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Edited by

Infodent Infomedix International Publishing & Consulting House

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infomedix.it

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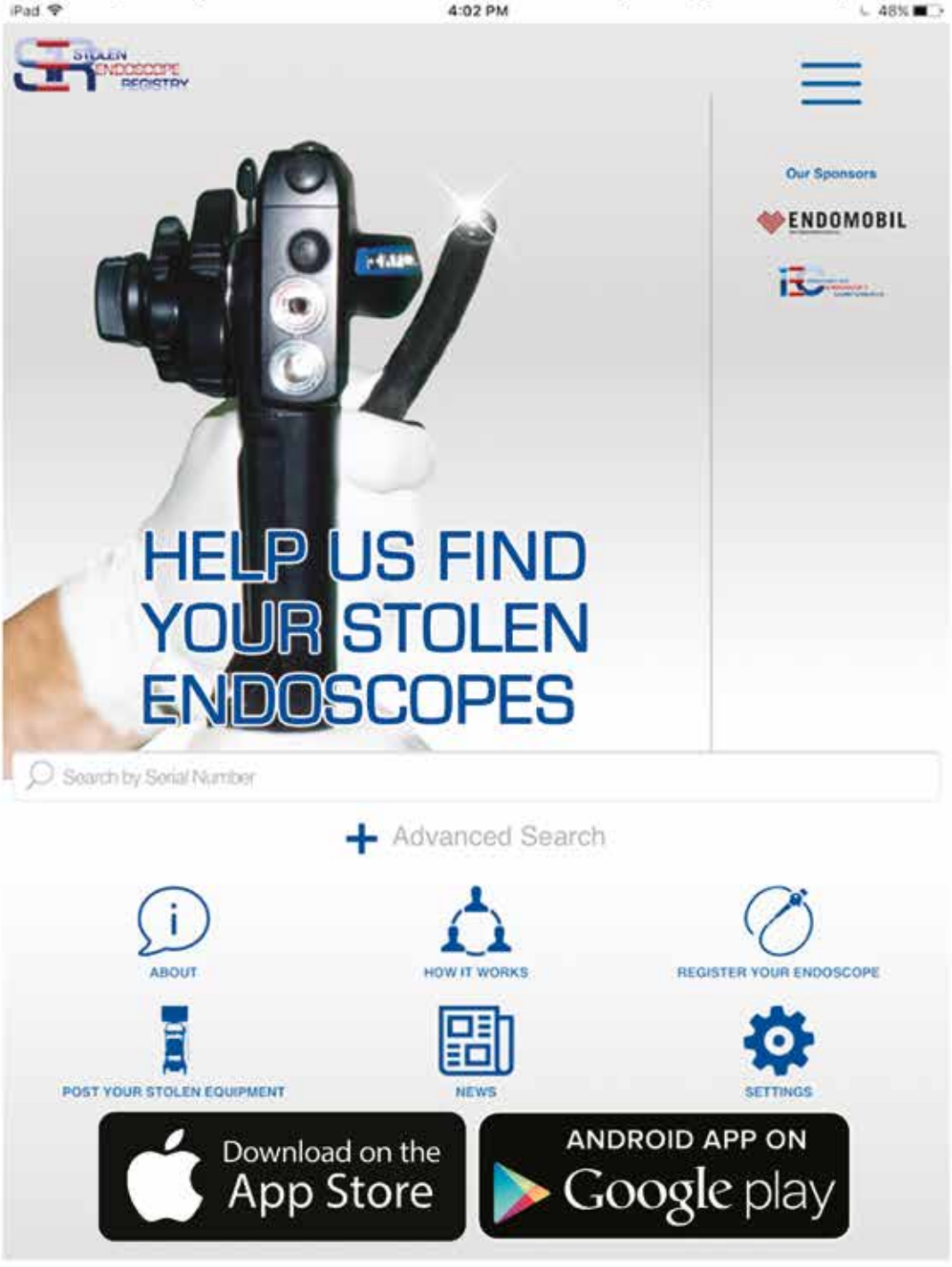
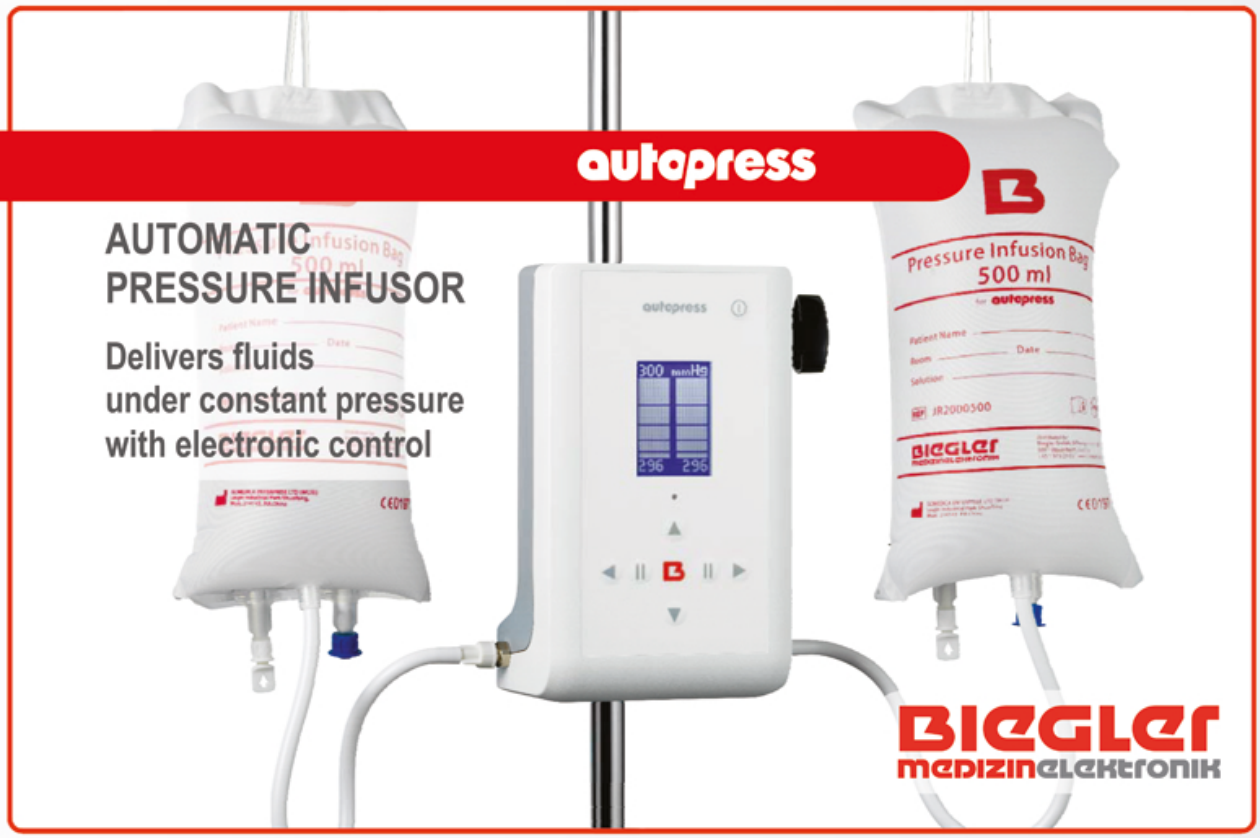
In an effort to protect the international medical equipment trading community as well as hospitals, clinics, physicians, repair facilities, leasing, and insurance companies etc. IEC created the first open database and news platform for stolen endoscopes, ultrasound probes, cameras, light sources etc.

Medical Equipment theft has reached millions in financial damages with an ever-increasing number of products missing from facilities all around the world. This FREE APP is brought to you by IEC, LLC and made possible by our generous sponsors.





Automatic Pressure Infusor

BIEGLER GmbH develops and manufactures medical devices and disposables for over 40 years. Biegler serves their customers by offering them not only high quality products and services but comprehensive and personal support as well.

The company based in Austria / Europe introduced the AUTOPRESS device as an important part of its fluid warming philosophy. Autopress works directly with Biegler blood and infusion warmers to deliver blood and fluids at high flow rates or as a stand-alone unit to deliver fluids at constant pressure up to 300 mmHg wherever needed.

Pressure infusing bags are mainly used for irrigation purposes during arthroscopy, laparoscopy and hysteroscopy. The adjusted pressure is constantly maintained and therefore does not require manual compensation.

When connected to an electrical outlet, Biegler Pressure Infusor automatically maintains pressure on blood and IV fluid bags. Pressure range is zero to 300 mmHg.

Features at a glance:

- Pressure is adjustable and always maintained
- Precise pressure setting from zero to 300 mmHg with electronic control
- Accomodates pressure cuffs 2 x 500, 2 x 1000 or 2 x 3000 cc
- Small and lightweight
- Mains operated
- Pressure cuffs can be emptied rapidly and easily
- Significant reduction of set up time

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Austria

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CE 0123

Arab Health - DWTC, Dubai
Jan 29 - Feb 1, 2018
Za'abeel Hall 1, Stand Z1.E18
www.biegler.com

Contents

We are excited to develop an innovation in our Infomedix magazine. Starting from this issue our focuses are changing, nevertheless remaining loyal to our articles on the economic and medical markets as well as worldwide industry news.

MARKET OVERVIEW: HEALTHIER HEALTHCARE SYSTEMS IN THE GCC

Cover page
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THE ROLE OF THE MEDIA IN BUSINESS AND SOCIETY

Exercising judgements over a business community is the simplest of things. Business leaders can move from heroes to zero – and occasionally back again, at the raise of a finger by the power of media. Rough justice perhaps – but many are the examples of the vital role of the media.

In the 1970s, the trade union movement slipped from its roots as a heroic saviour of the working man to the disruptive scourge of an industrial society. The 80s and 90s chartered the ascendency of business, entrepreneurism and finance – its bankers were the 'masters of the universe'. Capitalism had become the way to go; business was good for everyone. And the media cheered it ever onwards and upwards. But when it all went horribly wrong. The financial markets collapsed and the 'masters of the universe' became the zeroes of the hour. And as the wealth spreading ambition of 21st Century globalisation turned to dust, another era emerged. Austerity for the masses, prosperity for the privileged: not a good recipe for social harmony – with the frightening spectre of job-eroding automation lurking over the horizon. In many respects the free and fair media, played its part in exposing social injustices and holding business and government to account – just as it should. But the flames were also fanned by a new type of media revolutionised by technology – in the world where the speed of reporting and the competition to file first – not only the facts, but the highest impact version of the facts, became the challenge of social media and 24 hour rolling news.

Less scrupulous commentators, happy to use hyperbole, exaggeration or at the extreme the now famous 'fake news', have made fact, truth and accuracy an increasingly rare commodity – and tarnished all journalism in the process.

For it is a combination of inappropriate behaviour by some in business and irresponsible reporting by some in the media, that has contributed to a wedge being driven between business, the media and society.

Even in the medical sector, never has the aim of our Press Office been more important in today's business - to support and encourage high quality specialized journalism giving reliable market, economic and trade information to our readers.

The INFOMEDIX Press Office is doing its best in expanding unbiased information on different markets around the world; searching, requesting and comparing information from reliable sources. Committed to the facts. Certain of our beliefs in balance and determined in our duty to report fairly and accurately.

In today's world, businesses are not simply judged by how much money they make, but much more on how they make money. Reputation is all.

Ethics, social purpose, contribution to society are not optional extras but key criteria for access to talent, capital, customers and consumers – for the long-term future of any enterprise.

Today we believe we are at a tipping point – where if we fail to win trust, to earn respect, to re-establish the core values and recognition that business and media are good for society – we will all live to regret it.

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Biegler Medizinelektronik - more than 40 years of experience in the medical field

Biegler Medizinelektronik, based in Austria/ Europe, has to its credit more than 40 years of research, development and production in the service of medicine.

Customers are served by offering them not only high quality products and services but comprehensive and personal support as well. The quality management system was introduced in 1994 with EN ISO 9001 / EN 46001 and developed further in accordance with EN ISO 13485:20012. It covers all processes from development through to after-sales service and provides the guarantee for consistently high quality.
Together with the customer from the start: Research and development is one of the core competencies at Biegler Medizinelektronik. The company offers not just the technical but all the regulatory prerequisites for successful partnership with OEMs.
Biegler's expertise is in the development and manufacture of ready-for-sale medical products. The company operates distribution to end customers in over 70 different countries with distribution partners.

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www.skbioland.com // jeremyahn@skbioland.com

Metaltronica - The best cost-effective mammography solution

For over 40 years, Metaltronica SpA's mammography systems have assisted physicians in their mission of focusing on the early detection and diagnosis of breast pathologies in women. We provide a full range of complete solutions for mammography that satisfy all radiologists' needs while measurably increasing patient comfort.

Metaltronica's latest product, the Helianthus C, is an all-in-one digital mammography system with unmatched performance/price characteristics. This solution allows customers to acquire a superior digital mammography system at a competitive price which conveniently replaces existing analog equipment with or without CR, and is suitable for the LMIC marketplace.

Its extremely compact dimensions allow the new Helianthus C to be easily installed in limited spaces, in completely safe and operationally optimal conditions. The greatly reduced weight enables its use in smaller vans that do not require professional driver licenses, and the low power consumption in stand-by mode, as well as a lower component count, make it an eco-friendly system.

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metaltronica@metaltronica.com
Visit Us at: Arab Health 2018, Sheikh Rashid Hall - RD35; ECR 2018, Hall X3 – 311a

ConstaVac™ Blood Conservation System is the ideal solution for blood reinfusion

The CBCII Blood Conservation System is a closed blood recovery system used to post-operatively collect, filter, and allow reinfusion of autologous blood. It's a safe, simple and economic disposable system for blood reinfusion.

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-Simple: To transfer fluid, simply depress the lever, hang and spike the blood bag, infuse.

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- Instruction leaflet.

Here is Clinical Case made on 72 years old female patient, suffered a traumatic injury in the distal and middle third of the right leg, the wound remains unhealed after three weeks of conventional treatment. The last photo shows the wound healing after using the Super Healing Kit for 2 weeks.

www.pharmaplast-online.net //
sales@pharmaplast-online.net

Villa Sistemi Medicali presents the new Apollo DRF 4.0

The new Apollo DRF 4.0, evolution of the reference remote controlled table from Villa, presents a series of improving features that enhance system's performance and usability, as well as its flexibility and diagnostic capabilities, providing a rapid and efficient workflow with increased productivity and better diagnostic results.
The new borderless tabletop with reduced height from the floor improves the patient accessibility to the table and simplifies its transfer from the stretcher. The new touch screen console with smart-touch joysticks and the direct controls on the touch screen collimator improve and simplify the operator interaction with the equipment, while the new 2 way intercom system with preset audio messages allows to communicate with the patient in different languages.

Apollo DRF 4.0 can cover the widest range of R/F applications, providing high resolution images at very low dose: in addition to DSA and full-leg/full-spine exams, the new tomosynthesis modality offers detailed information resulting in a rapid and effective diagnostic process.

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GMM

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ECR 2018, Expo X2 – Booth No. 207

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The gantry is also able to reach the horizontal position (+90°) for interventional procedures with the patient in prone position.

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IMS Giotto is a company of GMM Group.

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IAE

Nowadays IAE is a major role player in the International X-Ray market as the only independent manufacturer in Europe of rotating anode tubes. With its wide product line of more than 100 insert/housing combination, IAE is a strategic and reliable partner to the most important equipment manufacturer globally.

IAE has recently developed a compact light weight rotating anode mammography x-ray tube unit, with special double angle target, for optimal performances with all techniques.

A non traditional, metal ceramic structure consented to divide by a factor two both the dimensions and the weight, compared to a standard mammographic unit, down to a lightweight 5.5 kg, and at the same time to increase the heat dissipation by a factor 4, obtained by an efficient air cooling.

In this unconventional x-ray tube, of metal-ceramic construction, the tube housing and oil are absent, let alone a small lightweight box containing the radiation shielding and electrical accessories.

The energy associated with each exam is rapidly transferred directly to the ambient air by forced ventilation, without the need of being accumulated temporarily in an intermediate body. The energy transfer rate is more than four times higher than the equivalent parameter of a conventional tube unit, so the number of exams that can be performed in an hour, or in a day, is as much higher.

This high dissipation, combined with the light weight, makes it the ideal tube for high energy imaging techniques with moving X-ray source like tomosynthesis. Two separate focal tracks, small focus on 10° and large focus on 16°, complete the features of this device.

It should be noted that the high average heat dissipation power of this unit allows a high patients throughput with no need of accumulating temporarily the energy within the tube unit, so that the so called tube unit heat capacity, more exactly the maximum tube unit heat content, in this case is an irrelevant and non applicable parameter.

IAE - CONGRESS AND FAIRS

ARAB HEALTH 2018 - Dubai, 29th January / 1st February 2018 - SHEIKH RASHID Hall - RB35
ECR 2018 - Vienna / Austria – 1 / 4 March 2018 - Expo Foyer D, D1
KIMES 2018 - Seoul / South Korea – 15 / 19 March 2018, booth nr. C422
CMEF SPRING 2018 - Shanghai / P.R. of China – April 11-14, 2018
FIME 2018 - Orlando/FL - July 17-19, 2018
JFR 2018 - Paris/FR – October 12-15, 2018
CMEF AUTUMN 2018 - P.R. of China – October, 2018
MEDICA 2018 - Dusseldorf/DE –November 12-15, 2018
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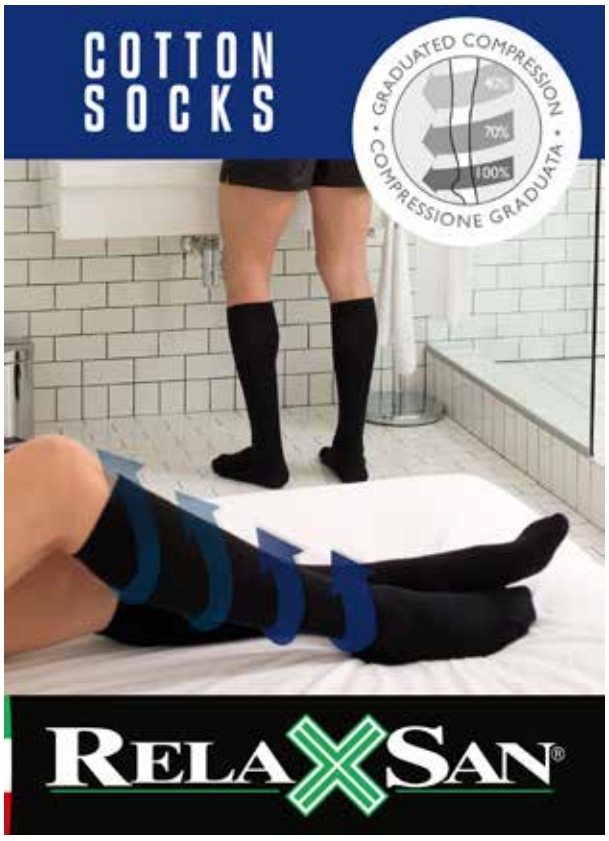

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- Saves time and money
- Toilet flushes automatically
- Faeces and toilet paper will be shredded and discharged
- Stable and natural physical posture leads to better results
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www.flow-clean.com // info@flow-clean.com

UROSCIENCES

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www.itamed.com // infohealth@itamed.com

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A recent index of 301 diseases found mental health problems to be one of the main causes of the overall disease burden worldwide.

According to the 2013 Global Burden of Disease study, the predominant mental health problem worldwide is depression, followed by anxiety, schizophrenia and bipolar disorder.

In 2013, depression was the second leading cause of years lived with disability worldwide, behind lower back pain. In 26 countries, depression was the primary driver of disability.

Breaking a widespread misconception, depression is not a disease of the rich or the affluent. More than 80% of these conditions are present in low-and-middle-income countries.

It is estimated that 1 in 6 people in the past week experienced a common mental health problem.

