Healthcare Innovation & the Digital Health Landscape in Latin and North Americas
Digital technologies such as data analytics tools and artificial intelligence (AI) systems can strengthen the innovation ecosystem. Not only are digital health technologies innovative on their own merits, they also further the impact of other innovations by helping to connect patients to appropriate services and new treatments. They can also support the innovation ecosystem by making drug discovery more efficient, improving communication with patients through digital channels and measuring the real-world effectiveness of breakthroughs.

– The Economist Intelligence Unit, 2018
Innovative healthcare trends for 2019

**Electronic medical records**
EMRs continue to be one of the biggest technological forces driving advancement in healthcare. Though most major systems have adopted the EMR by this point, we are just starting to scratch the surface of how this integrated technology can make patient care more streamlined and efficient.

**Blockchain systems**
The way in which Blockchain systems will impact healthcare in the future is to transfer data across health systems in ways that the Electronic Medical Records cannot. Stepping away from centralized patient data systems to "Blockchain" systems could take data sharing to a whole new level.

**Medical devices and telemedicine**
As IoT grows, and we collect health data on everything from our FitBits, to our smart scales, to the phones we carry 24/7, the potential for interaction between our EMRs and our technology increases. As we combine smarter and more medically accurate devices with advances in telemedicine, we may begin to see traditional doctor’s office visits becoming a thing of the past.

**Artificial intelligence (AI)**
Generally speaking, Artificial Intelligence (AI) will open the doors for humans and technology to connect in a way that we can monitor human activity more so than ever before. When it comes to healthcare, this means providers will be able to use artificial intelligence to treat patients on a whole new level.

**Voice applications**
Specialized players and leading tech companies are catching on with targeted voice technologies suited for healthcare industry use cases. Throughout 2019, HIPAA-compliant voice and chatbot applications for healthcare will gain prominence as these tech titans aggressively compete on voice solutions.

Source: Pennsylvania College of Health Sciences/Frost & Sullivan
Key figures for 2019

- AI for healthcare IT Application will cross US$1.7 billion by 2019
- Digital health tech catering to out-of-hospital settings will grow by 30% to cross US$25 billion market globally by end of 2019
- By end of 2019, 50% of all healthcare companies will have resources dedicated to accessing, sharing, and analysing real-world evidence for use across their organizations.
- By end of 2019, 5%-10% of healthcare-focused enterprise Blockchain applications will move from pilot stage to partial/limited commercial availability.

Market Synopsis – Latin & North Americas

In regions around the world, healthcare innovation is largely driven by rising costs, shifts in disease burden, and systemic challenges such as workforce shortages and lack of financing options. However, this plays out in very different ways around the world, due to differences in operating environments, culture, and financing that impact innovation and ease of market entry.

On a global level, a recent report by Prescient & Strategic (P&S) Intelligence observed that the global digital health market generated US$ 73.1 billion revenue in 2017 and is predicted to observe a tremendous growth, with a CAGR of 21.1%, during 2018–2023. Geographically, North America would hold the largest share of the global digital health market throughout the analysis period.

According to P&S Intelligence, the position of the North American digital health market can be attributed to the improving healthcare infrastructure, rising adoption of digital healthcare solutions, surging healthcare spending, and initiatives taken by various government associations for the implementation of digital healthcare technologies in healthcare facilities. Furthermore, IoT and other computational technologies require well-established information and communication technology (ICT) infrastructure, which is present in the region that helps in the growth of the digital health market in the region.

Meanwhile, a recent report by the Organisation for Economic Co-operation and Development (OECD) Development Centre titled “Start-up Latin America: Promoting Innovation in the Region”, noted that innovation growth is slower in Latin America than in OECD countries such as the United States, which can be attributed to both the financing and regulatory environments.

On average, Latin American countries invest a smaller percentage of GDP in research and development than OECD countries (0.63% versus 2.4% in 2009). Latin American banks are less likely to finance start-ups, and venture capital is less developed in Latin America than in the United States.

Within Latin America, Brazil is one of the most important healthcare markets with Global Market Insights predicting that the Brazilian digital health market will grow by nearly 28% between 2015 and 2024.
The emergence of the digital healthcare market has been driven by the growing demand for advanced healthcare services and, as a result, about 68% of the total Brazilian population has access to digital healthcare services. Wearable devices and mHealth apps have not completely replaced the medications but they have partially reduced the need for medications.

In an article published in Medium, Soledad Munoz Lopez, CIO of the Chilean Ministry of Health, explains that as Chile uses APIs to connect data, services, and apps wherever they are needed, the country will be well-equipped to adopt the next generation of healthcare technologies, whether applying machine learning to patient data or investing in self-service capabilities delivered via wearable devices.

