Managed Health Care

Investment Thesis

We have a bullish outlook for the Managed Health Care industry over the long term. The sub-industry has outperformed both the whole market and the health care sector since 2005, and we believe that the outperformance will continue to be robust as the drivers play on the industry’s side in the long term.

Tailwinds

- The U.S. Health Care expenditures as a percentage of the US GDP will continue to rise as life expectancy increases.
- U.S. Insurance prices have outpaced the overall inflation and will continue to do so because of the lower supply of doctors due to increasing college tuition and fees.
- The proliferation of patent expirations and the increase of cheaper generic drugs will lower medical cost ratios, which allow for a higher profit margin.
- The increase in Telehealth usage may cut costs because it allows doctors to perform their work without being in a fixed building. More patients can then be served with lower waiting times, increasing efficiency.

Headwinds

- The expansion of the Affordable Care Act may increase government involvement and regulation that may lower profit margins, such as increasing the medical loss ratio requirement.
- The reopening of the Health Insurance Marketplace may leave insurance companies with fewer commercial enrollments needed to maintain a sustainable insurance pool (scale).
- The COVID-19 recession increased Medicare and Medicaid demand but lowered the commercial market because of massive layoffs.

Key Industry Statistics

<table>
<thead>
<tr>
<th>Players’ Market Cap (In $ Billions)</th>
<th>UnitedHealth Group</th>
<th>377.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVS Health Corp</td>
<td>100.67</td>
<td></td>
</tr>
<tr>
<td>Anthem, Inc.</td>
<td>94.22</td>
<td></td>
</tr>
<tr>
<td>Cigna Corp.</td>
<td>87.89</td>
<td></td>
</tr>
<tr>
<td>Humana Inc.</td>
<td>57.34</td>
<td></td>
</tr>
<tr>
<td>Centene Corp.</td>
<td>38.09</td>
<td></td>
</tr>
<tr>
<td>Molina Healthcare, Inc.</td>
<td>14.76</td>
<td></td>
</tr>
</tbody>
</table>

Valuation

- Div Yld (%): 1.26
- P/E: 18.19
- P/E Fwd: 15.92
- P/BV: 3.30

Leverage & Liquidity

- Current Ratio: 1.07
- Net Debt to EBITDA: 0.16
- Total Debt to EV: 0.17

Profitability

- Gross Margin: 22.72
- Operating Margin: 6.61
- Profit Margin: 4.43
- Return on Assets: 6.51
- Return on Equity: 17.84

Earnings Estimates

<table>
<thead>
<tr>
<th>Year</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>Current</th>
<th>2021E</th>
<th>2022E</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROE</td>
<td>18.35%</td>
<td>19.94%</td>
<td>17.84%</td>
<td>17.84%</td>
<td>21.16%</td>
<td>22.09%</td>
</tr>
<tr>
<td>FCF/Share</td>
<td>$106.20</td>
<td>$153.02</td>
<td>$222.46</td>
<td>$222.46</td>
<td>$152.26</td>
<td>$192.72</td>
</tr>
<tr>
<td>EV/EBITDA</td>
<td>11.47x</td>
<td>11.89x</td>
<td>11.53x</td>
<td>10.64x</td>
<td>10.65x</td>
<td>9.52x</td>
</tr>
</tbody>
</table>

Industry Description

The Managed Health Care or the Health Insurance sub-industry, a part of the Health Care sector, comprises companies that own and operate Health Maintenance Organizations and other managed plans. Health insurers provide value by helping insureds pay for their healthcare expenses in exchange for premiums that are mostly charged regularly. They create profits by collecting more premiums than they pay as medical benefits. They also invest the cash inflows into the bond and equity markets to gain risk premiums until they pay them back as benefits.

Important disclosures appear on the last page of this report.
The chart above shows how Managed Healthcare sub-industry outperformed the market and the Healthcare sector itself. It had lagged around 2006-2015, but after 2015, it had grown faster than the other benchmarks. The drivers of these vast increases will be discussed further.

**Health Care Expenditures**

The chart above shows how much the United States disproportionately spends on Health Care. Other countries do not spend as much relatively because their health care system is mostly government-run. The US, however, is the leader in innovation where biopharma and complicated medical equipment technologies are invented. The U.S. then provides these inventions to the rest of the world.

