs' compliance with standards required by MCO contracts and the Medicaid Uniform Managed Care Manual, such as claims adjudication timeliness and hotline call pick-up rate standards. The dashboards provide HHSC staff with access to compliance data in a user-friendly, flexible, and efficient format. The compliance dashboards are used to facilitate data-driven decisions concerning the need for corrective actions, including the issuance of liquidated damages. As the dashboards contain confidential agency data, they are for internal use only. In SFY22 Q3, the Quality Performance Report (QPR) compliance dashboard was updated and revised to include all new data points through SFY22 Q2. MCDA continues to include the enhancements developed last quarter for use by MCCO.

Complaints Dashboards

As a result of findings from the report required by Rider 61 of the 2018-2019 General Appropriations Act, HB 1, 85th Legislature, Regular Session, 2017 (Article II, HHSC), on Medicaid Managed Care Oversight, MCS initiated a project to revise the managed care member complaints process to streamline intake and tracking, more effectively leverage complaints data to identify risks, and ultimately improve quality of services. In the 86th Legislative Session, Regular Session, HB 4533 added related requirements, including making aggregated data available to the legislature and the public.

In SFY22 Q3, two complaints dashboards for SFY21 Q4, and SFY22 Q1 were published on the [HHSC website](#), including a new category of complaints on the Medical Transportation Program (MTP), which will help MCS monitor the performance of these services in the wake of the program's carve-in to managed care in June 2021. These dashboards will be updated and published quarterly and include one dashboard for initial contact complaints, which are complaints that were resolved within one business day, and one dashboard for all other complaints. The dashboards display complaints compiled from both MCOs/DMOs and HHSC. They include both member and provider complaints data. In SFY22 Q3, MCDA compiled the SFY22 Q2 data for the upcoming dashboard update.

Additionally, MCS plans to begin to incorporate the complaints data into the MCO report cards produced by the state's External Quality Review Organization (EQRO), the Institute for Child Health Policy at the University of Florida (ICHP). To facilitate this addition, MCDA will be submitting complaint level data on a recurring basis to the EQRO. It is anticipated that ICHP will request these data annually.

As part of a Client 360 view being developed for MCS by Performance Management and Analytics System (PMAS) staff, MCDA has been investigating the use of complaints data collected in the TexConnect system (MCO self-reported complaints) and the Health and Human Services (HHS) Enterprise Administrative Record Tracking System (HEART) (complaints submitted directly to the HHS Office of the Ombudsman (OOO)).

Provider Network Adequacy

- Ensuring provider network adequacy is a high priority for the agency and Medicaid and CHIP program stakeholders. MCDA supports MCS's effort to continually evaluate the effectiveness of its provider networks, focusing on the Medicaid managed care health plans. To this end, MCDA participates in bi-weekly meetings with the MCCO Network Adequacy team to develop network adequacy dashboards. Below are some of the activities related to monitoring network adequacy in the past quarter.
- MCDA is partnering with the PMAS teams within DAP and HHSC Information Technology (IT), to further integrate and automate the data systems required to monitor provider network adequacy in a more holistic manner. To that end, this quarter, as approved by the HHS Data Governance and Performance Management (DGPM) Executive Steering Committee and Council, MCDA launched a DAP-wide workgroup, with MCS participation, to begin to plan more semi-automated strategies for producing provider network measures. This first step will provide a foundation for producing a more fully integrated data system in the second phase of the project.
- HHSC requires MCO provider networks to comply with distance and travel time standards in accordance with managed care contract requirements. MCDA measures geodistance and travel time between clients and providers using geospatial mapping analysis. In SFY22 Q3, MCDA further improved the extract, transform, and load (ETL) and geoprocessing scripts to develop a fully automated workflow from source data collection through to a properly formatted final deliverable. This quarter's results were completed, submitted, reviewed, and accepted in 7 weeks, which included an extension of the

workflow to load the cleaned, geocoded provider datasets to the SQL Server for wider usage.

- MCDA presented its new fully automated workflow for producing time and distance standards, used to monitor Medicaid managed care network adequacy, to the MCOs, increasing transparency and accountability in how HHSC evaluates MCO performance to ensure client access to sufficient numbers of providers. MCDA updated the Distance Performance dashboard through SFY22 Q3. This dashboard presents data on compliance with HHSC distance performance standards by MCO, county, and provider type.
- MCDA updated the Provider Terminations Report dashboard with SFY22 Q1 data. This dashboard includes counts of providers terminated, reason for termination, and the number of members impacted, allowing MCCO to filter by client program, MCO, SDA, and provider type codes.

Teleservices

The use of teleservices has alleviated barriers to office-based care during the COVID-19 pandemic for some clients. Teleservices utilization has been the subject of several recent analyses conducted by MCDA. With the passage of HB 4, 87th Legislature, Regular Session, which has expanded teleservices coverage, MCDA will continue to closely monitor trends in the use of this mode of service delivery.

