

Ghaziabad to get a ₹55 Cr Worth Multi-Specialty Hospital

Realty firm Migsun Group said it is entering the health segment by building a hospital in Ghaziabad at an investment of ₹55 crore. The multi-specialty hospital is under construction at Raj Nagar Extension in Ghaziabad, Uttar Pradesh.

The structure work of the proposed hospital is almost complete and the project will be operational this year, the company said in a statement.

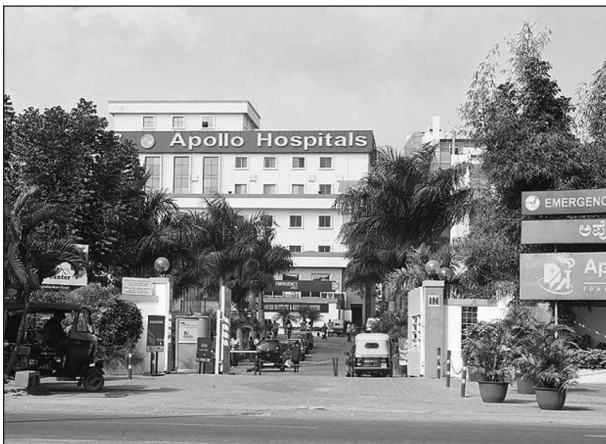
“Spread across 1.75 acres, the upcoming hospital will have 250 beds and have multiple specialties. It is likely to entail an investment of ₹55 crore, which includes land cost as well,” the statement said.



Apollo Hospitals Plan to Acquire IHH Healthcare Stake in Kolkata Venture

Apollo Hospitals’ management has said that the company is interested in buying out stake from its Malaysia-based partner IHH Healthcare Berhad in its hospital in Kolkata — Apollo Gleneagles. The company is looking for bolt-on acquisitions to gain market share and strengthening operations in Bengaluru and Mumbai, apart from inducting more beds into the existing capacity and building new hospitals.

Apollo Gleneagles, Kolkata, is a 50:50 joint venture between Apollo Hospitals and the Parkway Group, which is a part of IHH. Buying out stake from the JV partner also comes at a time when IHH has been strengthening its presence in the country through acquisition of various hospitals, including a major deal it has clinched to buy majority stake in Fortis Healthcare. According to its annual report in 2018, IHH has 33 hospitals, with 4,845 operational beds in India.



Foundation of Punjab’s First Ayush Hospital Laid

Punjab health minister, Balbir Singh Sidhu laid the foundation stone of 50-bed ayurvedic, yoga and naturopathy, unani, sidha and homeopathy hospital at Duneka village in Moga district of Punjab.

Sidhu said that the hospital will be completed within 15 months at an estimated cost of ₹6.16 Cr on five-kanals lands.

The Ayush hospital will comprise of four-floors in which facilities like wards, OPD, Panchkarma centre, yoga room, lab, dispensary, audiometry room, canteen, pantry, meeting hall, administrative offices, recovery room, etc. will be set up on first three floors while the fourth floor has been kept reserved for any extension of the hospital in future.



Mumbai Doctors Remove 12.8kg 'Giant' Kidneys from a Man Suffering with ADPKD

Doctors from Mumbai have removed giant kidneys weighing 7kg and 5.8kg from a Goan man living with a life-threatening genetic condition. 41-year-old Roman Pereira's were nearly 26cm and 21cm in length.

Pereira suffered from kidney failure due to a genetic condition called autosomal dominant polycystic kidney disease



(ADPKD), where normal kidney tissues are replaced by cysts.

Renal transplant surgeon Dr Pradeep Rao said since the kidneys were of a gigantic size, they could not take the laparoscopic approach and instead had to do an open surgery. "Through a single incision, we could remove both kidneys which weighed 12.8kg in total," he said.

Saifee Hospital Hosts International Conference on Annual Update in Peritoneal Surface Oncology at Tata Memorial Hospital

Saifee Hospital, the first to have a dedicated Peritoneal surface malignancy unit in the country, compered an international conference on "Annual Update in Peritoneal Surface Oncology" from 20th to 22nd February 2020, at the Tata Memorial Hospital. The conference addressed the needs of both beginners and experienced peritoneal surface oncologists providing a comprehensive update on the current standards of care in the field as well as the emerging therapies.

The Three-day extensive scientific program had the best in the field from around the world who conducted interesting sessions including the basics, topics of debate and the new developments in this field, through lectures, training workshops and case study discussions. Video sessions and live surgeries were per-

formed by the experts that were streamed live from the operation theatre in Saifee Hospital. The highlight of the program was live surgical demonstration conducted by Dr. Paul Sugarbaker, well-known for developing the principles of peritoneal cancer surgery. Along with the other stalwarts of the field like Prof. Olivier Glehen (Lyon, France), Prof. Yutaka Yonemura (Osaka, Japan), Dr. Avanish Saklani (India), Dr. K S Gopinath (India), Dr. Francois Quenet (Montpellier, France), Dr. Shivendra Singh (India), Dr. Ramakrishnan A S (India), Prof. Sang-Yoon Park (National Cancer Center, Korea) and Dr. Aditi Bhatt (India).

The primary objective of this initiative was to educate and collaborate with fellow practitioners and experts. Based on registry statistics, Mumbai alone has more than 2000 patients that have this aggressive form of disease, where standard treatment modalities give poor results. The idea is to create awareness of the medical fraternity, to help in early diagnosis so that patients could be referred to a high volume centre for better treatment.