Focus

Depression, Let's Talk

The WHO estimates that between 35% and 50% of people with severe mental health problems in developed countries, and 76 – 85% in developing countries, receive no treatment.

At worst, depression can lead to suicide, now the second leading cause of death among 15-29-year olds.

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Sadness and grief are normal human emotions. We all have those feelings from time to time, but they usually go away within a few days. Major depression is something more. It's a period of overwhelming sadness. It involves a loss of interest in things that used to bring pleasure. Those feelings are usually accompanied by other emotional and physical symptoms. Untreated, depression can lead to serious complications that put your life at risk. Fortunately, most people can be effectively treated.

Do you feel sad, empty and hopeless most of the day, nearly every day? Have you lost interest or pleasure in your hobbies or being with friends and family? Are you having trouble sleeping, eating and functioning? If you have felt this way for quite some time, you may have depression, a serious but treatable mood disorder. *"Depression: Let's Talk"* is in fact the one-year campaign launched by the World Health Organization (WHO) in October 2016 to highlight the problems linked to depression worldwide, with the goal that more people, everywhere in the world, overcome the stigma often associated with it and both seek and get help. **As leading cause of ill health and disability worldwide, the WHO report is a 'wake-up call' for countries to rethink approaches to mental health and to treat it with the urgency that it deserves, revealing that in 2015, the number of people globally living with depression had reached 322 million, an estimated 18.4% increase since 2005 and that "talking is really the first step towards recovery".**

Everyone feels sad or low sometimes, but these feelings usually pass with a little time.

What is Depression?

Everyone feels sad or low sometimes, but these feelings usually pass with a little time. Depression—also called "clinical depression" or a "depressive disorder"—is a mood disorder that causes distressing symptoms that affect how you feel, think and handle daily activities, such as sleeping, eating or working. To be diagnosed with depression, symptoms must be present most of the day, nearly every day for at least two weeks. **The WHO defines depression as a "persistent sadness and a loss of interest or pleasure**

If globally, the total number of people with depression was estimated to exceed 300 million in 2015, nearly that number again suffers from a range of anxiety disorders.

DEPRESSION, PREVALENCE

322 million: Number of people worldwide who suffer from depression That's 4.4% of the world's population.

Nearly half of these people live in the South-East Asia Region and Western Pacific Region, reflecting the relatively larger populations of those two Regions (which include India and China, for example) Women (5.1%) are more likely to be diagnosed with depression than men (3.6%).

Prevalence varies by WHO Region, from a low of 2.6% among males in the Western Pacific Region to 5.9% among females in the African Region.

Prevalence rates vary by age, peaking in older adulthood (above 7.5% among females aged 55-74 years, and above 5.5% among males). Depression also occurs in children and adolescents below the age of 15 years, but at a lower level than older age groups.

The number of persons with common mental disorders globally is going up, particularly in lower-income countries, because the population is growing, and more people are living to the age when depression and anxiety most commonly occurs.

Although depression can and does affect people of all ages, from all walks of life, the risk of becoming depressed is increased by poverty, unemployment, life events such as the death of a loved one or a relationship break-up, physical illness and problems caused by alcohol and drug use.

in activities that people normally enjoy, accompanied by an inability to carry out daily activities for two weeks or more". Lack of energy, feeling of tiredness and poor concentration, shifts in appetite or sleep patterns, substance abuse, anxiety, feelings of guilt, worthlessness and thoughts of self-harm or suicide are also common and can affect entire families.

Two of the most common forms of depression are:

• **Major depression**—having symptoms of depression most of the day, nearly every day for at least two weeks that interfere with your ability to work, sleep, study, eat and enjoy life. An episode can occur only once in a person's lifetime, but more often, a person has several episodes.

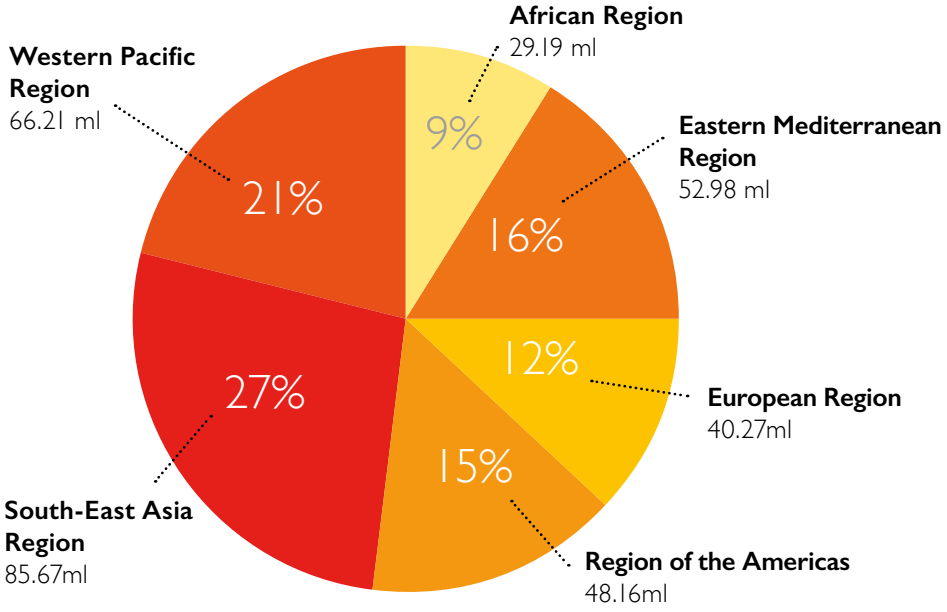
• **Persistent depressive disorder** (or dysthymia)—having symptoms of depression that last for at least two years. A person diagnosed with this form of depression may have episodes of major depression along with periods of less severe symptoms.

Specific circumstances can trigger other forms of depression. If you have **seasonal affective disorder (SAD)**, your mood is affected by sunlight. You're more likely to be depressed during winter, when there's less natural sunlight. This depression generally lifts during spring and summer. Winter depression, typically accompanied by social withdrawal, increased sleep and weight gain, predictably returns every year.

Many new mothers go through something called the "baby blues". It's caused by hormonal changes following childbirth, lack of sleep and everything that goes along with taking care of a new baby. Symptoms include mood swings, sadness and fatigue. Additional symptoms include withdrawal, lack of appetite and a negative train of thought. These feelings usually pass within a week or two. When they drag on longer and escalate, it may be a case of **perinatal depression.** Much more serious than the baby blues, women experience full-blown major depression during pregnancy or after delivery (postpartum depression). According to the National Institute of Mental Health (U.S.), about 10 to 15% of women develop postpartum depression. Untreated, it can be dangerous for mother and baby.

Psychotic depression occurs when a person has severe depression plus some form of psychosis, such as having disturbing false fixed beliefs (delusions) or hearing or seeing upsetting things that others cannot hear or see (hallucinations) or paranoia. The psychotic symptoms typically have a depressive "theme," such as delusions of guilt, poverty or illness. About 20% of people with major depressive disorder develop psychotic symptoms, according to the National Alliance on

CASES OF DEPRESSIVE DISORDER (MILLIONS) BY WHO REGION



Source: Depression and Other Common Mental Disorders: Global Health Estimates." Geneva: World Health Organization; 2017. Licence: CC BY-NC-SA 3.0 IGO.

In the year 2015, it is estimated by the WHO Global Health Estimates that 788,000 people died due to suicide, amounting to one every four seconds

ANXIETY, PREVALENCE

**264 million: Number of people worldwide estimated to suffer from anxiety disorders in 2015.
That's 3.6% of the world's population**

This total for 2015 reflects a 14.9% increase since 2005, because of population growth and ageing.

As with depression, anxiety disorders are more common among females than males (4.6% compared to 2.6% at the global level)

Anxiety disorders are highly treatable, yet only 36.9% of those suffering receive treatment.

Anxiety disorders are the most common mental illness in the U.S., affecting 40 million adults in the United States age 18 and older, or 18.1% of the population every year.

In the Region of the Americas, as many as 7.7% of the female population are estimated to suffer from anxiety disorder (males, 3.6%)

Prevalence rates do not vary substantially between age groups, although there is an observable trend towards lower prevalence among older age groups.

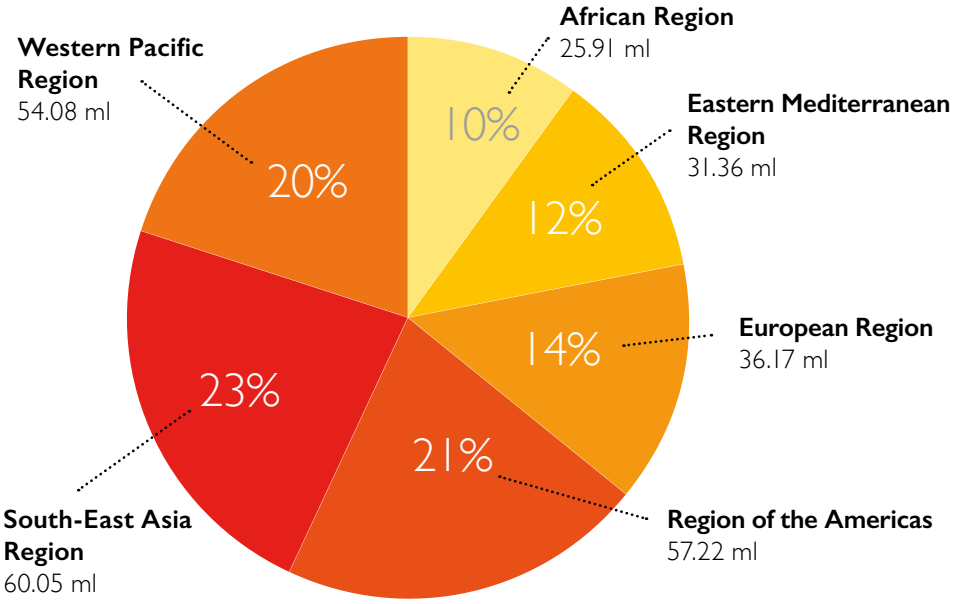
People with an anxiety disorder are three to five times more likely to go to the doctor and six times more likely to be hospitalized for psychiatric disorders than those who do not suffer from anxiety disorders.

Mental Illness (U.S.). **Bipolar disorder** or **manic-depressive illness** is different from depression, but it is included in this list because someone with bipolar disorder experiences episodes of extremely low moods that meet the criteria for major depression (called "bipolar depression"). But a person with bipolar disorder also experiences extreme high – euphoric or irritable – moods called "mania" or a less severe form called "hypomania."
Other examples of depressive disorders newly added to the diagnostic classification include **disruptive mood dysregulation disorder** (diagnosed in children and adolescents) and **premenstrual dysphoric disorder** (PMDD).

Common mental disorders refer to two main diagnostic categories: depressive disorders and anxiety disorders. **Anxiety disorders** refer to a group of mental disorders characterized by feelings of anxiety and fear, including **generilised anxiety disorder (GAD), panic disorder, phobias, social anxiety disorder, obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD).** As with depression, symptoms can range from mild to severe. The duration of symptoms typically experienced by people with anxiety disorders makes

People with an anxiety disorder are three to five times more likely to go to the doctor and six times more likely to be hospitalized for psychiatric disorders than those who do not suffer from anxiety disorders.

CASES OF ANXIETY DISORDER (MILLIONS), BY WHO REGION



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it more a chronic than episodic disorder. If globally, the total number of people with depression was estimated to exceed 300 million in 2015, nearly that number again suffers from a range of anxiety disorders. Since many people experience both conditions simultaneously (co-morbidity), it is inappropriate to simply add these two figures together to arrive at a total for common mental disorders.

The consequences of these disorders in terms of lost health are huge. Globally, depression is ranked by WHO as the single largest contributor to non-fatal health loss (7.5% of all years lived with disability in 2015); anxiety disorders are ranked 6th (3.4%).

The economic consequences of these

HOW CAN I HELP MYSELF IF I AM DEPRESSED?

- As you continue treatment, expect your mood to improve gradually, not immediately
- Try to do things that you used to enjoy. Go easy on yourself
- Try to be active and exercise
- Set realistic goals for yourself. Breaking up large tasks into small ones, set priorities and do what you can as you can
- Try not to isolate yourself and let others help you, confide in a trusted friend or relative
- Postpone important life decisions, such as getting married or divorced, or changing jobs until you feel better. Discuss decisions with others who know you well and have a more objective view of your situation
- Avoid self-medication with alcohol or with drugs not prescribed for you
- Continue to educate yourself about depression

health losses are also large: a recent study estimated that the cumulative global impact of mental disorders in terms of lost economic output will amount to US$ 16.3 million between 2011 and 2030.

Mental disorders frequently lead individuals and families into poverty. Homelessness and inappropriate incarceration are far more common for people with mental disorders than for the general population and exacerbate their marginalization and vulnerability. **Because of stigmatization and discrimination, persons with mental disorders often have their human rights violated and many are denied economic, social and cultural rights, with restrictions on the rights to work and education, as well as reproductive rights and the right to the highest attainable standard of health.** They may also be subject to unhygienic and inhuman living conditions, physical and sexual abuse, neglect and harmful and degrading treat-

ment practices in health facilities.
They are often denied civil and political rights such as the right to marry and found a family, personal liberty, the right to vote and to participate effectively and fully in public life, and the right to exercise their legal capacity on other issues affecting them, including their treatment and care.

Depressive disorders led to a global total of over 50 million Years Lived with Disability (YLD) in 2015. **Data from the National Survey on Drug Use and Health (U.S.) highlights the problem among young adults. From 2008 to 2010, more than 8% of young adults between the ages of 18 and 22 reported a major depressive episode in the previous year.**

The National Institute of Mental Health estimates that in the United States, 16.1 million adults aged 18 or older had at least one major depressive episode in 2015.

The pressures on today's youth are like no other generation perhaps and teens with depression may also have symptoms of other disorders, such as anxiety, eating disorders or substance abuse.

That's 6.7 % of all U.S. adults. Depression is also a major contributor to suicide deaths and the early identification and treatment is a very effective means of decreasing death by suicide. In the year 2015, it is estimated by the WHO Global Health Estimates that 788,000 people died due to suicide, amounting to one every four seconds; many more than this number attempted (but did not die by) suicide; the link to depression is clear with studies showing that 70-80% of people who kill themselves in high-income countries and around half of those in low-income countries, suffer from mental disorders, of which depression is the most common. Suicide accounted for close to 1.5% of all deaths worldwide, bringing it into the top 20 leading causes of death in 2015. Suicide occurs throughout the lifespan and was the second leading cause of death among 15-29 years old globally in 2015.
Anxiety disorders led to a global total of 24.6 million Years Lived with Disability (YLD) in 2015. **Estimates are lower for anxiety disorders compared to depression because these disorders are associated with a lower average level of disability.**

HOW CAN I HELP A LOVED ONE WHO IS DEPRESSED?

- **First help him or her see a healthcare provider or mental health professional**
- **Offer support, understanding, patience and encouragement**
- **Never ignore comments about suicide, and report them to your loved one's healthcare provider or therapist**
- **Invite him or her out for walks, outings and other activities**
- **Help him or her adhere to the treatment plan, such as setting reminders to take prescribed medications**
- **Help him or her by ensuring that he or she has transportation to therapy appointments**
- **Remind him or her that, with time and treatment, the depression will lift**

What causes depression?

Current research suggests that a combination of genetic, biological, environmental and psychological factors may all play a role. **Depression can happen at any age, but often begins in adulthood. It is now recognized as occurring in children and adolescents, although it sometimes presents with more prominent irritability than low mood. Many chronic mood and anxiety disorders in adults begin as high levels of anxiety in children.** Depression, especially in midlife or older adults, can co-occur with other serious medical illnesses, such as diabetes, cancer, heart disease, multiple sclerosis and Parkinson's disease. These conditions are often worse when depression is present. Sometimes medications taken for these physical illnesses may cause side effects that contribute to depression.

Determinants of mental health and mental disorders include not only individual attributes such as the ability to manage one's thoughts, emotions, behaviours and interactions with others, but also social, cultural, economic, political and environmental factors such as national policies, social protection, living standards, working conditions and community social supports. Exposure to adversity at a young age is an established preventable risk factor for mental disorders.

> No two people are affected the same way by depression and there is no "one-size-fits-all" for treatment. It may take some trial and error to find the treatment that works best.

Depending on the local context, certain individuals and groups in society may be placed at a significantly higher risk of experiencing mental health problems. These vulnerable groups may (but do not necessarily) include members of households living in poverty, people with chronic health conditions, infants and children exposed to maltreatment and neglect, adolescents first exposed to substance use, minority groups, indigenous populations, older people, people experiencing discrimination and human rights violations, lesbian, gay, bisexual and transgender persons, prisoners and people exposed to conflict, natural disasters or other humanitarian emergencies. The current global financial crisis provides a powerful example of a macroeconomic factor leading to cuts in funding despite a concomitant need for more mental health and social services because of higher rates of mental disorders and suicide as well as the emergence of new vulnerable groups (for example, the young unemployed). **In many societies, mental disorders related to marginalization and impoverishment, domestic violence and abuse, and overwork and stress are of growing concern, especially for women's health.**

People with mental disorders experience disproportionately higher rates of disability and mortality. For example, persons with major depression and schizophrenia have a 40% to 60% greater chance of dying prematurely than the general population, owing to physical health problems that are often left unattended (such as cancers, cardiovascular diseases, diabetes and HIV infection) and suicide.

For example, there is evidence that depression predisposes people to myocardial infarction and diabetes, both of which conversely increase the likelihood of depression. Many risk factors such as low socioeconomic status, alcohol use and stress are common to both mental disorders and other noncommunicable diseases.

Depression affects different people in different ways:

Women - have depression more often than men. Biological, lifecycle and hormonal factors that are unique to women may be linked to their higher depression rate. Women with depression typically have symptoms of sadness, worthlessness and guilt.

Men - with depression are more likely to be very tired, irritable, and sometimes angry. They may lose interest in work or activities they once enjoyed, have sleep problems and behave recklessly, including the misuse of drugs or alcohol. Many men do not recognize their depression and fail to seek help.

Older adults - are prone to depression as they became more isolated from their communities. When they stop working or lose the partner - they become frailer and subject to physical diseases, disorders do become more common even if they may have

less obvious symptoms, or they may be less likely to admit to feelings of sadness or grief. They are also more likely to have medical conditions, such as heart disease, which may cause or contribute to depression. It may be difficult to spot depression in older adults. Unexplained memory loss, sleep problems or withdrawal may be signs of depression.

Younger children with depression may pretend to be sick, refuse to go to school, cling to a parent, or worry that a parent may die.

Older children and teens with depression may get into trouble at school, sulk and be irritable. The pressures on today's youth are like no other generation perhaps and teens with depression may also have symptoms of other disorders, such as anxiety, eating disorders or substance abuse. They may be excessively negative and begin avoiding friends and activities.

Sadness is only one small part of depression and some people with depression may not feel sadness at all. Different people have different symptoms.

Emotional symptoms include:

- anxiety or "empty" mood and restlessness
- anger management issues, extreme irritability over minor things
- loss of interest in favorite activities
- Feelings of hopelessness, or pessimism
- Feelings of guilt, worthlessness, or helplessness
- fixation on the past or on things that have gone wrong
- thoughts of death or suicide

Physical symptoms include:

- insomnia or sleeping too much
- debilitating fatigue
- Feeling restless or having trouble sitting still
- Moving or talking more slowly
- increased or decreased appetite
- weight gain or weight loss
- difficulty concentrating, remembering or making decisions
- unexplained aches and pains, or digestive problems without a clear physical cause and/or that do not ease even with treatment

Some people experience only a few symptoms while others may experience many. Several persistent symptoms in addition to low mood are required for a diagnosis of major depression, but people with only a few – but distressing – symptoms may benefit from treatment of their "subsyndromal" depression.

