

# InnoHEALTH

India's First Magazine of Healthcare Innovations

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## SPRINT TO A NEW YOU

### WEIGHING ON FAT FACTS

### KISS GUILT GOODBYE

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# MULTI MEDICINE FACILITY

First of its kind in India and the World



Indian Spinal Injuries Centre in partnership with Netherlands-based Ayurvedic medicine chain Vaidyaraaja is going to start a first-of-its-kind multi-medicine facility in New Delhi (India) that will bring all streams of alternative medicine including Ayurveda, Unani, Homeopathy, Naturopathy and many more indigenous medical systems under the same banner. Thus bringing together all available medical systems in India under one roof.

The facility proposed to be created, is not just a first in India but also a first in the world will be managed and operated under the banner of Vaidyaraaja which works extensively in The Netherlands, Lithuania and other parts of Europe, besides India and with clinics, products and training facilities in India and Europe.

The multi-medicine facility will bring multiple alternative medicine systems together alongwith promo-

tion of scientific research involving studying, testing and recording ancient and traditional medicines and therapies. It will also invest heavily in researching for and testing of products available in traditional medical systems to establish scientific proofs of their efficacy.

The facility will have medical systems of Ayurveda, Siddha, Unani, Tibetan, Homeopathy, Naturopathy, as well as accepted and credible cures from traditional Indian localized and tribal medical systems, all dispensed under the same banner along with modern medicine.

People have for centuries benefited from indigenous, herbal and nature-based treatments. Even a number of indigenous tribes in India have preserved their age-old traditional treatment systems which are efficacious and can benefit the larger world.

The facility intends to bring together all such sources of rich information and help them grow for the larger good of mankind by recording and monitoring all treatments as per best practices in the world.

## ADDRESSING HEALTH WITH

INR 10 crore funding reaches out to counsel healthcare and mental wellness in schools

AddressHealth, a Bangalore based paediatric primary care continuum has received US\$ 1.5 million in series A funding from Gray Matters Capital is now reaching out to schools to counsel healthcare and mental wellness programmes. Its aim is to make affordable paediatric primary care available to four lakh children in India by 2018.

The company's school health programme's cloud-based EHR has health



data of over 150,000 children, allowing it to analyze health trends amongst urban school children and help parents take preventive health action for their children.



# SAATHIYA

## To the rescue of adolescence



India is home to 253 million adolescents which is largest in the world in terms of absolute numbers and when Reproductive, Maternal, Newborn and Child Health (RMNCH) programs were launched globally, India was the first country to add the '+A' i.e. adolescent component to the RMNCH, making it today's RMNCH+A program.

Under the Rashtriya Kishore Swasthya Karyakaram (RKSK) (2014) the Secretary, Health and Family Welfare recently launched the SAATHIYA Resource Kit including 'SAATHIYA

SALAH' Mobile App for adolescents. RKSK identifies six strategic priorities for adolescents i.e. nutrition, sexual and reproductive health (SRH), non-communicable diseases (NCDs), substance misuse, injuries and violence (including gender-based violence) and mental health.

The most important component and driving force of RKSK program are its Peer Educators and this resource kit has been launched to enable them to communicate with the adolescents of their community.

The Peer Educators (Saathiyas) act as a catalyst for generating demand for the adolescent health services and imparting age appropriate knowledge on key adolescent health issues to their peer groups. In order to equip the Saathiyas in doing so Saathiya Resource Kits (including 'Saathiya Salah' Mobile App) have been launched. The kit will enable the 1.6 lakhs Peer Educators towards taking their job forward and answering all the queries in the minds of an adolescent in spite of the plethora of media like Magazines, TV, internet etc. available.

The Resource Kit comprises i) an Activity Book ii) Bhranti-Kranti Game iii) Question-Answer Book and iv) Peer Educator Diary. Also the mobile app 'Saathiya Salah' (downloadable from Google play-store) acts as a ready information source for the adolescents in case they are unable to interact with the Peer Educators.

The mobile app is also linked to another important piece of cost-effective information platform of a toll-free SAATHIYA HELPLINE (1800-233-1250) which will act as an e-counselor. While the short films will be played by the Peer Educators at their group meetings, the activity book and games will bring about discussion and resolve adolescent queries.

