Vol. 04, Issue 07, No. 19, January-February 2020

MEDIWORLD
Middle East

Cover Story

Artificial Intelligence will shape the future

Feature

Providing integrated solutions that advance minimally invasive procedures

News & Update

Gulf Capital reveals its three-year growth plans for IVI-RMA Middle East

Healthcare destination

Oman adds hi-tech facilities to its healthcare sector

www.mediworldme.com

SMASHED?

Emirates SkyCargo

Never with us.

Concerned about the safety and integrity of your pharmaceutical cargo? Don't be. Emirates Pharma have you covered. We understand the importance of life-changing medicines, which is why we've developed an advanced transportation system specifically for temperature-sensitive pharmaceuticals. With state-of-the-art transit processes, cool-chain facilities, quick transfers and a network of over 150 destinations across 6 continents, why would you risk shipping your precious cargo with anyone else?

skycargo.com/emiratespharma

Emirates Pharma

MEDIWORLD Middle East

Published Bi-Monthly: Vol 03, Issue 06, No.18
Middle East, Africa and Asia & Beyond

MediWorld ME aims to create the ultimate platform to share the latest news, updates & developments from the healthcare & medical technology industry within & beyond the GCC countries

• BAHRAIN • CYPRUS • IRAN • IRAQ • JORDAN • KUWAIT • LEBANON • OMAN • QATAR • SAUDI ARABIA • SYRIA • UNITED ARAB EMIRATES • YEMEN • ALGERIA • ANGOLA • BENIN • BOTSWANA • BURKINA FASO • BURUNDI • CAMEROON • CENTRAL AFRICAN REPUBLIC • CHAD • CONGO • COTE D'LVOIRE • DJIBOUTI • E. GUINEA • EGYPT • ERITREA • ETHIOPIA • GABON • GHANA • GUINEA • GUINEA • BISSAU • KENYA • LESOTHO • LIBERIA • LIBYA • MADAGASCAR • MALAWI • MALI • MAURITANIA • MAURITIUS • MOROCCO • MOZAMBIQUE • NAMIBIA • NIGER • NIGERIA • RWANDA • SAO TOME & PRINCIPE • SENEGAL • SEYCHELLES • SIERRA LEONE • SOMALIA • SOUTH AFRICA • SUDAN • SWAZILAND • TANZANIA • TOGO • TUNISIA • UGANDA • ZAIRE • ZAMBIA • ZIMBABWE • BANGLADESH • BHUTAN • INDIA • PAKISTAN • SRI LANKA • NEPAL

7dimensions MEDIA FZE LLC

PO Box: 9604, SAIF Zone, Sharjah - UAE
Tel: +971 6 557 9579, Fax: +971 6 579569,
info@7dimensionsmedia.com
www.7dimensionsmedia.com

Chief Editor
Rustu Soyden
rustu@mediworldme.com

Editor
Ayesha Rashid
ayesha@7dimensionsmedia.com

Contributors
Nirmala Rao

Sales & Marketing
Israr Ahamed
israr@7dimensionsmedia.com

Tousif Ahmed
tousif@7dimensionsmedia.com

Head Operations
Mohammad Karimulla
karimulla@aircargoupdate.com

Creative Director
Mohammed Imran
imran@7dimensionsmedia.com

Photo Journalist
Wasim Ahmed
wasim@7dimensionsmedia.com

World wide Media Representatives
France, Belgium, Monaco, Spain: Aidmedia, Gerard Lecoeur;
Tel: +33(0) 466 326 106; Fax: +33 (0) 466 327 073
India: RMA Mesia, Faredoon Kuka;
Tel: +91 22 55 70 30 81; Fax: =91 22 5570 3082
Taiwan: Advance Media Services Ltd, Keith Lee;
Tel: (886) 2 2523 8268; Fax: (886) 2 2521 4456
Thailand: Trade and Logistics Siam Ltd, Dwighr A chiavetta;
Tel: +66 (0) 2650 8690; Fax: +66 (0) 2650 8696
UK, Ireland, germany, Switzerland, Austria: Horseshoe Media,
Peter Patterson;
Tel : +44 208 6874 160

Editorial

The next great frontier in the healthcare industry

First and foremost I will start by saying that the team of Mediworldme and I wish all our readers a very Happy New Year. The primary highlight of this year is that the UAE is at full swing as it gears up for the Expo 2020 which is set to run for 173 days, starting October 20th – April 10th 2021.

AI is getting increasingly sophisticated at doing what we humans do, but in a more quick and efficient way and at a lower cost. The potential for AI and robotics in healthcare is vast, just like in our daily lives. AI and robotics are increasingly a part of our healthcare eco-system. In our current month's cover story we feature Dr. Angelika Eksteen, CEO, AI Directions who explains to us how AI and its innovative solutions can be used to serve humanity.

Experts at Philips see Image-guided therapy as key when it comes to healthcare practitioners, providing care that is both efficient and effective. Philips has shifted its focus towards healthcare innovation, and is one of the major companies in image guided therapy products and services and continues to bring new technologies to the market. Özlem Fidancı - CEO, Philips Middle East & Turkey, talks in length how their partnership with Abdali Medical Center provides superior care to their patients.

Setting their insights on the highest attainable goal for coil design, GE's new approach challenges the longterm limitations of traditional rigid coils. Tamer Khalaf, Marketing and Applications Director for MR at GE Healthcare in the Eastern Growth Markets explains how their AIR technology enables total freedom in coil positioning and handling during MRI scans.

In recent years, Oman has been pushing for the implementation of modern technological solutions to boost efficiency in the healthcare sector and at the same time ultimately keeping costs down and cut out waiting times. Current healthcare expenditure in Oman is expected to rise at CAGR 9.1 percent from $3.2 billion to $4.9 billion in 2022, according to Alpen Capital. We take a look at Oman's healthcare sector in our medical destination section.

So sit back and explore our current issue as we bring you latest news and interviews with top experts in the healthcare industry.

Have a great day!

Sincerely,

Ayesha Rashid
Editor, *MediWorld ME*

CONTENTS

25 ANNIVERSARY

Under the patronage of His Highness Sheikh
Hamdan bin Rashid Al Maktoum
Deputy Ruler of Dubai, Minister of Finance and President of the Dubai Health Authority

DUPHAT

DUBAI INTERNATIONAL PHARMACEUTICALS & TECHNOLOGIES CONFERENCE & EXHIBITION

in conjunction with DUPHAT TECH™ DUPHAT OTC™

25 - 27 FEBRUARY 2020

Dubai International Convention & Exhibition Centre, UAE

"COMMITTED TO COMPLETE SOLUTIONS IN PHARMACEUTICALS"

DUPHAT
Downstream activities from finished formulations – both patented & generics

DUPHAT-Tech
Upstream and midstream Pharmaceutical manufacturers from R&D, processing & packaging machineries, ingredients / APIs, quality control to medical coding, labeling, storage & logistics

DUPHAT-OTC
Over the counter medicines, supplements, democosmetics and other consumer healthcare products prescribed by the pharmacists to patients

BOOK YOUR BOOTH NOW!

exhibit@duphat.ae
duphat.ae

duphat.UAE duphat_UAE

Join the Pharma Business Hub to meet buyers from the MEA region & expand your business

Organized by INDEX CONFERENCES & EXHIBITIONS

Supported by GOVERNMENT OF DUBAI, DUBAI HEALTH AUTHORITY, INDEX HEALTHCARE TECHNOLOGIES, ashp, EUFEPS, ESCP, shpa, ISPE, APhA AMERICAN PHARMACISTS ASSOCIATION, Therapeutic Drug Monitoring and Clinical Toxicology, ESOP2

Strategic Partner

INDEX Conferences & Exhibitions Organization Est.
P.O. Box 13636, Road # D-62, Opposite Nad Al Hamar, Dubai, UAE, Tel: +971 4 520 8888, Fax: +971 4 338 4193, Email: index@emirates.net.ae, Website: index.ae

Artificial Intelligence will shape the future

Intro: Artificial intelligence was founded as an academic discipline in 1956 since then AI techniques have experienced a resurgence following concurrent advances in computer power, large amounts of data, networking capabilities and further increase of theoretical understanding. AI techniques have become an essential part of many different industry sectors, helping to solve different challenging problems from customer satisfaction through to supporting various business goals.

Vasujit Kalia, in a tête-à-tête with Dr. Angelika Eksteen, CEO of AI Directions, talked about AI and how it can be used particularly, but not only, in healthcare.

Please introduce AI Directions

AI Directions is a Dubai based company, which was established in response to the exciting developments in Artificial Intelligence (AI). AI Directions' value proposition is based on the development of use cases across a number of industries. Fast and customized service delivery and proprietary methodologies developed to assist organizations to understand the strategic approaches to AI are available to support this aim.

AI Directions' business areas are:

- *Training and awareness with regards to AI;*
- *Assessment of AI Maturity and development of an AI Strategy;*
- *Consultancy to identify opportunities and risks related to the use of AI;*
- *Provision of AI solutions for dedicated problems and customers; and*
- *Provision of IoT solutions, e.g. for oil and gas or smart cities.*

The core staff of AI Directions brings together significant experience in research and development, technical standardization, development and implementation of national level strategies, international collaboration and consultancy. While we are technology neutral in our approach, we are also developing a set of products in the areas of pain detection, crowd monitoring and sentiment detection through the use of computer vision. We develop these products through our own network and via partnerships with research institutions in the region and international technology companies.

What are the solutions that you provide, and can you elaborate them?