Highlights of the program:

- > Day 1: Rationale for treating peritoneal metastases, Ovarian Cancer- Current surgical standards and case discussion with the experts.
- > Day 2: Live surgery, Preventative and Social Medicine Programme (PSM), Prescription Monitoring Programme (PMP) and Mesothelioma and rare tumours.
- > Day 3: Collaboration in Peritoneal Surface Oncology, Gastric Cancer and Colorectal Cancer.



Karnataka's 1,930 Ayushman Bharat Health & Well Centres Takes it Ahead in CPHC

Karnataka is marching ahead towards Universal Health Coverage (UHC) by strengthening provision of Comprehensive Primary Health Care (CPHC) in transformed primary public healthcare facilities. This the result of the 1,930 Ayushman Bharat – Health and Wellness Centres (AB-HWCs) established in 30 districts in the State, as per the latest data updated

by the State in AB-HWC Portal managed by Ministry of Health and Family Welfare (MoHFW), GoI.

Reproductive Child Health (RCH), including antenatal care, childcare, and family planning have been strengthened and streamlined and focused with the upgradation of Sub Health Centres and Primary Health Centres into AB-HWCs.

Besides, to address the rising rate of Non-Communicable Diseases (NCD) related morbidity and mortality in India, AB-HWCs have started playing a significant role in the screening / diagnosis of common NCDs, such as hypertension, diabetes and three

common cancers of Oral, Breast and Cervical cancers. The motivated primary healthcare team at these AB-HWCs have also focused on the screening of communicable diseases such as Tuberculosis and Leprosy (it is to remind that India is in the path of Elimination of TB by 2025 well ahead of SDG target year of 2030).

In addition to NCD screenings, Karnataka prioritized the need for community well-being by conducting more than 40,000 wellness as well as yoga activities in 1,922 AB-HWCs across the State.

Among the other States with well-performing HWCs are Tamil Nadu, Manipur, Gujarat, and Kerala.



Ayushman Bharat to Expand its Range of Services in April 2020

Additional service packages including basic oral health care, elderly and palliative healthcare and emergency medical services are planned to be rolled out at Ayushman Bharat - Health and Wellness Centres in April, a key Government official said recently. Joint Secretary (Policy), Ministry of Health and Family Welfare, Vikas Sheel said that services being provided at Ayushman Bharat - Health and Wellness Centres are targeted to be expanded from April 14, the second anniversary of the launch of the ambitious programme. "Programme guidelines are all ready", he said.

So far, seven service packages including child health, immunization, communicable and non-communicable diseases were being provided at Ayushman Bharat - Health and Wellness Centres. Some of the range of services to be



added in two months include screening for mental health ailments, care for common ophthalmic and ENT problems and emergency medical services including burns and trauma.

Delhi Reports Over 150 H1N1 Cases in 2 Months

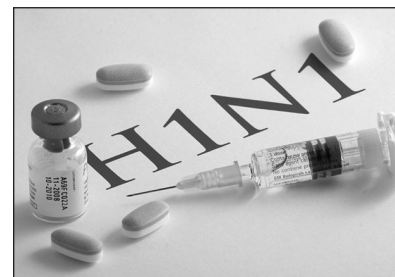
The scare over swine flu isn't limited to the Supreme Court, where five judges are said to be infected with the viral illness. Across Delhi, at least 152 positive cases of the influenza virus have been reported in the last two months.

There are no deaths reported though, as per the National Centre for Disease Control (NCDC).

Dr Suranjit Chatterjee, senior consultant, internal medicine at Indraprastha

Apollo hospital said the sudden upsurge in cases could be due to a mutation of the virus. "All viruses change or mutate to adapt. We don't know for sure but it's possible that the H1N1 influenza virus has mutated, leading to higher rates of transmission," he said.

According to Dr Anoop Misra, chairman, Fortis C-Doc, those with existing illnesses such as diabetes are being advised to take preventive vaccination.





Foundation for 100-Bed ESI Hospital Laid in Hyderabad

Minister of state for labour and Employment Santosh Kumar Gangwar laid the foundation stone for a 100-bed ESI hospital, which will be constructed with ₹110 crore, in Kakinada, Hyderabad .

Gangwar said with the objective of workers' welfare, 154 hospitals, 1,500 dispensaries, 815 branch offices, 65 regional and sub-regional offices are working under ESI.

He said the 100-bed hospital will be built in 7.26 acres and benefit 63,000 workers and 2.45 lakh family members in Kakinada and Yanam region.

Guwahati Gets its First Robotic Surgery Unit

Patients of the northeast will not have to travel to other parts of the country or abroad for undergoing the advanced procedure, with the launch of the first robotic surgery unit at a Guwahati hospital.

The first of its kind in the north-eastern region, the robotic surgery unit was launched at a private hospital.

Officially launching the Versius Robot and Robotic Operation Theatre in the hospital, Assam Minister of State for Health Pijush Hazarika said, it will provide high value services to society in terms of medical care.



AYUSH Experts Focus on Power of Traditional Medicines at ICoSDiTAUS-2020: Delhi

ICoSDiTAUS-2020, the two-day International Conference on Standardisation of Diagnosis and Terminologies in Ayurveda, Unani and Siddha Systems of Medicine concluded in New Delhi on 26th Feb with adopting the "New Delhi Declaration on Collection and Classification of Traditional Medicine (TM) Diagnostic Data".

The topics discussed in the conference included:

- > The challenges in Counting and classification of traditional medicine encounters.
- > Adapting ICD to TM Systems and their implementation.
- > Relevance and regulation of Traditional Medicine in Health Systems.

Alexander Kodwo Kom Abban, Deputy Minister for Health, Govt. of Ghana and Mrs. Suzanne Camelia Romer, Minister of Health of Curacao took leadership roles in the deliberations, and strongly advocated adopting Information Technology and new statistical tools for advancing the practice of TM systems across the globe.



