OliverWyman

TELEHEALTH ANALYSIS

Utilization Trends and Telehealth's Impact on Premium Rates — Minnesota All Payer Claims Database

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CONTENTS

1. EXECUTIVE SUMMARY

1.1 PURPOSE AND SCOPE

The Minnesota Department of Health (MDH) contracted with Oliver Wyman Actuarial Consulting, Inc. (OWA, we) to perform an analysis of the impact that telehealth services have had on claim costs and to consider the projected influence that telehealth services could have on future premium rates in Minnesota's private sector (commercial) health care market. This report documents the findings of the analysis that was performed as well as the data sources and methodology that were utilized.

1.2 ACTUARIAL FINDINGS

We performed a benchmarking analysis of commercial market cost and utilization metrics using information from the Minnesota All Payer Claims Database (MN APCD) and Merative MarketScan Commercial Database (MarketScan)[1] with the following findings:

1. We did not identify any material data quality issues with the MN APCD data when reviewing allowed[2] costs and member cost sharing per member per month (PMPM) metrics by major service categories.
2. When comparing utilization metrics between the two data sources, the annual service counts for Outpatient, Professional, and Other Medical look reasonable.
3. The MN APCD data shows a higher share of telehealth utilization for office visits and Mental Health and Substance Abuse (MHSA) services compared to MarketScan, but the overall utilization pattern of telehealth services over the time studied looks similar between the two data sources.

Our analysis of the MN APCD commercial market claims and telehealth experience shows that:

- Telehealth services do not appear to have contributed incrementally to overall Professional service costs in calendar year 2021 or in the first quarter (Q1) of 2022 and are therefore not creating excess costs.
- Within the MHSA Professional service category, telehealth services do not appear to be contributing additional cost above expected spending based on trended pre-COVID-19 levels and therefore might not directly created excess health care costs.[3]

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1 www.merative.com/documents/brief/marketscan-explainer-general.
Filtered to Minnesota residents with comprehensive medical and pharmacy coverage.

2 Allowed cost is the amount reimbursed to the providers and includes the member cost sharing and health plan or self-insured employer payment amount (paid amount).

3 Pre-COVID-19 period: January 2019 to February 2020; COVID-19 stay at home period: March 2020 to May 2020; post-COVID-19 period: June 2020 to March 2022.

- Telehealth utilization during the COVID-19 stay at home period increased significantly, especially for Professional services such as Primary Care Physician (PCP) and Specialist office visits and behavioral health services, indicating that telehealth helped with continuity of care.
- The utilization levels of telehealth services declined from the COVID-19 stay at home period to Q1 2022 but remain at higher levels compared to the pre-COVID-19 period for Professional services and particularly for behavioral health services.
- Approximately 1/3 of commercial enrollees utilized telehealth services at least once post-COVID-19 (through Q1 2022).
- Audio-only telehealth services were not identified as having significant utilization among commercial enrollees, although individuals aged 65 years and older had the highest share of audio-only users (8%) compared to the remaining population, indicating that audio-only services are important for specific cohorts of Commercial population and adequate reimbursement for audio-only might be important consideration for health policy decision makers.
- Enrollees who are younger, live in metro areas and/or who are females had the highest utilization rates of telehealth services.
- The oldest enrollees had the lowest utilization rates of telehealth services.
- The average monthly paid-to-allowed ratios for telehealth services did not change materially during the period from January 2019 to March 2022, indicating relatively consistent payment practices among Minnesota's health plans related to telehealth services over that time period.

Regarding the projected impact that telehealth services could have on future commercial premium rates, we find that:

- Responses from Minnesota's health plans indicate, in the near term, that there is no expected change in incremental future claim costs due to changes in the utilization of telehealth services relative to calendar year 2022 cost levels, indicating that telehealth might not directly created excess health care costs in the near term.
- In developing premium rates over the last several years, no specific adjustments due to changes in telehealth utilization were made by Minnesota's health plans when projecting their base experience to calendar years 2022, 2023, and/or 2024.
- Our analysis of the MN APCD data shows that telehealth services do not appear to have contributed incrementally to overall Professional costs in calendar year 2021 or Q1 2022.
- Within the MHSA service category, as of Q1 2022, telehealth services have not contributed additional cost above expected spending based on trended pre-COVID-19 levels.
- A report conducted by the Society of Actuaries (SOA) Research Institute[4] states that the impact of telehealth on short- and long-term costs could actually be favorable (i.e., result in lower overall costs); however, the report also states that "much more analysis of health outcomes is required before any conclusion can be reached."

4 Digital Health: After the COVID Boom, SOA Research Institute, June 2023: www.soa.org/resources/research-reports/2023/digital-health-covid-boom/.

2. INTRODUCTION

2.1 ASSIGNMENT DESCRIPTION AND INTRODUCTION TO FRAME THE RESEARCH QUESTIONS

The Minnesota Department of Health (MDH) contracted with Oliver Wyman Actuarial Consulting, Inc. (OWA, we) to perform an analysis of the impact that telehealth services have had on claim costs and to consider the projected influence that telehealth services could have on future premium rates in Minnesota's private sector (commercial) health care market. This analysis is part of the broader study of telehealth expansion and payment parity through the enacted 2021 Minnesota Telehealth Act.[5] We understand that the findings from this OWA report may be utilized to support MDH's effort to complete the required final report to the Minnesota Legislature regarding the impact of the Telehealth Act on the commercial health insurance market by January of 2024.[6]

The analysis we performed can be summarized as follows:

- **Benchmark analysis:** Completed a benchmark analysis of allowed claims, member cost sharing, and the utilization of health care services in the commercial market between the Minnesota All Payer Claims Database (MN APCD)[7] and the Merative MarketScan Commercial Database (MarketScan).[8]
- **Telehealth trends in the commercial market in Minnesota:** Utilizing the MN APCD, we analyzed the prevalence and utilization of telehealth services, the profile of telehealth users, the paid-to-allowed ratios for telehealth services, and any incremental impact of telehealth on allowed claims and utilization by service categories to-date.
- **Telehealth impact on commercial premium rates:** Evaluated the findings from a health plan questionnaire, OWA's analysis of the MN APCD claims data, and a recent study from the Society of Actuaries (SOA) Research Institute related to telehealth services and their impact on commercial premium rates.

The main findings from the three analyses we completed are described in Section 4; additional findings are included in Appendices A-F.

5 Minnesota Session Laws — 2021, 1st Special Session. Chapter 7. Article 6: www.revisor.mn.gov/laws/2021/1/Session+Law/Chapter/7/.

6 Minnesota Session Laws — 2021, 1st Special Session. Chapter 7. Article 6, Sec. 27: www.revisor.mn.gov/laws/2021/1/Session+Law/Chapter/7/.

7 V25 of the Minnesota All Payer Claims Database: www.health.state.mn.us/data/apcd/index.html.

8 www.merative.com/documents/brief/marketscan-explainer-general.

3. DATA AND METHODOLOGY

In support of the analysis conducted, we utilized the MN APCD and MarketScan data as our main data sources. In this section, we provide short descriptions of those data sources, how telehealth services were defined in our analysis, and OWA's cost model methodology.

3.1. DESCRIPTION OF MN APCD DATA

We utilized the MN APCD data (Extract 25) through the research environment provided by MDH. The MN APCD data was filtered to commercial product codes with an inner join on monthly membership records that had a Medical and Pharmacy (Medical/Pharmacy) coverage flag for the enrollment period of January 2019 to March 2022. Data for Medicaid, Medicare, and commercial product codes without a Medical/Pharmacy coverage flag were excluded. The annual member months included in our analysis are 15.7 million in 2019, 14.9 million in 2020, 15.0 million in 2021, and quarterly member months of 3.8 million in Q1 2022. The allowed costs for medical and pharmacy services are $7.8 billion in 2019, $7.1 billion in 2020, $7.9 billion in 2021, and $2.0 billion in Q1 2022. For additional details of the data utilized from the MN APCD, please see Appendix B.

3.2. DESCRIPTION OF MARKETSCAN DATA

We utilized MarketScan data for commercial enrollees with Medical/Pharmacy and Mental Health and Substance Abuse (MHSA) coverage that were enrolled between January 2019 and December 2021. We identified enrollees with residence in Minnesota and separately identified nationwide MarketScan enrollees outside of Minnesota. The annual member months included in our analysis are between 2.7 and 2.8 million for Minnesota residents; nationwide member months when excluding Minnesota residents are between 166.6 million and 221.0 million for years 2019, 2020, and 2021.

3.3. TELEHEALTH AND OTHER DEFINITIONS

We utilized three claim identifiers to define telehealth services:

1. Centers for Medicare and Medicaid Services (CMS) place of service codes.
2. Procedure modifiers.
3. Procedure codes.

The code listing (i.e., the list of values that these three claim identifiers can have that would indicate a service was provided via telehealth) that we used is outlined in the section named telehealth and other definitions of MN APCD data in Appendix A. To finalize the code listing that was utilized, we compared it against a list of codes provided by MDH used to identify telehealth services as of June 2023, a list of Medicare telehealth services effective January 1, 2023,[9] and conducted our own internal review. In addition, we identified audio-only services through specific codes based on their descriptions and confirmed with MDH that the codes we chose were appropriate. We note that claim code definitions and coding procedures can vary by providers and commercial health plans, however we believe that our definitions of telehealth codes are a reasonable proxy for identifying telehealth services.

Additionally, for our analysis, we utilized the USDA Rural-Urban Communing Area Codes (RUCA)[10] where metropolitan areas (RUCA codes 1-3) were defined as metro and remaining RUCA codes were defined as non-metro geographic identifiers. For additional details please see the section named telehealth and other definitions of MN APCD data in Appendix A.

3.4. OLIVER WYMAN'S COST MODEL METHODOLOGY

We categorized claims into major service categories (i.e., Inpatient Facility, Outpatient Facility, Professional, Other Medical and Pharmacy) utilizing Oliver Wyman's proprietary Cost Model (CM) logic. We applied the CM logic to each claim in the MN APCD and also to the MarketScan data. For additional detail regarding our CM logic, please see the section named Oliver Wyman Cost Model Overview in Appendix C.

3.5. OTHER DATA SOURCES

Additional data sources that were utilized include a Minnesota health plan questionnaire which was conducted by MDH in August 2023. MDH provided us with the responses from seven health plans with commercial membership in Minnesota which we estimate represented 84% of the commercial fully insured membership in Minnesota in 2021.

We also utilized the "Digital Health: After the COVID Boom"[11] study (SOA study) that was sponsored by the Society of Actuaries (SOA) Research Institute; for that study, the authors performed a literature review and an analysis of claims experience related to telehealth/ digital health services post-COVID-19.

9 List of Medicare telehealth services: www.cms.gov/Medicare/Medicare-General-Information/telehealth/telehealth-Codes.

10 www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/.

11 Digital Health: After the COVID Boom, SOA Research Institute, June 2023: www.soa.org/resources/research-reports/2023/digital-health-covid-boom/.

4. RESULTS

In this section we discuss the main findings from the benchmark analysis, our study of telehealth trends and the analysis of telehealth's projected impact of future commercial premium rates that we conducted. Details regarding these analyses are provided in the following subsections and also in Appendices D and F.

4.1. BENCHMARK ANALYSIS — MN APCD AND MARKETSCAN

Exhibit 4.1.1 provides a description of the general benchmarking and telehealth cost trends analyses that we performed and summarizes our main findings.

Exhibit 4.1.1: Overview of the analysis performed and overall findings

	General benchmarking	Telehealth cost trends
General description	Assess whether there are any potential data quality concerns with the MN APCD data based on a comparison of key metrics to similar information from MarketScan.	Compare allowed cost PMPM amounts for telehealth and related services, both nationwide and in Minnesota.
Overall findings	• We did not identify any material data quality issues with the MN APCD data when reviewing allowed cost and cost sharing PMPM metrics by major service categories. • When comparing utilization metrics between the two sources, the annual service counts from the MN APCD for Outpatient, Professional, and Other Medical service categories look reasonable.[12]	The MN APCD data shows a higher share of telehealth services for office visits and Mental Health and Substance Abuse compared to MarketScan, but the overall utilization pattern of telehealth services over the time period studied looks similar between the two sources.

Source: Oliver Wyman analysis

4.1.1. General benchmarking

Our comparison of the MN APCD to MarketScan was focused on calendar years 2019, 2020, and 2021.[13] Overall, the commercial enrollment volume in the MN APCD is much higher (about 15.0 million member months per year) than in the MarketScan data when filtered to Minnesota residents (2.8 million member months); a detailed enrollment comparison is provided in Exhibits D.1 and D.2 in Appendix D. Additionally, it is important to note that most of the MN APCD data is reflective of fully insured commercial business, whereas the MarketScan data is primarily reflective of self-insured commercial business (2.6 million member months per year out of the 2.8 million member months is represented by individuals enrolled in self-insured plans).

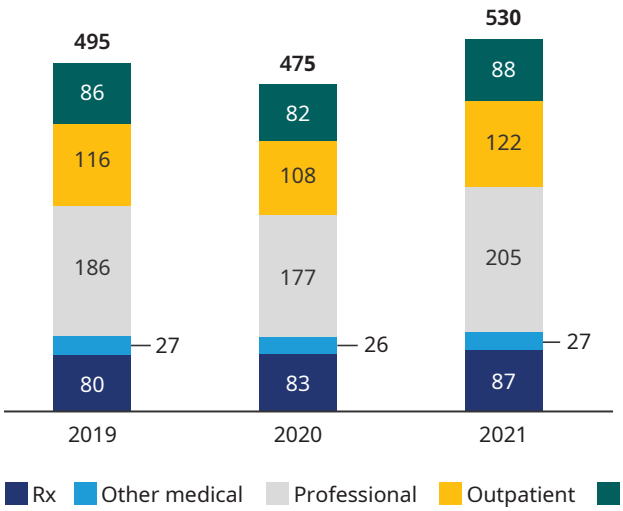
12 We have not analyzed inpatient and pharmacy utilization metrics due to an expectation that those would not be impacted by telehealth services.

13 We were not able to compare Q1 2022 as that data period was available in the MN APCD but not in MarketScan.

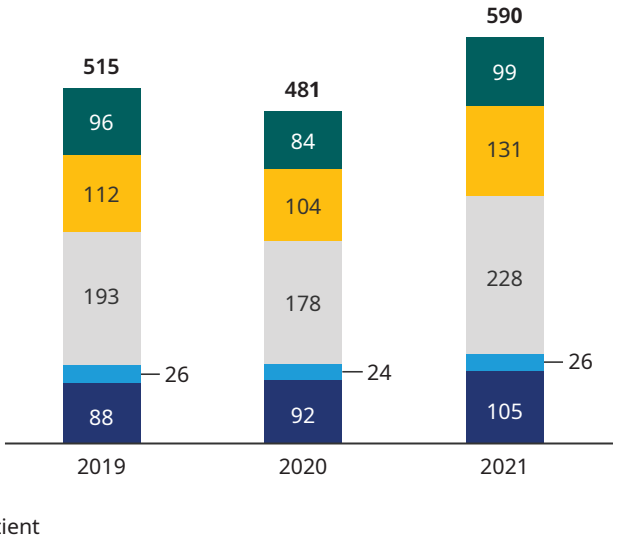
As shown in Exhibit 4.1.1.1, the allowed claims by major service categories look reasonably close between the two data sources, especially for the 2019 and 2020 calendar years. A comparison of the utilization metrics for the outpatient, professional, and other medical service categories between the MN APCD and MarketScan in Exhibits D.7 and D.8 in Appendix D shows a higher volume of services in the MN APCD data but a similar distribution of services between service categories by year.

