

COVID-19 Claims Recovery Analysis

On January 31, 2020, the United States Department of Health and Human Services declared a public health emergency, as a result of the novel coronavirus (COVID-19).¹ Less than two months later, on March 11, 2020, the World Health Organization declared COVID-19 a pandemic.² Two days later, the President of the United States declared a National Emergency and New Hampshire Governor Christopher Sununu issued an Executive Order declaring a state of emergency due to the spread of COVID-19.^{2,3} Among the measures taken to slow the spread of the virus, non-essential businesses closed, elective healthcare services, such as surgeries and in-person annual check-up appointments, were postponed, and residential care facilities for elderly patients prohibited visitors.^{4,5}

Some restrictions were lifted two months after the State of Emergency was declared; starting in May, Governor Sununu allowed businesses to reopen under certain conditions.⁶ With that, hospitals were allowed to resume non-essential medical procedures with enhanced COVID protocols in place.^{7,8}

The measures taken to slow the spread of COVID-19 in response to the pandemic impacted peoples' access to and use of every type of healthcare delivery service. Such changes in utilization are reflected in healthcare claims and corresponding costs. This analysis reviews the per member per month (PMPM) costs among commercially insured members across multiple types of service, showing how the services changed due to the pandemic and pandemic response. PMPM reflects the total paid amount for medical services, spread across all the members, for the month. The analytic period for this analysis was January 2019 through December 2021. For the purpose of this analysis, the period referred to as "pre-COVID" was considered to be January 2019 through February 2020, "COVID" was from March through May 2020 (when many emergency measures were lifted), and "post-COVID" was from June 2020 through December 2021.

TYPES OF SERVICE (TOS)

The Types of Service depicted in the keys follow the logic of the American Medical Association (AMA) book and align with the procedure codes. The types of service are broken down into three nodes, separated by periods (e.g., PRO.PRO.MED).

The first and second nodes depict the high-level TOS:

Professional (PRO) – Costs for personnel services associated with a visit (i.e., physician, psychologist, lab technician – anyone with professional designation).

Facility (FAC) – Costs for facility use associated with a visit.

- **Facility Inpatient (IP)** – Costs for facility use associated with an inpatient stay.
- **Facility Outpatient (OP)** – Costs for facility use associated with an outpatient stay.

Ancillary (ANC) – Other costs associated with a visit (i.e., supplies, drugs administered).

The third node indicates a lower-level TOS:

Facility Inpatient, Acute (FAC.IP.ACUTE) – An inpatient facility service for an acute visit.

Facility Outpatient, Surgical (FAC.OP.SURG) – An outpatient facility service for a surgical visit.

Professional, Evaluation and Management (PRO.PRO.E&M) – Services rendered by a provider (e.g., office visit, hospital visit, chronic care management services, advanced care planning).

Professional, Emergency Room (PRO.PRO.ER) – Emergency room services rendered by a provider (e.g., emergency department visit, advanced life support).

Professional, Medical (PRO.PRO.MED) – Services rendered by a provider that are not included in evaluation and management (e.g., vaccination, dialysis, allergy services, occupational therapy services, developmental testing, contact lens fitting).

Professional, Radiology (PRO.PRO.RAD) – Radiology services rendered by a provider.

Professional, Surgical (PRO.PRO.SURG) – Surgical services rendered by a provider.

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WHAT HAPPENED TO THE HEALTHCARE DELIVERY SYSTEM?

