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DAY 04 THURSDAY 31 JANUARY 2019

arab health DAILY DOSE

THE **OFFICIAL DAILY NEWSPAPER** OF THE ARAB HEALTH EXHIBITION

Source Medical Lab Products From 51+ Countries Next Week Continue doing business after Arab Health at MEDLAB

MEDLAB Exhibition and Congress is all set to connect and empower the international medical laboratory industry and will focus on developing the value of laboratory medicine in shaping the future of healthcare, next week. Organised by Informa Exhibitions – Healthcare, organisers of Arab Health, MEDLAB is the MENA region's no.1 medical lab exhibition that will take place between February 4 to 7, at the Dubai World Trade Centre.

Previously a part of Arab Health, MEDLAB is now in its third stand-alone edition and has become a must-attend event for the medical laboratory community. The event will welcome over 19,610 professionals and more than 678 companies from around 51 countries and is hosting 15 country pavilions. It brings together thousands of professionals, right from manufacturers to opinion leaders who congregate to shape the future of the industry.

According to reports, the 2018 edition of the show saw exhibitors cracking deals worth US\$166 million. With the numbers highlighting the show's success, it's no surprise that some of the biggest names are going to be a part of the event this year. For instance, the Ministry of Health UAE is joining MEDLAB for the first time this edition. Also, exhibitors such as Pure Health have increased their presence double-fold this year with a 150sqm stand; Siemens will have the largest stand at the exhibition with a core focus on how digitisation will transform the lab of the future. Another highlight will be Euroimmun's stand that will showcase the very first Virtual Lab.

The exhibition offers access to high-performance devices at cost-effective prices that enable in better decision-making. It prides itself on bringing innovation from all continents to support the advancement of patient care.

Furthermore, MEDLAB hosts the region's only CME-accredited multi-disciplinary Congress. It is committed to supporting the education of all faculty and medical lab professionals and offers conference tracks that put emphasis on the core lab and specialist lab units.



MEDLAB Congress 2019 will host 11 multi-disciplinary conferences that will provide education as well as management solutions to help advance skills and improve laboratory functions. These will provide up to 33.5 CME credits and fresh insights from industry pioneers to build key skills as well as increase the quality of care.

This edition, MEDLAB will explore the "Lab of the Future" as the UAE prepares to adopt the use of Artificial Intelligence (AI) in the medical laboratory. Reportedly, AI is predicted to add US\$182 billion to UAE's economy by 2035 with the healthcare industry taking a US\$22 billion slice of the gains.

The conference will explore the potential for AI to transform the medical laboratory industry in the UAE through improved efficiencies and how the diagnosis can be revolutionised through futuristic technologies such as data robots and "bloodless blood tests". The event will host other conferences such as Laboratory Management, which will open with a plenary session to talk about the laboratory beyond 2020. It will be followed by two sessions – the leadership session that will focus on managerial issues and the lab operations session, which will

address technical skills and methods designed for laboratory technicians.

Also, the newly introduced Immunology conference will provide delegates with a unique opportunity to engage with immunology field experts. This new track will discuss the latest trends and issues concerning the widespread utilisation of immunological techniques for healthcare advancement. Also new, the Cytogenetics & IVF conference is aimed at improving services in the growing number of fertility centres and genetic labs in the region. It will feature developments in prenatal diagnosis to chromosome biology in epigenetics and evolution.

This edition will bring back the "Heads of Lab Masterclass", a roundtable discussion that facilitates senior laboratory decision-makers to discuss both public and private laboratory concerns and challenges. The topic this year is "Laboratory Medicine: Challenges and Opportunities" and will feature exceptional leaders in the laboratory from the GCC. Leading companies such as Abbott, Beckman Coulter and Siemens Healthineers will address the challenges discussed at these sessions.

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Public Health Conference Highlights Regional Challenges

The discussions revolved around global perspectives on disaster preparedness

The Public Health Conference yesterday outlined several important areas in which public health bodies can contribute to making overall emergency and disaster management more effective.

"Speakers discussed health effects of some of the more important sudden impact disasters

and potential future threats while outlining the requirements for effective emergency medical and public health response to these events," commented Ross Williams, Exhibition Director, Arab Health.

At the conference, researchers from the Mohammed Bin Rashid University of Medicine and

Health Sciences discussed the findings of a pilot study carried out to identify disease pathogens carried by mosquitoes and transmitted to humans and animals in the UAE and Oman. At the discussion, it was agreed that infectious diseases should remain a public health priority and future research and ongoing surveillance is required.



Stay Connected With the Healthcare Marketplace All Year Round with Omnia

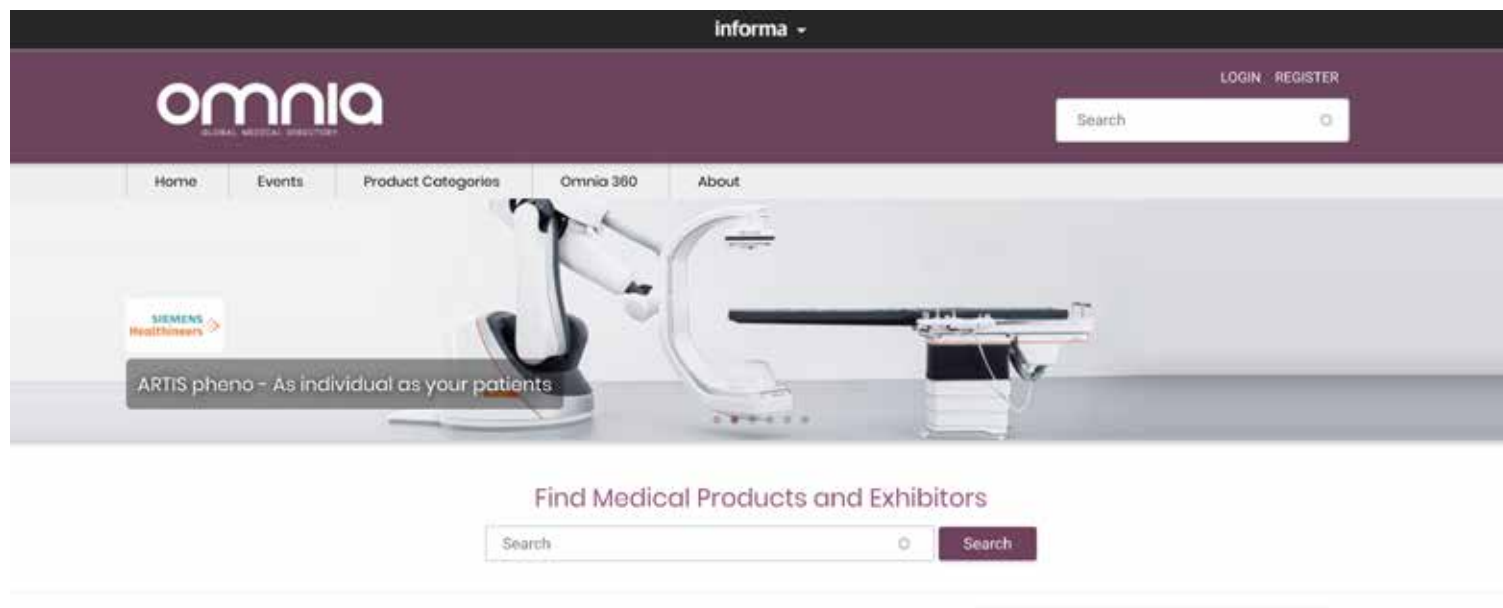
Informa Exhibitions – Healthcare organises 26 exhibitions yearly covering the Middle East, Africa, Asia, Europe and U.S. markets. At each exhibition, you will find the best healthcare and medical technology companies, suppliers, products, and healthcare professionals. With such an extensive marketplace, how can you stay connected with any of the events, exhibiting companies and the tens of thousands of products and services that these exhibitions host?

Enter Omnia, the Global Medical Directory, which is an all-encompassing digital platform that was conceived as a tool to bridge the gap between exhibitors and visitors all year-round. Breaking all geographic boundaries and time zones, Omniagmd.com helps you explore companies and products shown at all of Informa's premier events thus paving the way for a seamless connection for Informa's exhibitors, visitors and all other stakeholders across the spectrum of the healthcare industry.

This year-round connectivity with the global healthcare marketplace helps you to plan ahead of time and connect with exhibitors before, during and after the show.

The idea behind launching Omnia in 2017 was to provide significant value to Informa's exhibitors by enhancing their reach to a global marketplace, all-year round, and expanding this beyond the horizons of the limited days of the exhibition. Omnia's USP is an array of exciting features and an easy-to-use interface for its users.

As a user-centric platform, Omnia is also strengthening Informa's competitive position in the global events marketplace. Therefore, in a



single stroke, it is no longer just the limited number of days of an exhibition that matters. With Omnia, the show goes on, all year-round.

