Creating a clear picture of both the direct and indirect costs of COVID-19 can help health plan sponsors predict future trends and develop strategies to lower costs and improve member health.

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MAGAZINE

The Costs of COVID-19:

Assessing the Impact, Preparing for the Future

by | **Michele Domash, Amul Shah, M.D.,** and **Jo Ann Butler, CEBS**

As the United States enters the third year of the COVID-19 pandemic, sponsors of group health care plans for employees and their dependents continue to face uncertainties and challenges related to both the direct and indirect costs of this health crisis.

Each plan sponsor's experience with COVID-19 will vary by the demographics of covered members, including geographic region, vaccination rates, ages and more. This article will review the direct and indirect costs for self-funded health care plans related to the pandemic and provide strategies for predicting and addressing these costs.

Direct COVID-19 Costs

The nationwide price tag of the direct costs of pandemic care, including testing, totaled about $24 billion, according to the Peterson Center on Healthcare and the Kaiser Family Foundation. Almost 50% of the population is covered by employer-sponsored health insurance, the Kaiser Family Foundation estimates, so a significant portion of the total pandemic costs falls on group health plans.

The major direct costs of COVID-19 for health plans include testing and treatment for plan members who contract COVID-19 and those who develop long-haul COVID conditions. Health plans also pay for the administrative costs of vaccination, but the federal government pays for the vaccine itself.

Following are the major categories of direct costs for health plans.

Testing

The Families First Coronavirus Response Act (FFCRA), which was expanded by the Coronavirus Aid, Relief and Economic Security (CARES) Act, requires health plans to cover all testing costs for COVID-19 and related administrative and evaluation services in an inpatient or outpatient setting. Based on selected large plans, testing costs could range from 1% to 2% of medical and prescription claims costs, depending on the inflection of the pandemic and geographic regions. Plan sponsors can generally receive reports of the costs of COVID-19 testing during the pandemic from their claims administrator.

Federal guidance issued on January 10, 2022 expanded a plan's cost of COVID-19 testing to include over-the-counter (OTC) home test kits approved by the U.S. Food and Drug Administration (FDA), without requiring participants to pay any coinsurance or to obtain a prescription or prior authorization. Plan sponsors of self-insured plans should evaluate the safe harbor available and non–safe harbor options and consider how their medical claims administrator and/or pharmacy benefit manager (PBM) can help provide COVID-19 at-home test kits to those covered under their health plans. Federal guidance requires health plans to provide up to eight self-prescribed, self-administered and self-read OTC tests per 30 days for covered members, including spouses and children.

Treatment

Patients with COVID-19 undergo a range of treatments, which means plans will incur a range of costs. Some patients can recuperate at home, while others must be admitted to the hospital. The cost of inpatient care depends on the severity of each patient and can include time spent in an intensive care unit and the use of a ventilator to help with respiratory function. Costs range from $10,000 to more than $1 million for hospital stays of 30 days and longer. The overall incidence of COVID-19 diagnosis can be a significant percentage of overall health care costs, as much as 5% to 6% of costs based on nationwide averages and observations of individual plans. Plan sponsors will want to know their own specific costs to gauge how future trends might emerge. They will also want to factor in the program's estimated vaccination rates among their members since unvaccinated members are more likely to require hospitalization.

About 86% of the hospitalizations for COVID-19 were for unvaccinated individuals, and 14% were related to breakthrough cases of the vaccinated, according to the Centers for Disease Control (CDC) COVID Data Tracker. Although these statistics predate the peak of the Omicron mutation, emerging data shows that this trend has continued. However, the length of stay and severity for Omicron hospital admissions appear to be less than for previous variants.

Figure 1 displays the result of an analysis of preliminary data for a large health plan's experience during COVID-19. This analysis suggests that the cost of COVID-19 treatment for the unvaccinated is three times as much as the treatment for those who were vaccinated, due to increased need for hospitalization and length of illness.

