Healthcare Consumerism

Converging Trends and Privacy Challenges

Jing Wang MacKenzie, MD, MHA
September 29, 2014

Prepared for Carnegie Mellon University
US Healthcare is Ripe for Reform

Predicted healthcare spending uncontained
– Over $3 trillion for 2014 (almost equal to Germany’s entire GDP).
– Around $4.5 trillion by 2020.

People living with chronic disease increasing
– Around 133 million in 2013.
– Around 157 million by 2020 (around half the population).
– Around 81 million will have multiple conditions.
– Proportion of aging population (60 yrs and older), expected to increase from 11% (2009) to 22% (2050), and would create additional demand for healthcare services

Primary care provider shortage worsening
– Nearly 52,000 additional primary care physicians needed by 2025, in comparison to 2010.
– If the system for delivering primary care in 2020 were to remain fundamentally the same as today, there will be a projected shortage of 20,400 primary care physicians.

Sources:
3. About chronic diseases, National Health Council, 4 Nov 2013
The Asymmetry of Healthcare Spending versus Quality

TOTAL MEDICARE REIMBURSEMENTS PER ENROLLEE, BY ADJUSTMENT TYPE (Adjustment Type: Price, Age, Sex & Race; Year: 2010; Region Level: HRR)

CMS HOSPITAL COMPARE SUMMARY QUALITY SCORES, BY CONDITION (Condition: Overall; Year: 2007; Region Level: HRR)

Source: The Dartmouth Atlas of Healthcare
Disproportionate Cost Burden on Individuals

Cumulative Increases in Health Insurance Premiums, Workers’ Contributions to Premiums, Inflation, and Workers’ Earnings, 1999-2012

Clear and Steady Trend toward Value-Based Care

“Accountable Care Organizations are ... Providers who are jointly held accountable for achieving the measured quality improvements and reductions in the rate of spending growth.”

- Mark McClellan, MD, former Administrator for the Centers for Medicare and Medicaid Services

Source: Leavitt Partners Center for Accountable Care Intelligence
People with functional limitations and chronic conditions were over four times as likely to be in the top 5 percent of spenders as the general population.

Source: http://aspe.hhs.gov/daltcp/reports/2010/closerlook.htm#top
Targeted Care Model and Realty Gaps

Facts:

• Fifty percent of Americans don’t get the recommended preventive care and screening tests that science recommends.¹
• 60 percent of referrals go unscheduled² and 25% of scheduled appointments are missed.³
• 42 percent PCPs report not having enough time with their patients.⁴

Source:
2. 2009 – 2011 Annals of Internal Medicine
Higher Patient Activation Links to Better Care Outcome

<table>
<thead>
<tr>
<th>Event</th>
<th>More Activated Patient</th>
<th>Less Activated Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readmitted to the hospital within 30 days of discharge</td>
<td>12.8%</td>
<td>28%</td>
</tr>
<tr>
<td>Experienced a medical error</td>
<td>19.2%</td>
<td>35.8%</td>
</tr>
<tr>
<td>Have poor care coordination between health care providers</td>
<td>12.6%</td>
<td>41.8%</td>
</tr>
<tr>
<td>Suffer a health consequence because of poor communication among providers</td>
<td>13.2%</td>
<td>48.6%</td>
</tr>
<tr>
<td>Lose confidence in the health care system</td>
<td>15.1%</td>
<td>59.8%</td>
</tr>
</tbody>
</table>

Source: Patient Activation and Engagement for ACOs, Judith H. Hibbard, PhD, adapted from AARP’s “Beyond 50.09” Patient Survey.
Behaviors of Healthcare Consumers State a Paradox

72% Most concerned about affordability
30% Willing to change care setting or doctors to save costs
81% Want help in improving their health and wellness
40% Do not identify going to the doctor for regular checkups as a top priority

Source: 2012 Accenture Healthcare Consumer Survey
Lifestyle a Major Contributor to Health Status

The estimate to the left is presented by Center for Disease Control as an estimate, while the precise numbers remain unknown.

Source: http://www.cdc.gov/socialdeterminants/faq.html
Patient to Consumer a Transformation Journey

On-line Consumer Segmentation by Market Value
Most in Need = Least Digitally Invested

Suffer from a serious or chronic condition; they are the segment most likely to be obese; and they are the oldest. They consume a lot of medical care: Not only have 92% visited a doctor’s office in the past year, but 37% have been to the ER.

Source: http://blogs.forrester.com/gina_fleming/14-07-11-the_data_digest_introducing_forresters_consumer_healthcare_segmentation
Consumerism – Bifurcated Definitions

• Health consumerism is a movement which advocates patients’ involvement in their own health care decisions (Wikipedia).

