Unleashing the Power of Data, IT, and Innovation to Improve Health

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There has never been a better time to be an innovator at the intersection of health, data, & IT

New Incentives + Information Liberation = Rocket Fuel for Innovation
New incentives, part 1: “Meaningful Use”

Medicare/Medicaid incentive payments rewarding “meaningful use” of EHRs (not purchase of EHRs alone)

- Physicians: $44,000/$63,750
- Hospitals: $2M plus bonuses for higher Medicare, Medicaid volume
- Escalating requirements – Stages 1, 2, 3
- Over 150,000 providers have registered to participate thus far
New incentives, part 2: The Affordable Care Act and payment reform

• True transformation of the health care system depends on changing how we pay for care

• The Affordable Care Act will drive a shift from “pay for volume of services” toward “pay for health and value”

• Law launches an array of key payment reform programs + a game-changer: the Center for Medicare and Medicaid Innovation
Payment reforms will motivate and reward innovation at a whole new level

Patient Centered Medical Homes
• Organized outpatient care, coordination and team-based approaches

Accountable Care Organizations
• Shared savings; redesigned care processes for high quality, efficient delivery

Bundled Payments
• Pilot program for episodes of care; incentivizes reduced costs around eight conditions

Readmission Reduction Programs
• Motivates hospitals to engage with care coordinators and better organize delivery systems

IT Innovations Needed:

- Timely Clinical Data, Decision Support
- Care Integration Tools
- Technology to Extend Physician Reach
- Consumer Engagement Tools/Platforms/Apps
- Data Mining/Analytics
Information liberation, part 1: rising patient data liquidity

The Direct Project

- Collaborative, open project to develop a simple method for enabling secure transmission of health information via the Internet
- Launched 3/10, specs posted 6/10, first “secure health care email” production transaction 1/11
- Now being implemented by 65+ vendors representing over 95% of the EHR base of the US, key consumer platforms, etc.
- Go to directproject.org to learn more
Information liberation, part 1: rising patient data liquidity (continued)

"Blue Button"

- The ability for any veteran, Medicare beneficiary, or military beneficiary to download an electronic copy of their own personal health or claims information
- Launched 10/10, utilized by over 500,000 unique users thus far
- Also being adopted by Aetna, United Health, Walgreens, RelayHealth, Vermont, etc.
- Go to bluebuttondata.org to learn more
Information liberation, part 1: rising patient data liquidity (continued)

Improved Patient Access to Lab Data

- New proposed CLIA rule announced by HHS 9/2011

- Would give patients the right to get their own test results directly from the labs that generate them
Information liberation, part 2: increasing market transparency

Key early requirement of the Affordable Care Act
First website to compile comprehensive inventory of private and public health coverage options across the U.S. for consumers
Initial version deployed 7/10

Insurance pricing and benefits info added 10/10
Significantly enhanced clinical provider quality information on the way
Information liberation, part 3 -- the Health Data Initiative (HDI): turning HHS and our sister agencies into the “NOAA of health data”

Weather data

• Weather newscasts
• Weather websites
• Weather mobile apps
• Weather insurance
• And more

Made available to the public
Health Data Initiative core activities: liberate data and catalyze innovation

1. Publish brand new HHS data for public access – while rigorously protecting privacy and confidentiality

2. Make existing HHS data much more accessible -- “machine-readable,” accessible via application programming interfaces (APIs), free, much easier to find

3. Energetically publicize our data to innovators -- who can use it as raw material to develop applications and services that help improve health and health care
What kinds of data are we liberating?

Community Health Data Example:

- Health Indicators Warehouse, at healthindicators.gov
- 1,170 metrics of community health and health care performance
- Launched 2/2011
What kinds of data are we liberating?

HHS Data Being Liberated

- Govt Spending
- Community Health
- Provider Directories & Quality
- "Blue Button"
- Medical/Scientific Knowledge
- Consumer Product Information

Provider Directories & Quality Data Examples:

- Nationwide directories of care providers
- Provider quality COMPARE APIs at data.medicare.gov, launched 9/2010
- Medicare claim files for provider quality measurement, launched 1/2012
What kinds of data are we liberating?