The chart above shows that expenditures on health care kept on growing as a percentage of GDP. We believe this will continue to grow up to 20% for the next decade as we
are finding technologies that will extend life expectancy rates and maintain better health.

**INDUSTRY SEGMENTS**

**Private or Commercial & Out of Pocket**

The U.S. is the only major developed country that does not have Universal Health Care. For this reason, a lucrative opportunity lies for private insurers in this segment. Although there is a low barrier of entry (anyone can start an insurance company), the scale will determine their operational efficiency and profitability.

![Chart showing PRIVATE HEALTH INSURANCE AND OUT OF POCKET](image)

*Source: Centers for Medicare & Medicaid Services [3]*

The chart above shows the expected increase in private health insurance and out-of-pocket expenditures. It is likely that Private Health insurance expenditures will continue to grow up to around $2B and Out of Pocket expenditures to grow $564M by 2028. [3]

**Medicare & Medicare Advantage**

Medicare is a socialized health insurance program mainly for disabled and people aged 65 and over. It is financed by U.S. taxpayers' payroll taxes and Social Security benefits. Medicare Advantage, launched in 2003, offers extra benefits on top of the Medicare such as dental vision, and gym memberships. According to the CMS, Medicare enrollments are projected to grow at 2.8% in 2021 and 2022. The growth is primarily driven by accelerating growth in hospital and clinical services demand. [3]

**Medicaid**

Medicaid is a socialized health insurance program by both federal and state governments to cater to low-income demographics. Medicaid enrollments tend to rise during economic downturns because more people are laid off. Most people who just lost their jobs would not be able to afford Consolidated Omnibus Budget Reconciliation Act (COBRA) benefits and thus, forced to opt-in to Medicaid.

It had been expected that Medicaid enrollments would rise 1.8% in 2020 and slow down to 1.4% and 1.1% in 2021 and 2022, respectively. [3] We believe that Medicaid enrollments grew much higher when it was initially projected in 2019. Both HUM (469K to 772.4K) and CNC (9.646M to 19.056M) doubled their Medicaid enrollments from 2019 to 2020. [2]

![Chart showing MEDICARE AND MEDICAID EXPECTED ENROLLMENT GROWTH](image)

*Source: Centers for Medicare & Medicaid Services [3]*

**VHA, TRICARE, SCHIP & Others**

The rest of the insurance programs are mostly government-funded, either federal or and state. More programs will be enacted over time, but I do not see any government programs shifting to the private market soon, so that the report will focus on the other significant market segments.

**RECENT DEVELOPMENTS**

**COVID-19 and Potential Lockdown**

The coronavirus pandemic has desolated not only the U.S. but also the whole world. The new variant from South Africa becomes one of the growing concerns as it is known to spread more quickly and deadly than the initial virus strain. We expect the Biden Administration to issue another national lockdown if the active cases reach around 15 to 20 million Americans. When lockdowns are in place, small businesses such as dine-in restaurants and full-
service bars will be forced to close their doors, and the unemployment rate will rise. Medicaid enrollments will also increase due to workers losing their employer-sponsored health insurance, but commercial enrollments will go down due to layoffs. We do not expect that HUM will not be affected significantly since most of their revenues come from Medicare.


**Telehealth**

Telehealth is the delivery of health care services via remote technologies. Statista projects that Telehealth will rise to around 80 million visits by 2022.[13] The projection mentioned was released in June of 2019, before the pandemic. When the pandemic hit, more people are forced to use Telehealth instead of going to a physical hospital due to concerns of getting infected from the virus. The chart below shows a massive increase in Telehealth demand during the onset of the pandemic. At the same time, there was a lower number of emergency department visits.

Source: Statista, Telehealth Visits Projection [13]

The chart below shows that younger people use Telehealth more than older adults. Although, for all age groups, the majority is willing to use Telehealth. We believe that the COVID-19 pandemic forced people, especially the more aging population, to use Telehealth, which further increases acceptability. We expect the Telehealth trend to continue to grow as people get more comfortable with virtual appointments. Telehealth lowers the overall costs instead of in-person meetings because there are fewer fixed costs such as building and land. More patients will also be served with lower wait times because the doctors and the nurses do not have to move around to rooms so much.