Treatment and Therapies

Just 3% of total government spending worldwide is for mental health; from less than 1% in low-income countries to 5% in high-income countries. Yet, the cost of lost productivity in the workplace due to depression and anxiety is very high, with the global cost estimated at US$ 1 trillion annually, according to the WHO. That's more than US$ 130 for every person on the planet. **However, health systems have not yet adequately responded to the burden of mental disorders; therefore, the gap between the need for treatment and its provision is large all over the world.** Even in the most developed countries, about half of people suffering from depression are not diagnosed or treated and the percentage soars to between 80-90% in less developed nations. Treatment can be difficult to access, while a fear of stigma also prevents many people from seeking the help required to live healthy and productive lives.

However, health systems have not yet adequately responded to the burden of mental disorders; therefore, the gap between the need for treatment and its provision is large all over the world.

Globally, annual spending on mental health is less than US$ 2 per person and less than US$ 0.25 per person in low-income countries, with 67% of these financial resources allocated to stand-alone mental hospitals, despite their association with poor health outcomes and human rights violations. On the contrary, investing in treatment for depression and anxiety makes sense as, according to the WHO, every dollar invested in improving access to treatment leads to a return of US$ 4 in better health and productivity. **Redirecting this funding towards community-based services, including the integration of mental health into general healthcare setting, and through maternal, sexual, reproductive and child health, HIV/AIDS and chronic noncommunicable disease programmes, would allow access to better and more cost-effective interventions for many more people.**

Clinical depression, even the most severe cases, is treatable. Both psychosocial and medical treatments could be highly effective. The earlier the treatment can begin, the more effective it is. It is usually treated with antidepressant medication, psychotherapy or a combination of the two. Antidepressant medications may help improve the way your brain uses certain chemicals that control mood or stress. Several different antidepressant medicines may be tried before finding the one that improves symptoms and has manageable side effects.

RISK FACTORS INCLUDE

- **Personal or family history of depression**
- **Major life changes, trauma, or stress**
- **Certain physical illnesses and medications**
- **Alcohol or drug abuse**
- **Physical or sexual abuse**
- **Low self-esteem**
- **Anxiety disorder, borderline personality disorder, post-traumatic stress disorder (PTSD)**

Antidepressants take time – usually 2 to 4 weeks – to work, and often, symptoms such as sleep, appetite and concentration problems improve before mood lifts, so it is important to give medication a chance before reaching a conclusion about its effectiveness and a long-term approach is best. Stopping them abruptly can cause withdrawal symptoms. Antidepressants can have side effects which lessen over time and although they can be effective for many people, they may present serious risks to some, especially children, teens, and young adults. Antidepressants may cause some people to have suicidal thoughts or make suicide attempts. Anyone taking antidepressants should be monitored closely, especially when they first start taking them. **For most people, though, the risks of untreated depression far outweigh those of antidepressant medications when they are used under a doctor's careful supervision.**

For most people, though, the risks of untreated depression far outweigh those of antidepressant medications when they are used under a doctor's careful supervision.

Several types of psychotherapy (also called "talk therapy" or, in a less specific form, counseling) can help people with depression by teaching new ways of thinking and behaving and changing habits that may be contributing to depression. Examples of evidence-based approaches specific to the treatment of depression include cognitive-behavioral therapy (CBT), interpersonal therapy (IPT) and problem-solving therapy.

If the mentioned treatments do not reduce symptoms, electroconvulsive therapy (ECT) and other brain stimulation therapies may be an option for people with severe depression who do not respond to antidepressant medications. ECT is the best studied brain stimulation therapy and has the longest history of use.

It is a procedure in which electrical currents are passed through the brain and the most effective treatment for psychotic depression, according to the National Alliance on Mental Illness (U.S). It is especially helpful when combined with antipsychotics, antidepressants and cognitive behavioral therapy.

• Electroconvulsive therapy can be an effective treatment for depression. In some severe cases where a rapid response is necessary, or medications cannot be used safely, ECT can even be a first-line intervention.
• Once strictly an inpatient procedure, today ECT is often performed on an outpatient basis. The treatment consists of a series of sessions, typically three times a week, for two to four weeks.
• ECT may cause some side effects, including confusion, disorientation and memory loss. Usually these side effects are short-term, but sometimes memory problems can linger, especially for the months around the time of the treatment course. Advances in ECT devices and methods have made modern ECT safe and effective for the vast majority of patients.
• ECT is not painful, and you cannot feel the electrical impulses. Before ECT begins, a patient is put under brief anesthesia and given a muscle relaxant. Within one hour after the treatment session, which takes only a few minutes, the patient is awake and alert.

Other more recently introduced types of brain stimulation therapies used to treat medicine-resistant depression include repetitive transcranial magnetic stimulation (rTMS) and vagus nerve stimulation (VNS). Transcranial magnetic stimulation (TMS) uses magnetic pulses to stimulate the parts of the brain that regulate mood in a noninvasive way and with very few side effects. A variety of different potential applications for TMS, where focal brain stimulation might be helpful, are on the horizon. It has been used with success for bipolar disorder, for obsessive-compulsive disorder, post-traumatic stress disorder (PTSD), for the treatment of tinnitus (chronic ringing of the ears) and it also is quite useful for the treatment of chronic pain conditions.

The number of specialized and general health workers dealing with mental health in low-income and middle-income countries is grossly insufficient. Almost half the world's population lives in countries where, on average, there is

The number of specialized and general health workers dealing with mental health in low-income and middle-income countries is grossly insufficient.

one psychiatrist to serve 200,000 or more people; other mental healthcare providers who are trained in the use of psychosocial interventions are even scarcer. Similarly, a much higher proportion of high-income countries than low-income countries reports having a policy, plan and legislation on mental health; for instance, only 36% of people living in low income countries are covered by mental health legislation compared with 92% in high-income countries. **Finally, the availability of basic medicines for mental disorders in primary healthcare is notably low (in comparison to medicines available for infectious diseases and even other noncommunicable diseases), and their use restricted because of the lack of qualified health workers with the appropriate authority to prescribe medications.** In addition, the availability of non-pharmacological approaches and trained personnel to deliver these interventions is also lacking. Such factors act as important barriers to appropriate care for many persons with mental disorders.

Among Main Sources:
- "Depression and Other Common Mental Disorders: Global Health Estimates." Geneva: World Health Organization; 2017. License: CC BY-NC-SA 3.0 IGO.
http://www.who.int/mental_health/management/depression/prevalence_global_health_estimates/en/
http://www.who.int/mental_health/advocacy/WB_event_infographics/en/
http://www.who.int/campaigns/world-health-day/2017/resources/en/
Mental Health Action Plan 2013-2020, WHO 2013
-https://www.healthline.com/health/depression/facts-statistics-infographic#1
- Mental Health Foundation. (2016). Fundamental Facts About Mental Health 2016. Mental Health Foundation: London. https://www.mentalhealth.org.uk/statistics/mental-health-statistics-uk-and-worldwide
- National Institute of Mental Health (NIMH) -https://www.nimh.nih.gov/health/publications/depression/index.shtml
- Anxiety and depression Association of America
- https://adaa.org/about-adaa/press-room/facts-statistics

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Healthier Healthcare Systems in the GCC

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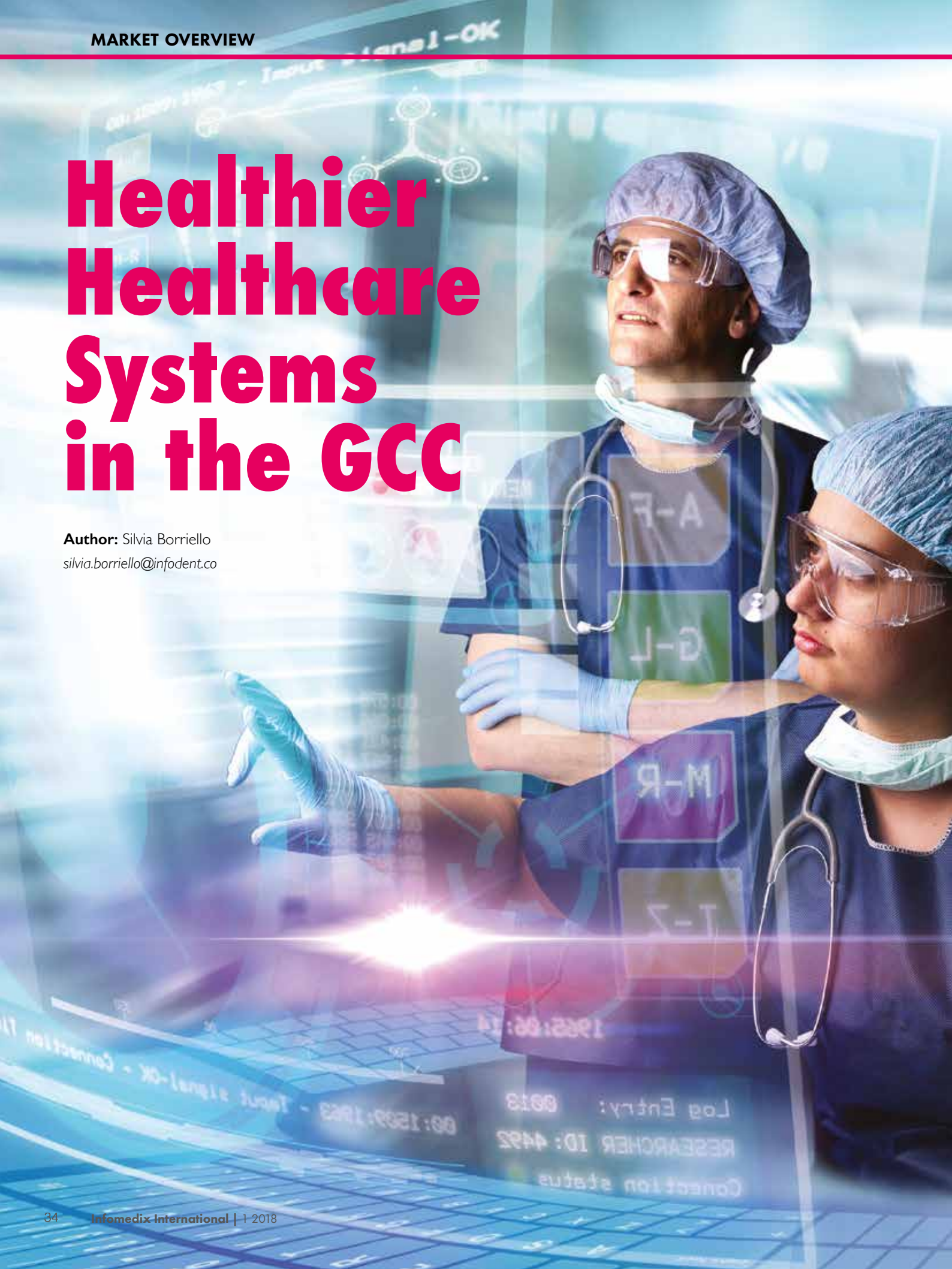


Rapidly growing populations and per capita incomes, rising life expectancies, a high incidence of lifestyle-related diseases, higher demand for quality care and ambitious medical infrastructure projects are driving healthcare industry growth in the Middle East's Gulf Cooperation Council states of Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

Yet, even though the region is making appreciable progress in its efforts to improve citizens' access and quality of care, pressure on available capacity is increasing and the GCC countries need to develop strategies to overcome tough challenges.

The six high-income countries of the Gulf Cooperation Council (GCC) are dissimilar in terms of land territory, populations and per income capital levels yet similar in other important political, economic and social respects. Saudi Arabia, the largest country in the Arabian Peninsula, has a land mass of 2.15 million square kilometres and a population of over 32 million people whereas Bahrain has a land territory of 750 square kilometres and a population of around 1.4 million people. In between, Oman, the UAE, Qatar and Kuwait have land areas ranging from 300,000 to 11,600 square kilometres and populations varying from 9.2 million to 2.5 million persons. In terms of gross national income levels estimated using purchasing power parity, Qatar leads the GCC countries and the world with a per capita income level of US$ 128,530 followed by Kuwait and Saudi Arabia with per capita income levels of US$ 88,170 and US$ 53,640. Bahrain has the lowest per capita income level of US$ 35,760 among the GCC countries. These differences aside, there are four important commonalities across the six countries:

State governments in the GCC must consider strategies for meeting increasing care needs and improving the quality of healthcare. Possible solutions include further development of private care options for nationals and expats.

- Rich endowments of natural resources - The GCC countries possess around 33 % of the proven oil reserves in the world. Saudi Arabia, alone, has around 18 % of global oil reserves. In term of natural gas, 17 % of proven gas reserves are found in the four GCC countries of Qatar, Saudi Arabia, Kuwait and Oman.

- Generous subsidy and welfare policies - With an abundance of natural resources, the GCC countries have established generous subsidy and welfare policies covering a range of sectors including energy, education, health, housing and social protection. The welfare policies in particular are reinforced by constitutional and legal provisions in all six countries stipulating the 'obligation' of the state to provide access to essential services including healthcare services.

- Large populations of expatriate workers - The labour markets in the GCC countries include a proportionately large number of expatriate workers consisting mainly of young males.

		% in Total Population (2010-2015)	
Country %	**Total Population, millions (2016)**	**Nationals %**	**Non-nationals %**
Bahrain	1,425.17	48	52
Kuwait	4,052.58	30.8	69.2
Oman	4,424.76	56.0	44.0
Qatar	2,569.80	14.3	85.7
Saudi Arabia	32,275.69	67.3	32.7
United Arab Emirates	9,269.61	11.5	88.5
Total	**54,017,61**	**51.9**	**48.1**

The majority of these expatriate residents work in the energy, construction, services and domestic household sectors. The numbers of expatriate workers range from 30-80 % of the total resident population within each GCC state.

- Common cultural, religious and social heritage - The Arabic language, Islam and tribalism are the defining cultural, religious and social characteristics of the societies in the GCC countries.

The close societal bonds, common historical experience and shared space on the Arabian Peninsula prompted the six countries to form an alliance in 1981 and to establish the 'Gulf Cooperation Council' (GCC). The objectives of the GCC are to deepen relations and strengthen cooperation between the member states at all levels, particularly in the economic, social and infrastructure sector. Over the past twelve years, the GCC worked on creating a customs union and common market for goods, services and labour. Since 2009, efforts by some member states have been exerted towards establishing a monetary union.

Privatization of care in these countries comes with other challenges, though, such as staffing, quality oversight, and the economics of reimbursement and insurance in a public-private healthcare system.

An Overview of the Healthcare System

The vast investments by the GCC governments over several decades in health service infrastructure in the form of large medical cities and complexes have yielded impressive improvements in overall health status outcomes. This increase in hospitals and clinics raised the quality of healthcare services in the region. The health systems established by the GCC states focused on fulfilling the core public health functions of childhood immunization, food safety, environmental health and essential child and maternal health services. In 1960, child mortality rates in the GCC countries were similar to those in MENA and those in the low and middle-income countries; and were around three times higher than the average child mortality rate in the high-income countries. **Over five decades, child mortality declined rapidly down to a level almost equalling the average rate in high-income countries. Similar improvements in**

The private sector share of health infrastructure capacity and service utilization is now substantial in most GCC countries.

health status outcomes related to infant, maternal and adult health are observed across all six GCC countries. According to WHO World Health Statistics 2014, infant mortality rate has decreased from 62 per 1000 live births to less than 9 deaths per 1000 live births in 2013 and life expectancy from birth has increased from 62 years in 1970 to around 77 years– an increase of 24% in four decades, remaining only slightly behind the average for high-income countries. Between the GCC countries, there was also variation in life expectancy during 1970-1990 with Oman and Saudi Arabia lagging significantly behind the other GCC countries. This gap in health status narrowed substantially over the latter two decades. The Sultanate of Oman, in particular, made exceptional improvements in health system performance during the period from 1970-2000 and was ranked among the top ten performers in the world by the World Health Organization (WHO) in 2000 for its accomplishments in improving the health system performance outcomes of health status, financial protection and responsiveness. In 1970, Oman had only 2 hospitals and 13 physicians on staff; and a life expectancy at birth of around 50 years. Over five decades, life expectancy improved by almost 80 % - a remarkable achievement reflecting an abiding commitment by the Omani Government towards improving the human development conditions of the population.

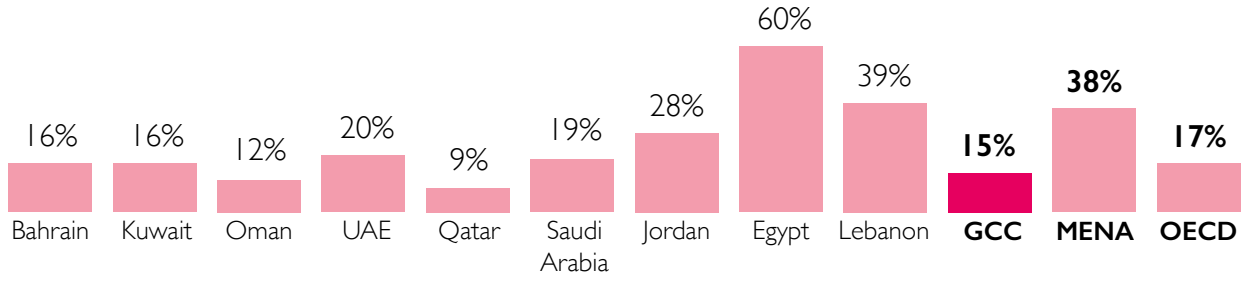
The overall number of doctors in GCC countries also witnessed an increase to 9.1% in 2012, averaging 2.5 doctors per 1000 population and general practitioners are on an average 2.1 per 1000 population. Nursing personnel increased in the same period by 7.3%, averaging 4.7 nursing staff per 1000 population. Yet, the healthcare workforce, especially physicians and nurses, remains mainly expatriates; Saudi Arabia, for example, has an expat physician population of around 76%. Around 13,000 new hospital beds were added in the GCC between 2009 and 2013, though the number of hospital beds per 1000 population stood at 1.9 in 2013.

These substantial improvements in health status in recent decades stemmed from the development of an extensive health service infrastructure by the public sector. The GCC states adopted from the beginning a traditional 'national health service' model under which health facilities providing services to the general population were largely owned and administered by the public sector. Within the public sector, large health sector networks emerged under the Ministries of Health, Defence, Interior and other public entities.

Over time, parallel health services emerged in the private sector particularly in the area of outpatient care. **The introduction of mandatory health insurance initiatives after 2000 in several GCC countries ushered in an era of rapid expansion in private care facilities, with governments looking at expanding access in partnership with private sector hospital networks.** The private sector share of health infrastructure capacity and service utilization is now substantial in most GCC countries. In Abu Dhabi, 31% of hospital beds and 93% of primary care centres and clinics are now in the private sector. In Saudi Arabia, 23% of all hospital beds in the country are owned by the private sector. **The advent of mandatory health insurance schemes in the GCC countries has driven up expenditure on private health insurance as a share of total private health spending.** In Qatar, spending on private insurance as a percentage of total private health expenditures increased from 7% in 1995 to 47.8% in 2012. In Saudi Arabia, the percentage increased from 27.7% to 45.3% during the same time period – and a similar increase was observed in Bahrain.

In spite of the fast growth in the private sector, GCC countries still depend heavily on government funding, both directly and indirectly through subsidies to private institutions, to meet healthcare needs. Governments remain the largest payers, funding around

Out-of-Pocket Health Spending as a % of Total Health Expenditure, 2012

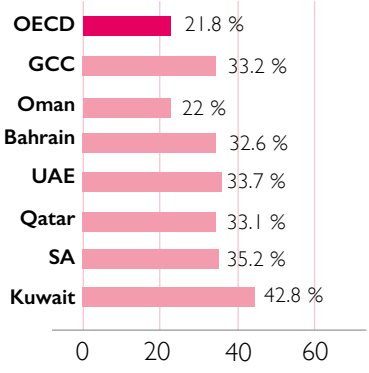


Source: WHO health financing indicators, 2012

70% of healthcare costs, which are steadily rising and at the aggregate level, under the status quo, they are expected to increase faster than GDP growth. GCC healthcare services cost US$ 18 million in 2008 and are expected to rise to over US$ 70 billion by 2020. They are projected to increase more for outpatient departments. In 2013, outpatient visits accounted for about 65% of all visits to the hospitals. The rising healthcare costs may be largely related to the absence of a specialty, or the quality of the available treatment in the home country.