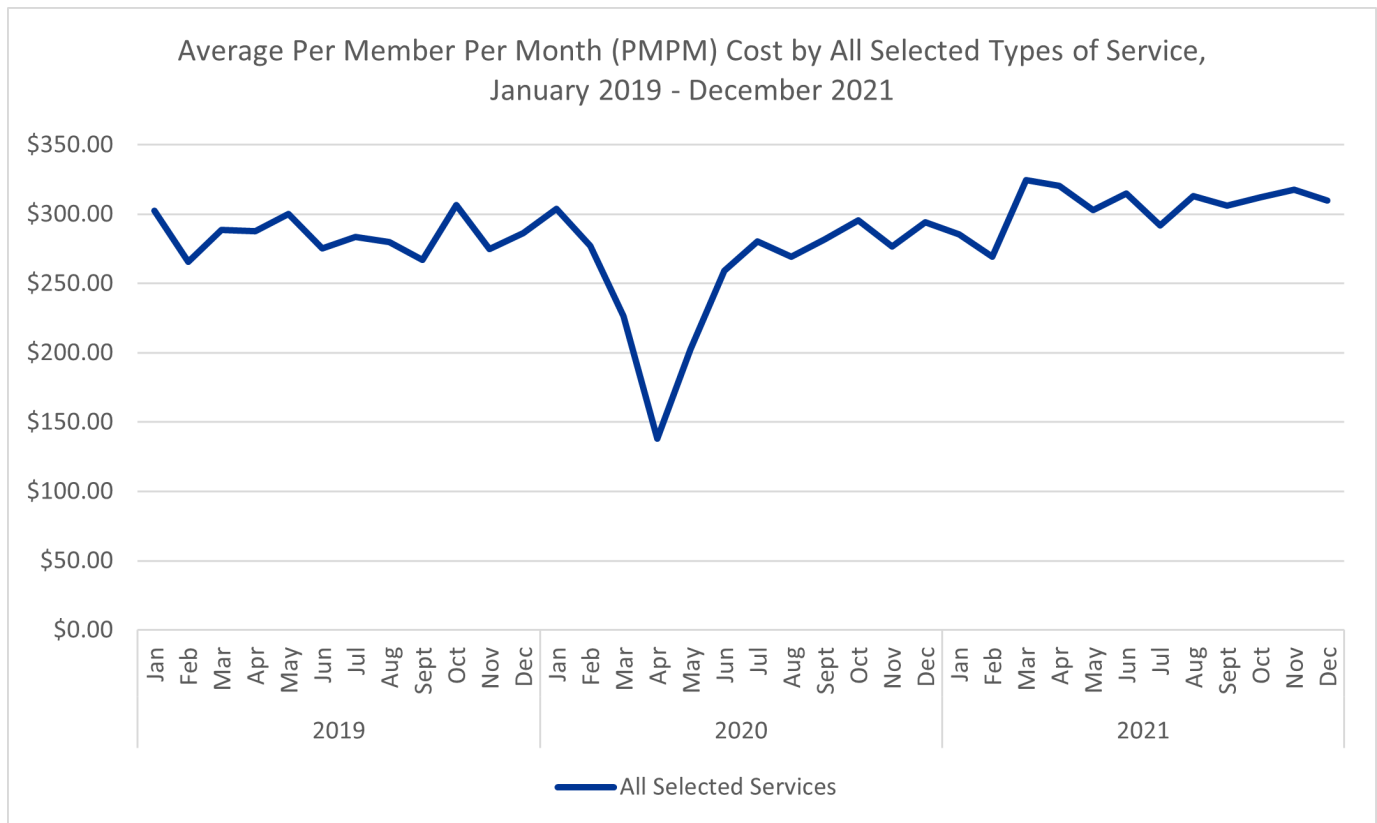
The per member per month (PMPM) cost reflects the total paid amount for medical services, spread across all the members, for the month. PMPM fluctuates as cost and utilization of services change over time. During the pre-COVID period, the cost PMPM for all insured members across types of service was fairly consistent, typically around \$300 PMPM. In March 2020, however, PMPMs for all types of service began to decline, reaching their lowest points (\$138 PMPM) in April 2020 (**Figure 1**). It is assumed that the decline was due to the reduced utilization of services.

Analysis found that 3 types of service rebounded to their pre-pandemic PMPMs soonest: Facility Outpatient, Surgical; Professional, Radiology; Professional, Surgical. These surgical and radiology services returned to pre-COVID PMPM costs by June 2020. The 2 types of service that were slowest to return to pre-COVID PMPM costs were Professional, Emergency Room and Professional, Medical, which did not rebound until August and September of 2020, respectively (**Figure 2, Table 1**).

