Digital healthcare

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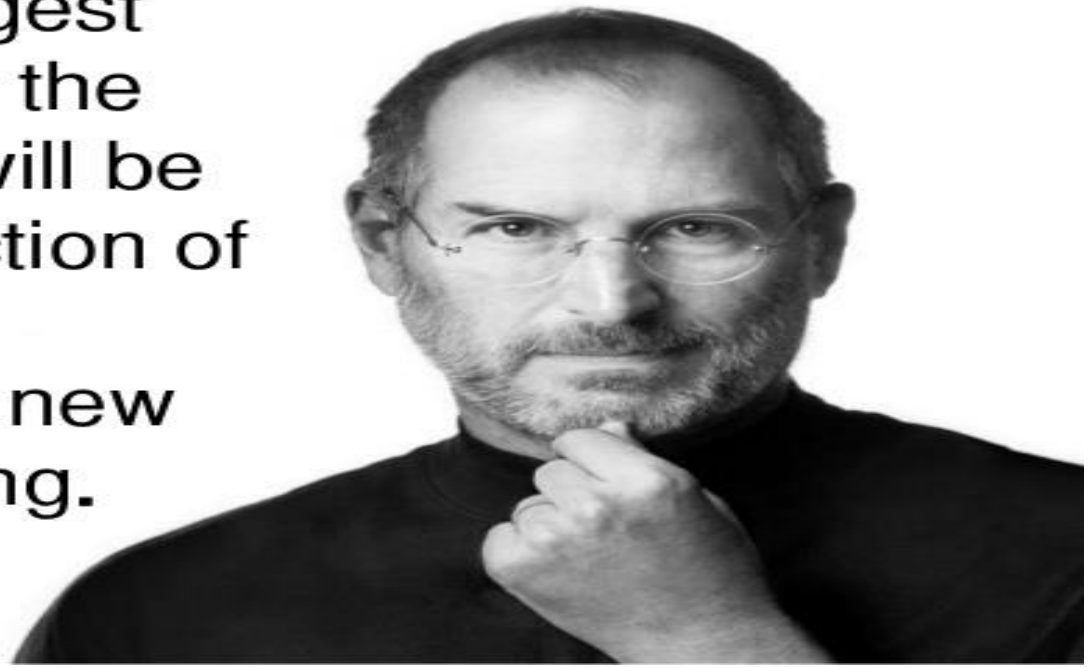
I think the biggest innovations of the 21st century will be at the intersection of biology and technology. A new era is beginning.



Digital healthcare

- Digital health refers to a system or solution that delivers effective health care solutions using IT tools and products. It is possible to provide better and more efficient care compared to traditional healthcare via patient online services and digital diagnostic techniques. Latest digital health technologies such as electronic health records (EHR), wireless technologies, and digital diagnostic systems encompass data such as patient history, medication, allergies, immunization dates, radiology images, diagnosis, laboratory and tests results, treatment plans, and insurance information

1.The Internet of Me: Your healthcare, personalized

Welcome to the era of personalized healthcare defined by meaningful and convenient individual health experiences.

2.Outcome Economy: Hardware producing healthy results

New intelligence is bridging the digital enterprise and the physical world. It's about more than technology; it's about delivering results.

3. The Platform (R)evolution: Defining ecosystems, redefining healthcare

Healthcare IT platforms capture data from disparate sources (e.g., wearables, phones, glucometers), and connect it to provide patients and caregivers a holistic and real-time view of your health.

4. Intelligent Enterprise: Huge data, smarter systems, better healthcare

A data explosion, accompanied by advances in processing power, health analytics and cognitive technology, is fueling software intelligence. Medical devices and wearables can now recognize, "think" and respond accordingly.