With the listed companies updating their information throughout the year, Omniagmd.com becomes a real-time resource pool for these companies and their products. Visitors can watch product demonstration videos, view PDFs and brochures, download catalogues as well as interact with multiple companies on the portal. Omnia members can also update these visual displays as and when required.

Omnia's engaging tools like 'Add to Favourite List' & 'Request for Information' makes planning for a trade show more effective for both visitors

and exhibitors. Apart from connecting with the exhibitors before, during and after the show, visitors can create a wish list of companies and products of interest and download these interactive tools to personal devices for future reference and planning.

Through Omnia, listed companies get genuine business enquiries and visitor information, while visitors are able to make informed decisions even off the exhibition floor.

One of the most important advantages of being an Omnia member is that all the communication taking place on the platform is transparent. Premium members have backend access to the dashboard to see live what's happening on the Omnia platform. This includes seeing whether people are buying, researching,

browsing, or would like to meet someone at the exhibition, or view the visitor activity on his page.

It is the lead generation success of Omnia that has had an overwhelming response from companies using the portal. The frequency of engagement between visitors to the site and Omnia members are on the rise while product uploads are being updated on a regular basis.

As intelligent technology paves the way for making meaningful connections with the intended target audience, and engaging in interactive experiences with the products on display all through the year, 2019 promises to bring in more exciting possibilities for growth for all Omnia members and visitors.



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TODAY AT A GLANCE

ARAB HEALTH 2019 CONGRESS

Conference	ROOM	Location	Start	Finish
Total Radiology	Level 2	Conrad Dubai	08:25	18:00
Obs & Gyne	Level 4	Conrad Dubai	08:20	18:00
Orthopaedics	Abu Dhabi B	1 st floor above Rashid Hall, DWTC	08:10	17:30
Surgery	Umm Al Qwain	2 nd floor above Rashid Hall, DWTC	08:30	18:00
Emergency Medicine	Ajman D and Fujairah A	Above Hall 7, DWTC	09:10	18:00
Public Health	Dubai C & Dubai D	Above Sheikh Maktoum Hall, DWTC	09:20	17:30
Anaesthesia	Ras Al Khaimah	2 nd floor above Rashid Hall, DWTC	09:00	17:35
Quality Management	Al Ain J & Al Ain K	Above Hall 4	08:50	18:00

ARAB HEALTH DAILY DOSE

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Your Guide to the Start-up Zone

Witness the most innovative startups showcasing their future driven ideas - visit them at the Innovation Hub, in the Plaza area. The companies here will display and demonstrate their new products and innovations that will contribute to shaping the future of healthcare.



The Innov8 Talks

Today's theme: Patient Safety & Quality

Location: Plaza Hall, DWTC

Moderator: Vivek Shukla, Director - Healthcare & Lifesciences, Frost & Sullivan

12:00: **Keynote: 11 Telehealth Secrets after 1,000 deployments**

Dr. Milton Chen, Founder and CEO, VSee, San Jose, U.S.

15:00: **Healthcare: Proactive instead of reactive through technology**

Dr Azad Moopen, Chairman and Managing Director, Aster DM Healthcare, Dubai, UAE

15:30: **WHO digital diabetes intervention guidelines and their impact on developing digital health strategies in the Gulf region**

Professor Robert S. H. Istepanian, Visiting Professor, Institute of Global Health Innovation, Faculty of Medicine, Imperial College, London, UK

THE PITCHES

12:30 - 14:30: **This will feature 8 talks, for 8 minutes**

Aventyn: Digital therapeutics company delivering clinical solutions for personalized chronic care, medical imaging and risk assessment

Dhonor Healthcare: Using blockchain to self-verify pharmaceuticals

id4h: Reducing hospital acquired infections, through improving work flow in the ICU and operating rooms

IvWatch: A continuous monitoring solution to aid in the early detection of peripheral IV infiltration

ObsteCare: Improving delivery care for mother and healthcare provider

Urotronic: Minimally invasive treatment to provide long term relief from stricture recurrence

Life Sense Group: Empowering people with wearable technology

Vomaris: Bioelectric technology to help infection control

THE JURY

■ Dr Mohammad Al Redha, Director, The Executive Office for Organizational Transformation, Dubai Health Authority

■ Mohamed Hamdy, Head of Venture Capital, Dubai Future Foundation

■ Saqr AlHemeiri, Chief Innovation Officer, Ministry of Health and Prevention

■ Mubarak Ibrahim, Director of IT Department, Ministry of Health and Prevention

■ Marwan Abdulaziz, Executive Director, Dubai Science Park

■ Daniel Amir Raduan, Head of Digital Health, Etisalat

■ Akbar Moideen Thumbay, VP - Healthcare Division, Thumbay Group



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Creating Smarter Data-Driven Systems

Interview with Bachir Awad, Vice President and Managing Director, Cerner Middle East & Africa

By Deepa Narwani, Editor

One of the key highlights of the inaugural 'Innovation Hub' at the show is the Motion Health technology being showcased by Cerner. The technology is a screening test that identifies early musculoskeletal problems and supports specialists to provide guidelines for the appropriate exercises to improve joint health and reduce potential injury risks.

Bachir Awad, Vice President and Managing Director, Cerner Middle East & Africa tells Daily Dose: "Motion Health over the last few years has been a major focus of ours on the innovation front. The technology uses Artificial Intelligence (AI) through videography, for instance, where a patient is able to stand in a room, and do various motions for a clinician but at the same time through cameras and technology, we are able to monitor every single movement and then come back and make a clinical assessment and recommendations, as to what potentially maybe wrong with the patient and what can be done to remedy it.

"Cerner has pioneered that space with our technology partners through various clinically developed materials that have been developed around it. We are actually quite confident that it is a solution that is ready for the market and has the ability to be able to diagnose diseases of today and potentially be able to prevent the diseases of tomorrow. Even at our booth, we are putting the spotlight on the innovation of tomorrow."

Cerner has always been an innovative company, Awad highlights, and its focus has always been on ensuring better healthcare outcomes. The company wants to continue to create smarter systems that

inform through data, as he stresses that it should be able to provide information that not only the physician can consume, but also what the consumer can use.

"We have got our next-generation platforms around Big Data and Population Health and these inherently have very sophisticated AI algorithms built into it and these systems can determine what's happening to you as a patient based on the data it has," he explains. "When data starts to inform decision-making and starts to predict that's when you get better healthcare outcomes. AI has a big role in how we leverage technology. I think the future of AI could actually speak back to the user and be integrated with medical records, that to me is the next evolution of personalising healthcare."

Awad emphasises that over the years, Cerner has been focused on how its systems can be delivered at a lower cost and at a faster pace. Ultimately, Awad shares that the company is trying to build efficient, lightweight systems that are not only smart but are also more intuitive and easier to use, but behind the scenes, they are much more agile thereby making them more efficient.

Furthermore, Awad believes that the UAE has been one of the biggest advocates of innovation and is striving to be an innovative country. From that perspective, he says, it's great to see that theme come into healthcare.

Awad concludes: "Cerner has been in the industry for 40 years; it's a home-grown organisation and we have organically grown through innovation. So, innovation is in our DNA. We love to see our clients wanting to innovate and for us to be able to bring

that innovation here to the UAE and to also be able to develop different things through collaboration with our partners here in the UAE and elsewhere

in the Middle East. Being able to bring these innovations to the market that are unique and co-developed is definitely a privilege."



Bachir Awad

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Do You Have a Culture of High Reliability?

By Paula Wilson, President and CEO, Joint Commission Resources, Joint Commission International

Joint Commission International (JCI) is the global subsidiary of the US-based Joint Commission. JCI is a non-profit organisation committed to helping healthcare organisations (HCOs) provide safe and high-quality care. This year JCI is celebrating its 20th year of accrediting organisations around the world. Over 1,000 healthcare organisations, in over 70 countries, display the JCI Gold Seal. The Middle East is the region with most JCI accredited organisations.

As we look forward to the next 20 years, we are proud of the impact we have had on the quality of care provided in both accredited and non-accredited organisations. However, despite our good work, we also recognise that there is still much more to do.

The JCI International Patient Safety Goals identify six key areas that are especially challenging for healthcare organisations:

Goal 1: Identify patients correctly

Goal 2: Improve effective communication

Goal 3: Improve the safety of high-alert medications

Goal 4: Ensure safe surgery

Goal 5: Reduce the risk of healthcare-associated infections

Goal 6: Reduce the risk of patient harm resulting from falls

Addressing these patient safety challenges is a central component of the JCI survey. The JCI standards and survey help HCOs improve on reducing infections, falls and ensuring safe surgery. But healthcare organisations everywhere continue to struggle with these and other patient safety issues. Accreditation provides a solid foundation for managing the risks to patients. Our experience has shown that accredited organisations perform better in many areas of care. But we also know that accreditation does not mean zero harm to patients.