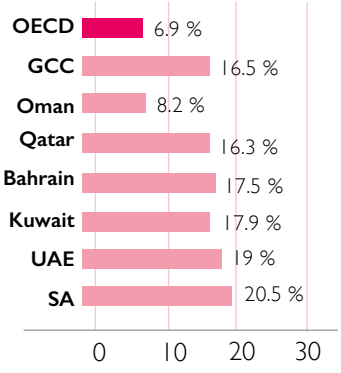
In fact, according to a poll, over 60% of Kuwaiti nationals and about 39% UAE nationals said they would travel abroad for treatment, 47% in Bahrain and 43% in Qatar and Oman would also prefer to get treated abroad. Even though a higher proportion of patients choose to travel abroad, the Gulf residents reported to be the most satisfied in the MENA region with the quality of healthcare services provided. Treatment costs incurred abroad are mostly paid by the healthcare authorities and other government agencies in the Council States. **The health services in GCC are provided free of cost to all residents and health insurance is available for both the expatriates and nationals. However, to**

Adult Obesity Prevalence (2013)



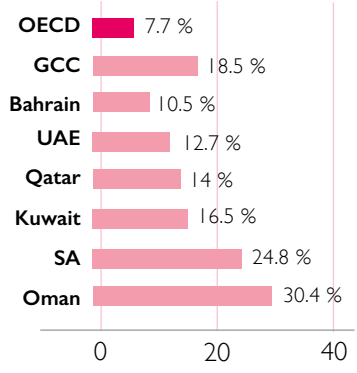
Source: WHO Indicators, 2014

Adult Diabetes Prevalence (2012)



Source: WDF, 2014, OECD Report 2013

Road Traffic Death Rates (2013)



Source: WHO Indicators, 2014

meet the growing demands of the healthcare delivery system in the GCC there is a need of a strong and capable healthcare delivery system.

In terms of the impoverishing effects of catastrophic health expenditures, either due to sudden illness or long-term chronic diseases, the GCC states afford their resident populations a relatively broad level of financial protection. Out-of-pocket (OOP) health spending as a percentage of total health spending is below 21 % in all six GCC states while it is much higher in other countries in MENA and other regions of the world. As shown below, average OOP health spending in the GGC as a percentage of GDP is 15 % – two percentage points lower than OECD average and 23 percentage points below the MENA average. OOP spending below the 20 % threshold set by WHO indicates a relatively good level of financial protection from the unpredictable costs of treating human illnesses.

The Escalating Crisis of Non-Communicable Diseases and Injuries

Despite the many gains, many important issues remain unaddressed and are becoming urgent. GCC countries are one of the fastest-growing populations in the world. It is predicted that by 2020 this population will increase by one-third, to the current 54 million people. Moreover, there is a huge influx of expatriates (migrant workers) which constitutes about 48 % of the total population. **The rapid growth, aging population and migration present serious challenges to the healthcare system including the associated healthcare costs.** Healthcare expenditure is in fact expected to grow to US$144 billion in 2020 worldwide; with approximately US$ 70 billion of this health spending is expected from the GCC countries, mainly because of the changing demographics and the rising prevalence of chronic diseases. **For this, healthcare in the GCC needs to be redesigned to best fit the local context while addressing cost increases, demographic realities, disease burdens, technological advances, socio-economic changes and inflation.**

Among the most pressing health system challenges facing countries around the world including the GCC countries is the escalating crisis of non-communicable diseases (NDCs) and injuries. After tackling and controlling infectious diseases over the past half century, the leading cause of death in the GCC countries has shifted to chronic non-communicable diseases, largely reflecting global trends over the last 20 years, especially those in Europe and North America. Globally, the five major types of non-communicable diseases and injuries are cardiovascular diseases, diabetes, cancers, chronic respiratory diseases and road traffic injuries and the major adult risk factors for non-communicable diseases are obesity, physical inactivity, tobacco use, alcohol consumption and raised blood pressure. These changes, combined with population aging, will necessarily dial up the pressure on health spending as the share of NCD disease burden continues to grow.

> A study in Saudi Arabia surveying physicians in Riyadh indicated that 86% of respondents from public hospitals believed that inappropriate hospitalization including extended lengths of stay occurred either 'sometimes' (69.6 %) or 'always' (16.4%).

GCC countries rank among the highest in the world on risk factors related to lifestyle ailments such as diabetes, cardiovascular conditions and obesity. According to the International Diabetes Federation, the region has 6 of the 10 countries in the world with highest diabetes prevalence. Saudi Arabia has the highest prevalence of diabetes, that is, 20.5% followed by Qatar (16.3%), Kuwait (17.9%), Bahrain (17.5%), UAE (19 %) and Oman (8.2%).

Mortality rate in GCC from NCDs is one of the highest in the world. This is primarily due to the unhealthy lifestyles, including physical inactivity, high caloric diet, lack of focus on health prevention and disease management, weak primary care infrastructure and inadequate treatment options to manage NCDs and their complications. The obesity rate for GCC nationals stands at an average of 40%, which is one of the highest in the world. In the coming years, this situation is likely to worsen as the sedentary population in the region ages.

These alarming trends warrant strong and sustained policy actions by the GCC countries. The mounting tide of non-communicable diseases and road injuries will not only place upward pressure on health financing but will also affect economic productivity due to the growing rates of premature mortality and morbidity among the working population. Mental health diseases, similarly, have significant social and economic consequences for GCC societies. NCDs are projected to account for 81 % of all deaths in MENA and 87 % of all deaths in the GCC countries by 2030. Premature deaths due to NCDs among the working population are particularly high. The share of NCD deaths among individuals aged 60 years or younger out of total NCD deaths in the GCC countries is the highest in the world. Estimates for several OECD countries including Japan, Denmark and the United States show figures below 15 %; the six GCC countries all equal to and above the 40 % level. The problem in Qatar and the UAE is exceptionally acute with the percentages reaching above the 50 % level. **The high rate of premature NCD mortality in the GCC countries stems from both unhealthy lifestyles and perhaps inappropriate treatment options to manage NCDs and their complications.**

Mental health disorders, diabetes, low back pain, road injuries and heart disease were the largest contributors to the burden of disease in the GCC countries in 2010 as measured by the composite

measure of disability adjusted-life years (DALYs) lost. Mental health disorders are ranked as the highest contributors to disease burden in Bahrain, Qatar and the UAE whereas road injuries are the top contributors in Saudi Arabia and Oman. In Kuwait, the non-communicable disease with the largest impact is heart disease. Explanations for the major contribution of mental health disorders to disease burden in these high-income countries include changing household, gender and social dynamics in the GCC countries.

Similarly, average death rates from road-traffic accidents are markedly higher in the GCC countries than the average rates among the high income countries of the world. The death rates from road traffic accidents, measured as the number of road traffic fatalities per 100,000 populations, ranged well above the high-income country average of 7.7 fatalities per 100,000 persons in 2013.

It is worth noting that Oman is an 'outlier within the outliers' as its indicators for obesity and diabetes are comparable to the OECD figures yet its indicator for road traffic fatalities is significantly higher than most of its neighbouring GCC countries. The impressive achievements in combating obesity and diabetes in Oman stem from decades of significant investments in primary care and health promotion activities. The less impressive road safety outcomes, as indicated by 2013 data, are likely the result of risky behaviours among the youth and possible under-investments in required emergency medical services.

On the health financing side, similarly, there are several important challenges confronting the GCC health systems. First and foremost, there is the question of long-term fiscal sustainability.

Pressures and Challenges of GCC Healthcare System

Many are the initiatives undertaken to intensify educational programs regarding

healthy life style (diet, exercise) that can assist citizens in modifying their lifestyle and several programs have been initiated to sustain prevention and control of chronic diseases. These include health education in schools (UAE), Health Promotion Council in Bahrain (National Plan for Control of Chronic Diseases), specialized clinics initiatives (Saudi Arabia), NIZWA project for healthy life style (Oman) and the Facts for Life Book (Cooperation Council States) project.

Nevertheless, an overall health system reform is the need of the hour. Patient centered care and management require changes from 'Radar Care' to 'continuity of care'. **The current healthcare system in GCC states functions as radar; the patient appears in the health system and is treated on a "find it and fix it" basis and is discharged, appearing only when next illness episode occurs.** Just 16 % of Kuwaitis said they visited a physician on a regular basis while Saudis are among the most likely to visit a doctor regularly (38 %). This healthcare system ("Radar System") is not equipped to meet the mounting challenges engendered by the alarming rates of non-communicable diseases (NCDs) in GCC. This requires radical changes to the health systems. Problems inhibiting implementation of NCD programs include lack of risk factor surveillance and absence of reliable mortality data. **The solution lies in strengthening primary care and ensuring that services and programs are focused with proactive interventions to promote and prevent risks to health. Basic primary care and public health education can lower costs in the long run.** The cheapest way to treat chronic diseases is to prevent them. Primary care physicians and nurses play a key role in educating patients about the preventable habits that lead to chronic disease (e.g. unhealthy lifestyles and eating, lack of exercise, smoking, etc.). However, GCC countries struggle to recruit and retain physicians and nurses from other countries with the necessary expertise, which hinders these education efforts.

Their 'care model' should be altered by shifting more NCD prevention and management services down to the level of primary care practitioners. Under such a model, at-risk patients can be more efficiently screened for NCD risk factors and chronic disease patients (i.e. hypertensive, diabetic patients) can be more effectively managed. Chronic disease management requires continuous monitoring by primary care practitioners of NCD patients. In recognition of this challenge, Bahrain is currently contemplating the strengthening of its NCD services within its 27 primary healthcare centres and a change in focus from just treating to preventing is underway also among the other GCC countries.

The current healthcare system in GCC states functions as radar; the patient appears in the health system and is treated on a "find it and fix it" basis and is discharged, appearing only when next illness episode occurs.

A further need exists for building human resource capacity and evidence-based guidelines.

Despite the fact that a remarkable increase took place in the number of healthcare workers there is still a shortage in availability of trained physicians and nurses, especially local professionals in the GCC; mainly, due to high turnover rates and retention issues. According to WHO World Statistics Report of 2015, UAE is lagging behind with 31 nursing and midwifery personnel for every 100,000 population.

One of the major reasons for this low number can be due to the fact that the GCC countries face a dearth of local talent to meet the requirement at healthcare centres and are heavily dependent on an expatriate healthcare workforce. This poses a challenge for the healthcare delivery system. Saudi Arabia (78%) and UAE (85%) have the highest percentage of expatriate staff in the health sector. Statistics reveal that only 3% of the 23,000 to 25,000 nurses in the country are Emirati. Expatriate workforce is expensive and they either prefer to return to their home country after a few years of service or move to the developed countries as they consider GCC healthcare facilities as a stepping-stone to gain experience and then seek careers in the West. Here is also a challenge in the healthcare delivery system regarding variation in clinician competence, due to the expatriate health workforce, as physicians with different training backgrounds from countries around the world are delivering healthcare in the GCC.

Another challenge to the system comes from NCD patients, particularly among the elderly, and road traffic injury patients needing long-term rehabilitative care often having extended and unwarranted lengths of stay in acute-care public hospitals. This problem stems from inadequate clinical management systems and from 'social pressures' for keeping long-term chronic patients in acute care settings. Another part of the problem is the shortage of adequate health facilities providing post-acute care services such as rehabilitative care, long-term nursing care, hospice and home-based services which exacerbates the bed management challenges of the public sector hospitals. A study in Saudi Arabia surveying physicians in Riyadh indicated that 86% of respondents from public hospitals believed that inappropriate hospitalization including extended lengths of stay occurred either 'sometimes' (69.6 %) or 'always' (16.4%).

Quality and appropriateness of care also represents an important challenge to GCC health officials. The fragmented health service delivery networks in the public and private sector and the absence of effective national quality of care programs in the GCC countries do not create an appropriate eco-system for continuous quality improvement in healthcare services. **The GCC countries need to harmonize quality of care standards**

across their numerous health service networks and develop national systems for monitoring and reporting quality of care outcomes. In Saudi Arabia, the Saudi Health Council is working to harmonize clinical coding standards across all of the six large healthcare subsystems in the country (Ministry of Health, Ministry of Defence, National Guard, Ministry of Interior, university sector, private sector). In Bahrain, the Government recently established the National Health Regulatory Authority (NHRA) to independently monitor the quality of clinical practice in the health sector.

Healthcare Financing

On the health financing side, similarly, there are several important challenges confronting the GCC health systems. First and foremost, there is the question of long-term fiscal sustainability. Although macro-level spending on health is relatively low compared to countries of similar income levels (total health spending is below 5 % of GDP in all GCC countries), there are three important factors prompting concern: (i) a fiscal base largely reliant on hydrocarbon revenues as opposed to tax revenues; (ii) increasing cost escalation arising from greater demand because of population dynamics, changing patterns of disease and the continuous introduction of high-cost medicines and health technologies; and (iii) a social contract, as reflected in different constitutional provisions, between state and society stipulating the obligations of the state to ensure access to healthcare services.

Healthcare expenditure in the GCC remains below the 10% global average. The UK spends around 9.3% of GDP on healthcare, while the US spends the most at 16.2%. By country, total healthcare expenditure as a percentage of GDP in Saudi Arabia is around 4.8 % of GDP and Bahrain is 3.7% which is relatively higher as compared to other GCC member states, i.e., UAE (3.5 %), Kuwait (2.7%), Oman (2.3%) and Qatar (1.9%).

Nonetheless, healthcare demand and subsequent expenditure is rising sharply in the GCC. It is predicted that in the next 10 years health spending will further increase with an estimated increase in Compound Annual Growth Rate (CAGR) of over 11 %. **Investment in the private sector may help but cannot be the solution. Instead, the governments need to improve the utilization of existing and available resources, invest and strengthen primary care to reduce the costs of hospital care and invest in public health through collaboration with other ministries outside the health sector.**

Development of the healthcare sector has taken centre stage in the GCC countries, as they witness an era of demographic transition accompanied by rising prevalence of lifestyle-related diseases.

There is ample room for improvements in the efficiency of spending by GCC health systems. **In most GCC health systems, an excessively large portion of health spending covers higher-cost secondary and tertiary care services rather than targeting lower-cost prevention, promotion and primary care services.** In Kuwait, according to National Health Accounts data, the Ministry of Health spent more on expensive overseas treatment (14 % of the Ministry of Health budget) in 2010-2011 than it did on primary healthcare services (8 %). In 2012, around 21,658 UAE nationals visited 5 private hospitals in Thailand with an average spend of around (Thai Bhat) 24,000 per outpatient service and (Thai Bhat) 350,000 per inpatient admission.

Last but not least, there has been insufficient innovation in developing new provider payment systems in the GCC countries. In recent decades, many health systems around the world have migrated from traditional line-item budgeting, salaried-based payments and fee-for-service schemes to new forms of payment systems. This transition occurred during 1970-2000 because of growing empirical evidence in the health economics literature that different types of payment systems have differentiated effects on the practice of medicine – and therefore on the fulfilment of different health system performance goals (i.e. efficiency, equity and quality). Some of the newer provider payment systems include global budgets for public hospitals, capitated payments for primary care services, prospective payments systems based on diagnosis-related groupings for hospitals service and pay-for-performance schemes. Each payment system has its advantages and disadvantages in terms of its health system consequences. **With the introduction of new mandatory health insurance initiatives, some GCC health systems have begun to experiment with the development of new payment systems including global budgeting and capitation for primary care services.** The GCC therefore needs innovative ways to finance health systems and introduce some competition into the industry to reduce inefficiencies and lower costs. There are many ways to do this, including having employers and patients contribute more to healthcare costs or to encourage more private sector involvement. Unfortunately, governments' role as the major healthcare provider and the industry regulator creates a conflict of interest that discourages private sector participation. The private sector does not want to be in a position of competing with the government.

Market Opportunities and Private Sector Involvement

Many countries in the GCC view healthcare as an engine of overall growth. Consequently, governments are investing heavily in modernizing and reforming their respective healthcare systems with the goal of further diversifying the economy. **This exploration to find new healthcare solutions has led GCC countries to expand and improve upon their current systems of care through the implementation of new**

technologies, new care systems and a series of public/private partnerships. During the next few years the GCC market is expected to grow at a 12.1 % compound annual growth rate (CAGR) from an estimated $40.3 billion in 2015 to $71.3 billion in 2020, according to Alpen Capital. The increase in the population and rising cost of treatment are the primary factors aiding this growth. About 79 % of the market will be accounted for by outpatient services, while the latter 21 % will correspond to inpatient services. **When looking at each GCC country, the healthcare market is anticipated to expand by between 11-13 % between 2015 and 2020 in terms of annual average growth rates.** Saudi Arabia is and will continue to be the largest market, followed by UAE. Additionally, the countries that are expected to have the fastest growth during the next few years are Qatar and the UAE.

One of the biggest healthcare challenges currently faced has to do with a shortage of hospital beds. Demand for number of hospital beds in the GCC region is projected to grow at a 2.3 % CAGR from an estimated 101,797 in 2015 to 113,925 in 2020.

Development of the healthcare sector has taken centre stage in the GCC countries, as they witness an era of demographic transition accompanied by rising prevalence of lifestyle-related diseases. **In order to ease the growing pressure on the healthcare system, the GCC governments are injecting huge funds as well as encouraging private sector participation to build hospitals and clinics, upgrade the existing infrastructure and match the quality of services offered in developed countries. This resulting in several investment opportunities for the private sector.** Over the last year, there has been a steady flow of private equity funds into the sector.

The UAE accounts for 26 % of the total healthcare spend by GCC governments. The healthcare market in the UAE is projected at $19.5 billion in 2020, indicating an annual average growth of 12.7 % from 2015 and is marginally higher than the GCC growth average. The country is likely to see an increase in demand for the number of hospital beds at nearly 3 % every year to reach more than 13,800 beds by 2020. UAE nationals are covered under the government-funded healthcare program. Expatriates, meanwhile, have to pay for private healthcare insurance and in 2008 the Abu Dhabi government made health insurance mandatory for expatriates. The UAE government is encouraging more private participation in the sector; however, it will likely continue to finance the bulk of healthcare spending in the near term.

Last but not least, there has been insufficient innovation in developing new provider payment systems in the GCC countries.

In Saudi Arabia, Saudi nationals are entitled to free healthcare, which is also available to religious pilgrims. To address increasing demand, the government's 2014 budget allocated $28.8 billion to health and social welfare, which included funding for 11 new hospitals, 11 medical centers and two medical complexes, on top of the 132 hospitals and healthcare centers already under construction. Overall, the health ministry is planning to raise hospital capacity from 38,000 to 68,000 beds in five years. After several years of large budgetary spending increases, the Saudi government is intensifying its efforts to promote private healthcare, via expanded health insurance, increased loan limits to build private hospitals and support for public-private partnerships.

Trends in the usage of healthcare technologies have been spearheaded by countries like the UAE and Saudi Arabia and include the implementation of e-visits and the digitization of healthcare records and patient management systems. Healthcare expenditure on IT is estimated to have reached € 513 millions and it is expected to continue to increase in the years to come as more GCC countries implement the usage of electronic records in their rapidly expanding healthcare systems.

Increases in the GCC's insurance premiums are outpacing the growth on the global market, while insurance penetration remains one of the shortest in the world. Insurance companies see a big potential for growth in the sector.

A growing trend in GCC countries is also the increase of inbound medical tourism. The UAE and Oman are leading the way in tapping into this potential resource for growth with the government providing specialized facilities to support the trend. GCC governments are also looking at public-private partnership models to help reduce overall financial risks, enhance the quality and range of services, gain expertise and prompt innovation.

Future plans for healthcare in the GCC include further expanding current infrastructure, developing strategies to attract and retain healthcare professionals and action plans to improve and equalize access to care.

