



Exploring the Intersections of Health, Technology and Equity

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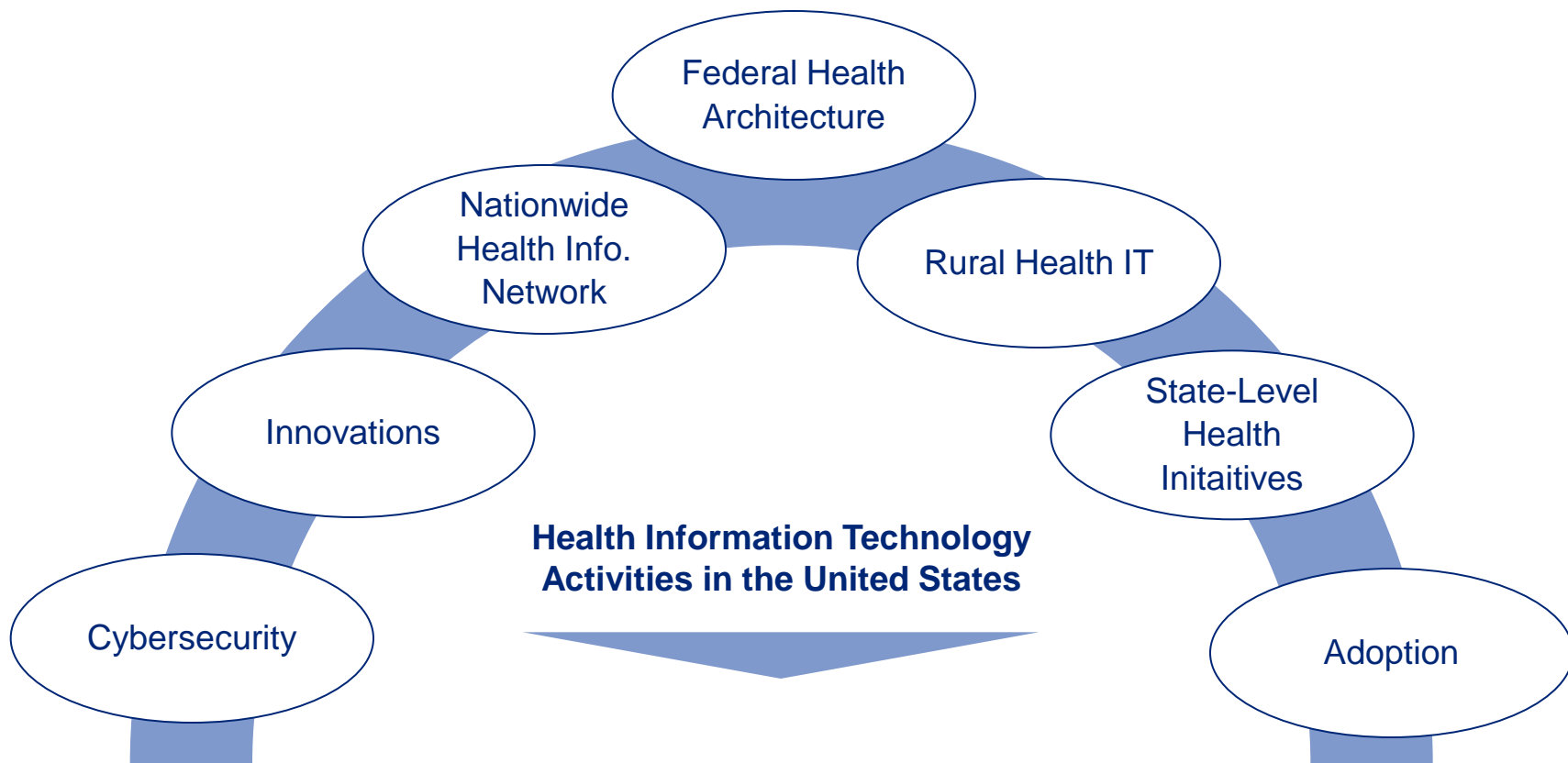
Objectives

1. Overview of the status of HIT and what is happening with HIT in the U.S.
2. The Federal Government's perspective - status of HIT in the public and private sector
3. The expansion and role of HIT in people's health and well-being



Overview of Status of HIT in the United States

HIT in the United States



These initiatives serve the need of various stakeholders to foster health IT adoption

HIT in the United States

Better healthcare



Improving patients' experience of care within the Institute of Medicine's 6 domains of quality: *Safety, Effectiveness, Patient-Centeredness, Timeliness, Efficiency, and Equity.*

Better health



Keeping patients well so they can do what they want to do. Increasing the overall health of populations: address behavioral risk factors; focus on preventive care.