Exhibit 4.1.1.1: Allowed cost PMPM comparison — MN APCD and MarketScan — commercial market in Minnesota
2019 to 2021

Allowed cost PMPM by year — MN APCD data
commercial medical/Rx coverage in Minnesota
In dollars



Allowed cost PMPM by year — MarketScan data
commercial medical/Rx coverage in Minnesota
In dollars



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25 and MarketScan data

4.1.2. Telehealth cost trends

We compared the monthly allowed cost PMPM for telehealth and related services nationwide and in Minnesota between MarketScan and the MN APCD. We looked at the portion of services that are defined as telehealth for the following metrics:

- Total medical allowed costs.
- Cost and utilization for professional services.
- Cost and utilization for Primary Care Physician (PCP) and Specialists visits.
- Cost and utilization for Professional MHSA services.[14]

14 PCP and Other Specialist and MHSA as defined in Oliver Wyman's CM.

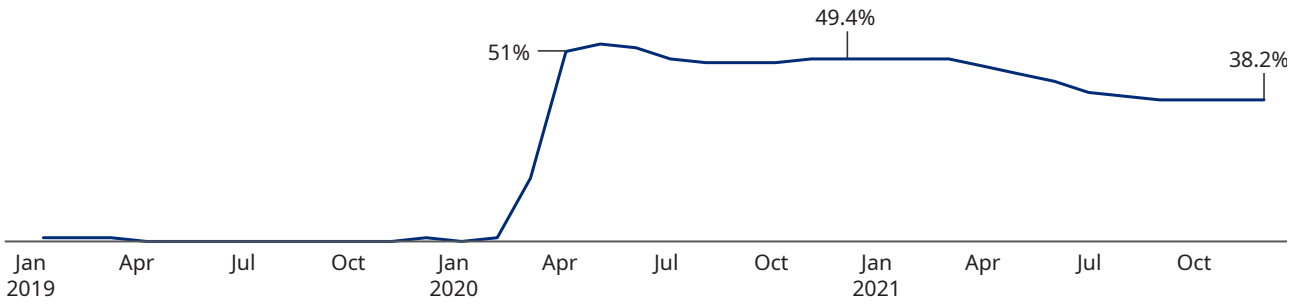
Exhibits comparing these metrics can be found in Appendix D. The focused views on Professional services noted above were selected as they are the services where the greatest telehealth utilization has been observed.

As shown in Exhibit 4.1.2.1, at the start of the COVID-19 pandemic in March 2020 there was a large increase in the percentage of MHSA services that were provided via telehealth. Subsequently, there was a decline; however, the percentage of MHSA services that were provided via telehealth remained much higher than pre-pandemic levels through December 2021. The MarketScan Minnesota data shows this same pattern, but the percentage of MHSA services that are provided via telehealth is consistently lower than in the MN APCD Data.

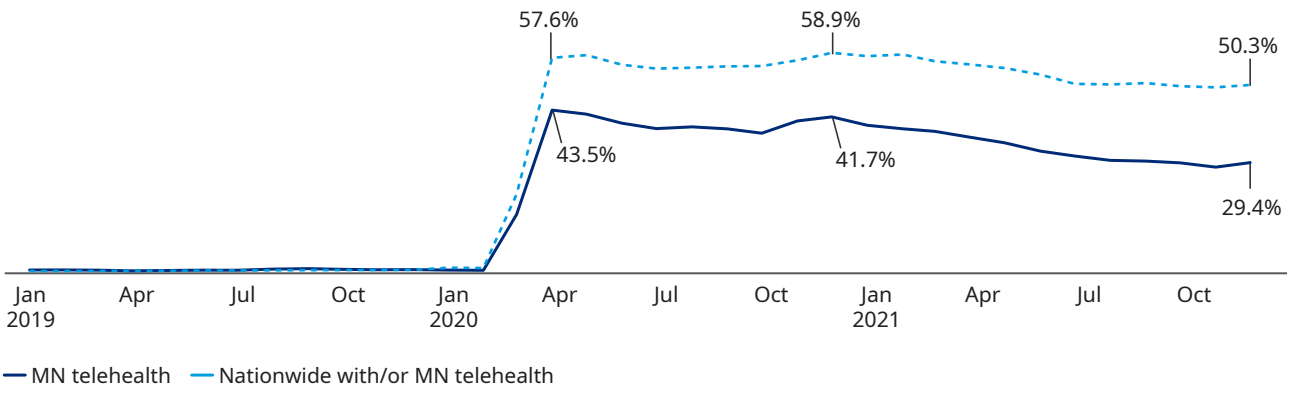
Exhibit 4.1.2.1: Telehealth Share of MHSA Allowed Cost PMPM Comparison — MN APCD and MarketScan — Commercial Market in Minnesota

January 2019 to December 2021

MN APCD telehealth spending share for mental health and substance abuse allowed PMPM



MarketScan telehealth spending share for mental health and substance abuse allowed PMPM



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25 and MarketScan data

4.2. TELEHEALTH TRENDS IN MINNESOTA'S COMMERCIAL MARKET

We utilized the MN APCD data for the commercial health care market to (1) analyze the prevalence and utilization of telehealth services on a monthly basis, (2) investigate the profile of the telehealth users and (3) identify any trends in health plan payment levels. These analyses are described in Exhibit 4.2.1 and subsequent subsections. Additional details are included in Appendix E.

Exhibit 4.2.1: Overview of the analysis performed and overall findings

	Telehealth prevalence and utilization	**Profile of telehealth users**	**Trends in health plan payments for telehealth**
General description	Analyze the prevalence and utilization of telehealth services as a percentage of services and allowed costs PMPM by demographic profile (e.g., age, gender, geography) or service category.	Analyze the profile of telehealth users vs non-users post-COVID-19 by demographic profile and by cost decile.	Analyze paid-to-allowed ratios among telehealth services to identify trends in health plan payment levels.
Overall findings	• Telehealth utilization during the COVID-19 stay at home period increased significantly, especially for Professional services such as PCP and Specialist office visits as well as for behavioral health services. • The utilization levels of telehealth services declined significantly between the COVID-19 stay at home period and Q1 2022 but remained higher for behavioral health services. • Audio-only telehealth services were not identified as having significant utilization among commercial enrollees. • Enrollees who are younger, live in metro areas and/ or who are females had the highest utilization rates of telehealth services.	• About 1/3 of commercial enrollees utilized telehealth services at least once post-COVID-19 (as of Q1 2022). • During the post-COVID-19 period, the share of telehealth users was highest among adult enrollees aged 35 to 44 and lowest among the older enrollees.	The average monthly paid-to-allowed ratios for telehealth services did not change materially during the period from January 2019 to March 2022, indicating relatively consistent payment practices among Minnesota's health plans related to telehealth services during that time period.

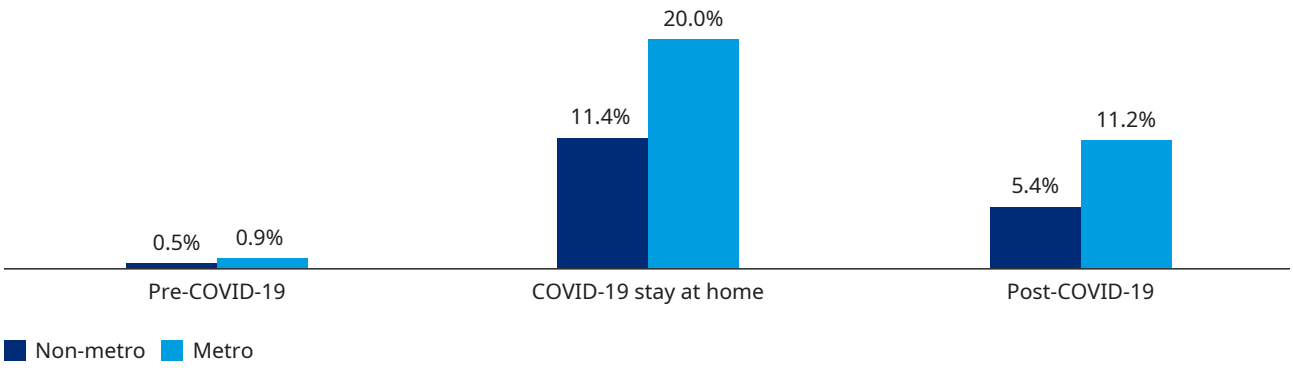
Source: Oliver Wyman analysis

4.2.1. Prevalence and utilization of telehealth services and profile of telehealth users

Findings regarding the pattern of the monthly utilization of telehealth services in the MN APCD data were provided in Section 4.1.2. That section shows that telehealth's share of services peaked during the COVID-19 stay-at-home period and declined afterwards, with just a few instances of increases when infections rose during Q4 2020 and Q1 2021. Telehealth utilization is concentrated among Professional PCP and Specialist office visits (e.g., including counseling services) as well as MHSA services; detailed utilization results are provided in Exhibit E.6 in Appendix E.

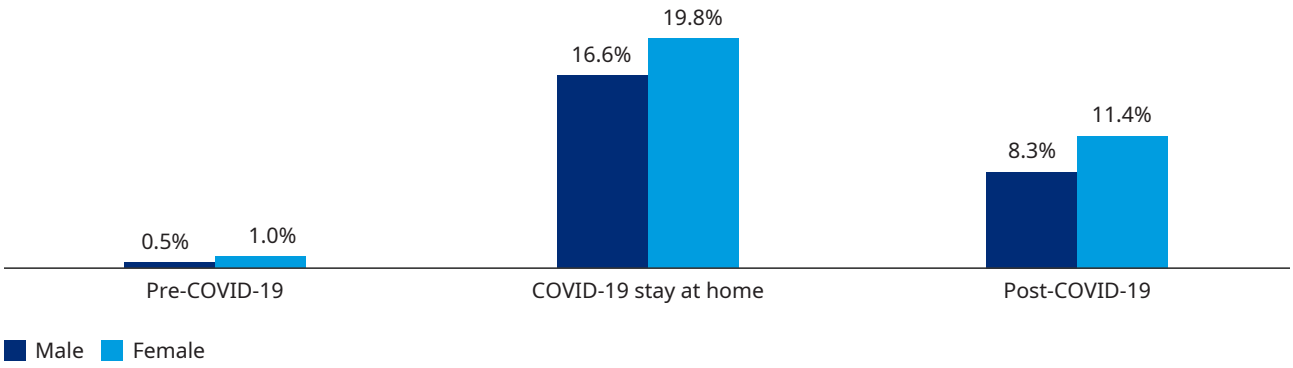
As shown in Exhibits 4.2.1.1 and 4.2.1.2, telehealth utilization was roughly twice as high among residents in Metro regions compared to Non-metro regions, and higher among females than males.

Exhibit 4.2.1.1: Telehealth's share of professional services by geography — MN APCD — Commercial Market in Minnesota
January 2019 to March 2022



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

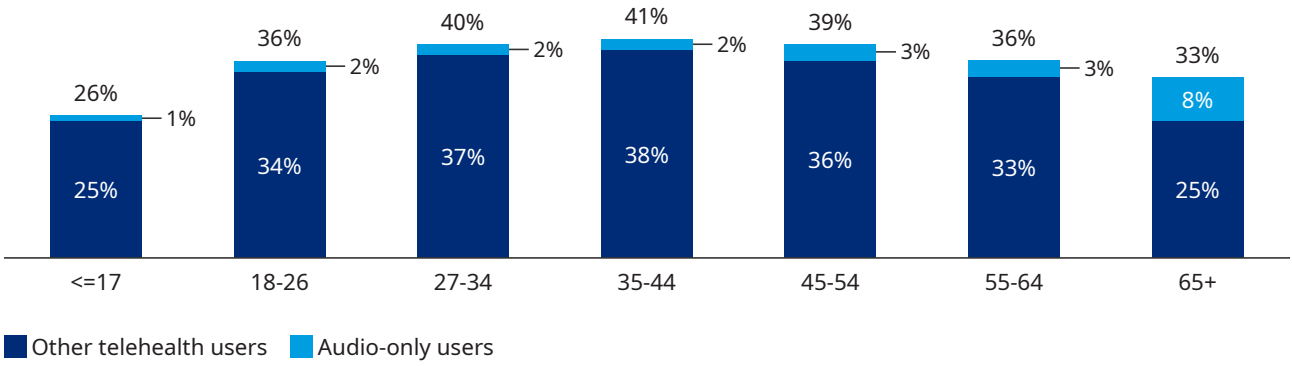
Exhibit 4.2.1.2: Telehealth's share of professional services by gender — MN APCD — Commercial Market in Minnesota
January 2019 to March 2022



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

Overall, approximately 1/3 of commercial enrollees in Minnesota utilized telehealth services during the post-COVID-19 period, with only a small percent of those enrollees using audio-only services.[15] These results can be observed in Exhibit E.11 in Appendix E. Telehealth utilization is the highest among the adult population aged 35 to 44 in Minnesota; however, an interesting insight from the data is that the oldest commercial enrollees (i.e., individuals aged 65 years and older had the highest share of audio-only users (8% compared to the remaining population, as shown in Exhibit 4.2.1.3.

Exhibit 4.2.1.3: Percentage of unique members who utilized telehealth by age — MN APCD — Commercial market in Minnesota
June 2020 to March 2022



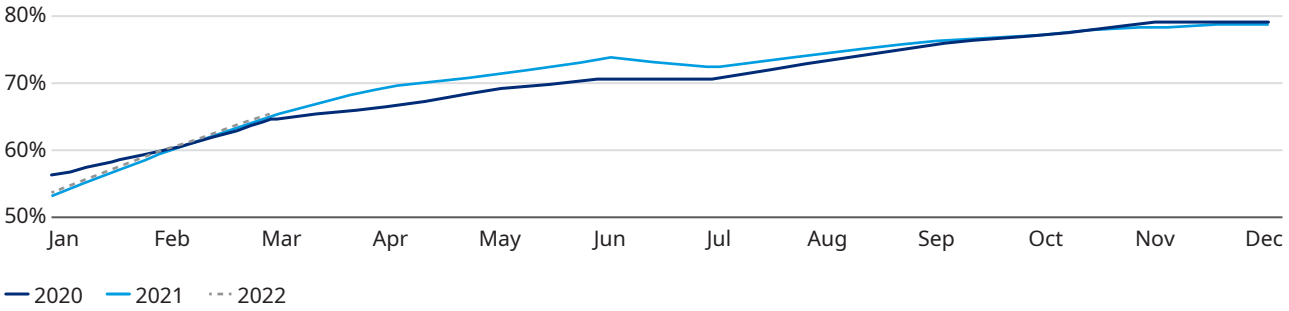
Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

4.2.2. Paid to allowed ratios

The average monthly paid-to-allowed ratios for commercial health plans and employers for telehealth services did not change materially during the period from January 2019 to March 2022. This is shown in Exhibit 4.2.2.1 and indicates that there were relatively consistent payment practices among Minnesota's health plans related to telehealth services during that time period.