The conference succeeded in taking forward the objective of expanding the International Classification of Diseases (ICD) into the realm of Traditional Medicine systems at a conceptual level with all the countries endorsing

the same. There was also a consensus that work on the second module of the Traditional Medicine Chapter of ICD should be expedited, and collaborative efforts of stake-holding countries are needed for this. The suitability of Ayurveda, Unani and Siddha systems for inclusion in the TM Chapter of ICD was also pointed out.

The New Delhi declaration emphasised the commitment of the countries to Traditional Medicine as a significant area of health care. It further sought the opportunity for including traditional systems of medicine like Ayurveda, Unani and Siddha in the International Classification of Diseases of WHO which is the standard diagnostic tool for health management across the world.

India's First Coronavirus Death Reported in Karnataka

A 76-year-old man who recently died tested positive for the novel coronavirus, an Indian state health minister reported, marking the country's first fatality from the global pandemic.

The man "has been Confirmed for COVID19. The necessary contact tracing, isolation & other measures as per protocol are being carried out," B Sriramulu, health minister for Karnataka state, tweeted.

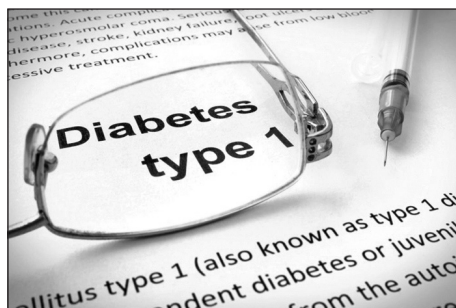
The man, who recently returned from Saudi Arabia and had a history of hypertension, diabetes and asthma, died on the night of 10th March.

India to Launch National Organization of Type 1 Diabetes

Dr. C.N. Ashwath Narayan, Deputy Chief Minister of Karnataka will be launching a national organization of Type 1 diabetes - Type 1 Diabetes Foundation of India on March 1.

According to the International Diabetes Federation, the number of people with diabetes in India is currently around 69.2 million and is expected to rise to 123.5 million by 2040.

Type 1 diabetes mellitus (T1DM) is one of the most common pediatric endocrine illnesses. These children and their diabetes education, multiple daily insulin injections, daily blood glucose monitoring, prevention



and handling of acute complications, screening for and managing chronic complications, safe disposal of sharps, psychological support, and societal support rather than discrimination.

Across India, there are Type1D support groups, who provide free support services to the T1D affected kids and their families.

Under the umbrella of the Type Diabetes Foundation of India, all these support groups aim to represent one unified voice to raise awareness about Type1D and rush for laws and benefits to make Type1 lives better.

Tata Signs MoU with MP Govt for Better Healthcare Services

The Madhya Pradesh government recently signed an MoU with Dorabji Tata Trust to provide better healthcare services in the state.

Primary health services will be improved through Arogyam Health and Wellness Centres in the state under the MoU.

A committee comprising representatives of National Health Mission and Tata Trust will be formed to monitor the implementation of the project.

The Health Department and Tata Trust will initially work in five centres each in 23 high priority districts. Thus, the 115 identified health and wellness centres will provide technical and managerial support to the programme.

In the fourth year, Tata Trust will expand the programme to 500 health and wellness centres.

Each of these districts will have an electronic record saved in an urban primary health centre.

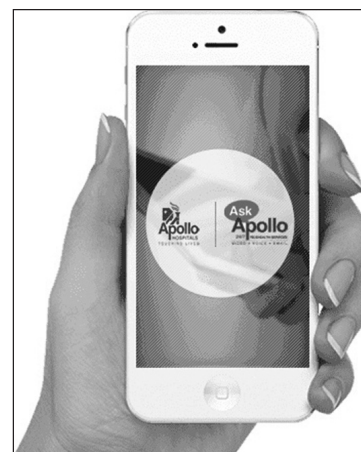


Tata Trust will also provide healthcare support by creating data for referrals and follow up about cases of pregnancy, hypertension, diabetes and cancer.

Booking Appointments Made Easy at Apollo Hospitals India's First Voice App to Book Healthcare Appointments

Apollo Hospitals launched a voice-based app Amazon Alexa Skill-Ask Apollo. With voice commands, it will guide patients using Amazon Echo or Alexa-powered device to book medical appointments with doctors and search for Apollo Hospital or pharmacy located in proximity.

The voice command app is developed by MobiSprint Consulting. Ask Apollo app gives users the access to over 5,000 super and multi-specialty doctors at 72 Apollo Hospitals and over 3,500 pharmacies in India. The app is available on both iOS and Android platforms. After adding the Alexa skill, users can connect it to their profile.



Apollo Hospitals is the only hospital in India to apply voice-assisted search of medical clinics and pharmacies along with booking appointment.

This newly added feature will be beneficial for both patients and the hospitals as it would ease the process of booking appointment on both sides. Last year, additional support for Hindi and Hinglish was included in Alexa. However, Apollo's app only works on English commands.

Goa Govt Allots Old GIM Bldg to Set Up Ayush Clinic

The Goa government has allotted the ground floor of the old campus of Goa Institute of Management (GIM) to the ministry of Ayush to set up an Ayush centre, minister of state for Ayush Shripad Naik said recently.

He said around 1,600 sqm has been allotted for the centre at Ribandar along with 252 sqm for residential accommodation.

Under the National Ayush Mission, ₹30 crore has been sanctioned for the two district hospitals, he said, adding that an initial amount has been released to the Goa government to start work.