In comparing 2019 (pre-COVID) and 2021 (post-COVID) claims data, findings showed that the PMPM costs for nearly all types of service analyzed in this report were at least slightly higher in 2021 than in 2019, after a drop in 2020 (**Figure 3, Table 2**). In fact, PMPM for nearly all types of services returned to pre-COVID levels by March 2021.

This analysis does not include pharmacy-related use and cost. Pharmacy claims did not experience a similar dip in 2020 with the COVID restrictions. A forthcoming brief will focus on pharmacy costs specifically.

Figure 1. Average Per Member Per Month (PMPM) Cost by All Selected Types of Service, January 2019 - December 2021



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Figure 2. Average Per Member Per Month (PMPM) Cost by Type of Service, January 2019 - December 2021

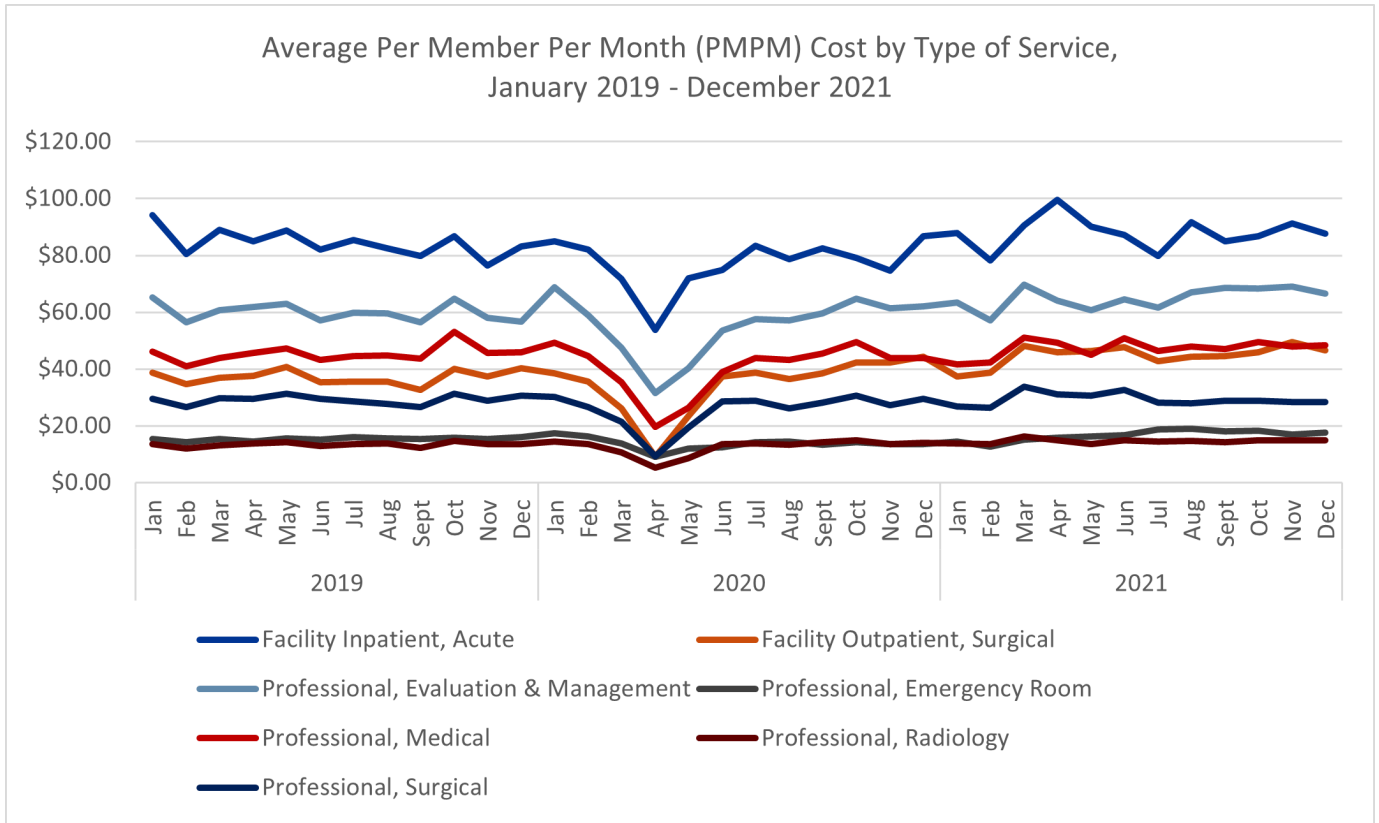
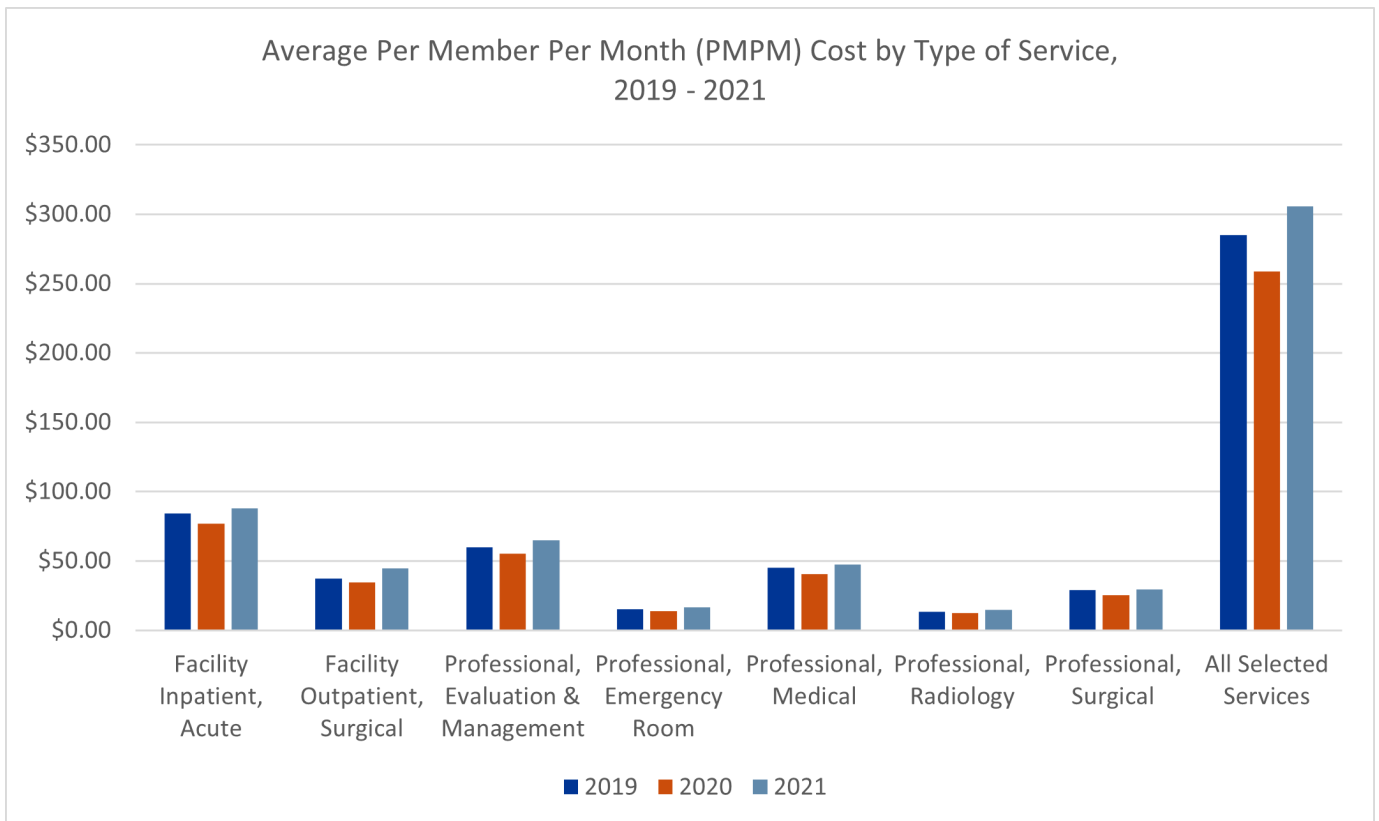


