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The Vitals

Medical Mag

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

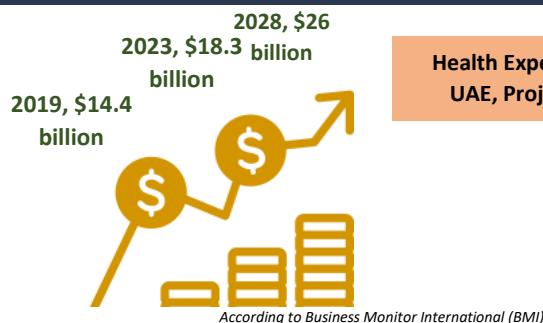
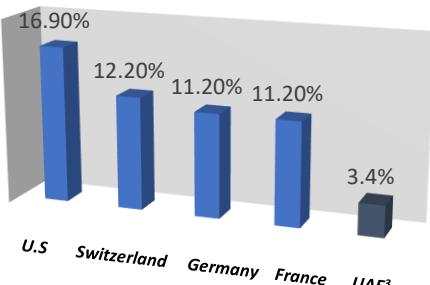
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By Badri Management Consultancy

Medical Innovations

The UAE health insurance sector has been expanding rapidly over the past few years. The challenges the UAE is facing is similar to those faced by the rest of the developed world. However, UAE has adopted a series of long-term initiatives to make medical insurance better and effective among the leading countries. UAE's health expenditure reached a value of \$13.7 billion (AED 50.3 billion) in 2018¹.

Health Expenditure As a % of GDP in 2018²



Medical Insurtech in UAE

The evolution and adaptation of Insurtech has proved beneficial for all stakeholders in the insurance sector. Insurtech companies are focused on providing services personalized to each insured person, and this requires an in-depth analysis of customer preferences, behaviors, and lifestyle needs. Insurance providers are competing to improve customer services through digitized claim handling in different ways. This will allow insurers to significantly cut down on overheads. If Insurtech can increase efficiency without increasing manpower, it may result in cost reduction in a way that premiums might not increase. While the UAE has embraced the power of smart technologies, it emphasizes that users of AI must comply with all of the UAE and DOH regulatory requirements, including data protection.



¹ According to the Healthcare Resource Guide by export.gov

² According to the statistic posted by Statista

³ According to the Healthcare Resource Guide by export.gov

⁴ According to the Healthcare Resource Guide by export.gov

At the 39th Gitex Technology Week (Gitex 2019), which was held between 6th – 10th October 2019 at the Dubai World Trade Centre, the Dubai Health Authority showcased a number of innovative smart healthcare applications and solutions⁵.

The exhibition included the Smart Health Alert, which is aimed to proactively identify the Modified Early Warning Scores (MEWS) recorded in Salama, the intervention response time, the procedure taken, the length of stay, and the transfer out of intensive care unit to identify if the patient's case is at risk of deterioration in advance. The provision of such facilities opens doors to insurers and employers to not only influence healthy lifestyle but also to boost profitability.

"More than 4,250 exhibitors from over 64 countries and 55,000 attendees are expected to attend Arab Health 2020 from 27th – 30th January in Dubai, UAE" – Arab Health by Informa Markets⁶

Modified Early Warning Scores (MEWS).

The Dubai Health Authority has developed a protocol using Artificial Intelligence (AI) to detect Healthcare-Acquired Infection (HAI) that can trigger Sepsis, more specifically in those who are already at risk, such as those who have diabetes or those having chemotherapy. It has been launched in collaboration with DHA's Electronic Medical Record (EMR) or Salama system to predict sepsis using Modified Early Warning Scores (MEWS)⁷.

Sepsis is a potentially life-threatening condition caused by blood's response to an infection. Sepsis occurs when body responds to those chemicals which the body normally releases into the bloodstream to fight an infection. If sepsis progresses to a septic shock, the blood pressure drops dramatically and this may result in death.

