COVID-19: Considerations for commercial health insurance rates in 2021 and beyond

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How might the COVID-19 pandemic affect the cost of healthcare in the commercial health insurance market in 2021?

Although pricing actuaries are trained to project future costs in environments of heightened risk, COVID-19 has introduced unprecedented disruption and uncertainty. The pandemic has affected all aspects of the healthcare industry and the American economy, altering the landscape in ways that may both increase and decrease expected costs. As knowledge around COVID-19 continues to evolve, much of the industry focus has been on this year’s costs, but this volatile and uncertain environment also presents an extraordinary challenge for health plans developing rates for 2021 commercial coverage.

This white paper is intended to help commercial health plans navigate this evolving environment through discussion of key considerations for how the pandemic and its aftermath could affect the cost of health insurance coverage in 2021. For an in-depth review of anticipated 2020 healthcare cost impacts across markets, please see the Milliman publication “Estimating the impact of COVID-19 on healthcare costs in 2020: Key factors of the cost trajectory.” For additional discussion of cost considerations for payers across markets, see also the Milliman publication “COVID-19: Health cost issues for U.S. healthcare payers now and in the days ahead.”

1. Acute treatment and vaccination for COVID-19

How will acute COVID-19 infections and the prevention of infections impact healthcare costs in 2021?

As the outbreak continues to develop, there is still uncertainty surrounding the cost impact of treating acute COVID-19 cases in the next few months, let alone into next year. The 2021 cost impact of treatment will depend heavily on several factors including: the future pattern of new infections, the cost of identifying and treating these infections, and the timing and cost of an eventual vaccine.

At the time of writing this white paper, COVID-19 infection rates in the United States appear to have plateaued, with peak infection rates in the rearview mirror for many but not all states. However, it is not clear whether new cases will mostly subside as states manage the spread of COVID-19, or if there will be secondary peaks in infections as shelter-in-place orders are lifted, or even if the viral spread will become a seasonal or year-round phenomenon. The likelihood and severity of a second round of infection will depend on the degree of return to normal behavior and mobility, whether testing and contact tracing are effectively leveraged to identify and isolate infected individuals before the disease can spread, and the emergence of herd immunity, among other factors.

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5 Herd immunity may occur when 70% to 90% of a population becomes immune to a disease. See https://www.cnn.com/2020/04/23/health/coronavirus-herd-immunity-explainer-wellness-scn-tmd/index.html.

How will the cost of COVID-19 treatment evolve over the coming year?

Many organizations are working on developing COVID-19 treatments, including therapies and vaccines. The impact of these efforts will depend in large part on these organizations’ research success and evolving clinical guidance for the course of treatment. If any effective acute or preventive treatments are discovered, they could radically alter health plan costs. Costs could drop if interventions limit the incidence of costly complications and inpatient care, or increase if there is massive demand for new and expensive specialty biological or pharmaceutical interventions, such as what happened in 2014 with the introduction of modern hepatitis C therapies. Many healthcare payers have committed to waiving cost sharing for treatment of COVID-19, so they are fully exposed to the costs of care.7

When will a vaccine be ready for deployment, and what will it cost?

Many organizations are working on vaccine development. However, expert opinion suggests widespread availability of a vaccine is at least a year away, with a timeline contingent not only on initial vaccine development but also human safety and efficacy trials and the need to rapidly scale up production and distribution of a massive volume of doses.8 The cost of a vaccine, if developed, is unknown, and could depend on whether or not governments are the primary purchaser.9 The federal government was the primary purchaser of vaccines during the H1N1 outbreak, which cost an average of $8.60 per dose.10 Congress has already appropriated $300 million for the purchase of COVID-19 vaccines in the Coronavirus Preparedness and Response Supplemental Appropriations Act (H.R. 6074), signed into law on March 6. Some have estimated the cost of the vaccine could be in the range of $50 to $100 per person.11

In addition to the cost of the vaccine itself, the industry must consider other questions such as: will plan sponsors shoulder the costs, or will federal or state governments provide funding? How will available doses be allocated, and who will be indicated for vaccination? It is likely that doses will be deployed as they become available, and these initial doses will not be distributed uniformly; this could cause regional differences in cost.

2. Access and demand for healthcare

How will the ongoing pandemic and its aftermath affect patients’ access to healthcare and the types of care they receive?