“Because APIs provide a platform for combining software to create new services, initiatives such as public-private partnerships and hackathons promise to take Chile’s health sector in exciting and innovative new directions,” she says. “For Chileans throughout the country, connectivity will truly be the foundation for a healthy future.”

A report published by Innovations in Healthcare explored the healthcare landscape in Mexico with regards to innovation and found that many innovative healthcare models are emerging in the country, largely in response to the market gaps noted in the previous section.

According to the report, there is a wide range of innovative activity in the healthcare sector in Mexico, primarily in the private sector and a number of healthcare innovators in Mexico are using technology to increase reach to patients in a more efficient manner via telemedicine and enhance access to provider information.

Meanwhile, in reference to Colombia, the above report also describes how the growing emphasis on innovation and entrepreneurship within universities is spurring the development of new technologies across sectors, including healthcare. However, the report highlighted that many of these programs are still in early stages.

It also highlighted that several innovators have developed promising new technologies with the potential to be disruptive in Colombia as well as in other markets. These products include new diagnostics, biotechnology, and telemedicine offerings. In addition, several innovators have created new solutions that challenge the way products and services are currently delivered in the Colombian healthcare system, including new e-commerce platforms that reduce costs to consumers and health plans that provide faster access to healthcare.
The movers and shakers in digital health innovation

In North America…

- Silicon Valley startup Pr3vent has developed an AI-based system that can screen the retinal images of newborn babies to highlight potential eye conditions that require follow-up and treatment.

- Kore.ai offers smart bots for healthcare facilities. The digital assistant can connect patients to the right contacts directly, give appointment details or make any changes. It lets the patients easily refill prescriptions or pay bills and delivers lab, test or procedure outcomes or recommended next steps.

- Noteworth is a connected health platform that enables health organisations to prescribe virtual care models to their patients. They help clinicians collect and access contextualized patient-generated health data that improve care coordination and outcomes, reduces costs, and better engages patients.

In Latin America…

- Livox App provides assistance to the disabled people and has 10,000 users in Brazil. This app provides speech assistance to the people with speech-related disability and is available in more than 25 different languages.

- Argentina-based EntelaiPic offers revolutionary deep learning algorithms that can assist radiologists in identifying the most relevant cases, and can even suggest potential diagnoses, while providing structured reports for neurologists and physicians.

- Nubix aims at the management, storage and remote interpretation of imaging and radiology performed by specialists, connecting radiologists (at any time and anywhere) with public and private clinics and hospitals in Mexico.

- With Lentesplus, consumers in Colombia can purchase contact lenses that are prescribed to them by a doctor via phone or the Internet. Patients can pay to visit a certified clinic in the Lentesplus network for an eye consultation.
The future of innovation in healthcare

According to research from the Economist Intelligence Unit, new technologies such as telemedicine, personalized healthcare, and the interplay of data and AI are heightening the impact of innovations that all start with basic research, leading to the development and commercialisation of new drugs and treatments.

Further progress will require a blend of investments at each stage of innovation as the private and public sectors co-ordinate in ways that make healthcare both worthwhile for investors while serving the public good, the report continues.

Many stakeholders throughout the healthcare system have made significant advancements that directly improve healthcare, ranging from the development of innovative cancer treatments to the use of telemedicine to expand healthcare access. And there are signs of hope for funding innovations that will drive innovation across the healthcare system.
Healthcare Innovation Seminar at FIME 2019

For 2019, join your colleagues at FIME for a three-day seminar on Healthcare Innovation under the theme “Utilizing the best of technology to improve patient care”. This conference will identify technology trends, address key questions and provide solutions to implementing sustainable technology in the healthcare setting.

From this learning platform, delegates will:
- Discover new and upcoming trends in patient management
- Discover application of hi-tech solutions in hospital setting
- Review showcase of products and services and their applications
- Investigate the role of technology in improving patient engagement and health awareness
- Assess how disruptive technologies and innovations can impact the healthcare ecosystem
- Determine how connected health technologies can support delivery of new models of care, health and wellness

Topics to be discussed include developments on:
- Automation, AI
- Telehealth
- Wearables expand for health and wellness
- Digital therapeutics
- Ethical and policy challenges in digital health
- Genomics
- Big data and digital transformation

For 28 years, Florida International Medical Expo (FIME) has brought you new and refurbished medical equipment, hospital technology, products and supplies. From state-of-the-art imaging equipment to the most cost-effective certified pre owned medical equipment, FIME continues to be the leading healthcare business platform across the Americas

The 2019 edition of the show will take place from June 26-28, 2019 and will welcome 1,200+ exhibiting companies to showcase their latest innovations to 14,000+ healthcare and trade professionals.

Concurrently with the exhibition are 4 educational tracks and a variety of workshops and seminars for healthcare professionals to advance their knowledge and skills.

For more information, visit fimeshow.com