## CureFit

### Buys health-food delivery firm Kristys Kitchen

Prevention has four important aspects- eating healthy, active lifestyle, mental wellness, regular health check-ups. Bangalore-based healthcare and fitness start-up, CureFit Healthcare Pvt. Ltd. aims to fulfil these aspects with the vision of making every individual healthy with a holistic approach towards healthy living. With this in mind CureFit has acquired online health-food delivery company, Kristys Kitchen.

CureFit provides services such as fitness advice and medicine deliveries

with the intention of introducing services in mental wellness, health food and fitness on its soon to be launched mobile application.

Kristys Kitchen has a kitchen in Bangalore and claims to be operationally cash positive and servicing over 250 orders a day. The company had raised \$15 million in series-A round of funding last year in July.

CureFit plans to offer its three main planned services—health food subscriptions, Cult fitness subscriptions and mental wellness offering, focusing

on prevention side of healthcare. CureFit will be launching fitness, mental wellness—DIY (do-it-yourself) packs of yoga and meditation within the next three months.



# YOLO HEALTH

## Chandigarh Angels Network invest in healthcare startup



**C**handigarh Angels Network has invested INR 1.6 crore (\$235,000) in Mumbai-based healthcare startup Yolo Health which is run by Health ATM India Pvt. Ltd, provides a walk-in kiosk with medical devices and staffed by a medical attendant.

Patients can walk into a Yolo Health ATM without an appointment and get a quick health check-up and instant health report. They can also consult with healthcare providers via video conferencing. The company hopes to drive healthcare ATMs into under-privileged areas.

Yolo Health will use the funds to develop Health ATMs, which will dispense generic drugs alongwith investing the funds in research and marketing.

Yolo plans to set up 100 virtual care touch-points across rural and urban communities in 2017.

# WellDoc's BlueStar

## An Innovative App launched in India to Improve Diabetes Care

**T**he International Diabetes Foundation has made predictions that diabetes could affect 123 million Indian citizens by 2040 and

also their statistics show that the treatment for diabetes complications costs more than 670 billion US dollars a year globally, and that the disease claims the lives of five million people worldwide each year.

The app will initially be piloted with a select group of patients in New Delhi, which allows them to transform their smartphone, tablet or personal computer into a personal health advisor.

The app will be tailored to the Indian market to account for specific medications and local diets, allowing patients to enter details of their meals and receive instant advice on the optimal medication and dosage.

WellDoc's BlueStar® application is a mobile health monitoring tool that helps adults living with type 2 diabetes and their doctors drive behavioral and clinical change. The app analyzes diabetes data entered by the patient, including blood glucose levels and medications, and delivers curated analytics to a patient's healthcare team to improve decisions and better manage the disease.

In this light IFC, a member of the World Bank Group; WellDoc, a US-based digital health startup and Max Healthcare, a leading Indian healthcare provider recently launched a cutting-edge mobile application in India to improve diabetes care.



# PRACTO RAY TAB

Introduces Digital Consent Forms for the first time in India



In June, 2014 Practo Tab was built to serve as a seamless companion for Practo Ray- the widely- used practice management and appointment scheduling software for doctors and clinics. Practo Tab is an all-in-one device empowering practice management and enhancing patient relationship management.

The digital consent form will further strengthen the existing portfolio of services that are being offered on Practo Tab including patient registration, feedback, schedule management, billing etc. and help doctors manage their clinic from anywhere as all information is available on the cloud and accessible offline as well as online.

For the very first time consent forms have been given the digital makeover. Practo, the leading digital healthcare platform has announced the integration of consent forms into the Practo Ray Tab for the first time. Available across general, dental, dermatology and gynaecology practices; the integration is aimed to

further digitise practice management and ensure that patients sign the form before they undergo any treatment or surgery.

Clinics can customise the form as per their needs and create different consent forms based on different treatments.

The digital consent forms available on Practo Tab are legally compliant and uses electronic signatures as per Sec 2 (ta) of Information Technology Act 2000. With the integration of consent form on Practo Tab, we will be able to provide better tools to doctors and significantly improve patient's health-care experience.