Source: Statista, Telehealth Willingness Among Adults, 2019 U.S. [2]
Patent expirations

The increase in generic drugs due to patent expirations lowers the medical costs ratios for insurers and therefore increases margins. Below is a list of high-grossing drugs that lost their patent protection. For example, Lipitor, a Pfizer anti-cholesterol drug, generated nearly two billion dollars of revenue (about 16% of its revenue), expired in 2010. The "patent cliff" is bullish for the health insurance industry because people can now get a cheaper drug that costs only a fraction of the original patented drug, meaning insurance companies will not have to spend as much paying back benefits.

ACA and Health Care Marketplace

The Biden Administration signed an executive order to reopen the health insurance marketplace for three months starting February 15, 2021, so people that lost their jobs and became uninsured can shop for medical insurance [9]. Open enrollment allows unemployed people to get the protection they need during the worldwide pandemic. The reopening of the open-enrollment period means that more people will be opting for Medicaid plans. During the fiscal year ended 2020, HUM and CNC doubled their Medicaid enrollments.[2] We believe that the economic environment will further increase the Medicaid enrollments for the next few months and then slowly decrease as the economy recovers and people get back to the job market again.
represents the outpace of college tuition and fees over the last fifteen years.

Projected National Health Expenditures

With increasing health care prices faster than the overall inflation, National Health Expenditures is projected to grow at an average annual rate of 5.4% for the next seven years to reach around $6.2 trillion by 2028. We believe the projection is aligned with my conviction that the health care expenditures pie will grow more significant as the supply of talent decreases over time.

Customer Mix Change

It is expected that Private Health Insurance expenditures will command more minor of the total mix (from 33.80% in 2020 to 32.20% in 2027). Out of Pocket expenditure mix is also forecasted to decrease from 10.09% in 2020 to 9.22% in 2027. With ACA and the further opening of the health insurance marketplace, private insurance carriers are forced to compete with the government and across state borders.

CMS also projects that commercial customers as a percentage of Hospital Care will go down from 45.5% in 2020 to 43.6% in 2027. Medicare is expected to go up from 25.6% in 2020 up to 28.7%, which is a good trend for companies concentrating on the Medicare segment, such as Humana and Centene.

CMS’s projections are fair and aligned with what we believe. We believe that there will be fewer uninsureds over time, and more people will rely on the government's insurance programs. However, we do not think a radical change to a Universal Healthcare Insurance system will be implemented in the future as I do not believe it will fix the current U.S. health care system. Government roadblocks will also prevent it from happening.
Demographic Change

By 2030, all baby boomers will be age 65 or older. It is projected that more people will opt into the Medicare and Medicare Advantage over the next few years as baby boomers will be retiring and therefore bullish for Humana and Centene. [8]

**COMPARABLES ANALYSIS**

**Enrollment Exposure %**

The chart above suggests that the key players in the sub-industry specialize in a specific market segment or customers. UnitedHealth’s and Cigna's businesses are catered more on commercial insurance. Humana and Centene specialize in Medicare customers. Cigna, Centene, and Molina focus on Medicaid enrollments. The different customer mix will affect how much the margins they can command and how much growth are there in each segment.

![ENROLLMENT % EXPOSURE (Q4 2020)](image)

*Source: Bloomberg. Key Players Enrollment Concentration [2]*

**Actuarial Capability**

Medical ratios represent how much an insurer uses to pay out every premium dollar to its customer’s medical claims. The higher the medical loss ratio, the less profitable the operations will be. The lower it is, the higher profitability margins a company earns. A lower medical ratio may also imply that a company has better actuarial talent. Molina, Centene, and Wellpoint operate at a higher medical loss ratio vs. the industry. It can be implied that if a material downward change of enrollments persists, they will be forced to increase prices, and therefore be less competitive relative to the peers. However, they serve more Medicaid and Medicare customers whose revenue source is the government who can set regulations on loss ratios. With the ACA provision, insurance companies must spend 80% (for the individual and small group market) or 85% (for large group market) of their premium income on health care claims and quality improvement.