In this period of social distancing, hospitals and physicians around the country have observed a steep drop in non-COVID-19 admissions and visits, indicating some combination of deferred care (to be rescheduled when distancing measures ease) and care eliminated in its entirety. Consistent with expectations, elective surgeries and other nonessential care have declined. This stems both from patients weighing the risk against the benefit of routine hospital and clinic visits, as well as providers that have temporarily limited or halted access to nonessential care. Anecdotal reports even indicate a surprising decline in emergency treatment for conditions such as heart attacks, suggesting that some combination of crucial care not provided and societal behavior changes is altering the typical incidence of emergencies.12

At the same time, the use of remote care has skyrocketed, as consumers seek access to providers from the comfort and safety of home, and carriers revise policies to eliminate barriers to virtual care. One leading provider of telehealth technology recently reported a doubling in utilization rates over the year prior, while many vendors have been struggling to meet increased demand.13,14

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How long will utilization declines last, and what will healthcare costs and utilization patterns look like in the aftermath of the pandemic?

Expert opinion suggests that social distancing measures could be necessary until a vaccine is widely available, herd immunity is achieved, or the spread of infection is managed through extensive testing, contact tracing, and isolation practices. To the extent that distancing measures remain in effect during calendar year 2021, issuers could see a continued suppression of typical healthcare costs.

If and when distancing measures are fully lifted and demand for (and access to) care is no longer suppressed, issuers may expect a period in which pent-up demand for previously deferred services drives utilization rates well above the pre-COVID-19 baseline. The timing and duration of this utilization surge will likely depend on whether reopening the economy and restoring access to care happens quickly or is phased in over a sustained period, how much care had been deferred during lockdown, and the capacity of the healthcare system to meet the increased demand. Supply is likely to be a constraining factor until this demand is satisfied, with many providers operating at or above normal capacity for an extended period.

Payers should also consider how long it will take for consumers to feel comfortable returning to “normalcy,” and whether some changes in utilization wrought by necessity during the pandemic will have lasting effects on the distribution of care. For example, will consumers become more comfortable with and reliant on telemedicine, nurse hotlines, and mail order prescription drugs?

3. Lasting impacts on population health

What effect will COVID-19 have on the future health of members in carriers’ risk pools, and how will carriers account for the new risk profile?

We do not yet know the long-term health impact of those who recover from COVID-19, although studies have found increased mortality risk (specifically deaths involving the respiratory system, as well as associations with other body systems), among patients who have recovered from pneumonia.

How will the pandemic affect overall population health?

Even for those members not directly infected by the virus themselves, population health effects are myriad. For those under shelter-in-place orders and/or otherwise deferring care, what will be the lasting impact of those missed visits? Will chronic conditions worsen, and will additional acute needs arise? Past viral pandemics have introduced many “indirect” deaths; deaths not directly linked to the condition but likely related. It may be natural to think that all avoided care is routine with minimal future impact, but even routine preventive care can help patients from becoming high-risk, reducing future years’ chronic disease prevalence and disability. Moreover, patients managing chronic conditions pre-pandemic could require higher levels of care; for instance, if access to prescribed drugs is limited by supply chain disruptions or other causes of scarcity.

Most Americans have experienced some level of lifestyle upheaval during the pandemic, from changed work environments to lessened social interaction to quarantined living situations to unemployment; moreover, constant media coverage has increased stress and anxiety. Many speculate that there will be an increase in mental health and substance abuse conditions as a result of these environmental stresses. In addition to having their own costs, these conditions have also been shown to exacerbate comorbid physical conditions. These effects could last for years down the road.

How will carriers adjust rating philosophies to manage COVID-19 risk?

We know that certain conditions exacerbate the severity of COVID-19. Under Patient Protection and Affordable Care Act (ACA) regulations, compliant individual and small group plans are not allowed to charge enrollees higher premiums to account for these additional benefit costs (although they can—and should—apply a broad adjustment to the entire market single risk pool). However, it is permissible to adjust premiums for tobacco users (up to 50% relative to nonusers); given early correlation data between respiratory conditions and COVID-19

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severity, will carriers choose to use this lever to manage risk? For large group and other plans not subject to ACA regulations, industry factors could be applied in rate development. For example, carriers may consider reevaluating rating factors for industries where workers are in close contact with the public (medical professionals, grocery store clerks) in light of the pandemic and its lasting effects.

4. Economic impacts on enrollment and utilization of care

How will the collateral economic damage from COVID-19 affect enrollment in commercial health plans and the utilization patterns of those seeking or retaining coverage?