1 Data analysis for advanced healthcare diagnosis

2 Boston Children's Hospital connects doctors and nurses around the world via OPENPediatrics™

Today

People are shopping for health insurance online

Doctors are emailing patients

Clinics are screening patients to see how they react to certain medications based on their DNA

Tomorrow

Request meds from your smartwatch

Receive one simple bill for care

Get a real-time text alert that your blood pressure is too high

Access personalized plan options from your insurer

1.The Internet of Me: Your healthcare, personalized

MAIN ROLES OF DIGITAL HEALTH

- The main role of digital health innovations are as:
- Decreasing long-term healthcare costs
- Enabling better healthcare outcomes
- Create a more all-around view of health
- Empowering both the patient and the healthcare provider with real-time data
- Enabling the introduction of new contributors to the healthcare ecosystem

Today

- High-tech operating rooms allow tracking of patient, staff and tools so everything is at the right place at the right time
- Wearables provide customized feedback on your health
- Remote monitoring tools (blood pressure cuffs, glucometers) keep people safe and healthy in their homes

Tomorrow

- Bypass the lengthy check-in process by receiving a wearable band pre-appointment
- Use an app for turn-by-turn directions through a hospital facility
- Be notified of your caregiver and the wait time before a clinician even steps into the room

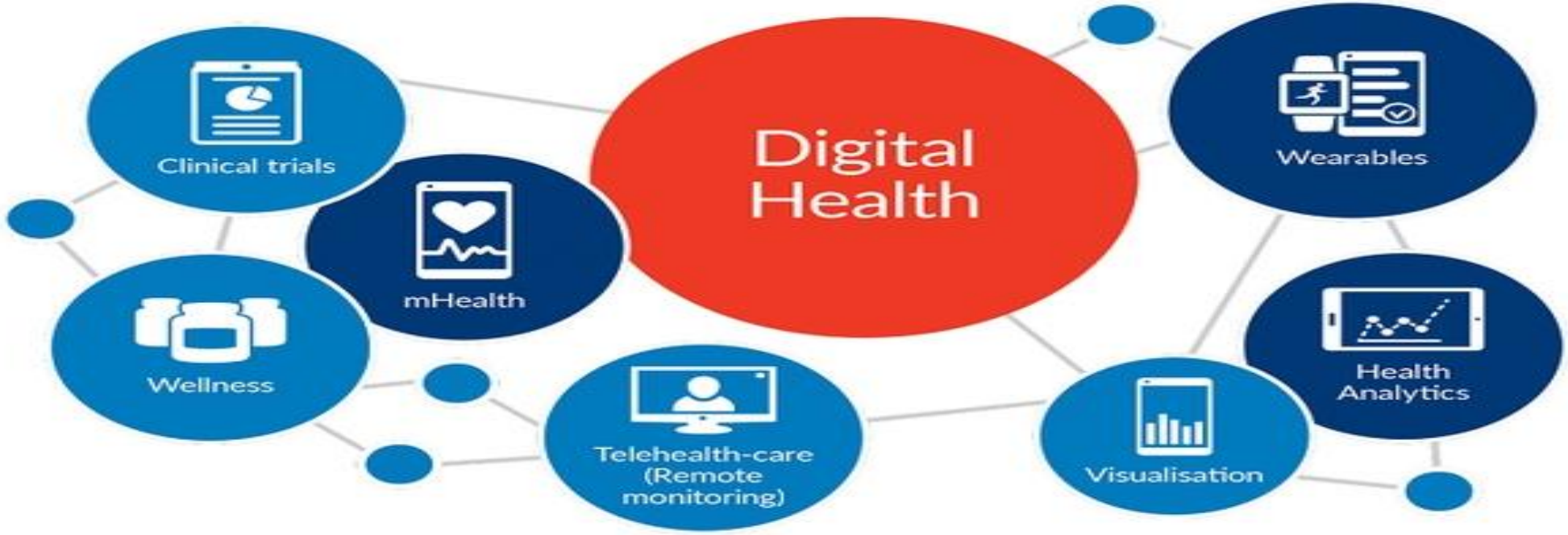
Benefits of digital healthcare

- Time-saving: Booking appointments on your phone is easier and less time consuming than calling your doctor for the same.
- Your appointments stay with you: You have a complete record of the appointments booked by you and for the people they were booked for. This reduces confusion and keeps your records intact.
- Environment friendly- Digital healthcare is more environment friendly since the use of paper is eliminated to the maximum.
- Your doctor: Select your preference of doctors based on your location so you don’t have to travel long distances in order to visit a doctor.