15 Audio-only users represent members who utilized audio only telehealth services at least once during each of the three defined COVID-19 periods but might have utilized other telehealth services as well; Other telehealth users are the remaining telehealth users who are not included in the audio-only category.

Exhibit 4.2.2.1: Health plan paid to allowed claims ratio for telehealth professional claims by month — MN APCD — Commercial market in Minnesota
January 2020 to March 2022



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

Another observation we had is that the paid-to-allowed ratios were lower for professional telehealth services compared to non-telehealth professional services; this result is shown in Exhibit E.13 in Appendix E. One possible reason for this could be that telehealth services are typically utilized for lower cost/severity services or are performed by non-physicians (e.g., nurse practitioner), yet the underlying member cost sharing is often the same (e.g., same copay) across a wide range of Professional services.

4.3. TELEHEALTH IMPACT ON COMMERCIAL PREMIUM RATES

One of the primary goals of our analysis was to estimate how the impact of telehealth services on claim costs may be expected to impact future premium rates in the commercial health care market. Our findings in this section are based on the following information sources:

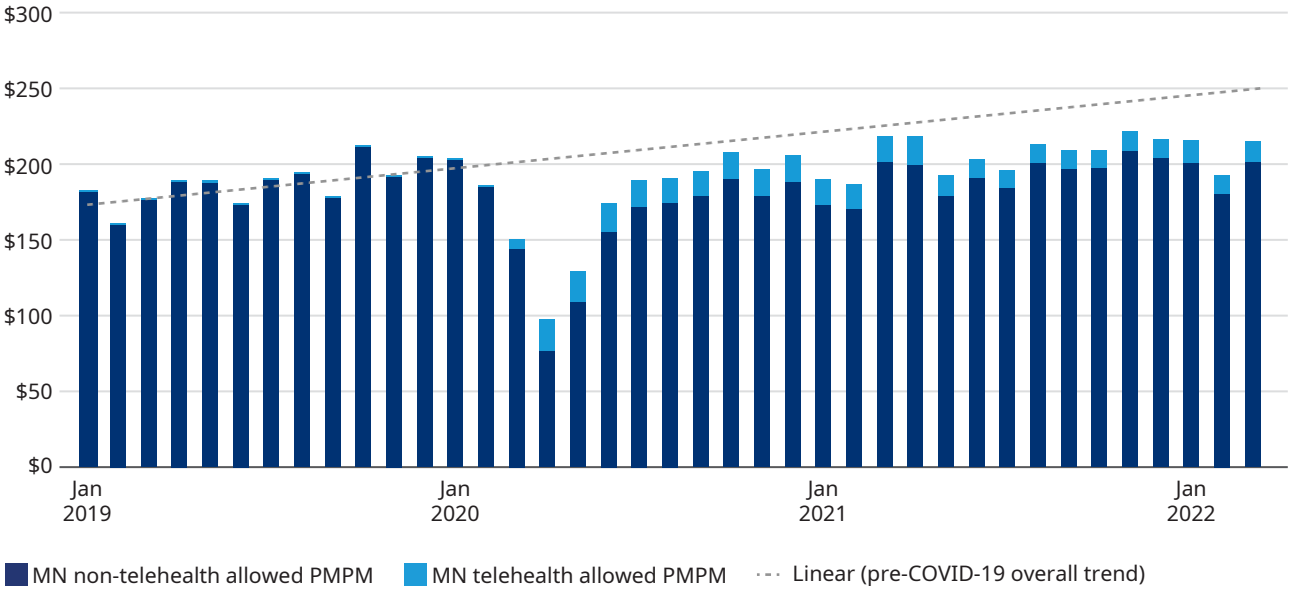
- An analysis of telehealth's impact on allowed claims based on MN APCD data.
- Findings from a telehealth questionnaire completed by Minnesota health plans.
- Findings from a recent study sponsored by the SOA Research Institute related to telehealth services.

4.3.1. Incremental impact of telehealth on claims cost — MN APCD analysis

Using the MN APCD data, we conducted a comparison of trended pre-COVID-19 allowed costs PMPM by month during the post-COVID-19 period to actual allowed costs PMPM for Professional services, and specifically for the MHSA service category. Overall, based on our analysis, telehealth services do not appear to be contributing incrementally to overall professional costs in 2021 or Q1 2022 in Minnesota's commercial market; this is shown in Exhibit 4.3.1.1. As shown, none of the actual monthly claims PMPM metrics during the post-COVID-19 period are higher than the trend line that was developed based on the pre-COVID-19 spending levels and trends. We note that these results are similar to results we developed based on MarketScan data that are provided in Appendix F.

Exhibit 4.3.1.1: Professional allowed claim cost — MN APCD — Commercial market in Minnesota

January 2019 to March 2022

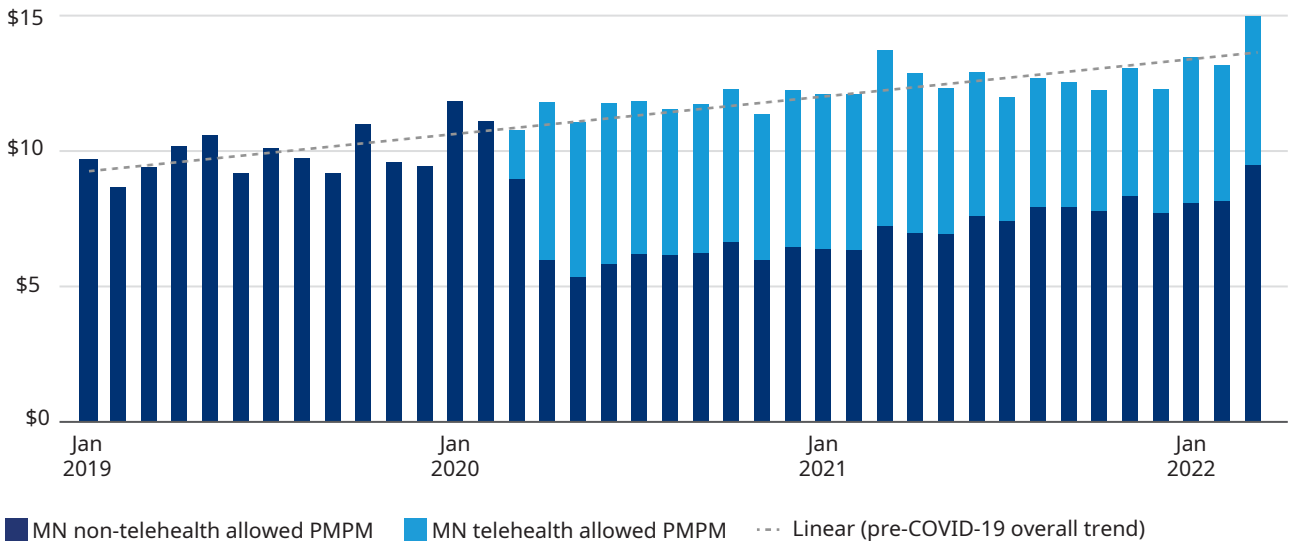


Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

Specifically, within the Professional MHSA service category, which is where the proportion of telehealth services has grown the most, we also found that telehealth services do not appear to be contributing incrementally to costs during the post-COVID-19 period; this is shown in Exhibit 4.3.1.2.

Exhibit 4.3.1.2: Professional MHSA allowed claim cost — MN APCD — Commercial Market in Minnesota

January 2019 to March 2022



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

4.3.2. Findings from Health Plan's telehealth questionnaire

MDH conducted a survey related to telehealth services with commercial health plans in August 2023. Our findings related to the health plans' view of telehealth's impact on commercial costs can be summarized as follows:

- All seven of the health plans who responded to the survey indicated that they do not anticipate any change in future claim costs specifically due to the utilization of telehealth services relative to calendar year 2022 cost levels.
- All seven of the health plans responded that they made no specific adjustments due to changes in telehealth utilization when projecting base experience to develop commercial premium rates for the 2022, 2023, and/or 2024 plan years.

Findings from the questionnaire support the conclusion from our analysis of the MN APCD and MarketScan data that telehealth services have not contributed incrementally to overall Professional costs during the post-COVID-19 time period.

4.3.3. Society of Actuaries research study

A report regarding a study related to the impact of telehealth services since the COVID-19 pandemic that was sponsored by the SOA Research Institute was released in June 2023. The study performed a literature review and an analysis of claims experience[16] related to the impact of telehealth/digital health services post-COVID-19. Some key findings from the study for the commercial line of business include the following:

- Based on research of other studies and claims analysis, the report states that "the impact of telehealth on short- and long-term cost reduction has promise, but much more analysis of health outcomes is required before any conclusion can be reached."
- The impact is likely to vary across populations and telehealth's greatest impact is likely to be on higher-risk and underserved populations.
- The adaptation rate of telehealth varies by geography with the North Central region (including Minnesota) having the highest utilization of telehealth services in the commercial market.[17]
- Telehealth utilization is highest among Urban regions compared to Rural and is the highest among age group 30-39.[18]
- Overall telehealth utilization has dropped off post-peak COVID-19 but remains higher than pre-COVID-19 utilization.
- Commercial MHSA telehealth utilization remained high through the end of 2021.[19]

Findings from our analysis of the MN APCD data and MarketScan data align well with findings from the SOA's study.

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16 The data set is based on Optum Benchmarking Data with national multi-payer de-identified claims and enrollment data for over 20 million commercial and Medicare members.

17 See Figure 3 of the SOA Study.

18 Table 1 on page 14.

19 Figure 1 on page 12 where the study end date is December 2021.

5. DISCUSSION

We understand that the findings from this OWA report might be utilized to support MDH's effort to complete the required final report to the Minnesota Legislature related to the impact of the Telehealth Act for commercial health insurance market. In particular, our analysis could be helpful in answering the following questions:

- Should audio only reimbursement continue?
- Should payment parity for telehealth (either audio, video, or both) continue?
- Is telehealth, as currently reimbursed, creating excess costs or not resolving problems?
- Does telehealth help or hinder continuity of care?

Our analysis of telehealth trends in the commercial market in Minnesota shows that telehealth utilization increased significantly during the COVID-19 stay-at-home period, especially for Professional services such as office visits for primary care physicians and specialists, as well as for Mental Health and Substance Abuse services. This indicates that telehealth helps with continuity of care. However, it appears that telehealth services are not having a material incremental impact to overall Professional costs in Minnesota's commercial market during the post-COVID-19 time period, therefore telehealth might not directly create excess health care costs. This conclusion is supported by our analysis of the MN APCD data and MarketScan data and responses from the Minnesota health plans to a questionnaire conducted by MDH. A study conducted by the SOA Research Institute related to telehealth services concludes that the impact of telehealth on short- and long-term cost could actually be favorable, "but much more analysis of health outcomes is required before any conclusion can be reached." Individuals aged 65 years and older had the highest share of audio-only users (8%) compared to the remaining population, indicating that audio-only services are important for specific cohorts of the Commercial population and adequate reimbursement for audio-only might be an important consideration for health policy decision makers. It will be important to continue monitoring the impact of telehealth services and to conduct further analysis of health outcomes to fully understand the potential benefits and drawbacks of telehealth services on the commercial market in Minnesota.

6. DISTRIBUTION AND USE

Usage and responsibility of client: Oliver Wyman prepared this report for the sole use of the client named herein for the stated purpose. This report includes important considerations, assumptions, and limitations and, as a result, is intended to be read and used only as a whole. This report may not be separated into, or distributed, in parts other than by the client to whom this report was issued, as needed, in the case of distribution to such client's directors, officers, or employees. All decisions in connection with the implementation or use of advice or recommendations contained in this report are the sole responsibility of the client named herein.

Third party reliance and due diligence: Oliver Wyman's consent to any distribution of this report (whether herein or in the written agreement pursuant to which we issued this report) to parties other than the client named herein does not constitute advice by Oliver Wyman to any such third parties. Any distribution to third parties shall be solely for informational purposes and not for purposes of reliance by any such parties. Oliver Wyman assumes no liability related to third party use of this report or any actions taken or decisions made as a consequence of the results, advice or recommendations set forth herein. This report should not replace the due diligence on behalf of any such third party.

7. CONSIDERATIONS AND LIMITATIONS

Data verification: For our analysis, we relied on publicly available data and information provided by the client named herein without independent audit. Though we have reviewed the data for reasonableness and consistency, we have not audited or otherwise verified this data. Our review of data may not always reveal imperfections. We have assumed that the data provided is both accurate and complete. The results of our analysis are dependent on this assumption. If this data or information is inaccurate or incomplete, our findings and conclusions might therefore be unreliable.

Unanticipated changes: We based our conclusions on the estimation of the outcome of many contingent events. We developed our estimates from historical experience, with adjustments for anticipated changes. Unless otherwise stated, our estimates make no provision for the emergence of new types of risks not sufficiently represented in the historical data on which we relied or which are not yet quantifiable.

Internal/external changes: The sources of uncertainty affecting our estimates are numerous and include factors internal and external to the client named herein. Internal factors include items such as changes in provider reimbursement and claims adjudication practices. The most significant external influences include, but are not limited to, changes in the legal, social, or regulatory environment, and the potential for emerging diseases. Uncontrollable factors such as general economic conditions also contribute to the variability.

Uncertainty inherent in projections: While this analysis complies with applicable Actuarial Standards of Practice, users of this analysis should recognize that our projections involve estimates of future events and are subject to economic and statistical variations from expected values. We have not anticipated any extraordinary changes to the regulatory, legal, social, or economic environment or the emergence of new diseases or catastrophes that might affect our results. For these reasons, we provide no assurance that the emergence of actual experience will correspond to the projections in this analysis.

8. ACKNOWLEDGEMENT OF QUALIFICATIONS

Ryan Schultz is a Principal, Peter Kaczmarek is a Senior Manager, Anna Ramos and Michael Tremel are Consultants with Oliver Wyman Actuarial Consulting, Inc. We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial analysis contained herein.

APPENDIX A. TELEHEALTH, BEHAVIORAL HEALTH, METRO AND NON-METRO DEFINITIONS

DEFINITION OF TELEHEALTH SERVICES

- We utilize three claim identifiers to define telehealth services:
  - CMS place of service:
    - This is how to identify telehealth claims that are for procedures that could be telehealth or in-person.
  - Procedure modifiers.
  - Procedure codes.
- These codes are utilized with "or" logic:
  - If a claim has a code that we identify as telehealth from any one of the three identifiers we use, we will flag it as telehealth.
- In addition, we identify audio only services through specific codes based on description and confirmed by MDH.
- We compared the code listing against a list of codes provided by MDH as of June 2023, a list of Medicare telehealth services effective 1/1/2023,[20] and our internal review.
- We indicated codes we added and removed from the MDH listing and as recommended by MDH.