Today we are challenging healthcare organisations to imagine a state of zero harm to patients. We are studying the traits of highly reliable organisations (HROs) such as nuclear power and aviation to understand what healthcare can learn from these industries. These industries share the risk and complexities of HCOs but perform at much higher levels of quality over long periods of time.

We have learned that HROs have strong leaders committed to reaching the highest levels of quality possible. These leaders create a culture that is both safe and just, meaning that staff feel safe to report opportunities to improve processes that are risky to patients. It also means that leadership sets clear boundaries about acceptable and unacceptable behaviours for all staff.

Highly reliable organisations understand that human error is inevitable. Memory lapses, distractions, interruptions, stress and fatigue impact employee's performance. They reject the commonly held belief in healthcare that great, error free clinical care comes solely from professional

training and hard work. They also reject a culture that keeps failures a secret. HROs see actual mistakes, and equally important, near misses as valuable information, providing insight into where they need to work on improving work processes to mitigate the human factors.

Once an organisation knows where the process problems exist, there are many tools available to help improve these processes. Common process improvement tools come from manufacturing and include the tools of lean and six-sigma. The Joint Commission's Center for Transforming Healthcare Care has developed Robust Process Improvement or RPI as a performance improvement model that tailors and augments these tools for the healthcare setting. At JCI we use the RPI model to drive our own performance. We have made this the way we work.

The major challenge leaders face in improving quality and organisational performance is the change management necessary to move the organisation forward. Changing an organisation's culture as well as changing the way work gets done is always met with resistance from the employees impacted. Organisational culture change means virtually everyone will feel the change. Specific groups, perhaps, are impacted more depending on what operational and clinical processes are undergoing change.

Why is change so hard? And how do leaders overcome the resistance to change? An article from the Harvard Business Review by Elizabeth Kantor Ross provides a top 10 list of why we avoid change. Some of the reasons cited include the fear of losing control, the fear that change is happening too quickly, the uncertainty that comes with change, the potential loss of status and worry that change will mean more work.

Leaders need to spend time on understanding why their staff is fearful of change and then address those fears. Transparency and honesty are important if the change is to be successfully managed. Good leaders begin the process with introspection into their own fears and concerns. They need to make a long-term commitment to implementing change and demonstrate that the change is a new way of working and not a new programme. They need to earn the trust of their employees by behaving as they expect all the staff to behave. They need to show authentic empathy in addressing the concerns of their staff. Anything less breeds cynicism which leads to inevitable failure.

This is all very hard work. It requires focus and discipline over long periods of time. But if done well, it opens the possibility of imagining a time when there is zero harm to patients.

Wilson will be speaking on 'Human Improvement: Empowerment, Safe Staffing, and Team Work' as part of the Quality Management conference, at 09:15.



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INTEGRATION

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MEDICAL FAIR ASIA

SINGAPORE 9 – 11 September 2020

MEDICAL FAIR CHINA

SUZHOU 5 – 7 September 2019

MEDICAL FAIR INDIA

MUMBAI 5 – 7 March 2020

MEDICAL FAIR INDIA

NEW DELHI 21 – 23 February 2019

MEDICAL FAIR THAILAND

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MEDICAL MANUFACTURING ASIA

SINGAPORE 9 – 11 September 2020

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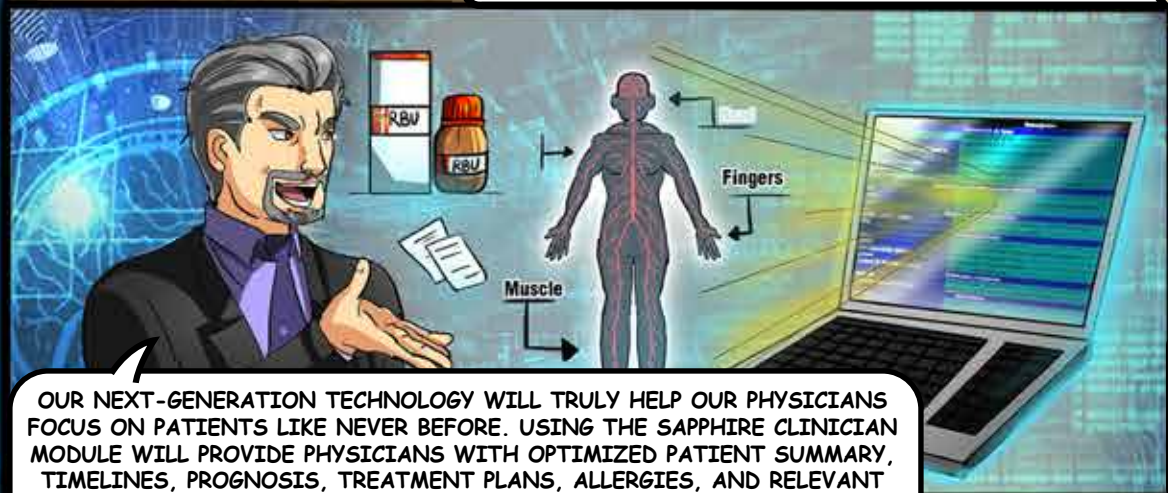
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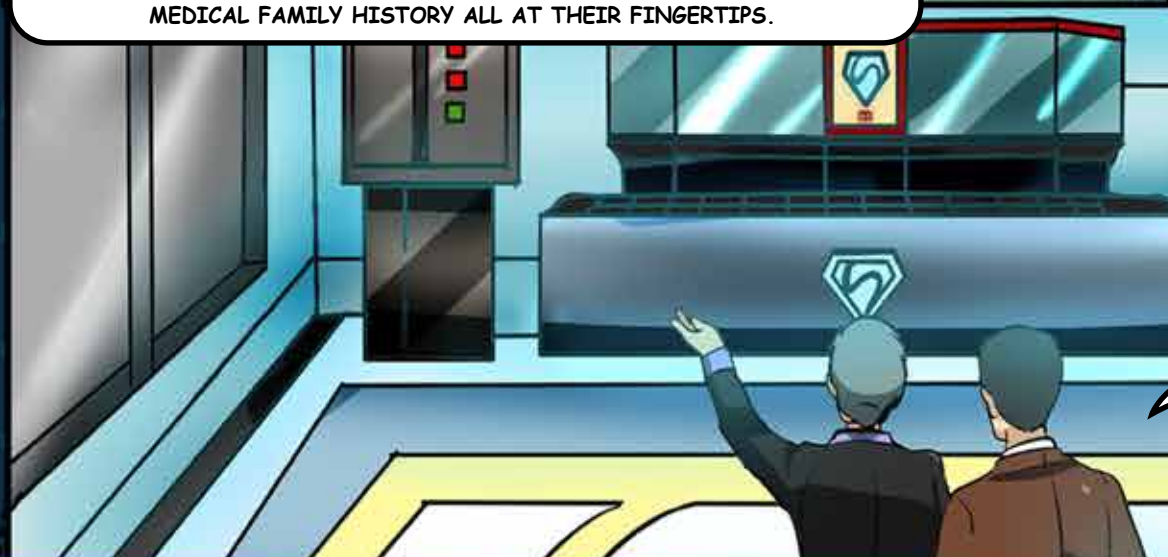
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LET'S INTRODUCE THE WORLD TO THE FUTURE OF HEALTHCARE...



HALL 6

BOOTH C10

Ethylene oxide sterilization:

A tried and tested process

Article provided by Business France

French company SOLSTEO that manufactures industrial-type ethylene oxide sterilisers enjoys worldwide success partly due to an innovative software application which can be adapted for existing machines.

Most polymer-based medical devices are not compatible either with the high temperatures required for steam sterilisation (121°C/134°C), which cause them to deform, or with gamma rays, which can cause plastics to stain or become cloudy. Ethylene oxide sterilisation, however, is performed at temperatures typically between 40°C and 55°C, and is compatible with all medical devices, irrespective of their type and composition. Ethylene oxide is therefore the ideal sterilisation method for all medical devices, provided that the strict standards governing its use (safety and toxicity) and its follow-up (Ethylene oxide residuals in the medical devices) are adhered to.

SOLSTEO is a French company that manufactures industrial-type ethylene oxide sterilisers. SOLSTEO is a member of the technical committee that developed the ISO 11135 standard and provides its customers with experience and expert knowledge of the sterilisation process.

SOLSTEO's success worldwide is partly due to an innovative software application: a plug & play version of its supervisory control and data

acquisition (SCADA) system CRISTALWARE 2.0., which can be adapted for existing machines. This new version is innovative in that it incorporates an equipment simulation tool, which means that the program can be 95% validated before the software is installed on an existing machine. Like a surgeon performing a transplant on an otherwise healthy heart patient, CRISTALWARE

2.0. gives equipment a second lease of life!

Committed to protecting the environment, SOLSTEO supports green industry and offers innovative solutions to reduce the environmental footprint by integrating alternative natural energy sources (solar power) into the operation of its machines and air purification systems (scrubbers and catalytic burners).