Key findings:

• In 2018, the mHealth technology segment held the largest revenue share owing to rising adoption of mHealth technologies among physicians and patients, increasing trend of preventive healthcare, and rising funding for mHealth startups

- • Digital health systems occupied the second largest revenue share in 2018 owing to rising government initiatives to promote digital health, resulting in an increased adoption of digital systems among healthcare systems
- • North America held the largest revenue share in 2018 owing to rapid growth in adoption of smartphones, advancements in coverage networks, rise in the prevalence of chronic diseases, and increase in geriatric population
- • Asia Pacific is expected to expand at the fastest CAGR over the forecast period owing to increasing penetration of smartphones and smart wearable devices and rising adoption of mHealth services
- • Key players operating in the digital health market include **Apple Inc.; AirStrip Technologies; Allscripts; Google Inc.; Orange; Qualcomm Technologies Inc.; Mqure; Samsung Electronics Co. Ltd.; Telefonica S.A.; Vodafone Group; Cerner Corporation; and McKesson Corporation**



Today

- Software is helping oncologists determine the right therapy for cancer patients
- Intelligent systems at hospitals securely connect data from multiple systems and devices
- Nurses are able to spend more time with patients

Tomorrow

- Take a picture of your rash and health analytics will help triage the issue
- Get diagnosed by a machine that detects you are running a fever
- Access your electronic medical record to enable more personalized protocols

Robots as a surgeon

- Robots will not replace surgeons in near future but Involving them as an assistant will improve precision & safety

Proactive Treatment Plans

- Can act as a personalized medical advisor
- Looks into medical records & lab tests to analyse patient's condition to identify potential threats & suggests the right solution

Drugs Discovery

- Analyse the results of previous attempts & guide the process of finding new medicines in the right direction

Digital Diagnosis

- Past data from similar cases can be compared & analyzed with patient's condition to diagnose disease

Image Processing/ Analysis

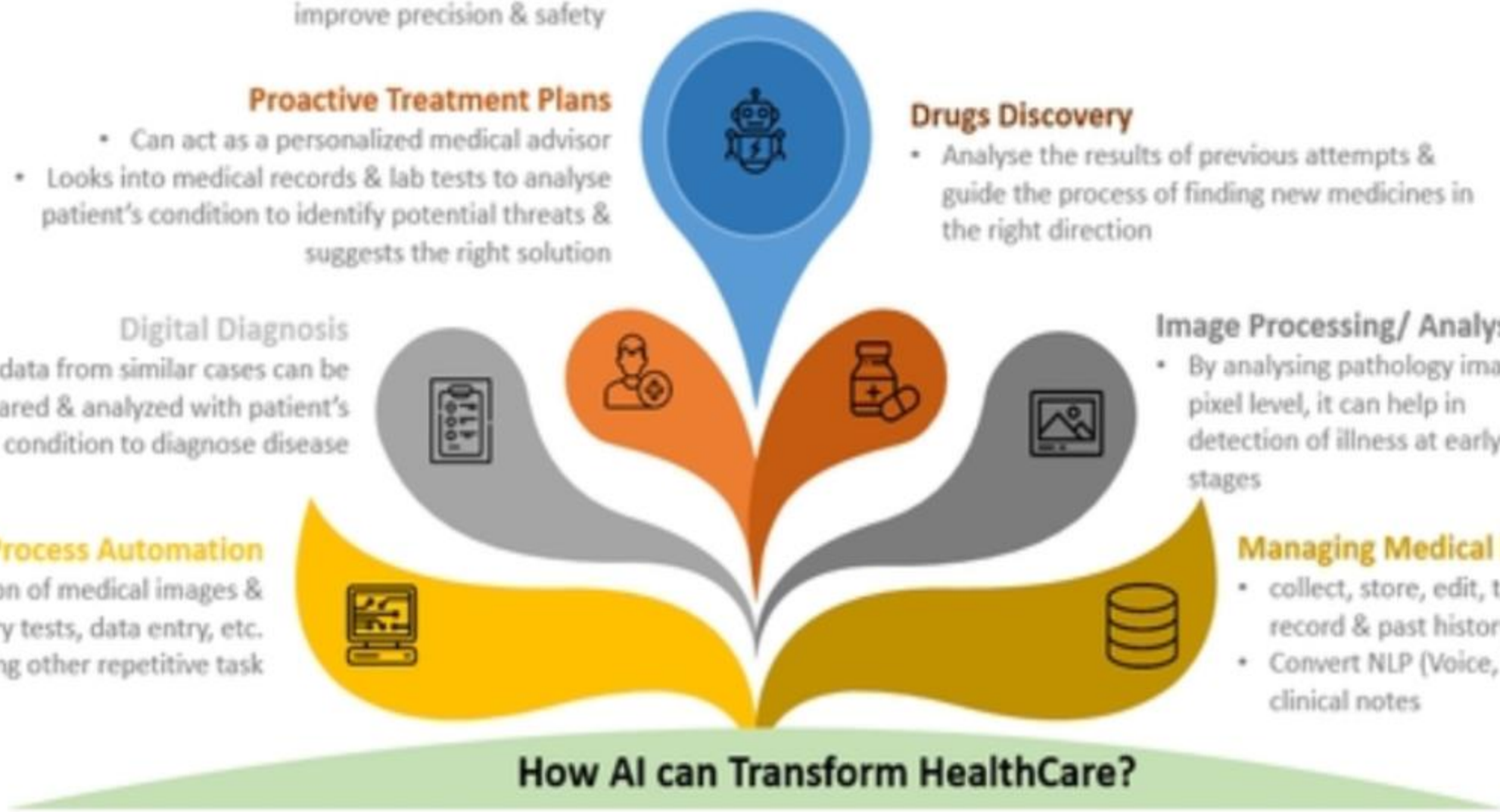
- By analysing pathology images at pixel level, it can help in detection of illness at early stages