In the first six weeks after social distancing measures were widely implemented across the United States, over 30 million Americans newly applied for unemployment insurance, nearly four times the number of unemployment filings tallied over the worst two years of the 2008 global financial crisis, and more than wiping out all gains in employment since the prior recession. The Economic Policy Institute estimates that 3.5 million workers likely lost their employer-sponsored insurance over the last two weeks of March alone. To the extent these job losses persist or worsen into 2021, payers offering employer-sponsored insurance can anticipate substantial declines in enrollment, particularly among younger or hourly workers on the margins, including those in highly impacted industries such as retail and food service.

Furthermore, issuers offering qualified health plans on the individual marketplace may expect an influx of many of these newly uninsured households: the loss of income for households experiencing job loss and furloughs could drive greater eligibility for and enrollment in subsidized, means-tested individual ACA coverage, while other households may drop below individual ACA income cutoffs entirely, ending up on Medicaid rolls or uninsured.

What will be the profile of these enrollees look like? Risk adjustment reports released by the U.S. Department of Health and Human Services (HHS) demonstrate a consistently healthier morbidity profile for employer group coverage than individual ACA risk pools. To the extent there is an influx of relatively healthy previously employed individuals and families into individual coverage, issuers may see an improvement in individual risk pool morbidity, all else equal. At the same time, plan sponsors for employer coverage may face higher costs if coverage losses are disproportionately borne by younger employees, or if employers prizing stability become less likely to shop and switch between carriers.

Economic uncertainty may also affect consumers’ access to and willingness to spend on elective healthcare services, even among those untouched by job loss, and may affect plan purchasing decisions. One PwC report suggests that rollout of the “great recession” of 2008 led to a steep decline in elective surgeries—which trend to be costly but discretionary—lasting for several years afterwards.

Plans should consider the extent to which economic stimulus measures and financial assistance to businesses and individuals by the federal government and states will limit job losses and economic damage from the pandemic. Plans should also consider whether newly enrolled members will lapse coverage during 2021 open enrollment and/or as pandemic risks subside, as well as the risk of adverse selection between those who remain and those who lapse.

5. Disruptions to provider networks

How will healthcare provider systems be disrupted by the outbreak?

Although some hospitals are experiencing historically high levels of patient volume, their finances have been upended. Hospitals accrue revenue from an expected mix of services and procedures, each paid at different rates from a variety of public and private sector payers. The COVID-19 outbreak has completely changed this expected revenue mix for 2020, as some of the most profitable procedures for hospitals (i.e., elective surgeries) have been postponed. Economic disruption may also precipitate a shift in providers’ business away from higher-margin

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21 For instance, see https://jamanetwork.com/journals/jama/fullarticle/2765184.

25 Plan liability risk scores in risk adjustment reports published by HHS have consistently been higher for state individual Qualified Health Plan (QHP) markets than for risk-adjusted state small group QHP markets, even after controlling for differences in demographics and plan mix. See, for example, the 2018 report at https://www.cms.gov/CCIIO/Programs-and-Initiatives/Premium-Stabilization-Programs/Downloads/Summary-Report-Risk-Adjustment-2018.pdf.
commercial payers toward lower-margin public payers (i.e., Medicare and Medicaid). Hospitals also budget for an expected level of uncompensated care, and it is likely that they will treat more of the uninsured than expected from COVID-19 in 2020.

Unanticipated expenses have surfaced as well from additional supplies and equipment, and from hiring additional staff to increase capacity and address fatigue and burnout. This mix difference in both expected revenue and expenses in 2020 will strain hospital budgets. Other healthcare providers may experience similar disruption, especially those who specialize in services more likely to be deferred in this environment. The Coronavirus Aid, Relief, and Economic Security (CARES) Act, and its sequel recently passed into law, includes a fund of $175 billion reserved for healthcare providers. Starting on April 10, an initial distribution of $30 billion was made to providers proportionate to their shares of Medicare fee-for-service (FFS) reimbursements in 2019. Additional funds will be distributed in the future, but it is unclear whether it will be enough to make up the difference.

How much the unprecedented financial shock to provider systems and the margins on which they operate affect future contract negotiations and reimbursement structures?

Similar to the progression of the outbreak itself, the extent of the financial impact is expected to vary widely by region and affect rural and urban for-profit and nonprofit organizations differently. To counter this, we expect many providers will adjust revenue strategies, perhaps including cost shifting whereby providers increase fees for higher-margin commercial payers to offset losses on lower-margin business from public payers. Carriers should be mindful of surplus situations for providers in their networks and keep these dynamics in mind when maintaining their provider networks and negotiating reimbursement schedules for 2021.