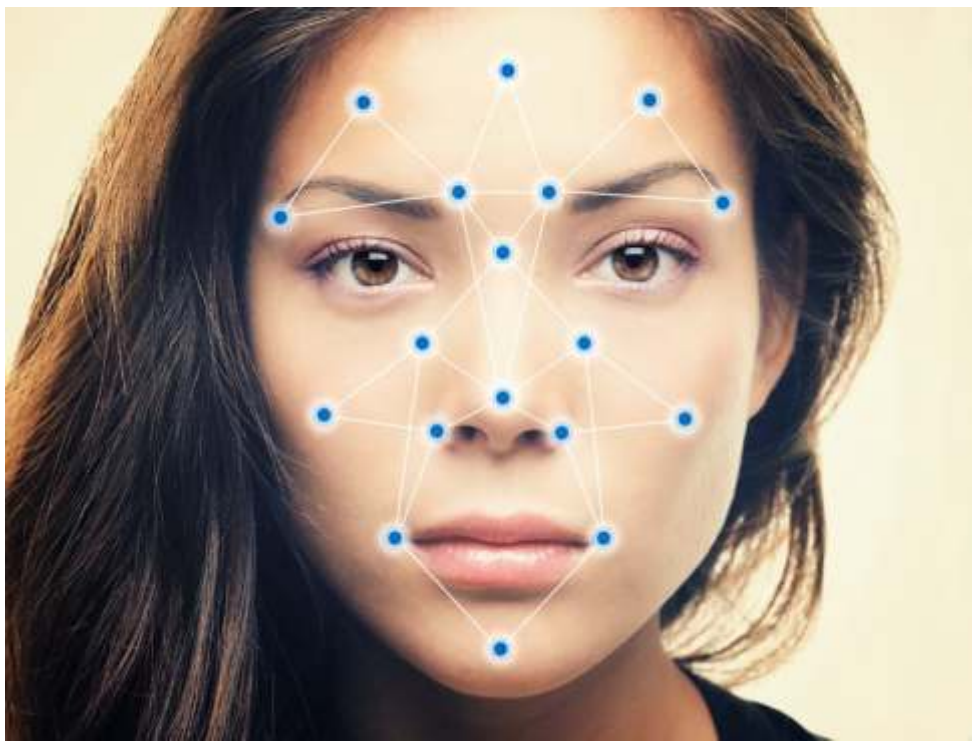
AIDirections' AI Services and AI Solutions are:

➲ **AI Readiness Model:**

The AI Readiness Model checks that the prerequisites for successful AI projects, namely digital transformation and data governance, are in place. This works through a self-assessment (alone or assisted) that any organization can carry out to identify their current status and to see what needs to be improved. A report provides all results and a summary highlighting the findings.

➲ **Development of an AI Strategy:**

In this changing world, all organizations should have an AI Strategy to be prepared for what is coming! AI Directions supports organizations in the development of an AI Strategy; this can take place at a higher level to catch quick wins or makes use on an assessment of AI-related opportunities and risks for the organization, just whatever is preferred.



➲ **Sentiment Analysis Solution:**

AI Directions' Sentiment Analysis solution identifies the degree of customer satisfaction through the use of a normal camera. This can be used to replace the physical emoji buttons that are currently the means of identifying customer satisfaction; the AI solution provides better results as it assesses all people, whereas the buttons are used more occasionally by customers.

➲ **Face Verification Solution:**

Whether you wish to recognize loyal customers or to control access to areas, AI Directions' Face Verification solution allows you to do so. For this application, we do need to have the faces of the persons in question stored to do the comparison, but this can be implemented in a way that only the machine sees the face and any humans only see the results.

➲ **Pain Detection Solution:**

- AI Directions' Pain Detection solution detects levels of pain non-invasively, using a normal camera, to assist caretakers. There are different scenarios for the use of the Pain Detection Solution (on our web site, there are videos illustrating these cases):
- Assisting nurses (in non-ICUs) by raising an alarm if patients pain level or other vital sign and raising above a pre-defined alarm point, therewith allowing for purposeful rounding;
- Helping doctors to objectively assess patients' pain levels over time;
- Assessing the pain levels and other vital signs of outpatients, sending an alarm to the doctor if any of these levels are rising too high.

➲ **For People Flow:**

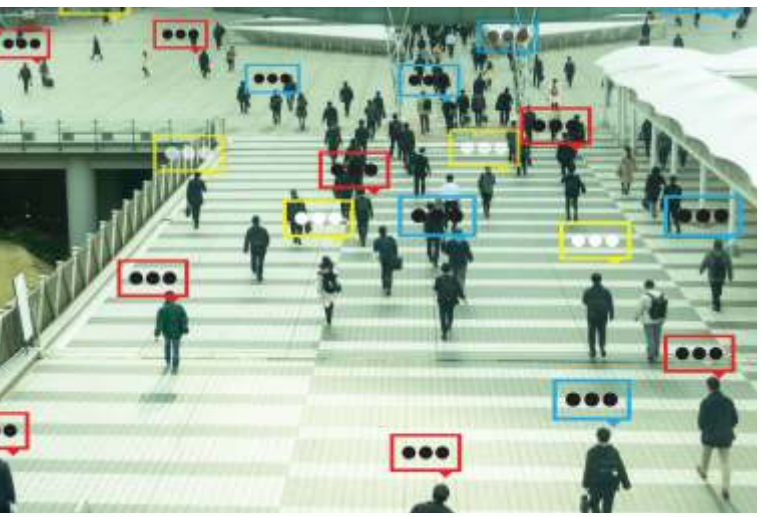
In any area where lots of people come together, it is important to understand their movements – AI Directions' People Flow solution does this. This can help to understand where there are bottlenecks in a hospital, and also – if combined with the Sentiment Analysis Solution – can give insights what certain situations do to the people in it.

What makes AI Directions different from other AI companies?

AI Directions is a UAE founded and based company – we are here when we are needed! The decision to build AI Directions in UAE was based on the fact that UAE provides an ideal environment by supporting new technologies, having great interest in AI and important AI developments, such as the Ministry of AI.

We do not sell boxes – We strongly believe in the fact that AI solutions are not “one size fits all”, they need to be tailored for best success. Therefore, we work with our customers to first identify where AI solutions are most valuable for the business, and then integrate AI in their business processes.

The main ingredient that makes us flexible in the development approach is our flexible development framework, allowing us for rapid prototyping, development and deployment. This platform supports a range of computer vision applications, such as face verification and pain detection, but is flexible and expandable to other AI domains. It leverages industry and international standards to ensure the broadest interoperability. It can be deployed on a wide range of operating systems and platforms and is modular to allow for the deployment in many varied use cases.



By default, our services are not making use of any AI cloud services, all data stays in UAE. Should cloud solutions be required, the AI Directions Platform can be deployed on a cloud service and consume cloud AI APIs. Platform scales from edge scenarios through to data center and (if required by a customer) cloud.

All our AI solutions can work with low or no connectivity and on relatively low compute. We can use existing cameras if they are state of the art and also integrate into your patients' management system, or any other ERP solution that is in place. All solutions are extremely flexible regarding input and output, and entirely privacy preserving as no data leaves the premises, unless wanted.

AI Directions is a pure-play AI company, different from others that add AI to their core business.

Can you throw some light on the partnership between the SEED Group and AI Directions?

SEED Group is a diversified Group operating in industries including technology, healthcare, tourism & hospitality, and real estate. Since its conceptualization in 2000, the group has transformed into a front-runner in multiple business sectors. Our greatest strength lies in forming strategic partnerships with organizations looking to establish a strong presence in the GCC.

AI Directions decided to partner with SEED Group to benefit from their extensive knowledge and invaluable expertise of the MENA business landscape, and to explore opportunities of collaboration with other partners of SEED Group.

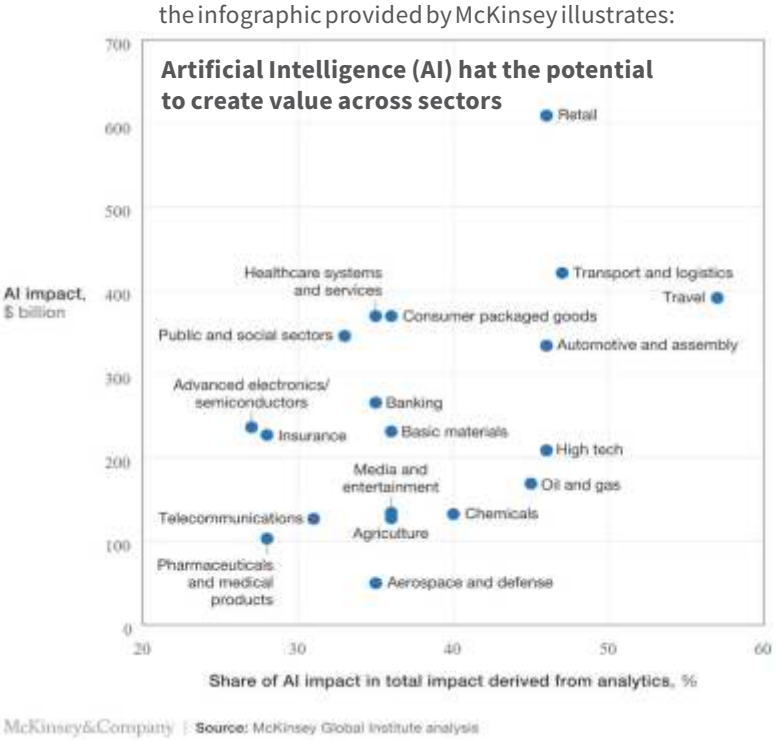
What is the cost involved in it these solutions?

We are price competitive because of the networked competence model where we work with highly qualified development resources in South Africa and partner with even some of our competitors to deliver solutions.

Details about the pricing relate to the type of solution employed, whether it is a purchase or subscription-based, how many instances of the solution are employed, how much adaptation is needed, etc. Please contact us if you need to know more.

How do you foresee the popularity of AI in the coming years?

AI will have a significant impact all sorts of businesses, as the infographic provided by McKinsey illustrates:



Therefore, we do believe that AI will get more & more popular in its different applications over the coming years.

What are your expansion plans?

While our current solutions are already good in detecting pain and vital signs, such as heart rate, we plan to enhance the accuracy of these solutions, and to include SPOx using only normal cameras. In addition, we will use radar-and visual fusion-based solutions to enhance the vital signs detection. We are also exploring the use of near-infrared in areas such as hypoglycemia detection.

AI Directions is also in the process to add more data science into their solutions to enhance the flexibility and breadth of applications.