Reduced costs



Lowering the total cost of care while improving quality, resulting in reduced monthly expenditures for Medicare, Medicaid, and CHIP beneficiaries.



Health Information Technology



Cybersecurity

1. Meaningful Use
2. HIPAA - Privacy and Security

Federal Government Responds: HITECH Act



Part of American Recovery and Reinvestment Act of 2009 (ARRA)

Goal: Every American to have an EHR by 2014

Systematically addresses major barriers to adoption and Meaningful Use:

- Money/market reform
- Technical assistance, support, and better information
- Health information exchange
- Privacy and security



Meaningful Use Takes Off

- 52% percent of office-based physicians intend to take advantage of EHR incentives
- The percentage of primary care providers who have adopted EHRs in their practice has doubled from 20% to 40% between 2009 to 2011
- ONC's Regional Extension Centers (RECs) have signed up more than 100,000 primary care providers
- This means that *roughly one third* of the nation's primary care providers have committed to meaningfully using EHRs by partnering with their local REC. Momentum is *building!*
- Hospital adoption has more than doubled since 2009, increasing from 16% to 35%
- Most (85%) of hospitals intend to attest to Meaningful Use by 2015

Privacy and Security

- HIPAA Security Rule –
 - In health care, accurate and complete information about individuals is critical to providing high quality, coordinated care
 - Coordinated attention at the Federal and State levels is needed both to develop and implement appropriate privacy and security policies.
 - Only by engaging all stakeholders, particularly consumers, can health information be protected and electronically exchanged in a manner that respects variations in individuals' views on privacy and access.



Innovations

1. Prizes and Challenges - Investing in Innovations
2. Startup America at HHS
3. Health Data Initiative
4. AHRQ Innovations Exchange at the Agency for Healthcare Research and Quality (AHRQ)
5. popHealth
6. MedlinePlus Connect at the National Library of Medicine and National Institutes of Health

The Health Data Initiative: turning HHS and our sister agencies into the “NOAA of health data”



Health-related data from



Made available to the
public

FUELS

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

Unleashing the power of data

These datasets and tools have been gathered from agencies across the Department of Health and Human Services (and other sources) with the goal of improving health for all Americans. The data sets are increasingly available in a variety of machine-readable formats and via Application Programming Interfaces (APIs), making it easier than ever to consume data.

Just how much information is out there? Consider just a few examples:



MedlinePlus Connect has information for **over 900 diseases, illnesses, health conditions and wellness issues**. This service allows health organizations and health IT providers to link patient portals and electronic health record (EHR) systems to MedlinePlus, an authoritative up-to-date health information resource for patients, families, and health care providers.



ClinicalTrials.gov, a registry of federally and privately supported clinical trials, currently has **115,266 trials** with locations in **177 countries**.



The Department of Agriculture's Myfoodapedia provides information on the total calories and saturated fat content of over **1,000 commonly eaten foods**.



Data.Medicare.Gov COMPARE APIs provide detailed quality performance data for **thousands of individual hospitals, nursing homes, home health agencies, and dialysis providers** across the country.

Where to find the data: Health.Data.gov, the one-stop place to get all of our free, publicly available data



Welcome to the **Health Data Community**

You've found a public resource designed to bring together high-value datasets, tools, and applications using data about health and health care to support your need for better knowledge and to help you to solve problems. These datasets and tools have been gathered from agencies across the Federal government with the goal of improving health for all Americans. Check back frequently because the site will be updated as more datasets and tools become available.

