

*“Declare the past,  
diagnose the present,  
foretell the future.”*

*-Hippocrates*

# The Vitals

## Medical Mag

### ***Introduction:***

In today’s times of chaos, while it is still early to assess the impact of COVID-19, it is clear that it will leave a lasting impact in its wake, both in terms of the lives lost and effected and in terms of the opportunity cost to businesses severely impacted due to different forms of a lockdown in most countries. This newsletter covers the first quarter of 2020 as it unfolds and projects what the near future could bring for the GCC’s Healthcare Insurance Industry.

### ***Inside this Issue***

#### **The Impact of COVID-19 on Medical Insurance**

A pandemic has taken the world by storm. It has disrupted daily lives, rocked financial markets, and has left us perplexed about the future. We examine the various aspects of its impact on the medical insurance industry.

KSA’s long awaited Digital Transformation is finally taking its shape. We explore what has been done, what is happening and what is yet to happen.

#### **KSA’s Revolutionizing Healthcare Industry**

#### **GCC’s Booming Medical Insurance Industry**

An insight on the ever-changing dynamics of the GCC region’s massive Healthcare Industry — how is the market moving in different countries inside the region.

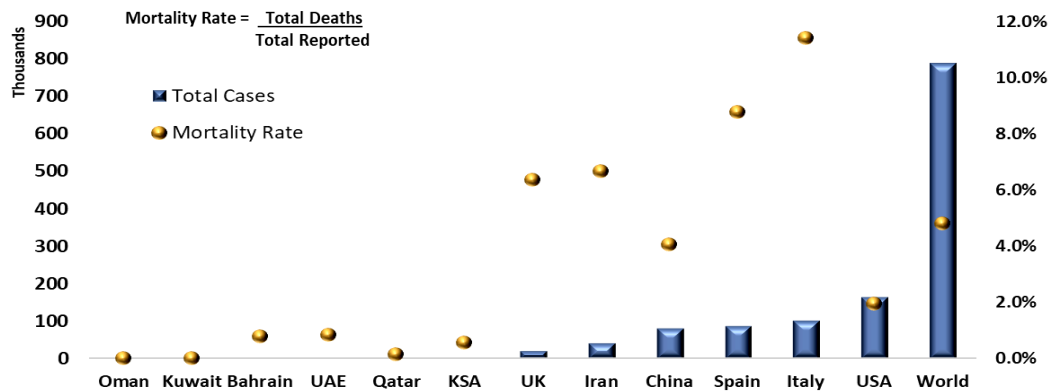


“We are not at the mercy of the #coronavirus ... Now that it has a foothold in so many countries, the threat of a pandemic has become very real. But it would be the first pandemic in history that could be controlled.”

- **Dr. Tedros Adhanom Ghebreyesus, Director General, WHO<sup>1</sup>**



## COVID-19 Mortality Rates by Country<sup>2</sup>



# The Impact of COVID-19 on Medical Insurance

### What can we learn from SARS and MERS?

There have been two previous coronavirus episodes in the world, MERS and SARS but it is difficult to extrapolate them to COVID-19. SARS had a much higher mortality rate. An infected person was quite obvious to tell apart. It was of a higher severity but a lower frequency. However, the case with COVID-19 is quite the opposite. Fortunately, the mortality rates are much lower compared to the previous similar epidemics but high transmission makes it harder to suppress it.<sup>3</sup>

Types of Coronavirus	Number of Reporting Countries	Estimated Mortality Rates
SARS <sup>4</sup>	29	9.56%
MERS <sup>4</sup>	27	34.4%
COVID-19 <sup>2</sup>	200+	4.81%

### Duration of Hospital Stay for COVID-19 Patients

Based on some early COVID-19 reports from the UK, China, and Italy, a study estimated that the patients will stay in the hospital for **8 days** if critical care is not required and **16 days** (with 10 days in ICU) if critical care is required. It also estimated that **30%** of the patients that are hospitalized will require critical care. While the duration of stay estimated is lower than that observed in other countries (which is lengthier in order ensure negative tests at discharge), it is still in line with general pneumonia admissions.<sup>8</sup>