Özlem Fidancı
CEO, Philips Middle East & Turkey

Providing integrated solutions that advance minimally invasive procedures

Image Guided Therapy uses integrated solutions and smart devices to deliver accurate diagnoses by providing medical professionals with 2D and 3D imaging from three sides of the table without dislodging wires, tubes and pivoting or panning the table. Through the multi-dimensional imaging, doctors are able to easily pinpoint locations of distress without too many incisions and cuts

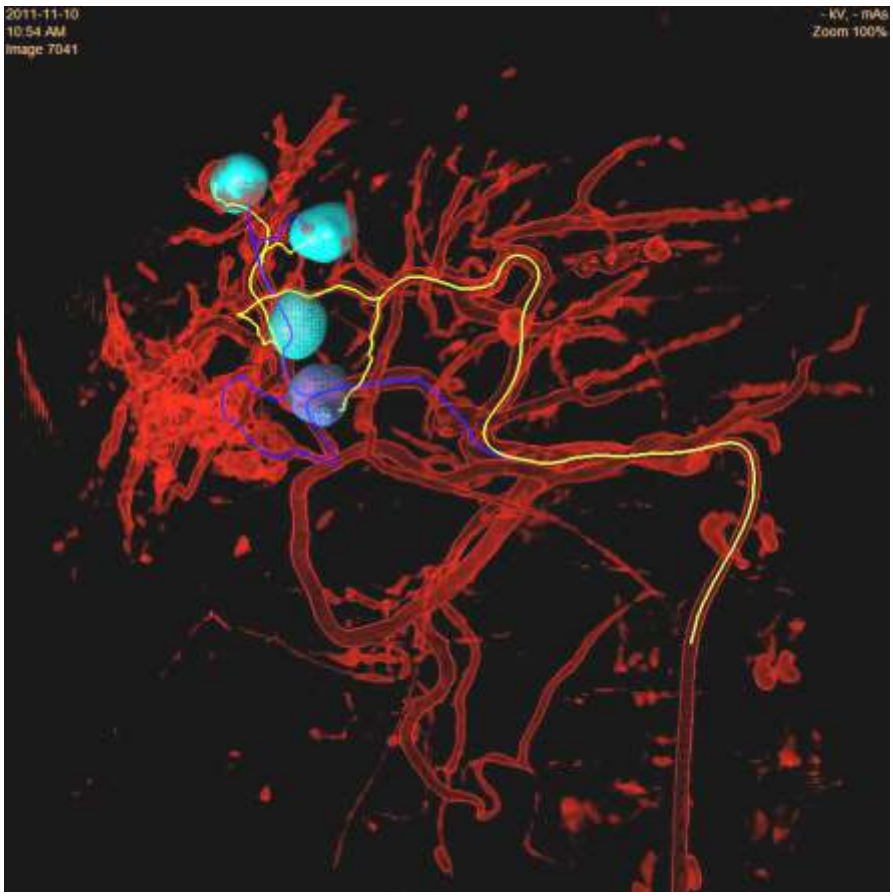
Commonly known to be a central concept of 21st century medicine, Image guided therapy is the use of any form of medical imaging to plan, perform and evaluate surgical procedures and therapeutic interventions. Image guided therapy techniques help to make surgeries less invasive and more precise, leading to shorter stays in the hospital and fewer repeated procedures.

The global image guided therapy systems market size was valued at $3.02 billion in 2017 and is anticipated to expand at a CAGR of 6.3% over the forecast period, according to Grandview research (2018 – 2025).

Pioneers in the field of image guided therapy, Philips believe that technological possibilities are endless but not limited. However, according to them there will be smarter therapeutic devices that not only guide treatment through vascular imaging but also deliver disease therapy.

Philips recently partnered with Abdali Medical Center (AM), the new modern multi-disciplinary hospital. In collaboration with, Philips, Abdali Medical Center has commissioned the latest technologies to improve safety, ensure effective diagnoses and treatments that ultimately lead to improved patient experience. This includes the latest Philips Innovations in Image Guided Therapy, advanced Patient Monitoring, a full range of premium Ultrasound units and Digital X-ray.

Abdali Medical Center and



The global image guided therapy systems market size was valued at $3.02 billion in 2017 and is anticipated to expand at a CAGR of 6.3% over the forecast period, according to Grandview research (2018 – 2025).

Philips have also co-designed a full state of the art patient connected care and monitoring solution that allows continuous accurate monitoring for their patients throughout their stay.

This partnership is consistent with Abdali Medical Center's strategy to adopt innovation in supporting its mission to bring best practice patient-centered care and promoting research and teaching over time – and this equipment will be part of the platform available for future resident program trainings.

Özlem Fidancı - CEO, Philips Middle East & Turkey, tells Ayesha Rashid how Philips' latest technological innovations, allow Interventionists to easily and confidently perform a wide range of routine and complex procedures with a unique user experience and at the same time help Abdali Medical Center optimize lab performance and provide superior care.

What kind of latest technology will you commission to Abdali medical center?

The latest Philips technologies commissioned to the Abdali Medical Center include the Azurion, a new-generation image guided therapy platform; the newest range of Philips Intellivue monitors, including Intellivue X3 for transport and Intellivue MX800 for advanced Patient Monitoring; the best tomographic offerings from the Philips EPIQ Ultrasound System and the incredibly efficient mobile X-Ray systems, which are deployed across all AM units and high acuity departments.

Which Image guided therapy will Abdali use and why?

Philips has commissioned Abdali Medical Center with Azurion, a new generation image guided therapy platform that allows medical professionals to confidently perform a wide range of routine and complex procedures with ease whilst providing patients with superior care. The Philips Azurion is suitable for performing full angiography studies for cardiac, electrophysiology, neuro and vascular procedures and guarantees accurate and effective results. The Azurion platform provides unlimited possibilities to access and integrate information from different imaging modalities like CT, MR, US, PACS, etc. which is needed not only for planning the procedure, but also during the procedure for guidance and to make the correct therapeutic decision.

The possibilities are endless for the future of minimal invasive procedures through Image Guided Therapy. What are your thoughts on this?

Nowadays, innovation in healthcare not only focuses on faster and efficient solutions but also on better patient experience, which is first-priority for many healthcare institutions worldwide. This is where image-guided therapy comes into play by providing integrated solutions that advance minimally invasive solutions that reduce patient recovery time and post-procedure scarring. Azurion platform with its open architecture and

Image Guided Therapy uses integrated solutions and smart devices to deliver accurate diagnoses by providing medical professionals with 2D and 3D imaging from three sides of the table without dislodging wires, tubes and pivoting or panning the table.

interoperability possibilities enables simple and easy integration with any external device for minimally invasive and advanced procedures.

Image guided therapy is perceived to enable diagnostic technology for minimal invasive therapy. How is the therapy a truly integrated solution in one device?

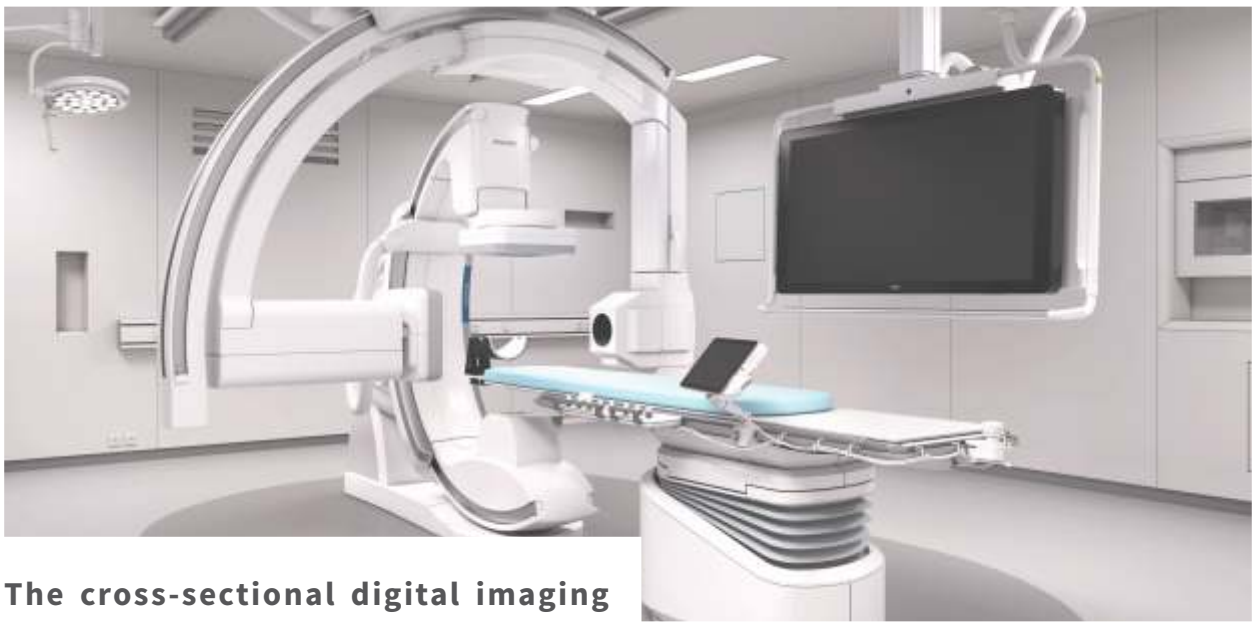
Philips Image Guided Therapy comes with an intelligent motion control that allows clinicians to set up procedure-based workflow and broaden lab utilization. The device can be guided from anywhere across the table opening up more positioning freedom and patient access options. It always makes patient care priority by providing 2D and 3D imaging from all three sides without moving the table, while improving catheter, wire, and intubation control. And if required, the device can easily switch from minimally invasive to open surgery.

How does Image Guided Therapy make surgical procedures less invasive and more precise?

Image Guided Therapy uses integrated solutions and smart devices to deliver accurate diagnoses by providing medical professionals with 2D and 3D imaging from three sides of the table without dislodging wires, tubes and pivoting or panning the table. Through the multi-dimensional imaging, doctors are able to easily pinpoint locations of distress without too many incisions and cuts. Procedures like transcatheter aortic valve implantation (TAVI) through femoral access have become routine in many intervention labs, thanks to the superb image quality at low doses combined with multimodality information access and integration that allows deployment of right graft accurately.