## Wearable brain scanner :

Kolkata-based **Arogya Meditech Pvt. Ltd.** has developed a product called **CEREBROS**, a low-cost, portable, radiation-free brain scanning device that detects brain injuries, strokes and other neurological emergencies. It comes in the form of a wearable head-gear and combines two technologies-Near Infrared Spectroscopy and Electroencephalography.



## OmiX LABS :

Bengaluru based biotech company OmiX Labs has designed a platform that includes a disposable bio-chip loaded with all reagents and a smartphone based reader for DNA analysis. Aiming to bring tests to the patients themselves, its current projects include detection of low levels of malarial parasite in blood, urinary tract infections and anti-microbial resistance.

# IBM REVEALS FIVE INNOVATIONS

that will Help Change our Lives within Five Years

TRENDS

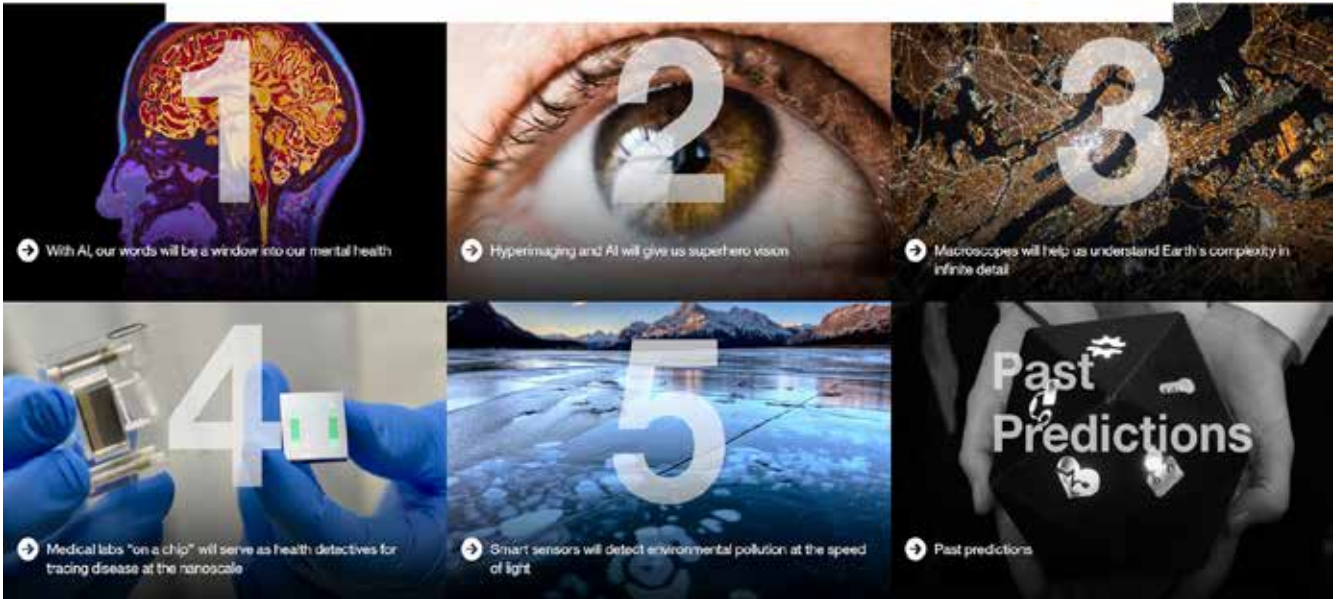
POLICY

WELL BEING

PERSONA

ISSUES

WOMAN CORNER



IBM unveiled the annual “IBM 5 in 5” – a list of ground-breaking scientific innovations with the potential to change the way people work, live, and interact during the next five years. With advances in artificial intelligence and nanotechnology its aim is to invent a new generation of scientific in-

struments that will make the complex invisible systems in our world today visible over the next five years.

IBM’s global team of scientists and researchers is steadily bringing these inventions from the realm of their labs to the real world.

