

# The Vitals

Medical Mag

“Declare the past, diagnose the present, foretell the future “  
-Hippocrates

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By Badri Management Consultancy

## STORIES WE COVER

1. What's New? Benchmarking
2. Regional Update- Chronic Diseases
3. Global Update- World Hepatitis Day
4. Latest Developments- Respiratory Syncytial Virus, Amniotic Membrane, Newborn additions, Medical Insurance Rates

## What's New?

### What is benchmarking and why it is important?

Benchmarking for medical insurance key performance indicators (KPIs) is a relative comparison for the KPI standing for any medical insurer with the standard values prevailing in the industry. This could either be a market average or a predefined target value based on the objective.

Since various insurers will have different values for their KPIs based on their strategies and controls, it is important to identify and set a range of values that are market consistent and can be considered as a yardstick to evaluate the competitiveness.

Given the medical data is voluminous and claim trends are constantly evolving, it has become vital more than ever for the market players to assess the key drivers of the cost and focus on controlling these factors through optimizing the value close to the benchmarks.

Furthermore, benchmarking assists in planning for future products by identifying areas of improvement. Following are some of the examples from our internally designed benchmarks:

Table 1

Key Performing Indicator	Detail		2018	2017
Chronic Ratio	Mix of Chronic claims as % of total OP utilization		25-29%	30-32%
% Specialist	Mix of Specialist consultations as % of total OP consultations	*Tiers		
		Tier 1	60-65%	60-65%
		Tier 2	55-60%	55-60%
		Tier 3	50-55%	55-60%
		Tier 4	25-30%	40-45%
% Drugs	Mix of Drugs as % of total OP utilization	Tier 5	15-20%	15-20%
			28-33%	30-35%
% Investigations	Mix of investigations as % of total OP utilization		25-30%	25-30%
C-Section to Normal Ratio	Mix of C-Section MAT claims as % of total MAT claims	Normal	50-55%	55-60%
		C-section	45-50%	35-40%

\*Ranges for Gross Premium for Tiers (In AED): Tier 1: >6,000, Tier 2: >4,000 ≤ 6,000, Tier 3: >2,000 ≤ 4,000, Tier 4 :>1,000 ≤2,000, Tier 5: ≤ 1,000

## Chronic Diseases

A chronic disease is one that lasts for 3 months or more. Generally, they cannot be prevented by vaccines or cured by medication, nor do they just disappear. Currently, chronic diseases are the major cause of disability and death and result in premature adult deaths in many parts of the world.

Almost half of the deaths caused by chronic diseases occur in people who are under the age of 70.<sup>1</sup> The major contributors to the leading chronic diseases include use of tobacco, lack of physical activity, and poor eating habits.

### Treatment for critical eye disease or chronic disease in Dubai

On World Sight Day 11<sup>th</sup> October 2018, Dubai Health Authority and Noor Dubai Foundation signed a MoU to provide treatment to UAE residents who suffer from critical eye illness or chronic diseases that may lead to visual impairment. According to the MoU, DHA will provide consultation and treatment in its facilities while Noor Dubai will provide the funding.<sup>2</sup>

The Eastern Mediterranean Region has the highest rate of deaths due to cardiovascular diseases at around 309 per 100,000 men and around 204 per 100,000 women.

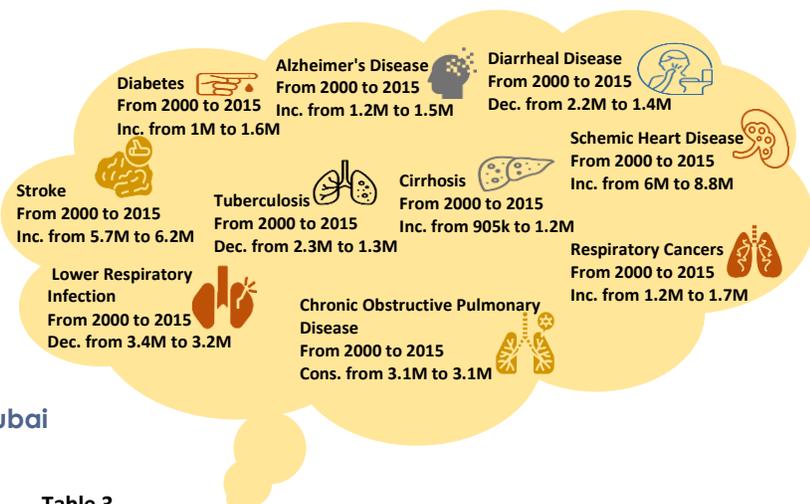
In UAE, patients suffering from cardiovascular diseases live 15 years lesser than those in the West. While the first screening for cardiovascular diseases costs around AED 2,000, the overall average cost of treatment can range anywhere from AED 3,000 to AED 60,000 or more depending on the treatment.<sup>3</sup>