Long-Haul COVID-19 Conditions

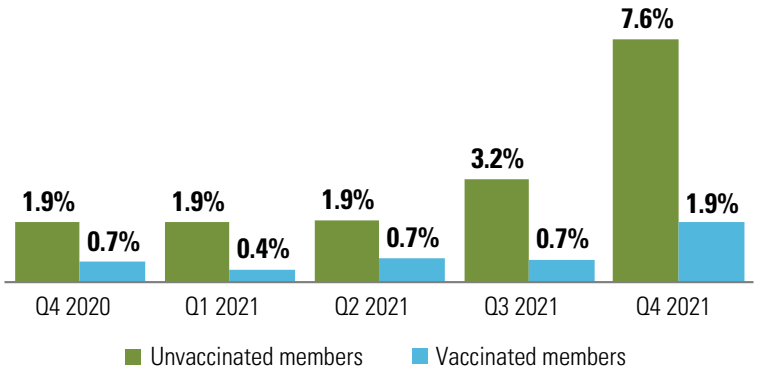
Some individuals experience post-COVID-19 conditions, colloquially referred to as *long-haul COVID*, that may occur four or more weeks after the initial infection. The conditions can be new or a continuation of COVID-19 conditions and include a variety of issues such as shortness of breath, difficulty concentrating, chest pain, headache, dizziness and fever. A case study by the King's College London found that being fully vaccinated[1] decreases the chances of a COVID-19 infection turning into a post-COVID-19 condition by 50%.

takeaways

- Health plan sponsor costs related to COVID-19 will vary by the demographics of covered members, including geographic regions, vaccination rates, ages and more.
- Direct health plan costs related to COVID-19 include testing and treatment for those who contract COVID-19 as well as treatment of long-haul COVID-19 conditions.
- Indirect health plan costs include conditions that may result from members delaying care or changing health care utilization habits. Additional costs may come from increased use of mental health and substance use disorder services, compliance with new regulations and employee turnover.
- Some health plan sponsors have chosen to address COVID-19 costs by seeking to increase vaccination rates with incentives, threat of termination, premium surcharges/discounts and wellness plan rewards.

FIGURE 1

Cost of COVID Care (Percentage of Non-COVID Medical Costs)



Source: Cheiron example group data.

While it is still early for good estimates of the cost of long-haul COVID, Bruce Lee, M.D., of the City University of New York Public School of Health (CUNY), estimated that the average one-year cost of a COVID-19 patient after being discharged from the hospital is around $4,000, largely due to the lingering issues from acute respiratory distress syndrome, which affects nearly half of the patients, and sepsis. Lee estimated that even those who do not require hospitalization have average one-year costs of $1,000 after their initial COVID-19 illness.

Indirect COVID-19 Costs

Indirect costs of COVID-19 are those influenced by the pandemic and may be fueled by changes in utilization of care, hesitation by plan members to visit the doctor for regular preventive visits, mental health conditions exacerbated by the stress of the pandemic, compliance requirements and employee turnover. Indirect costs may be higher and pose more ongoing or long-term risks to the plan than direct costs, as discussed below.

Deferred Care and Changes in Utilization of Care

Plan members may have deferred preventive care and screenings during the pandemic, which may result in conditions such as cancer being detected later and therefore being more advanced and costly than they otherwise would have been. For example, surveys conducted by the Urban Institute in September 2020 showed that 36% of adults under age 65 either delayed or did not get care because they were worried about exposure to SARS-CoV-2 or because a health care provider limited services during the pandemic. And 28.8% of parents delayed or did not get one or more types of care for their children for the same reasons. Plan sponsors should analyze member use of preventive care and consider ways to encourage members to participate in activities and visit doctors regularly to manage and prevent serious health conditions.

In comparison, care for chronic conditions doesn't seem to have declined in the same way. Based on a review of the experience of several groups, many participants are continuing to see specialists and take medications for chronic conditions.

Figure 2 displays trends for primary care and specialty care visits experienced by one large group.

Increased Need for Mental Health and Substance Use Disorder Care

Another indirect cost comes from the increased use of mental health and substance use disorder services, including cases that surface as a comorbidity among people who contract COVID-19. By November 2020, the prevalence of probable anxiety rose to 50% and probable depression to 44% among Americans, which was six times higher than early 2019 U.S. norms, according to an abstract published in April 2021 in *Translational Behavioral Medicine*.

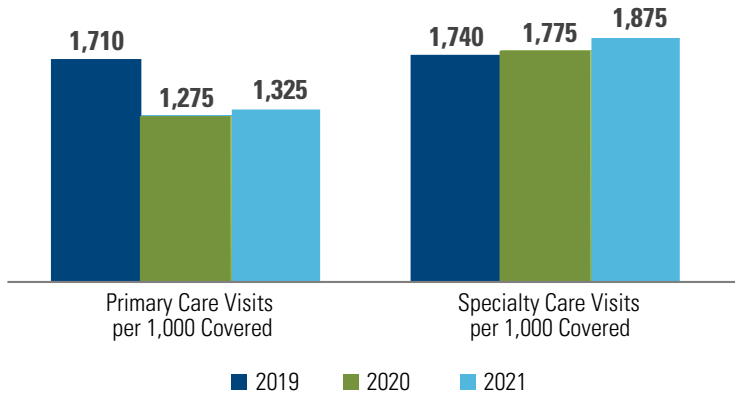
As of June 2020, 13% of people in the U.S. reported starting or increasing substance use as a way of coping with stress or emotions related to the COVID-19 pandemic, according to the American Psychological Association, citing the CDC. The early months of the pandemic also brought an 18% increase in overdoses nationwide compared with the same period in 2019, according to a June 2020 study by the Overdose Detection Mapping Application Program (ODMAP). The trend continued throughout 2020, and the CDC reported that drug overdose deaths rose nearly 30% during 2020—the highest number ever recorded.

