GUY CARPENTER

Estimating the Impact of COVID-19 on the U.S. Medical (Re)Insurance Market

Background on the Novel Coronavirus Outbreak

At the end of the 2019 calendar year, the government in China identified a novel coronavirus (COVID-19) that infected dozens of patients. While authorities took steps to control the spread, by the end of January 2020, the virus had spread outside of China, including to the United States. Shortly thereafter, the World Health Organization (WHO) declared a pandemic.

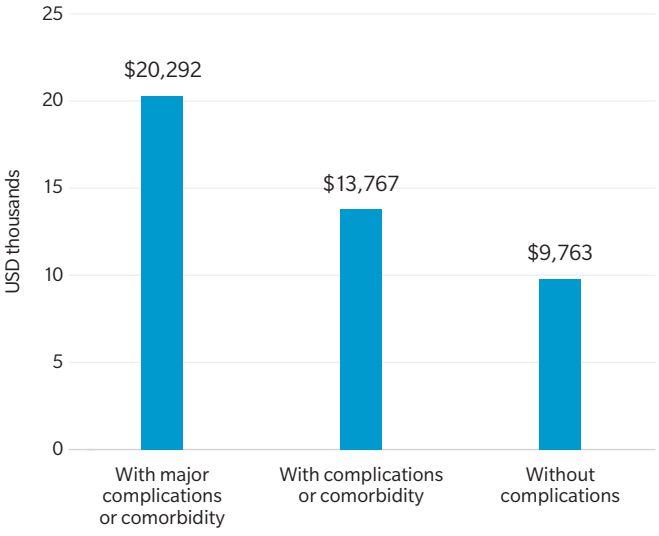
As the COVID-19 situation is changing on a daily basis, the impact to the insurance and reinsurance markets is not yet fully known. However, given the significance of the developments, Guy Carpenter is providing the following view of how COVID-19 may impact the medical (re)insurance market.

COVID-19 Timeline

2019	2020							
December	January 11	January 20	January 30	February 9	February 29	March 11	March 13	April 21
Virus identified	First death reported in China	First confirmed U.S. case in Washington State	WHO declared a global health emergency	Death toll in China surpassed the number of deaths from SARS	First death reported in the United States	WHO declared the virus a pandemic	President Trump declared a national emergency	CDC reported 746,625 confirmed cases and 39,083 deaths in the United States;[1] Globally, WHO reported 2,356,414 confirmed cases and 160,120 deaths.[2]

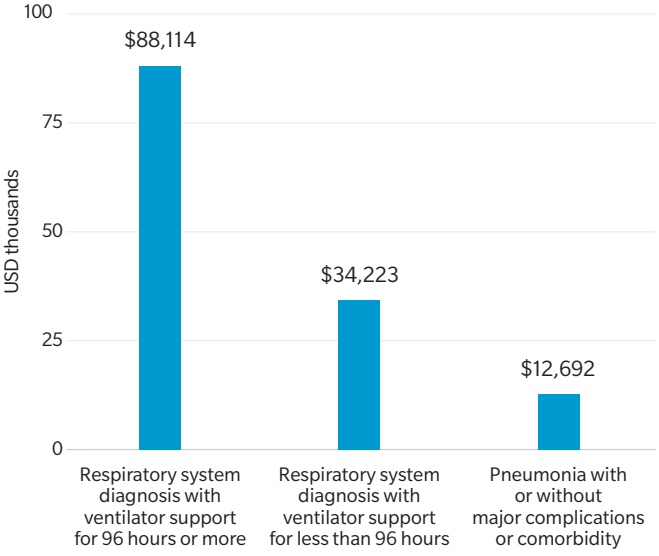
1. https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html
2. https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Figure 1. Average Total Cost of Treatment for an Inpatient Admission for Pneumonia Among Large Employer Plans, by Level of Complexity, 2018



Source: KFF analysis of IBM MarketScan Commercial Claims and Encounters Database, 2018

Figure 2. Median Total Cost of Treatment for an Inpatient Admission for Respiratory Conditions Among Large Employer Plans, 2018



Source: KFF analysis of IBM MarketScan Commercial Claims and Encounters Database, 2018

Analysis of Potential Medical Claims

The societal, operational and human costs associated with COVID-19 are prominent in our thoughts, discussions and efforts. While these costs are undoubtedly high, health insurers and reinsurers are also closely monitoring the direct and indirect financial impact of the virus. The growing use of telemedicine and capacity constraints within our healthcare system will potentially dull utilization increases; however, the financial costs will still be significant.