![MEDICAL LOSS RATIO](image)

*Source: Bloomberg. Key Players' Medical Loss Ratios [2]*

Although Humana’s customers are also mainly Medicare and Medicaid, they are operating with a medical loss ratio around the industry index. This fact makes Humana the leader among the above comparison. UnitedHealth and Cigna use at the lowest (best) medical loss ratios. We believe it is due to their large scale and excellent actuarial capability. The reason is that they have more revenue coming from the commercial market, meaning their profits come mainly from companies that provide insurance to their employees. UNH and CI can then demand a higher rate versus if they were serving the government.

**Premium Profitability per Segment**

**Commercial**

The chart below shows that Humana was able to charge a higher price compared to UnitedHealth and Cigna. UNH, however, commands the highest total revenue ($55.872B), about eight times in comparison to HUM ($6.850). HUM may command a higher income per enrollment, but UNH has the scale. Over the long horizon, all the companies that serve the commercial market had grown their revenue per enrollment.
MOH was able to command a higher Medicare revenue per enrollment. However, MOH ($27.2M) does not have the scale that UNH ($90.764B) and HUM ($62.213B) have. We believe that the jump in MOH’s revenue capability is caused by a massive demand for Medicare plans (43K to 115K enrollments from 2019 to 2020) due to older employees retiring after the pandemic. Both HUM and UNH are also poised to benefit as more baby boomers are retiring and turning 65.

Medicaid

UnitedHealth commands the highest revenue per enrollment ($7K) versus HUM and CNC ($5.467K and $5.447, respectively). Centene, however, has the highest number of enrollments, 19M versus 6.62M for UNH. We believe UNH is poised to increase its scale as they diversify to the Medicaid market. CNC and HUM are also currently in an excellent position to expand their Medicaid business as more demand will come after the onset of the COVID-19 pandemic.

Overall Profitability per Member per Month

HUM ($598.58) and UNH ($584.1) gain the highest premium per member per month, while MOH ($378.2) and CNC ($372.01) gain the lowest. As explained earlier, MOH and CNC may have the lowest revenue capability since the bulk of the source of their revenue is from the government. However, HUM stood out relative to their competition because HUM serves the Medicare and Medicaid market the most.

HUM ($497.26) and UNH ($462.1) have the highest costs relative to CNC ($320.73) and MOH ($326.97). Typically, the lower the costs, the better; however, the government requires health insurance companies to spend at least 80% of their revenue as medical benefits. Since both HUM and UNH commands a higher revenue per member, they can
provide more medical services. With scale, customers will have better and more benefits than their peers, which increases customer satisfaction and further increases enrollments.

![Overall Medical Cost Per Member Per Month]

Source: Bloomberg. Overall Cost per Member per Month [1]

UNH ($122) and HUM ($101.32) operate at the highest margin versus CNC ($51.28) and MOH ($51.23). Both UNH and HUM stood out from the comparison over the long term because of their ability to command higher prices, more medical benefits, and higher margins.

![Overall Margin Per Member Per Month]

Source: Bloomberg. Overall Margin per Member per Month [1]

ECONOMIC DRIVERS

GDP 2021 Expectations

The consensus expectations for U.S. 2021 GDP growth recently went up from 3.9% in January to 6.25% in mid-April, outpacing the world GDP forecasts. The world GDP 2021 growth expectations went up from 5.2% to 5.8% in the same timeframe.[2] We believe US GDP growth should be higher up to 7% for 2021. We have a bullish conviction because as soon as more COVID-19 vaccines are distributed and more biotechnology companies announce new FDA-approved vaccines, business and consumer confidence will increase. More consumers are willing to spend and release their pent-up demand to travel, and businesses will have to supply those demands, boosting the overall economy.