Virtual Care Services

The use of virtual health services increased dramatically during the

FIGURE 2

Primary Care and Specialty Care Visits per 1,000 Covered



Source: Cheiron example group data.

pandemic, most notably for mental health care. Several insurers rolled out enhanced virtual care services during the pandemic. Some plans report that as many as 50% to 60% of individual mental health visits are being conducted virtually. This contrasts with the much lower use of virtual visits for regular primary care physicians at less than 10% and for specialists at 15%. Knowing the extent to which members prefer in-person care or telemedicine will help guide plan sponsors with plan design changes and participant messaging to encourage primary care visits during the pandemic. It is important to note that providing access to care, virtual or not, helps maintain the regular cadence of visits involved in managing and preventing mental health conditions. Moreover, the cost of virtual care could be somewhat lower than care delivered in person and is a consideration in any strategy to ensure access and optimal utilization of provider visits.

Compliance

Plan sponsors also face the cost of complying with government regulations and mandates during the pandemic. Some of these compliance costs include covering certain benefits at 100% rather than having a cost-sharing approach. Most recently, plan sponsors have been required to cover at-home COVID-19 tests at 100%; however, they will likely see offsetting savings as individuals use those tests instead of more expensive tests, such as those administered by health care providers.

Turnover

Many industries have experienced more employee terminations or early retirements as the pandemic continues. In 2021, the federal government provided a subsidy to fully reimburse employers for the cost of Consolidated Omnibus Budget Reconciliation Act (COBRA) premiums for up to six months for employees who involuntarily lost their jobs because of the pandemic. The expectation was that the subsidy would help individuals continue COBRA and mitigate the COBRA costs for both the member and the plan sponsor. The demographics of employees who leave their jobs and their replacements will have varying impacts on health benefit costs. Examining the characteristics of the current and future covered population as well as reviewing elections of self-pay premiums after termination will help determine any indirect costs in this area.

Plan Strategies Employers Are Using to Increase Vaccination Rates

Many plan sponsors have chosen to address COVID-19 costs under their health plans by implementing measures to increase vaccination rates for their plan members and their families. Strategies include implementing vaccine mandates, premium surcharges and/or higher copays for the unvaccinated, and premium discounts and/or lower copays for the vaccinated.

Vaccine Mandates

Employers have implemented a range of vaccination policies, including the following.

- **Incentives:** Some employers and plans offer incentives, including cash, additional vacation days and hours of pay, or gift cards for employees who get vaccinated. Bank of America announced that it would donate $100 to local food banks and food pantries for each employee who signs up for a COVID-19 booster vaccine.
- **Threat of termination:** Some employers, such as United Airlines, use the stick rather than the

carrot approach, threatening to fire employees who remain unvaccinated. On August 6, 2021, United became the first U.S. airline to adopt such a measure. United says 99.5% of its employees, not counting 2,000 who applied for religious or medical exemptions, are vaccinated.

- **Tracking the governmental test-or-vaccinate mandate:** Although the vaccination-or-test emergency temporary standard issued by the Occupational Safety and Health Administration (OSHA) never went into effect, many large employers had already implemented the mandate before the Supreme Court struck it down.
- **Occupational mandates:** Vaccination mandates were more prevalent in certain industries such as health care and airlines as well as occupations where the employees had a high rate of contact with the public.

Based on early accounts, employer vaccination mandates have increased vaccination rates and cut down on absenteeism. Tyson Foods, New York City schools, major hospital systems in Maine and the National Basketball Association are among those with vaccination rates exceeding 90%.