The COVID-19 is a never before encountered member of the coronavirus family that has created a turmoil around the world. The first 100,000 confirmed cases developed over the course of nearly three months but it only took 12 days to reach the next 100,000. This signals that the speed of transmission is increasing.<sup>3</sup>

### Impact of the Governments' Measures against COVID-19 on Insurers

As per the directives issued by MoHAP, any COVID-19 related claims or charges from the point of confirmation of the disease must be treated as emergency cases, free of cost (including co-payments), regardless of what insurance cover the patient has.<sup>5</sup>

However, now that COVID-19 has been declared a pandemic, technically healthcare insurers (in UAE) are no longer liable to respond to the treatment of a policyholder diagnosed with COVID-19, due to a policy exclusion (“all healthcare services for internationally and/or locally recognized epidemics”), which recognizes this change. This exclusion is designed to ensure that health insurance providers do not face crippling and unsustainable losses in the face of a pandemic. Now the question arises if the state will be covering the cost of care.<sup>6</sup>

King Salman ordered for the COVID-19 treatment to be available, free of charge, for all citizens and expatriates in the Kingdom in need of medical care.<sup>7</sup> This may mean a relief for insurers in KSA.

According to a study, multiple non-pharmaceutical interventions (NPIs) aimed at reducing contract rates in the population are required in order to have a substantial impact on the spread of the disease. “A minimum policy for effective suppression is therefore population-wide social distancing combined with home isolation of cases and school and university closure.”<sup>8</sup>

The UAE government’s steps to tackle COVID-19 include strict social distancing, a sterilization drive everyday after 8 PM, and invoking the communicable disease law under which not reporting a case would lead to prison time and fines.<sup>9</sup> Fines have also been placed for not social distancing and leaving homes for unnecessary reasons. The KSA had prepared 25 hospitals before any cases were reported in the country. Later, the country was put under partial curfew and fines are charged for loitering outside. Kuwait too placed a partial curfew, Oman is practicing social distancing, Bahrain has banned public gatherings, while Qatar has closed all unnecessary business stores.

### Proportion of Infections that Require Hospitalization & the IFR<sup>8</sup>

Age-group (years)	% symptomatic cases requiring hospitalization	% hospital cases requiring critical care	Infection Fatality Ratio
0 to 9	0.1%	5.0%	0.002%
10 to 19	0.3%	5.0%	0.006%
20 to 29	1.2%	5.0%	0.03%
30 to 39	3.2%	5.0%	0.08%
40 to 49	4.9%	6.3%	0.15%
50 to 59	10.2%	12.5%	0.6%
60 to 69	16.6%	27.4%	2.2%
70 to 79	24.3%	43.2%	5.1%
80+	27.3%	70.9%	9.3%

As per the WHO & the mentioned study that examined a subset of cases from China then extrapolated the data to estimate the infection fatality ratio for the UK, the virus appears to particularly hit people over the age of 60 and those that are already weakened by other illness, which potentially results in fatality.

<sup>1</sup> As per a tweet from Dr. Tedros Adhanom Ghebreyesus on March 9, 2020.

<sup>2</sup> As per the Worldometer Website as of March 31, 2020.

<sup>3</sup> As per the article published on World Economic Forum, March 20, 2020.

<sup>4</sup> As per the Research Brief Published by the Society of Actuaries, March 10, 2020

<sup>5</sup> As per the article published by The National, March 11, 2020.

<sup>6</sup> As per the article published by Business Live ME, March 25, 2020.

<sup>7</sup> As per the article published by the Saudi Gazette, March 30, 2020.

<sup>8</sup> As per the study published by the Imperial College London, March 16, 2020.

<sup>9</sup> As per the article published by Gulf News, March 24, 2020.