TELEHEALTH PLACES OF SERVICE AND PROCEDURE MODIFIERS

Exhibit A.1: CMS place of service code

CMS number	CMS description	Audio-only?
2	Telehealth provided other than in patient's home.	No
10	Telehealth provided in patient's home.	No

Source: www.hhs.gov/guidance/document/cms-place-service-code-set

20 List of Medicare telehealth services: www.cms.gov/medicare/coverage/telehealth/list-services.

A.2: CMS procedure modifier code

CMS code	Description	Audio-only?
G0	"Telehealth services that are furnished on or after January 1, 2019, for purposes of diagnosis, evaluation, or treatment of symptoms of an acute stroke."	No
GT	REMOVED 1/1/2018 — Change Request (CR) 10152 eliminates the requirement to use the GT modifier (via interactive audio and video telecommunications systems) on Professional claims for telehealth services. Use of the telehealth Place of Service (POS) Code 02 certifies that the service meets the telehealth requirements.	No
GQ	REMOVED 1/1/2018 — "Via an asynchronous telecommunications system." Asynchronous telemedicine means that medical care was provided via image and video that was not provided in real-time.	Asynchronous
93	Synchronous telemedicine service rendered via telephone or other real-time interactive audio-only telecommunications system.	Yes
95	Indicates a synchronous telemedicine service rendered via a real-time interactive audio and video telecommunications system.	No
FQ	Implemented 4/1/2022 — mental health — A telehealth service was furnished using real-time audio-only communication technology.	Yes
FR	Implemented 4/1/2022 — mental health — A supervising practitioner was present through a real-time two-way, audio/video communication technology.	No

Source: www.cms.gov/files/document/mm12549-cy2022-telehealth-update-medicare-physician-fee-schedule.pdf

Exhibit A.3: Telehealth procedure codes

Procedure code	Description	Audio-only?
99441	Telephone E/M service; 5-10 minutes of medical discussion.	Yes
99442	Telephone E/M service; 11-20 minutes of medical discussion.	Yes
99443	Telephone E/M service, 21-30 minutes of medical discussion.	Yes
99444	Deleted effective 1/1/2020 — online Evaluation/Management service by a physician or other qualified health care Professional.	No
99421	Online digital evaluation and management service, for an established patient, for up to 7 days cumulative time during the 7 days; 5-10 minutes.	No
99422	Online digital evaluation and management service, for an established patient, for up to 7 days cumulative time during the 7 days; 11-20 minutes.	No
99423	Online digital evaluation and management service, for an established patient, for up to 7 days cumulative time during the 7 days; 21+ minutes.	No
98966	Telephone assessment and management service provided by a qualified nonphysician health care Professional to an established patient, parent, or guardian not originating from a related assessment and management service provided within the previous 7 days nor leading to an assessment and management service or procedure within the next 24 hours or soonest available appointment; 5-10 minutes of medical discussion.	Yes
98967	11-20 Minutes.	Yes
98968	21-30 Minutes.	Yes
G2010	REMOVED 1/1/2021 — Remote evaluation of recorded video and/or images submitted by an established patient (e.g., store and forward), including interpretation with follow-up with the patient within 24 business hours, not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment.	Asynch

Procedure code	Description	Audio-only?
G2012	REMOVED 1/1/2021 — Brief communication technology-based service, e.g. virtual check-in, by a physician or other qualified health care Professional who can report evaluation and management services, provided to an established patient, not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment; 5-10 minutes of medical discussion.	No
G2250	Remote assessment of recorded video and/or images submitted by an established patient (e.g., store and forward), including interpretation with follow-up with the patient within 24 business hours, not originating from a related service provided within the previous 7 days nor leading to a service or procedure within the next 24 hours or soonest available appointment. HCPCS code G2250 replaced HCPCS code G2010.	Asynch
G2251	Brief communication technology-based service, e.g., virtual check-in, by a qualified health care Professional who cannot report evaluation and management services, provided to an established patient, not originating from a related e/m service provided within the previous 7 days nor leading to a service or procedure within the next 24 hours or soonest available. HCPCS code G2251 replaced HCPCS code G2012.	No
G2252	Brief communication technology-based service, e.g. virtual check-in, by a physician or other qualified health care Professional who can report evaluation and management services, provided to an established patient, not originating from a related e/m service provided within the previous 7 days nor leading to an e/m service or procedure within the next 24 hours or soonest available appointment.	No
G2061	REMOVED 1/1/2021 — replaced by 98970, but similar description.	No
G2062	REMOVED 1/1/2021 — replaced by 98971, but similar description.	No
G2063	REMOVED 1/1/2021 — replaced by 98972, but similar description.	No
G0406	Follow-up inpatient consultation, limited, physicians typically spend 15 minutes communicating with the patient via telehealth.	No
G0407	Follow-up inpatient consultation, intermediate, physicians typically spend 25 minutes communicating with the patient via telehealth.	No
G0408	Follow-up inpatient consultation, complex, physicians typically spend 35 minutes communicating with the patient via telehealth.	No
G0425	telehealth consultation, emergency department or initial inpatient, typically 30 minutes communicating with the patient via telehealth.	No
G0426	telehealth consultation, emergency department or initial inpatient, typically 50 minutes communicating with the patient via telehealth.	
G0427	telehealth consultation, emergency department or initial inpatient, typically 70 minutes or more communicating with the patient via telehealth.	No
G0508	telehealth consultation, critical care, initial, physicians typically spend 60 minutes communicating with the patient and providers via telehealth.	No
G0509	telehealth consultation, critical care, subsequent, physicians typically spend 50 minutes communicating with the patient and providers via telehealth.	No
98970	Qualified nonphysician health care Professional online digital evaluation and management service, for an established patient, for up to 7 days, cumulative time during the 7 days; 5-10 minutes. CPT code 98970 replaced HCPCS code G2061.	No
98971	11-20 Minutes.	No
98972	21-30 Minutes.	No
G0459	Inpatient pharmacologic management.	No

Procedure code	Description	Audio-only?
G0071	Payment for communication technology-based services for 5 minutes or more of a virtual (non-face-to-face) communication between an rural health clinic (rhc) or federally qualified health center (fqhc) practitioner and rhc or fqhc patient, or 5 minutes or more of remote evaluation of recorded video and/or images by an rhc or fqhc practitioner, occurring in lieu of an office visit; rhc or fqhc only.	Asynch
G2025	RHC/FQHC distant site telehealth service.	No
98969	Brief check-in or e-visit.	No
G2551	Brief communication technology-based service, e.g. virtual check-in, by a qualified health care Professional who cannot report evaluation and management services, provided to an established patient, not originating from a related service provided within the previous 7 days nor leading to a service or procedure within the next 24 hours or soonest available appointment; 5-10 minutes of clinical discussion.	No
G2552	11-20 Minutes.	No

Source: www.cms.gov/files/document/mm12126.pdf, hcpcs.codes/g-codes/G2251/ and hcpcs.codes/g-codes/G2252/

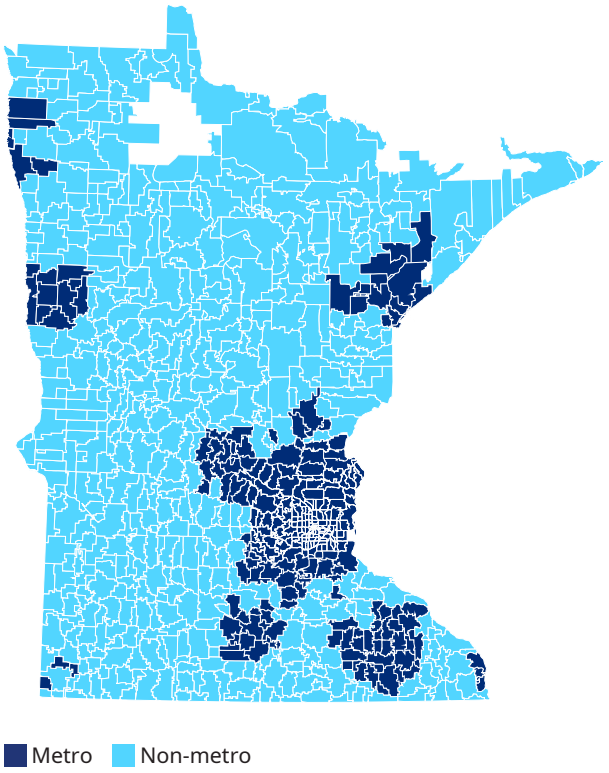
DEFINITION OF BEHAVIORAL HEALTH (BH) SERVICES

1. We define behavioral health which include mental health and substance abuse services utilizing diagnosis code F.
2. Oliver Wyman reviewed the proposed method from the MDH documentation which applies similar logic.
3. Please note that Oliver Wyman's cost model has additional breakdown for mental health and substance abuse services utilizing more refined service category methodology.

APPLIED AGE RANGES AND METRO/NON-METRO LOGIC

- **Age grouping:** Age groupings using the member age indicator in the MN APCD: <=17, 18-26, 27-34, 35-44, 45-54, 55-64, 65+
- **Geographic metro/non-metro split:**
  - We utilized the recommended USDA Rural-Urban Commuting Area Codes (RUCA) from 2010 where we defined the following Metro/Non-metro identifier for each RUCA code.
  - We applied the RUCA crosswalk by ZIP code to define each ZIP code in Minnesota as Metro/Non-metro as shown in the map in Exhibit A.3.

Exhibit A.3: Metro/non-metro identifier for each RUCA code

Primary RUCA Codes, 2010		Metro/ non-metro	Minesota Metro/non-metro by ZIP codes
1	Metropolitan area core: primary flow within an urbanized area (UA).	Metro	
2	Metropolitan area high commuting: primary flow 30% or more to a UA.	Metro	
3	Metropolitan area low commuting: primary flow 10% to 30% to a UA.	Metro	
4	Micropolitan area core: primary flow within an Urban Cluster of 10,000 to 49,999 (large UC).	Non-metro	
5	Micropolitan high commuting: primary flow 30% or more to a large UC.	Non-metro	
6	Micropolitan low commuting: primary flow 10% to 30% to a large UC.	Non-metro	
7	Small town core: primary flow within an Urban Cluster of 2,500 to 9,999 (small UC).	Non-metro	
8	Small town high commuting: primary flow 30% or more to a small UC.	Non-metro	
9	Small town low commuting: primary flow 10% to 30% to a small UC.	Non-metro	
10	Rural areas: primary flow to a tract outside a UA or UC.	Non-metro	
99	Not coded: Census tract has zero population and no rural-urban identifier information.	N/A	

Source: www.ers.usda.gov/data-products/rural-urban-commuting-area-codes/

APPENDIX B. RECONCILIATION OF MN APCD DATA

RECONCILIATION OF THE MN APCD DATA, 2019

Exhibit B.1: 2019 allowed cost commercial LOB
In billions

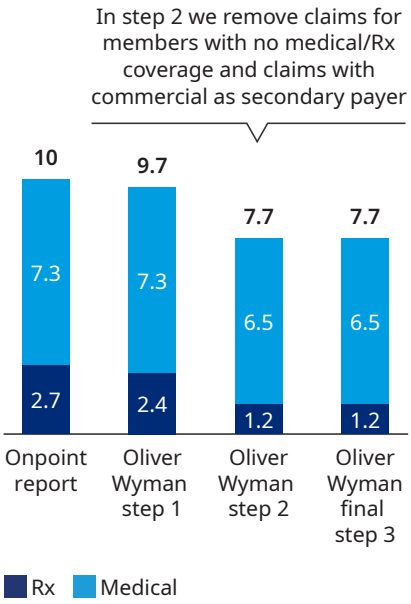


Exhibit B.2: 2019 health plan paid commercial LOB
In billions

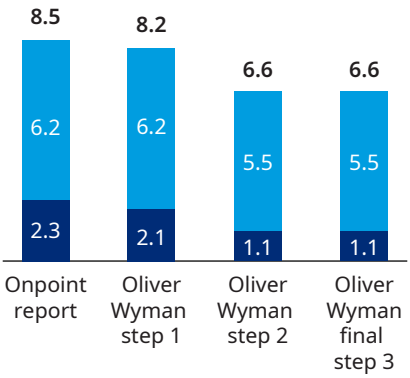
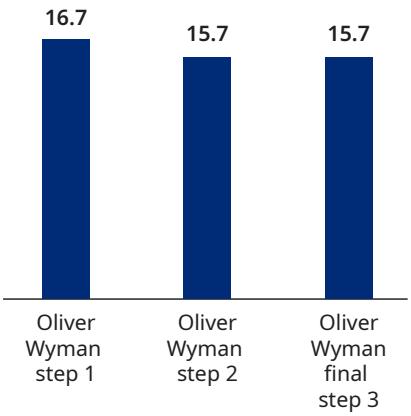


Exhibit B.3: 2019 member months commercial LOB
In millions



Rx Medical

Notes: Oliver Wyman step 1: Source from MN APCD enhanced tables with commercial product codes,
Oliver Wyman step 2: Inner join on Commercial membership with Medical/Pharmacy coverage flag,
Oliver Wyman step 3: Final data output from Oliver Wyman Cost Model
Source: OW Analysis; Onpoint Report: Extract_v.25.1 Trending by Submitter Setting (2022-12); Setting Product Type; Commercial LOB; $/Claim multiplied by Claims Count

RECONCILIATION OF THE MN APCD DATA, 2020

Exhibit B.4: 2020 allowed cost commercial LOB
In billions

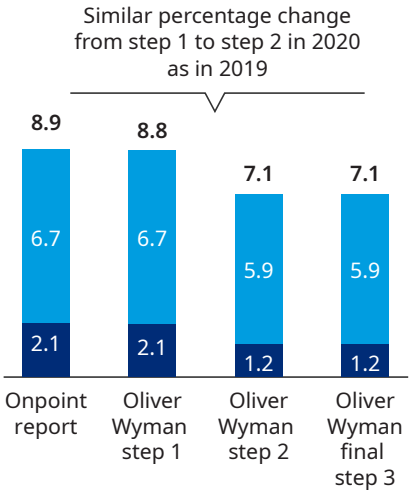


Exhibit B.5: 2020 health plan paid commercial LOB
In billions

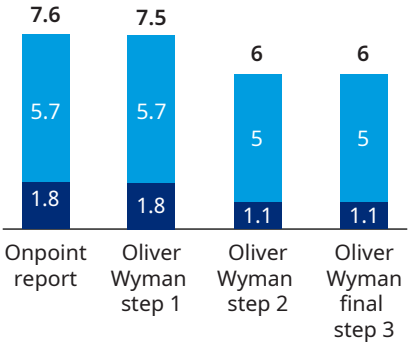
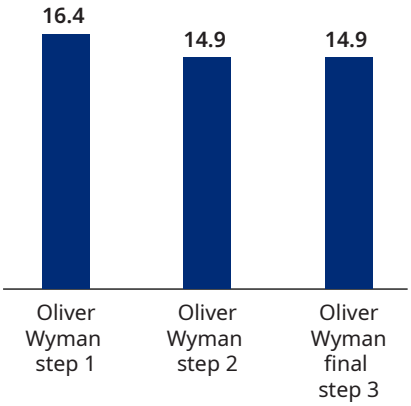