Figure 3. Average Per Member Per Month (PMPM) Cost by Types of Service, January 2019 - December 2021



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Table 1. Average Per Member Per Month (PMPM) Cost by Type of Service, January 2019 - December 2021

| Year | Month | Facility Inpatient, Acute | Facility Outpatient, Surgical | Professional, Evaluation & Management | Professional, Emergency Room | Professional, Medical | Professional, Radiology | Professional, Surgical | Total, All Selected Services |
|------|-------|---------------------------|-------------------------------|---------------------------------------|------------------------------|-----------------------|-------------------------|------------------------|------------------------------|
| 2019 | Jan | \$94.04 | \$38.70 | \$65.22 | \$15.31 | \$46.04 | \$13.68 | \$29.40 | \$302.39 |
| | Feb | \$80.47 | \$34.67 | \$56.43 | \$14.34 | \$41.02 | \$12.08 | \$26.54 | \$265.55 |
| | Mar | \$88.95 | \$36.84 | \$60.66 | \$15.27 | \$43.83 | \$13.14 | \$29.73 | \$288.40 |
| | Apr | \$85.00 | \$37.64 | \$61.74 | \$14.41 | \$45.76 | \$13.75 | \$29.40 | \$287.71 |
| | May | \$88.68 | \$40.66 | \$62.95 | \$15.50 | \$47.14 | \$14.15 | \$31.29 | \$300.37 |
| | Jun | \$82.04 | \$35.35 | \$57.18 | \$15.09 | \$43.15 | \$12.79 | \$29.54 | \$275.15 |
| | Jul | \$85.34 | \$35.46 | \$59.74 | \$16.11 | \$44.60 | \$13.51 | \$28.69 | \$283.46 |
| | Aug | \$82.49 | \$35.64 | \$59.66 | \$15.60 | \$44.86 | \$13.73 | \$27.81 | \$279.80 |
| | Sept | \$79.89 | \$32.75 | \$56.41 | \$15.40 | \$43.60 | \$12.25 | \$26.56 | \$266.85 |
| | Oct | \$86.72 | \$40.07 | \$64.79 | \$15.72 | \$53.03 | \$14.68 | \$31.35 | \$306.37 |
| | Nov | \$76.48 | \$37.32 | \$57.94 | \$15.28 | \$45.67 | \$13.57 | \$28.73 | \$274.99 |
| | Dec | \$83.14 | \$40.33 | \$56.75 | \$16.13 | \$45.87 | \$13.51 | \$30.71 | \$286.43 |
| 2020 | Jan | \$85.00 | \$38.59 | \$68.86 | \$17.34 | \$49.21 | \$14.45 | \$30.22 | \$303.67 |
| | Feb | \$82.04 | \$35.48 | \$58.83 | \$16.22 | \$44.61 | \$13.47 | \$26.68 | \$277.32 |
| | Mar | \$71.66 | \$26.15 | \$47.36 | \$13.88 | \$35.33 | \$10.69 | \$21.54 | \$226.60 |
| | Apr | \$53.81 | \$9.20 | \$31.64 | \$9.18 | \$19.71 | \$5.34 | \$9.24 | \$138.11 |
| | May | \$71.98 | \$23.55 | \$40.27 | \$11.97 | \$26.46 | \$8.63 | \$19.52 | \$202.38 |
| | Jun | \$74.79 | \$37.38 | \$53.60 | \$12.52 | \$38.95 | \$13.55 | \$28.58 | \$259.37 |
| | Jul | \$83.38 | \$38.81 | \$57.62 | \$14.23 | \$43.85 | \$13.73 | \$28.76 | \$280.38 |
| | Aug | \$78.58 | \$36.53 | \$57.08 | \$14.53 | \$43.11 | \$13.26 | \$26.06 | \$269.14 |
| | Sept | \$82.45 | \$38.47 | \$59.68 | \$13.26 | \$45.53 | \$14.16 | \$28.09 | \$281.64 |
| | Oct | \$79.05 | \$42.29 | \$64.65 | \$14.21 | \$49.57 | \$15.03 | \$30.53 | \$295.34 |
| | Nov | \$74.62 | \$42.21 | \$61.37 | \$13.53 | \$43.91 | \$13.50 | \$27.36 | \$276.50 |
| | Dec | \$86.82 | \$44.39 | \$62.00 | \$13.50 | \$43.87 | \$14.10 | \$29.58 | \$294.27 |
| 2021 | Jan | \$87.92 | \$37.35 | \$63.45 | \$14.48 | \$41.67 | \$13.88 | \$26.79 | \$285.53 |
| | Feb | \$78.29 | \$38.72 | \$57.07 | \$12.75 | \$42.40 | \$13.59 | \$26.48 | \$269.29 |
| | Mar | \$90.61 | \$48.02 | \$69.72 | \$15.06 | \$50.96 | \$16.31 | \$33.78 | \$324.47 |
| | Apr | \$99.43 | \$45.86 | \$64.09 | \$15.77 | \$49.33 | \$14.82 | \$31.17 | \$320.47 |
| | May | \$90.06 | \$46.38 | \$60.72 | \$16.34 | \$45.08 | \$13.58 | \$30.71 | \$302.86 |
| | Jun | \$87.29 | \$47.70 | \$64.49 | \$16.76 | \$50.83 | \$14.99 | \$32.68 | \$314.73 |
| | Jul | \$79.84 | \$42.75 | \$61.53 | \$18.71 | \$46.33 | \$14.50 | \$28.10 | \$291.76 |
| | Aug | \$91.75 | \$44.43 | \$67.02 | \$18.94 | \$47.83 | \$14.81 | \$28.05 | \$312.83 |
| | Sept | \$84.84 | \$44.56 | \$68.51 | \$17.99 | \$46.93 | \$14.24 | \$28.87 | \$305.95 |
| | Oct | \$86.69 | \$45.81 | \$68.28 | \$18.18 | \$49.58 | \$14.91 | \$28.76 | \$312.20 |
| | Nov | \$91.27 | \$49.42 | \$68.90 | \$16.83 | \$48.00 | \$15.01 | \$28.28 | \$317.71 |
| | Dec | \$87.70 | \$46.58 | \$66.59 | \$17.57 | \$48.30 | \$14.95 | \$28.29 | \$309.97 |

