Abstract

How healthcare can benefit from the changes in information technology applied to medical data – patient records, clinical trials, pharmaceutical research and government objectives in population determinants of health.

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Abstract:

A digital citizen represents an individual in terms of information collected by third parties.Similar to a passport or profile, this data is how external systems and agencies can interact and provide services. It can come from financial, social, government and healthcare providers. Data from each is fed into a multi-dimensional view of the person, with the information under the control of the digital citizen for reasons of privacy, regulation and monetization.The opportunity to create a health ecosystem to support anydigital citizen is of uttermost importance. The collective goals areto improve transparency, treatment efficiencies, provider productivity, better medical outcomes, with an additional objective - self-learning. The health care sector, all of its components and stakeholders, benefit from such a platform that protects privacy to make the healthcare more efficient and effective.

Current Healthcare Costs

In 2017 the U.S spent $3.5 trillion in health care or $10,739 per person,representing 17.9% of the nation's Gross Domestic Product (GDP). The Center forMedicare and Medicaid Services and its National Health Expenditure Data forecaststhat the healthcare spending in the U.S. is projected to grow at an average annual rateof 5.5 percent for the period 2018 -2027 reaching nearly $6.0 trillion by 2027 (20% ofGDP.)Despite these expenditures and the abundance of medical technologies, the U.S. was ranked31st on life expectancy among 200 countries surveyed by the World Health Organization (WHO) in 2016. These disappointing numbers reflect communication shortfalls, data standards and data transfer problems among stakeholders in different health care systems.The opportunity to empower individuals to understand their health goes beyond the information found on their medical record. Providing access to aggregated health and other health impactful data (i.e. social determinants of health) driven by personal health information provides an opportunity to create a continuum of care. This increases efficiencies, improve outcomes and mitigate the occurrence of preventable negative clinical events. From reducing medical errors created by the providers to patient involvement on their health and their community social determinants

of health, the digital citizen empowers the health ecosystem tocreate a self and ever learning process platform (i.e., machine learning and AI).

Case Example – Medication

Patient medication non-adherence is a vivid example of how the health care system currently fails to use the resources in an effective manner.Medication adherence is of crucial importance to support the care of patients with chronicdiseases. It is hampered by,

▯ the disconnect between different providers prescribing different medications,

▯ the lack of real time feedback on side effects from the patient to the providers,

Biography:

Joxel Garcia MD, MBA, 14th Assistant Secretary for Health in the US Health and Human Services, Four Star Admiral in the US Public Health Service. He previously served as Deputy Director of the Pan American Health Organization (PAHO)/Regional Office Western Hemisphere for the World Health Organization. Among his other roles were Commissioner of Health for Washington DC, Commissioner of Health for the State of Connecticut, Executive Director of the MD Anderson Cancer Control and Prevention Platform and member of the Moonshots leadership team, and Chief Medical Officer at American Express.

Publication of speakers:

1. MD Anderson Cancer Prevention and Control Platform

2. Advancing Quality Improvement in Public Health