Despite the current challenges, the outlook for the GCC healthcare market is quite optimistic and will continue to be one of the most attractive markets for investments in years to come. The healthcare market is expected to continue its growth through the increased usage and improvement of medical insurances, which will allow more people to afford and use medical care. Public private partnerships will play an imperative part in the overall healthcare market growth, encouraged and subsidized by the different GCC governments.

Among Main Sources:

- Extracts from "Health Care in Gulf Cooperation Council Countries: A Review of Challenges and Opportunities". For full report: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5650259/

- Extracts from "Shaping Healthier Societies and Building Higher Performing Health Systems in the CGG Countries". For full report, World Bank: http://documents.worldbank.org/curated/en/907131468182345587/Main-report

-https://www2.deloitte.com/qa/en/pages/about-deloitte/articles/GCC-countries-dependent-expatriate-hc-workforce.html

- https://www.forbesmiddleeast.com/en/healthier-healthcare-systems-in-the-gcc-2020-priorities/

-http://www.arabianbusiness.com/more-gcc-nationals-seeking-healthcare-abroad-poll-469515.html

-https://www.tforg.com/how-we-think/sweetspot-blog/2015/04/27/healthcare-market-trends-in-the-gulf-cooperation-council-gcc/

-http://www.arabianbusiness.com/gcc-healthcare-sector-forecast-grow--71bn-market-by-2020-621929.html

Plasma therapy CGF - Concentrated Growth Factors (2nd generation)
- an overview of possible applications -

by **Katrin Rotter-Böttger**
Independent medical Trainer for Meso-/PRP-CGF-Therapie and Plasma-Gel
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For the production of CGF, only special CGF-tubes are filled with blood and centrifuged. In comparison to other user protocols, here, there follows a targeted focus of the platelets and the CD34 + stem cells. The high-quality borosilicate tubes from Silfradent show a particularly high yield of growth factors.
No other therapy is so versatile and can be used in so many ways. CGF is used in sectors such as dentistry/implantology, orthopedics, ophthalmology, gynecology, ENT, sports medicine, dermatology and many other fields. Similarly, it has become essential in professional sports. CGF contributes to bone formation and stimulates injured tissue to regenerate. Meanwhile, autologous PRP is now available in powder form.

CGF and A.P.A.G. (solid form)

Orthopaedics CGF for Epicondylitis lateralis

PRP, which works so fantastically in the medical arena, is becoming increasingly popular in medical aesthetics due to its unique mechanism of action. Since healthy skin does not show any inflammation or injury, a different protocol and application is required.
CGF conduces to the regeneration of the skin and its solid form (APAG/activated plasma albumin gel) is used as a bio-dermal-filler to smooth out wrinkles.

Medical Aesthetics atrophic changes in the skin – age related (treatments with CGF and APAG)

Personalized Cosmetic products can be integrated into the CGF protocol - Cream and Mask containing autologous Plasma

Device for producing A.P.A.G.

The thrombocyte is the key player to this therapy and is activated by any injury. Wound closure takes place within a short period of time, due to adhesion and aggregation of the thrombocytes, At the beginning of every wound healing, vascular permeability is increased, causing fluid to exude from the vessels and form an oedema, thus easing the proliferative processes.

In this phase, the growth factors of the alpha-granules of the thrombocytes are released and attracted to the tissue (chemotaxis). It is primarily the fibroblasts that contribute to the healing process (collagen). Growth factors such as TGF-ß, PDGF, FGF stimulate the fibroblasts to divide and migrate. In the wounded area, new cells and blood vessels are built to compensate the defect. **The CGF-Therapy uses this wound healing process.**

Centrifugation

Centrifugation is fundamental to successful CGF therapy. Newer user protocols take the correlation between relative centrifugal force (RCF) and yield of platelets into account.

CGF for Wounds/Burns
Ulcus cruris - autologous membranes (endogenous plaster)

What happens if the centrifugation is too strong?

If the blood sample is centrifuged with an excessively high G-Force (RCF), platelets and plasma proteins can be pushed downwards into the erythrocyte phase. The result will be PPP – platelet poor plasma, plasma poor in thrombocytes. Furthermore, the thrombocytes degranulate prematurely, the erythrocytes are damaged and hemolysis is caused, which, although often not visible to the naked eye, has an unfavorable effect on the plasma composition.

Medifuge

Fractional centrifugation makes the difference

The latest technology in this field is the MEDIFUGE MF 200, offered by the company Silfradent. Six different times and speeds, allow the particles to settle in the desired layer.

Important: Only centrifuges certified as medical devices of the Class 2a may be used for the manufacture of PRP. Laboratory centrifuges may not be employed. (compare law regulation).

Alopecia Treatments with CGF containing Melatonin for promoting hair growth

The production of CGF is safe, but requires uniform application protocols. Self-made protocols are not approved and can be harmful. CGF-Protocols not only secure quality on a constantly high level but also ensure that effectiveness, production methods and additives are reviewed. In addition they afford both the client and therapist safer usage.

HEALTH IT FORUM: Minister Pinkwart calls for great framework conditions for the digitized healthcare industry

Interview with Prof. Dr. Andreas Pinkwart, Minister for Economic Affairs, Innovation, Digitization and Energy in North Rhine-Westphalia

A curse or a blessing? What should we make of the increasing digitization of healthcare? In his keynote speech at the HEALTH IT FORUM, Professor Andreas Pinkwart addressed new trends and their potential. In this interview with MEDICA-tradefair.com, he also focuses on this subject and talks about the perils new healthcare technologies could entail.

Prof. Dr. Pinkwart at the HEALTH IT FORUM at MEDICA 2017.

Professor Pinkwart, what are your personal highlights among healthcare trends, especially as it pertains to digitization?
Professor Andreas Pinkwart: I anticipate considerable progress thanks to the use of artificial intelligence. The previous experiences in diagnostics look promising. We must take advantage of artificial intelligence wherever it surpasses our own to benefit patients. One prerequisite for this is to ensure that the existing medical data can be used and processed accordingly. To do this, big data needs to turn into smart data. For example, healthcare apps can encourage increased physical activity or healthier eating habits. These positive behavioral changes also improve prophylaxis and reduce diseases in the long term. There is also significant potential in the field of telemedicine, especially for rural areas and as it relates to the monitoring of patients with chronic diseases. Thanks to the use of computer systems, patients with motor and cognitive impairments can receive treatment and rehabilitation services.

What barriers will technological advances break down in the coming years?
Pinkwart: We will continue to push the boundaries of what is feasible in medicine. Types of cancers that used to be an automatic death sentence can be cured today. Paralyzed patients can learn to walk again with the help of assistance systems. Premature infants can survive despite a low birth weight, oftentimes without permanent damages. Significant progress is also made in the field of regenerative medicine, the artificial replacement of the heart, lungs, and skin, which exhibits increased activity.

Where else do you see room for improvement on the path from developing an idea that truly benefits patients to its implementation?
Pinkwart: There is still a long way before any new products and treatment processes actually reach the patient. It is time for universities, medical facilities and the industry to work even closer together, while researchers and developers have to aim at making new products and processes available to patients as quickly as possible. Having said that, the new European Medical Device Regulation is expected to make it more difficult for companies with innovative ideas to bring products to the market. This might necessitate support services for small and medium-sized enterprises. Moreover, health insurance companies must also ensure that new devices and treatments are reimbursed.

What are the prospects and dangers of an increasing digitization of the healthcare sector?
Pinkwart: As the healthcare sector is being digitized, it must be guaranteed that every patient has autonomous access to his/her data without the presence of doctors and that he/she is able to manage his/her treatment. The impending Federal Data Protection Act pertaining to the patient's rights to access personal data does not fully ensure the right of informational self-determination. This is why the safety of IT systems is a major challenge. Not only does this refer to the safety of medical records but also applies to the unauthorized access to medical devices by third parties. The possibilities of diagnostics and therapy also increasingly present ethical concerns. That is why we have to consider the boundaries we might want to set in this area. The growing use of artificial intelligence and robotics must not result in a decreasing responsibility of medical personnel and nursing staff to care for patients.

In the healthcare sector, global players, universities, research institutes and startup companies explicitly collaborate to find solutions to medical problems. What can other industry sectors learn from this type of global networking?
Pinkwart: German pharmaceutical and medical technology companies are internationally highly regarded due to the high quality and safety of products. Having said that, distinctions like licensing and reimbursement procedures delay the technological progress. When it comes to digitization, the healthcare sector learns from other industries. The decision-makers are very interested in improving the quality of diagnostics, therapy, and rehabilitation. For companies to stay competitive in the global setting, we have to create great framework conditions for the digitized healthcare industry.

This interview was conducted by Anne Hofmann and translated from German by Elena O'Meara..
MEDICA-tradefair.com
Source: https://www.medica-tradefair.com/cgi-bin/md_medica/lib/pub/tt.cgi/HEALTH_IT_FORUM_Minister_Pinkwart_calls_for_great_framework_conditions_for_the_digitized_healthcare_industry.html?oid=85947&lang=2&ticket=g_u_e_s_t

A Significant International Impact has Always been and Remains MEDICA and COMPAMED's Trump Card - Visitors Hail from over 130 Countries

The MEDICAlliance Provides a One-Stop Shop for Marketing Power, Enabling Companies to Access Attractive Markets and Business in a Range of Countries

Düsseldorf, 16 November 2017 - "MEDICA and COMPAMED have always had a high degree of international impact, and this remains their trump card. Top decision makers from around the world come together here and see the huge breadth of what we have on offer, which is the international frontrunner and has yet to be beaten", Joachim Schäfer, Managing Director of Messe Düsseldorf, said, summing up the four-day run (from 13-16 November 2017) of the world's biggest medical trade fair and the international leading specialist trade fair for the supplier market for the medical technology industry. Of a total of 123,500 professional visitors, **over 60% came from countries outside Germany, from 130 different countries. Among these were visitor groups with**

members who were the top of their field, from China, India, Columbia and Nepal, along with visitor groups from the most important markets for medical technology in Europe who have attended for years and years.

MEDICA also proved to be first place globally in terms of its exhibitors; Joachim Schafer underlined this: **"A large proportion of our 5,100 exhibitors came from abroad, from 66 countries, presenting innovations covering all the needs for the outpatient and inpatient care sectors.** Despite the renovations taking place in our trade fair premises and the fact that the area that housed Halls 1 and 2 was not available for this year's MEDICA, we hit the same booking profit as the previous year. With the temporary lightweight construction Halls 3a and 18, we were able to respond to almost all requests for exhibition space successfully."

The current reports from the trade associations highlight how important the stimulus for international business that MEDICA and COMPAMED provide is for the service providers. **According to the German Medical Technology Association BVMed, the medical technology industry expects to see an increase of almost 6% in its global turnover, and this will be driven by dynamic developments in the export market. In comparison, domestic trade will experience a relatively low growth of 2.8%, predicted to result in overall turnover of 30.6 billion Euros.** These are the outcomes of the latest survey of 106 German and foreign manufacturers. At the time that MEDICA was on, the trade associations SPECTARIS and ZVEI also confirmed that their member companies were experiencing far more growth in export business than they were in comparison to domestic demand, which is marked by a plunge in capital expenditure, and the inpatient and outpatient sectors.

A New Umbrella Brand Brings Together International Expertise

In addition to the opportunity to make many international business contacts, which the service providers were offered once again this year at MEDICA 2017, the opportunity to participate in other medical trade fairs in attractive continental markets is also growing in significance. "For many years, our successful healthcare events abroad have offered the ideal platform to unlock the growth potential of prospering economic regions", explained Horst Giesen, Global Portfolio Director for Health & Medical Technologies at Messe Düsseldorf.

> The new conference, MEDICA ACADEMY, was a certified advanced training event for doctors from a wide range of disciplines.

A new umbrella brand, MEDICAlliance, was introduced at MEDICA 2017 for this purpose, enabling both exhibitors and visitors to navigate these options easily. Horst Giesen sums it up: "Based on our world-leading trade fairs MEDICA, REHACARE and COMPAMED, we are offering global event expertise throughout the entire value-added chain and supply chain for medical care and rehabilitation, as well as the corresponding supplier products and services under this new label."

The specialist trade fairs MEDICAL FAIR in Mumbai, New Delhi, Singapore, Bangkok, Suzhou and the MEDICAL MANUFACTURING ASIA trade fair (in Singapore) and INTEGRATION (Moscow) and more are all part of MEDICAlliance. The new umbrella brand MEDICAlliance encompasses all of Messe Düsseldorf's global trade fair activity and its subsidiaries in the health sector. This includes strategic partnerships for events, such as HOSPITALAR (Sao Paulo) or ZDRAVOOKHRANENIYE (Moscow).

The partnership with MEDTECH COLUMBIA (Bogota) is brand new. A cooperation agreement for this was signed by Werner M. Dornscheidt, the CEO of Messe Düsseldorf, Tom Mitchell, the CEO of Messe Düsseldorf North America and Andrés López-Valderrama, the CEO of Corferias Bogota (organizer of MEDTECH) on the first day of MEDICA 2017. "Columbia is one of the markets experiencing the greatest growth in medical technology in Spanish-speaking Latin America. In terms of strategy, it is important that we show unity with them via MEDICAllianca", said Werner M. Dornscheidt, emphasizing the significance of this future engagement. **The sales volume for the Columbian market for medical technology amounts to 1.3 billion US dollars and is expected to grow by at least 20% before 2019, with an import quota of 80%** (Source: gtai).

Brand New and Tried and Tested - Useful for Visitors and Exhibitors

To respond to the interests of our many international visitors as well as possible, the MEDICA programme had even more new event formats added to it this year - with highlights that were of international relevance whilst simultaneously addressing the traditional German professional visitors.

For example, the new conference, MEDICA ACADEMY, was a certified advanced training event for doctors from a wide range of disciplines. It received an excellent response from its participants. The seminar offered on "Handing Over Practices", to mention one among many, was met with great interest. The latest numbers from the National Association of Statutory Health Insurance Physicians (Kassenärztliche Bundesvereinigung) (Source: Arztmonitor 2016) proved that we have picked up on the hot topics here. According to these numbers, almost one in four practising doctors in Germany is planning to give up their practice within the next five years.

Currently, the topic of infection prevention is of importance to both national and international audiences. Infection prevention was a focal point in the MEDICA ACADEMY seminars that was remarked upon and noted by many, and the same applied for the new MEDICA LABMED FORUM. From the various viewpoints of the different outpatient and inpatient medical professional target groups, the questions that were important to them were addressed - from facets of travel medicine and worldwide migration to interdisciplinary coop-

erative work to fight against the increase in resistance and multi-resistance with sufficient hygiene measures and therapies that comply with the guidelines.

The forums integrated into the trade fair and their accompanying conferences, such as the established MEDICA MEDICINE + SPORTS CONFERENCE for sports and preventative medicine, or the international military and disaster medical conference DiMiMED, among others, have also aided the exhibitors to find the right target groups for them, and this has been demonstrated by the example set by Oehm und Rehbin GmbH. Over the past years, they have used the industry sessions at the DiMiMED conference to present their hardware and software solutions for mobile medical imaging. They have been taking part in MEDICA as an exhibitor since 2016. "The international scope of MEDICA is crucial for us - it's the ideal context to show the vast range of our products" explained Bernd Ohm, the CEO. For this company, being able to speak closely with doctors, technical universities and engineers is an important component of their innovation strategy.

Digitalisation and Dematerialization for Smart Processes

To sum up the discussions from the other well-attended themed forums which were integrated into MEDICA, for example the MEDICA HEALTH IT FORUM or the MEDICA CONNECTED HEALTHCARE FORUM, as well as the innovative products presented by the exhibitors, we can state the following: **Digitalization is penetrating all sectors of medical care, and this is a trend that is here to stay.** Economic feasibility and easy handling of medical technology devices and products are top priorities in terms of ensuring sales. Any applications that make relevant information available at the point of care as quickly and easily as possible are in very high demand. Mobile computing programs on tablets and smartphones are examples of this, along with their apps. This leads us onto another trend: dematerialization. With more and more systems, devices and products, innovation is overwhelmingly based around new software solutions and less on hardware. **This equipment is also becoming more compact and lighter, without any reduction in performance.** An ultrasound system consisting solely of a combination of the transducer, a smartphone and an app was one of the product highlights at MEDICA 2017. Thanks to innovative development of the transducer, ultrasound-to-go has become an option even in cardiology, one of the most demanding disciplines.

Thanks to innovative development of the transducer, ultrasound-to-go has become an option even in cardiology, one of the most demanding disciplines.

Wearables also proved to be particularly smart. Many innovations in this sector were presented for a variety of fields of application at MEDICA 2017, for example for diabetes or cardiac disease through to optimal wound care (via intelligent plasters). Humotion, a German start-up, used its presence at the new MEDICA START-UP PARK (in Hall 15) to present a new sensor system which is integrated into fabric. This enables a patient's entire movement dynamic to be captured with great precision, which provides valuable information to doctors and therapists of people with orthopaedic issues or geriatric patients.

"A New Era for Hospitals"

Under the theme "A New Era for Hospitals", the 40th German Hospital Conference was dedicated to queries on health policy following the parliamentary elections, also covering digitalisation and clinical quality assurance among other topics. Over 2,000 participants attended this leading information and communication platform aimed at the directors and management of German hospitals. The event was accompanied by the European Hospital Conference (as it is every other year). The European Hospital Conference is a meeting point for the top decision makers from hospitals throughout Europe. Here, the eHealth Action Plan 2012-2020 from the European Commission was a topic that awoke much interest and was avidly followed.

COMPAMED: Tiny Components are the Next Big Thing!

Held alongside MEDICA, COMPAMED (in Halls 8a and 8b) reinforced its reputation as a top international event for the supplier market in medical manufacturing, clocking up almost 800 exhibitors from 35 countries. The companies and research institutes came to Halls 8a and 8b and showcased their high-tech solutions, thus presenting themselves as skilled partners for development and production in the medical technology industry. This year, miniaturized components constituted a popular topic. These are needed as they are used as components in wearables or implants (e.g. sensors, rechargeable batteries and RFID technology), to give an example.

Date of the next MEDICA in Düsseldorf: 12 – 15/11/2018

Date of the next COMPAMED in Düsseldorf: 12 – 15/11/2018

More information available on the Internet at www.medica-tradefair.com / www.compamed-tradefair.com

More information about the MEDICAlliance available on the Internet at: www.medicalliance.global

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Significant developments in the Russian Legistation effective from January 2018

Some significant changes in the legislation of the Russian Federation have been undertaken and coming into force in January and February 2018, in particular in such domains and spheres of regulation as: banking law; tax law; public procurement; intellectual property rights; Internet messengers and mass media; circulation of medicines; medical services; industrial production and technical regulation; inspections of legal entities and individual entrepreneurs. Below among the most relevant for our business.

1. STATE PROCUREMENTS

1.1 Procurement from Small and Medium Enterprises

From 1 January 2018, the threshold values of revenues and assets of legal entities that are obliged or may make purchases from small and medium enterprises (SMEs) are reduced.

It is established that specifics of the participation of small and medium enterprises in the procurement of goods, works, and services by certain types of legal entities shall apply in respect of, inter alia:

• legal entities specified in Article 1.2 of Federal Law No. 223-FZ dated 18 July 2011 'On Procurement of Goods, Works, Services by Individual Types of Legal Entities'(1) the annual revenue of which (for credit institutions - value of assets) from sale products according to the

annual accounting (financial) statements for the previous calendar year exceeds 500 million roubles, and provided that they do not meet the conditions of classifying as SMEs;
• autonomous institutions the total value of contracts which for the procurement of goods, works, services for the preceding calendar year exceeds 250 million roubles.

1.2 Uniform Rules for Describing Medicines for Medical Use

From 1 January 2018, the specific requirements to the description of the medicines for medical use which are purchased for the state and municipal needs in documentation on purchase of the medicines shall become effective.