The IBM 5 in 5 is based on market and societal trends as well as emerging technologies from IBM’s Research labs around the world that can make these transformations possible. Here are the five scientific instruments that will make the invisible visible in the next 5 years :

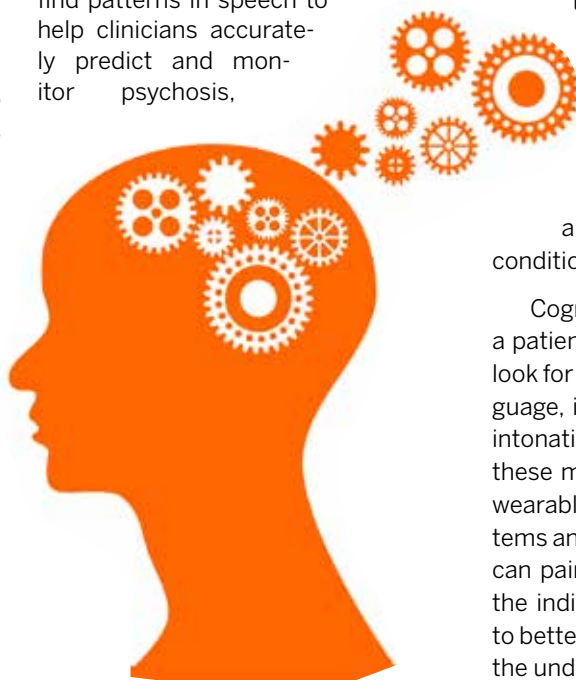
## With AI, our words will open a window into our mental health

The global cost of mental health conditions is projected to surge to US\$ 6.0 trillion by 2030. If the brain is a black box that we don’t fully understand, then speech is a key to unlock it. In five years, what we say and write will be used as indicators of our mental health and physical wellbeing.

Patterns in our speech and writing analyzed by new cognitive systems will provide tell-tale signs of early-stage developmental disorders, mental illness and degenerative neurological diseases that can help doctors and patients better predict, monitor and track these conditions.

At IBM, scientists are using transcripts and audio inputs from psy-

chiatric interviews, coupled with machine learning techniques, to find patterns in speech to help clinicians accurately predict and monitor psychosis,

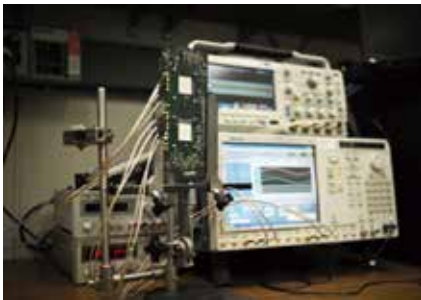


schizophrenia, mania and depression. Today, it only takes about 300 words to help clinicians predict the probability of psychosis in a user. In the future, similar techniques could be used to help patients with Parkinson’s, Alzheimer’s, Huntington’s disease, PTSD and even neurodevelopmental conditions such as autism and ADHD.

Cognitive computers can analyze a patient’s speech or written words to look for tell-tale indicators found in language, including meaning, syntax and intonation. Combining the results of these measurements with those from wearable devices and imaging systems and collected in a secure network can paint a more complete picture of the individual for health professionals to better identify, understand and treat the underlying disease.

## Hyperimaging and AI will give us superhero vision

In five years, new imaging devices using hyperimaging technology and AI will help us see broadly beyond the domain of visible light by combining multiple bands of the electromagnetic spectrum to reveal valuable insights or potential dangers that would otherwise be unknown or hidden from view. Most importantly, these devices will be portable, affordable and acces-



sible, so superhero vision can be part of our everyday experiences. A view of the invisible or vaguely visible physical phenomena all around us could help make road and traffic conditions clearer for drivers and self-driving cars. For example, using millimeter wave imaging, a camera and other sensors, hyperimaging technology could help a car see through fog or rain, detect hazardous and hard-to-see road conditions such as black ice, or tell us if there is some object up ahead and its distance and size. Cognitive computing technologies will reason about this data and recognize what might be a tipped over garbage can versus a deer crossing the road, or a pot hole that could result in a flat tire. Embedded in our phones, these same technologies could take images of our food to show its nutritional value or whether it's safe to eat. A hyperimage of a pharmaceutical drug or a bank check could tell us what's fraudulent and what's not. What was once beyond human perception will come into view.

IBM scientists are today building a compact hyperimaging platform that "sees" across separate portions of the electromagnetic spectrum in one platform to potentially enable a host of practical and affordable devices and applications.