Aster DM Healthcare Collaborates with Zebra

Article provided by Zebra Technologies

Zebra Technologies Corporation recently announced that Aster DM Healthcare Group will be using Zebra mobile computers for multiple applications related to patient safety and quality of care. In its two Dubai-based hospitals, this has helped improve front-line nurses' responsiveness to patients in the intensive care unit (ICU), catheterization lab and inpatient wards.

"Technology is the future of healthcare. Closed loop medication administration ensures we provide safer, enhanced patient care," said Dr. Sherbaz Bichu, CEO, Aster Hospitals UAE. "With Zebra's healthcare solutions, we are moving toward a paperless environment in our hospitals. By becoming an intelligent hospital, we are increasing clinical efficiencies with electronic data and effectively managing medication administration."

Aster added mobile computers to its Zebra line-up for their ruggedness and scanning capability. Nurses now use Zebra mobile computers at the bedside for patient identification and medication administration, verification and management. This has enhanced overall patient safety, which is also consistent with Zebra's Future of Healthcare: 2022 Hospital Vision Study results, which revealed 72 per cent of surveyed decision-makers agree mobile devices improve patient care quality, increase time spent with patients and reduce errors.

Thamer Nouri, Business Development Manager, Zebra Technologies Middle East said: "As a regional leader in the adoption of digital technology, Aster is expanding its performance edge by using the latest solutions to provide the best patient care."

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To Face the Future, Innovation is Key

By Dr. Omar Najim, MBChB MRCS DoHNS MSc (surgical technology), Senior Advisor, Undersecretary Office, Department of Health, Abu Dhabi, UAE

As a fifth-year medical student in the mid-nineties at one of the oldest medical schools in the region in Baghdad (founded in 1927), walking the corridor to the first practical session in neurosurgery, I was trying to remember the different branches of the circle of Willis as well as the names of cranial nerves. I was expecting a question or two on that in my first encounter with my eminent professor. The last thing on my mind was innovation, more importantly I was thinking about if my tie was in the right position, if my white coat was ironed and my shoes were clean. As my group and I gathered around one of the best neurosurgeons at that time, Prof. al Khalili, his first question after raising a hand-held ophthalmoscope was “Does anyone know who invented this?”. All seven of us were dumbstruck as to why would that be important. That routine continued all the way through the two weeks we spent with him, stopping at every instrument and every peculiar disease name to ask the same question – who invented it or who named that disease.

As it turned out, it was Hermann von Helmholtz, who invented the ophthalmoscope (or rather reinvented its usefulness) – a simple genius technology that revolutionised the discipline of ophthalmology. A few years later, I asked Prof al Khalili about that habit of his and he said that he believed that knowing who invented the medical tools that we use helps us save or improve the lives of the patients we serve, “it is a must to improve and invent new tools to be able to help more”. In essence he said that innovative thinking is a core principle of being a good doctor. As it turned out Prof al Khalili had a very interesting career, holding a double fellowship from the Royal College of Surgeons and Ophthalmologist and had four inventions for global surgical tools to his name, in addition to being a linguist and a writer.

I was delighted with the theme of this year Arab Health this year – Innovation in healthcare. The new generation, population habits and behaviours are ever more globalised in aspiration and attitude, and patients today have higher and higher expectations. Also, with longer life expectancy and the chronic disease burden getting larger, and technology around us is forever expanding, therefore innovation is currently the only answer in town.

Many of us mix innovation and invention most of the time. Actually, while invention is a completely new idea or product, innovation is a much wider concept. The dictionary defines innovation in so many different ways, but in principle it can be a new methods, ideas or principles, but also it could be a break with tradition, a shift of emphasis, a departure or a change in direction.

On the journey of thinking about what innovation is needed to tackle the many issues that healthcare in general and in the region specifically are facing, it is worth learning about the past first. In the words of the late Sheikh Zayed (PBUH) “He who does not know his past cannot make the best of his present and future, for it is from the past that we learn.”

The Arab, Islamic civilisation and this region has given so many innovations to the world; innovation that we still use every day to treat patients. If you walk into any surgical theatre today, and the chief nurse pulls the drapes to reveal a set of 20-30 oddly shaped shiny surgical instrument, they can tell you which ones are from about a thousand years ago.

In the 10th century, the Muslim scholar Al Zahrawi (also known in the west as Albucasis), produced his masterpiece al-Tasrif, which is a medical encyclopaedia that includes beautifully illustrated treatise of many of the surgical instruments that we use today. His efforts have positively impacted millions of patients across the centuries and across the globe to this day. In the words of the 19th century French historian Leclerc, “Al-Zahrawi remains a leading scholar who



transformed surgery into an independent science based on the knowledge of anatomy. His illustration and drawing of the tools is an innovation that keeps his contribution alive.”

If you are a surgeon, then it is worth exploring the works of a Al Zahrawi, Ibn Zuhr and Al Razi. Abu Baker al Razi will be of particular interest to those of us who think of fighting infection every day; his systematic approach to making the environment in terms of hospital location, layout and materials work for the benefit of the patients and is still widely used today. If you are an oncologist, then the early ideas of describing cancer by Ibn Sina (Avicenna) and its grading was revolutionary at the time. If you are an ophthalmologist, then you should be thankful that Ibn Al Haytham revolutionised the science of lights and optics – his inventions are still lighting our way!

Finally, we all know from our medical school years that the blood circulation was meticulously described by William Harvey in 16th century Europe. However, it is widely accepted now that another Arab scholar described the pulmonary circulation 500 years earlier. Ibn Alnafis critically examined Ibn Sina (Avicenna) another intellectual, through the book entitled “commentary on the anatomy of the canon of Avicenna”. In this book, he described in detail the role of the lungs, its pulmonary circulation and dispelled the myths surrounding that subject.

All of the above and many more had the courage and the conviction to challenge the status quo. They innovated for the sake of their fellow humans and their contributions are still creating an impact all over the globe. They clearly show that the skills of innovation are not dependent on who you are, where you live and what level of knowledge you have. They and many others from around the world observed, identified a pain point and were set on finding a solution that changed our perspective.

Many of us that are gathered today at Arab Health have seen medicine and healthcare changing beyond recognition in the lifetime of our career. The older generation still remembers the first half of the 20th century, when people used to have a life expectancy of almost half of what we expect today. Innovation in antimicrobial through the work of Fleming, vaccination through the work of Jenner, the focus on quality through the teaching of Deming, the surgical checklist by Gawande Et al and the multidisciplinary approach has moved the medical profession at a pace that many of us feel out of breath just trying to catch up. It is fair to say that instead of having healthcare that is simple but ineffective, nowadays we have an effective but complex healthcare that is constantly changing.

Looking into the future, we need to learn about the new tools that our fellow humans made available to us. While we focus our innovation efforts as a

trade on inventing new drugs, new devices and new pathways, IT engineers and innovators have been advancing at a literally lightening or “quantum” speed. The advancement in big data farming, blockchain, artificial intelligence, IoT, social media and pixelated resolution is not only going to knock on our doors soon, rather it will be like a tsunami that will change everything we do. The advice to my fellow colleagues is to start learning and collaborating within the profession and outside on how to ride that tsunami and ride it effectively and safely for the benefit of the people we serve. Taking the example of Artificial Intelligence, a technology that is having the perfect storm to realise its full potential. A technology that with the advancement of data processing speeds, the availability of big data storage solution and expertise in algorithmic thinking will make some of our relied-on-specialties redundant.

While your 5-year-old daughter knows and can sense when you are angry, and a 5th year medical student knows how to be gentle on breaking bad news, they both might fail at spotting a T12 fracture in an X-ray of a patient with pneumonia. An AI will be really bad at breaking bad news, but they will surely spot that fracture. My anticipation that the biggest specialties that will be affected by this initially are radiology, histopathology and physicist. It is pretty much, any specialty that rely heavily on regular set of data that will be the first to change. The key word here is something that got drilled into me during my early years of medical vocation; “Pattern Recognition”.

Now preparing for these innovations and having an open critical mind and patient centred approach to solution are necessary.

We also need to learn that change is inevitable. Innovation is all around us and as we are gathered under the Arab Health banner in the UAE that has a very clear vision of how to be a positive force for the good of humanity, with a prime example of being the first country to have an AI minister.

I urge you to get out of your comfort zone and think critically on our current practices and start collaborating to push new ideas forward. Your patients, your families and your fellow human needs you.

Dr. Najim will be speaking on ‘Achieving large scale change in quality’ as part of the Quality Management conference, at 13:00.

Successful Fight Against Hospital-Acquired Infections

Machine washable beds from Stiegemeyer

Article provided by Stiegemeyer

Hospitals worldwide are fighting against drug-resistant pathogens. In many industrial countries the probability for contracting a hospital-acquired infection during treatment is almost 10 per cent or higher. The beds' role in this is not unimportant as due to decreasing lengths of stay more patients are coming in contact with them in a shorter amount of time. Luckily there is a way to improve the hygiene of beds and at the same time have them operational again more quickly: automated reprocessing.