**Table 2**

Year	2018	2017
Top 10 Chronic Diseases in UAE	% Utilized in Drugs	% Utilized in Drugs
Malignant Cancers	30-35%	30-35%
Diabetes Mellitus	60-65%	60-65%
Ischemic Heart Disease	55-60%	50-55%
Chronic KUB diseases	20-25%	15-20%
Hypertension	50-55%	55-60%
Chronic Muscle, Bone & Joint diseases	30-35%	25-30%
Chronic Thyroid diseases	10-15%	10-15%
Metabolic Disorders	40-45%	50-55%
Asthma	50-55%	55-60%
Chronic Nose and Throat diseases	15-20%	15-20%

Table 2 reflects the proportion of drugs in total annualized outpatient cost per chronic patient.

Table 3 highlights the top drugs utilized corresponding to the chronic conditions. In addition, the average units prescribed per visit.



**Table 3**

Top 10 Chronic Diseases in UAE	Top Frequency Drugs	Units Per Invoice
Malignant Cancers	Revlimid (10.92%)	28
	Tasigna (9.91%)	313
	Ibrance (9.87%)	33
Diabetes Mellitus	Victoza (5.43%)	7
	Lipitor (3.83%)	61
	Trulicity (3.70%)	9
Ischemic Heart Disease	Plavix (12.68%)	63
	Lipitor (7.80%)	60
	Crestor (5.48%)	59
Chronic KUB diseases	Cialis (8.81%)	55
	Epotin (6.37%)	3
	Omnic Ocas (6.29%)	47
Hypertension	Exforge (6.08%)	63
	Lipitor (5.58%)	66
	Crestor (3.35%)	66
Chronic Muscle, bone & Joint	Humira (7.75%)	4
	Enbrel (5.33%)	8
	Hyalone (4.31%)	2
Chronic Thyroid Diseases	Euthyrox (6.24%)	129
	Crestor (3.33%)	70
	Lipitor (3.17%)	75
Metabolic Disorders	Lipitor (12.33%)	70
	Crestor (9.06%)	68
	Statix (3.81%)	67
Asthma	Pulmicort (9.27%)	15
	Singulair (5.23%)	39
	Seretide Diskus (5.16%)	1
Chronic Nose & Throat	Sevoflurane (46.64%)	66
	Perdiem (4.31%)	1
	Nasonex (2.16%)	1

<sup>1</sup> As per the article published on Health Hub on 3 June 2019

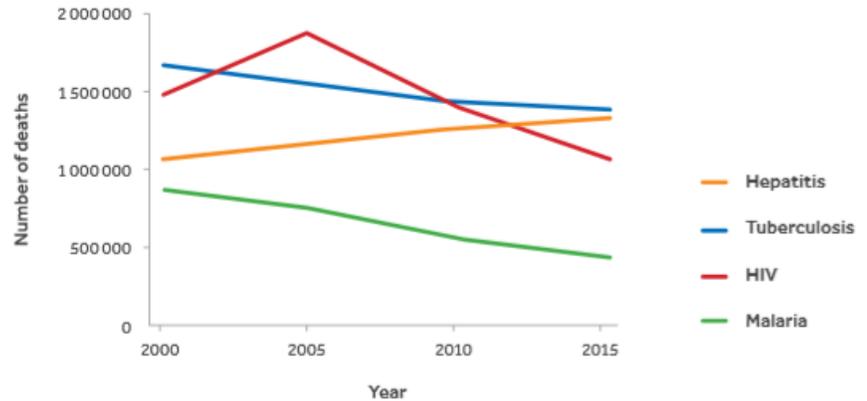
<sup>2</sup> As per the news published on Gulf News on 7 April 2014

<sup>3</sup> As per the blog published on Bayzat on 12 December 2015

## World Hepatitis day

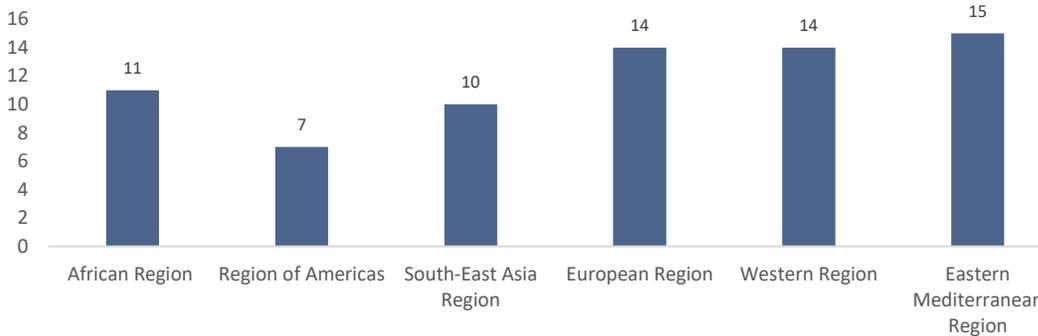
*'Get tested early, stay healthy longer'*

