“Information Technology and Priorities for Healthcare: The White House Perspective”

Aneesh Chopra
U.S. Chief Technology Officer & Associate Director for Technology
White House Office of Science & Technology Policy
A Presidential Commitment to Technology

Healthcare.gov a Model for Simplifying Access to Information

“My Administration is committed to creating an unprecedented level of openness in Government...and establish a system of transparency, public participation, and collaboration.”

– President Barack Obama, Jan 21st, 2009

Source: www.healthcare.gov; www.whitehouse.gov/open
A Focus on Strengthening Global Competitiveness
Harnessing Technology, Data, Innovation for Growth, Empowerment

<table>
<thead>
<tr>
<th>Innovation Trend</th>
<th>E-Government</th>
<th>Higher Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>19.5</td>
</tr>
<tr>
<td>2</td>
<td>Singapore</td>
<td>19.0</td>
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<tr>
<td>3</td>
<td>Lithuania</td>
<td>14.8</td>
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<tr>
<td>4</td>
<td>Estonia</td>
<td>13.9</td>
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<tr>
<td>5</td>
<td>Denmark</td>
<td>13.8</td>
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<tr>
<td>6</td>
<td>Luxembourg</td>
<td>13.6</td>
</tr>
<tr>
<td>7</td>
<td>Slovenia</td>
<td>13.7</td>
</tr>
<tr>
<td>40</td>
<td>U.S.</td>
<td>2.7</td>
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www.whitehouse.gov

2010 UN Index rankings jumped from fourth (in 2008) to second
American Graduation Initiative calls for return to #1 by 2020
Tech Team* Formula to Close Technology Gap
Platforms + Participation Equals Ecosystems Focused on Results

Public Sector Platforms

*United States CTO, CIO

Public Participation

Results-Driven Ecosystems

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Consensus-Driven Standards
Accountable Government
Open Data
Cloud Computing
Advanced IT Infrastructure
Unleashing a Mobile Broadband Revolution
Presidential Commitment to (Nearly) Double Available Spectrum

Spectrum Initiative in Brief

#1: Identify and plan for the release of 500 MHz of spectrum

#2: Provide new tools and new incentives to free up spectrum

#3: Redeploy the spectrum to high-value uses

#4: Use the auction proceeds to promote public safety and job-creating infrastructure investment

Innovations: Text4baby partnership serves 75,000+ moms since 02/10 launch

Commerce Dept report due by 10/10 on timetable for freeing up spectrum for exclusive or shared use; CTO focus on advanced sharing technologies

Source: http://www.whitehouse.gov/administration/eop/nec/speeches/technological-opportunities-job-creation-economic-growth
From R&D to Public Sector Innovation
NSF-Funded Research Commercialized, Supporting Cloud Initiative

USCB Prof. Wolski joins NSF-funded grid computing “VGrADS” project; proposes novel concept (Fall 2007) to link “private” and “public” clouds; commercialized in 2009 and deployed as part of NASA Nebula

Source: http://www.nasa.gov/open/plan/nebula.html; www.usaspending.gov; www.eucalyptus.com/about/story
Anatomy of an Open Government Ecosystem

HHS Launches Community Health Data Initiative (CHDI)

HHS launches CHDI June 2nd - demonstrating 20+ apps recently built or improved by innovators across the country using data HHS has made public (with much more to come)

Innovation: Microsoft announces Bing Health Maps and the incorporation of “Hospital Compare” data in search results

Source: Community Health Data Initiative, Department of Health & Human Services; www.hhs.gov/open
“Blue Button” to Liberate Personal Health Data
Previewing New Tool for Veterans, Medicare Recipients this Fall

“…veterans will be able to go to the VA website, click a simple “blue button,” and download or print your personal health records so you have them when you need them and can share them with your doctors outside of the VA.”

–President Barack Obama, Aug 2\textsuperscript{nd}, 2010

“All Hands” - Health 2.0 Developer Challenge

A growing number of “challenges” leading up to Health IT Innovation Week – October 3-10th, 2010

WWHI catalyzes innovation - $10K for a personalized wireless health ecosystem; sponsors “Innovation Day” – highlighting Veterans Healthcare (VAi2) – 10/12/10

Source: www.health2challenge.org
Standards to “Unlock” Value of Health Exchange

Open Industry Collaboration Delivers Technical Specs in 90 Days

NHIN Direct Project in Brief

Secure, Direct Communication

“A set of policies, standards and services that enable the Internet to be used for secure and meaningful exchange of health information to improve health and health care” – launched 3/10, specs posted 6/10

SMTP-based specs for all providers; reference implementation underway with 25,000+ lines of code and counting...