How will the technologies decide, guide, treat and confirm the right care in real time during the procedure to enable better outcomes for each patient?

We at Philips believe that technology can not only make lives a lot easier but better as well. As a leader in image guided therapy, we provide integrated solutions in real time during the procedure for better outputs for every patient. The Philips Azurion lab has various intervention tools that help physicians treat the patient confidently during each phase of treatment. Philips IFR or instant wave free ratio helps physicians decide which lesion should be treated first in case of multiple stenosis in coronary artery. In the same way, tools like dynamic coronary roadmap provide real-time guidance by overlaying live fluoroscopy images on coronary angiograms, thereby eliminating or reducing the need to give contrast puffs to see the coronary anatomy. Philips Intravascular Ultrasound (IVUS) helps in confirming whether the stent was accurately deployed or not. Having worked with world class clinicians, we use our comprehensive portfolio of interventional imaging devices, smart devices, software and services to treat one patient every second worldwide. All together this enables us to optimize care delivery, reduce total costs and help clinicians treat patients better so they can return to their lives as soon as possible.



The cross-sectional digital imaging modalities MRI, CT are the most commonly used modalities of image guided therapy. Why?

As procedures become more complex, it becomes important to get 3D insights for treatment planning. Such 3D images can be acquired either in the angio room itself on the angiography system or can be acquired in a conventional MR or CT scanner. The cross sectional images can be imported from CT or MR if the patient has undergone such examinations and this information can be integrated in the angiography system for better treatment planning, intraoperative guidance and post procedural checks. Using the CT/MR images helps reduce X-ray radiation to the patient by avoiding Cone Beam CT acquisition on the Image Guided therapy system. Such multimodality imaging helps improve treatment outcomes with fusion of MR/CT 3D images with live fluroscopy to guide the devices to the right position and provide targeted therapy with high precision.

How will innovation improve patient experience?

Today, innovation is embedded within all aspects of healthcare. The healthcare industry is consistently creating and updating strategies to keep pace with the fast-changing world of information and technology. It has the ability to impact lives in the smallest to the biggest ways due to its operational effectiveness. From allowing consumers to schedule their health appointments online to quick and effective diagnoses for complex diseases and treatments, innovation has indeed come a long way in an incredibly short time when it comes to patient experience.

With healthcare sector advancing at full speed digitally, what could we hope to see in the future in terms of medical technology from Philips?

Philips is consistently developing new devices to keep up with an ever-evolving and digitally enhanced age. This is to enable better outcomes across the health continuum from healthy living and prevention, to diagnosis, treatment and homecare. We leverage advanced technology and deep clinical and consumer insights to deliver integrated solutions. We hope to spread Philips' innovations all across the world and better the lives of millions of people to come.

Any upcoming devices?

There is a clear shift from open surgery to minimally invasive treatments. Some of the new developments in IGT are on improving the workflow in the lab to provide superior care for most complex minimally invasive procedures. Multimodality information is available at the touch of a button in the examination room. More and more, new clinical apps with anatomical intelligence are being developed to help segment the targeted anatomy automatically. New technologies around augmented reality imaging for precise spinal fusion will be available soon, which will not only allow high quality images for accurate navigation, but also provide high precision treatment options without using invasive frames for targeted therapy. There is a lot of research going on reducing radiation to patient and staff. Philips is working on technology that will enable navigation of devices without x-ray radiation. The future is all about artificial intelligence and Image Guided therapy systems with AI assisted decision support technologies that will enable the physicians to not only decide the right therapy and treatment strategy, but also assist them to determine the end point of the treatment.

Dr Batra's®
HOMEOPATHY
LONDON • DUBAI • INDIA

TASTE THE SWEET PILLS OF SUCCESS?

Your key is a Dr Batra's™ franchise and success is all yours !

WHAT YOU NEED:

- **Low Initial Investment**
- **Exclusive Floor Space**

WHAT YOU GET:

- **Easy Break-Even Model + High ROI**
- **Round-The-Clock Support**

Wish to foray into healthcare sector? This could be your golden opportunity.

By owning a **Dr Batra's™ franchise**, you not only become a part of a leading homeopathy brand with over 240 clinics in India & abroad, but also a global homeopathy market growing at a rising rate of 30% annually.

Grab the opportunity & taste the sweet pills of success !

Looking out for investors
Bahrain | Canada | France | Hong Kong | Malaysia | Qatar | Singapore | Switzerland | USA and others

Call
Mr. Kartik Bhatt
+971 52 655 9837

Email
international.franchise@drbatras.com

AIR Technology – MRI industry's first suite of RF coils

The new coil design is 60 percent lighter than conventional coils and conforms to a variety of patient sizes – in fact, the 48-channel head coil is designed to fit 99.9 percent of patients. It is truly making MR a personalized experience for the patient

Mr. Tamer Khalaf
Marketing & Applications
Director for MR at GE Healthcare

An MRI consists of multiple coils of conductive wire stacked and loop around the core of the coil. Each wire serves a different purpose, but are usually a physically small antennae of sorts. They produce a uniform magnetic field without producing significant amounts of radiation. There are many types available that includes Gradient, RF, Surface, Volume, Shim, Array and Extremity.

The most commonly type of coils that are used in the MRI industry is RF (Radiofrequency) coils that are used as transmitters and receivers of RF signals in equipment used in MRI.

The RF frequency electromagnetic field produced as transmitters is a magnetic near-field with very little associated changing electric field component (such as all conventional radio wave transmissions have). Thus, the high-powered electromagnetic field produced in the MRI transmitter coil does not produce much electromagnetic radiation at its RF frequency, and the RF power is confined to the coil space and not radiated as 'radio waves'. Thus, the transmitting coil is a good EM near-field generator at radio frequency, but a poor EM radiation transmitter at radio frequency.

The receiver coil picks up the oscillations at RF frequencies produced by precession of the magnetic moment of nuclei inside the subject. The signal acquired by the coil is thus an induced emf, and is not the result of picking up radio waves.

The inductor market is expected to grow from $3.01 billion in 2015 to $3.94 billion by 2022, at a CAGR of 3.93% between 2016 and 2022, according to marketsandmarkets.com.

GE's latest AIR Technology is an industry-leading coil suite designed to truly conform to the human body. It was inspired by the desire to challenge the longtime limitations of traditional rigid coils.

By mimicking universal experiences that bring us all comfort and security, the AIR Technology™ coil suite is both comforting and comfortable. Each coil is lightweight, flexible and just like a blanket, they closely wrap around your patient for incredible image quality.

Mr. Tamer Khalaf, Marketing & Applications Director for MR at GE Healthcare in the Eastern Growth Markets tells Ayesha Rashid of Mediworldme how AIR Technology enables total freedom in coil positioning and handling during MRI scans?

Tell us in detail about you AIR technology?

AIR Technology is an industry-first suite of RF coils enabling total freedom in coil positioning and handling during MRI scans. They are designed to conform to the human body just like a comfortable blanket. AIR Coils use innovative conductor material designed for ultra-flexibility, so it can be closely wrapped around patients for incredible image quality. AIR Touch automates coil selection with one touch leading to up to 59% improvement in patient setup time, and 37% reduction in scan time.

How does AIR technology deliver a simply better experience with versality and productively?

The innovative design of AIR Technology, including AIR Touch, allows for high consistency and repeatability between MR technologists and improves productivity by reducing patient setup and scan times.

The coil can be adapted to the patient rather than the patient adapting to the coil. With the help of AIR coils and AIR Touch, complex scans like elbows and shoulders are now easier and more consistent for the techs to position and more comfortable for the patient.

The innovative conductor material was designed to allow more coil elements in the Field of View (FOV i.e. area we are trying to scan). This improves signal reception (also called SNR), depth of penetration speed, and image quality.

Major difference between AIR and traditional coils?

AIR coils are made of entirely new innovative conductor material designed to greatly reduce a common limitation with conventional coils called coupling. When coil elements overlap each other, signal is greatly reduced because of coupling. This is especially common in traditional 'flexible' coils when trying to image hips, shoulders, and legs where the coil must wrap around the body. Reducing this coupling phenomenon with AIR coils also allows us to put more coil elements in the FOV leading to higher SNR.

AIR Coils are lighter weight, more comfortable and flexible offering a better technologist and patient experience. Patients, technologists and radiologists all enjoy benefits from AIR Coils.

How does it reduce patient stress and offer a more conclusive body scan?

Patient stress and anxiety is generally related to one of two things: staying for extended periods of time inside the magnet bore and having heavy 'cage-like' and 'intimidating' coils placed on them.

AIR coils greatly improve SNR, which can lead to higher acceleration factors for faster scans. If we can scan these patients and get them out of the magnet bore faster, it will greatly reduce stress and anxiety. Furthermore, because AIR coils are light weight and flexible, they can be inconspicuous.

What made you come up with a sophisticated technology like AIR?

Our team has always delivered transformational technology starting with the first commercial high-field 1.5T SIGNA MRI system in 1983. In coil technology, it started with the introduction of phased arrays in 1991. Today, phased array technology is the foundation of all MR coils in the industry. The introduction of AIR Technology is simply the continuation of a long and rich history of innovation to make MR scans more comfortable for both the user and the patient.

What is your vision behind AIR technology?

Our vision in MR is to provide results that are fast, consistent, quantifiable and personalized; AIR technology delivers on multiple facets of that vision.

Recent advancements in MRI industry?

Patient experience and comfort has been an ongoing trend in MRI. GE has led the way in this front by being the first to introduce Silent Scan (sound is a major source of discomfort for patients), AIR coils, and perfecting wide bore magnets. Software and potential of AI has also opened new frontiers for MRI. GE already has 6 different AI-based applications, and more are coming as a result of work with our global and regional collaborators.

How will AIR transform patient experience?