- MCDA updated the internal Teleservices Quarterly Dashboard through November 2021. This dashboard presents telehealth, telemedicine, and telemonitoring costs, claims, clients, and providers, allowing filtering factors like client age and program.
- MCDA updated a dashboard to analyze the share of mental health; substance use disorder (SUD); well child visits; and Physical, Occupational, and Speech Therapy (PTOTST) care delivered via teleservices from SFY16 to SFY22 Q1, with demographic breakouts, to show its increased usage over time and how COVID-19 has impacted the utilization levels of the benefits.
- MCDA provided analyses on Medicaid and CHIP clients' utilization of teleservice services to help Medicaid and CHIP Services (MCS) update the biennial *Telemedicine, Telehealth, and Home Telemonitoring Services in Texas Medicaid* Report as directed by SB 789, 77th Legislature, Regular Session, 2001.
- To improve the use of teleservices to provide and enhance mental and behavioral healthcare for children placed in conservatorship, MCDA worked

with the Department of Family and Protective Services (DFPS) and MCS to analyze STAR Health clients utilization, pursuant to SB1896.

Prior Authorization Data Collection

Access to prior authorization data from the MCOs enhances contract oversight by allowing MCS and MCDA to track trends over time and potential variations between MCO prior authorization processes. For the first phase of the agency's effort to access the data, since September 2020, the MCOs have been required to submit aggregated prior authorization files on a monthly basis. MCDA developed an ETL process to manage the data and identify quality issues, allowing UR, who manages the project, to reach out to the MCOs to have them correct the errors and resubmit the deliverables. To monitor the trends, MCDA developed and refreshes an internal dashboard for UR which displays MCO prior authorization approval and denial frequencies by service type. The dataset and dashboard are refreshed monthly; the most recent completed month of data is February 2022.

In SFY20, the Prior Authorization subcommittee developed the Change Order Request for the second phase of the project, the Prior Authorization Member-Level Data Warehousing Project. Phase 2 will focus on collecting data at the level of the individual transaction, rather than aggregated data. Granular data will allow MCDA to connect client level prior authorizations to actual services delivered as reported in the encounters.

In SFY22 Q3, HHSC continued to coordinate with Texas Medicaid & Healthcare Partnership (TMHP) on the development of the project to finalize variables to include in the new Member-Level Data Warehouse. UR staff have continued to work with the MCOs to assist them in successfully submitting test data to the TMHP Data Warehouse. As of the end of 2022 Q3, all seventeen MCOs have passed trading partner training.

Service Utilization Dashboards

MCDA creates and maintains a comprehensive service utilization dashboard displaying healthcare utilization by multiple service types, broken out by Medicaid and CHIP programs, MCOs, Service Delivery Areas (SDA), age groups, race/ethnicity, and gender. The dashboard features multiple measures, including amounts paid, utilization rates, and number of claims. Currently, the dashboard includes the following services: telemedicine/telehealth; telemonitoring; emergency department (ED) visits; inpatient stays; physical therapy (PT), occupational therapy

(OT), and speech therapy (ST); private duty nursing (PDN); personal care services (PCS); durable medical equipment (DME); DME prescriptions; vendor drug program (VDP); mental health (MH); SUD; and well-child visits. During the third quarter of SFY22, the dashboard was updated to include finalized data through SFY21 Q3 and preliminary data through SFY22 Q1.

Ongoing Trend and Anomaly Detection

MCDA continues to refine its internal procedures for making and analyzing quarterly updates to the key service utilization dashboards. Analysts have been designated to acquire expertise in specific areas of service. With focused subject matter expertise, the analyst can more readily interpret signals of significant variations in the data. Detection of three types of signals has been automated: (1) "Outliers" (data points outside the control limits), (2) "Long Runs" of seven or more consecutive data points on one side of the long-term average, and (3) "Short Runs" (three of four consecutive values closer to a control limit than to the average value). See Figure 1 below for an example.