## Macrosopes will help us understand Earth's complexity in infinite detail

In five years, we will use machine-learning algorithms and software to help us organize the information about the physical world to help bring the vast and complex data gathered by billions of devices within the range of our vision and understanding. We call this a "macroscope" – but unlike the microscope to see the very small, or the telescope that can see far away, it is a system of software and algorithms to bring all of Earth's complex data together to analyze it for meaning. By aggregating, organizing and analyzing data on climate, soil conditions, water levels and their relationship to irrigation practices, for example, a new generation of farmers will have insights that help them determine the right crop choices, where to plant them and how to produce optimal yields while conserving precious water supplies.

In 2012, IBM Research began investigating this concept at Gallo Winery, integrating irrigation, soil and weather data with satellite images and other sensor data to predict the specific irrigation needed to produce an optimal grape yield and quality. In the future, macroscope technologies will help us scale this concept to anywhere in the world.

## Medical labs "on a chip" will serve as health detectives for tracing disease at the nanoscale

Early detection of disease is crucial. In most cases, the earlier the disease is diagnosed, the more likely it is to be cured or well controlled. In the next five years, new medical labs "on a chip" will serve as nanotechnology health detectives – tracing invisible clues in our bodily fluids and letting us know immediately if we have reason to see a doctor. The goal is to shrink down to a single silicon chip all of the processes necessary to analyze a disease that would normally be carried out in a full-scale biochemistry lab. The lab-on-a-chip technology could ultimately be packaged in a convenient handheld device to allow people to quickly and

regularly measure the presence of biomarkers found in small amounts of bodily fluids, sending this information securely streaming into the cloud from the convenience of their home. There it could be combined with real-time health data from other IoT-enabled devices, like sleep monitors and smart watches, and analyzed by AI systems for insights. When taken together, this data set will give us an in depth view of our health and alert us to the first signs of trouble, helping to stop disease before it progresses.

At IBM Research, scientists are developing lab-on-a-chip nanotechnology that can separate and isolate bioparticles down to 20 nanometers in diameter, a scale that gives access to DNA, viruses, and exosomes. These particles could be analyzed to potentially reveal presence of disease even before we have symptoms.

## Smart sensors will detect environmental pollution at the speed of light

Most pollutants are invisible to the human eye, until their effects make them impossible to ignore. In five years, new, affordable sensing technologies deployed near natural gas extraction wells, around storage facilities, and along distribution pipelines will enable the industry to pinpoint invisible leaks in real-time. Networks of IoT sensors wirelessly connected to the cloud will provide continuous monitoring of the vast natural gas infrastructure, allowing leaks to be found in a matter of minutes instead of weeks, reducing pollution and waste and the likelihood of catastrophic events.

At the heart of IBM's research is silicon photonics, an evolving technology that transfers data by light, allowing computing literally at the speed of light. These chips could be embedded in a network of sensors on the ground or within infrastructure, or even fly on autonomous drones; generating insights that, when combined with real-time wind data, satellite data, and other historical sources, can be used to build complex environmental models to detect the origin and quantity of pollutants as they occur.



# DIGITAL RADIOGRAPHY SYSTEM

## Ultisys launched by triviton healthcare

**T**riviton Healthcare's radiology division Kiran Medical Systems has introduced its innovation driven Ultisys range of radiography products during the Arab Health Convention in Dubai 2017.

The ultisys platform has been ingeniously designed and developed with a wide range of clinical applications involving general radiography. The system features a floor mounted x-ray system with a wide range of generator power options from 32 kW to 82 kW, choice of tethered or wireless flat panel detectors. It is seamlessly integrated through a powerful imaging software platform that provides a highly intuitive user interface and image processing that makes even the smallest bone and soft tissue details visible in superb resolution.

Kiran's portfolio of radiology products includes the Infinity and Elite series surgical C-Arm systems available in 3.5kW and 5.0kW power output and the option of 1Kx1K digital imaging chain with advanced image processing capabilities; a comprehensive



range of radiation protection products, anti-scatter x-ray grids and imaging accessories including computed radiography systems, dry films for DICOM printers, Screen Films, Analogue Cassettes and Screens.