Examples of the types of direct insurance claims associated with COVID-19 include testing, doctor/emergency room visits, hospital admissions, stays in intensive care units and end of life care. As shown in Figure 1, the insurance costs in the United States associated with an inpatient hospital stay for pneumonia (a common complication from COVID-19) range from nearly USD 10,000 to over USD 20,000 (in 2018 dollars), depending on the length of stay, geography, coverage type and comorbidities of the patient. While the exact cost of testing for COVID-19 varies, according to FAIR Health, for patients not requiring a hospital stay, the costs for flu testing and accompanying doctor visits can range from USD 200.00 to USD 500.00.[3] While less common, severe cases of COVID-19 may develop into acute respiratory distress syndrome (ARDS), costing health insurers hundreds of thousands of dollars per member.

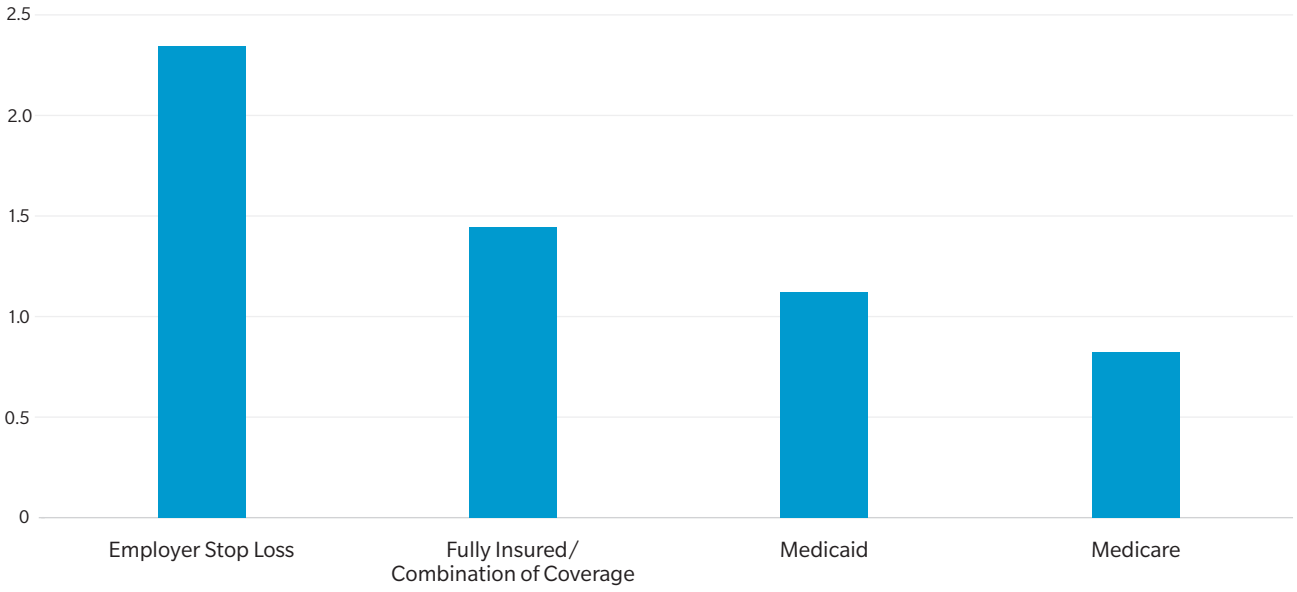
For patients who require more extensive treatment, including with a ventilator, costs are much higher. As shown in Figure 2, costs for treatment with ventilator can range from USD 34,000 for ventilator support of less than 96 hours to USD 88,000 for ventilator support for more than 96 hours.

There are also a number of indirect medical cost considerations. For example, health insurers offering Administrative Services Only and employer stop loss products may be exposed to increased credit risk should employers not have available funds for paying employer claims or premiums. This risk would appear to be greatest for small employers, potentially blunting the increase in credit risk exposure, as small employers are more likely to purchase fully insured plans. Health insurers are also keeping an eye on the proportion of members seeking out-of-network care, which could lead to increase costs for both the insurer and member. While some of the largest U.S. cities are now sheltered in placed, increased out-of-network utilization may result if individuals become sick while self-isolating in rural areas or not returning home because of travel concerns.

There is growing encouragement from governments and healthcare providers to postpone elective surgeries. Eliminating non-essential surgeries allows hospitals to re-allocate their resources to better manage a surge in patients needing medical care resulting from contracting COVID-19. Should this trend continue, and it appears it will, health insurers may benefit from a near-term decrease in utilization from other-than-COVID-19 diagnoses, partially offsetting the increased utilization resulting from the pandemic.