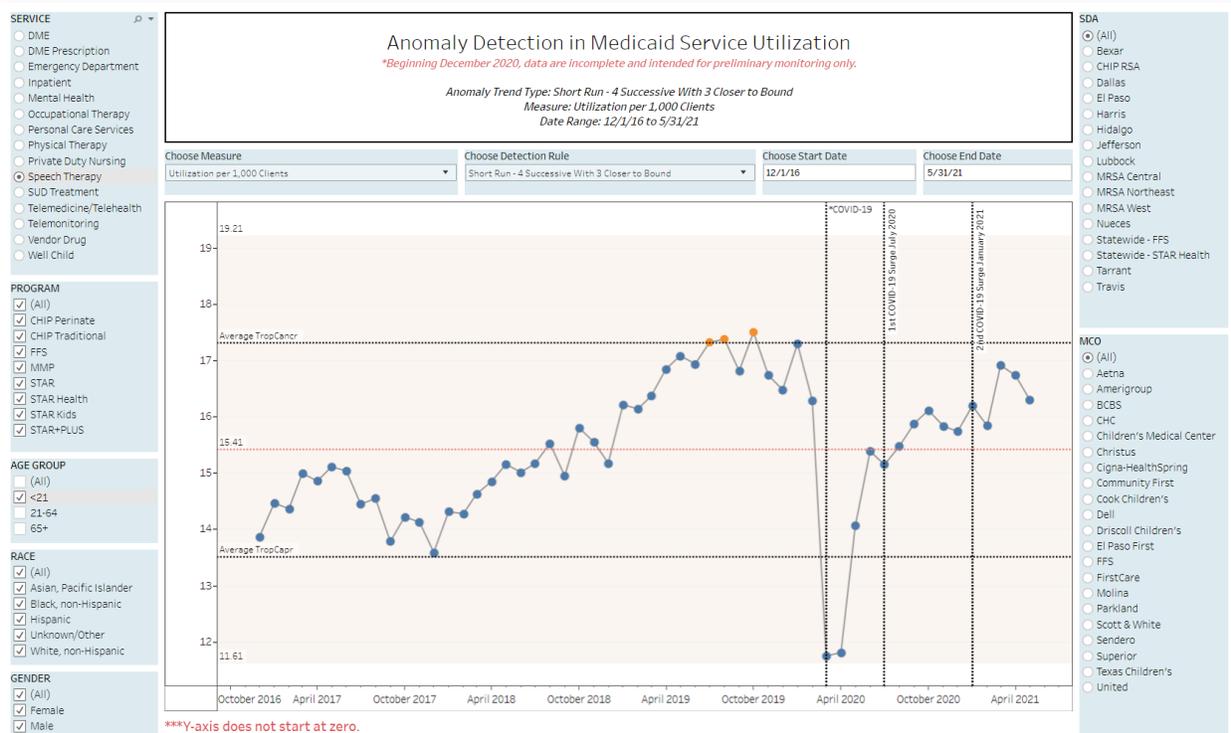
Once MCDA detects a potential anomaly, analysts take several steps to identify an explanation for the data variation. First, data quality is reviewed. Additionally, MCDA developed and updates a chronological dashboard that denotes when significant Medicaid and CHIP program and policy changes have been implemented. This dashboard is used to help determine whether observed irregularities in utilization data may be a result of such program or policy changes.

MCDA presents its highest priority findings to the Service Utilization Workgroup, a committee of subject matter experts from across MCS, such as policy and program divisions, and other areas in HHSC, including Actuarial Analysis. The MDCA team asks the workgroup members to offer ideas for what is driving the anomaly and to provide direction on next steps, including:

1. close the anomaly since it is directly related to a policy change or other known event and aligns with expected trends,
2. continue to monitor the anomaly since the reason for the trend is unclear and possibly of concern,
3. investigate the anomaly further based on a theory about what may be driving it, or
4. elevate the anomaly to leadership based on its potential to significantly impact quality of care or cost to the state.

Any elevated anomalies requiring MCS leadership attention may be presented at the Managed Care Oversight Coordination meetings, a forum where information about Medicaid and CHIP program performance is exchanged between leadership in all areas of the Medicaid and CHIP Services department and related HHSC divisions.

Figure 1: Sample Screen Shot of Anomaly Detection Dashboard with Short Run



Service Utilization Monitoring During COVID-19

In the third quarter of SFY22, 23 new anomalies related to the utilization rate per 1,000 members or the amount paid per client were detected in the service utilization dashboard data. As described above, before the pandemic, MCDA would present the highest priority of these anomalies to the Service Utilization Workgroup to determine what might be driving the data variations. However, for SFY20 Q3 to SFY21 Q3 data, MCDA needed to adjust its standard anomaly detection presentation due to the onset of the COVID-19 pandemic in March 2020.

COVID-19 impacted service utilization rates in several ways. First and foremost, the Public Health Emergency (PHE) resulted in fewer people, including Medicaid clients, receiving in-person health services. Therefore, the obvious downward trend for

most services did not need to be presented to the Service Utilization Workgroup for feedback. While MCDA continued to log anomalies for SFY21 Q3, for consistency in its monitoring activities, analysts focused on how much impact the PHE had on specific services and how well each service appears to be rebounding after the initial decline. Observations were shared with the workgroup, who were asked to weigh in on possible reasons for the varied impacts.

Other PHE-related and non PHE-related policy changes were considered in the analyses. For example, policies to expand telehealth and telemedicine mitigated the PHE's negative impact, by offering opportunities for clients to access more types of services safely from home.

Additionally, per federal program regulations, HHSC did not disenroll individuals from Medicaid and CHIP during the PHE, resulting in caseload increases. The economic downturn due to the PHE also increased Medicaid caseloads. Therefore, the downturn in utilization rates may not only be explained by a decrease in the number of clients utilizing the services but also by the relative increase in enrolled clients.