Finally a Policy on Rare Diseases

Not All Affected by Rare Diseases Receive Disease-Specific Treatment

Estimates indicate that over 70 million people are affected by rare diseases in India. Despite their prevalence in a small segment of the population, they are emerging as a public health challenge in the country. Further, only 1 in 10 patients receives disease-specific treatment. The health ministry recently formulated the National Policy for Rare Diseases 2020, an amended version of the earlier draft released in 2017. Although the new policy mentions treatment as being available, it is only limited to certain categories. There is a need to include other diseases and ensure that more focus is given to research and development in this area, apart from creating awareness about these diseases.

Talking on the condition of rare disease treatment in India, COO and Co-founder of Redcliffe Life Sciences, Ashish Dubey, said, "Given the prevalence of rare diseases and the fact that the research on their treatment is ongoing, it is important to ensure that every mother undergoes genetic screening at an early stage. Any genetic analysis post the birth of the baby can now be done in the fetus in the first trimester itself. Screening for a broad range of conditions are becoming a routine aspect of prenatal care. Through Crysta we offer this facility wherein the parents-to-be can



understand if the baby to be born has the likelihood of any diseases. In case of a positive diagnosis, it is possible to tailor treatment specific to the condition through what is called precision medicine. Many health-tech startups within the country are pioneering the use of precision medicine across use cases."

The lack of awareness about rare diseases in India is something which makes it imperative to come up with a comprehensive preventive strategy. Increased emphasis must be given to genetic screening programmes to prevent births

of children with rare diseases and help parents take an informed decision.

It is notable that in order to tackle the adverse scenario, the government, under the recently released draft policy has proposed to fund one-time treatment cost to the tune of ₹15 lakh for certain treatable rare diseases, as suggested by industry experts. The only condition is that the patient is eligible under the Government's flagship health insurance scheme, Pradhan Mantri Jan Arogya Yojana (PMJAY) or Ayushman Bharat.

Also, certain research reports suggest that researchers have recently concluded a six-month pilot project of genome sequencing of Indians. This can be a good sign as there are possibilities that the solution to the problem of rare diseases may just be around the corner.

A Centenarian Chinese Man Becomes the Oldest Patient to Fully Recovers from Covid-19

A 100-year-old Chinese man has fully recovered from the novel coronavirus, making him the oldest known patient to beat the deadly virus.

According to Xinhua, the patient was discharged recently from a hospital in Wuhan, the epicenter of the outbreak.

Apart from the flu-like respiratory disease, the elderly patient had Alzheimer's, hypertension and heart problems.

He underwent 13 days of therapy, which included treatment with antiviral drugs, plasma transfusions, and traditional Chinese medicine.

Preventing, Detecting and Treating Birth Defects

Meyer Organics and the Spina Bifida Foundation Join Hands for a Critical Discussion on World Birth Defect Day, 3rd March

Meyer Organics, part of Vitabiotics Ltd, headquartered in London, and Spina Bifida Foundation, a not-for-profit organisation run by Medical Professionals and parents of Spina Bifida children involved in the care and upbringing of those patients in India organised a discussion around 'Common Birth Defects' at Nehru Centre, Worli- Mumbai on 3rd March 2020.



Bifida Foundation said, "Spina Bifida is a Latin phrase that literally means "Split Spine". One of the main causes of this occurrence is the lack of folic acid and other important nutrients. We wish to generate awareness amongst the audience around ways through which parents can deal with this birth defect

in their children and what care needs to be taken. We would like to extend our heartfelt gratitude to Meyer Organics for supporting us in this initiative".

The event shed light on Common Birth Defects – Prevention, Care and Rehabilitation and the way forward in India – How Maharashtra can take the lead.

Expressing her views, Ms. Uma Kalekar, Director, Meyer Organics said, "It gives us immense pleasure to join hands with the Spina Bifida Foundation to take the lead on the issue of birth defects in children, and how mothers at early stage can help prevent the damage. It is important for us to understand the core problem and come up with solutions with Spina Bifida to help parents cope effectively."

Dr. Santosh Karmarkar, Consultant Paediatric Surgeon and Paediatric Urologist at Lilavati Hospital & Research Centre, and Founding Member of Spina

The event witnessed veteran medical professionals, doctors, and medical advisors as attendees, speaking on different topics related to Common Birth Defects. Dr. Amrish Vaidya, Paediatric Surgeon, Sr Consultant and Co-ordinator SRCC Hospital, Mumbai, Dr. Deepak Changlani, Congenital Heart Defects Pediatric Cardiologist, Lilavati Hospital and Fortis Hospital, Thane, Ms. Sangeetha, Chakrapani, Founder Trustee, Together Foundation, Mumbai, Prof. Dr. S. Suresh, Radiologist, Director Mediscan Systems, Chennai were some of the prominent names from the industry present.

Doctors Perform 1st CRISPR in Human Body

U.S. scientists say they have used the gene editing tool CRISPR inside someone's body for the first time, a new frontier for efforts to operate on DNA, the chemical code of life, to treat diseases.

A patient recently had it done at the Casey Eye Institute at Oregon Health & Science University in Portland for an inherited form of blindness, the companies that make the treatment announced recently.

It may take up to a month to see if it worked to restore vision. If the first few attempts seem safe, doctors plan to test it on 18 children and adults.

Dr. Jason Comander, an eye surgeon at Massachusetts Eye and Ear in Boston, another hospital that plans to enroll patients in the study, said it marks "a new era in medicine" using a technology that "makes editing DNA much easier and much more effective."

Scientists can't treat it with standard gene therapy, supplying a replacement gene because the one needed is too big to fit inside the disabled viruses that are used to ferry it into cells.