Robotics Process Automation

- Examination of medical images & laboratory tests, data entry, etc.
- Automating other repetitive task

Managing Medical Data

- collect, store, edit, trace medical record & past history
- Convert NLP (Voice, Text) into clinical notes



How AI can Transform HealthCare?

- Amalgamation of AI with humane touch won't eliminate doctor – It will provide assistance & bring more precision
- By such amalgamation healthcare will go towards prevention instead of treatment/ cure

Artificial intelligence use in healthcare!

- ***Early Detection:*** *AI is used to detect diseases like cancer and more accurately and in their primary stage. This early detection of diseases helps to better patient care and understanding of the disease stage as well as cure.*
- ***Robot-Assisted Surgery Process:*** *Cognitive surgical robots can use information from different surgical encounters to enhance surgical techniques. Several medical teams can get insights into useful data from pre-operative medical records. This technique is useful to reduce the scope of error and time of treatment.*
- ***Automated Image Diagnosis:*** *Over the last years, AI has helped in the progress of medical imaging. Many times, the storage of medical images is creating a problem.*
- ***Dosage Error Reduction:*** *It is very important to prescribe the dosage of the patient accurately, or else there might be penalties to pay. Thus, it helps to decrease the margin of medical errors that may occur while giving medicines to patients.*
- ***Drug Creation:*** *Drug creation and discovery is one of the most trending applications for AI in healthcare. Generating different avenues of pharmaceuticals by using clinical trials can use excessive money and time.*

- Artificial intelligence in healthcare is poised to deploy trillion gigabytes of medical data for generating valuable insights beyond human intelligence. Business Insider Intelligence report suggests that AI spending in healthcare is expected to grow at 48% between 2017 and 2023. AI-powered machine learning models are improving the diagnostic abilities of doctors and ensuring effective delivery.
- Machines are beginning to surpass human foresightedness with advanced algorithms. Under AI's vast umbrella, machine learning algorithms are capable of sifting through unstructured data and identifying patterns to generate relevant insights.
- Early diagnosis of health risks, diseases, and rare conditions is a major challenge for medical professionals. However, with the advent of **AI's predictive analytics techniques**, doctors are able to gauge the probability of certain health risks.
- **How does Oodles use Artificial Intelligence in healthcare to strengthen diagnosis?**
- We, at Oodles AI, practice **data-driven predictive analysis** powered by machine learning algorithms for accurate and timely prediction of health conditions. We are adept at training **ML models with Electronic Health .**

Thank you