World Hepatitis Day is annually celebrated on 28<sup>th</sup> July. It is aimed at raising global awareness about hepatitis — a group of infectious diseases — and encourages its prevention, diagnosis, and treatment. Hepatitis affects hundreds of millions of people worldwide causing acute and chronic diseases. After tuberculosis, viral hepatitis is the second major killer infectious disease. In 2015, hepatitis alone caused 1.34 million deaths. Moreover, the number of people infected with hepatitis is 9 times more than the number of people infected with HIV.<sup>4</sup>



The number of deaths due to Hepatitis has an increasing trend, as shown in the graph above.<sup>5</sup>

Number of persons (in millions)



The bar graph above shows that East Mediterranean region has the highest number of deaths due to hepatitis C in 2015.<sup>5</sup>

Dubai residents are now covered for the treatment of Hepatitis C under the Essential Basic Plan (EBP). The policyholders now have to pay an extra amount of Dh18 for Hepatitis C (HCV) treatment. All medicines for HCV treatment are covered for the patient. The only condition is that the patient must be a resident visa holder with a health insurance cover.<sup>6</sup>

*The median cost of treating HCV ranges from \$280 for an uncomplicated hepatitis to \$139,070 for a complicated case requiring a liver transplant.<sup>7</sup>*

### Infected People (In 2015)

Hepatitis (All types)	27.0 Million
Hepatitis B	2.8 Million

### People receiving treatment (In 2015)

Hepatitis (All types)	4.5 Million
Hepatitis B	0.8 Million

\*Source: World Health Organization <sup>11</sup>

### Drug for Hepatitis B

Tenofovir or Entecavir are effective drugs to suppress the Hepatitis B virus. The median price of Tenofovir on the international market fell from US\$ 208 per year to US\$ 32 per year in 2016. Tenofovir can be used by adults and by children who are at least 2 years old and weigh at least 22 pounds (10 kilograms).<sup>8</sup>

### FACTS

- Among the 36.7 million people living with HIV in 2015, an estimated 2.7 million had chronic HBV infection and 2.3 million had been infected with HCV.<sup>5</sup>
- The prevalence of the Hepatitis C virus is less than 1% in UAE but only 30-50 % of the patients are diagnosed.<sup>9</sup>
- Viral hepatitis mortality is the 5th leading cause of death in Middle East.<sup>10</sup>
- There are around 14.8 million people living with chronic Hepatitis B infection in the Middle East.<sup>10</sup>
- It is estimated that 18.8% of the people living with Hepatitis B in the region are co-infected with Hepatitis D.<sup>10</sup>

### Hepatitis A and E



**Caused by:**  
Contaminated food and water

### Hepatitis B, C and E



**Caused by:**  
Infected body fluids

<sup>4</sup> As per the news published on Gulf News on 27 July 2019

<sup>5</sup> As per the Global Hepatitis Report 2017

<sup>6</sup> As per the news published on Gulf News on 16 August 2019

<sup>7</sup> As per research published on BMC Health Services on 10 January 2019

<sup>8</sup> As per the article published on Medscape on 9 September 2019

<sup>9</sup> As per the news published on National News on 21 March 2019

<sup>10</sup> As per World Hepatitis Alliance

<sup>11</sup> As per World Health Organization in 2015

## Respiratory Syncytial Virus (RSV)

Respiratory Syncytial Virus (RSV) is the second largest cause of lower respiratory infection mortality worldwide,<sup>12</sup> which can cause severe lung infections including bronchiolitis (infection of small airways in the lungs) and pneumonia (infection of the lungs). It is a very common virus that causes mild cold-like symptoms in adults and older healthy children. It can also cause serious respiratory infections in babies, especially in those born prematurely who have heart or lung diseases or who are immunocompromised.

### United States (Average Annual Statistics)

Children less than 5 years		Adults older than 65 years	
Outpatient visits	21,000,000	Hospitalizations	177,000
Hospitalizations	57,527	Deaths	14,000

\*Source: Center for Disease Control and Prevention<sup>13</sup>

## Newborn Insurance cover in Dubai

Dubai Health Authority (DHA) now covers the gap between insurance coverages for newborns, making it compulsory for all insurers to cover the child at birth. After the 30-day period of cover under the mother's policy is over, the new policy enforces that insurance companies must give the newborn medical insurance cover with the same table of benefits as the family's insurance. Moreover, no insurer can impose waiting periods of any kind on newborns, whether they are waiting periods against pre-existing conditions or any other conditions. Also, backdating up to a maximum of seven days is allowed for newborn additions for coverage from the date of birth. The new policy is subject to underwriting conditions of the group and is not applicable in case of lower salary band members.