The new coil design is 60 percent lighter than conventional coils and conforms to a variety of patient sizes – in fact, the 48-channel head coil is designed to fit 99.9 percent of patients. It is truly making MR a personalized experience for the patient.

Technology used to deliver AIR?

It took two separate and simultaneous research projects to develop the innovative components behind AIR Coils. GE's proprietary E-mode electronics reduce current noise, boost linearity and improve tolerance to varying coil loading conditions. It makes the most out of every centimeter to reduce component volume by more than 60 percent. The conductor material for the loop is lightweight and bendable and a series of linked resonators replaces the rigid circuit boards and lumped components that comprise conventional coils.

These two technologies work very closely together to get high SNR with minimal interaction between the two elements.

Describe the development process of AIR?

GE Healthcare's Coils team, inspired by the blanket we use to cover patients during MR scans, had a vision to make MR coils lightweight and ultra-flexible just like a blanket. Their philosophy during the development was to never compromise. From the start this was the design team's philosophy. And every time they found themselves starting to compromise, they started over.

Is AIR one of the advancements in MRI industry?

The industry itself is recognizing this as a breakthrough. AIR Coil Technology was named Aunt Minnie Best New Radiology Device for 2019. AIR technology is exclusive to the MRI environment and currently does not lend itself well to other industries.

What does the future hold for AIR in the MRI industry?

The President & CEO of our Global MR business, Eric Stahre, says, “we are only limited by our imagination and our customers' imagination to come up with new and different designs.” I couldn't agree more. In the same way the introduction of phased arrays in 1991 transformed MR coil technology, we believe that AIR technology will set the new standard.

First independent data sharing platform

for tracking and monitoring of temperature-controlled shipments

"Built on Nallian's data sharing platform, the Global Pharma Tracker integrates logistics, temperature and quality data into a single, real-time view of a shipment's journey, from factory to pharmacy. Data is injected in the data sharing platform from the responsible parties' systems, leveraging legacy systems and previous IT investments," says Verheyen

Jean Verheyen
CEO Nallian

Managing a temperature-controlled supply chain is a challenge. $35 billion worth of pharmaceutical products is lost per annum due to cold chain issues.

In order for medications, vaccines, and other pharmaceuticals to remain effective, they require optimal conditions in which they are stored in, cared for, and monitored.

The environment inside pharmaceutical locations should be constantly observed. The slightest shift in temperature may consequently change the potency and sterilization.

Preserving the quality of pharmaceuticals highly depends significantly on how it is being maintained, transported and stored along the cold chain. In its simplest form, the product ships directly from manufacturer to end user or customer. In reality, however, the chain is rarely this short.

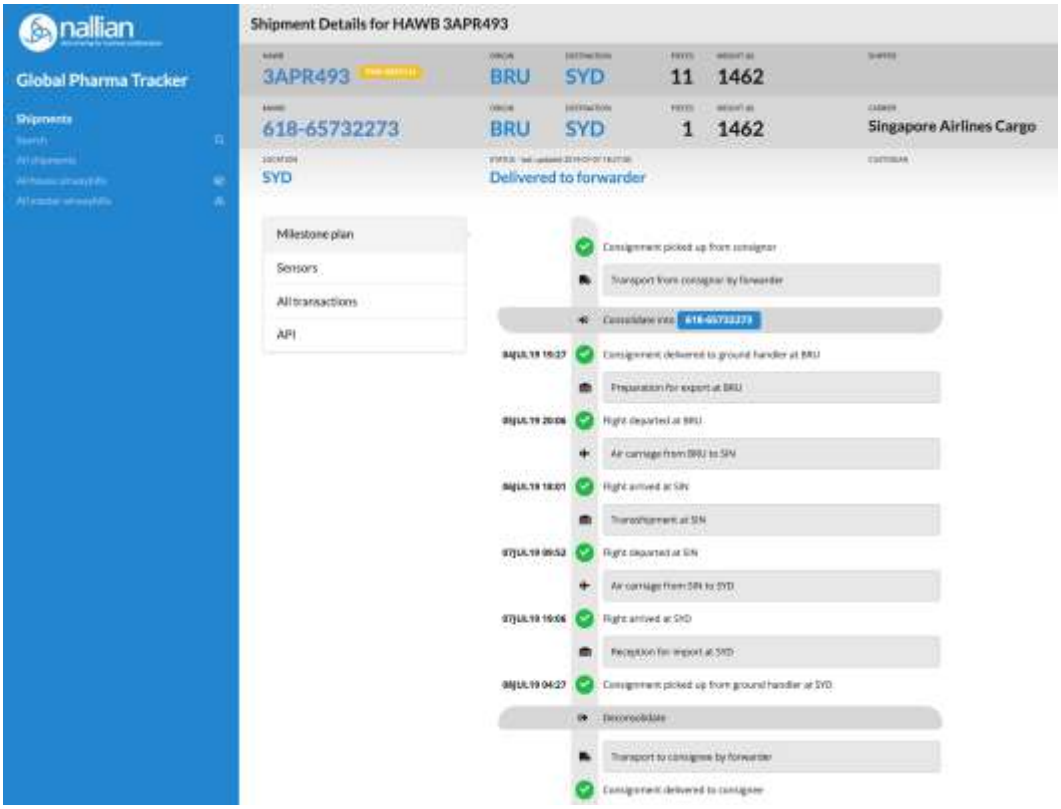
Proper storage temperatures are the basic requirements to ensure optimum quality of the pharmaceuticals throughout their shelf life. Increasingly, drugs and vaccines should be stored and transported within a specific temperature range: between 2˚and 8˚, or between 20˚and 25˚.

In particular, vaccines, insulin, and biotechnology-derived products must be protected from freezing. Even a brief period at sub-zero temperatures may cause an irreversible loss of efficacy. These products should be maintained within a narrow temperature range above freezing but below maximum temperature.

Jean Verheyen, CEO of Nallian tells Mediworldme how their Global Pharma Tracker provides unparalleled levels of transparency and visibility to the whole pharma supply chain.

Tell us in detail about your pharma tracker?

The Global Pharma Tracker is the first independent data sharing platform for end-to-end tracking and monitoring of temperature-controlled pharma shipments. Providing unparalleled levels of transparency and visibility, it empowers pharma actors to efficiently detect, act upon and ultimately prevent costly temperature excursions - currently causing billions worth of product loss every year.



The overlay of temperature, quality and logistics information as well as registration of the responsible party in the platform provides visibility on when an excursion occurs (or is likely to occur soon), where the shipment is at that time and who is responsible for it. Without GPT, collecting the relevant data to analyze an excursion can take 3 weeks or more. Using GPT, this information in available to all relevant parties. In addition, alerts can be sent in real-time when an excursion or delay occurs.

Why is this relevant?

Managing a temperature-controlled supply chain is a challenge. $35 billion worth of pharmaceutical products is lost per annum due to cold chain issues.

- 43% of this cost is due to compromised product
- 24 % of cost is related to root cause analysis
- It takes in general 3 weeks or more to collect relevant data

How does it end to end track and monitor temperature control pharma shipment?

Built on Nallian's data sharing platform, the Global Pharma Tracker integrates logistics, temperature and quality data into a single, real-time view of a shipment's journey, from factory to pharmacy.

It registers all events from the different actors involved in the process (shippers, handlers, carriers, forwarders, cold chain solution providers. Data is injected in the data sharing platform from the responsible parties' systems, leveraging legacy systems and previous IT investments.

The data owner always stays in control of who sees which part of their data. Only parties related to a shipment can see the data and only those parts of the data that are shared with them in that specific context.

GPT creates a unique overlay of temperature, quality and logistics information (MAWB, HAWB, IoT), providing the visibility needed to make the right decisions in case of excursions or delays, and guarantee a better quality of logistics service to shippers and ultimately, patients.

How does it empower pharma experts to efficiently detect, act upon & ultimately prevent costly temperature excursions - currently causing billions worth of product loss every year?

Analysis of this information also allows to better understand 'danger zones' and take pro-active measures. For example: if data analysis shows that at a specific location, excursions happen frequently during a specific period of the day, and this is linked to ambient temperature typically being elevated, one might decide to apply another type of packaging that ensures thermal protection for a longer period of time to ensure the product is better protected while waiting to be loaded; or one might decide to ship the product via another route.

The global pharma air cargo supply chain involves many partners: shippers, carriers, ground handlers, forwarders, cold chain service providers and airport authorities. In this fragmented supply chain, detecting excursions and defining why and where they happened is today a complex, time-consuming and manual process? Where does pharma tracker come in?

The different actors involved in the process may optimize their processes internally, this optimization stops at the company's boarder - or the handover of the shipment. Data captured during their part of the process remains within their own systems and is not necessarily shared with other parties. The GPT brakes down these siloes by enabling virtual integration of the parties involved. It gathers all relevant data in the data sharing platform and makes it visible to the relevant parties within a clear and predefined data governance and sharing framework.

Pharma interestingly is one of the sectors that is most advanced in the when it comes to integrating technology? What do you think?

The pharmaceutical industry is highly regulated and faces increasingly strong requirements in terms of traceability and visibility. This requires it to be forward thinking and leverage technology as an enabler (think of the implementation of serialization in view of the FMD). Within the steering groups of organizations such as Pharma.Aero we see a clear demand and willingness to adopt technology such as GPT – as in many other industries it will be the innovative, forward thinking players who will take the lead and accelerate adoption for the industry.

Keeping in view the tremendous competitive pressure that the pharma industry is facing, efficient management of business processes is becoming essential for sustenance and growth. This is where the pharma industry can leverage technologies that can offer a powerful solution for the pharmaceutical industry and that enables them to be standard compliant and optimize their ROI? Your opinion?

With $35 billion worth of pharmaceutical products lost per annum due to cold chain issues (43% of cost due to compromised product, 24% of cost related to root cause analysis), it goes without saying there are huge benefits to be reaped in terms of ROI. Solutions like the GPT are specifically designed to help pharmaceutical companies avoid these losses, by providing better insights that empower them to take corrective actions faster & take preventive measures that eventually avoid them from happening.

What should Pharma organizations do to achieve digital transformation?