Its manufacturing facilities are approved by US-FDA, SGS-UK and

PMDA-Japan amongst others. With approximately 50-65 % of the entire components designed and manufactured from scratch in India, there is a significant cost reduction in the development of the equipment subsequently enabling to make the products available at affordable prices.

# HEALTHCARE Internet of Things platform

**L**oughborough University London has been awarded research funding from the UK-India Education Research Initiative (UKIERI) to build a secure Internet of Things (IoT) platform for use in healthcare. IoT platforms connect devices, allowing them to collect and use data. This three-year

UKIERI award, led by Dr Yogachandran Rahulamathavan of the University's Institute for Digital Technologies (IDT), will enable IoT platforms to be created that interact with people who need round-the-clock assistance, using sensors to measure movement, location and body functions such as breathing,

heart rate and blood pressure.

An initial pilot testing phase will see patients in care homes from the states of West Bengal and Odisha in India recruited in order to study chronic diseases, with IoT services tailored to respond to the socio-cultural differences across regions.

The framework will be extended to analyse real-time physiological data from patients equipped with wireless devices whilst travelling in ambulances, before focusing on the development of a secure infrastructure for data collection and an interface which empowers users and protects the privacy of participants. The project is a collaboration between the Institute of Digital Technologies and IIT Kharagpur, supported by City University of London, eSmart Saving Ltd UK and the All India Institute of Medical Sciences.



# MyMedela

## Mobile application

**M**edela India, the world's leading global producer of breast pumps and nursing accessories recently launched their unique MyMedela application that offers first-of-its kind digital breastfeeding support for pregnant, new and experienced mothers. The app which is available for Android and iPhone, is a 24/7 resource providing mothers with robust tracking tools, along with personalized, expert advice on nursing and pumping.

A survey conducted by Medela showed that only 33 per cent mothers initiate breastfeeding in the first hour and even seasoned ones need assistance and encouragement to ensure the most successful experience for baby and mom. MyMedela app delivers proactive guidance for overcoming issues and challenges and gives tips that can lead to a positive breastfeeding experience for mother and child. The app has been created to empower mothers with all the necessary information and support at the click of a button with provisions of customised solutions based on each mom's individual situation to make their breastfeeding journey smooth and enjoyable.

MyMedela  
is here.  
Download now



### Unique features of MyMedela App:

- Offers an exclusive confidence assessment to understand mom's strengths and focus on her goals to then deliver customized feedback and support based on mom's answers and other data entries
- Provides a problem solver tool for quick answers to common breastfeeding questions, featuring tips from expert healthcare professionals
- Sends tailored articles and videos within the app, based on where each mom is on her breastfeeding

journey

- Tracks breastfeeding and pumping routines (e.g., time spent, volume and frequency)
- Records information about baby's growth and daily activities, such as height, weight, sleep and diapers
- Snapshots of mom and baby's activities are available on easy-to-read dashboards

Sends personalized reminders, alerts and notifications that celebrate accomplishments and help moms manage breastfeeding challenges and goals

## AUTOMATION TO NURSE ISSUES

**W**hile the healthcare industry is undergoing a seismic shift, vying to move from volume-centric to value-based care, effective technological enablement will play a key role in this transition. In the current scenario, the industry is grappling with a considerable shortage of nurses to cater to a high demand market. A WHO study titled, 'The Health Workforce in India', published in June 2016, revealed that India had 61 nurses/midwives per 1 lakh of the country's population. A solution targeted at easing the nursing allocation process, is Radius™, an Uber-like scheduling tool



that is now being used in the healthcare sector.

Radius™, powered and developed in-house by Intelnet® Global Services – a leading Business Process Service provider, is an innovative tool designed to transform the nursing

allocation process in the home healthcare market which also allows the nurses to have the flexibility to work part-time yet earn the same or even more. This tool helps in increasing in-house staff utilisation by up to 20% and reduces staff scheduling by up to 70%. Radius™ uses end to end WFM analytics allowing customers to build a robust staffing model and creates

a pull environment where the nurses chase the customers, do comprehensive reporting and get dash boarding solutions at the click of a button. Lastly, it also allows the flexibility to provide continued care to patients from their choice of nurses.