<sup>12</sup> As per the article in BMJ Journals

<sup>13</sup> As per the Center for Disease Control and Prevention

<sup>14</sup> As per the World Health Organization

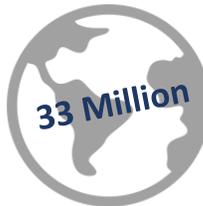
<sup>15</sup> As per the news published on Kxan news on 1 August 2019

<sup>16</sup> As per the news published on Khaleej Times on 14 July 2019

<sup>17</sup> As per the news published on Khaleej Times on 4 May 2019

<sup>18</sup> As per the news published on Gulf News on 21 September 2019

## 2017 Worldwide Respiratory Infections



\*Source: World Health Organization<sup>14</sup>

**AUSTIN (KXAN) — An experimental vaccine which fights respiratory syncytial virus.<sup>15</sup>**

## Case story in UAE

In the UAE, parents are burdened with huge bills to cover the cost of care for their newborns. In 2017, Camellia Mohammed gave birth to a premature boy named Omar at 24 weeks of pregnancy. Omar weighed just 600 grams at birth. After a long process, Camellia was able to claim AED 140,000 from her own policy and claimed AED 400,000 from Omar's policy. However, the family was still unable to claim insurance coverage for the rehabilitation costs involved.<sup>17</sup>

## Burn Victims treated with Amniotic Membrane in the UAE

Recently, the first ever procedure in the UAE was carried out using amniotic membrane to accelerate wound care and regenerate skin tissue.<sup>16</sup>

The amniotic membrane surrounds the placenta and protects the developing fetus in utero and separates the mother from the fetus.

The amniotic membrane helps in pain management, which is critical for patients with burns and deep wounds. The membrane is rich in nutrients, reduces inflammation, has antibacterial properties, is non-immunogenic, and reduces scar tissue formation.



## UAE Medical Insurance rates need a rise

According to an article published on Gulf News, premiums on basic Medical Insurance currently at Dh600, need to be increased significantly to relieve the pain of healthcare operators in the UAE. For this, employers have to meet the increased cost of providing health care, while insurance companies have to reduce the discounts being demanded by health care providers.<sup>18</sup>

## How can we help you?

- Pricing and Predictive Analysis
- Fraud Waste and Abuse Detection
- Cost Containment Alternatives
- Performance Monitoring & Analytics
- Profit Optimization

## Company Profile



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Medical Actuary & Manager



**Syed Faraz Ahmed**  
Senior Actuarial Analyst

## References

- [https://www.healthhub.sg/a-z/diseases-and-conditions/96/topics\\_chronic\\_diseases](https://www.healthhub.sg/a-z/diseases-and-conditions/96/topics_chronic_diseases)
- <https://www.dha.gov.ae/en/DHANews/Pages/DHANews1753471994-11-10-2018.aspx>
- <https://blog.bayzat.com/leading-health-problems-in-the-uae/>
- <https://gulfnews.com/uae/health/70-of-hepatitis-patients-in-uae-are-undiagnosed-1.65466696>
- <https://apps.who.int/iris/bitstream/handle/10665/255016/9789241565455-eng.pdf;jsessionid=3E742B549CE49AE03CE7A5F3937557BD?sequence=1>
- <https://gulfnews.com/uae/health/hepatitis-c-and-three-cancers-now-covered-on-basic-plan-in-dubai-1.65388868>
- <https://bmchealthservices.biomedcentral.com/articles/10.1186/s12913-019-3869-8>
- <https://www.medscape.com/viewarticle/899639>
- <https://www.thenational.ae/uae/new-uae-campaign-targets-thousands-of-undiagnosed-hepatitis-c-carriers-1.715003>
- <https://www.worldhepatitisalliance.org/regions/eastern-mediterranean-region>
- <https://www.who.int/>
- <https://thorax.bmj.com/content/early/2019/08/04/thoraxjnl-2018-212212.full>
- <https://www.cdc.gov/rsv/research/us-surveillance.html>
- <http://uk.ovg.ox.ac.uk/rsv>
- <https://www.kxan.com/news/experimental-vaccine-shows-positive-results-in-fighting-infectious-rsv/>
- <https://www.khaleejtimes.com/uae/dubai/burn-victims-treated-with-donated-amniotic-membrane-in-uae>
- <https://www.khaleejtimes.com/news/uae-health/dubai-makes-major-change-to-newborn-insurance-cover-1>
- <https://gulfnews-com.cdn.ampproject.org/c/s/gulfnews.com/amp/uae/health/uaes-basic-medical-insurance-rates-need-a-rise-1.66575252>

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