As it is often repeated at the leading conferences in the industry, the technology is there, it's a matter of starting to adopt it. Those parties willing to move forward should not wait for the entire industry to move forward as a whole, but start with a 'coalition of the willing'. In particular in view of establishing efficient collaboration through data sharing, we have already seen a lot of value in starting with such a small group of people/companies who wish to move forward. It allows booking first successes rapidly, as it required less people to align. It is also how we have successfully run the pilot of GTP (with a limited number of shippers, handlers, forwarder and airports, one or two lanes to track) and it is how other cargo communities have successfully adopted collaborative work (such as Brussels Airport, Heathrow, Vienna Int'l Airport, Liege Airport). The successes these pioneers are booking not only strengthens their leading position in the market but also accelerate adoption in the industry

What does 2020 hold for Pharma industry in terms of technology?

The technology is ready to break the status quo and change the outlook of the industry. Powerful trackers are available to ensure reliable registration throughout the shipments journey, packaging is getting ever more advanced and the GPT platform can provide the visibility and transparency needed. It's now a matter of adopting it.

Oman

adds hi-tech facilities to its healthcare sector

Current healthcare expenditures in Oman are expected to grow at a CAGR of 9.1 percent from $3.2 billion in 2017 to $4.9 billion in 2022, according to a report published by Alpen Capital

-By Ayesha


JAWHARAT MUSCAT HOSPITAL

The Sultanate of Oman, resides on the southeastern coast of the Arabian Peninsula in Western Asia. The country borders with the UAE to the northwest, Saudi Arabia to the west, and Yemen to the southwest, and shares marine borders with Iran and Pakistan.

The Sultan Qaboos bin Said al Said has been the hereditary leader of the country, an absolute monarchy, since 1970. Sultan Qaboos is the longest-serving current ruler in the Middle East, and third-longest current reigning monarch in the world.

Oman is a member of the UN, the Arab League, GCC, the Non-Aligned Movement and the Organization of Islamic Cooperation. It has sizable oil reserves, ranking 25th globally. In 2010, the United Nations Development Program ranked Oman as the most improved nation in the world in terms of development during the preceding 40 years. A significant portion of its economy involves tourism and trade of fish, dates and certain agricultural produce. Oman is categorized as a high-income economy and ranks as the 69th most peaceful country in the world according to the Global Peace Index.

Healthcare sector

Oman boasts a universal health care system, which offers free primary health care to Omanis and subsidized care for the foreign population of the sultanate. Over the past four decades greater access to medical facilities and doctors has greatly improved the lifespan of Omani citizens, who have seen their life expectancies increase from 49.3 years in 1970 to roughly 76 years in 2016.

The country has invested heavily in the health sector and succeeded in creating a relatively modern health care system over the last 40 years. Health indicators attest to its comprehensive and well-developed standards. At the same time, the government's determination to provide all its citizens with free, basic health care, along with treating persistent diabetes and cardiovascular disease, means that health-related expenditures are growing.

According to reports published by the Oxford Business Group at the end of 2016, the Ministry of Health (MoH) had 74 hospitals with a total of 6589 beds (equivalent to 14.9 beds per 10,000 people) as well as 266 governmental health centers, clinics, and pharmacies, and 1105 private clinics. Government-run hospitals for the general Omani public accounted for 49 hospitals and 4659 beds, while the private sector accounted for 15 hospitals with 637 beds. The rest of the hospitals are operated by the Royal Armed Forces, the Royal Oman Police, and Sultan Qaboos University. Despite the fact that Omanis can be treated without charge in government hospitals, some choose to visit private hospitals in order to avoid wait times. The government typically reimburses private hospitals for their care. Although the government generally pays for specialized treatment abroad for Omani citizens, in November 2017, the MoH announced only patients suffering from chronic or acute ailments who cannot be treated domestically will be allowed to go abroad for treatment. Over the past five years, there has been a 56 percent drop in the number of patients sent abroad for treatment according to MoH data. The preferred destinations for most Omanis are India, Thailand and Europe. Omanis consider US health care expensive and the few who do go there have friends or family and travel at their own expense. The MoH does not usually refer patients to American hospitals.


ARMED FORCES HOSPITAL
AL-KHOUD

Current healthcare expenditures in Oman are expected to grow at a CAGR of 9.1 percent from $3.2 billion in 2017 to $4.9 billion in 2022, according to a report published by Alpen Capital. This growth is due to a rising population and the rising cost of care. To accommodate the growing base of patients, the bed requirement in Oman is anticipated to grow at a CAGR of 3.2 percent through 2022, translating into a demand for more than 1,100 new beds to reach a capacity of 7,937 beds.

In November 2017, the MoH announced contracts to build three new hospitals in Salalah, Khasab, and Suwaiq. The Royal Oman Police will construct a new 4,600 bed hospital over the next three years, requiring equipment, management services, and drug imports. In the private sector, Badr Al Samaa group started work on a new 100-bed hospital in Sohar. Large scale projects such as the $1 billion International Medical City (IMC) in Salalah, and the Medical City in Barka by the MoH have been on hold.

Medical innovation in process

Oman has been pushing for the implementation of modern technological solutions to boost efficiency in the health care sector and ultimately keep costs down and cut waiting times. This has been notable in the digitization of the country's medical records, with 86% of all government hospital and health care facilities having been linked electronically to a central database by the beginning of 2015. In early January 2017 the Ministry of Health began implementing a cashless transaction system at public health care centers, with both primary clinics and government hospitals now accepting card payments.

Moreover, the Ministry of Health has been reducing the prices of the most commonly used medicines in Oman, in phases over the past years. In June 2015, Ministry of Health revised the prices of 1,180 drugs including those of respiratory system diseases, psychiatric, ENT, eye, cancers, blood diseases and vaccines. This program is in line with the resolution passed at the 72nd meeting of the GCC Health Ministers, held in Muscat on January 4, 2012, to standardize the import prices of medicines. In April 2017, a 45 percent profit cap on medicines was introduced by the Ministry of Health.

The Omani government currently spends more than $260 million a year on medicines and supplies, with more than 93% of medical supplies, including laboratory, surgical equipment and pharmaceuticals, needing to be imported from abroad. There is an ongoing push to establish more pharmaceuticals operations in Oman. The development of the domestic pharmaceuticals industry, could also offer a host of new opportunities.

According to the Ministry of Health, Oman imports more than 90 percent of medicines and surgical supplies consumed in the country. The Ministry of Health is striving to reduce the reliance on imported medicines by encouraging domestic medicine industry which is still considered a small sector but has seen some growth in the past years. Currently there are two local drug-makers and only one company for surgical supplies.

Establishing interconnectivity

Oman is focused on upgrading its facilities and diagnostic capabilities. The Ministry of Health has expressed interest in US healthcare information management technologies as part of its efforts to standardize operations and establish interconnectivity among Oman's hospitals and regional clinics.

Consequently, current healthcare expenditure on outpatient and inpatient services in Oman is projected to grow at an annualized average rate of 10 percent to $1.5 billion and $2.3 billion, respectively, by 2022. To accommodate the growing base of patients, the bed requirement in Oman is anticipated to grow at a CAGR of 3.2 percent through 2022, translating into a demand for more than 1,100 new beds to reach a capacity of 7,937 beds.

The Ministry of Health has outlined other requirements including a full-fledged EMS / ambulance system, innovative health insurance solutions for the 2 million expat population (and eventually for citizens, currently covered by the government), customized patient catering plans, and help with recruitment to address Oman's severe shortage of doctors. The Ministry of Health has also expressed specific interest in U.S. healthcare information management technologies as part of its efforts to standardize operations and establish interconnectivity among Oman's hospitals and clinics.

The Ministry of Health has also repeatedly stressed the need to develop innovative health care financing and insurance solutions, as the government cannot continue to sustainably finance the majority of health care in the Sultanate. The Oman Chamber of Commerce and Industry, a government body

representing the Omani private sector, has been pushing for mandatory health insurance for private sector employees and wishes to implement it by 2019. Under the FTA, US insurers in Oman can establish a commercial presence through subsidiaries, branches, or joint ventures, and provide a full range of insurance products. U.S. providers are also assured a swift approval of new products (30 days for non-life insurance and 60 days for life insurance). The insurance market in Oman is small, but will likely grow, particularly the health insurance market, and the FTA positions U.S. providers to be more competitive.

Smart digital solutions

Omantel, the front-runner in telecommunications and ICT in the Sultanate, has joined hands with Siemens to bring smart solutions (smart hospitals) to the country's health care sector.

Omantel aims to use its expansive state-of-the-art ICT infrastructure to bring advanced solutions to health care practitioners and provide better outcomes for the patients.

Siemens, a robust name in infrastructure digitalization among many other specialties, showcased the advanced capabilities of eHealth & Smart City Solutions at Omantel's 3rd Annual ICT Summit which took place in November.

urthermore, continuing Omantels strategic direction towards the Sultanates digital transformation, the tie-up stands to hugely benefit the public and private health care sectors as it opens the doors to host of revolutionising solutions aimed at enhancing productivity, boosting efficiently and flexibility, transparency, compliance, safety and security.

To achieve these goals under the defined scope, the partnership will work together using four broad cases: improved patient outcomes through circadian lighting, improved staff productivity through patient tracking and asset tracking and quicker information on emergencies. Circadian lighting regulates activity patterns of the brain in humans as per natural light available in the 24-hour pattern. Simulating circadian lighting in health care has shown proven results with improved patient performance to treatment, health and safety.

A tracking system will help monitor the patient in and out of the health care facility, and will be able to inform/warn health institutions about emergencies, if any.

Asset tracking systems, meanwhile, is a digital way to track inventory across departments in hospitals and clinics and reduce costs due to loss, damage, and theft. These systems improve the inventory management processes, thus saving precious time and enhancing staff productivity.

With these introductions, Omantel will be successfully integrating ICT with public service through health care in Oman.

Moreover, Sheikh Abdullah Salim al Salmi, executive president, Capital Market Authority (CMA), recently issued a decision, making amendments to the Unified Health Insurance Policy 'Dhamani'.