Other impacts to client enrollment include the addition of the Healthy Texas Women (HTW) program to Medicaid in February 2020, increasing the fee-for-service (FFS) caseload by almost 300,000 members or over 50 percent. Likewise, following guidance from the Centers for Medicare and Medicaid Services (CMS), in April 2021, HHSC moved some Medicaid beneficiaries to more appropriate Medicaid programs for which they are eligible.

High level observations shared with the Service Utilization Workgroup are included below. Service utilization rates are the most common measure reported. These rates indicate the number of distinct clients who received a service per 1,000 enrolled clients. Utilization rates are calculated based on clients rounded to the nearest whole numbers, except for SUD, PDN, and telemonitoring, where the numbers are too small to round.

Observations about the immediate impact of COVID-19 on services generally compare utilization in February 2020, just prior to the PHE, to April 2020, right after its onset. Observations about the impact of the PHE on services since then are based on final data through SFY21 Q3 (May 2021) and preliminary data from June 2021 - November 2021. The more recent data are "preliminary" because encounters are not considered complete until eight months after services are

delivered. This reporting lag provides time for providers and MCOs to submit and adjudicate the claims. Therefore, these more recent figures are subject to change.

- ED service utilization rates decreased sharply, from around 49 clients per 1,000 in February 2020 to around 20 clients per 1,000 in April 2020 (~59 percent decrease). Part of this decline is due to seasonality, with a peak in ED utilization generally occurring in January and a trough in June. However, this decrease is more pronounced than in past years. Unlike in previous years, a seasonal peak in ED utilization typically seen in winter months (December/January) is absent post COVID-19 PHE and typical seasonal troughs during summer months have not re-emerged. A decrease in the FFS utilization rate began pre-pandemic, in February 2020, corresponding to the incorporation of the HTW program into Medicaid. A sudden influx of enrolled FFS clients may have, at least temporarily, decreased the utilization rate more than usual. Preliminary data through November 2021 indicate that there is an upward trend in ED utilization and rates have reached pre-PHE levels, with February 2020 at 40 clients per 1,000 and November 2021 at 39 clients per 1,000.
- Inpatient service utilization rates decreased from around 12 clients per 1,000 in February 2020 to around 10 clients per 1,000 in April 2020 (~17 percent decrease). Signs of the impact of seasonality and HTW enrollment seen in ED services pre-pandemic are also present in inpatient services. Preliminary data through November 2021 suggests that the utilization rates for the STAR Kids program have rebounded slightly, although not to their pre-pandemic levels, while most other programs have seen a continued downward trajectory during this period.
- Well-child service utilization for clients less than 21 years old decreased sharply during the initial stages of the pandemic, from around 88 clients per 1,000 in February 2020 to around 47 clients per 1,000 in April 2020 (~41 percent decrease). The average monthly number of clients receiving a well-child service has gradually rebounded after April 2020, but as the number of monthly enrolled clients kept increasing, utilization per 1,000 client rates decreased.
- The seasonal peak in August for well-child vaccinations and school physicals were present in SFY20 and SFY21 although at a lower rate than previous years. Unlike some of the other service types that switched to remote service delivery, well-child visits experienced a very marginal increase in teleservices, probably due to the need for in-person contact for services like

vaccinations. Prior to March 2020, no well-child visits were conducted remotely, while only about 1 to 2% of services were performed remotely from April 2020 to November 2021.

- A steep drop in VDP utilization was observed during the initial stages of the PHE, from around 220 clients per 1,000 in February 2020 to around 150 clients per 1,000 in April 2020 (~32 percent decrease). VDP usage is making a slow and steady recovery. Utilization per 1,000 clients in the last 4 months of preliminary data is either at or above the mean. Utilization rates increased from 152.5 in April 2020 to 188.3 clients per 1,000 in November 2021 (~21 percent increase). Also, the average monthly number of clients receiving a VDP service peak in 2 of the last 4 months of preliminary data. Thus, the continuous increase in Medicaid enrollment may be driving down utilization rates since the raw numbers of clients receiving a service have returned to or exceeded pre-pandemic levels for, STAR, STAR Health and STAR Kids. The remainder of the programs have downward trends.
- Total VDP costs had little fluctuation throughout the pandemic but cost per client did increase after March 2020. Cost per client increased 21.7% from March 2020 to April 2020 and remained elevated until March 2021. There was a 12.5% decrease in average cost per client from March 2021 to April 2021 and it has continued to trend downward. CHIP-Traditional, STAR, STAR Kids, and STAR+PLUS all have seen increased costs per client while STAR Health, FFS, CHIP-Perinate, and MMP costs per client have either decreased or remained stable. Cost per client and average monthly clients have opposing trends, so it is possible the neediest clients on more expensive drugs or those with more prescriptions have continued to receive services during the PHE.
- Speech therapy utilization rates for clients less than 21 years of age decreased from around 16 clients per 1,000 in February 2020 to around 12 clients per 1,000 in April 2020 (~25 percent decrease). Similarly, physical therapy utilization rates for the same age group and time frame dropped from around six clients to four clients per 1,000 (~33 percent decrease) and occupational therapy utilization rates dropped from around eight clients to six clients per 1,000 (~25 percent decrease). By March 2021, however, preliminary data indicates that all three types of therapy utilization have rebounded above the long-term mean and are approaching pre-PHE rates.
- An increase in delivering services via a remote modality for these therapies likely played a role in their relatively quick recovery. Teleservices had the