Exhibit B.6: 2020 member months commercial LOB
In millions



Notes: Oliver Wyman step 1: Source from MN APCD enhanced tables with commercial product codes,
Oliver Wyman step 2: Inner join on Commercial membership with Medical/Pharmacy coverage flag,
Oliver Wyman step 3: Final data output from Oliver Wyman Cost Model
Source: OW Analysis; Onpoint Report: Extract_v.25.1 Trending by Submitter Setting (2022-12); Setting Product Type; Commercial LOB; $/Claim multiplied by Claims Count

RECONCILIATION OF THE MN APCD DATA, 2021

Exhibit B.7: 2021 allowed cost commercial LOB
In billions

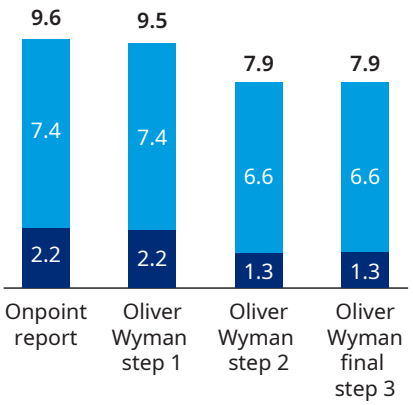


Exhibit B.8: 2021 health plan paid commercial LOB
In billions

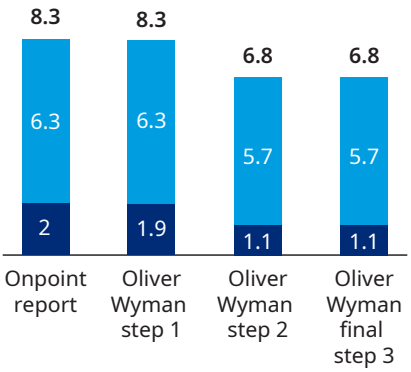
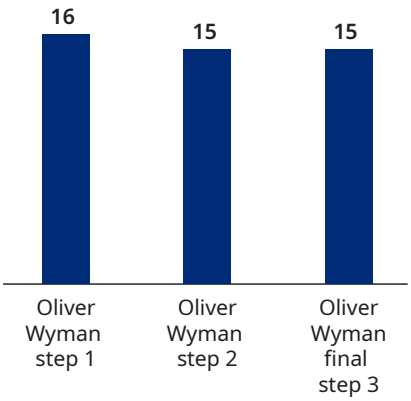


Exhibit B.9: 2021 member months commercial LOB
In millions

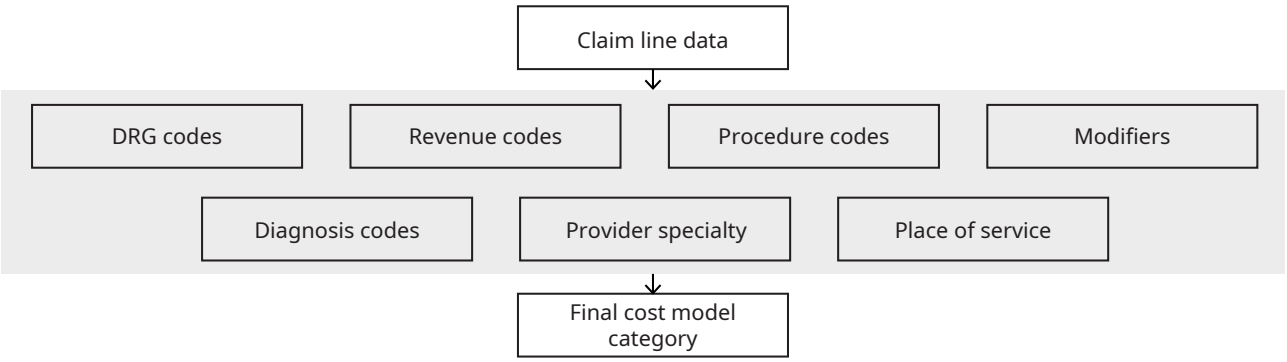


Notes: Oliver Wyman step 1: Source from MN APCD enhanced tables with commercial product codes,
Oliver Wyman step 2: Inner join on Commercial membership with Medical/Pharmacy coverage flag,
Oliver Wyman step 3: Final data output from Oliver Wyman Cost Model
Source: OW Analysis; Onpoint Report: Extract_v.25.1 Trending by Submitter Setting (2022-12); Setting Product Type; Commercial LOB; $/Claim multiplied by Claims Count

APPENDIX C. OLIVER WYMAN COST MODEL OVERVIEW

GENERAL OLIVER WYMAN COST MODEL LOGIC OVERVIEW

- The process appends cost model categories for easier understanding of claims data, consistency in claims grouping, more efficient review, etc.
- As necessary, grouping logic is applied to include all claims for the same member/date into one category (e.g., PCP visit, emergency room).



This information is used to determine the appropriate cost model category

Source: Oliver Wyman analysis

GENERAL OLIVER WYMAN COST MODEL SERVICE CATEGORIES

Major cost model category	Description
Inpatient Facility	These are claims where a member had to stay overnight at a facility (e.g., hospital, rehab, hospice, skill nursing facility). This includes payments for the facility use, all supplies used, and all services that hospital staff perform. Claims in this category are billed by the facility.
Outpatient Facility	These are claims that are provided by a facility where a member did not have to stay overnight (e.g., hospital, ambulatory surgical centers). This includes payments for the facility use, all supplies used, and all services that the facility staff perform. Claims in this category are billed by the facility.
Professional	These are services provided by a health care professional associated with a private practice. These include services that are billed directly by the physician or their practice. This category does not include professional services that are provided by facility-based or facility-employed professionals and billed by the facility.
Other Medical	These are the remaining services that are not facility claims or services provided by a professional. These would be claims for ambulance, home health care, DME, prosthetics, supplies, OTC medication, injectables, and acupuncture, excluding associated professional services. This also includes vision, hearing, or dental care.
Pharmacy/RX	Drugs dispensed by a pharmacy.

Source:Oliver Wyman analysis

APPENDIX D. RESULTS FOR BENCHMARK ANALYSIS MN APCD AND MARKETSCAN

GENERAL BENCHMARKING — MN APCD VS MARKETSCAN

Exhibit D.1: Member months by year — MN APCD data commercial medical/Rx coverage in MN
In millions

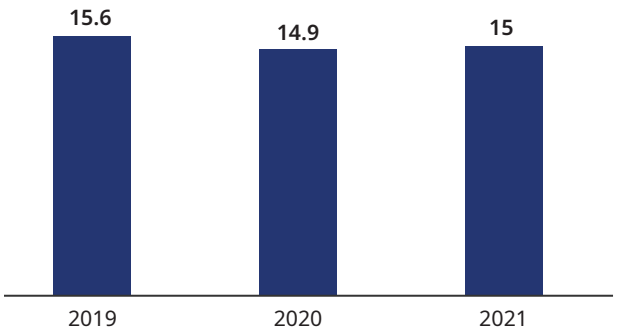


Exhibit D.2: Member months by year — MarketScan data commercial medical/Rx coverage in MN
In millions

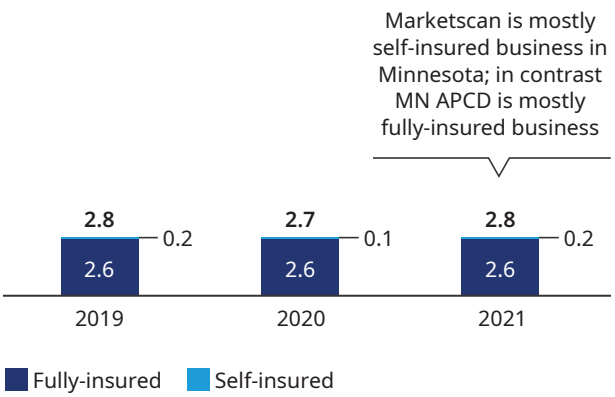


Exhibit D.3: Allowed cost PMPM by year — MN APCD data commercial medical/Rx coverage in Minnesota

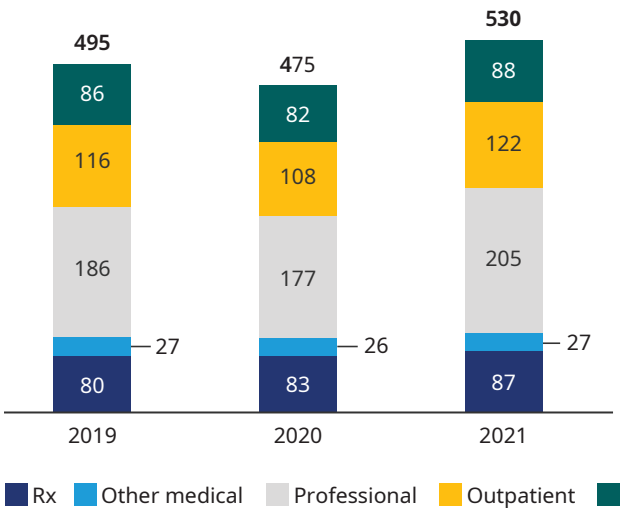
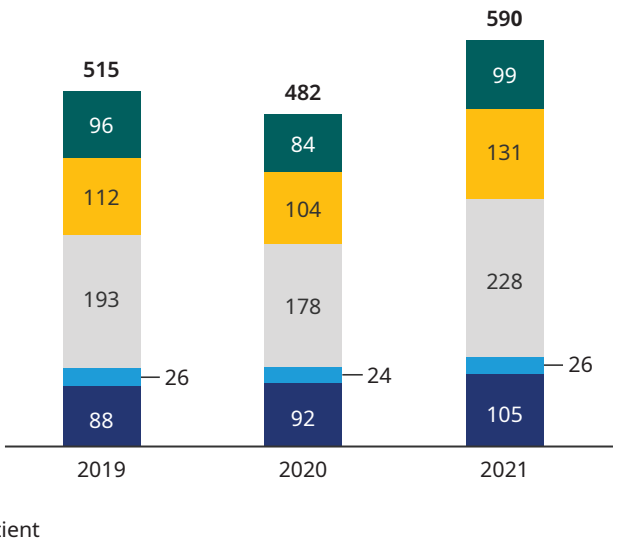


Exhibit D.4: Allowed cost PMPM by year — MarketScan data commercial medical/Rx coverage in Minnesota



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25 and MarketScan data

Exhibit D.5: Members cost sharing PMPM by year — MN APCD data commercial medical/Rx coverage in Minnesota

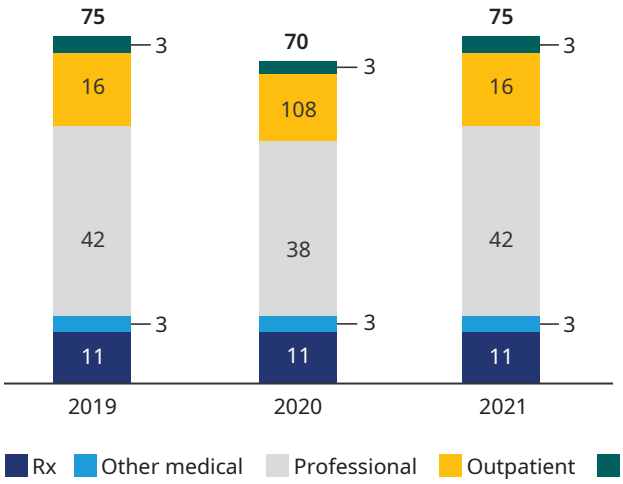


Exhibit D.6: Members cost sharing PMPM by year — MarketScan data commercial medical/Rx coverage in Minnesota I

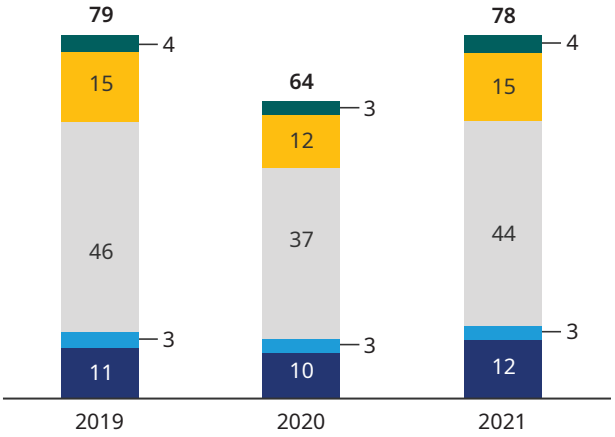


Exhibit D.7: Medical utilization per 1000 by year — MN APCD data commercial medical/Rx coverage in Minnesota

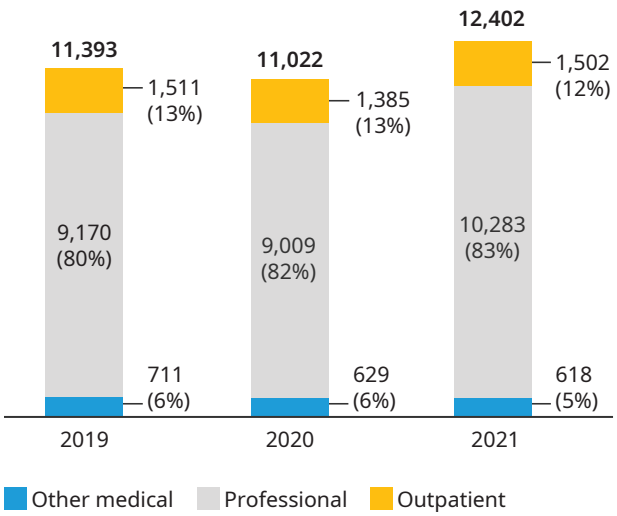
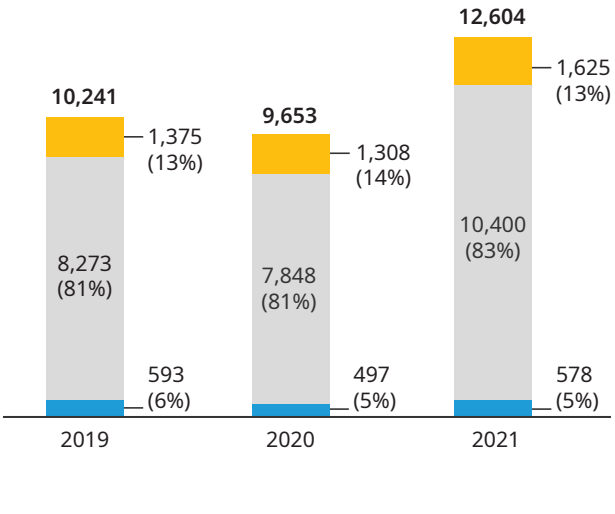


Exhibit D.8: Medical utilization per 1000 by year — MarketScan data commercial medical/Rx coverage in Minnesota



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25 and MarketScan data

Exhibit D.9: Allowed cost PMPM by year — MN APCD data commercial medical/Rx coverage in MN