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Table 2. Average Per Member Per Month (PMPM) Cost by Type of Service, 2019 - 2021

| Type of Service | 2019 | 2020 | 2021 |
|---|-----------------|-----------------|-----------------|
| Facility Inpatient, Acute | \$84.44 | \$77.02 | \$87.98 |
| Facility Outpatient, Surgical | \$37.12 | \$34.42 | \$44.80 |
| Professional, Evaluation & Management | \$59.96 | \$55.25 | \$65.03 |
| Professional, Emergency Room | \$15.35 | \$13.70 | \$16.61 |
| Professional, Medical | \$45.38 | \$40.34 | \$47.27 |
| Professional, Radiology | \$13.40 | \$12.49 | \$14.63 |
| Professional, Surgical | \$29.15 | \$25.51 | \$29.33 |
| Total, All Selected Services⁹ | \$284.79 | \$258.73 | \$305.65 |

REFERENCES

- <https://aspr.hhs.gov/legal/PHE/Pages/2019-nCoV.aspx>
- <https://www.governor.nh.gov/news-and-media/friday-march-13-2020-president-united-states-declared-national-emergency-concerning>
- <https://trumpwhitehouse.archives.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/>
- <https://www.governor.nh.gov/sites/g/files/ehbemt336/files/documents/2020-04.pdf>
- <https://www.cdc.gov/museum/timeline/covid19.html>
- <https://www.governor.nh.gov/sites/g/files/ehbemt336/files/documents/emergency-order-40.pdf>
- <https://www.governor.nh.gov/sites/g/files/ehbemt336/files/documents/emergency-order-17-ex-a.pdf>
- <https://www.huschblackwell.com/new-hampshire-state-by-state-covid-19-guidance>
- Total, All Selected Services** encompasses the 7 types of service identified in this brief.

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