![US and World GDP 2021 Economic Forecast]


Inflation Expectations

There has been a considerable rise in inflation expectations after the pandemic recession. However, it is still at the lower point relative to the 2018 and 2013 levels. As the above chart shows, inflation rose fast by the end of March and then slow down in April as the Fed is more worried about inflation running too cold than too hot.[14]

![ProShares Inflation Expectations ETF and FTSE 30-Year TIPS Index]

Source: Bloomberg. ProShares Inflation Expectations ETF and FTSE 30-Year TIPS Index [2]
The slowdown in inflation expectations was due to the pessimism in Fed's forecast. We expect a continued increase in inflation as the Fed continues its quantitative easing operations by buying bonds from the market. However, we do not expect the Fed to increase the Fed Funds target rate for another two years, as Jerome Powell discussed in his previous FOMC meetings. We believe that the Fed will somehow achieve its 2% inflation target rate in two years or by 2023.

### COMPARABLE ESG ANALYSIS

<table>
<thead>
<tr>
<th>Ticker</th>
<th>Total ESG</th>
<th>Environment</th>
<th>Social</th>
<th>Governance</th>
<th>Controversy Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM</td>
<td>23</td>
<td>0.1</td>
<td>17.5</td>
<td>5.5</td>
<td>2</td>
</tr>
<tr>
<td>CNC</td>
<td>23</td>
<td>0.1</td>
<td>15.9</td>
<td>6.7</td>
<td>2</td>
</tr>
<tr>
<td>UNH</td>
<td>21</td>
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<tr>
<td>CI</td>
<td>12</td>
<td>0</td>
<td>6</td>
<td>5.7</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: Sustainalytics, [9]

### Environment Risk

All the companies' environment score is about the same. UNH's water use was down from 942.9 in 2016 to 650 Mio. m³. HUM had also successfully brought down their GHG emissions from 129.2 in 2014 to 80.8 MTCO2e in 2019.

### Social Risk

Although CI has the best Social risk score, Cigna’s turnover per employee significantly went up from 0.66 in 2018 to 2.08 in 2019, which causes some concern. UNH has 40% minorities in the workforce, 26% are in the management. HUM has similar metrics, 42%, and 25%, respectively. CI, however, has the lowest percentage of minorities, 34% and 22%, respectively.

### Governance Risk

HUM has the best rating (5.6) out of the peers. The above chart shows that UHN has the lowest percentage of independent directors out of the peers. Having a higher rate of independent directors is essential because they serve as a guide and watchdog to ensure good governance.

### Total ESG Risk Score

CI has the best ESG Risk Score mainly because of their ability to disclose their ESG information and their compliance with the Global Reporting Initiatives, the most widely accepted framework for sustainability reporting. HUM has also opted for this standard while UHN, CI, and MOH have not.

### Controversy Level

Controversy Level identifies companies involved in incidents and events that may negatively impact stakeholders. The higher the score, the higher the risk there is. All of them have a two or Moderate level except for UNH, which has a 3. UNH's score is due to a probe by New York's Financial Services Department whether UNH's algorithm violates state anti-discrimination laws. The DFS's study found that healthier white patients were prioritized over sicker black patients. If proven guilty, there will be a significant repercussion on the company.
**TAILWINDS AND HEADWINDS**

**Tailwinds**

1. Insurance prices are expected to increase and will continue to outpace the overall inflation.
2. National health expenditures are projected to increase, which will create a suitable environment for health insurers.
3. The number of people willing and utilizing Telehealth services is expected to increase, propagated by the pandemic.
4. The "Patent Cliff" will create a higher margin environment for health insurers.

**Headwinds**

1. The number of Commercial or Private enrollments is expected to go down during the pandemic as people lose their employer-sponsored medical benefits. However, there will be a massive increase in Medicaid enrollments.
2. The reopening of the Health Care marketplace for enrollment will increase competition among health insurers because they will have to compete with the government.

**SUMMARY**

We believe the positives outweigh the negatives within the sub-industry over the long term. Among the peers within the sub-industry, HUM and UHN appear to command the highest operational efficiency. UHN's controversy over anti-discrimination laws causes significant concern, especially during these unprecedented times. Due to a rise in Medicaid enrollments, CNC also becomes a very attractive consideration. Further due diligence for these companies may reveal good investment opportunities.

**REFERENCES**

2. Statista. Statista.com
5. Centers for Disease Control and Prevention. https://www.cdc.gov/mmwr/volumes/69/wr/mm6943a3.htm

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