So they're aiming to edit, or delete the mutation by making two cuts on either side of it. The hope is that the ends of DNA will reconnect and allow the gene to work as it should.

It's done in an hour-long surgery under general anesthesia. Through a tube the width of a hair, doctors drip three drops of fluid containing the gene editing machinery just beneath the retina, the lining at the back of the eye that contains the light-sensing cells.



Punjab Hospitals to Set Up 'Flu corners'

The Punjab government recently announced emergency measures, including setting up of 'flu corners' in all government and private hospitals, in the event of any exigency amid scare over deadly coronavirus. "The 'flu corners' will screen all suspected cases of respiratory tract infections at the earliest and ensure that the movement of such cases is restricted in order to prevent the spread of the (coronavirus) disease," an official statement said.

The state government also approved the Punjab Epidemic Diseases, COVID-19 Regulations, 2020 under the ambit of sections 2, 3 and 4 of the Epidemic Diseases Act, 1897 to combat the menace of the virus, the statement said.

According to a notification approved by the cabinet, no private laboratory has been authorized to take or test sample of COVID-19 or coronavirus in the state.

No person, institution or organisation will use any print or media in any form, for giving information on COVID-19 without prior permission of the Department of Health and Family Welfare, Punjab. Spread of any rumours or unscientific information regarding COVID-19 will be a punishable offence under the notification, said the statement.

The state cabinet also announced that all hospitals in the state have been directed to take a suspected patient's history of travel to any country or area from where the spread of the disease is being reported, and

also the history of coming in contact with a suspected or confirmed case of COVID-19, along with cases of respiratory tract infections or those presenting with symptoms similar to coronavirus.

If there is any history of travel or contact with a case of COVID-19 in the last 14 days of development of symptoms, the person has to be kept in hospital isolation and the Department of Health has to be informed immediately by that doctor, hospital or clinic.

Any person having travelled to a country or area from where COVID-19 is being reported has to self report to the nearest government hospital or call at helpline number 104 to inform about the travel details so that necessary action could be undertaken by the health department, the statement said.

In case COVID-19 is reported from a defined geographic area, the district administration will have rights to implement containment measures in order to prevent the spread of the disease.

Deputy commissioner of each district is authorized to take action as per the notification for COVID-19 in the area of jurisdiction of the district, the statement said.

A committee shall be constituted and notified by the Department of Health and Family Welfare under the chairmanship of deputy commissioner involving SSP, civil surgeon and other officers of the district to take decision for measures for containment of COVID-19.



Gujarat Faces Death of Doctors in Govt Hospitals

Only 14.40% doctors with the MBBS degree join the government sector after being appointed by the state government. Over the past two years, 2,228 such doctors were hired but only 321 took up the offer.

Deputy chief minister and health minister Nitin Patel said that among the reasons for not joining government service was the doctors' pursuit of advanced degrees. He said that Gujarat does not have enough medical colleges so students were forced to go to other states to study.

Patel said to ensure that doctors with the MBBS degree serve in rural areas, the government has reduced the tenure of ru-

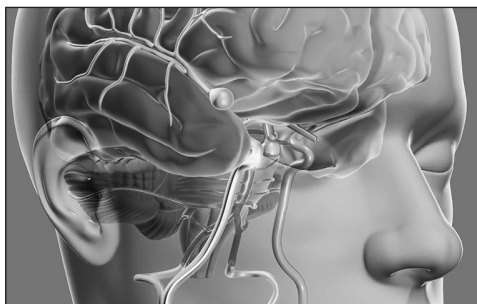


ral service from three years to one year. Also, the surety bond to enforce rural service had been set at ₹20 lakh in 2019; it was previously only ₹5 lakh.

The government's reply reveals that 28 doctors joined government service in Banaskantha, followed by 27 in Valsad. In major cities such as Ahmedabad, of the 15 doctors given appointment, only four joined. Officials said that in Chhota Udepur, 138 doctors were appointed but only four joined. In Dahod, 293 were appointed but only 16 joined.

Kerala's Sree Chitra Thirunal Institute Develops Brain Aneurysm Treating Tech

The research team of Sree Chitra Thirunal Institute of Medical Science and Technology (SCTIMST), Thiruvananthapuram has developed an innovative intracranial flow diverter stent for the treatment of aneurysms of the blood vessels of the brain. It is ready for transfer and further testing in animals, followed by human trials.



ter grip on the walls of arteries of complex shapes in order to reduce the risk of migration of the device. The unique design is in its weave also makes this stent resistant to kinking or twisting, when it is placed in tortuous arteries and those with complex shapes. Even a 180 degrees bend does not occlude the lumen of the stent. A portion

Flow diverters stents when deployed in the artery in the brain bearing the aneurysms, divert blood flow away from the aneurysm, thus reducing the chances of its rupture from the pressure of blood flow. Intracranial aneurysm is a localized ballooning, bulging or dilation of arteries in the brain caused by progressive weakening of the inner muscles of the wall of the blood vessels.

Spontaneous rupture of the aneurysm can result in bleeding into the space around the brain resulting condition called a subarachnoid haemorrhage (SAH). Subarachnoid haemorrhage can lead to paralysis, coma or death. The Surgical treatment of an aneurysm involves opening the skull and a clip on the neck of the aneurysm, so that it is cut off from the path of blood flow.

The Chitra flow diverter is designed to have a bet-

of the wires is made radio-opaque for better visibility in X-Rays and fluoroscopy thus aiding accurate delivery of the diverter in the blood vessel.

Nitinol, a superelastic alloy with shape memory was acquired from National Aero Space Laboratories, Bengaluru (CSIR-NAL). When the device is deployed at the site, it is released from its crimped locked position and assumes the desired and originally designed shape because of the shape memory property of Nitinol. The flow diverter is delivered to the aneurysm in the brain using a delivery system. The delivery system has also been developed by the team.

