Digital Health Strategies, Health Disparities and Health Equity: The Promises and Perils of Technology

IOM Roundtable on the Promotion of Health Equity and the Elimination of Health Disparities

Policy and Technology Considerations
Tessie Guillermo, ZeroDivide

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About ZeroDivide...

ZeroDivide is a mission driven consulting organization helping communities transform through the adoption and integration of technology....

@ehealthequity
@zerodivideorg
The integration of HIT and eHealth is prompted by policy and regulation, but even more so, the industry itself is requiring more and more rapid change.
Health IT is at the Core of Population Health Management

- Define Population
- Identify Care Gaps
- Risk Stratification and Predictive Modeling
- Engage Patients
- Manage Care
- Measure Outcomes

- Data Integration
- Analysis
- Reporting
- Communications
Patient Centered eHealth Ecosystem
ELEMENTS OF TRANSFORMATION FOR
POPULATION HEALTH MANAGEMENT
Presented by ZeroDivide

CONSUMER FACING PROCESSES

- Social Media
  - Promote services to new consumers
  - Share stories
  - Build communities

- Consumer Experience
  - Ensure cross-connectivity w/ social service agencies & behavioral health
  - Personalize the customer experience
  - Promote health literacy

- Mobile
  - Text and App usage to:
    - Extend care
    - Promote services
    - Provide customer service

OPERATIONAL PROCESSES

- Analytics
  - Target marketing
  - Identify at-risk populations
  - Optimize revenue
  - Improve quality

- Automation
  - Monitor operations in real time
  - Control integration
  - Secure access management
  - Establish standards

- Internal Collaboration
  - Active knowledge sharing
  - Use of social networks
  - Video conferencing

Data Integration
- Consumer data (ecosystem)
- Other data (finance, quality, etc)

EVALUATION: Underpins all activities

THE PATH TO DIGITAL MATURITY
Patients Want to Self-Manage Online

- **Prescriptions**: The majority of patients want to refill prescriptions through digital channels. 73% use mobile channels.

- **Reminders**: The majority of patients want to receive digital reminders for preventative or follow-up care. 88% use email.

- **Appointments**: The majority of patients want to book, change, or cancel appointments through digital channels. 72% use websites.

Source: The Accenture Connected Health Pulse Survey, 2012
Three main types of eHealth Tools

- **Tethered PHRs and Patient Portals**
  - Provide access to patient data
  - Linked to EHR systems
  - Enable patient-MD communications

- **Disease Management Tools**
  - Focus on chronic disease
  - Not linked to EHR systems
  - Pilot programs without scale

- **SMS Messaging**
  - Focus on simplicity
  - Rx adherence, appt reminders
  - Public health announcements
  - Subscription-based
SMS and eHealth Apps: A lack of scale

- Evidence shows SMS and disease management apps are effective in reaching underserved patients and improving their engagement.
- However these solutions have yet to be brought to commercial scale by large health systems and insurers.
- Apps are not tied to existing hospital and health system records, presenting challenges.
- They have been implemented primarily via pilot programs run by departments of health and academic medical centers.
• Ownership is high, regardless of race, age, education, income

**Race**

- White
- Black
- Latino

**Education**

- High school
- Some college
- College

**Age**

- 18-29
- 30-49
- 50-64
- 65+

**Income**

- <$30k
- <$50k
- <$75k
- $75k+
PHRs and Portals: *Poor design*

- Most commonly used eHealth tools hold significant potential to engage and empower patients
- Tied to successful enterprise EMR systems, meaning safety net providers are less likely to offer them
- Significant demographic disparities in their adoption even within integrated health systems
- Generally poor usability and design when compared with web 2.0 tools and mobile apps
Barriers to eHealth Adoption

**Digital Divide**
- Access to broadband and mobile data
- Access to technology platforms
- Interoperability of tools across platforms

**Design and Usability**
- Linguistic/cultural competency of tools
- Limitations caused by disability
- Technological literacy

**Education and Awareness**
- Patient awareness of eHealth and incentives
- Physician awareness and incentives
- Health literacy
- Privacy concerns and distrust
Low-income women of color living with a chronic condition

Use and have regular access to Internet-connected technology.

Feel discouraged by current eHealth tools.

Demand personalized, culturally competent technology solutions.
Programmatic Recommendations

- Improve the digital literacy of consumers and safety net providers
- Support eHealth tools that feature user-centered design
- Support technology capacity building for safety net providers.
Complementary Policy Approaches

Top-Down

*Federal eHealth Policies*
- Meaningful Use requirements
- Innovation grants and funds for eHealth pilots
- Central database/registry of approved education resources and apps

Bottom-Up

*Community eHealth Programs*
- Community-led marketing and awareness campaigns
- Forums to bring patients and developers together
- Community eHealth pilots
THANK YOU!

Tessie Guillermo
tessie@zerodivide.org
415-773-0388
@tmguillermo
www.zerodivide.org
@zerodivideorg