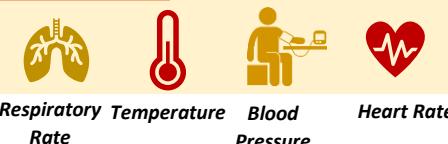
Smart Apps for easy access

The U.A.E has also experimented with a wide variety of apps aiming to make it easier for the patient to make an appointment without waiting for a long period of time. Dammi is an app designed to make it easy for a person to donate blood by finding a suitable time and place in Dubai¹². The Dubai Health Authority has also announced to update its electronic medical record system, Salama, by first quarter of 2020¹³. New features include video chat with doctor, Uber Careem booking, self-registration known as On My Way, which helps patient to register using the app prior the appointment, echeck-in.

How MEWS Works?

MEWS is an international evidence - based tool that monitors the **Vital signs** to identify patterns indicating severe infection. The Electronic Medical Record system calculates a score; if the score is 3 or above, an automatic warning generates⁸. This scoring system will help in commencing treatment immediately. Fishersville, Va. based Augusta Health hospital has witnessed a decrease in mortality rates from sepsis, **saving an estimated 282 lives** as a result⁹.

Vital Signs



Respiratory Rate **Temperature** **Blood Pressure** **Heart Rate**

Constantly evolving technology ensures that high quality medical care will become the standard throughout the region, while positioning the UAE as an innovation hub. It can attract those who are looking for the highest level of healthcare booming medical tourism a rise.

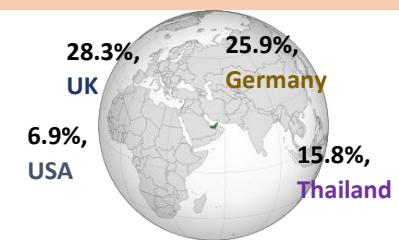
The impact of these devices on the medical sector will be considerable, they can improve remote disease monitoring and enable early diagnosis.



DHA Overseas Patients¹⁰

1,207 during the year 2018

Treatment Proportion of Overseas



Every year sepsis affects



Every year sepsis



¹¹Source:World health Organization



⁵ As per the news published on DHA official website on Oct 06,2019

⁶ As per the information available on the Arab Health website

⁷ As per the news published on DHA official website on Oct 06,2019

⁸ As per the Article published on Arab Health The official Magazine

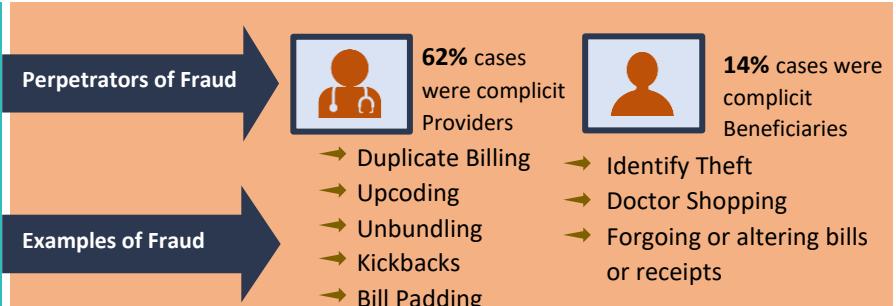
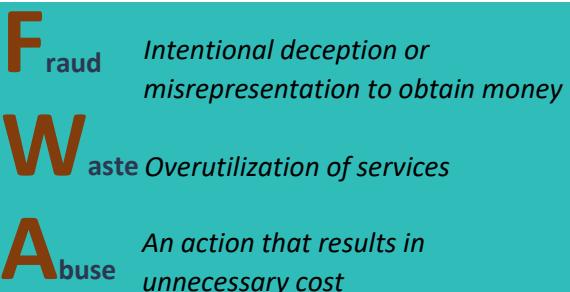
⁹ As per the Article published on HealthTech website by Dennis Morley.