The amendments will now include domestic workers in

Dhamani, thereby encouraging their employers to provide high quality and cost-effective healthcare, apart from the basic benefits provided by certain embassies for their respective communities.

He pointed out that such amendments were made following discussions with the community and the stakeholders in cooperation with the Ministry of Foreign Affairs (MOFA) and the representatives of the concerned embassies.

Al Salmi said the Dhamani scheme has reached high level of preparedness in the legislative and regulatory structure to pave the way for actual implementation adding that health insurance rules and standard health insurance policy are ready and that draft amendments to certain provisions of the insurance companies law are in their final stages and the health insurance database has been officially launched. He added that the electronic platform of Dhamani which links the insurance companies, health care institutions and the regulators has been awarded.

Furthermore, Oman- based IRIS Health Services recently introduced future-tech solutions to more than 100 hospitals, pharmacies and clinics across Oman. AI, Blockchain and other tech will improve consumer access to quality care and resource efficiency for providers and strengthen the insurance sector. The digital solutions include electronic health cards, real-time eligibility checks, e-pharmacy lists and a Physicians Support Tool, benefiting everyone involved in the health insurance ecosystem from consumers to insurance companies to regulators and providers.

The IRIS solution also generates instant insurance e-cards with benefit information such as deductible and co-payment details clearly visible, as well as standardised claim forms – together, these two processes alone increases efficiencies for the health ecosystem.

As a goodwill gesture, IRIS is currently providing its Physician Support Tool and related training for free to all the medical service providers in its network in Oman. The Support Tool allows physicians to code diagnoses according to World Health Organization and other international standards at the touch of a button without the need for specialist coders or knowledge.

Gulf Capital reveals its three-year growth plans for IVI-RMA Middle East

Abu Dhabi-based Gulf Capital recently announced its three-year growth plans for IVI-RMA Middle East, the fastest growing provider of fertility treatment services in the GCC, following its acquisition for over $100 million.

Gulf Capital said in a statement that it is actively targeting investments within the fast growing and defensive healthcare sector and has identified the fertility sub-sector as a key focus priority, given its expected double-digit growth rates across the region.

With increased awareness coupled with the technological advancements in the field, the fertility sector in the GCC is forecast to continue to grow at 15 percent annually over the next five years.

Launched in early 2016, IVI-RMA Middle East has established itself as the fastest growing IVF service provider in the UAE and Oman with over 1,200 pregnancies in less than four years.

The new growth plan will see the launch of a new platform-wide brand identity in 2020, the inauguration of a state-of-the-art genetics lab in Abu Dhabi, and expanding the number of clinics by more than three-fold to nine clinics taking the provider to new markets in the Middle East, Asia and Europe.

The company and Gulf Capital will also be opportunistically looking at acquisitions in other geographies, the statement said.

Dr Karim El Solh, CEO of Gulf Capital, said: “We are thrilled to back the strongest management and medical team within the IVF sector regionally. This transaction exemplifies Gulf Capital's tried and tested strategy of acquiring controlling stakes in market leading companies in high growth sectors."

Dr Human Fatemi, medical director for IVI-RMA Middle East, added: “Over the past few years, the uptake of assisted reproduction methods to conceive has increased exponentially in the GCC, especially among the urban population. Infertility in the Middle East has been on the rise due to the ever-evolving lifestyle patterns and other disorders. However, most of the treatment protocols are based upon western treatmentplans.

“While the IVF market in the GCC is growing rapidly, there is a clear need to address issues like standardized clinical protocols, structured training, genetic laboratories and ethical practices.

"It has been our constant endeavor to assist more and more couples to fulfill their dream of starting a family by providing the most advanced fertility treatments in accordance with international guidelines, coupled with the right technology. Our partnership with Gulf Capital shall help us offer our services to an even broader segment of the population.”

GSK, Neopharma to launch first locally produced batch of medicines

Global healthcare giant GlaxoSmithKline (GSK) and Neopharma, a UAE-based pharmaceutical company, have announced the launch of the first locally produced batch of medicines.

The partnership, announced in 2019, established Neopharma as GSK's third-party manufacturer for handling the final manufacturing stage for six of its most prescribed medicines in the UAE.

This first batch includes 35,000 packages of medicine, which have been manufactured at Neopharma's manufacturing plant in Abu Dhabi, with plans to have them readily available for UAE patients in a month.

The launch of the locally produced batch reaffirms the UAE's vision to become a pharmaceutical manufacturing hub in the region.

Mohamed Hamad Al Hameli, Undersecretary of the Department of Health – Abu Dhabi, said, “Abu Dhabi has set out to become a pharmaceutical research, development and manufacturing hub within the MENA region, and this is another great step forward in achieving this aim. In doing so, the country will be better placed to meet the needs of patients through improved access to locally produced medicines.”

The UK Ambassador to the UAE, Patrick Moody added, “The launch is a fantastic example of what UK and UAE companies can achieve together. It is bringing jobs and expertise to the UAE, as well as better services for patients... It is another step forward in our shared ambition to work together to be global leaders in healthcare and life sciences.”

Handled in good company.

From arrival until departure, your Dangerous Goods shipments will benefit from our experience, unique infrastructure and our careful and sensitive approach. Quality first.

- Unique area for DGR shipments: 1,000 sq. m.
- Staff trained to IATA standards and requirements.
- Acceptance and handling available 24/7.
- Handling capacity for all 9 hazard classes.

Please call **+352 2456 6001** or visit **www.luxaircargo.lu** for more information.

Luxair CARGO

Emirates Islamic contributes Dh2m to MBRU's first mobile clinic

Emirates Islamic, one of the leading Islamic financial institutions in the UAE, has contributed Dh2 million to Mohammed Bin Rashid University of Medicine and Health Sciences (MBRU).

The contribution, which is provided through Emirates Islamic's Charity Fund, will be used to help the University launch its first mobile clinic, 'Wellness on Wheels.'

Awatif Al Harmoodi, general manager, Operational Quality & Processes, Emirates Islamic, said, "As a bank that has always been a pillar of the community and is committed to supporting the UAE's healthcare industry, we are delighted to contribute to MBRU as they launch 'Wellness on Wheels'. Through this contribution, we aim to provide high-quality healthcare services to people living in areas where medical facilities are inaccessible and further contribute to building a stronger, healthier and happier community."

Dr Amer Mohammad Al Zarooni, deputy vice chancellor for Administration and Professional Services at MBRU, said, "Wellness on Wheels is a highly regarded initiative by MBRU and we are happy to have a strong partnership with Emirates Islamic, which enabled us to bring this initiative to a larger section of the population.

"In line with our values of giving and excellence, and our vision to serve humanity by helping build healthy and fit communities, we are excited to work on this project and bring this mobile clinic to communities to get easy access to wellness facilities."

Jordanian researcher creates device for early breast cancer detection

A Jordanian researcher has created a device that can be used by individuals for early breast cancer detection, according to a statement by the King Abdullah II Fund for Development (KAFD).

Believing in "the importance of stimulating scientific and technological innovation by members of society", researcher Tasnim Harahisha developed the device out of a desire to find practical solutions to the problems and needs of local communities.

Harahisha's invention is one of many that the KAFD has funded, the statement said.

Her participation in the Applied Scientific Research Project, which allows researchers to work on inventions funded by the KAFD, led to the invention of the early detection device, which facilitates breast cancer detection without the need for a biopsy.

"The small device, which helps women conduct a self-examination at home, is extremely easy to use and will save time, effort and huge costs," Harahisha said.

The researcher highlighted the KAFD's role in "providing the necessary tools to carry out the research and in networking her ideas with a number of specialised experts", according to the statement.

Through the Applied Scientific Research Project, the fund invests in the capabilities and energies of young people and motivates researchers who have applied research ideas or proven applied scientific output, KAFD said in the statement.

Innovative solutions to challenges facing local communities, and especially those that contribute to providing employment opportunities in the areas of applied research, are welcomed in the project, according to the statement.

KIMS Bahrain Healthcare unveils 5th new institution

KIMS Bahrain Healthcare (KBH) has launched its fifth institution in Askar, Bahrain.

The soft opening of the Kims Bahrain Medical Centre (KBMC) Askar was attended by group chief executive Dr Sheriff Sahadulla, KBMC chairman and Royal Bahrain Hospital (RBH) president Ahmed Jawahery and group GCC operations executive director Jacob Thomas.

Located on Avenue 52, the multi-specialty center aims at exclusively serving the population residing in and around Askar.

The center is equipped with general clinics, in addition to facilities and services such as X-ray, laboratory and pharmacy and will provide services of general medicine and urgent care.

It will also provide, on a visiting basis, services of specialist doctors in orthopedics, general surgery, internal medicine dermatology and others.

Kims established its first medical center in Bahrain in 2004, which was also the country's first private healthcare facility. The other facilities under the group are the RBH, KBMC and RBH Medical Center.

UAE's first medical facility to offer da Vinci Xi surgical system for robotic surgery

American Hospital, has become the first medical facility in Dubai to offer the fourth generation of da Vinci Xi surgical system to conduct robotic surgery services.

The launch of the service aligns with the overarching goals of the UAE Centennial 2071 and the recent three-year budget cycle (2020-2022) approved by HH Sheikh Mohammed bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, to make Dubai one of the most liveable cities in the world. As per this budget cycle, for the year 2020, 5 percent has been dedicated to Excellence and Innovation.

Dr. Hatem Moussa, American board certified, consultant general surgeon and an international robotic surgery trainer at American Hospital, said, "The facilities at the hospital represent the most advanced services from across the world, and with the addition of the robotic surgery system, we will be taking the surgery beyond the limits of human hands."

"da Vinci Xi surgical system is the latest development in the robotic surgery that we are proud to premiere in Dubai for the well-being of patients not only in the UAE but also patients coming to the region who are seeking the highest-quality medical care. Moreover, American hospital will be the only hospital in the region to perform robotic assisted single site surgery to minimize the risk of infection with one small scar only."