In particular, the description contained in the procurement documentation shall indicate: the dosage form of the medicine, medicine dosage strength with supply capacity of medicine in multiple dosage strength and double quantity, the residual shelf life of the medicine expressed in time units of measure (for example, 'not earlier than 1 January 2020' or 'at least 12 months from the date of the contract conclusion', etc.).

In order to describe the medicines in the procurement documentation it is allowed to indicate:
• the trade names if the medicines are necessary for appointment to the patient based on medical indications (individual intolerance, vital indications) according to the decision of the medical commission of the medical organisation;
• the way of the medicine administration (injections or infusions) if the medicines are intended for parenteral use;
• the age of a child (from 0, from 3 months, from 12 months, etc.) if the medicines intended solely for use in paediatric practice.

The characteristics of medicines contained in the instructions for the use that refer to a particular manufacturer of the medicine are not allowed for indication, in particular:
• equivalent dosages of the medicine that provide for the need to divide the solid dosage form of the medicine;
• dosage of the medicine in certain units of measure, where it is possible to convert into other units of measure (for instance, 'IU' (international unit) can be converted into 'mg', or 'percentage' can be converted into 'mg/ml', etc.);
• fill volume of the medicine primary package, except for solutions for infusions;
• presence (absence) of excipients;
• fixed temperature regime for the medicine storage in the presence of an alternative one;
• presentation (primary package) of the medicine (for example, 'ampoule', 'bottle', 'blister', etc.);
• number of units (tablets, ampoules) of the medicine in the secondary package, as well as the requirement to supply a specific number of packages instead of the specific amount of the medicine;
• requirements for indicators of pharmacodynamics and (or pharmacokinetics of the medicine (for example, effect start time, maximum effect, effect duration).
(Decision of the Government of the Russian Federation No. 1380, dated 15 November 2017).

1.3 Requirements to Banks Issuing Guarantees to Secure Applications and State Contracts

From 1 January 2018, customers when making purchases for state and municipal needs shall accept bank guarantees that meet the requirements set by the Government of the Russian Federation.

The list of banks that

meet such requirements shall be kept by the Ministry of Finance of the Russian Federation based on the information received from the Bank of Russia, and shall be posted on the official website of the Ministry of Finance.
(Federal Law No. 267-FZ dated 29 July 2017).

2. MEDICINE AND PHARMACEUTICALS

2.1 Law on Telemedicine

From 1 January 2018 the Federal Law 'On the Introduction of Amendments to Certain Legislative Acts of the Russian Federation on the Application of Information Technologies in the Area of Health Protection' No. 242-FZ dated 29 July 2017 comes into force (except for certain provisions).
Telemedicine technologies are defined as information technologies that provide for remote interaction of medical officers between each other and with patients, for identification and authentication of them, for documenting their actions during consultations, and for remote medical supervision of a patient's health.
Medical assistance with the use of telemedicine technologies shall be organised and provided according to the procedure established by the competent federal executive authority, the procedures for the provision of medical care and based on medical care standards.
Consultations to a patient or his/her legal representative can be provided by a healthcare professional with the use of telemedicine technologies for the following purposes:
• prevention, collection, analysis of patient complaints and history data, evaluation of the effectiveness of medical and diagnostic measures, medical supervision of the patient's health;
• making a decision on the need in a face-to-face attendance (examination, consultation).

When providing consultations with the use of telemedicine technologies, the doctor can correct the previously prescribed treatment, if the diagnosis is established by him/her and the treatment is prescribed at the face-to-face attendance (examination, consultation).

Documenting of the information on the medical assistance to a patient using telemedicine technologies, including making entries into the patient's medical documents, shall be performed using a strengthened qualified electronic signature of a healthcare professional.
A patient or his/her legal representative may receive medical documents (copies thereof) and extracts therefrom, including in e-form, on request sent, inter alia, in e-form.
The Uniform State Information System in the area of public health will be created.

2.2 List of Vital and Essential Medicines for Medical Use

On 1 January 2018, the following lists approved by the Order of the Government of the Russian Federation No. 2323-r, dated 23 October 2017:
• list of vital and essential medicines for medical use;
• list of medicines for medical use, including those prescribed by the decision of medical commissions of medical institutions;
• list of medicines for people with hemophilia, cystic fibrosis, pituitary dwarfism, Gaucher disease, malignancy of lymphoid, hematopoietic and related tissue, multiple sclerosis, persons after the transplantation of organs and(or) tissues;
• minimum range of medicines needed for medical care.

The new lists are supplemented with a number of medicines and dosage forms for medicines already included in the lists.

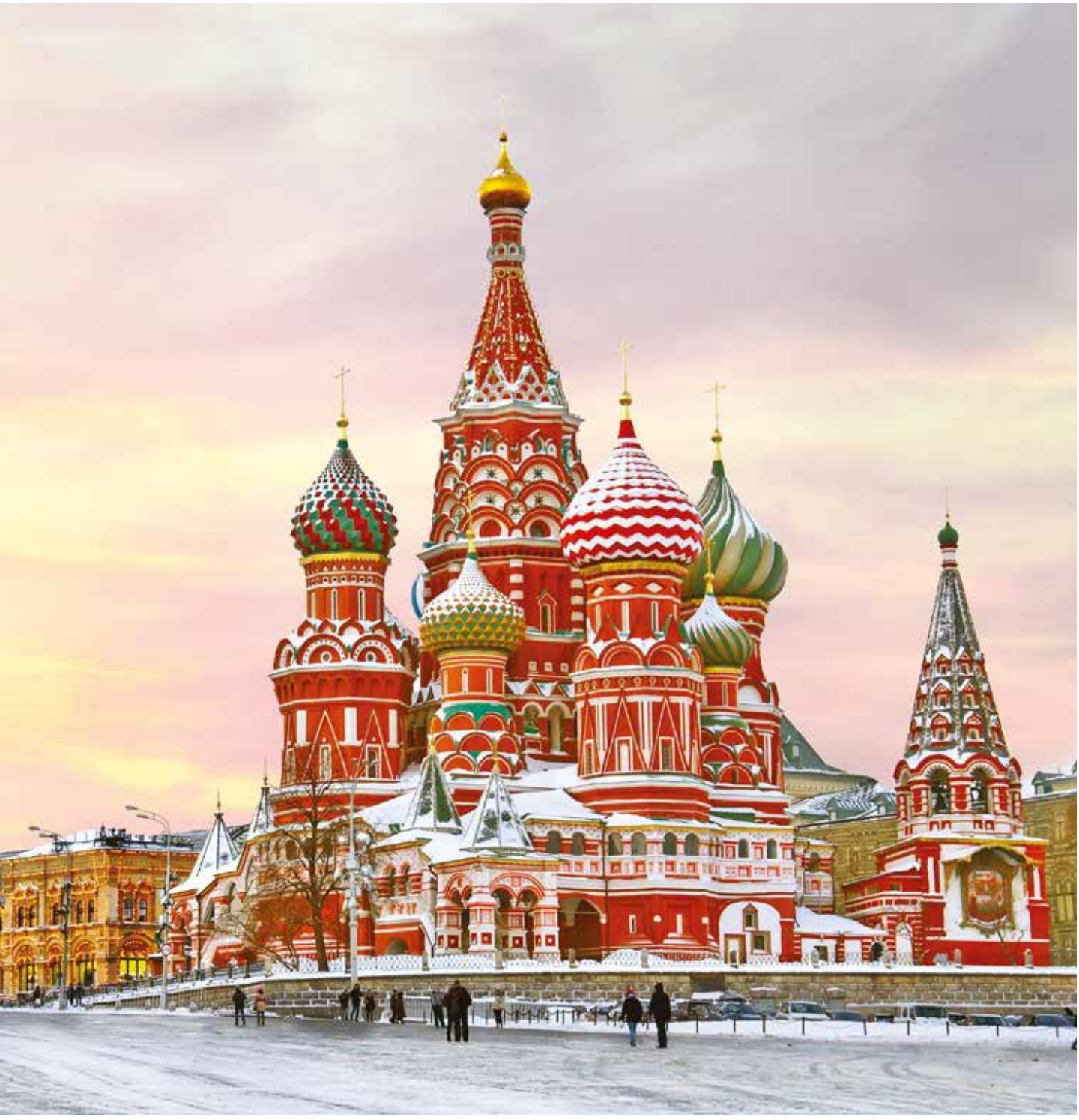
2.3 Information on the Interconvertibility of Medicines for Medical Use

From 1 January 2018, information on the interchangeability of medicines for medical use will be included in the state register of medicines (i.e. for the purposes of state and municipal procurements).
It is also allowed to use the results of determining the interconvertibility of medicines for medical use.
(Federal Law No. 429-FZ, dated 22 December 2014; the Order of the Ministry of Healthcare of the Russian Federation No. 80n, dated 09 February 2016)

3. TAX LAW

3.1 "Tax free"

From 1 January 2018, Russia implements a 'tax free' system, which involves the VAT refund when exporting goods by citizens of foreign countries (other than EAEU countries) purchased by them in Russia in retail organisations.
Non-Russian nationals may apply for compensation of the tax amount within 1 year after the purchase of goods provided that

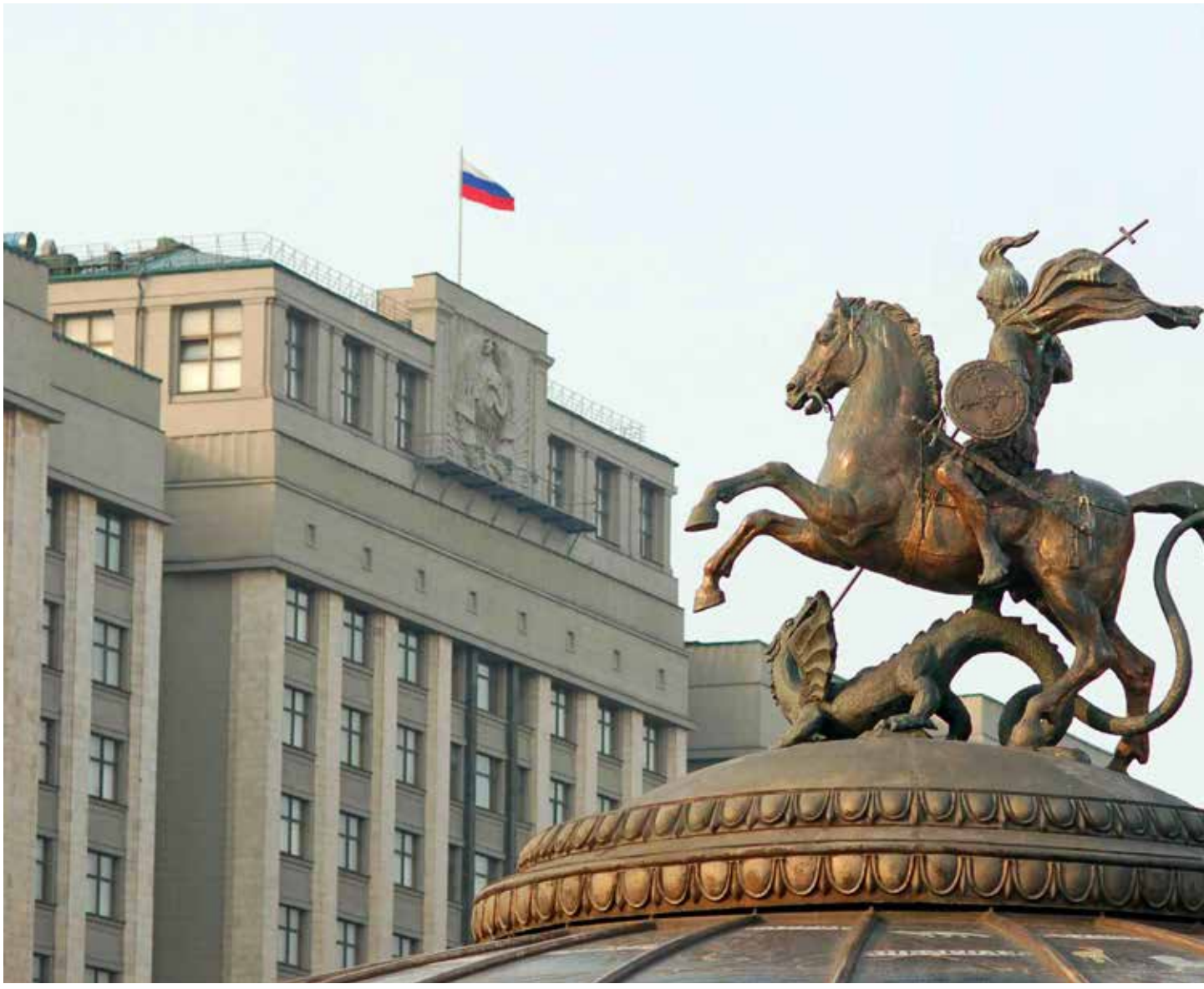


the goods are exported from Russia within 3 months from the date of their purchase. When selling goods to non-Russian nationals for at least 10 thousand roubles including VAT within one calendar day the seller shall issue the document (check) for compensation of the tax amount, with indication of the required information.

The tax amount is not compensated when purchasing excisable goods and other goods according to the established list.

The refundable tax amount is determined as the difference between the VAT amount calculated by the retailer when selling the goods and the cost of the service for compensation of the tax amount. A zero VAT rate is established with regard to services for the tax refund.

The procedure for justifying the application of the zero tax rate by organisations providing the said services, conditions for



the tax refund, a list of documents confirming the right to tax refund, as well as requirements for the retailers the list of which will be established by the competent authority, are determined.
(Federal Law No. 341-FZ dated 27/11/2017).

3.2 VAT Zero Rate

From 1 January 2018, the zero rate of VAT applies:

- to sales of goods exported under the re-export customs procedure, previously placed under the customs procedure of processing in the customs territory or the customs procedure of a free customs zone, free warehouse, when providing the necessary documents;
- to sales of goods (processed products, wastes and/or residues) received (accumulated) as a result of processing, or goods manufactured (made) from goods placed under the procedures of a free customs zone, free warehouse.

In order to justify the application of the zero VAT rate in conducting of operations for export sales of goods sent in international mail to foreign persons taxpayers shall submit the documents according to the established list.
Taxpayers may apply a rate of 10% or 18% instead of the zero rate when performing works (rendering services) in connection with transportation of exported goods, subject to submitting the respective application to the tax authority at the place of their registration not later than the 1st day of the tax period when they intend not to apply a zero rate. The period for applying the tax rates provided by the application must be at least 12 months. It is possible not to apply a zero tax rate only with respect of all operations performed. Different tax rates may not be applied depending on who is a buyer of the relevant goods (works, services).
(Federal Law No. 350-FZ, dated 27 November 2017)

3.3 Investment Tax Deduction for Corporate Profit Tax

From 1 January 2018, taxpayers may reduce the amount of tax (advance payment) payable to the budget of a constituent of the Russian Federation by no more than 90% of the current period expenditures for the purpose of completion, further equipping, reconstruction, modernisation and technical re-equipment of fixed assets.

The amount of the investment tax deduction cannot be more than the difference between the estimated amount of corporate profit tax for the tax (accounting) period and the estimated tax amount when applied the tax rate of 5% (unless another rate is determined by a decision of the constituent of the Russian Federation).
Certain categories of taxpayers cannot apply the investment tax deduction.
If at least one of the parties to the interdependent party transaction applies an investment tax deduction for corporate profit tax during the tax period, such a transaction shall be recognised as controlled when the amount of revenue under the transaction for the corresponding calendar year exceeds 60 million roubles.

(Federal Law No. 335-FZ, dated 27 November 2017).

3.4 Gambling Tax

From 1 January 2018, the minimum and maximum gambling tax rates are doubled. In addition, the taxable objects shall be deemed processing centres of interactive betting of totalisators and betting offices. The tax rate for these objects can be established by the laws of the constituent entities of the Russian Federation within the range of 2.5 to 3 million roubles.
The application for registration of objects taxable with the gambling tax must be submitted to the tax authority no later than 5 days before the date of their installation.
(Federal Laws No. 354-FZ and No. 358-FZ dated 27 November 2017).

3.5 Favourable Tax Regime in the Territory of the SEZ in the Kaliningrad region

From 1 January 2018, in the territory of the special economic zone (SEZ) in the Kaliningrad region new tax incentives will apply, in particular:
• zero VAT rate for domestic air transport services with a point of departure or destination located in the territory of the Kaliningrad region;
• exemption from excise taxation for certain transactions with excisable goods; the specifics of the calculation and payment of excise duty in the release of excisable goods for domestic use are established;
• the corporate profit tax rate will be 0% during 6 tax periods starting from the period where the first profit was received from the implementation of an investment project and 10% - during the next 6 tax periods;
• reduced tariffs of social insurance contributions for payers included in the register of SEZ residents in the Kaliningrad region for the period up to 2025 inclusive, subject to statutory specifics, are introduced.
(Federal Law No. 353-FZ dated 27/11/2017).

3.6 Double Taxation Convention between Russia and Brazil

From 1 January 2018, the Convention between the Government of the Russian Federation and the Government of the Federative Republic of Brazil 'On Avoidance of Double Taxation and Prevention of Evasion from Taxation with Respect to Income Taxes' dated 22 November 2004 (together with the Protocol, dated 22 November 2004) shall apply.
(Federal Law No. 300-FZ, dated 30 December 2008; the Memorandum of the Ministry of Finance of the Russian Federation dated 24 November 2017)

4. INDUSTRY

4.1 Classification of Products as Products Manufactured in Russia

From 1 January 2018, more stringent requirements for industrial products are established in order to classify them as products manufactured in Russia; in particular, the requirements for the percentage of foreign components in the manufacture of machine tools; the number of operations performed on the territory of the Russian Federation in the production of self-propelled single-bucket excavators and loaders, crawler cranes, conveyors for the food industry, etc.
(Decision of the Government of the Russian Federation No. 719 dated 17 July 2015).

4.2 Rules and Criteria for Classifying Products as Industrial Products that Have No Analogues Produced in Russia

On 1 February 2018, the Rules and Criteria for Classifying Products as Industrial Products that Have No Analogues Produced in Russian Federation approved by the Decision of the Government of the Russian Federation No. 1135 dated 20 September 2017, come into force.
Criteria for classifying products as industrial products that do not have analogues produced in Russia are defined as differences between the product parameters and parameters of industrial products produced in Russia. Thereat, parameters of products are deemed parameters related to the functional purpose or the list of functions, the scope of application, quality characteristics (for example, reliability, ergonomics, energy efficiency, production effectiveness, safety, environmental, production, operational parameters, metrological characteristics and other parameters of products).
The Ministry of Industry and Trade of Russia shall classify products as products that have no analogues produced in Russia subject to the examination and issue an opinion on the respective classification of products within 30 business days after submission of the respective application to the Ministry.
Examination of products shall be carried

out by organisations included in the list of organisations that carry out expert examination of the differences between product parameters and parameters of industrial products manufactured in Russia.

The maximum amount of payment for providing the obligatory examination of the differences between product parameters and the parameters of industrial products produced in the Russian Federation is established, in particular, for:
• determination of the parameters of the declared products relating to the functional purpose or the list of functions performed, the scope of application, the quality characteristics;
• search for industrial products produced in the territory of the Russian Federation that are similar to the declared products.

4.3 Ban for Production and Turnover of Low-Alcohol Tonic Beverages Except for Those Produced for Exports
From 1 January 2018, a ban for the production and turnover of alcoholic products with an ethyl alcohol content of less than 15% of the volume of finished products containing tonic substances (components) is introduced, except for the products produced for the purpose of export from the Russian Federation.
Besides, a ban for the movement across the territory of the Russian Federation of unmarked alcoholic beverages in the amount of more than 10 litres per a person is introduced. The violation of this ban entails a fine in the amount of 3,000 to 5,000 roubles with confiscation of the respective products.
The license for the retail sale of alcohol products or licenses for the retail sale of alcoholic beverages when providing public catering services will include the coordinates of the planimetric points of the stationary commercial facility or a stationary public catering facility where the alcohol products are permitted for sale.
It is specified that only organisations that have in their ownership, economic management, operational management or lease for the term of 1 year or more the production and storage facilities shall be entitled to produce alcoholic products.
(Federal Law No. 278-FZ dated 29 July 2017).