¹⁰ According to the Dubai Annual Health Statistical Report of 2018 published on DHA official website on Dec 09,2019

¹¹ According to the factsheet provided by W.H.O

¹² As per the news published on DHA official website on Oct 06,2019

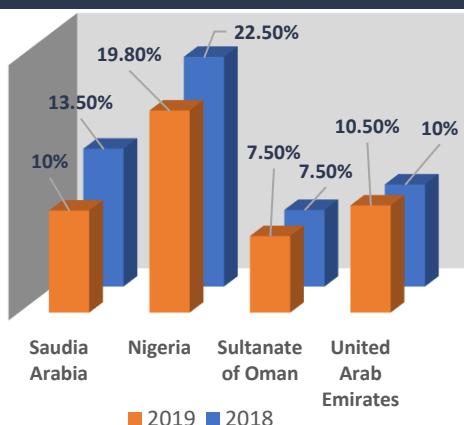
¹³ According to the article published on ZAWYA official website on Sep 01, 2019



The health sector is one of the fastest growing sectors that directly affects the economic development of a country. The willingness to adopt new ideas and bring them to life has significantly driven growth in recent years. As previously mentioned, The UAE's health expenditure reached a value of \$13.7 billion (AED 50.3 billion) in 2018¹⁴.

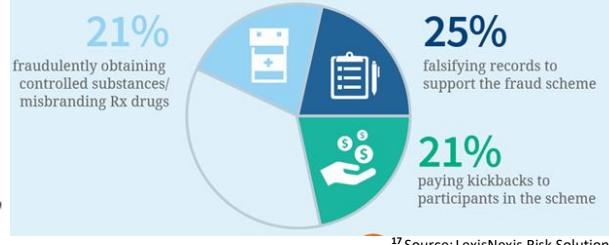
Medical costs in the UAE are clearly rising at an unsustainable rate. This is due to the rising cost of drugs, lifestyle of an individual, and changes in regulation and medical innovations. Waste and fraud account for some of these high costs - the cost of paying out unfair claims is ultimately recovered through higher premiums and an increase in out-of-pocket expenses. The Middle East reportedly loses more than USD 1 billion every year to factors including "fraud by patients and a culture of over-prescribing by doctors."¹⁵

Annual Medical trend Rates¹⁶



"Abu Dhabi has implemented a standard for data exchange called Shafafia, to improve the quality of data, reduce the overheads, and cost of patient themselves"¹⁸

Common Health Care Fraud Schemes



The UAE is adopting several implications to avoid waste and abuse and control medical cost, which is arising by health insurance fraud.

The Dubai Health Authority has announced the adoption of American Medical Associations' copyrighted Current Procedural Technology (CPT) coding system¹⁹. It is a set of medical codes that are used to report medical surgeries, diagnostic procedures, and services.

Dr. Genesh Rajamani, Head of provider management at Neuron, a Third-Party Administrator (TPA) in health insurance, told Gulf News: "The biggest issue is of fraud, wastage, and abuse of the health insurance system, and CPT coding will help eliminate that by providing clarity in the billing system. Eventually the common man will stand to gain as insurance premiums will not be raised when insurance companies are assured that they are paying for what is rightfully determined."

The introduction of CPT coding will make the medical billing process highly efficient, without human error. Previously, hospitals were using the 2012 CPT coding version.

Mother of Cancer patient jailed in Dubai for Dh 188,000 medical fraud²⁰

At Muraqqabat police station, Dubai a case was registered against medical fraud in April 2018. A 28-year-old Nepali woman misused her Indian friend's child insurance card and Emirate ID to get her own daughter treatment. The girl had leukemia and needed therapy; the treatments costing AED 188,000 in total proceeded till July 2018.

After being convicted of fraud, the Nepali woman was sentenced to one month in prison by Dubai court.