The construction of machine washable beds is a challenge for every manufacturer. Stiegemeyer from Germany is a pioneer in this field. For more than 40 years, the company has been providing beds suited for automated reprocessing and has continuously improved its technical advance.

Stiegemeyer's experience can also be seen in the new Evario. It is the first hospital bed that is available in a machine washable model variant with plastic safety sides and head/footboards. The split Protega safety side can be easily operated and impresses with modern international design. On request, a control panel can be integrated on both sides with individual functions for patients, care staff and technicians. Such a bed that is also suited for automated reprocessing has been a longstanding dream for many hospitals that has now come true.

All machine washable beds from Stiegemeyer are characterised by special cavity sealing of the frame structure as well as exclusive body impermeability of the drive components. The robust quality also allows the surfaces to remain in top condition during the cleaning and disinfection process. Bed models such as Evario and Puro are designed with as many large surfaces and as little gaps as possible to prevent most dust and dirt from accumulating.



The Evario by Stiegemeyer is the first hospital bed that is available in a machine washable model variant with plastic safety sides and head/footboards.



Stiegemeyer offers machine washable hospital beds such as Evario and Puro.

In order to use automated bed reprocessing many hospitals first have to purchase a washing system. Stiegemeyer focuses on ideally harmonised solutions and cooperates with Belimed, a worldwide leading manufacturer of cart washers. Belimed's products meet all relevant standards, need little space and convince with their efficient drying process and low environmentally friendly water consumption.

"Customers using products from both companies can rely on high, validatable and reliable hygiene quality," says Mario Ohl from Stiegemeyer's technical service department. Work flows within the hospital can be organised more efficiently. Staff is being relieved thanks to the elimination of physically strenuous manual cleaning. Automated reprocessing increases the safety and life quality in wards, saves time, and improves the image of the hospital.



Stiegemeyer focuses on ideally harmonised solutions and cooperates with Belimed, a worldwide leading manufacturer of cart washers.

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Philips Showcases AI-powered Connected Health Technologies

Innovations support the delivery of seamless healthcare in the hospital and at home

Combining smart, AI-powered connected health technologies with a deep understanding of healthcare providers' needs, Royal Philips, a global leader in health technology, has showcased its latest innovations at the 2019 Arab Health Exhibition and Congress with solutions that improve outcomes, enhance the patient experience, increase staff satisfaction and lower the cost of care delivery.

According to Ozlem Fidanci, Philips CEO Middle East and Turkey, "Many of our innovations include AI, which has great potential to improve patient outcomes and the efficiency of care delivery. We believe the true value of AI can only be unlocked by combining it with knowledge of the clinical and operational context in which it is used – a people-centred approach that we call 'adaptive intelligence.'"

Lowering the cost of care and improving efficiency

Philips' Ingenia Ambition 1.5T MR is the latest advance in the Ingenia MRI portfolio which comprises fully-digital MRI systems, healthcare informatics and a range of maintenance and life cycle services for integrated solutions. The Ingenia Ambition is the world's first MR system to enable helium-free operations, reducing the chance of potentially lengthy and costly disruptions, and virtually eliminating dependency on the unpredictable pricing of helium.

The Philips eICU program combines predictive analytics, data visualisation, and advanced reporting capabilities to deliver vital information to bedside caregivers. It allows for near real-time remote patient monitoring and early intervention



via advanced audio-visual technology.

Improving health outcomes

The Philips EPIQ CVx cardiovascular ultrasound system is specifically designed to increase diagnostic confidence and simplify workflow for clinicians in cardiac care, giving them more time to interact with their patients and reducing the need for repeat scans. It provides clinicians with photorealistic renderings of the heart, improving cardiac anatomy analysis with

detailed tissue and depth perception through a new virtual light source.

Previewing at Arab Health, Philips' forthcoming Trilogy Evo is the only portable life support ventilator platform designed to stay with patients to provide consistent therapy and monitoring as they change care environments and when their condition changes. It has been designed to allow physicians and care providers to coordinate care from hospital to home by storing their patient prescription and therapy

information in a single secure location.

Improving the patient experience

The DreamStation Go is Philips' smallest positive airway pressure device designed to simplify travel for patients living with obstructive sleep apnea. At half the size of the previous generation devices, DreamStation Go delivers the same clinically-proven performance and comfort, for reliable, convenient therapy on-the-go.

TruDoc 24x7 Displays Virtual Clinic

Article provided by TruDoc

TruDoc 24x7, a leading 24x7 Population Health Management Provider, is showcasing their new 24x7 Population Health Management Solution including the 24x7 Virtual Clinic Booth, which allows patients to connect with full-time licensed doctors for reliable medical advice, at the show.

The current healthcare market has reached unmanageable levels, where unnecessary over utilisation has led to perpetual increase of medical insurance premiums. In addition to the financial impact, there are serious potential clinical damages due to unnecessary clinical procedures and or medications.

"TruDoc 24x7's aims to align consumers/ employees and payers/employers by having full time doctors who are paid a salary with no incentives and who tell patients what they need not what they can afford through NHS International Guidelines," said Raouf Khalil, CEO & Founder of TruDoc24x7.

After realizing that, in healthcare, virtual services alone aren't enough to change consumer behavior, TruDoc 24x7 transitioned from its previously recognised brand of Mobile Doctors 24-7, which was a basic telemedicine provider to a comprehensive 24x7 Population Health Management company. This new strategy and whole gamut of entry point solutions has allowed the company stratify its members and ensure they are directed to appropriate level of care as well as

avoid unnecessary overutilisation, thus achieving the appropriate balance between quality and cost, as it has been concluded that \$40 billion of Arab world's spending on healthcare is wasted.

According to the American Medical Association '70% of non-life-threatening conditions could be resolved by speaking to a doctor over the phone. TruDoc's 24x7 Population Health Management (PHM) Solution provides members with 24x7 access to comprehensive service solutions for healthy, acute or chronic conditions, whilst they are

travelling via its mobile application, at the office through an on-site Virtual Clinic Booths, or at home via a Hospital at Home Program including 24x7 telemonitoring.

The company also provide Chronic Disease Management Programmes for conditions like Diabetes, Hypertension, Hyperlipidemia and Lower Back Pain to name a few along with second opinion service from medical consultants and experts recognized in their fields globally. The company's PHM ensures the alignment of consumers/

employees and payers/employers by informing patients the truth about what they need not what they can afford in accordance to international guidelines. TruDoc 24x7's doctors are paid a flat salary with no incentives. This is a concierge service that saves money and ensures the right balance between quality and cost. In addition, TruDoc 24x7 shares the clinical and financial outcome reports along with utilisation trends and analytical recommendations for increasing Return on Investment.



Impact of Prostatic Artery Embolization in the UAE

By Jamal Aldeen ALkoteesh, Chair of Department, Clinical Imaging Institute - Chief Medical Officer, Physician-Radiology, Al Ain Hospital

Prostate Artery Embolization (PAE) has emerged as a promising treatment for lower urinary tract symptoms secondary to benign prostatic hypertrophy (BPH). We aim to provide an up-to-date review of this minimally invasive technique, including discussion of potential benefits, patient's selection and technical challenges. Current evidence suggests it is a promising and effective option for patients with large prostate volumes, multiple comorbidities, young patient with erectile dysfunction from medications and suboptimal results from pharmacotherapy. Larger, randomised studies with long-term follow-up data are needed for this technique to be formally established in the treatment paradigm for BPH.

Introduction

As men age, the prostate gland grows larger and may begin to press on the urethra. Enlarged prostate affects more than half of men by age 60 and causes symptoms such as frequent urination, weak urine stream and a persistent feeling of having to urinate.

Surgery is the standard treatment for the condition but can cause complications such as sexual dysfunction and impotence.

A new non-invasive procedure could bring long-term relief from symptoms caused by an enlarged prostate. This new treatment is called Prostate Artery Embolization (PAE).

This procedure works by closing the blood supply to the prostate and as a result, the prostate shrinks in size, causes less blockage, and the symptoms improve.

PAE Procedure History

PAE has evolved into an encouraging minimally invasive option for patients suffering from a variety of prostatic issues, including lower urinary tract symptoms (LUTS) secondary to benign prostatic hyperplasia (BPH), haematuria of prostatic origin, and prostate cancer. After initial medical therapy, transurethral resection of the prostate (TURP) remains the gold standard of surgical treatment. However, its role is undermined by the associated risks of bleeding and lasting sexual dysfunction. With the considerable prevalence of BPH and an associated impact on national healthcare in the UAE, less invasive options and minimally invasive procedures have been continually examined. Since first performing PAEs in 2008 in the world in Brazil, the multidisciplinary team at the University of Sao Paulo has been encouraged by patient outcomes. Al Ain Hospital has been offering PAE since 2015 and over 25 patients with BPH have been treated.