5. TECHNICAL REGULATION

From 1 January 2018, a number of sections have been excluded from the uniform list of products that are subject to obligatory certification:

4361 'Electronic and physical functional, nuclear and radioisotope devices, blocks and units',
4362 'Devices, installations, systems for measurement and control of ionising radiation',
4363 'Radioisotope instruments',
4364 'Detectors of ionizing radiation',
6937 'Operating equipment for nuclear power plants',
6938 'Pumps for nuclear installations and radiochemical production',
6940 'Radiation machinery',
6968 'Radiation protection equipment',
6981 'Special technological equipment', and
7010 'Isotope products'.
Certificates of conformity issued before 1 January 2018 shall be valid until the expiration of their validity.

6. STATE CONTROL (SUPERVISION)

6.1 Risk-Oriented Approach in the Organisation of Certain Types of State Control (Supervision)
From 1 January 2018, a risk-oriented approach in organising and implementing state control (supervision) over business activities will apply. Under this approach, in some cases, the choice of intensity (form, duration, periodicity) of inspections and other control measures is determined by referring the activities of a legal entity, individual businessman and(or) production facilities used by them in the performance of such activities to a certain risk category or a certain hazard class (category).
The current Rules for classifying the activities of legal entities and individual entrepreneurs and (or) their production facilities to a certain risk category or a certain hazard category (category), as well as a list of types of state control (supervision) that are implemented using a risk-based approach are approved by the Decision of the Government of the Russian Federation dated 17 August 1981 No 806.
(Federal Law No. 246-FZ dated 13 July 2015).

6.2 Checklists for Scheduled Inspections
From 1 January 2018, in the course of scheduled inspections of legal entities and individual businessmen, the controlling authorities will use checklists in certain cases, in particular, in case of:
• control over the medical devices circulation;
• federal state supervision in the area of medicines circulation;
• state control of the quality and safety of medical activities;
• state supervision in the area of civil defense;
• state supervision in the area of protecting the population and territories from natural and man-made emergency situations;
• federal state supervision in the area of hydraulic structures safety;
• federal state supervision in the area of industrial safety;
• federal state energy supervision;
• federal state supervision over compliance with the labour legislation and other regulatory legal acts (in respect of employers - legal entities and individual businessmen which refer to the moderate risk category).
(Decisions of the Government of the Russian Federation No. 840, dated 14 July 2017, No. 864, dated 22 July 2017, No. 930, dated 4 August 2017, and No. 1080, dated 8 September 2017).

Source: GRATA International Law Firm (Moscow) - http://www.gratanet.com/
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(1) Including state corporations, state-owned companies, public-law companies, natural monopolies, organisations engaged in regulated activities in the area of electricity supply, gas supply, heat supply, water supply, sewerage, sewage treatment, processing, utilisation, neutralisation, and landfill of solid municipal waste, autonomous institutions, as well as business companies where participation of the Russian Federation, constituent entity of the Russian Federation, municipal unit in the charter capital exceeds 50 % in total.

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ASEAN-Hong Kong Free Trade Agreement Signed

On November 12, 2017, the Association of Southeast Asian Nations (ASEAN) and Hong Kong Special Administrative Region (SAR) of China signed a free trade and investment pact to strengthen economic cooperation between the two regions and stimulate economic development. The two agreements, the ASEAN-Hong Kong, China Free Trade Agreement (AHKFTA) and the ASEAN-Hong Kong Investment Agreement (AHKIA), were signed at the 31st ASEAN Summit in Manila and will come into force on January 1, 2019.

The agreements cover all aspects of trade in goods, such as tariffs; rules of origin; non-tariff measures; customs procedures and trade facilitation; trade remedies; technical barriers to trade; and sanitary and phytosanitary measures. They also include elements related to trade in services; investment; economic and technical co-operation; dispute settlement mechanism; and other areas of interests to be mutually agreed upon by the two parties.

Chris Devonshire-Ellis of Dezan Shira & Associates comments: "This FTA brings Hong Kong into parity with mainland China which has had an FTA with ASEAN for several years. Hong Kong's unique mix of China and Asian focused financial services and regional service support are a great mix with ASEAN's overall reach and this agreement provides a much needed boost to Hong Kong's overall attractiveness as an investment destination for Asia."

Strong trade links between Hong Kong and ASEAN

Hong Kong holds a distinct advantage across the Asia-pacific region in terms of its unique location and strong links to the international markets as well as Mainland China. While Hong Kong is part of China, it conducts its economic and trade relations separately from the mainland and serves as a bridge connecting the Chinese mainland and Southeast Asia.

With the increasingly close economic and trade ties between China and Southeast Asia, Hong Kong plays an important role as a trade link between the two. For instance, through its Closer Economic Partnership Arrangement (CEPA) with Mainland China, Hong Kong provides preferential market access to Hong Kong service suppliers as well as tariff-free treatment for products of Hong Kong origin in China. This has therefore created a strong nexus connecting foreign businesses (mostly businesses from ASEAN) to China through Hong Kong.

With the increasingly close economic and trade ties between China and Southeast Asia, Hong Kong plays an important role as a trade link between the two.

Since 2012, the re-exports of goods of ASEAN origin through Hong Kong to China have risen at the rate of 6.4 percent annually on average. In 2016, 12 percent of trade between ASEAN and Mainland China, with a value of over US$54 billion, was routed through Hong Kong.

Further, in the last ten years, the value of bilateral commodity trade between Hong Kong and members of the ASEAN has increased by 72 percent. ASEAN is Hong Kong's second largest partner in commodity trade. In 2016, the commodity trade between ASEAN and Hong Kong reached US$107 billion (HK$833 billion), whereas trade in services stood at US$15.4 billion (HK$121 billion) in 2015.

Among the individual member states, Singapore, Thailand, and Vietnam are Hong Kong's leading trading partners, representing 38.8 percent, 15.7 percent and 15.2 percent of Hong Kong's total merchandise trade with the region respectively.

In terms of investment, at the end of 2015, the ASEAN ranked sixth among Hong Kong's destinations for outward direct in-

vestment, at US$ 28 billion (HK$218 billion), and also sixth among Hong Kong's sources of inward direct investment, at US$ 71 billion (HK$555 billion).

Opportunities arising from the Hong Kong – ASEAN Free Trade Agreement

Hong Kong is among the world's freest and most open economies. However, the customs duties imposed by ASEAN on Hong Kong goods put Hong Kong at a great disadvantage in terms of its trade relationship with South East Asian countries. The newly signed AHKFTA is set to change this.

The FTA will reduce the customs duties imposed by ASEAN and improve Hong Kong's overall competitiveness in the international market. The AHKFTA together with the China-ASEAN FTA and the Mainland China-Hong Kong CEPA will broaden Hong Kong's position as a hub for international trade and services.

In terms of business benefits, the agreement will offer four key advantages to stakeholders in the region, namely tariff reduction for trade in goods; better and fairer investment protection; fewer restrictions for trade in services; and a longer stay for business travelers.

Previously, only seven of the ten ASEAN countries allowed business travelers from Hong Kong to stay in the country without a visa for up to 14 – 30 days. The free trade deal will allow Hong Kong business travelers to stay in any ASEAN country for up to 90 days, without requiring a business visa.

With regards to trade restrictions, both Hong Kong and ASEAN countries will remove barriers on foreign capital participation and the number of foreign workers employed. Foreign businesses can benefit significantly from AHKFTA as the agreement will extend Hong Kong's network to cover all major economies in South East Asia. As all ASEAN member states are also economies along China's Belt and Road Initiative (BRI), the closer ties established between Hong Kong and ASEAN will help foreign enterprises tap business opportunities offered by the BRI.

About ASEAN Briefing

ASEAN Briefing is published by Asia Briefing, a subsidiary of Dezan Shira & Associates. We produce material for foreign investors throughout Asia, including China, India, Indonesia, Russia, the Silk Road & Vietnam..

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Article taken from: https://www.aseanbriefing.com/news/2017/11/16/hong-kong-asean-free-trade-agreement-signed.html

Basics of Manufacturing Non-disclosure Agreements in China

Introduction: contracts in China

Many SMEs view Chinese manufacturers as cheap, technically-skilled, attractive options for manufacturing their products and as such pursue partnerships with them. While Chinese manufacturers can be the key to the products needed to give your company worldwide reach, China—like all countries—can be home to unscrupulous merchants with a taste for IP theft. As such, tailoring contracts to suit your intellectual property rights (IPR) is an important way to ensure that your company's specific intellectual property assets are adequately protected when dealing with Chinese manufacturers. In particular, this article will address use of so-called NDAs (non-disclosure agreements) and NNNs (non-use, non-disclosure, and non-circumvention agreements) to protect an SME's trade secrets—"any non-public technical or business information with commercial value that is guarded by confidentiality measures."

What are NDAs and NNNs?

At its core, a non-disclosure agreement (NDA) between an SME and a Chinese manufacturer is an agreement which states that once the SME reveals its trade secrets to the Chinese manufacturer, the manufacturer will refrain from disclosing those secrets to anyone else. Once a secret loses its secrecy—once it is revealed to the public—it no longer has any kind of legal protection and, most likely, will lose its economic value. That is why NDAs are go-to contracts for any SME which seeks to use a Chinese manufacturer. Otherwise, the manufacturer could reveal the SME's trade secrets, making those secrets impossible to protect and capitalise on.

Yet many times an NDA falls short of offering the comprehensive protection sought by SMEs for a variety of reasons, be it because the contract is shoddy and does not address all potential risks, because the contract includes wording or provisions which nullify it, or even because it was never signed to begin with. To address these points, we recommend that all SMEs sign an NNN agreement—not just an NDA agreement—before beginning any serious discussions with or revealing information to Chinese manufacturers. NNNs cover non-use, non-disclosure, and non-circumvention, providing a much more comprehensive framework for protecting SMEs' IP.

The NNN: why NDAs might "Not Deter Anyone" in China

Although SMEs will likely be familiar with NDAs from their experiences in Europe, when searching for Chinese manufacturers the best course of action is to triple-down on protection and opt for a non-use, non-disclosure, and non-circumvention agreement.

Non-use will prevent manufacturers from using an SME's IP to compete with it. Even for trade secrets, these are much more important than they may seem. Many manufacturers which illegally capitalise on trade secrets will not render those secrets useless by revealing them to the public. Instead, the manufacturer itself will attempt to use the secrets to produce goods to compete with the SME. Strong non-use clauses in an agreement will discourage this behaviour.

Non-disclosure will protect trade secrets against manufacturers' next likely trick: disclosing a trade secret. To understand why a manufacturer would choose to do so, SMEs must understand that trade secrets only receive protection for as long as they remain secret. When they become public knowledge, any protection they had is lost. Manufacturers can thus bypass non-use agreements by disclosing the information and removing its protected status as a trade secret. In these circumstances, other firms will be free to use the information to complete with the SME. To prevent this, NNN agreements mandate that trade secrets cannot be disclosed without the SME's approval and that adequate steps must be taken to protect all such secrets. To discourage disclosure, SMEs can also craft agreements which bind companies whether the information is a trade secret or not, as described in our next article "Writing a good manufacturing non-disclosure agreement in China."

Non-circumvention will prevent the manufacturer from bypassing anti-counterfeiting methods built into an SME's IP. Beyond protecting trade secrets, non-circumvention clauses will prevent the manufacturer from capitalising on exclusive access to your products to sell unauthorised products in other markets. For example, without a non-circumvention agreement, a manufacturer could produce extra goods and sell them to markets which the SME plans to expand into in the near future such as South-East Asia or developing nations.

When to sign an agreement: sending in the canary

A fatal error among SMEs searching for Chinese manufacturers is delay in asking manufacturers to sign NNN agreements. Oftentimes, these agreements are considered to be of secondary importance and SMEs will either overlook their use or will wait until the last minute and will be forced to use a boilerplate agreement.

The best time to prepare an NNN agreement is while preparing to search for manufacturers. Furthermore, never forget to register your IP before you break into a new market or sign manufacturing contracts. Registering your IP will help prevent the manufacturer from registering in China and abusing China's first-to-file system.

Steps for designing a comprehensive agreement are covered in our next article "Writing a good manufacturing non-disclosure agreement in China," but

Non-disclosure will protect trade secrets against manufacturers' next likely trick: disclosing a trade secret.

once the agreement is written, it is critical to send NNN agreements to manufacturers before any secrets are disclosed. This will protect an SME's rights without burdening manufacturers. China lawyers regularly detail horror stories about companies which have failed to protect their IP or have been duped into thinking that not signing an NNN agreement is part of China's local business culture. A manufacturer's refusal to sign an NNN agreement before learning key information about an SME's product is a sure-fire indication of suspicious motivations. On the contrary, a manufacturer which signs the agreement or comes back and asks for provisions to protect their own proprietary information is much more likely to be a reliable partner. Even if the manufacturer had no intention of stealing your IP (unlikely in the case of a manufacturer which tries to avoid signing an NDA), if the manufacturer refuses to install adequate IP safeguards then the business relationship is simply not suitable. With a reliable manufacturer found, an SME can move forward with the relationship and can begin drafting other contracts to protect itself during the later phases of cooperation, including a product development agreement and, later, an original equipment manufacturing contract. Splitting up contractual negotiations in this way allows for discussions to begin and for concrete de-

tails regarding development and production to be addressed once IP is already shielded. In general, larger manufacturers which do more exporting work will be more likely to have experience with foreign firms and to respect foreign firms' IP.

Naming names: beware of the manufacturer's relationships with other firms

Deciding precisely who will sign contracts and receive classified information on behalf of the Chinese manufacturer is critical. SMEs should remember that while manufacturers may be linked to other firms through relationships between owners or long business ties, these separate companies will be separate legal entities in the eyes of Chinese courts. This problem can crop up when a clever manufacturer wants to avoid its contractual obligations by signing an agreement with one company and asking that information be also disclosed to a sister company not covered by the original agreement. This will allow the manufacturer's sister organisation to freely exploit the SME's proprietary information. This is especially common with Chinese companies with sister companies located in Macau, Hong Kong, or Taiwan, where agreements enforceable by mainland courts may prove ineffective. If companies in these jurisdictions will be part of an agreement, they should be bound by separate NNN agreements designed to be enforceable in those jurisdictions. Even honest manufacturers may see no harm in circumventing carelessly crafted contracts. In China, many companies belong to larger corporate groups or identify as state-owned enterprises. These companies may not consider other companies within their group or other state-owned enterprises operating within the same sector to be competitors and may see no harm in sharing an SME's trade secrets with them. In this case, what seems like harmless collaboration to the Chinese firm could actually constitute a grave blow to your firm's competitive advantage. These kinds of relationships pose added security risks which need to be addressed while the contract is drafted. In such situations, it is not against decency or local business culture to insist that all manufacturers which will be privy to classified information are bound by agreements and will be fully liable if the information is disclosed within their group. Furthermore, if possible, asking that ranking individuals working for the manufacturer personally sign the NNN agreement and accept personal liability if it is broken can help to solidify a contract. An often overlooked aspect of enforcing NNN agreements is ensuring that the SME's communications themselves abide by the agreement. Clearly marking out which information is classified or is considered a trade secret can prevent abuse by unscrupulous manufacturers or costly errors by employees. Furthermore, once an NNN agreement is signed with a Chinese firm, an SME should be careful to only disclose secrets to that firm—and to insist that that firm not disclose those secrets to anyone else.

A fatal error among SMEs searching for Chinese manufacturers is delay in asking manufacturers to sign NNN agreements.

Conclusion

An SME should sign an NDA with any manufacturer to whom it plans to reveal confidential information such as sensitive product information, designs and sketches, business strategy, client information, etc. before doing so. NDAs are quick and inexpensive, and a basic knowledge of key clauses is enough for effective use with manufacturers or employees. NDAs are widely used in China and well-accepted by Chinese courts, so a Chinese third party that is unwilling to sign an NDA is likely not a trustworthy potential business partner and should be treated with caution.

Samuel Sabasteanski
China IPR SME Helpdesk

CHINA IPR SME HELPDESK

About China IPS SME Helpdesk

The China IPR SME Helpdesk supports small and medium sized enterprises (SMEs) from European Union (EU) member states to protect and enforce their Intellectual Property Rights (IPR) in or relating to China, Hong Kong, Macao and Taiwan, through the provision of free information and services. The Helpdesk provides jargon-free, first-line, confidential advice on intellectual property and related issues, along with training events, materials and online resources. Individual SMEs and SME intermediaries can submit their IPR queries via email (question@china-iprhelpdesk.eu) and gain access to a panel of experts, in order to receive free and confidential first-line advice within 3 working days.

The China IPR SME Helpdesk is co-funded by the European Union.

To learn more about the China IPR SME Helpdesk and any aspect of intellectual property rights in China, please visit our online portal at http://www.ipr-hub.eu/.

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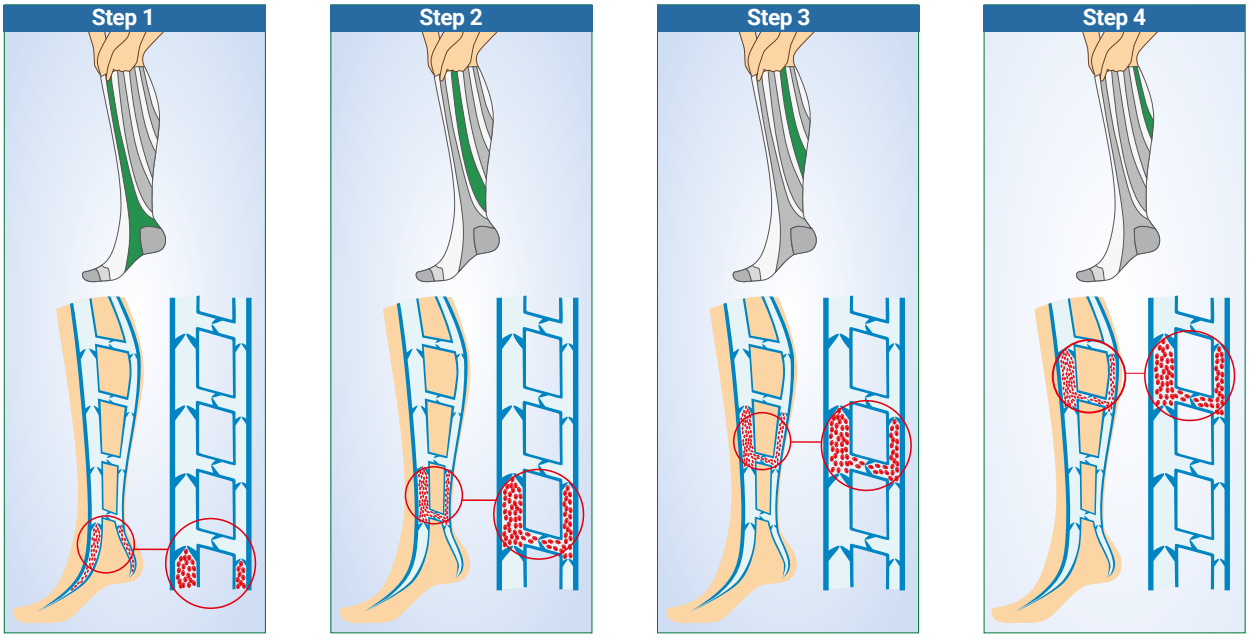

With each stage venous blood is pushed out into the above-lying blood vein system. The regular repetition of these 4 stages activates the gradual targeted stimulation to improve blood circulation.

Unlike ordinary compression socks that use extreme compression to restrict blood flow to the lower leg, the SANKOM® Patent Socks use innovative patent technology step by step targeted compression to improve the efficiency of the veins.