Robotic Assisted surgery is a process that allows surgeons to perform complex surgical procedures with more precision, flexibility, and control than conventional techniques, the latest edition enable surgeons to perform minimally invasive surgery with an advanced set of instruments, 3D- High Definition (3D-HD) vision system, and with 10 times magnification.

The da Vinci Xi instruments have mechanical wrists that bend and rotate to mimic the movements of the human wrist- allowing the surgeon to make small, precise movements inside the body.

Sherif Beshara, chief executive officer of Mohamed & Obaid Al Mulla Group, said, "With a strong emphasis on global healthcare and medical expertise, our mission is to make the region healthier and happier through quality care that comes from latest technological equipment and to integrate artificial intelligence in our medical services. American Hospital consistently seeks the ultimate in-patient comfort and safety, and this new system is one additional step on that journey."

Catering to the international and national patient demand, American Hospital strives to bring latest technology in healthcare to the region and to train doctors by partnering with global leaders in the medical field.

The robotic surgery system that will be employed at American Hospital are developed by da Vinci Xi surgical system, renowned for creating versatile systems that provide multi-quadrant access for a variety of complex procedures.

DHCR issues new regulations for lactation consultants

Dubai Healthcare City Authority – Regulatory, DHCR, the regulator of Dubai Healthcare City, DHCC, recently announced the introduction of the Lactation Consultant licensing specialty, along with new regulations, stipulating certification requirements among other licensure criteria, to increase specialization and diversify the healthcare talent pool in the free zone.

Lactation consultants provide personalized assistance to mothers and their babies, assisting them through various stages of the breastfeeding process and providing practical and emotional support.

At the DHCC, more than 30 clinical facilities offer pre- and post-natal care, provided by some 200 healthcare professionals. Commenting on the introduction of the specialty, Dr. Ramadan AlBlooshi, Chief Regulatory Officer, DHCR, said, "Specialization enhances the continuum of care for maternal and child health.

By recognizing and regulating this specialty, we will ensure that certified and trained lactation consultants contribute to improving knowledge and supporting breastfeeding in the health sector and the community. Our licensure requirements are in line with international practices and recognize global certifications."

Professional qualification requirements for allied health professionals who apply for licensure as a lactation consultant cover two options – either a Bachelor's Degree with proof of education (90 hours) on lactation and/or breastfeeding topics as part of an academic program, or a certification from the International Board of Lactation Consultant Examiners.

The benefits of breastfeeding are well documented. According to the World Health Organization, breastfeeding is recommended from birth for at least the first six months. For infants, benefits are linked to the reduced risk of asthma, obesity, Type 2 diabetes, ear and respiratory infections, and Sudden Infant Death Syndrome. For mothers, breastfeeding can help lower the risk of hypertension, Type 2 diabetes, and ovarian and breast cancers.

Omani Health Minister unveils strategic plans for vaccinations and measles

Under the theme (together towards better immunization services), Dr. Ahmed Mohammed al Saeedi, Minister of Health, recently launched the National strategic plans for vaccinations and measles.

He also introduced new vaccines in the National Immunization Program in a ceremony to be held at the Kempinski Hotel.

The National Vaccine Action Plan defines strategic objectives and priority actions for immunization programs to guide efforts to prevent and control vaccine-preventable diseases in the Sultanate within the upcoming five years. It takes into account the country's epidemic statue, morbidity burden and priorities, as well as the international trends.

The strategy is to reach the goals in terms of coverage, access to new vaccines, mortality and disease reduction, ensuring the quality, effectiveness and safety of vaccines through integrating state-of-the-art technology.

GMU, RCSI and Bahrain Medical University to promote mutual cooperation in medical education and research

Gulf Medical University (GMU), Ajman, recently signed an agreement for strategic collaboration with the Royal College of Surgeons in Ireland (RCSI), Medical University of Bahrain, aimed to promote mutual cooperation in medical education and research. The MoU was signed at Gulf Medical University by Prof. Hossam Hamdy, the Chancellor, representing GMU and Prof. Sameer Otoom, the President, representing RCSI Bahrain.

The MoU is part of GMU's strategic objectives concerning internationalization and global collaborations. At present, higher education and training are confined within the walls of universities. E-learning and technological advances maximize the utilization and effectiveness of the learning process. GMU, as a leading medical university in the Gulf region, has close relationships with similar universities in the GMU.

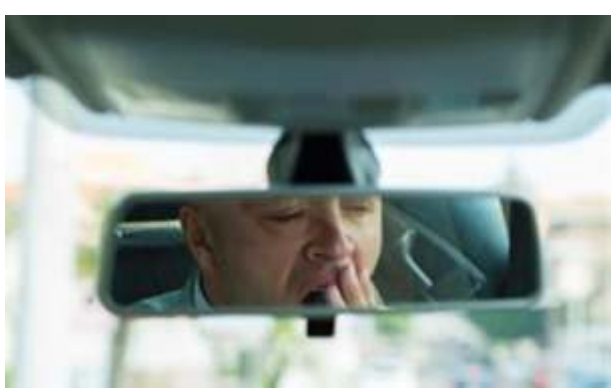
Prof. Hossam Hamdy said the collaboration between GMU and RCSI Bahrain would open up several opportunities in education, research and internationalization. “Both the institutions share the same values and have the same vision and mission of imparting healthcare to the populations of the UAE, Bahrain and the GCC countries through innovations in medical education and healthcare. We hope to take this collaboration ahead in such a way that it benefits both GMU and RCSI Bahrain, as well as the region,” he said.

Prof. Sameer Otoom said that the collaboration would focus on three things mainly: exchange of examiners, joint research and clinical electives. Regarding the delegation's visit to GMU and the tour of the teaching, training and research facilities, he said, “We are very impressed with the research facilities of GMU that we've seen today – a big research center focusing on one type of research and big modern hospitals within the Gulf Medical University Academic Health System. This is an exemplary concept.”

The delegation also complemented GMU for its innovative, technology-intensive training methodology, especially the Virtual Patient Learning (VPL) system developed by GMU to enhance the students' learning experience.

Gulf Medical University has been establishing tie-ups with leading international universities and research institutions in the United States, Europe, China, India, Japan, Korea, the Gulf States and Egypt, in line with its strategic directions. In the field of research, the University has established international research laboratories that cooperate with a large number of international research centers and work with their counterparts in the UAE, especially in the field of immunology research to treat cancer. GMU receives students from more than 80 countries as its reputation and image goes beyond the region.

20% traffic accidents caused by a common sleep disorder, says experts



Twenty percent of road traffic accidents in the Middle East are due to underlying sleep apnea, a common sleep disorder, a report said.

It affects 20 percent of women and 35 percent of men, added the Road Accident Survey, noting that men have higher incidence. Four per cent of adults are suffering from obstructive sleep apnea (OSA).

There is a correlation of high BMI and OSA risk.

Some common symptoms of sleep apnea are daytime sleepiness, loud snoring, and restless sleep.

Dr Kalpana Nagpal, senior consultant ENT, Head, Neck and Robotic Surgery at Indraprastha Apollo Hospital said that robotic surgeries have given a new and easy way out to the sleep apnea patients. Doctor highlights that now there is no need to ignore snoring or sleep apnea.

According to Dr Nagpal, robotic surgery is becoming increasingly popular among the surgical specialties and most of the institutions have or are investing in it. It has numerous benefits over the conventional methods like fast recovery, low infections, almost painless, almost no scar, low blood loss, great cosmetic results and better post-operative immune function.

“The Obstructive Sleep Apnea (OSA) or snoring is a dangerous disorder and most of us laugh it off or ignore or learn to live with it,” said Dr Nagpal. She further explained that this condition arises when a person constantly stops breathing while sleeping due to the collapse in his/her airway.

It isn't clear why a person develops OSA, but triggers for the same are many ranging from weight gain, alcohol, sedative use, decreased muscle tone or the physical makeup of the person's airway. If the condition is left undiagnosed/untreated or ignored for a longer span, the OSA can affect a person in many ways like the decreased quality of life, diabetes, impotence, high blood pressure, fatigue, stroke or cardiac arrest, memory disturbances etc.

MEDIWORLD Middle East

UPCOMING EVENTS

Building Healthcare Innovation & Design 2020

27-30 January
Dubai

Healthcare Infrastructure Forum

27-30 January
Dubai

IMTSDUBAI International Medical Travel Show

02 February
Dubai

2nd Annual Middle East Healthcare & Technology

24-25 February
Bahrain

DUPHAT Dubai Int'l Pharmaceuticals & Technologies Conf. & Exhibition

25-27 February
Dubai

Middle East Health Leadership Program

29 Feb -05 March
Abu Dhabi

Blockchain in Healthcare Symposium

29 February
Abu Dhabi

Middle East Healthcare Financing and Revolution Summit 2020

9-10 March
Abu Dhabi

Healthcare and Pediatric Nutrition Conference 2020

30-31 March
Dubai

AIMed

8-10 April
Abu Dhabi

مطار الشارقة
Sharjah Airport

Connecting Communities
Across the Globe

AUTOMOBILES | **DANGEROUS GOODS** | **HONEYBEES** | **HORSES** | **PHARMA**

- Easy and transparent procedures mean your cargo moves with minimal waiting time.
- Dedicated trucking fleet and airlines networks ensure excellent regional connectivity.
- Availability of cool units to facilitate perishable handling.
- First airport to offer IATA CEIV Pharma certified cargo handling services in the Middle East and Africa.
- Our competitive rates make us popular with charters, ad hoc operators and sea-air traffic.

SHARJAHAIRPORT
www.sharjahairport.ae

الشارقة لخدمات الطيران
Sharjah Aviation Services
www.sharjahaviation.com

IATA ISAGO

PHARMA AERO
STRATEGIC MEMBER


THE WORLD'S HEALTH
IS IN THE SAFE HANDS
OF TURKISH CARGO
As the cargo airline that flies to more countries than any other, we carry
all your health and wellness needs, from pharmaceuticals to
medical supplies without ever interrupting the temperature-controlled cold chain.
TURKISH CARGO
TURKISH
CARGO
turkishcargo.com