HEALTH CARE IN 2050: Four Themes

1) Populations engaged in their health and wellness

Includes: This appears to be a natural progression of patient engagement, in which patients play an active role in deciding the course of their care. It extends beyond "patients" in the sense of one being treated for a condition to encompass "healthy" people as well. This being the case, much of the engagement is toward health maintenance and disease prevention.

What it looks like:

- Wellness Apps
- Online, accessible, transparent personal health records
- Broader concept of a health service provider (from nurse and doctor to wellness coach and counselors)
- Social network communities for specific conditions

Drivers:

- Greater appreciation of lifestyle factors contributing to health (and increased proportion of disease burden due to chronic conditions)
- Greater cost sharing (High-deductible insurance plans)
- Greater availability and access to personal health information
- Move toward value-based health care model (e.g., from fee-for-service to pay-for-performance, 80/20 model of eliminating conditions in the 80% of the condition's lifespan when it is preclinical)

Challenges:

- Engaging all segments of the population, particularly those with low health literacy
- Motivating individuals to become engaged

2) Personalized medicine

Includes: ability for a patient to obtain a treatment optimized based on their individual characteristics, such as genetic makeup, microbiome, and environment. Individual characteristics may also be used to predict future disease conditions and allow for pre-emptive interventions. In combination with the above trend, this may be more of the ability to practice prevention (e.g., diet, exercise, sleep, vitamins) based on individual characteristics, this has been called "personalized preventive health maintenance"

What it looks like:

- Genetic profile in medical record
- Individually tailored prescriptions and treatments
- Predictive models of health conditions

Early diagnosis and treatment based on constant monitoring (e.g., from wearables, Alexa)

Drivers:

- Advancements in ability to typify an individual based on genetics, microbiome, etc. resulting from large-scale research
- Biological and behavioral feedback from phones, devices, and wearables
- Access to big data, and techniques to find patterns in it (e.g., machine learning)
- Consumer genomics (e.g., 23andMe)
- Move toward value-based health care model

Challenges:

- Engaging all segments of the population, particularly those under-represented in research or without means for technological monitoring
- Privacy and security

3) Convenient care

Includes: A more streamlined and efficient process for delivering health care. Telemedicine, home delivery of treatments (e.g., vaccines, prescriptions, lab test kits), and remote operations will have a substantial role. Local "Brick and mortar" neighborhood health centers that can quickly provide a broad range of services, however, may also have a role in delivering health care to populations who are less tech savvy.

What it looks like:

- Telemedicine
- Quick delivery of medical goods
- Neighborhood service centers capable of delivering a broader range of services in a timely manner

Drivers:

- Advances in technology and logistics
- Amazon entering health care marketplace
- Move toward value-based health care model
- Cultural acceptance of technology to deliver medical care

Challenges:

• Engaging all segments of the population, particularly those with less access to technology

4) Whole-person (or even whole-community) approach to health care

Includes: health care providers considering a person's overall health and wellness rather than focusing on a condition. In combination with item 1, above, this involves health care providers addressing the social determinants of health, such as housing and social life to create a delivery system much more integrated with the broader community system that produces health.

What it looks like:

 Health care providers involved in provision of non-traditional services, such as housing, job placement, recreation, and social activities

Drivers:

- Greater appreciation of social determinants of health contributing
- Greater understanding of interconnectedness of mental, physical, and social health conditions.

Challenges:

Engaging all segments of the population, particularly those...

Broader trends that will affect how the abovementioned themes are realized:

- Population demographics: We can also look projections by age, sex, and race/ethnicity from the CA Dept. of Finance Demographic Research Unit: http://www.dof.ca.gov/Forecasting/Demographics/projections/
- Climate change
- Health care marketplace

Sources

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