Source: www.nhindirect.org
Nationwide Health Information Network
Social Security Administration Delivers Early Results

**Open Collaborative**

The Mayo Clinic to host a CONNECT Code-A-Thon in Rochester, MN

September 21-22, 2010

Interested in Hosting a Code-A-Thon?

CLICK FOR DETAILS!

Quarterly 2-day workshops to build code, deliver interoperability solutions at your pace, interest

**NHIN CONNECT in Action**

Early Results: mean case processing time savings of 42% as compared to the Virginia state average

Source: www.connectopensource.org; Using the Nationwide Health Information Network to Deliver Value to Disability Claimants: A Case Study of Social Security Administration and MedVirginia Use of MEGAHIT for Disability Determination, Feldman, Horan
**Early Deliverable: Enrollment Standards for ACA**

“**All Hands on Deck**” to Deliver Framework for Service Excellence

**Consumer-Centric Approach**

<table>
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<tr>
<th>Core Data Elements</th>
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<tr>
<td>Verification Web Services</td>
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<tr>
<td>Transparent Business Rules</td>
</tr>
<tr>
<td>Transmission of Enrollment Info</td>
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<tr>
<td>Privacy &amp; security</td>
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</tbody>
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**“Deep Dive”**

**Verification Web Services**

#1: ACA requirements – citizenship, income, legal status

#2: Standardized Web services process

#3: Additional interfaces to federal, state or other widely-available data sources

#4: Federal reference software model

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“Not later than 180 days after the enactment, the Secretary, in consultation with the HIT Policy and Standards Committees, shall develop interoperable and secure standards and protocols that facilitate enrollment in Federal and State health and human services programs.”

-Section 1561, Affordable Care Act

Source: healthit.hhs.gov
## Technology Approach to Spur Market Solutions

### Three Levers to Deliver on the Promise of Healthcare IT

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<tr>
<th>Provider Adoption</th>
<th>Data Interoperability</th>
<th>Application Innovation</th>
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<tbody>
<tr>
<td><strong>#Meaningful Use Incentive Payments:</strong> Flagship Recovery Act initiative offering $20+BN provider reimbursement for HIT adoption</td>
<td><strong>#NHIN Connect Collaborative:</strong> Open standards to promote federal agency health data exchange</td>
<td><strong>#Community Health Data Initiative:</strong> Flagship open government initiative to spur “mash-ups” on health data to spur local improvement</td>
</tr>
<tr>
<td><strong>#“Modular” Health IT Applications:</strong> Open certification program to encourage substitute-able healthcare applications</td>
<td><strong>#NHIN Direct:</strong> Voluntary, consensus driven standards to govern simple, secure data transmission over the Internet</td>
<td><strong>#Payment Innovation Center:</strong> $10BN CMS center focused on shifting provider payment to reward quality</td>
</tr>
<tr>
<td><strong>#Privacy &amp; Security Standards:</strong> Strict provisions on ensuring patient privacy and data security</td>
<td><strong>#“Blue Button”:</strong> Simple standardized file format to allow consumers access to health data on federal websites (VA, Dept of Defense, CMS)</td>
<td><strong>#Advanced IT Infrastructure:</strong> Strategy to leverage ultra high-speed broadband, mobile broadband, and R&amp;D commercialization</td>
</tr>
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</table>
Putting it Altogether: Entrepreneurs are Welcome
Bob, Dave, Andrew Embody Spirit of (Near) Frictionless Participation

Team (in spare time) wins competition (Jan, ‘10) by building more accessible Federal Register after posted on data.gov

Inspires AOTUS (March, ‘10) to designate team as lead designers for modernized “daily newspaper of the federal government”

Source: [www.federalregister.gov](http://www.federalregister.gov); [www.innovationmovement.org](http://www.innovationmovement.org); [www.wested.org](http://www.wested.org)