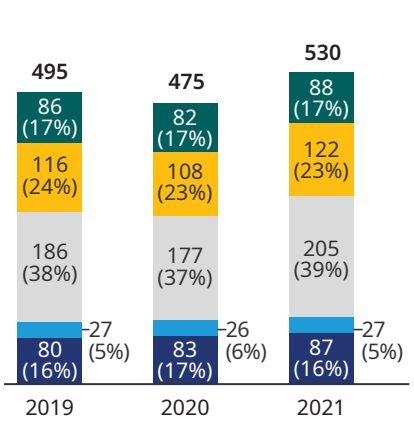


Exhibit D.10: Allowed cost PMPM by year — Marketscan data commercial medical/Rx coverage in MN

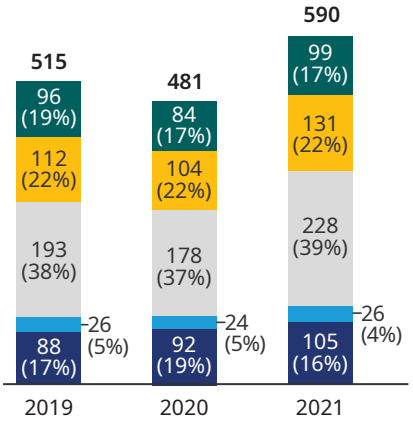
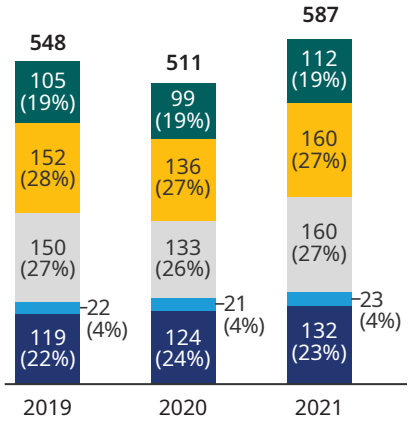


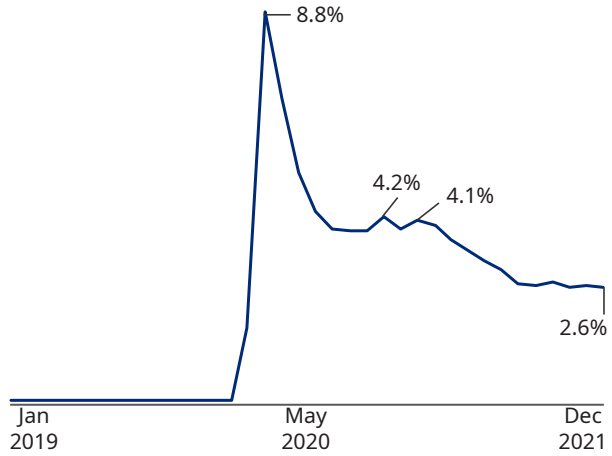
Exhibit D.11: Nationwide (w/o MN) allowed cost PMPM by year — Marketscan data commercial medical/Rx coverage



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25 and MarketScan data

MEDICAL TELEHEALTH SPENDING TRENDS — MN APCD VS MARKETSCAN

Exhibit D.12: MN APCD telehealth share of medical total* allowed PMPM
January 2019–December 2021



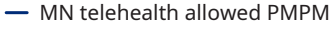
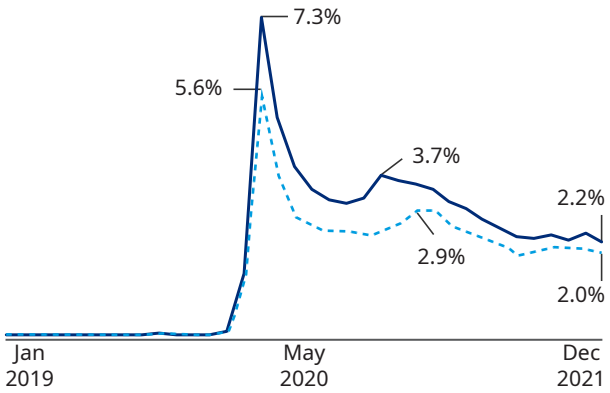
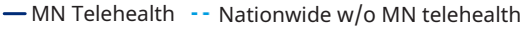


Exhibit D.13: MarketScan telehealth share of medical total* allowed PMPM
January 2019–December 2021





* Medical Total Includes service categories such as Inpatient (Hospital and Other Facility), Hospital Outpatient Facility, Professional, and Other Medical Total but excludes Pharmacy
Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25 and MarketScan data

PROFESSIONAL TELEHEALTH SPENDING TRENDS — MN APCD VS MARKETSCAN

Exhibit D.14: MN APCD telehealth share of professional allowed PMPM
January 2019–December 2021

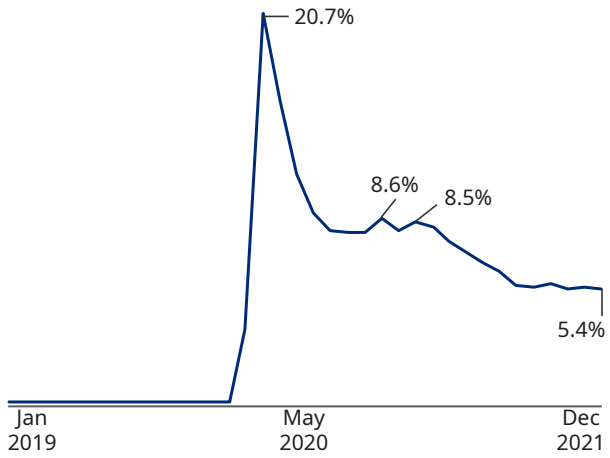
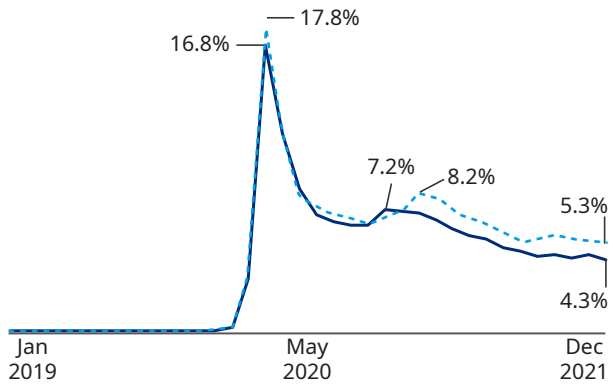


Exhibit D.15: MarketScan telehealth share of professional allowed PMPM
January 2019–December 2021



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25 and MarketScan data

MHSA TELEHEALTH SPENDING TRENDS — MN APCD VS MARKETSCAN

Exhibit D.16: MN APCD telehealth spending share for mental health and substance abuse allowed PMPM
January 2019–December 2021

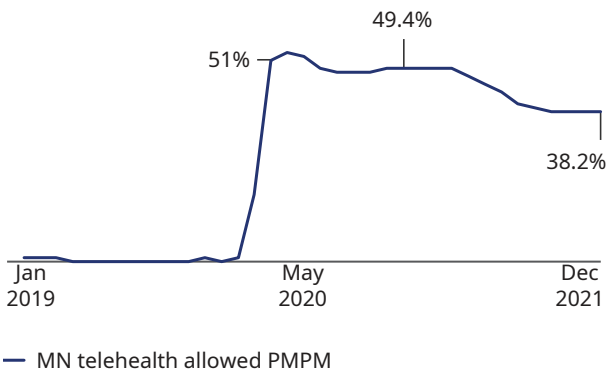
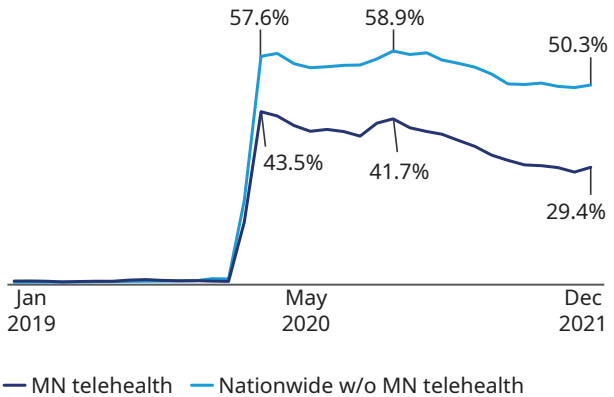


Exhibit D.17: MarketScan telehealth spending share for mental health and substance abuse allowed PMPM
January 2019–December 2021



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25 and MarketScan data

PROFESSIONAL OFFICE TELEHEALTH SPENDING TRENDS — MN APCD VS MARKETSCAN

Exhibit D.18: MN APCD telehealth spending share for office — PCP and other specialist allowed PMPM
January 2019–December 2021

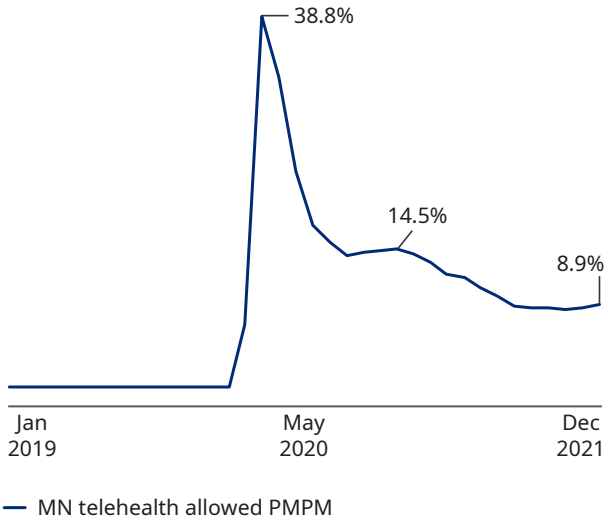
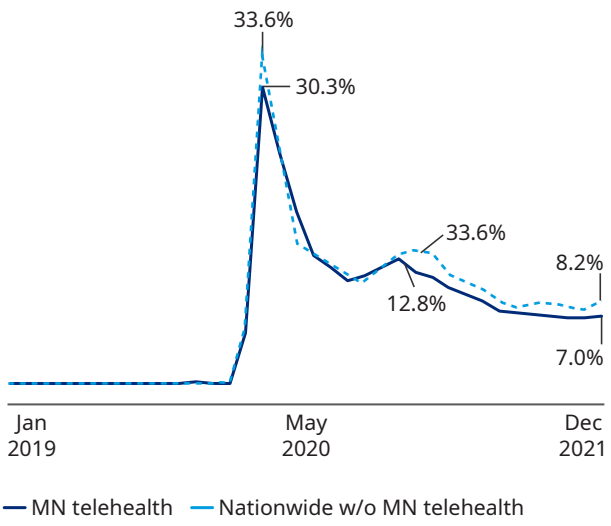


Exhibit D.19: MarketScan telehealth spending share for office — PCP and other specialist allowed PMPM
January 2019–December 2021

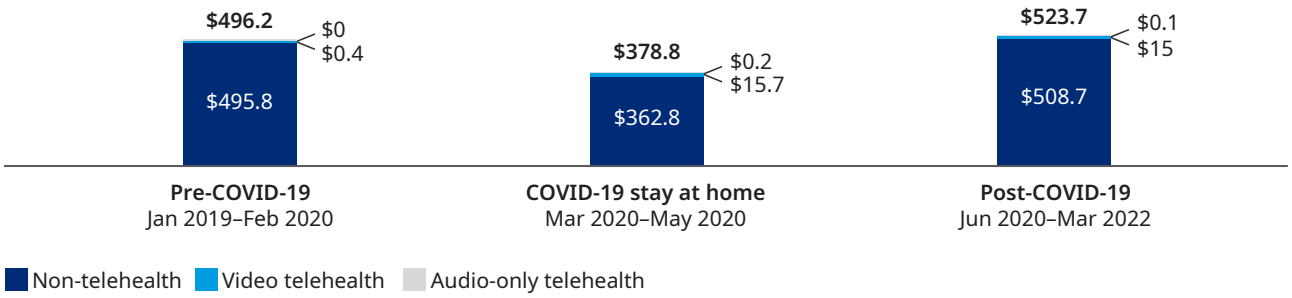


Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25 and MarketScan data

APPENDIX E. RESULTS FOR TELEHEALTH TRENDS IN THE COMMERCIAL MARKET IN MINNESOTA

TYPE OF TELEHEALTH CLAIMS BY COVID PERIOD

Exhibit E.1: Allowed cost PMPM (Medical and Rx) by COVID-19 period and telehealth vs non-telehealth MN APCD data — Commercial medical/Rx coverage



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

SHARE OF TELEHEALTH ALLOWED PMPM BY MAJOR SERVICE CATEGORY

Exhibit E.2: Allowed cost PMPM by service category and telehealth — MN APCD data — Commercial medical/Rx coverage
COVID-19 stay at home period

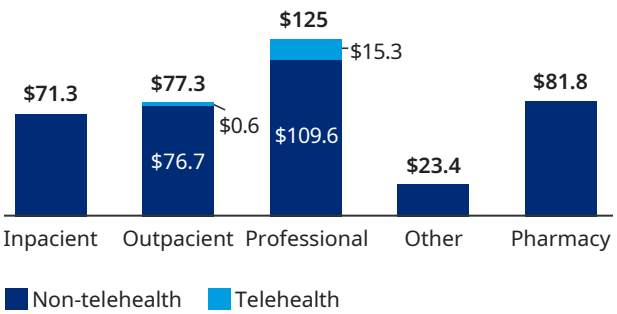
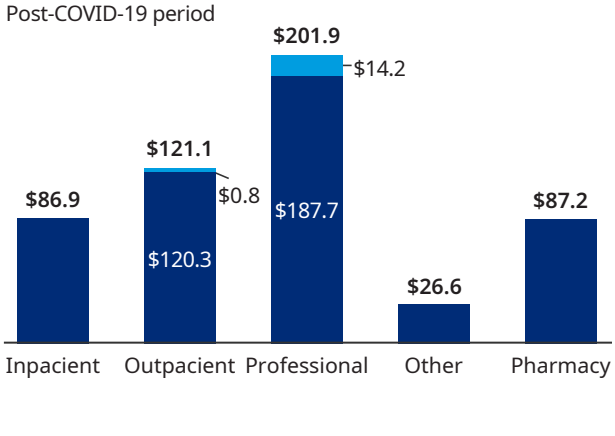


Exhibit E.3: Allowed cost PMPM by service category and telehealth — MN APCD data — Commercial medical/Rx coverage
Post-COVID-19 period



Note: For definition of the service categories, see Appendix C
Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

TELEHEALTH'S SHARE AND UTILIZATION OF PROFESSIONAL CLAIMS BY MONTH

Exhibit E.4: Telehealth's share of professional services and allowed cost by month
MN APCD data — Commercial medical/Rx coverage