## Relapse of COVID-19 in Patients — A Case Study

In Japan, a patient was reported to have recovered from COVID-19 only to get infected with the disease a second time. The exact reason for the relapse is still not clear. The suggested possibilities were that:

- i) The patient caught a new version of the virus from another person.
- ii) Her system did not fight off the virus completely so when it started to replicate inside her lungs, her symptoms returned.<sup>10</sup>

In Guangdong, China, officials announced in late February that around 14% of declared recoveries in the province later retested positive.<sup>11</sup>

Another case finding shows that at least a proportion of the recovered patients still may be virus carriers. The finding comes as four medical professionals from China recovered from COVID-19 & their symptoms were resolved. They were tested for 13 days post recovery. The results showed that every test between Day 5 and Day 13 was positive for the virus.

Researchers explained that the antiviral the patients were taking could have pushed the number of viral copies in their bodies down enough to not have been detected by the less-sensitive virus test that they took.

The researchers concluded that there is always the possibility that the new coronavirus would mutate as it moves through populations, changing into a version that already-exposed immune systems cannot recognize. The challenge then becomes how fast does it mutate?

It is also possible that after a week or two, the amount of virus in the blood or lungs comes up to a higher concentration—high enough for a person to be able to transmit it to other people.<sup>10</sup>

## Treatment for COVID-19

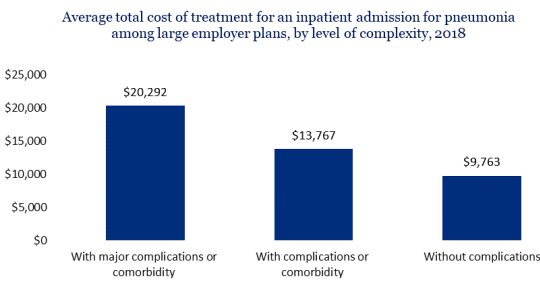
Since this virus is a novelty for mankind, researchers are yet to discover a vaccine that would cure patients of COVID-19. No cure for this disease means that treatments given are based on supportive care that essentially target the symptoms to provide relief to the patient. Some patients are being treated with an antiviral drug called oseltamivir, which seems to suppress the virus' reproduction in at least some cases.<sup>12</sup>

Those who get infected with COVID-19 develop a protective antibody. Studies show that antibodies to coronaviruses do not tend to last long, hence a relapse of the disease is not outside the realms of possibility.<sup>11</sup> Several cases of a relapse have been identified around the world. Moreover, it was reported that some recovered patients might experience a drop of 20–30% in lung function, which maybe resolved through physiotherapy.<sup>13</sup>

Cases in which pneumonia inhibits breathing, treatment involves ventilation with oxygen. A study of 1,099 Chinese COVID-19 patients found that 41.3% needed supplemental oxygen and 2.3% needed invasive mechanical ventilation.<sup>12</sup>

## What does it cost to treat COVID-19?

Health researchers in the U.S. based their COVID-19 treatment costs prediction off of the costs associated with hospitalization for pneumonia.<sup>14</sup>



The costs for a COVID-19 treatment would be higher than the cost of a pneumonia treatment since COVID-19 treatments require protective equipment and isolation, making it more expensive. It is hard at this point to estimate those costs because there is not much data in insurance claims databases that for COVID-19.<sup>15</sup>

Analysts have pointed out that insurers could benefit as hospitals postpone expensive elective surgeries and other procedures, but it's unclear if that benefit will outweigh testing and treatment costs for COVID-19 claims costs. Regardless, those with postponed procedures will still come back at some point. Ultimately there would be more utilization of the healthcare system than was predicted going into the year.<sup>16</sup>



## Affect on Premiums for 2020 & 2021

The impact of COVID-19 on global growth and the medical insurance industry is likely deeper than the current consensus and could last well into the third quarter of 2020 and beyond.

Insurers across the world likely be impacted by a sharp slowdown in economic activity, which would undermine growth & perhaps even contract insurable exposures.<sup>17</sup>

Premiums for the private health insurance plans for 2020 have already been finalized and insurers' expenditure could be higher than expected when they developed those premiums. Moreover, if individuals and groups can no longer pay premiums due to job losses, insurers could receive lower revenues yet have to maintain coverage during grace periods. Both factors could lead to insurers experiencing financial losses in 2020.