3. Business Insider

Figure 3. Average Member Retention: Healthcare Clients – USD Millions



Source: Guy Carpenter

Which Types of Carriers and Reinsurance Coverages are Most Impacted?

There are three main types of medical reinsurance: excess of loss, quota share and aggregate. Of these, excess of loss, also known as specific reinsurance, is the most common. Excess of loss reinsurance reimburses health insurers when annual per member medical costs exceed a pre-determined threshold. According to data from Guy Carpenter's 2020 GCMarketPulse Report, shown in Figure 3, the average per member retention for Guy Carpenter healthcare clients is just under USD 1.5 million, with Medicare carriers generally having the lowest retentions and employer stop loss carriers purchasing higher retentions. Given these retention levels and the previously discussed estimated costs associated with COVID-19 care, it is unlikely this outbreak will have a wide impact on the majority of excess of loss reinsurance contracts. However, certain health insurers (and captives) purchasing relatively low per member retentions will likely experience a material impact at their next reinsurance renewal.

While less common, quota share and aggregate reinsurance contracts have a higher likelihood of being triggered by the COVID-19 pandemic. In contrast to excess of loss contracts, which generally provide per member severity protection, quota share and aggregate contracts provide health insurers with financial protection as a result of an increased frequency of claims. While we do not anticipate seeing a significant spike in individual claim severity, as more and more individuals become infected, claim frequency is significantly increasing. On the carrier side, this increased frequency may lead to losses for health insurers offering employer stop loss policies including aggregate coverage.

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Table 1. Hospitalization, Intensive Care Unit (Icu) Admission, and Case–Fatality Percentages for Reported Covid–19 Cases, by Age Group — United States, February 12 – March 16, 2020

Age Group (yrs) (no. of cases)	Hospitalization (%)	ICU Admission (%)	Case-fatality (%)
0-19 (123)	1.6-2.5	0	0
20-44 (705)	14.3-20.8	2.0-4.2	0.1-0.2
45-54 (429)	21.2-28.3	5.4-10.4	0.5-0.8
55-64 (429)	20.5-30.1	4.7-11.2	1.4-2.6
65-75 (409)	28.6-43.5	8.1-18.8	2.7-4.9
75-84 (210)	30.5-58.7	10.5-31.0	4.3-10.5
≥ 85 (144)	31.3-70.3	6.3-29.0	10.4-27.3
Total (2,449)	**20.7-31.4**	**4.9-11.5**	**1.8-3.4**

Lower bound of range = number of persons hospitalized, admitted to ICU, or who died among total in age group; upper bound of range = number of persons hospitalized, admitted to ICU, or who died among total in age group with known hospitalization status, ICU admission status, or death.

Source: Severe Outcomes Among Patients with Coronavirus Disease 2019 (COVID-19) — United States, February 12–March 16, 2020. MMWR Morb Mortal Wkly Rep. ePub: 18 March 2020. DOI: http://dx.doi.org/10.15585/mmwr.mm6912e2

As we learn more about COVID-19 every day, it is clear that it has most heavily affected older individuals and those with underlying medical conditions, especially respiratory illness. As demonstrated in Table 1, the hospitalization, intensive care unit and fatality rates are right skewed on the age curve with a significant increase in likelihood of higher care needed for individuals 65 and older. Because the vast majority of this age demographic is served by Medicare or Medicare Advantage health plans, those health insurers with an outsized Medicare population may see adverse claims selection compared to more diverse peers.

Age is one factor impacting the hospitalization and death rates. However, another important factor is the presence of other underlying disease. The CDC reported that approximately 90 percent of patients hospitalized with COVID-19 had one or more underlying conditions, the most common being obesity, hypertension, chronic lung disease, diabetes mellitus and cardiovascular disease.[4]

COVID-19 is not geographically discriminate. Viruses in general are more likely to quickly spread within densely populated areas creating hot spots of infection, similar to what is occurring in Seattle, San Francisco and New York. As a result, regional and single-state health insurers (for example, county-based Medicaid health plans) may see a disproportionate claims impact if there is a localized outbreak in the area where their plans are offered. Larger health insurers will likely see increased claims frequency from members across the country; however, their spread of risk by age and geography, along with often very strong balance sheets, should shield these carriers from a longer-term financial impact.