HHS Data Being Liberated

- Govt Spending
- Medical/Scientific Knowledge
- Community Health
- Provider Directories & Quality
- Consumer Product Information
- “Blue Button”

“Blue Button” Data

- VA, HHS, DoD joint venture
- Allows veterans, Medicare beneficiaries, and active duty military to download their own claims or personal health information
- Launched 10/2010
What kinds of data are we liberating?

HHS Data Being Liberated

- Govt Spending
- Community Health
- Medical/Scientific Knowledge
- Provider Directories & Quality
- “Blue Button”
- Consumer Product Information

Consumer Product Information Examples:

- FDA recall (drugs, devices, food) data in downloadable XML format --published 10/2010
- Health insurance products available in the individual and small business markets across the U.S. – made available via downloadable files 8/2011
What kinds of data are we liberating?

Medical/Scientific Knowledge Examples:
- National Library of Medicine API Portal, deployed 9/2010, including ClinicalTrials.gov and Pillbox APIs
- Medline Plus Connect, launched 11/2010
What kinds of data are we liberating?

HHS Data Being Liberated

Govt Spending

Community Health

Provider Directories & Quality

“Blue Button”

Medical/Scientific Knowledge

Consumer Product Information

Govt Spending Data Example:

- Medicare claims “basic standalone files” – first-ever claim-level files (“slimmed” for privacy protection), available for free public download for all major types of care as of 5/2011
HealthData.gov, the one-stop place to get all of our free, publicly available data, launched 2/2011
Publicizing our data to innovators across America

- Challenges and “code-a-thons” (health2challenge.org)
- Many innovator “meetups” and conferences
- Annual “health datapaloozas”
The June 9, 2011 Health Data Initiative Forum

• 2\textsuperscript{nd} annual “health datapalooza” -- sponsored by the Institute of Medicine and HHS

• Showcased 50 of the best innovations developed by companies that help consumers, care providers, employers, and communities improve health and health care

• Featured major announcements by nearly 20 additional companies and other organizations
Examples: helping consumers take control of their health and health care

- iTriage
- Healthline
- Vitals.com
- Patients Like Me
- Asthmapolis
- Food Oasis
Examples: helping care providers deliver better care (and succeed as accountable delivery systems)

- Aetna
- Essence Group/Lumeris
- Doximity
- Press Ganey
- Rise Health
- ElizaLIVE
Examples: helping communities improve health

- Ozioma
- ESRI
- Network of Care for Healthy Communities
- Palantir/CDC
Selected announcements at the Forum

- Walgreens “Health Guides” + challenge
- Aetna Foundation challenge
- Sanofi Aventis diabetes challenge
- NCIIA Nursing Home of the Future “invent-a-thon”
- University of Michigan: nation’s first consumer health informatics masters degree program
- Startup Health: new health startup “seed accelerator/entrepreneurship academy”
- New “Health Data Consortium”
Founding members of the Health Data Consortium

- Academy Health
- California HealthCare Foundation
- Consumers Union
- ESRI
- Gallup-Healthways Well-Being Index
- Grantmakers in Health
- Health 2.0
- InnoCentive
- Institute of Medicine
- Lucile Packard Foundation for Children’s Health
- Mayo Clinic Center for Innovation
- National Association of Counties
- O’Reilly Media
- Robert Wood Johnson Foundation
- U.S. Department of Health and Human Services
HDI goal: a self-propelled, open “ecosystem of innovation” using data to improve health (and create jobs of the future)

A Rapidly Growing Array of Innovative Products and Services That:

- Help consumers take control of their health and health care
- Help employers promote health and wellness
- Help care providers deliver better care
- Help journalists shed light
- Help local leaders make better-informed decisions
- Support all of the above through “data intermediary” services
- And much more

Health-Related Data from FUELS

Health-Related Data from:

- U.S. Department of Health and Human Services
- U.S. Environmental Protection Agency
- U.S. Department of Agriculture
- U.S. Department of Defense
- U.S. Bureau of Labor Statistics
- FUELS
A historic moment and opportunity!

New Incentives

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Information Liberation

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Rocket Fuel for Innovation & Progress