Prostate Artery Anatomy

Technically, PAE is challenging. Knowledge of anatomical features to identify and catheterise target arterial branches is paramount to achieve the best clinical outcomes. Unnecessary catheterisation increases procedure time and radiation exposure. The prostate receives its arterial supply via the medial and the capsular/lateral branch but is variable among patients.

Assis et al proposed an angiographic classification of prostate artery anatomy and analysed 286 pelvic sites to find that most inferior vesical arteries and their prostatic branches arise from the internal pudendal artery. Cone-beam computed tomography

(CBCT) angiography has been utilised to evaluate the many variants of the prostatic artery. With direct contrast injection and three-dimensional angiogram, subtle prostatic feeders are better identified when compared to digital subtraction angiography (DSA) and CT angiography.

Transfemoral Access vs Transradial Access

Traditionally, PAE has been performed via a transfemoral approach (TFA) but transradial approach (TRA) for PAE has garnered increased interest recently. Evidence has suggested that TRA results in shorter post-procedure hospital stays, decreased access-site complications, and an improved patient satisfaction. This method would also allow patients to ambulate immediately post PAE, which could facilitate urination. The distance from the forearm to pelvis along with the arterial tortuosity and previously mentioned variant anatomy has deterred initial attempts for PAE via TRA. Further, prior to selecting TRA patients, collateral circulation must be adequate as determined using a Barbeau test (ie, a modified Allen's test with a pulse-oximetry device).

Studies showed when PAE is performed via TRA, patients don't need pre-PAE pelvic angiograms and have decreased procedure times, fluoroscopy times, and total radiation doses when compared with PAE through TFA. The exclusion criteria for TRA-PAE has been patient height (>6 ft), type D Barbeau waveform, and radial artery diameter <2.0 mm.

Indicated Patient Populations

One of the most promising benefits of PAE has been its efficacy in a variety of patient populations. PAE has been performed in patients with both small and large prostates. TURP in larger gland sizes, especially in prostate volumes >80 cm, is associated with longer operative times and an increased risk of bleeding and anaesthesia-related complications. In contrast, PAE has been demonstrated to be safe and efficacious in varying prostate sizes with no major complications. Further, PAE has demonstrated its role in elderly patients (≥75 years old). In a prospective study done by Wang et al, despite this cohort of patients having a higher prevalence of hypertension, heart disease, chronic obstructive pulmonary disease, urinary retention and antiplatelet agent use than younger patients, they experienced no major complications and a significant improvement in International Prostate Symptom Score (IPSS) after PAE. Conversely, TURP has been associated with an increased risk of complications in patients with multiple comorbidities.

PAE and Lower Urinary Tract Symptoms Due to Benign Prostatic Hyperplasia

In terms of symptomatic improvement in patients suffering from LUTS, PAE has continued to demonstrate its value. Most recently, a meta-analysis by Cizman et al examined PAE in the setting of short- to mid-term follow-up. Over 500 PAE patients were assessed to determine the efficacy and safety of the procedure. At 12 months, IPSS and quality of life (QOL) score decreased by 59 per cent and 56 per cent, respectively, with no significant change in International Index of Erectile Function scores. Prostate-specific antigen (PSA) level and postvoid residual (PVR) volume had the largest decrease within the first six months after PAE. Peak

flow rate also increased by more than 90 per cent at 12 months. The analysis suggests that the degree and rate of morbidity associated with PAE is more favourable than that of TURP. When compared with adverse events of TURP, PAE has a lower incidence of bleeding, blood transfusion, UTI, and urethral stricture. PAE has also been demonstrated to have a minimal association with ejaculatory and erectile dysfunction when compared with TURP.

Medium- and long-term outcomes post PAE were recently analysed by Pisco et al; 630 patients were examined at 18 to 78 months. Medium-term follow-up was defined as 18 to 36 months and long-term follow-up was defined as 36 to 78 months. Long-term follow-up patients had a 76.3 per cent success rate with a lack of sexual dysfunction or urinary incontinence. The study noted that most clinical failures occurred prior to 18 months post PAE. As time post-PAE increased, the incidence of clinical recurrence decreased. Among all patients, there was a mean improvement in IPSS, QOL, and erectile function at both medium-term and long-term follow-up. Correspondingly, there was a decrease in prostate volume and PSA during these time frames.

At Al Ain Hospital we have seen patients improving within days of the procedure and some of them weeks and one patient took one month till he was able to remove his catheter.

PAE and Haematuria

Prostatic haematuria is usually associated with BPH, iatrogenic urological trauma, or radiation therapy. Traditionally, it is treated conservatively with increased fluid intake, indwelling catheterisation with bladder irrigation, and medical therapy. However, when these interventions fail, refractory haematuria is life threatening. PAE has been shown to be an option for these patients. Although distinct prostatic haemorrhage is rarely seen on angiography, PAE is successful by obtaining complete arterial occlusion. By utilising a super-selective approach, control or cessation of haematuria within 1 to 3 days is achieved in 83 to 100 per cent of patients.

PAE and Prostate Cancer

After skin cancers, prostate cancer is the most common cancer affecting men in the U.S. Patients with advanced prostate cancer can present with or develop gross haematuria, urinary obstruction, and ureteral obstruction. Conventionally, this is treated with hormonal and other pharmacologic therapy. In refractory cases, surgical interventions have been performed. Although a large-scale trial has not yet been performed, PAE may play a role in the treatment of prostatic haemorrhage related to advanced prostate cancer.

Increased prostate volume has been associated with an increase in urinary complications post prostatectomy. In this sense, PAE may serve as a bridge to decrease prostate size and improve symptoms prior to prostatectomy or other surgical options.

Possible Complications

Although minimal, PAE has adverse effects post procedure. For patients without indwelling catheters, urethral burning during voiding and frequent urination have been the most common symptoms after PAE.

However, these effects usually resolve within a week and can be treated with non-opioid analgesic medications. More serious complications are associated with non-target embolization to the bladder, rectum, and penis. Ischemia to these organs is always possible and must be avoided through proper mapping via CBCT, microcatheterization for distal embolization, and calibrated microspheres for predictable embolization. At Al Ain Hospital we experienced three complications, which resolved within few days. One patient had penile 3mm ulcer, which was treated by focal antibacterial cream (Fucidin), a second patient had hematospermia, which resolved in two weeks and the last patient who was 54-years-old experienced trash foot from cholesterol emboli two days after the procedure and doppler ultrasound showed patient arterial tree with all run off and the foot improved by conservative management by giving aspirin 100mg daily.

The Future of PAE

PAE is a novel and promising therapy and it has proven to be effective in treating BPH in symptomatic patients regardless of the size of the prostate and we have seen an increase in the number of self-referred patients coming to interventional Radiology clinic looking for this procedure as they might have heard and read about it and wanted to avoid surgical options if possible. The latest results of PAE are similar to surgery but with fewer complications and patients are getting discharged within three to six hours after the treatment, with almost immediate symptom relief.

I believe PAE could eventually become standard treatment for enlarged prostate. It must be continually investigated in order to validate these encouraging observations. Future larger studies with long-term follow-up along with randomised control trials are currently underway. Although current data suggest that PAE is a promising procedure for interventional radiologists, a concerted effort to include a multidisciplinary team of urologists, diagnostic radiologists and interventional radiologists will provide patients with optimum care.

References available on request.

Dr. ALkoteesh will be speaking on 'Vascular erectile dysfunction imaging and intervention', at the Total Radiology conference, at 10am.

Incidence

- Increases with age. By age 60, 50 per cent of men will have signs of BPH, by age 85, 90 per cent will have signs of BPH
- About 1/3 will have symptoms that require treatment

Symptoms

- Slowness or dribbling of stream
- Hesitancy or difficulty starting urination
- Frequent urination
- Urgency or sudden need to urinate
- Need to get up at night to urinate
- Complications: bladder stones, bladder infection, haematuria, damage to kidneys from back pressure caused by retaining large amounts of urine, and urinary retention



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NMG is an American based Design-Build company that is at the forefront when it comes to modular interior design and construction.

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GE Highlights Advanced Portfolio of Healthcare Solutions

From digital solutions to advanced diagnostic equipment, GE Healthcare's solutions presented at Arab Health 2019 include innovative healthcare technology for surgery, digital health, MR, CT, MI and interventional, and are designed to support clinicians in achieving earlier diagnosis and delivering better patient care.

Interventional Solutions

GE Healthcare's multi-disciplinary Discovery IGS 7 OR with high quality intra-operative 3D imaging and guidance for neuro, spine and orthopaedic surgeons and Liver ASSIST V.I., a new software that equips clinicians with a dynamic simulation tool, are interventional solutions that address key clinical challenges and will introduce a new wave of patients to the benefits of minimally-invasive therapies, which includes the potential for reduced risk, pain and recovery time.