greatest effect on speech therapy as none of these services were delivered remotely prior to the PHE but more than half (51%) of them were conducted remotely in April 2020 for clients of all ages. The percentage of remote speech therapy has plateaued to around 15% as of November 2021. Occupational therapy saw a large increase in teleservices as well during the PHE, from just a few remote services conducted in February 2020 to 27% of total OT in April 2020. Between June 2020 and February 2021, remote occupational therapy services, for clients of all ages, remained steady around 15% but has since decreased to 6% in November 2021. Teleservices also had a modest impact on physical therapy as it went from 0% remote pre-pandemic to 11% in April 2020. Two percent of physical therapies are still being delivered remotely as of November 2021.

- Mental health service utilization rates decreased from around 27 clients per 1,000 in February 2020 to around 23 clients per 1,000 in April 2020 (~14 percent decrease) and by February 2021 had decreased to 21 clients per 1,000. Preliminary data through November 2021 indicate that while the utilization rates have remained below average, the average number of monthly clients with services experienced a rebound, with a rise in the total number of clients in the spring of 2021 being similar to or above pre-COVID levels. This trend could suggest that some of the decline in utilization may be due to increased client enrollment. Meanwhile, mental health services delivered through telehealth and telemedicine increased sharply, from 2-3 percent of services delivered via teleservices in February 2020 to over 60 percent of mental health services delivered via teleservices by April 2020. The percentage of mental health services delivered through telehealth and telemedicine has declined somewhat but still makes up about 29% of all mental health services delivered through November 2021.
- From February 2020 to April 2020, SUD services decreased from 0.9 clients per 1,000 to 0.74 clients per 1,000 (~18.7 percent decrease) and has averaged 0.78 clients per 1,000 since the start of the pandemic. However, preliminary data through November 2021 indicates that the average monthly number of clients served rebounded to pre-COVID levels, with a rise in the total number of clients in the spring and summer of 2021 and has been above average through November 2021. The proportion of SUD services delivered through telehealth and telemedicine increased from virtually no services delivered remotely in February 2020 to over 20 percent of services delivered through telehealth and telemedicine modalities by April 2020. As of November 2021, about 10% of SUD services are still delivered remotely.

- PDN utilization rates for clients less than 21 years old dropped modestly in the first month of the PHE; from around 1.7 per 1,000 clients in March 2020 to around 1.6 per 1,000 in April 2020 (~6% decrease). After April, PDN's utilization steadily decreased, although at a much slower rate, reaching 1.4 clients per 1,000 in November 2021, the last month of the preliminary data.
- Likewise, PCS utilization for members less than 21 years old also decreased at the beginning of the PHE, but the dip was much less dramatic than PDN's. It dropped from around 4.3 in March 2020 to 4.1 clients per 1,000 in April 2020 (~4.7%). In subsequent months, utilization appears to decrease faster than PDN's rates, falling to a low of 3.4 per 1,000 in November 2021. However, the raw counts of clients utilizing PDN and PCS services have remained relatively stable. The downward trend in the utilization rates is likely an artifact of the denominator (enrollees) increasing during the PHE, as more people qualified for services due to job loss and federal rules against removing people from Medicaid or CHIP. It is important to note that utilization rates for services like PCS and PDN with low client numbers are more sensitive to changes in the client pool eligible for the services, i.e., the utilization rate denominator.
- While utilization across the spectrum of services decreased, the proportion of services delivered through telehealth and telemedicine increased sharply, both in terms of utilization rates and costs per client during the PHE. As members avoided in-person care, teleservices became the substitute when possible. Monthly clients using telehealth/telemedicine across all programs increased from about 18,000 (3.7 per 1,000) in February 2020 to about 388,000 (78.2 per 1,000) in April 2020. By November 2020, roughly 300,000 clients (52.4 per 1,000) were utilizing teleservices (representing nearly 1 in 20 clients). Preliminary data up to November 2021 has shown a decline from its peak as about 192,000 clients (32.3 per 1,000) are utilizing teleservices.
- Like telehealth and telemedicine services, telemonitoring experienced an uptick in utilization during the COVID-19 PHE. However, because its application is limited to certain diseases (i.e., hypertension and diabetes), increased utilization was not nearly as widespread as telehealth and telemedicine. The utilization rate increased from 1.9 per 1,000 in February 2020 to 2.2 per 1,000 in April 2020 (~16 percent). Looking at the preliminary data through November 2021, the monthly utilization rate decreases to around 1.7 clients per 1,000. Although the November 2021 utilization rate is lower than the February 2020 pre-PHE rate, the number of

clients utilizing telemonitoring is about 15% higher; with 10,200 clients in August 2021 versus 8,900 in February 2020.