Premium Surcharges/Discounts

Some plans impose surcharges for the unvaccinated and discounts for the fully vaccinated. For example, JP Morgan Chase & Co. said that "unvaccinated and undisclosed" employees will have higher medical plan costs through higher payroll contributions for medical insurance. Delta Air Lines raised health insurance premiums for unvaccinated employees by $200 a month to cover higher COVID-19 costs and limited sick pay for unvaccinated employees. Delta Air Lines dropped the surcharge in April 2022, stating that it believes "the pandemic has moved to a seasonal virus." This is another form of an incentive, effectively offering lower premiums for those who are vaccinated. Premium surcharges could continue into 2023 if COVID-19 is still prevalent; generally, plan sponsors evaluate program changes with their open enrollment cycle and/or plan year.

Plan sponsors should be aware that the employee premium cost for the sponsor's lowest cost, minimum value plan must meet Affordable Care Act (ACA) affordability guidelines. Thus, before imposing a premium surcharge, the plan sponsor needs to determine whether the cost, including the surcharge, would render the plan as unaffordable.

Wellness Plan Rewards

Bank of America allowed employees who submitted proof of vaccination against COVID-19 by December 31, 2021 to preserve 100% of an annual $500 wellness credit to apply toward their 2022 health insurance premiums but limited unvaccinated employees to a maximum wellness benefit of $250. Any wellness plan benefit must comply with guidance from the Departments of Labor and Health and Human Services published on October 4, 2021 (FAQs Part 50) about incentives employers may offer to encourage employees to receive COVID-19 vaccines, cautioning that incentives may be lawful only if they comply with applicable wellness plan regulations and the requirements enforced by the Equal Employment Opportunity Commission (EEOC). In general, any reward that a plan provides in connection with the vaccine incentive program must not exceed 30% of the total cost of employee-only coverage and must give individuals eligible for the program the opportunity to qualify for the reward under the program at least once per year.

Takeaways as the Pandemic Changes

Health plan sponsors can review the following when evaluating future health plan costs related to the impact of COVID-19.

- **Plan experience:** Knowing the plan's historical experience provides context for customizing pandemic recovery measures. Plan sponsors can collect utilization information for their own covered population as a baseline for developing strategies to manage costs, which may include policies regarding vaccination status, incentives for preventive care or implementing other plan design and management changes. Plan sponsors can generally request reports from their medical and prescription drug vendor partners on the costs related to COVID-19, including testing, vaccinations, and actual care and treatment—both outpatient and inpatient. Other methods of data mining such as gathering statistics by age and comorbidities may help reveal ongoing risks.
- **Direct and indirect pandemic costs:** Reviewing both direct and indirect costs of the pandemic for the plan and covered members ensures a more complete strategy in this enduring and complex pandemic. Knowing the direct costs is the first step. Evaluating the indirect costs involves tracking utilization before,

during and emerging from the pandemic for primary care, specialty care, emergency and nonemergency care, and treatment by condition. Comparing that utilization with plan-determined targets and any industry or peer benchmarks will help guide the amount and type of efforts to support member and patient engagement.

- **Preventive and chronic care:** An important part of navigating the pandemic is tracking utilization of preventive and chronic care and developing supportive strategies to return preventive care and chronic care utilization to at least prepandemic levels. Supportive strategies include plan design changes and ongoing campaigns to drive engagement in health. Plan design changes might include offering 100% coverage or reduced copays for selected services, such as telehealth visits. Strategies to increase engagement could include holding health fairs and offering screenings, providing heart disease and diabetes management programs, expanding access to mental health providers and counselors, and working with providers and patients to improve steps that patients and members can take to enhance their preventive and chronic care. For example, a patient diagnosed with high blood pressure might be offered a self-guided program to help reduce and monitor blood pressure to avert a serious acute coronary syndrome.
- **Mental health benefits and usage:** Plans should ensure that mental health care programs provide the resources plan members need. Continuing to support virtual options for behavioral health services is one way to offer 24/7 access to qualified providers for certain mental health services. Plans can evaluate network access and address areas where access is more limited or providers are not accepting new patients to ensure that coverage is available.

At the time of publication, the COVID-19 public health emergency period had been extended to continue until July 15, 2022. However, the costs of the pandemic will continue long after this emergency ends.

For plan sponsors, being ready to emerge from the pandemic with improved member health and lower costs likely means continuing to encourage vaccination, testing, preventive care visits and screening, and managing chronic care. These measures can help mitigate the magnitude of impact of the pandemic as more variants develop and new medical solutions emerge.

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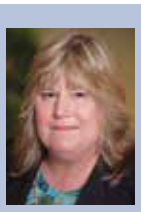

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Endnote

1. The Centers for Disease Control and Prevention (CDC) counts people as fully vaccinated if they received two doses of the mRNA series or received one dose of a single-dose vaccine.

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