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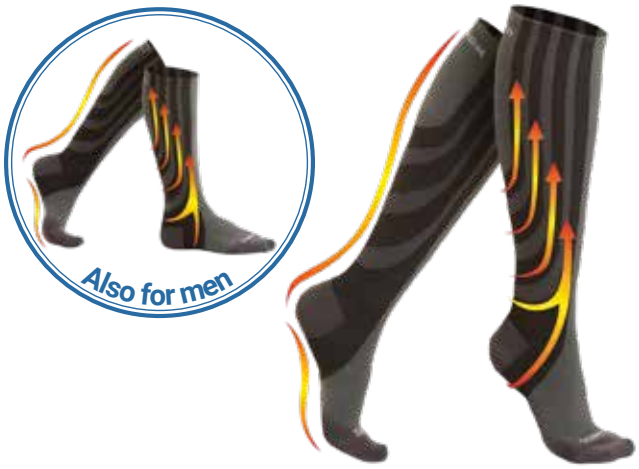
The only socks in the world to both prevent the cause and fight the consequence of poor blood circulation.



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- Shock absorption heel
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European Society of Radiology Looks Back on Successful International Day of Radiology 2017

Thursday, November 16, 2017 (ESR/Vienna) - The International Day of Radiology (IDOR) was celebrated for the sixth time on November 8, this year focusing on emergency radiology and was joined by supporters all around the world.

More than 160 radiology-related professional societies from around the world participated in the International Day of Radiology 2017, holding a range of different events to celebrate, such as public lectures, department open days, national media appearances, and press events. A comprehensive list can be found on the **IDOR homepage**.

The new IDOR book **'HELP - Emergency Medical Imaging'** was published on November 8 as downloadable pdf and has already been downloaded more than 1,500 times within the first five days. Under the editorial leadership of Professor Robert F. Dondelinger from Liège, Belgium, 42 authors from all over the world contributed to the book, with further chapters provided by the ESR's EuroSafe Imaging initiative, the European Federation of Radiographer Societies (EFRS) and the ESR Patient Advisory Group. In addition, 3**0 interviews with emergency radiology experts** from different countries, conducted by the ESR, have been published on the IDOR webpage.

About IDOR

The International Day of Radiology is an annual event held with the aim of building greater awareness of the value that radiology contributes to safe patient care, and improving understanding of the vital role radiologists play in the healthcare continuum. The day is a joint initiative of the European Society of Radiology (ESR), the Radiological Society of North America (RSNA) and the American College of Radiology (ACR).

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European School of Radiology: http://www.esor.org/cms/website.php

On social media, the International Day saw tremendous feedback throughout various platforms. The **IDOR Facebook page,** which shared a variety of events, fan posts and general IDOR information, attracted 7,800 likes on IDOR related posts and gained over 2,000 new fans with a peak during the days before the actual event.
On Twitter, which has traditionally seen the biggest buzz for IDOR related social media activities, 5,200 tweets including the **hashtag IDOR 2017** have been tweeted, generating a user feed reach of 24.3 million. In comparison to last year, the IDOR hashtag appeared three million times more often in Twitter users' feeds.
For the fourth time, the ESR organised a Thunderclap campaign for IDOR 2017. Thunderclap is a tool for amplifying a message on social media. By supporting the Thunderclap, users agreed to share the same message at the same time as everyone else on their Facebook, Twitter or Tumblr pages, giving the message much more prominence and priority on social media feeds than individual posts. The Thunderclap message was released on November 8, 14:00 CET by 423 supporters to a combined audience of 667,537 people.

To bring the IDOR 2017 main topic emergency radiology to the public's attention, the ESR (European Society of Radiology) has created a mini-website acting as an **online emergency room** to show examples of emergency cases, with images and explanations of how radiologists' expertise comes into play. Content and cases were developed in cooperation with Dr. Elizabeth Dick, President-Elect of the European Society of Emergency Radiology. Users can explore four body regions – abdomen, chest, head & neck, limbs – with three different cases/modalities for each region.
The same application is currently running on a touch screen window on the ground floor of the ESR office in Vienna where interested passers-by can find out more about emergency radiology and its daily use.

The ESR celebrated IDOR 2017 with an internal staff event at its office and was joined by participants of the **ESOR** (European School of Radiology) for EDiR Courses, which took place throughout the week in the ESR learning centre located on the same premises. Professor Michael Fuchsjäger, from Graz/Austria, gave introductory words in his capacity as chair of the ESR Communication & External Affairs Committee and a temporary IDOR 2017 projection was visible on a building opposite the ESR office during the event.

IDOR 2018 will be celebrated on November 8, 2018 and will feature cardiac imaging as its main topic.

Successfully closed the third edition of IDEA in Ethiopia

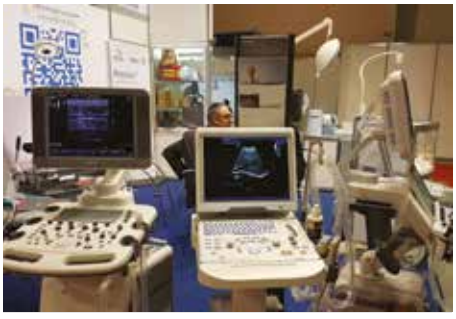
Dr. Gerhard K. Seeberger, President Elect of FDI (World Dental Federation) and President of ADI (The Academy of Dentistry International), Dr. Fitsum Arega EIC (Ethiopian Investment Commission) Commissioner, Dr. Simona Autuori Italian Trade Commissioner, H.E. Dr. Mebrahtu Meles, State Minister, Ministry of Industry of the Federal Democratic Republic of Ethiopia, Dr. Muluken Tadesse, President of EDPA (Ethiopian Dental Professional Association), H. E. Dr. Kebede Worku, State Minister, Ministry of Health of the Federal Democratic Republic of Ethiopia, Dr. Renato Gullà, President of the Scientific Committee of IDEA, Dr. Gianna Pamich, President of UNIDI (Italian Dental Industries Association), Dr. Gianfranco Berrutti, President of IDEA (International Dental Exhibition Africa), Dr. Gemechis Mamo President of EMA (Ethiopian Medical Association), Dr. Mesfin Goji President of EPA (Ethiopian Pharmaceutical Association)

The third edition of **IDEA (International Dental Exhibition Africa)**, the dental trade-show organized by UNIDI (the Italian Dental Industries Association) in cooperation with ITA (Italian Trade Commission), has successfully closed on Saturday December the 16th, 2017. After two successful years in Senegal, IDEA moved to **Ethiopia** to approach the East African Countries; Ethiopia is the fastest growing economy and the second largest market in Africa: a perfect location to host an event that is becoming **the most relevant international trade-show for the dental, medical and pharmaceutical sectors in Africa.**
On Thursday, December 14th the President of UNIDI Gianna Pamich and the President of IDEA Gianfranco Berrutti opened the event. At the opening ceremony, an impressive panel of speakers intervened: Dr. Seeberger, President Elect of FDI (World Dental Federation), the presidents of the Ethiopian Dental Professionals Association, the Ethiopian Medical Association and the Ethiopian Pharmaceutical Association, as well as the representatives of ITA and of the Ethiopian Government, which gave their patronage to IDEA together with the Italian Embassy. The speakers welcomed more than 1.000 professionals and operators and highlighted the key-role of IDEA, giving an all important contribution to the dental sector in Africa. This has been granted both by the opportunity to get in touch with the latest innovations of the industry and by the possibility to take part to high level scientific events held by internationally renowned. The involvement of the medical and pharmaceutical sectors, strictly related to the dental market, means bigger margins of growth for IDEA and more training opportunities for the local professionals; it contributes to make IDEA the most important "meeting point" for the medical sector in Subsaharian Africa. From 14th to 16th December at the UNECA Congress Center **50 International Companies met more than 3.000 dental, medical and pharmaceuticals professionals** coming from several African Countries. Besides, a numerous group of dealers had the chance to get in touch with international manufacturers in their own continent: the exhibitors met 30 dealers, selected by UNIDI in partnership with ITA, coming from Kenya, Uganda, Tanzania, Rwanda, Zambia. The President of the local dentists Associations of these Countries were also part of the delegation. Besides the exhibition, a very high level scientific congress was held during IDEA, including conferences, workshops and panel discussions: thanks to a **partnership agreement**, the **Ethiopian Dental Professional Association (EDPA)** supported UNIDI by organizing and promoting **a comprehensive scientific programme**. A panel of international speakers, including Dr Castellucci, Dr Fornara and Dr Seeberger, attended the event under the scientific direction of Dr Renato Gullà, member of the cultural committee of the Italian Society of Endodontics and active member of the EDPA. An entire day was focused on exhibitors' workshops. The high number of people attending the scientific events confirmed the local professionals' strong interest in training opportunities. IDEA, being part of UNIDI's strategy for the internationalization of the Italian dental industry in emerging markets, "is not about foreign companies coming to Africa to organise their event, rather, it is about building together a common project in Africa" (G. Berrutti, President of IDEA).

In order to consolidate the success of IDEA 2017, the next edition will be held in Ethiopia from 13th to 15th December 2018.

For further information please visit www.idea-africa.com or contact us: info@idea-africa.com

The international exhibition Bulmedica/Buldental will bring together the world of medicine from 16 to 18 May at Inter Expo Center


Life standard and life expectancy are directly related to the quality of medical services.The international events that offer professionals and leaders in this sector excellent conditions for exchanging ideas, technology, experience and business development appear to be crucial to their development. Being aware of this, the 52nd edition of Bulmedica / Buldental, the specialized Bulgarian international exhibition, will bring together the worlds of medicine and dentistry.This will be held from 16 to 18 May 2018 at Inter Expo Center - Sofia. For more than half a century, the international forum, which has become a leader in the industry, brings together hundreds of exhibitors and thousands of specialists united by the common interest in the development of medicine and dentistry through the implementation of innovation. The 2017 edition was attended by more than 200 direct companies-exhibitors. Companies from Bulgaria, Italy, France, Russia, Singapore, China, Germany, the Netherlands, Pakistan, Latvia, Turkey, Greece, Romania, Ukraine, Slovenia, Hungary presented over 240 innovations in manufacturing technology, products, medical software, equipment and furnishings.
The last edition was visited by 13 287 experts from Bulgaria, Greece, Hungary, Serbia, France, United Kingdom, USA, Macedonia, Turkey, Spain, Italy, Japan, China, Cyprus. The exhibition is organized under the patronage of the Ministry of Health in Bulgaria and with the support of the professional organizations - Bulgarian Medical Association, Bulgarian Dental Association, Union of Dental Technicians in Bulgaria, Association of Dental Dealers in Bulgaria and Bulgarian Pharmaceutical Union.

10% discount on indoor space only

Upon registration for participation until January 31, 2018 the companies will be able to benefit from a 10% discount on indoor space only.
Again, in 2018, the exhibition halls of BULMEDICA will recreate the atmosphere of contemporary furnished medical and hospital facilities by exhibiting plenty of Bulgarian and foreign products. Among them there will be new models of clinical-laboratory and diagnostic equipment, devices, universal and specialized furnishing for healthcare facilities, tools, reagents, consumables and other products for treatment. The ever-enlarging forum BULDENTAL will allow numerous traditional and new companies to exhibit and present to the distributors high-end dental equipment and furnishings, devices, tools, materials and consumables, and much more.

The side-events program - in the focus of the exhibition

Bulmedica / Buldental is an attractive venue for specialists from Bulgaria and abroad also due to its side-events program. Once again, in 2018 it will include numerous corporate presentations, international forums, scientific conferences and live demonstrations. The enormous capabilities of 3D printing for the needs of dentistry have been demonstrated at the 2nd Dental Tribune Conference @ Buldental, which took place in 2017 within the framework of the exhibition. For the young mothers and fathers, a " School for Parents " was organized. Volunteers conducted free diabetes tests, while representatives of the Bulgarian Red Cross National Disaster Response Team (NDRT) demonstrated alpine rescue and transportation of victims with a stretcher. Presenting innovations; the development and deployment of advanced technologies; the exchange of ideas and professionalism; expanding business and creating contacts.These are the guiding objectives attained by the team of Bulmedica / Buldental in its 50 years of history, and they will be further followed, as well.

Detailed information can be found at bulmedica.bg/en.

Bulmedica / Buldental - 52nd International Specialized Exhibition for medicine - Dates: 16 - 18.05. 2018
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Working Together for Health in Honduras

In regions of Honduras with high rates of poverty, nonprofit groups like Alabama Honduras Medical Education Network (AHMEN) not only provide relief, but also are partners in working with the Honduran people to build better outcomes for the future. With a focus on medical relief and educational development, AHMEN has been making a difference in Honduras since 1998. In this article, hear from Jennifer Smith, a pharmacist who joined with AHMEN, students and faculty from Rudy School of Nursing & Health Professions at Cumberland University, and Honduran dental and medical professionals to provide much-needed health care in Honduras.

In March of 2017, a team of nurses, nursing students, a pharmacist, and a chaplain teamed up with the Alabama Honduras Medical Education Network (AHMEN) traveled to La Ceiba, Honduras.

Together, we provided medical care for children and adults with little or no access to basic health care.

We partnered with a local physician from Fundación Margie and dentists from Fundación Buckner. We set up clinics in a church or school in 3 different locations around La Ceiba.

Over 3 days, we saw over 725 patients.

We conducted blood pressure and glucose screenings, and diagnosed and dispensed medications for many health concerns, including chronic diseases like diabetes and hypertension. We also provided de-worming medication where needed, and preventive care for adults and children through vitamin supplements, dietary advice, and lifestyle recommendations.

With the addition of the local volunteer dentists on the team, we could also provide basic dental services such as tooth extraction, cleaning, fluoride treatments, provision of adult and child dental kits (toothbrush, toothpaste, floss), and education on dental health.

It is a wonderful experience to work alongside local practitioners who are also volunteering their time.

I always learn something new, whether it's an unfamiliar disease state or medication, or just finding an appropriate alternative when we don't have exactly the right medication. This is especially fun when we have students on the team and they're able to experience being part of such a unique interprofessional work environment.

Over the course of the week, we also visited a local nursing home and provided some basic care for the residents there. Additionally, to better understand the health care system in Honduras, we toured a local hospital's pediatric, labor & delivery, and neonatal ICU areas.

I have been fortunate to be able to return to Honduras several times to work with a medical team and I hope to continue in the future.

As a pharmacist, the clinic days are often long and exhausting. In the midst of the craziness, it's easy to get wrapped up in packaging meds and writing labels. But whether it's a heartfelt thanks from a young mother that received vitamins for her children, or an adult with diabetes who now has enough medication to get through a few more months, I'm always reminded of why we're there when talking to the patients.

Our team would like to sincerely thank the **Henry Schein Cares Foundation** for the generous donation of supplies for this trip and helping us to improve health care for the people of Honduras.

About AHMEN

In 1998 a single group of volunteers from Walker County, Alabama traveled to Limon, Honduras as a medical relief team. Poverty, disease, malnutrition, and lack of opportunity were not the only aspects of life there that this team witnessed. Within these conditions, they saw their own friends, family, and children. After sharing meals and enlivening experiences with individuals so far from home, this group returned to their normal lives satisfied with having made a difference... even if it was for only a week.

Then came Hurricane Mitch. After seeing the destruction on the news and hearing that all the places along the North Coast that the team visited had been dramatically changed by the storm, the team's leadership received a request from Sister Eleanor Cooper of Cruzadas Evangelico asking for help. As a result, the team not only mobilized its initial support system but also rallied entire communities to gather clothes, toys, building materials, Bibles, food, and medical supplies so that they did not abandon the people with which they had grown so close only a few months earlier. It was within this recovery effort that AHMEN was born. Over the years many thousands of volunteers have come together to work as God's hands and feet in Honduras through AHMEN. Some teams continue to bring much-deserved medical attention to the most ignored areas of Honduras along the Garifuna and Moskitia coasts. Others conduct state-of-the-art eyecare clinics across the country.

http://www.honduranmissions.com/about/

About the Henry Schein Cares Foundation

The Henry Schein Cares Foundation "helps health happen" by expanding access to care for at-risk and underserved populations globally through the support of not-for-profit organizations, institutions, and communities dedicated to increasing the delivery of health education and care. The work of the Henry Schein Cares Foundation targets those with some of the most limited access to care through a focus on three areas: wellness, prevention, and treatment; emergency preparedness and relief; and capacity building.

Source: http://helpinghealthhappen.org/medical-outreach-honduras/

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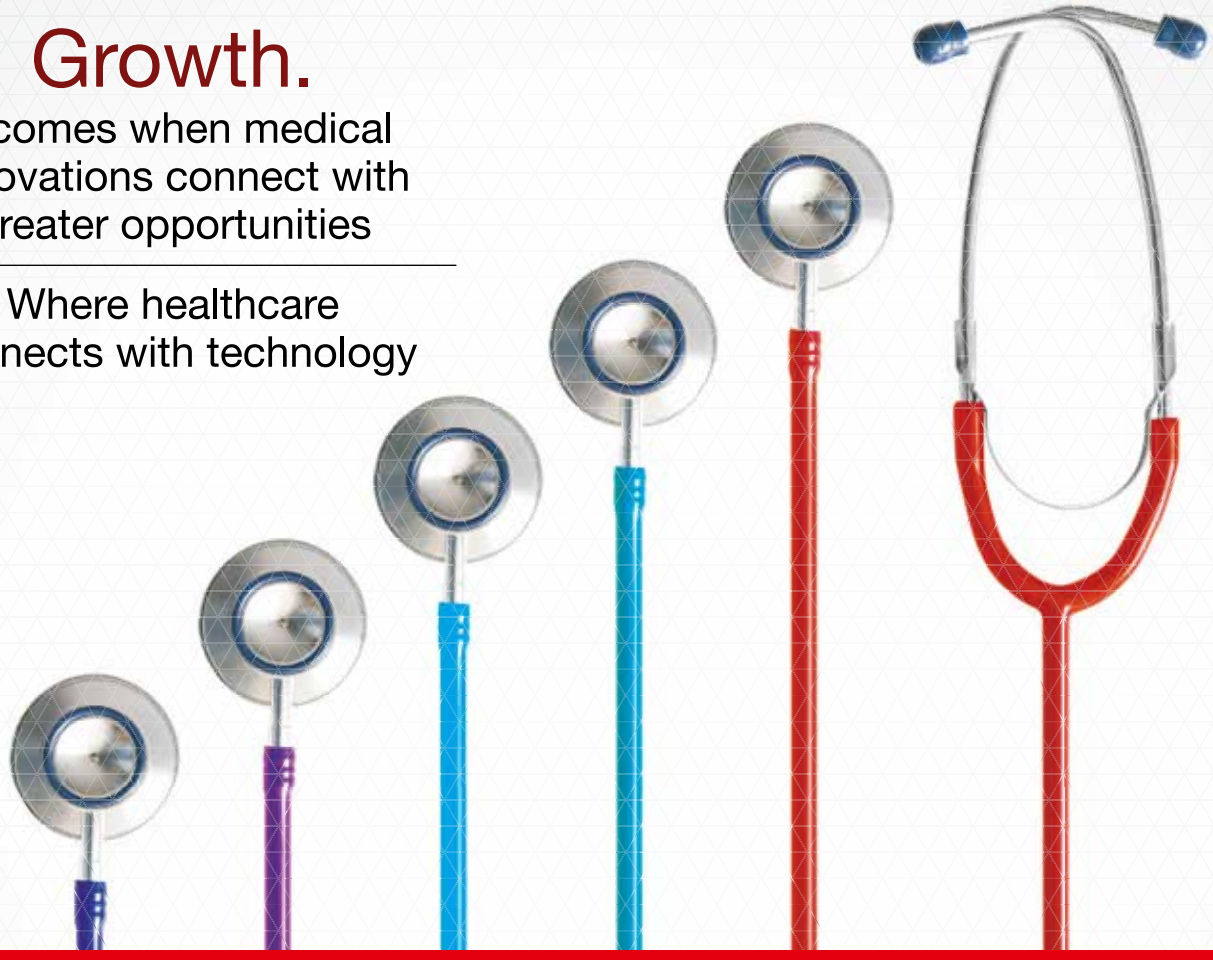

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