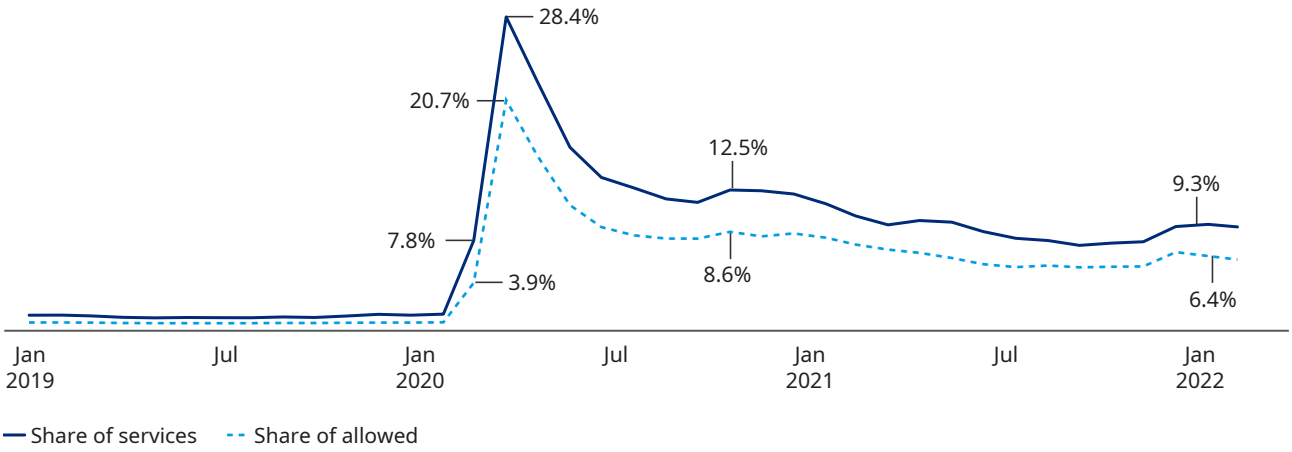
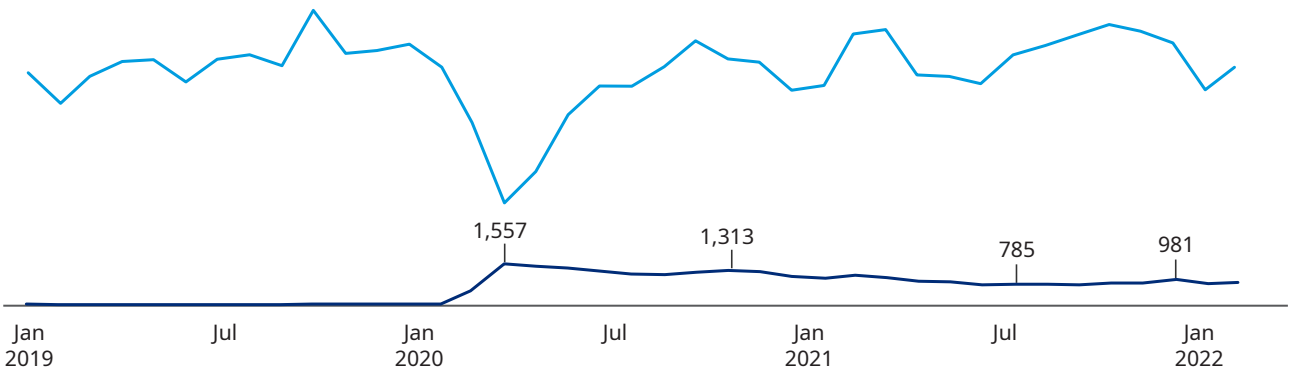
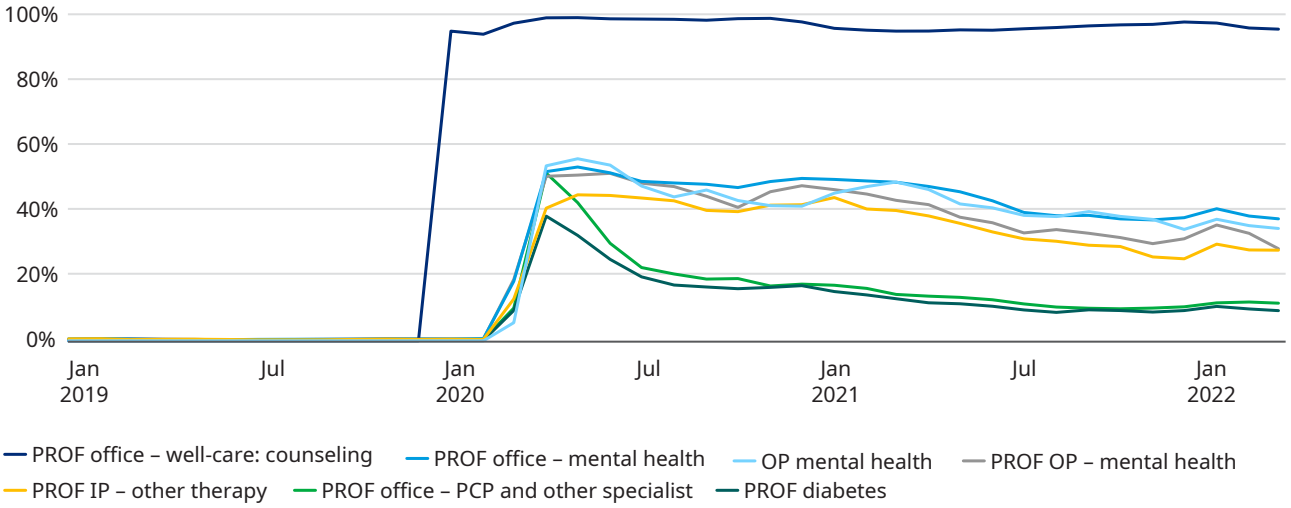


Exhibit E.5: Utilization[1] per 1,000 members of telehealth and non-telehealth professional services by month
MN APCD data — Commercial medical/Rx coverage



1. Utilization is measured as the number of service units (MN APCD field = quantity)
Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

Exhibit E.6: Telehealth's share of allowed cost PMPM for selected professional services by month
MN APCD data — Commercial medical/Rx coverage



Well-care counseling (e.g., counseling for risk reductions/behavioral change intervention under procedure codes 99401-99429, nutritional counseling under S9470) includes telehealth specific services under procedure codes 99421-99423 effective starting in January 2020.

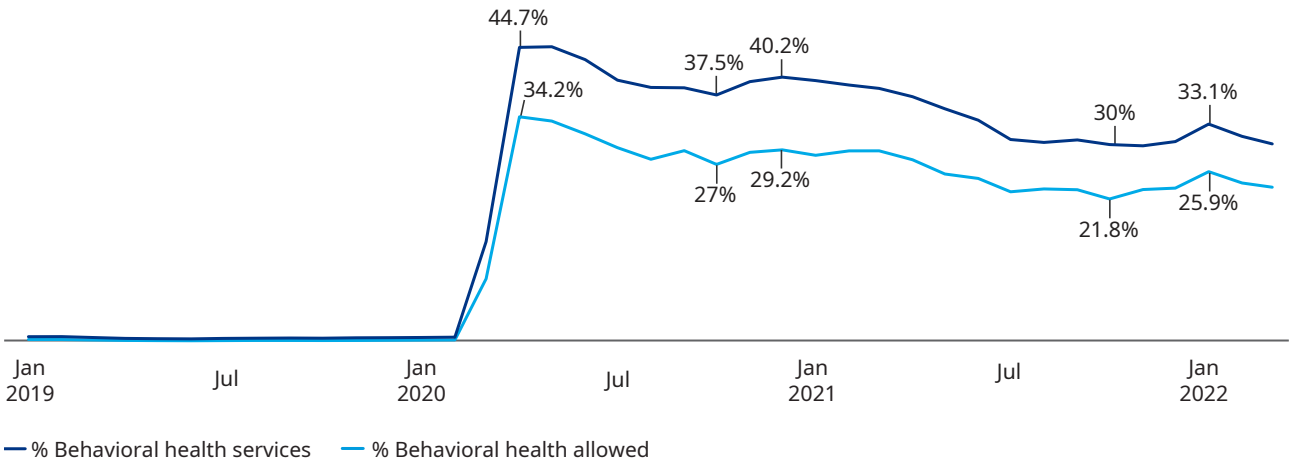
COVID-19 Stay at Home and Post-COVID-19 period allowed PMPM

Level 2 Service	Telehealth	Non-telehealth	Total
PROF Office — PCP & Other Specialist	$7.28	$50.05	$57.33
PROF Office — Mental Health	$4.60	$5.50	$10.10
OP Mental Health	$0.63	$1.71	$2.34
PROF OP — Mental Health	$0.52	$0.64	$1.16
PROF IP — Other Therapy	$0.50	$0.60	$1.10
PROF Diabetes	$0.31	$1.82	$2.13
PROF Office — Well-Care: Counseling	$0.27	$0.01	$0.28

Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

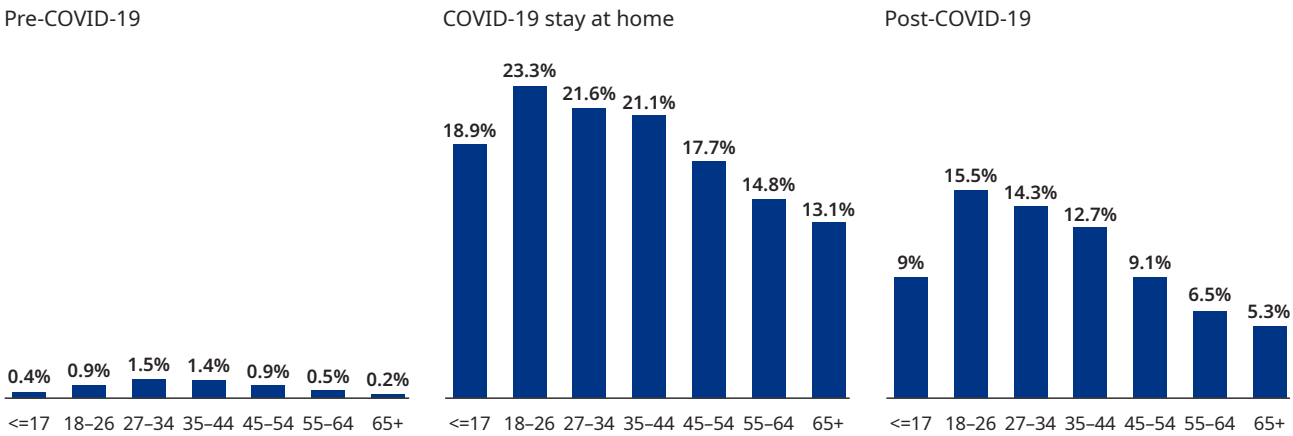
TELEHEALTH'S SHARE OF BEHAVIORAL HEALTH (BH) CLAIMS AND SERVICES BY MONTH HAS DECLINED SINCE AN INITIAL SPIKE DURING THE COVID STAY AT HOME; HOWEVER, TELEHEALTH REMAINS EQUAL TO ABOUT 30% OF ALL BH SERVICES

Exhibit E.7: Telehealth's share of BH services[1] (all medical categories) and allowed cost by month
MN APCD data – Commercial medical/Rx coverage



1. Behavioral health is defined as any medical claim with diagnosis code F
Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

Exhibit E.8: Telehealth share of professional services by age and COVID period
MN APCD data — Commercial medical/Rx coverage



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

TELEHEALTH'S SHARE OF PROFESSIONAL SERVICES BY GEOGRAPHY AND GENDER SHOWS HIGHER TELEHEALTH USAGE AMONG METRO AREAS AND THE FEMALE POPULATION

Exhibit E.9: Telehealth's share of professional services by metro and non-metro regions and COVID-19 period
MN APCD data — Commercial medical/Rx coverage

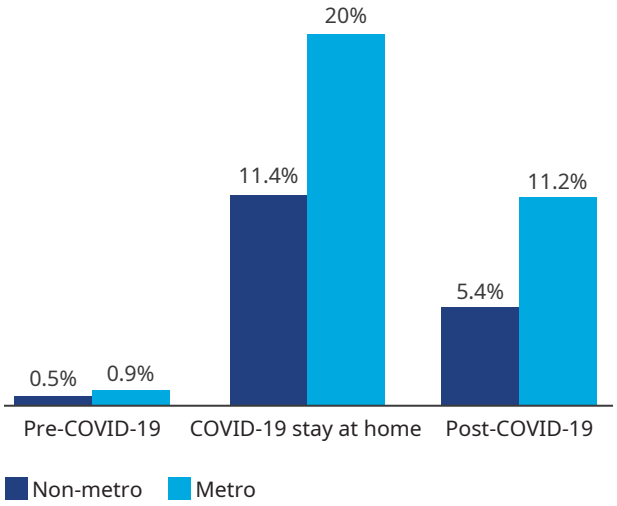
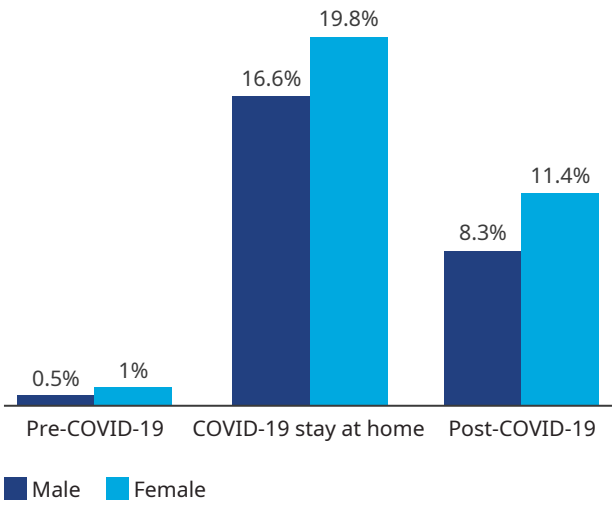


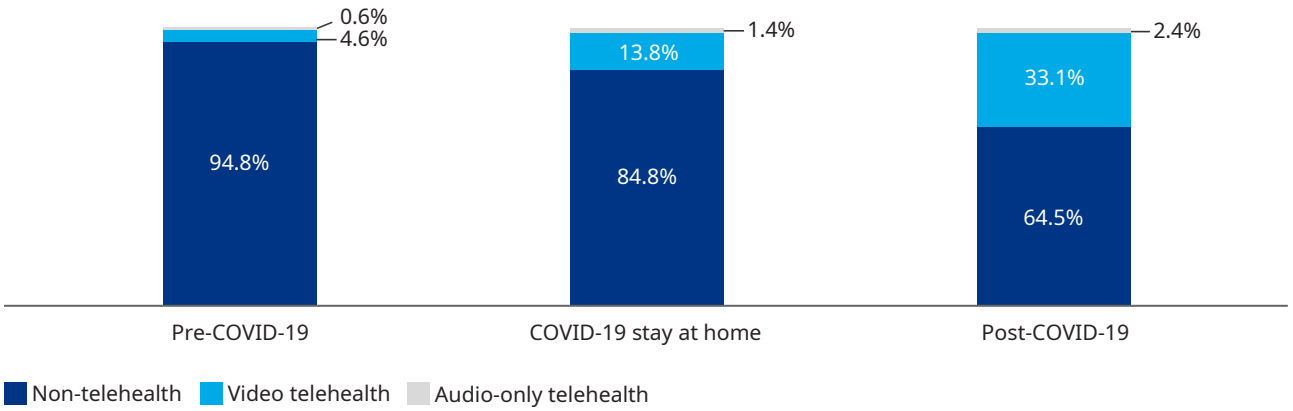
Exhibit E.10: Telehealth's share of professional services by gender and COVID-19 period
MN APCD data — Commercial medical/Rx coverage