If most costs related to COVID-19 are expected to incur in 2020, 2021 premiums might only be affected minimally. However, to offset 2020 financial losses, margins in 2021 may need to be increased in order to rebuild surplus over the next few years. Apart from that, insurers will also have to consider any COVID-19 related economic effects that could hamper business in the next year. Such uncertainties make appropriate ratemaking more difficult.<sup>18</sup>

## What would be the impact on Solvency?

Both IA and SAMA have sent out forms to all insurers asking them to submit the expected cost to their company of COVID-19 in 2020, and its potential impact on their solvency.

Well-capitalized insurers would have sufficient reserves to cover COVID-19-related losses for the year. Some insurers, especially those already at risk of insolvency, could face increased solvency risk due to higher costs during the outbreak. Many employers self-insure and do not always have as much reserved for unexpected events as an insurer would. Some employers could experience revenue losses and a depletion of investments while experiencing higher medical claims. Although some have stop-loss coverage, the majority of COVID-19 claims will fall below the large claim threshold.<sup>18</sup>

<sup>10</sup> As per the article published on Live Science, March 1, 2020.

<sup>11</sup> As per the article published by The National, March 24, 2020.

<sup>12</sup> As per the article published on Live Science, March 14, 2020.

<sup>13</sup> As per the article published by Independent, March 13, 2020.

<sup>14</sup> As per the brief published on Peterson-KFF Health System Tracker website, March 13, 2020.

<sup>15</sup> As per the brief published by the Imperial Verge, March 17, 2020.

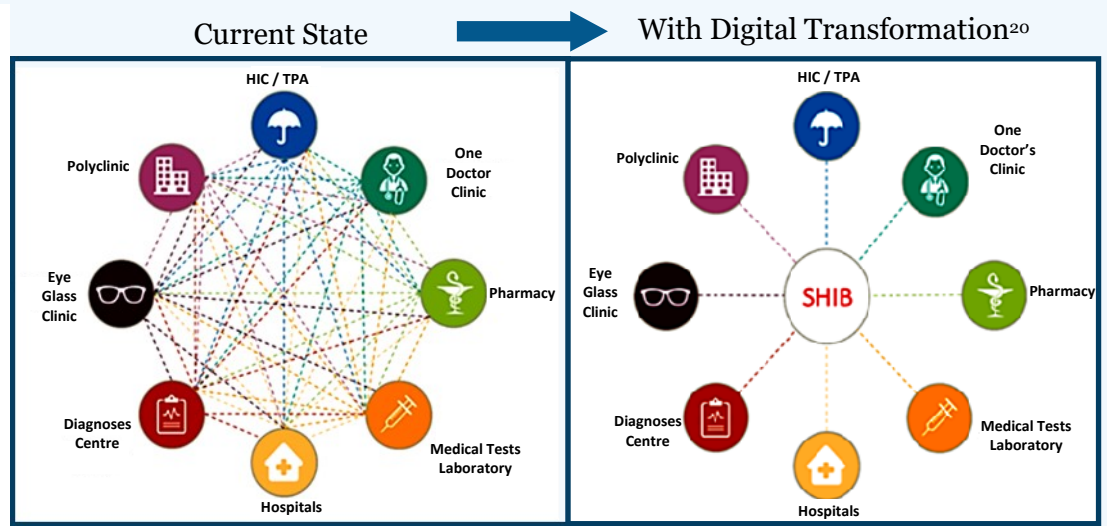
<sup>16</sup> As per the article published by Modern Healthcare, March 23, 2020.

<sup>17</sup> As per the article published by Deloitte, March 18, 2020.

<sup>18</sup> As per the FAQs published by the American Academy of Actuaries, March 24, 2020.

“A major aspect of (Digital Transformation) will be the upcoming national private health insurance data exchange platform ... which will be a game changer in increasing the transparency and quality of health insurance information.”

— **Dr. Shabab Alghamdi, Appointed Secretary General of CCHI in 2019.**<sup>19</sup>



# KSA's Revolutionizing Healthcare Industry

As the development of the healthcare IoT applications continues to gain pace in KSA, the country would still be facing barriers on the following three fronts:<sup>21</sup>

## Technical

Technical barriers are the full implementation of health information systems that are automated and interoperable at the national level, between emerging clusters & providers within the clusters.