- Prior to the influx of HTW clients to Medicaid FFS and the PHE, Durable Medical Equipment (DME) utilization varied seasonally from about 32 clients per 1,000 in summer to about 36 clients per 1,000 in winter. From January to February 2020, with the influx of HTW clients to FFS, utilization declined from about 35 clients per 1,000 to 32 clients per 1,000, for a decrease of 8.6%. In March 2020, at the beginning of the PHE, utilization was 32 clients per 1,000 and in the last mature month of data (May 2021) was 28 clients per 1,000, for a decline of 12.5%. Decline during the PHE is the result of the enrollment denominator increasing due to more people remaining in or qualifying for Medicaid. The corresponding average number of clients receiving this service per month (independent of enrollment denominator) displayed a seasonal trend in gradual decline before the pandemic. However, it demonstrated a net 9.4% increase during the pandemic from about 148,000 clients in May 2020 to about 163,000 (preliminary) in November 2021.
- Pharmacy products (defined by Vendor Drug Program Product List) have seasonal upturns in fall and winter and downturns in summer prior to the PHE. The notable behaviors are in October 2020 when flu shots drove utilization rates upward, and in spring 2021, when COVID-19 vaccines drove it even higher. Utilization reached a low of 10 clients per 1,000 in February 2021 and has a high outlier (preliminary) of 40 clients per 1,000 in August 2021.

COVID-19 Dashboards and Studies

Since January 2021, MCDA has been posting [external dashboards](#) displaying the numbers and rates of Medicaid and CHIP clients receiving COVID-19 tests or receiving a service with a diagnosis of COVID-19, including emergency department visits and inpatient stays. The dashboards are updated quarterly. In SFY22 Q3, MCDA refreshed the dashboards with data through November 2021.

MCDA continues to assist with the HHSC and DSHS study of the impact of COVID-19 on vulnerable Texans by participating in research planning and analysis and by adding demographics to its service utilization and teleservices dashboards to allow for comparison of service utilization patterns and the use of teleservice across various client populations.

In SFY22 Q1, MCDA created and posted two dashboards on the HHSC public website in coordination with the COVID-19 vulnerable populations study. The new dashboards highlight the use of teleservices during the PHE. They include the number of teleservices and the associated amount paid, by month, and can be filtered by age group, program, SDA, race/ethnicity, and sex. The second dashboard looks at the percentage of mental health; SUD; well child visits; and physical, occupational, and speech therapy care and amount paid via teleservices; broken out by month and can be filtered by age group, program, SDA, race/ethnicity, and sex. In SFY22 Q3, MCDA refreshed the teleservices dashboards with data through November 2021.

The COVID-19 related dashboards continue to allow MCDA to closely monitor the impact of COVID-19 among clients. Likewise, MCDA uses the data behind the dashboards to respond, in a timely manner, to MCS's COVID-19 related ad hoc data requests.

MCDA conducted an analysis to estimate the non-risk payment expenditures for COVID-19 testing/diagnostic services as well as inpatient hospital treatment. MCDA has built a dashboard that identifies any abnormal billing practices for MCOs that are receiving non-risk payments for testing/diagnostic services. MCDA has updated this dashboard to include data up to April 2022's reporting time period.

MCDA has been working with other areas of DAP and DSHS to create analytical files to model COVID-19 changes in utilization and health outcomes.

Physical, Occupational, and Speech Therapy Monitoring

MCDA continues to closely monitor physical, occupational, and speech therapy utilization rates in compliance with Senate Bill 1, 87th Legislature, Regular Session, 2021 (Rider 10, Article II, HHSC). In SFY22 Q3, MCDA finalized analyses on client service utilization, provider network adequacy, and services provided to clients while on wait lists, for inclusion in the June 2022 report. As the new report is biannual instead of quarterly, going forward, MCDA will share findings from the reports twice a year. The most recent report for December 2021, can be found at <https://www.hhs.texas.gov/sites/default/files/documents/biannual-therapy-access-monitoring-dec-2021.pdf>.

Behavioral Health

In SFY22 Q3, MCDA continued to revamp its dashboard on psychotropic medications to focus on the information most commonly requested by MCS leadership. The dashboard will feature best practice parameters, including use of polypharmacy, first developed to monitor psychotropic medication use among foster care children due to concerns over overprescribing. Since 2004, HHSC has updated these measures annually in the Use of Psychotropic Medications for Children in Texas Foster Care report. The most recent report, for SFY19, can be found at <https://hhs.texas.gov/sites/default/files/documents/laws-regulations/reports-presentations/2021/psychotropic-meds-tx-foster-care-fy2002-2019.pdf>.

In SFY22 Q3, MCDA continued modifications to a quarterly report on the Interstate Compact on the Placement of Children (ICPC) to bring it into closer alignment with the annual psychotropic dashboard report.