With the availability of the indigenous technology from SCTIMST and Nitinol from NAL, a well-established industry should be able to manufacture and sell at a much lower price. SCTIMST has filed separate patents for the stent and the delivery system.

India and Africa's Côte d'Ivoire Join Hands for Healthcare Cooperation

Indian Union Cabinet has approved a Memorandum of Understanding (MoU) between Ministry of Health and Family Welfare of the Republic of India and the Ministry of Health and Public Hygiene of the Republic of Cote d'Ivoire (A west African country) on Cooperation in the field of Health.

The Memorandum of Cooperation covers the following areas of cooperation:

- Exchange & training of medical doctors, officials, other health professionals and experts in the field of advanced medical technology, nuclear medicine, renal transplantation, cardiac surgery, nephrology, hemodialysis and medical research;
- Regulation of drugs and pharmaceutical products;
- Assistance in development of human resources and setting up of health care facilities;
- Medical and health research development;
- Management of healthcare sector and public health services including medical evacuations;
- Procurement of generic and essential drugs and assistance in sourcing of drug supplies;
- Collaboration and research in the field of HIV/AIDS;
- Development and improving the techniques and strategies for epidemiological surveillance;
- Exchange of best practices in the field of primary health care;
- Sharing of know-how on management of hospitals and community healthcare centers;
- The promotion of public health and sharing of experiences in medical waste
- Management;
- Health promotion and disease prevention;
- Non-Communicable Diseases;
- Occupational and Environmental Health;
- Medical Research; and
- Any other area of cooperation as may be mutually decided upon.

BMC Identifies Four Hospitals in Mumbai to Set Up Coronavirus Isolation Wards

Four municipal hospitals where isolation wards can be set up at short notice in case of a Covid-19 outbreak have been identified by the BMC, said additional municipal commissioner Suresh Kakani. Currently, only Kasturba hospital has an isolation ward in the city.

The hospitals shortlisted are Hinduhradaysamrat Balasaheb Thackeray Trauma Care Hospital



in Jogeshwari; Bhabha Hospital in Bandra, Bhabha hospital in Kurla and Rajawadi in Ghatkopar. Among the other measures being taken by the municipal corporation include upgrading facilities in Kasturba, developing facilities at other locations by roping in more civic, state government and private hospitals.

State-of-the-Art Centre for Cancer Treatment at JJ Hospital

Mumbai's well-known JJ Hospital will soon get a state-of-the-art cancer centre for treatment and research on the disease, Amit Deshmukh, Maharashtra minister for medical education, announced in the legislative Council recently. Maharashtra health and family welfare minister Rajesh Tope said, "The number of expert doctors in the field of cancer is not sufficient in comparison to the number of cancer patients in the state."

Across 36 districts in the state, 11 district hospitals offer chemotherapy for cancer patients.

Further, specialist doctors and nurses from 16 district hospitals were given a month-long training at Tata Memorial Hospital in Mumbai on chemotherapy, Rajesh Tope informed the legislative Council.



Zydus Announces Launch of World's First Drug for Treating NASH in India

Zydus Cadila, has announced that the Drug Controller General of India (DCGI) has approved its New Drug Application (NDA) for Saroglitazar for the treatment of Non-Cirrhotic Non-Alcoholic SteatoHepatitis (NASH) in India. The drug will enter the Indian market within three months. The drug will also be launched in Mexico soon.

Speaking about the development, Pankaj Patel, Chairman, Zydus Group mentioned, "Saroglitazar will provide hope and new lease of life for millions of patients in India suffering from NASH."

Saroglitazar was launched in India in September 2013, for the treatment of diabetic dyslipidemia and hypertriglyceridemia in patients with type-2 diabetes not controlled by statins alone. In January this year, Saroglitazar received an approval for the treatment of Type 2 Diabetes Mellitus. In the last seven years, over a million patients have benefitted from this drug.

Saroglitazar is uniquely poised with its dual PPAR alpha and gamma properties – reducing the comorbidities (dyslipidemia, hypertriglyceridemia, diabetes mellitus) and causing NASH resolution.



Coronavirus is Preventable and Treatable, Say Chinese Officials

The novel coronavirus that has killed more than 1,700 people in China is "preventable and treatable", an official from the country's National Health Commission told reporters. GuoYanhong, a hospital administration supervisor at the commission, made the remarks at a daily press conference, in which she also said the percentage of infected patients in virus epicentre Wuhan who are critically ill had dropped to 18% now from 38% at the beginning of the outbreak.



Doctors Perform Live Knee Surgery at Digital Orthopedic Technology (DOT 2020) Workshop at Ahmedabad

Renowned orthopedic surgeon Dr. Manish Shah performed live knee surgery using his patented KNE3WIZ technology at the Digital Orthopedic Technology workshop in Ahmedabad.

The live surgery was performed at the Digital Orthopedic Technology Workshop 2020 (DOT 2020) conducted by SEA (Surgeon Education Academy) at Ahmedabad a first of its kind workshop focusing on the evolution of Knee Arthroplasty.

Speaking about this feat the inventor of KNE3WIZ technology Dr. Manish Shah said, "The KNE3WIZ technology is a highly accurate Total Knee Replacement (TKR) surgery process that builds on all the previous existing technologies to create an augmented system that assesses each use case individually and offers unparalleled precision solution. The product overcomes all the problems faced by conventional and modern TKR surgeries like Patient Specific Instrumentation Surgery, Robotic Surgery as well as Computer Assisted Surgery while saving a significant amount of time as well as money."