## Legal

Legal barriers can be overcome with the help of policy directives on data sharing, privacy & recovery, & backup plans on an information system and the robustness of those.

## Administrative

Administrative challenges that are inevitable in any IoT implementation, can be tackled through cultural training and development of the healthcare staff to adopt and promote the use of IoT especially with regards to patient care.

One of the key objectives supporting the KSA Vision 2030 Program is the implementation of digital healthcare technologies with the Ministry of Health (MoH) aiming to digitalize records for nearly 70% of the Saudi citizens by 2020.<sup>21</sup>

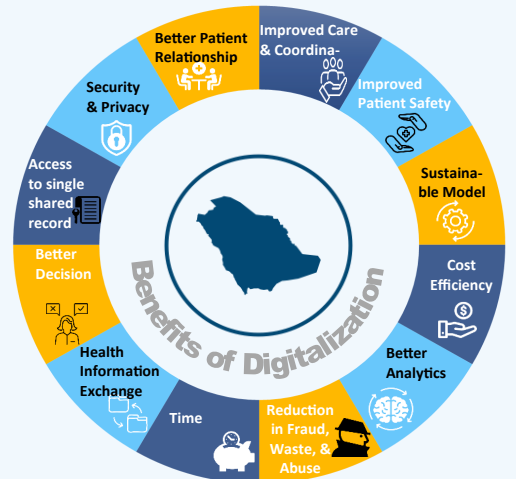
Digital transformation is a game changer for the health insurance industry making processes move with greater efficiency and quality and lower overall costs. Additionally, it can reduce waste, fraud, and abuse in the insurance system because everything will be more transparent. It would also negate the need for unnecessary examinations and conflict of treatments which arise from fragmented care.

SHIB and Saudi Arabian national electronic health records (SeHe) will form a digital unified platform. When launched, all private health insurance transactions will be on this system.

The level of transparency and quality of data available through these digital health platforms will be enormously important in understanding where improvements are required and how to best bring them about.

The KSA's population dynamic alone shows that there can be an expected increase in the burden of lifestyle diseases and associated comorbidities that would result in a demand for specialized medical and surgical care.<sup>22</sup>

Furthermore, given the country's structural shift in population composition showing an increase in the life expectancy for males and females from the current level of 73.1 years and 76.1 years for males and females respectively to 78.4 and 81.3 by 2050 in the region, the demand for long-term care (LTC) facilities, focusing on geriatric related care, rehabilitation, & home healthcare services will also have to be increased.<sup>24</sup>



## The Way Forward with Travel Medical Insurance in KSA

After CCHI revised the tables of benefits in 2019, which led to increased prices, health premiums also grew. The international credit rating agency, Fitch Ratings, claims that health insurance in Saudi Arabia will further continue to grow in 2020 given the introduction of temporary mandatory insurance for pilgrims from abroad and tourists. These comprehensive policies are expected to account for over **SAR 3bn** (\$800m) of premiums (about 8% of total insurance premiums) and cover about 17m people annually.<sup>23</sup>

<sup>19</sup> As per an interview published by The Business Year, 2020.

<sup>20</sup> As per the CCHI website.

<sup>21</sup> As per the article published by the Saudi Gazette, November 4, 2019.

<sup>22</sup> As per the article published by Omnia Health, January 13, 2020.

<sup>23</sup> As per the article published by Middle East Insurance Review, February 26, 2020.

<sup>24</sup> As per the article published by Omnia Health, January 15, 2020.



As the cost of delivering quality health benefit programs continues to increase, it is important that stakeholders explore other avenues such as preventative programs, new technology, and wellness initiatives to avoid costly & lengthy treatments. This has the potential to allow medical inflation to be better managed.