Autism Applied Behavior Analysis

The Medicaid Autism Services ABA benefit went live Feb. 1, 2022, in compliance with Rider 28 (87th Texas Legislature, Senate Bill 1, 2021 (Art. II, HHSC)). In SFY22 Q3, MCDA provided the Autism benefit work group and the MCOs a weekly update on the locations of licensed behavior analysts (LBAs) that have applied for enrollment. MCDA developed an automated workflow to greatly decrease the turnaround time for these deliverables from days to hours.

Enrollment

Another tool developed by MCDA to help investigate data variations is the Monthly Enrollment Report. The data in this report alerts the team to fluctuations in enrollment or Medicaid program rollouts which might impact service utilization. Enrollment data also provides the denominators used in utilization rates, which normalizes the rates to aid in direct comparisons between, for example, MCOs. The one-page enrollment report is distributed widely to MCS and other HHSC staff. Its use has resulted in efficiencies by replacing ad hoc data requests historically managed by DAP and HHSC Forecasting with a self-service alternative. Because the report is vetted by Forecasting before its release, its use also improves consistency in reporting. MCDA is currently developing a corresponding interactive dashboard to provide staff with a self-service platform to filter for the data needed without requiring a special ad hoc request from DAP or Forecasting.

Over time, MCDA has made changes to the monthly enrollment report in response to changes in policy, such as when Adoption Assistance and Permanency Care Assistance moved from Fee for Service to Managed Care. When changes occur, MCDA staff make manual changes to the enrollment report which are then vetted by Forecasting. Once Forecasting verifies the changes, MCDA staff build automated processes to populate the new items in the report going forward.

Utilization Review

MCDA continues to help the UR Team prepare for their annual reviews of clients receiving services under the STAR+PLUS Home and Community Based Services (HCBS) program and the Medically Dependent Children Program (MDCP) Waiver within the STAR Health and STAR Kids programs. The purpose of these legislatively mandated reviews is to monitor the appropriateness of care delivered by MCOs to these vulnerable populations. MCDA provides sampling consultation to ensure the reviews adequately represent the targeted populations. In SFY22 Q3, MCDA pulled the SFY22 Medically Dependent Children Program (MDCP) random sample and associated client data.

4. Enhancing Data Infrastructure

MCDA Platform

The work MCDA conducts depends on a robust, reliable, and flexible data system. In conjunction with TMHP, MCDA developed a platform that allows analysts to access data stored at TMHP more quickly than the original process of pulling the data over an internet connection. The platform contains an Oracle database server, numerous software applications used by MCDA staff to perform analysis and reporting, and a Tableau server used by MCDA staff to produce dashboards. The platform houses other data produced by MCDA staff, such as Medicaid and CHIP enrollment data, MCO self-reported quality measures, professional licensure data, and the Analytical Data Store (ADS, described under Data Marts in the following section). MCDA regularly tests system upgrades, performs quality control, and collaborates with TMHP staff to detect and correct errors and address any system performance issues.

Data Marts

MCDA's TMHP platform houses the PTOTST and Behavioral Health (BH) Data Marts, designed to allow quick and detailed analysis of trends and variations. The PTOTST Data Mart contains the most recent seven years of data on therapy encounters, forming the basis for analysis and visualization of such variables as cost and utilization measures by factors such as year, MCO, Service Delivery Area, and Managed Care program. The current BH Data Mart, updated annually, houses behavioral health related services and non-behavioral health data to allow analysis of co-morbidities. For instance, using the BH Mart, analysts have explored differences in the behavioral health diagnoses and services by children receiving psychotropic medications in STAR, STAR Health, and STAR Kids.

The ADS is a 'Best Picture' view of the claims and encounter data, meaning that it contains only the most current version of a transaction. ADS offers a cohesive blend of managed care and fee-for-service medical and pharmacy data, allowing a holistic view of a provider or member at the time a service took place. The ADS has become the preferred source for blended claims/encounters data and is accessible to MCDA and other DAP teams via the Data Analytics Platform.

In SFY22 Q3 MDCA has continued to work with TMHP to enhance ADS with additional variables which will improve the accuracy and consistency of analyses. These enhancements include creating indicators for Women's Health and the Medically Dependent Children Program, as well as calculated fields for inpatient episodes of care length of stay days that span the entire episode of care (which may represent multiple claims/encounters). Some of these new fields have been completed and are currently in use, while others are still in the development and testing stages.

5. Goals for Next Quarter

In SFY22 Q4, MCDA will build on the work it is conducting on MCS key initiatives and other projects, including the following:

Provider Network Adequacy

MCDA will continue its partnership with the PMAS teams in the project to further integrate and automate the data systems required to monitor provider network adequacy in a more efficient and holistic manner, as directed by the HHS DGPM Executive Steering Committee and Council. Next quarter, MCDA plans to complete validating its method for producing key provider network adequacy measures and pilot a semi-automated system to produce the measures.