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

ABOUT 1/3 OF COMMERCIAL ENROLEES UTILIZED TELEHEALTH AT LEAST ONCE POST-COVID

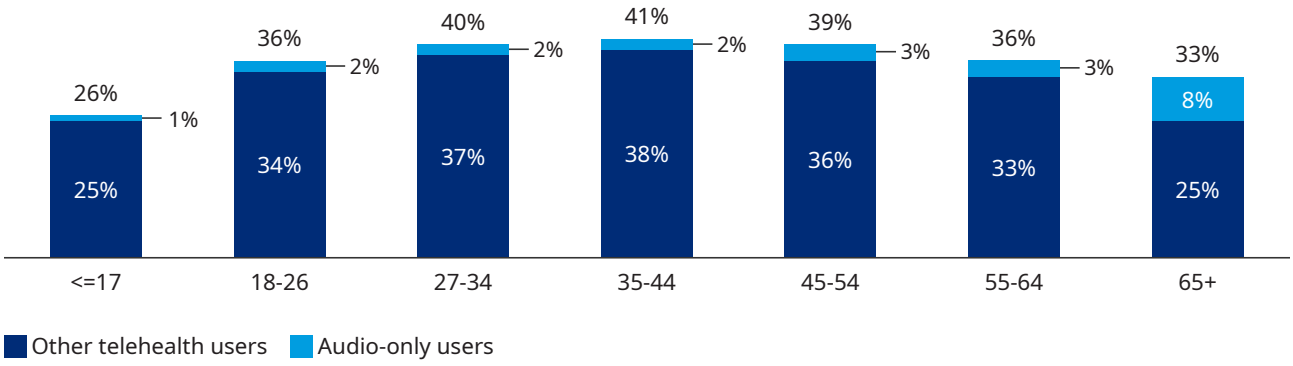
Exhibit E.11: Share of members with Telehealth utilization by COVID period
MN APCD data – Commercial medical/Rx coverage



Note: audio-only Users represent members who utilized audio-only telehealth services at least once during each of the three defined Covid periods but might have utilized other telehealth services as well; Other telehealth users are the remaining telehealth users who are not included in the audio-only category
Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

TELEHEALTH USERS BY AGE RANGE DURING THE POST-COVID PERIOD

Exhibit E.12: Percentage of unique members who utilized telehealth by age post-COVID
MN APCD data — Commercial medical/Rx coverage



Note: audio-only Users represent members who utilized audio-only telehealth services at least once during each of the three defined Covid periods but might have utilized other telehealth services as well; Other telehealth users are the remaining telehealth users who are not included in the audio-only category
Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

PROFESSIONAL PAID TO ALLOWED RATIOS ARE LOWER FOR TELEHEALTH SERVICES COMPARED TO NON-TELEHEALTH AND TOTAL MEDICAL

Exhibit E.13: Health plan paid to allowed claims ratio for telehealth professional, non-Telehealth professional, and total medical services
MN APCD data — Commercial medical/Rx coverage

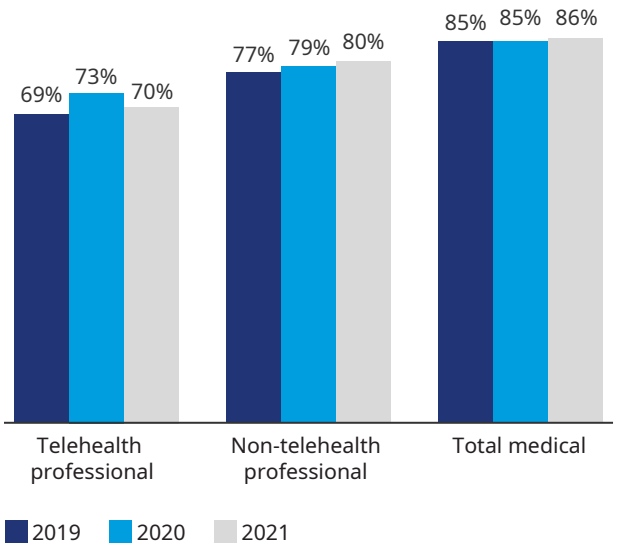
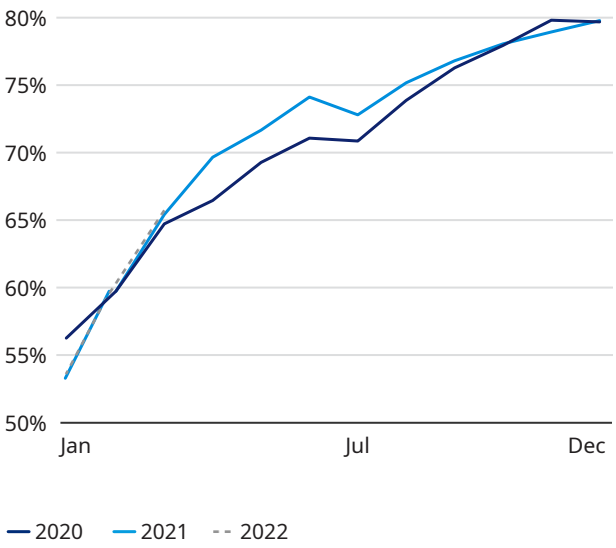


Exhibit E.14: Health plan paid to allowed claims ratio for telehealth professional claims by month 2020–Q1 2022
MN APCD data — Commercial medical/Rx coverage



Source: Oliver Wyman analysis of data from Minnesota All Payer Claims Database (MN APCD), Extract 25

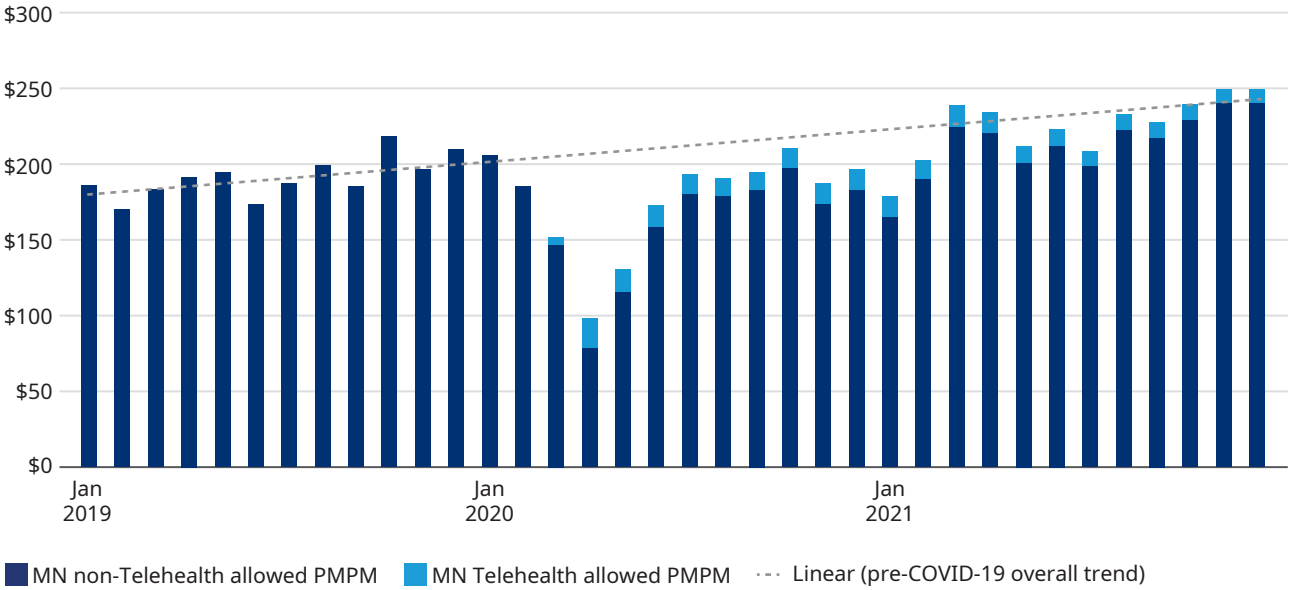
APPENDIX F. IMPACT OF TELEHEALTH ON COST IN THE COMMERCIAL MARKET IN MINNESOTA UTILIZING THE MARKETSCAN DATA

Utilizing the MarketScan data for Minnesota residents, we analyzed the total allowed cost PMPM for all Professional services, PCP and Other Specialist office visits, and MHSA Professional services over the period from January 2019 to February 2020 (pre-COVID-19 period) and calculated the rate that these allowed costs had been increasing at (the trend rate). Using the calculated pre-COVID-19 trend rate, we then projected what the allowed claims for those services would have been if the COVID-19 pandemic did not happen. We compared these projected allowed claims for March 2020 to December 2021 (stay at home and post-COVID-19 period) against the actual reported amounts by month, combined for telehealth and non-telehealth services. If the actual monthly PMPM metrics were higher than our projection of what they would have been had COVID-19 not happened, this would indicate that telehealth may have incrementally increased the overall cost of services.

As shown in Exhibit F.1, for Professional services in MarketScan, the actual PMPM metric post-COVID-19 is mostly below the projection line with the exception of March, April, November, and December 2021. Based on the data through December 2021, on an incremental basis, it appears that telehealth services have not contributed significantly to overall Professional costs. Additional comparisons for PCP and Other Specialist office visits and for MHSA are shown in Exhibits F.2 and F.3. For MHSA Professional services, we estimate that telehealth services have contributed about $1 to $2 PMPM incrementally to the allowed costs in 2021. Please note that we discuss similar analysis based on the MN APCD data in subsection 4.3.1.

Exhibit F.1: Professional Services Allowed Cost PMPM — MarketScan — Commercial Market in Minnesota

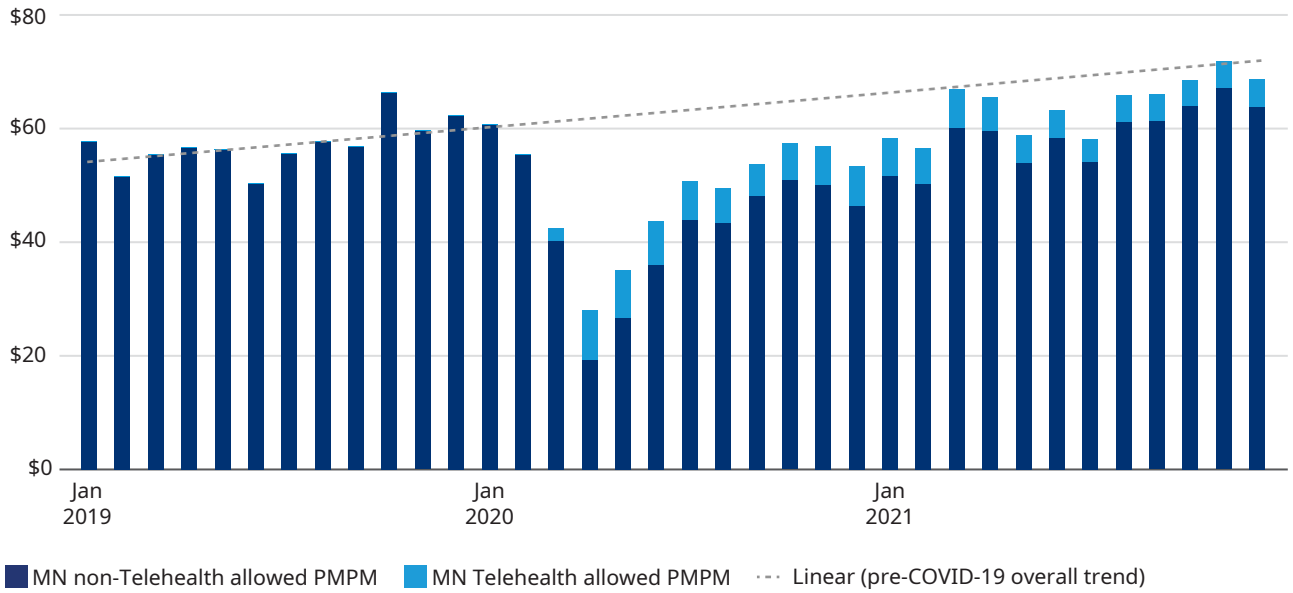
January 2019 to December 2021



Source: Oliver Wyman analysis of MarketScan data

Exhibit F.2: Professional PCP and Other Specialist Allowed Cost PMPM — MarketScan — Commercial Market in Minnesota

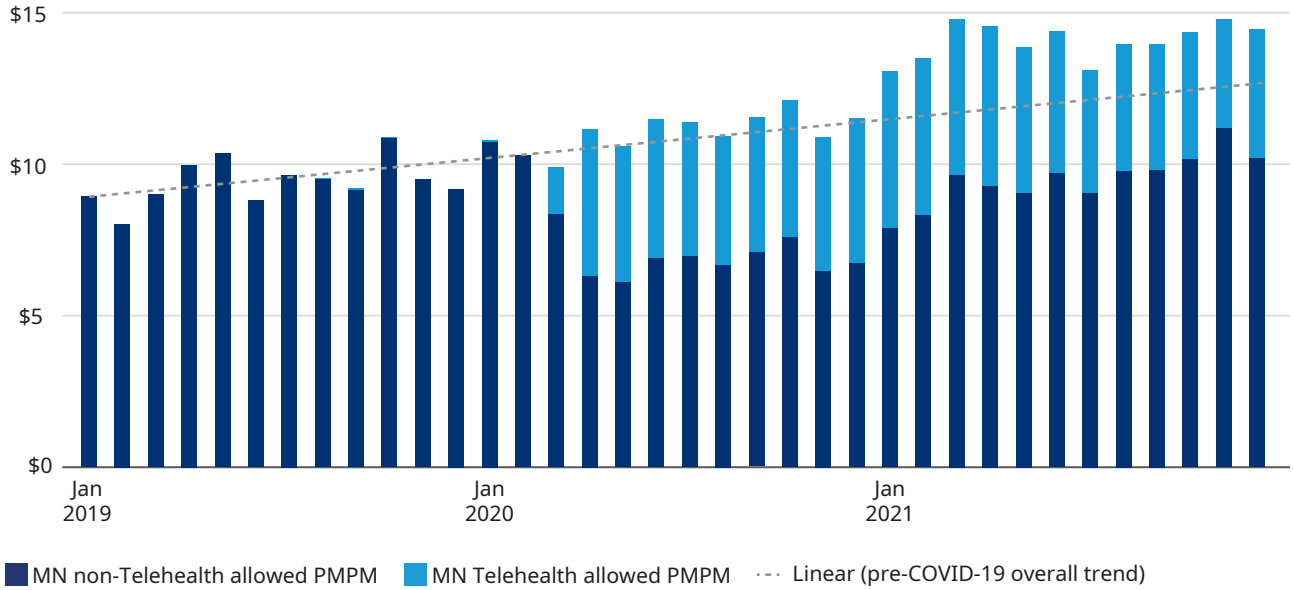
January 2019 to December 2021



Source: Oliver Wyman analysis of MarketScan data

Exhibit F.3: Mental Health and Substance Abuse Allowed Cost PMPM — MarketScan — Commercial Market in Minnesota

January 2019 to December 2021



Source: Oliver Wyman analysis of MarketScan data

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