The **UAE's** health expenditure, which is estimated to have increased to US\$ 14.4 bn last year<sup>25</sup>, is expected to rise to US\$ 21.3 bn by 2021.<sup>26</sup>

Health expenditure in **KSA** is projected to grow at a CAGR of 6.1% to US\$ 59.5 bn in 2022.<sup>26</sup>

Current healthcare expenditure in **Oman** is expected to grow at a CAGR of 9.1% to US\$ 4.9 bn in 2022.<sup>26</sup>



# GCC's Booming Medical Insurance Industry



Medical insurance premiums in the GCC region are bound to rise given the increase in the growing and ageing population & medical insurance becoming mandatory for more countries in the region.

In UAE, infrastructure spending and phased introduction of mandatory health insurance across its remaining Emirates is driving overall growth in the sector. Meanwhile, KSA is expected to benefit from the significant infrastructural developments, coupled with new business and a reformed tourism program.

### The Fight Against Diabetes Continues

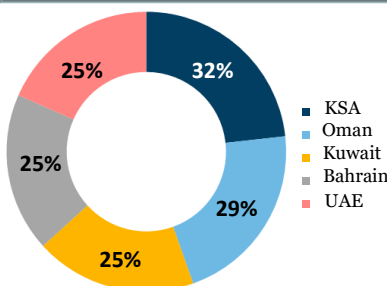
In its attempt to fight against diabetes and reduce healthcare costs, MoHAP has launched an AI device that evaluates diabetic foot wounds accurately through a handheld diagnostic tool and a mobile application that aims to enhancing public awareness on the ways of preventing diabetes and reducing complications related to diabetes.

The Ministry highlighted the importance of health awareness, underlining that prevention and treatment are critical factors in avoiding complications. Such launches by the Ministry are examples of its efforts towards providing comprehensive and integrated healthcare services through innovative & sustainable ways.

Simultaneously, spiraling medical costs are set to outpace inflation by close to three times – the regional average is expected to grow to 14% in 2020 as the cost of delivering health benefit programs rises across the region.<sup>27</sup>

In KSA, the public healthcare sector witnessed a decrease in the volumes and share of out-patients while the private sector has been experiencing growth in both out-patient and in-patient utilization and OP-IP conversion. It is expected that this trend will further consolidate with the increase in insurance coverage. Eventually, the private sector will gain more prominence as the government sector will move away from being a healthcare service provider to a regulator hence boosting efficiency and investment and improving outcomes.<sup>30</sup>

### Prevalence of Type 2 Diabetes in the GCC region by Country<sup>29</sup>



It is expected that profits for UAE health insurers will continue to be squeezed by medical inflation & intense competition. The combined ratio for health insurance in the **UAE was 100.1% in 2018 (2017: 97.8%)**. Similarly, earnings for health insurers in KSA remain under pressure from medical claims inflation outpacing the recent increase in premiums. This was reflected by the loss ratio jumping to **91% and 88% in 2019 and 2018**, respectively, compared to **77% in 2017**. Given the deteriorating loss ratio, price increases may not be enough to offset the increasing medical claims inflation.<sup>28</sup>

Moving forward, the UAE and KSA Health Insurance Industries are anticipated to grow at a CAGR of 4.2% and 5.0% respectively.<sup>28</sup>

With healthcare becoming increasingly available and the hospital sector being commercialized, the increased demand for healthcare services is ensuing in rising costs and a further strain on healthcare budgets.

In an attempt to control insurance premiums and costs, hospitals in the UAE are adopting revenue cycle management that utilizes medical billing software to track revenue generation. This will allow for greater transparency & accountability in medical procedure rates and billings. Operationalizing AI platforms across selected healthcare workflows can result in a **10-15% gain** in productivity over the next 2-3 years. This will help hospitals manage their costs, improve clinical outcomes, and provide patients a better experience.<sup>30</sup>

### Top three causes for increasing medical costs<sup>29</sup>



<sup>25</sup> As per the article published by International Investment, February 18, 2020.

<sup>26</sup> As per the Arab Health website.

<sup>27</sup> As per the article published by The National, January 27, 2020.

<sup>28</sup> As per the article published by Middle East Insurance Review, February 27, 2020.

<sup>29</sup> As per the article published by Arabian Business, January 27, 2020.

<sup>30</sup> As per the article published by Omnia Health, January 13, 2020.