Attended by over 150 orthopedic and joint replacement surgeons around the country, DOT2020 is India's first hands-on-workshop with individualized training for bone registration with digital devices. The workshop also included personal workstations for the attending delegates to receive firsthand training on 3D planning for efficient knee replacements in addition to covering the basic tenets of Total Knee Replacement



(TKR). The participants also learned to plan and procure 3D printed solutions for TKR.

Post workshop the visiting surgeons were shown the live surgery performed by Dr. Manish Shah and his team using the very innovative Kne3Wiz tool developed by Dr. Shah. Kne3Wiz has been designed as fully surgeon dependent system where once the CT scan gets loaded, the surgeon registers anatomical landmarks, aligns the prosthetic knee, chooses the implant design and finalizes its position. The surgeon then uses the Kne3wiz jig to recreate his or her operative plan with precision, saving both time and money.

Italian Couple Diagnosed for Covid-19 Administered with Anti-HIV Drugs

In a first in India, doctors at SMS hospital in Jaipur have administered the combination of anti-HIV drugs, lopinavir and ritonavir tablets, for the treatment of coronavirus on two Italian patients.

Earlier in February, the India Council of Medical Research (ICMR) had sought an emergency approval from Central Drug Control Organisation (CDCSO) for restricted use of combination of the anti-HIV drugs for the treatment of COVID-19 patients in India.

Dr DS Meena, Medical Superintendent of SMS Hospital told ANI, "Following the all standard pro-



ocols and procedures by ICMR to have administered the combination of anti-HIV drugs - lopinavir and ritonavir tablets - for the treatment of COVID-19 patients. As of now, we have used this on Italian couple after taking their consent. Both of them are fine and stable."

"The female has tested negative now and her condition has improved while 69-year-old male is still positive and on non-invasive ventilation (NIV) support. As he is a chronic smoker this is creating a bit of problem for us," said a senior doctor.

Asian Institute of Nephrology & Urology Opens New Facility in Hyderabad

The Asian Institute of Nephrology & Urology (AINU) is expanding its presence in Hyderabad by adding new facility to its existing capacity.

AINU recently inaugurated its second facility in Dilsukhnagar, Hyderabad; a 60-bedded kidney care center with specialized 10-bedded acute kidney care unit.

Established in 2013, AINU is a specialized urology and nephrology-focused tertiary care hospital, offering a full suite of medical and surgical services, day care services and supporting services. The new facility will house a specialized dialysis unit



of 12 beds with an advanced HDF dialysis capable units for critically ill patients. A dedicated team of fulltime urologists and nephrologists are available 24x7 to provide quality care to the patients.

AINU is equipped with both surgical and acute kidney intensive care units; and has emerged as a referral center for complex and high-end endoscopic, laparoscopic

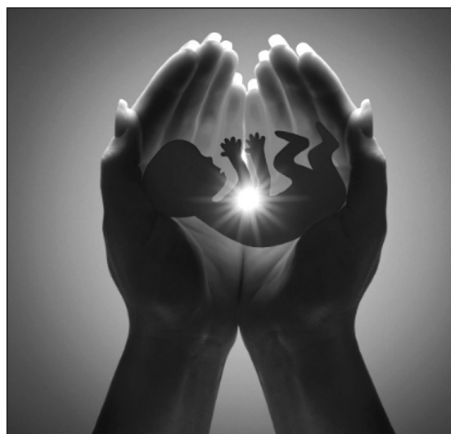
and robotic urological procedures for kidney stones, prostate enlargement, kidney cancer, prostate cancer, urinary bladder cancer, congenital urinary tract disorders and Kidney transplantation to name a few.

Cabinet Approves Bill to Regulate Fertility Clinics Offering IVF and Other Services

The Union Cabinet approved the Assisted Reproductive Technology (Regulation) Bill which proposes establishment of a national registry and registration authority for all clinics and medical professionals serving in the field. The bill also proposes stringent punishment for those practising sex selection and sale of human embryos or gametes. Giving details of the bill, Union minister Smriti Irani said, "Ensuring confidentiality of the commissioning couples, women and donors

will also be done under the aegis of this proposal of the Cabinet. The bill also has a provision that those involved in trafficking and sale of embryos will be fined Rs 10 lakh at first instance and in second instance the person could be imprisoned for up to 12 years." Irani said the bill also seeks to protect the reproductive rights of not only the commissioning couple but also the lady who will be part of this process. "This particular decision of the Cabinet seeks a central database in the country through which details of all clinics and banks, including the nature, kind of services provided, outcome of the services provided will be obtained on a regular basis," she said.

According to an official statement, the national board lays down code of conduct to be observed by persons working at clinics, to set the minimum standards of physical infrastructure, laboratory and diagnostic equipment and expert manpower to be employed by



clinics and banks. The states and union territories will constitute the state boards and state authorities within three months of the notification by the Centre. The state board shall have the responsibility to follow the policies and plans laid by the national board for clinics and banks in the state, the statement said. The major benefit of the Act would be that it will regulate the assisted reproductive technology services in the country. Consequently, infertile couples will be more ensured/confident of the ethical practices in ARTs.

Cancer Patient Walks Again After Paralysis

The patient Vaijanti, 43, has been fighting with aggressive cancer for the last 3 years. In 2017, she was diagnosed with stage-3 breast carcinoma and in the process of treatment, she underwent breast surgery. Despite 16 rounds of chemotherapy, the cancer started spreading to her other body parts as well. Two months back, the patient developed a fracture in her spine which left her completely paralyzed below the abdomen. Due to this, she was unable to move her legs and was completely bedridden.