COVID-19 Analysis

The COVID-19 testing and diagnosis dashboards, as well as the new telemedicine dashboards, will continue to be refreshed on a recurring basis. MCDA will also continue to assist with the analysis and writing of the COVID-19 study (being led by the Research and Evaluation Unit within DAP) on the impact of COVID-19 on vulnerable Texans, including those who receive services through the Medicaid program. MCDA will begin to use the enhanced dashboards (including demographics) as the basis for quarterly anomaly detection. Resulting observations will be communicated to the Research and Evaluation Unit as a guide to further research. MCDA will continue analyzing the COVID-19 non-risk payment data to look for any anomalous billing activities.

Complaints Dashboards

HB 4533 requires HHSC to make aggregated complaint data available to the legislature and public. MCDA will continue to clean and aggregate data from the HHSC Office of the Ombudsman, HHSC Division of Medicaid and CHIP Services, and self-reported data from the MCOs. MCDA will also provide complaint-level data files to the External Quality Review Organization to begin to incorporate into the MCO report cards.

Prior Authorization Data Collection and Dashboard

In the coming quarter MCDA will continue to perform ETL on the MCO deliverables. This ETL process will occur on an agreed upon monthly schedule until the design for the system for collecting member level PA data is finalized and implemented.

Compliance Dashboards and ETL

MCDA will continue to conduct careful quality assurance on the incoming deliverables and any resubmissions to ensure accurate measurement of MCO contract compliance. In addition, 30-day and 45-day deliverable data refreshes for SFY22 Q3 will be conducted.

Service Utilization Dashboards

In the coming quarter, all service utilization dashboards will be updated with the most recently available final data, covering the third quarter of SFY21 and preliminary data through SFY22 Q2.

Trend and Anomaly Detection

The tenth complete cycle of MCDA's quarterly control limits approach to detection of data variation signals will be implemented, culminating in a meeting in late July 2022 of the Service Utilization Workgroup. Specific findings related to ongoing impacts from COVID-19 on service utilization patterns will be discussed by the workgroup. Also, in the coming quarter, MCDA staff will conduct follow-up investigations suggested by the workgroup in its April 2022 meeting.

ADS

In SFY22 Q3, MCDA and TMHP will continue its collaborative work on enhancements to the ADS. Upcoming upgrades include a flag to more readily identify inpatient hospitalization episodes of care and a pre-calculated field with the number of days in each episode. A separate flag will help analysts distinguish which services were received through the HTW program or the HTW Plus program, and which services were paid for through Medicaid or general revenue.

Enhancing Data Infrastructure

Given the breadth of the MCDA dashboard library, it is a resource-intensive endeavor to continuously carry out the ongoing updates necessary to keep the data as current as possible. To increase the efficiency of this process, MCDA is investigating the feasibility of using Tableau Python Server (TabPy) to automate these dataset refreshes. TabPy is an external server implementation which allows the execution of Python scripts on Tableau. MCDA is also exploring the use of Microsoft Power BI as a method for increasing the efficiency of its ETL processes.

6. List of Acronyms

Acronym	Full Name
ABA	Applied Behavior Analysis
ADS	Analytical Data Store
APD	Advance Planning Document
BH	Behavioral Health
CMS	Centers for Medicare and Medicaid Services
CHIP	Children’s Health Insurance Program
COVID-19	Coronavirus Disease of 2019
DAP	Office of Data, Analytics, and Performance
DME	Durable Medical Equipment
DFPS	Texas Department of Family and Protective Services
DGPM	Data Governance and Performance Management
DSHS	Texas Department of State Health Services
EC	Executive Commissioner
ED	Emergency Department
ETL	Extract, Transform, and Load
EQRO	External Quality Review Organization
FFS	Fee-For-Service
HB	House Bill
HCBS	Home and Community Based Services
HEART	HHS Enterprise Administrative Record Tracking System
HHS	Health and Human Services
HHSC	Health and Human Services Commission
HTW	Healthy Texas Women
ICHP	Institute for Child Health Policy at the University of Florida
IT	Information Technology
LBA	Licensed Behavioral Analyst
MCCO	Managed Care Compliance and Operations
MCDA	Medicaid CHIP Data Analytics
MCO	Managed Care Organization
MCS	Medicaid and CHIP Services
MDCP	Medically Dependent Children Program
MH	Mental Health
MMC	Medicaid Managed Care
MMP	Medicare-Medicaid Plan
MTP	Medical Transportation Program
OIG	Office of Inspector General
OOO	HHS Office of the Ombudsman
OT	Occupational Therapy
PA	Prior Authorization
PCS	Personal Care Services
PDN	Private Duty Nursing

Acronym	Full Name
PHE	Public Health Emergency
PMAS	Performance Management and Analytics System
PT	Physical Therapy
PTOTST	Physical, Occupational, and Speech Therapy
QPR	Quality Performance Report
SB	Senate Bill
SDA	Service Delivery Area
SFY	State Fiscal Year
ST	Speech Therapy
SUD	Substance Use Disorder
TabPy	Tableau Python Server
TMHP	Texas Medicaid & Healthcare Partnership
UR	Utilization Review
VDP	Vendor Drug Program