How will cost swings interact with one-sided and two-sided risk-sharing arrangements?

A recent survey from the National Association of Accountable Care Organizations (ACOs) shows that over half of ACOs with downside risk are considering leaving the Medicare Shared Savings Program (MSSP) because of anticipated financial losses associated with COVID-19. Payers with risk-sharing arrangements with providers should consider reevaluating agreement parameters for current and future performance years, if possible. Potential changes would include modifying trend targets as appropriate, adjusting or removing sharing percentages, or excluding specific months of experience from calculations.

Carriers should also consider how services delivered in alternative settings will be reimbursed, and the challenges that will result. Communities in the epicenters in the United States are scrambling to increase capacity by building temporary hospitals, and while the federal government has deployed military resources, care at some of these sites (such as those operated by the military) is provided free of charge.

6. Operational impacts

How will operational disruptions and cash flow volatility impact carriers' reserve estimates used for pricing?

Short-term medical reserve calculations generally rely on either a developmental approach (examining past payment patterns) or a projection approach (trending estimates forward). With many working in unfamiliar environments, delays in claim submission (from providers to carriers) and in claim processing may make incurred but not reported (IBNR) calculations (and the resulting fully incurred estimates) more volatile, just as carriers are trying to glean insights into how their current-year experience is emerging.

With economics changing in short order for many, carrier revenue could change significantly. For individual market enrollees, particularly those who qualify for Advance Premium Tax Credits (APTCs), will grace periods become a regular occurrence in the months to come (and if not, will significant lapseation effects replace them)? In the group market, will the appetite for self-insurance change as employers seek cost predictability in the fully insured market?

How will carriers' delivery systems need to adapt, and how will that influence risk and costs in 2021?

Plans must ensure that care management functions continue to appropriately monitor and guide treatment and adherence by patients with chronic and ambulatory care sensitive conditions, and should consider how changes in the delivery of care may affect the cost and effectiveness of care management practices and the associated medical costs of high-risk enrollees.


Plans should also consider whether existing policies and investments support the changing patterns of care during the pandemic (for example, as enrollees seek primary care through virtual clinics). As discussed above, social distancing may need to continue in some fashion until a vaccine exists, and telehealth has already shown strong growth promise in the pandemic environment. Nimble carriers may invest in their telehealth capabilities as patients seek it out.

Plans should also consider the downstream impact of these new care patterns on risk score capture. On April 10, the Centers for Medicare and Medicaid Services (CMS) released guidance on how Medicare Advantage will incorporate telehealth, and followed with ACA guidance on April 27.

Last but not least, appropriate coding practices have become a vital part of carriers’ risk strategies in risk-adjusted markets and in value-based care arrangements. Disruptions to healthcare costs and risk score coding from COVID-19 and social distancing may complicate existing risk-sharing arrangements and performance benchmarks, with financial impacts varying significantly across market participants (both providers and payers).

How might general and administrative (G&A) expenses be impacted by the pandemic?

Member services and provider relations may need to handle an increased volume of incoming and outgoing inquiries and communications due to the disruption and uncertainty associated with COVID-19 care and reimbursement, necessitating increases in staffing for those departments. Plans may experience abnormal volatility in enrollment, affecting the required expense load per member per month (PMPM). Information technology expenses for carriers may increase while workforce productivity declines as they, like other employers, grapple with work-from-home orders, disruptions in childcare, and potential outbreaks of COVID-19.

How will the pandemic impact carriers’ risk-based capital calculations, where both the numerator (TAC) and denominator (ACL) could change quickly?

Own risk and solvency assessment (ORSA) reports are necessarily qualitative in nature and always present a challenge in creative forward-thinking scenario development. The American Academy of Actuaries’ regulator guidance on ORSA did include pandemics as a specific consideration when analyzing capital adequacy, but everything is obvious in hindsight—how did carriers actually consider pandemics in their analyses? And what’s the next pandemic-level event that carriers have yet to consider?

What other operational impacts should be considered?

The COVID-19 pandemic impacts carrier operations in many ways, and this paper only highlights some of them. A few weeks ago, another Milliman paper examined many of these operational impacts at greater depth; we recommend that carriers review this paper.

7. Future considerations

How will COVID-19 impact pricing beyond 2021?

Although the greatest period of disruption is likely happening now as carriers plan for the remainder of 2020 and look ahead toward 2021, carriers should already be preparing for 2022 and beyond. It is safe to say that the 2020 experience period will require significant adjustment when used for rating purposes for 2022. Compensating adjustments will need to be made to "unwind" the impact from the pandemic, including removing the costs of acute COVID-19 treatment, and accounting for deferred or forgone services. An adjustment to account for longer-term impact to morbidity from COVID-19 may also be warranted, depending on the nature of the covered population being priced.