Dr. Hitesh Garg, Head of spine surgery at Artemis Hospitals, Gurugram, said, "It was a complicated case. Her body was paralyzed two months back and it was difficult to say how much spinal cord was still alive.



The family was informed that surgery might lead to more complications because of the wide spread of the disease."Dr. Himanshu Tyagi, Sr. Consultant, Orthopaedics, Spine Surgery, stated, "The operation was done on December 26, 2019, and within a week she was able to stand on her feet." Vaijanti said, "Even though the success rate of surgery was very less but I was determined to face it. My determination, family support and the best medical care provided by Artemis Hospital made me walk again on my legs."

Scientists Create Real-Like Transparent Organs

Researchers at the Helmholtz Zentrum München, Ludwig Maximilians University Munich, and Technical University of Munich in Germany have managed to make entire organs, including a human kidney, eye, thyroid, and pig pancreas, transparent and easy to study using a special microscope optimized for the task. Described in journal



Cell, the technique, dubbed SHANEL, not only makes organs transparent but also allows cells to be identified by type and for a computer to use deep learning to analyse and map the cells within a 3D rendering of the organ. The technology has significant implications for studying a variety of diseases, improving our understanding of molecular scale anatomy, and creating new drugs and medical devices.

SHANEL was created because existing techniques to clear tissues are not effective for entire organs because of large amounts of insoluble compounds. "We had to change our approach completely and start from scratch to find new chemicals which can make human organs transparent," said Shan Zhao, first author of the study, in a press release. The team studied a large selection of possible alternatives and identified a detergent called CHAPS that pokes holes through organs and helps clearing compounds to seep inside. To identify individual cells within the cleared organs, the team partnered with MiltenyiBiotec, a German company, to create a laser-scanning microscope that can hold a sample as large as a human kidney. A computer algorithm was also created to identify and map the millions of cells that an organ has. "SHANEL can develop

into a key technology for mapping intact human organs in the near future. This would dramatically accelerate our understanding of organs such as the brain, their development and function in health and disease," added Dr. Ali Ertürk, Director of the Institute for Tissue Engineering and Regenerative Medicine at Helmholtz ZentrumMünchen

and also Principal Investigator at the Institute for Stroke and Dementia Research at the hospital of LMU. The researchers believe that the technology will aid in designing and bioprinting replacement organs and tissues in the not too distant future. Certainly a better understanding of organs at the cellular level will help.

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Lunit Receives Korean Approval for its AI Solution for Breast Cancer

A new study, published in *Lancet Digital Health*, shows the added value of AI-aided breast cancer detection from mammography images. The study, conducted by Korean academic hospitals and Lunit, a medical AI company specializing in developing AI solutions for radiology and oncology, features large-scale data of over 170,000 mammogram examinations from five institutions across South Korea, USA, and the UK, consisting of Asian and Caucasian female breast images. The dataset includes over 36,000 biopsy-proven, independent cancer positive cases—the largest scale of cancer data among mammography-related AI studies.

“It is an unprecedented quantity of data with accurate ground truth—especially the 36,000 cancer cases, which is seven times larger than the usual number of datasets from resembling studies conducted previously,” said Hyo-Eun Kim, the first author of the study and Chief Product Officer at Lunit. “The quality of data has also been assured, with ethnic diversity, covering various imaging devices and scanning conditions.” The study shows a significant improvement in the performance of radiologists, before and after using AI. According to the study, the AI alone showed 88.8% sensitivity in breast cancer detection, whereas radiologists alone showed 75.3%. When radiologists were aided by AI, the accuracy increased by 9.5% to 84.8%. Lunit INSIGHT MMG is commercially available and is being used clinically, approved by Korea Ministry of Food and Drug Safety and pending approval by European CE within the first quarter and FDA clearance by later this year.

Dr. Atul Shah Receives 6 Sigma Excellence Award

Dr. Atul Shah, a well-renowned plastic surgeon was conferred Six Sigma Health Care Excellence Award in the “Lifetime Achievement of the Year - Plastic Surgery” category. The award conferred on him in recognition of his outstanding achievement, diligence, noble services and sustained contributions to the society along with a certificate of appreciation.

Dr. Atul Shah is also the recipient of ALIMCO award for designing prefabricated splints for hand deformity in leprosy, Golden Peacock award for innovative products and services like “self-care Kit”, which found place in national leprosy program benefiting 80,000 ulcer cases throughout India and Reader’s Digest Gold Award for Corporate Social Responsibility on behalf of Novartis India Limited. Dr. Shah is the recipient of prestigious “International Gandhi Award 2017” of the Gandhi Memorial Leprosy Foundation for his humanitarian work in upliftment of leprosy patients with reconstruction and rehabilitation besides plastic surgery. He is the first Plastic Surgeon to receive this honor from Gandhi Memorial Leprosy Foundation.

Born in 1949 at Jetpur, Gujarat, India, Dr. Atul Shah completed his MS (General Surgery) in 1976 and MS (Plastic Surgery) in 1978 from Grant Medical College and Sir J. J. Group of Hospitals, Mumbai. In 1985, he was awarded MNAMS from National Academy of Medical Sciences, New Delhi, in recognition of his contribution to advancement of plastic surgery and medical sciences. Dr. Atul Shah is attached to the Nanavati Super Specialty Hospital at Vile Parle, Mumbai as Consultant Plastic Surgeon since 1990. He was handling the Burn Unit where he initiated early tangential excision of burns and skin grafting to reduce the mortality and morbidity in burns patients. He integrated the leprosy reconstructive surgery keeping only few complicated procedures for advanced centers of leprosy surgery.



Dr Shah receiving the award from Air Marshal Pawan Sharma