Potential for Extra-contractual Obligations

As the virus continues to spread within the United States, questions began to arise about whether and how coronavirus-related testing and treatment would be covered by public and private health insurers. The concern is that potential costs may prevent those patients who may need testing, from pursuing testing. The largest health insurers voluntarily pledged to cover COVID-19 testing without cost sharing, though without a uniform standard this may lead to confusion and lack of consistency. In addition, some state governments quickly began passing legislation requiring health insurers to cover testing without cost sharing. On March 18, 2020, the Families First Coronavirus Response Act was signed into law. The Act addresses a number of items, including mandating that diagnostic testing for the coronavirus be covered without any cost sharing or prior-authorization. This would also apply to state Medicare, Medicare Advantage, Medicaid and Children's Health Insurance Programs plans.

Initially, major health insurance carriers had not agreed to waive cost sharing for treatment of the virus.[5] However, on March 25, 2020, CVS Health/Aetna announced they will waive cost sharing for COVID-19 treatment for Aetna-insured commercial plan sponsors effective immediately for any such admission through June 1, 2020. Shortly after, Cigna and Humana also agreed to waive cost sharing for treatment. At this time, it appears that all major carriers have agreed to waive cost sharing associated with COVID-19 treatment.

The elimination of cost sharing for COVID-19 testing pertains primarily to how those items will be handled in the primary insurance market, but what about handling within reinsurance

4. https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e3.htm?s_cid=mm6915e3_w
5. https://khn.org/news/trump-wrongly-said-health-insurers-will-pay-for-all-coronavirus-treatment/

coverage? While the cost of testing is minimal compare to typical retentions, at least one reinsurer (and we hope others to follow) has agreed to cover the additional plan costs associated with cost share waivers. However, especially for quota share and aggregate coverage, health insurers should verify that their reinsurance coverage will align with any changes in the underlying coverage provisions.

Reinsurance Coverage and Rate Implications

The implications of COVID-19 for the medical reinsurance market are evolving; initial indications are that it will have a minimal long-term influence on rates and contractual terms for the majority of placements. In the short-term, while reinsurers are fully functional, there are likely to be additional questions during the underwriting and disclosure process creating a longer than average renewal timeline.

As previously discussed, the majority of Guy Carpenter's clients purchase excess of loss reinsurance with company retentions higher than the anticipated costs associated with COVID-19 care. While every client situation is unique, and certain reinsurance programs, for example, quota share, aggregate and medical catastrophe, will be impacted, the majority of reinsurance contracts are not likely to be triggered. However, those health insurers with lower retentions who have members being treated for ARDS will likely generate claims activity for the reinsurance market.

For future reinsurance renewals, health insurers should be prepared to answer a longer list of questions around pandemic preparedness, historical coronavirus claims and company financial stability. Additionally, we anticipate reinsurers will increase their scrutiny on Medicaid and Medicare insurers who include insolvency coverage within their reinsurance contracts. This provision is a type of cut-through whereby the reinsurer is responsible for directly paying ground-up medical claims (up to a predefined limit), should the insurance company become insolvent. Going forward, coverage for insolvency for certain government-sponsored health plans may be limited or come at an increased cost.

Guy Carpenter has already seen an increased interest for medical catastrophe reinsurance. This type of coverage protects health insurers (and health providers) from catastrophic events causing an accumulation of claims in a given year. Medical catastrophe reinsurance can cover multiple events such as earthquake, terrorism, hurricane, or, be peril-specific (pandemic only). As demand for this product will certainly increase, the supply of reinsurance capacity is in flux and may not be available at pricing levels that health insurers are willing to pay. One factor limiting the supply of pandemic-specific catastrophe reinsurance is that reinsurers cannot diversify their risk by writing different geographies. While certain regions of the world may be more or less impacted, a pandemic, by definition, is spread across the globe. Guy Carpenter will continue to work with our clients and reinsurance partners to build capacity for this coverage.

About Guy Carpenter

Guy Carpenter & Company, LLC is a leading global risk and reinsurance specialist with more than 3,100 professionals in over 60 offices around the world. Guy Carpenter delivers a powerful combination of broking expertise, trusted strategic advisory services and industry-leading analytics to help clients adapt to emerging opportunities and achieve profitable growth. Guy Carpenter is a business of Marsh & McLennan (NYSE: MMC), the world's leading professional services firm in the areas of risk, strategy and people. The company's 76,000 colleagues advise clients in over 130 countries. With annual revenue of $17 billion, Marsh & McLennan helps clients navigate an increasingly dynamic and complex environment through four market-leading businesses including Marsh, Mercer and Oliver Wyman. For more information, visit www.guycarp.com and follow Guy Carpenter on LinkedIn and Twitter @GuyCarpenter.