New technology in PET/CT and SPECT/CT

In PET/CT, MotionFree offers the first-ever digital respiratory motion management solution that does not require a gating device. The digital solution seamlessly integrates with existing workflows for every patient to actively monitor respiratory motion

in the background of every PET/CT procedure, clear away motion artifacts from every image, and provide real-time respiratory analysis.

In Nuclear Medicine, all five systems in the new 800 Series are designed to help clinicians achieve exceptional outcomes with scalability for both CT and SPECT subsystems and allowing customers to choose the CT capability that best fits their practice and the option to upgrade to digital SPECT.

Next generation of Intelligent CT Scanners and digital tools

The Revolution CT systems now enabled with Smart Subscription, a service which provides access to all the latest CT device software, all the time, for one fee per device per year. The Revolution Frontier Gen 2 provides oncology imaging solutions to improve diagnosis and treatment, including SmartView 3D that allows to more accurately see lesions and identify where to biopsy.

Magnetic Resonance

GE Healthcare is elevating radiology by showcasing a comprehensive portfolio of SIGNA MR systems and digital solutions including AIRx, an AI-based,

automated workflow tool for brain scanning that is designed to provide automated slice prescriptions to help reduce previously redundant, manual steps; and AIR Touch, an intelligent patient recognition software that works with AIR Technology coils to help optimise every scan.

Digital Solutions

GE Healthcare's portfolio of digital healthcare solutions connects machines, people and data to help solve the customers' most pressing operational and clinical challenges.

Today, radiologists waste an estimated 19 percent of their time having to use multiple systems. To address this challenge, radiologists are using new generations of picture archiving and communications systems (PACS) such as GE Healthcare's Centricity™ Universal Viewer, which has been shown to increase the efficiency of some reading tasks by up to 40-50 percent at imaging centers around the world.

Centricity™ Universal Viewer supports native breast imaging. With a single, unified reading environment, it allows the inclusion of almost all modalities in screening or diagnosis workflows including CT, MRI and Tomosynthesis, as well as other patient reports such as clinical notes and pathology reports.

Surgery

For the first time, GE Healthcare is bringing the power of real-time zoom to surgery suites with OEC Elite CFD's new Live Zoom feature. Live Zoom enables clinicians to focus in on critical details by easily zooming up to four times on a live image as well as taking additional fluoro shots or Cine runs with no change in X-ray technique.



Cleveland Clinic Abu Dhabi Showcases Transplant Expertise

Doctors Share Lessons of Developing UAE's First Multi-Organ Transplant Program

Physicians from Cleveland Clinic Abu Dhabi will discuss the remarkable progress of transplant surgery in the UAE at the show, sharing their experience of developing the UAE's first multi-organ transplant program.

Earlier this month, Cleveland Clinic Abu Dhabi hosted a celebratory event for its transplant patients as part of the celebrations surrounding "The Year of Tolerance". The hospital had performed 35 transplant operations, including the UAE's first heart, liver and lung transplants from deceased donors, by the end of 2018.

Dr. Antonio Pinna, Director of Liver Transplant and Hepatology at Cleveland Clinic Abu Dhabi, provided a detailed overview of the current progress of living related donor liver transplantation at the first day of the Gastroenterology Conference. He also shared his expertise on liver volume modulation in transplant at the Surgery Conference on Tuesday.

Dr. Arun Kumar, Medical Director for Transplant Anesthesiology at Cleveland Clinic Abu Dhabi, will present a comprehensive overview of evidence-based strategies that ensure the best possible outcome in liver transplant operations at the Anesthesia Conference today.

"Anesthesia for liver transplantation has made remarkable progress in the last two decades. Successful anesthetic management for a liver transplant requires a thorough understanding of the various stages of the surgery and close collaboration with the surgical team to ensure there are no complications. Donor organs are a scarce resource and every effort must be made to ensure a

successful outcome," said Dr. Kumar.

Organ transplantation remains a relatively new fixture in the UAE since a revision of the law allowed for deceased organ donation in 2017. In addition to the medical aspects of organ donation, Dr. Haamid Siddique, a physician in Cleveland Clinic Abu Dhabi's Critical Care Institute will present on the legal issues surrounding organ transplants in the UAE at the Anesthesia Conference today.

"Building on the early success of our comprehensive program, we continue to work closely with our local partners to build a national transplant program that will offer this life-saving treatment to even more patients without the need to travel abroad," said Dr. Siddique.



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Measuring Impact of Technology in Healthcare Recruitment

Article provided by TrueProfile.io

Innovative technologies within healthcare in recent years have transformed medical practices, advanced the abilities of doctors and have widened the services offered to patients. With the ongoing emergence of new ground-breaking technologies including AI, telemedicine platforms and digital transformation within medicine, 2019 looks set to be another year which pushed the boundaries within healthcare.

However, while we've seen leaps and bounds within the healthcare offered to patients, the processes that exist for medical professionals to secure employment seem out of sync with the work that's carried out by such individuals. The technological changes we have seen within the industry shows a workforce that is committed to advancement, however HR processes for healthcare employees still involve laborious, manual processes, which often halt the pace of professional progression.

The slow-moving pace of document verification for international healthcare and the impact that this can have on the professional migrant community has been readily documented by the World Health Organisation where it states:

"All people who plan to leave their country of origin in order to work as doctors or nurses in another country have to produce a certificate of good standing and proof of registration in their own country. This information is sometimes used to estimate the emigration potential (the number of people who plan to leave their country), but available evidence shows that there is a large gap between the intention to emigrate and actually doing so. This gap can be explained, for example, by difficulties in finding a job or in getting one's qualification recognised in the destination country."

Verification is of course in place to protect healthcare professionals and their patients, that we must all agree on. However, existing processes are actually hurting those that it seeks to help by being too slow, too manual and too repetitive - particularly when the availability of technology today means that they really don't need to be.

Professional Migration Within Healthcare

The push and pull factors around skill shortages within the medical industry mean that a huge number of healthcare professionals migrate to pursue employment opportunities in other countries. As a result, healthcare employers face a huge influx of skilled medical professionals from overseas in order to cater for the demand within their regions. Add to this the fact that over 50 per cent of CVs contain misleading information and that around 4-6 per cent of applications are a result of employment fraud, and the need for fully verifying and checking each new hire becomes highly apparent.

To set the scene, consider the workforce here in the UAE. The majority of healthcare workers originate from overseas and within the population as a whole, 88.4 per cent belongs to the expat community. Of course, due to the nature of the healthcare industry, each and every employee here in the UAE must have their details and qualifications fully verified before employment can commence. This means that for every worker and every job application, medical licences, good standing certificates, accreditations and educational qualifications must be checked, confirmed and verified.

These checks are completely essential and their mandatory nature safeguards patient care and the working environment of other medical professionals. It's without surprise that these background employment checks are a huge burden

on applicants, former employees, issuing authorities such as universities and government regulators. Particularly as these checks are done with each new professional migrant, each job change, and also in the instance that verified documents expire or are misplaced.

The manual, analogue processes that are involved in document verification seem somewhat archaic in comparison to the leaps and bounds seen within the medical industry itself; that is, until now.

The New Standard within Document Verification

TrueProfile.io is a new creation within the document verification industry, which seeks to abolish repetitive background check by using cutting-edge technology. This new technology is powered by the DataFlow Group, a familiar name within the healthcare space, as document verification has been carried out by the DataFlow Group since 2006. Since its inception, the DataFlow Group has completed over 1 million employment background checks for applicants, the majority of which originated from the healthcare industry.

The DataFlow Group saw the friction caused by the current processes for document verification and so, TrueProfile.io was born. It is an applicant and employer-centric professional platform, which places the needs of these individuals at the heart of its offering. The platform is built upon Ethereum blockchain, which remedies the need for continual background checks, while employers and employees reap the benefits of a professional platform.

How can TrueProfile.io assist professional migrants within healthcare? The process is simple: an applicant signs up on the TrueProfile.io platform as a 'Member', enters their details and submits

the necessary documents for verification. Once these are returned with a positive verification, the documents are stored on blockchain and are now known as 'TrueProofs'. This simply means that they have the verified stamp of approval from TrueProfile.io and can now be used as part of a job application.

TrueProofs can be housed on a professional profile, which is all part of the TrueProfile.io member offering, known as myTrueProfile. A myTrueProfile page offers the perfect opportunity for members to showcase their credentials in a positive light, while knowing that the information offered is fully verified. The information can be downloaded or shared via a link with a potential employer, in order to build instant trust.

The use of blockchain means that once verified, a members' documents are secure, cannot be tampered with and the information is owned by them. This provides a fully portable professional profile, which can be used time and time again throughout an individual's career.

TrueProfile.io's document verifications can be done at any time, either during the application process or in order to expedite the professional migration timespan; they can be carried out ahead of applying.