¹⁴ According to the healthcare Resource Guide by export.gov

¹⁵ According to the article published by AMEInfo website on July 09, 2019

¹⁶ According to the 2019 Global Medical Trend Rates Report by AON

¹⁷ According to LexisNexis Risk Solution.

¹⁸ As per the Article published on Netcetera official website.

¹⁹ As per the news published on Gulf News on Oct 12, 2019

²⁰ As per the news published on Khaleej Times on March 25,2019

Blockchain can be an effective tool to detect fraud and prevent risk. Integrating the blockchain with existing technology such as Artificial Intelligence may lead to improve healthcare industry.

There are companies that are operating different software, which use AI to detect a pattern of behavior. These have led to identification of bogus claims worth millions of Dirhams. The bogus claims brought to light fraudulent cases such as:

- Pediatric consulting adults and billing specialist fee.
- GP billing for specialist
- Injections given with no bill for drugs.
- Overbilling of CPTs, the number of CPTs is inconsistent with number of visits, upcoding of ICDs.

Generic drugs can be as effective as branded drugs and are more cost effective. In 2018, the Department of Health (DoH) began dispensing more generic medicines in order to reduce the cost of the healthcare sector. Health insurance professionals have longed for doctors to prescribe more generic drugs. This will benefit the providers most since they will be saving AED 2.3 billion a year²². This will also allow money to be spent elsewhere since largely prescribing branded drugs can lead to abuse and waste across the healthcare system.

²¹ As per the Article published on Netcetera official website.

²² As per the News published in The National UAE

²³ According to the News published on official website of Department of Health-Abu Dhabi on Dec 11,2019

²⁴ As per the Procedural Directive number 2 of 2019(PD 02/2019)

²⁵ As per the Policy Directive Number 07 of 2018 (PD 07/2018)

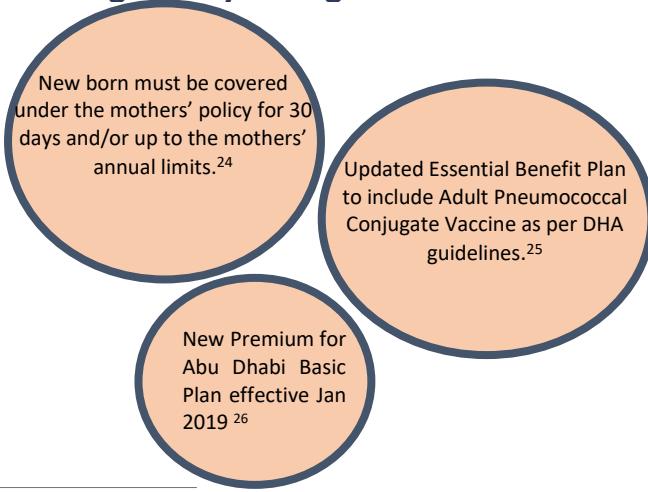
²⁶ As per the Abu Dhabi Basic Plan

Department of Health – Abu Dhabi mandates: All patients to receive emergency care regardless of insurance status²³

On 11th Dec 2019, the DoH made it mandatory for all healthcare facilities in the Emirates to provide emergency treatment regardless of the patients' insurance statuses.

The introduction of this new regulation will create challenges but it will create opportunities for the insurers and service providers, and will result in a better claim experience for the insured.

Other Regulatory Changes in 2019



How can we help you?

Pricing and predictive analysis

Fraud Waste and Abuse Detection

Cost Containment Alternatives

Performance Monitoring & Analytics

Profit Optimization

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GET IN TOUCH WITH US!

Phone: +971-4-3207-250

Fax: +971-4-3207-260

<https://www.linkedin.com/company/badr-consultancy/>

www.badrconsultancy.com

2107 SIT Towers,
PO Box 341486,
Dubai Silicon Oasis,
Dubai, UAE

Company Profile



Hatim Maskawala
Managing Director



Rahim Gowani
Medical Actuary & Manager



Syed Faraz Ahmed
Senior Actuarial Analyst