Similar concerns apply to large group rating, as group-specific experience is typically used as a starting point for developing rates. Plan sponsors that were previously rated with experience may see the credibility weights used to blend experience decrease, depending on how their enrollment levels dropped from layoffs or other reasons during 2020. Carriers should revisit large claims pooling guidelines used in pricing, as they may need to adjust pooling charges and thresholds accordingly to avoid excessive or inadequate pooling. Rating for groups in certain industries or concentrated in geographic areas hit harder by the outbreak should also be closely monitored.

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32 According to Section 9.8.11.2 of the 2018 Risk Adjustment Data Validation (RADV) protocols: “For the purposes of RA data submission, and subsequent data validation under HHS-RADV, any service provided through telehealth that is reimbursable under the state law of the issuer’s state of licensure that otherwise meets RA data submission standards may be submitted.” See https://www.regtap.info/uploads/library/RADV_2018Protocols_070319SCR_070519.pdf.


What is the potential impact to MLR reporting?

Carriers should also consider the implications of the 2020 experience year on future federal medical loss ratio (MLR) reporting. The effect of large swings in reported MLRs is one-sided as federal rules require carriers to issue rebates in years with favorable experience, but carriers do not receive credit in unfavorable years.

MLR reporting uses a three-year window of experience; in the case where there may be excessive losses from COVID-19 in 2020 and carriers attempt to reaccumulate surplus in subsequent years, plans may be liable for rebates in 2023 when the 2020 experience is no longer included. Alternatively, if 2020 claim costs are low from suppressed care while losses are incurred in 2021, plans may be required to pay out one year of rebates (for 2020) before the offsetting 2021 experience may be considered, particularly in light of lower loss ratios and high individual market rebates in the 2018 and 2019 reporting years.

8. A range of potential outcomes

With so many moving parts, how can health plans get a handle on the net cost impact of COVID-19 for commercial coverage in 2021?

One instructive approach is to think through ranges of likely scenarios across the full set of considerations, from low-cost to high-cost, and consider how emerging information affects the relative likelihood of one scenario over another.

For example, at one extreme we can imagine a low-cost scenario for health plans (in this example, plans offering individual ACA coverage):

- Economic disruption and special enrollment periods (in state-based exchanges) drive substantial enrollment by otherwise healthy individuals and families
- Social distancing continues well into 2021 leading to continued deferral of care
- Infections remain under control limiting acute COVID-19 costs
- The vaccine (if and when available) is subsidized such that health plans bear a minimal cost
- Drivers of increased cost post-outbreak (such as pent-up demand, provider cost shifting, and population health deterioration) are insufficient to outweigh the reduction in typical healthcare costs

At the other extreme, we can imagine a high-cost scenario:

- Adverse selection during 2021 open enrollment leads to a higher-risk enrollee population
- Providers demand substantial increases to reimbursement in order to remain financially solvent
- Severe COVID-19 costs in the beginning of 2021 are paired with a rush of non-COVID-19 costs from pent-up demand and worsening population health once a vaccine (expensive and nonsubsidized) becomes widely available.

While it is unlikely that either of these scenarios plays out exactly as described above, by thinking about the likelihood of such extreme scenarios and the considerations that drive them, this type of thinking can help plans can begin to settle on a best-estimate impact suitable for 2021 rating. Sensitivity analyses and rigorous scenario testing are critical to ensuring that a carrier’s risks are adequately managed.

Limitations and Qualifications Statement

This paper is intended to provide an educational overview of considerations for healthcare payers related to the potential impact of COVID-19 on health insurance costs and revenue requirements in 2021 and beyond. It is not meant to represent an exhaustive list of all relevant considerations nor predict which outcomes are most likely to happen. The discussion within is premised on the current understanding of the spread of COVID-19, including assumptions as to how many people are infected in a population, how severe those infections are across the population, and actions taken to limit infection. Scientific knowledge of these items is incomplete and new data on the spread of COVID-19 in the United States is still emerging. In addition, actions taken by governmental authorities and the healthcare system related to the COVID-19 pandemic are rapidly changing. Consequently, considerations for health plans and their relative importance will evolve as new information becomes available and new actions are taken by the authorities and other stakeholders. Due to the limited information available on the pandemic, any analysis is subject to a substantially greater than usual level of uncertainty.

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