• Healthcare Consumerism is ... about supplying the information and decision support tools (employees) need, along with financial incentives, rewards, and other benefits that encourage personal involvement in altering health and healthcare purchasing behaviors (The Institute for HealthCare Consumerism).
Maturity Levels of Healthcare Consumerism

Digital Connectivity vs. Consumer Control

Incentivized
- Financial risk sharing
- General health education

Informed
- Cost transparency
- Access to personal health records

Engaged
- Direct purchasing
- Shared care decision making
- Self-care enablement
Consumerism a Main Driver for Digital Health Growth

**DRIVEN BY HEALTH REFORM**

**Top six trends of digital health (2014 YTD)**

- **PAYER ADMINISTRATION**
  - Management and administration tools for payers
  - $211M

- **DIGITAL MEDICAL DEVICES**
  - Software/hardware designed to treat a specific disease or condition
  - $206M

- **ANALYTICS AND BIG DATA**
  - Data aggregation and analysis to support a wide range of healthcare use cases
  - $196M

- **HEALTHCARE CONSUMER ENGAGEMENT**
  - Consumer tools for the purchasing of healthcare services or health insurance (B2B and B2C)
  - $193M

- **POPULATION HEALTH MANAGEMENT**
  - Comprehensive platforms for managing the health of populations under the shift to risk-based payment models
  - $162M

- **PERSONALIZED MEDICINE**
  - Software platforms to support the delivery of medicine customized to an individual’s genetics
  - $150M

Consumer Access to Digital Health Information Becoming a Norm

Digital Health Activities over the last 12 Months
U.S. Broadband Households

- Looked up health info online
- Used provider or insurer website
- Used website for appointments, lab results, or prescriptions
- Used health app
- Used device to track health patterns
- Stored health information electronically
- Communicated electronically with healthcare or health insurance professional
- Participated in online support group

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http://www.parksassociates.com/events/connected-health/media/chs-2014-pr1, dated April 9, 2014
Higher Level of Direct Care Participating is Desired

**Consumer Interest in using innovative health information technologies, 2012**

- **Videoconferencing for follow-up visits**
  - Strong interest (ratings of 8–10): 44%
  - Interest (ratings of 6–10): 67%
- **Self-monitoring device to check condition and send information to doctor electronically**
  - Strong interest (ratings of 8–10): 41%
  - Interest (ratings of 6–10): 62%
- **Videoconferencing for sick visits**
  - Strong interest (ratings of 8–10): 34%
  - Interest (ratings of 6–10): 56%
- **App that enables access to medical records and treatment information**
  - Strong interest (ratings of 8–10): 28%
  - Interest (ratings of 6–10): 44%
- **App to set and track progress toward health improvement goals**
  - Strong interest (ratings of 8–10): 26%
  - Interest (ratings of 6–10): 41%
- **App that reminds you to take medication**
  - Strong interest (ratings of 8–10): 26%
  - Interest (ratings of 6–10): 40%

Source: Deloitte analysis

Digital Ecosystem Supporting Healthcare Consumerism

Example systems and owners:

**Managed by Providers**
- EHR/Tethered PHR
- HIE
- Labs
- Telehealth & Home Monitoring
- Patient Portals

**Managed by Payers**
- Membership & Eligibility
- Claims
- Disease Management

**Managed by Employers**
- HRAs
- Worker’s Comp
- Group Benefit & HSA

**Managed by Consumers**
- Wellness Sensors & Tracker Apps
- Standalone PHRs

Courtesy: Philips Digital Health Platform
Complex Data Flow Under Complex and Uneven Regulatory Protection

Non-Exhaustive List of Laws/Regulations

- Federal Privacy Act
- HIPAA & HITECH
- 42 CFR Part 2 regarding drug and alcohol program records
- Clinical Laboratory Improvement Amendments (CLIA)
- Genetic Information Nondiscrimination Act (GINA)
- FTC PHR Breach Notification
- State laws

Secondary Data Use Boundary Blurred at Best

• Lack of legal clarity and regulatory uniformity
• Large flexibility given to information operators
• Mixed incentives seed distrust
• Market thirst for data mining
Data Segmentation for Privacy a Limited Promise

• DS4P project established to give more privacy control to patients
• Two-year initiative end in May 2014 with successful pilots
• Managed by the Office of the National Coordinator for Health IT to demonstrated how patient can granularly manage the sharing of sensitive patient data, such as mental health and substance abuse information.
• Use Industry standards to tag and manage access to structured data
• Access rules based on regulatory, organizational policies and individual preferences.

Not Addressed:
• Unstructured data difficult to manage
• Personal sensitivity varies greatly and challenging to uniformly tag
• The Swiss cheese EHR can be dangerous to patient safety
Exponentially Expanded Scope of Third-Party Management

- What and what consent is needed from consumers?
- How can the 3rd party privacy policy be enforced?
- What kind of disclosure transparency is available to consumers?
- What happens when that user consent is revoked?
- What can be expected for cooperation in event of data breach?
The Question

How will innovation enable healthcare consumers with tools that are affordable, intuitive to use, and effective with privacy protection?
About Me

• Currently a Principal of Philips Healthcare Transformation Services, a fully owned management consulting practice
• 18 years in Healthcare including clinical, technology and management consulting fields
• Formerly VP of Aetna Accountable Care Advisory Services, Health IT/Privacy Commercial Practice Lead at Booz Allen Hamilton, and Director of Care Delivery Information Security/Enterprise Architect at Kaiser Permanente
• Co-founder of Medical Device Innovation, Safety and Security Consortium
• Served as a member of the Advisory Committee to California Attorney General’s Recommendations on Prevention, Detection, and Mitigation of Medical Identity Theft
• Served as a voting member of the Security Committee of the California Privacy and Security Advisory Board (CalPSAB.)
• Contact: Mackenziejing@gmail.com

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