Assisting Healthcare Providers

The other side of the coin is of course HR professionals who collectively carry out countless background checks on a continual basis. By using TrueProfile.io as part of their hiring practices, an employer becomes a TrueProfile.io 'Business Partner', which offers a number of benefits, most notably, complete assurance that healthcare employees are qualified for the role they will be

carrying out.

In addition, time-to-hire is significantly reduced which in turn improves the efficiency of HR teams, allowing them to get on with more human-centric tasks. TrueProfile.io is quick and easy to use, while displaying all of your applicants submitted verifications in a user-friendly dashboard. This allows you to see the right, qualified and verified hires for your business, meaning that hiring decisions become a lot easier to make, with added peace of mind.

Future Prospects

We are ready to welcome employers and applicants within the healthcare sector who are keen to be part of the new standard offered by TrueProfile.io. Getting started is easy, simply visit our website and sign up as either a Business Partner or a Member.

There's no compromise on the quality or depth of background checks with TrueProfile.io - they still remain as thorough as ever. Instead, its new technology means that the final hurdle in recruiting and placing essential healthcare staff across borders simply ceases to exist.



A Framework for Organisational Excellence

By Prof. Tariq A. Aldowaisan, Founder & General Manager, Global Lead Consultants, Kuwait

The aim of quality is to delight the customer. Achieving this aim requires a clear and deep understanding of the customer. Steve Jobs said; "get closer than ever to your customer. So close that you tell them what they need well before they realise it themselves." In fact, organisations build their strategic perspectives and associated metric dimensions from their consumers. A popular perspective is the balanced scorecard (BSC) with four dimensions: financial, customer, internal processes, and learning and growth. A less common perspective is the process scorecard (PSC) with four dimensions: effectiveness, quality, efficiency, and productivity. Here, we propose a framework for organisational excellence that is based on an integrated scorecard that combines both the balanced and process perspectives.

The Meaning of Quality

Definition of quality has evolved over time, from focusing on the product and the provided service, to considering the process and the value. Currently, the most prevalent definition of quality is "customer delight".

Delighting the customer requires addressing four questions:

Who are your customers? The purpose is to profile and pareto your customer population. For hospitals, patients are the customer. They may be profiled on age, nationality, and/or payment method.

What delights your customers? The purpose is to identify those characteristics that are valued by the customer. These may include responsiveness, tangibles, reliability, empathy and cost.

How delighted are they currently? For the critical-to-customer characteristics, the organisation needs to determine how far its current performance from the target. This requires soliciting the opinion of the customers, usually through a survey method.

Why aren't you delighting them more? The purpose is to initiate improvement projects. Depending on the answer to the previous question, a project mandate is developed with specific objective and timeline.

Before we go further, we need to clarify some points associated with the customer concept. The customer is the recipient of the service. The partners assist in the delivery of the products and services. Some of the customers are internal; as is the case with the human resources or information technology departments, whose customers are internal. The customer who receives the service and the client who pays for it are not necessarily the same. For example, a patient is the customer of the hospital, and the insurance firm is the client. The needs and requirements of both must be considered separately when designing the service that may affect both. Customers are not one monolithic thing; they should be profiled and prioritised for effectiveness and value.

Metrics' Perspectives

To delight customers, specific features and their associated metrics need to be defined. The features are typically identified from insightful reading, and in some cases anticipation, of customer requirements. This is a serious exercise that falls under the area of "Quality of Design."

Some of the identified metrics are process-related that are reflected in the produced service or product, while others are related to the opinion of the customer that is usually captured through customer opinion surveys. Process metrics may be classified into two types; productivity that focuses on getting more outputs from the available resources, and efficiency that focuses on reducing the resources for a given output.

Productivity may be simply determined by dividing the output by the input. One example is the number of patients served per clinic, or at a



micro perspective, the number of patients served for each type of sickness. On the other hand, efficiency is defined as the input divided by the output. For instance, utilization of resources, such as MRI or beds, may be measured by dividing the time used by the available time for the resource. Another important metric is the waiting time of the patient or timeliness, which is measured as the percentage of patients that are served on-time. Process compliance or Sigma level is another measure of interest. A four Sigma level process is better than a two or three Sigma level process.

Examples of customer metrics are those related to soliciting the opinion of patients in the services they've received. Various service dimensions such as tangibility, responsiveness, and empathy may be measured by a set of questions each, and then aggregated to compute a composite measure. Another more efficient measure is the net promoter score that measures patient loyalty.

The instance of 'delight' typically drives values to the organization, which are captured with financial and effectiveness metrics. Typical examples of financial metrics are net profit margin, operating expense ratio, and return on assets. Effectiveness is measured as actual output divided by planned output. Examples of effectiveness metrics may relate to growth targets such as sales and number of people served. Impact metrics also fall under the banner of effectiveness. Examples are Carbon Footprint and eradication of a certain disease.

The three key factors that impact the process well-being are the technology, the management system, and the people. The latter is the one that has the highest impact and yet poses the greatest challenge. The performance of people may be captured through learning and growth metrics. An example is the training intensity, which measures the amount of training the worker receive, and their contribution to work improvement activities and initiatives.

The balanced scorecard (BSC) consists of four perspectives; financial, customer, internal processes, and learning and growth.

The process scorecard (PSC) also consists of four perspectives; effectiveness, quality, productivity, and efficiency.

An integrated scorecard (ISC) may be derived by combining the two perspectives, which will also consist of the following four perspectives:

Financial and Effectiveness.
Quality.

Productivity & Efficiency.

Learning and Growth.

It is not enough to balance metrics based on the ISC; equally important is to ensure that there is a balance between leading and lagging metrics. For example, at process sigma level, a leading indicator should resonate in the lagging indicator of higher level of patient satisfaction.

Performance Management System Framework

Using the integrated scorecard (ISC), we construct a performance measurement system framework. There are four types of strategic objectives associated with the ISC:

Grow and sustain.

Provide outstanding services and products, and delight customers.

Improve processes and resources utilization.

Develop the human capital.

Using the proposed framework, the organization may develop its set of metrics for each sector and department, and then cascade these metrics to the individual employee level. For a small size organization, the total number of metrics ranges from 150 to 200. Applying the Pareto Principle, few of these metrics, in the range of 10 to 15, are selected as Key Performance Indicators (KPIs) to be monitored at the corporate level.

Each metric must have a complete definition that includes: code, name, dimension/perspective, strategic objective, formula, unit, assumptions, frequency of measurement, accountable party, responsible party, data sources, target values, base value, standard, and levels of performance.

Conclusion

It is important that people in the organisation share a clear understanding of the meaning of quality and how it impacts the organisation performance. Here, we proposed an integrated scorecard to relate the performance in quality to other areas of performances. Then we developed a performance measurement system framework to relate the integrated scorecard to strategic objectives and set the stage for the development of metrics at the department and corporate levels.

References available on request.

Prof. Aldowaisan will be speaking on 'Quality to excellence' as part of the Quality Management conference, at 10:15.

Two Medical Concierge Companies launch Birmingham offering at Arab Health 2019

To support the growing number of private clinics treating patients with complex and life-threatening conditions in Edgbaston, Birmingham, two medical concierge companies are launching patient pathway offerings for international patients and referrers at Arab Health 2019.

Located in Birmingham, Edgbaston Medical Quarter offers some of the best places for international private patients to receive healthcare - particularly in oncology, orthopaedics, trauma, diabetes, rehabilitation, fertility and mental health.

The companies - Lexihealth and Medical VIP International - both offer 'door-to-door' health concierge services with transparent costs that allows rapid access to the best UK healthcare for patients from around the world and the Middle East.

Designed to guide patients through every aspect of their needs, the bespoke services provide easy access to world-class healthcare in Edgbaston. Whether this is choosing the right medical consultant to arranging travel logistics such as flights and accommodation for patients, their family or companions, right through to rehabilitation and repatriation.

The personalised service also includes lifestyle requests such as schooling, booking restaurants, organising translators, chauffeurs and city guides.

Dedicated medical concierge gives referrers and patients choices, helping to deliver the best outcome by transparency, complete independence, trust and quality care.

CEO of Lexihealth, Annabelle Neame, said: "We manage the often-complex healthcare journey, from appointment negotiation to all the administration associated with one's treatment and invoicing. Lexihealth offers a personalised and coordinated quality care with a discreet, bespoke handheld concierge service throughout. There is a single point of contact with dedicated patient liaison managers appointed to each case and with appointments, screenings and treatments at times and in locations to suit the patient."

Dr Mahnaz Hashmi, Co-founder of Medical VIP International, said: "Choosing a properly qualified independent healthcare practitioners whom you can trust, especially in a different country, can be extremely difficult. Regulation and pricing structures can also be confusing. International Medical VIP can guide you through every step of the way from medical sourcing to a hassle-free billing service and a personal concierge service. Every patient can tailor the service to meet their needs and those of their family or companion."

To find out more about Edgbaston's new medical concierge package, visit the Edgbaston Medical Quarter stand in the UK Pavilion, Hall 7 Stand H7D50.



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