[More Information](#)

Special Features

Health Data Initiative Forum

[VIEW MORE](#)

Home Data/Tools Apps Expo Other Data Sites Blogs Forums

Search This Community... [SEARCH](#)

A group of diverse professionals in business attire are gathered around a table, looking at a tablet computer. The scene is set in a modern office or conference room.

Data.gov » All Communities

Recent Blog Post

A stethoscope is placed over a white surface with several bar charts. The charts have blue and red bars, representing data analysis in a medical or healthcare context.

What's New

A hand is pointing to a colorful pie chart on a whiteboard. A stethoscope is visible in the foreground, suggesting a medical or healthcare setting.

Challenges

The logo for Challenge.gov beta, with the tagline "Government Challenges, Your Solutions". Below it is the logo for the 2011 Health 2.0 Developer Challenge, featuring a gear and the number 13.



Examples of health data resources that are available

Listed below are just some of the key health data sets available that could be utilized in applications/services that help care providers, consumers and communities. See pages following for brief summaries of each data set. And check out Health.Data.gov for a much more comprehensive listing of available data resources.

Type of Data Set	If you are building an app/service for...		
	Providers	Consumers	Community
Provider Quality COMPARE APIs at data.medicare.gov	✓	✓	✓
Hospital / Nursing Home / Home Health / Dialysis Compare	✓	✓	✓
FQHC (Federally Qualified Health Center) Directory	✓	✓	✓
National Plan and Provider Enumeration System (NPPES) Downloadable File	✓	✓	✓
National Library of Medicine API Portal	✓		
MedlinePlus Connect	✓	✓	
Clinicaltrials.gov API	✓	✓	
NIH's Visible Human Project	✓	✓	
NLM's TOXMAP: Online Toxicology Maps	✓	✓	✓
VitalStats	✓	✓	
Cancer Incidence – Surveillance, Epidemiology, and End Results (SEER) Registries	✓		✓
FDA Recalls (drug, food and product)	✓	✓	
HealthCare.gov Insurance Plan Directory	✓	✓	✓
Mental Health Services Directory/Substance Abuse Treatment Center Directory	✓	✓	✓

Examples of health data resources that are available



Data Set	If you are building an app/service for...		
	Providers	Consumers	Community
Household Products Database		✓	
USDA's MyFood-a-Pedia		✓	
"Blue Button" data (the ability for veterans, Medicare beneficiaries and active duty military to download their own personal health information)	✓	✓	
Dietary Supplements Labels Database: brands, ingredients and references	✓	✓	
Hospital, Skilled Nursing Facility, Home Health Agency, Renal Dialysis Facility, Hospice Cost Report Data	✓		✓
National Health Expenditures			✓
Medicare Claims "Basic Standalone Files"	✓		✓
Health Indicators Warehouse	✓		✓
QuitNowTxt SMS Library		✓	✓
Medical Expenditure Panel Survey (MEPS)	✓		
Wide-ranging Online Data for Epidemiologic Research (WONDER)	✓		✓
Web-based Injury Statistics Query and Reporting System (WISQARS)	✓		✓
Your Food Environment Atlas	✓	✓	✓
Behavioral Risk Factor Surveillance System (BRFSS)	✓	✓	✓

The Third Annual Health Data Initiative Forum – The Health Data Palooza!

- This year's Palooza will take place on June 5-6, 2012 at the Walter E. Washington Convention Center in Washington, DC.
- This year's event will be hosted through the Health Data Consortium, a public-private partnership between the Institute of Medicine, Robert Wood Johnson Foundation, Consumers Union, Academy Health, Innocentive, Health 2.0, the Mayo Clinic's Center for Innovation and several other organizations.
- Will showcase 250 of the best innovations in three tracks: consumer, provider and community apps
- Please visit www.hdiform.org for more information on registration, timelines





Rural Health IT

- USDA Programs:
 - **Community Facilities Program**, which provides direct and guaranteed loans as well as grants for community facilities projects in rural areas.
 - **Distance Learning and Telemedicine Grant Program**, which may provide grants to help bring telemedicine services to rural communities.



State-Level Health Initiatives

- State Health Policy Consortium
- State Alliance for eHealth
- Health Information Security and Privacy Collaboration (HISPC)
- State-level Health Information Exchange Consensus Project



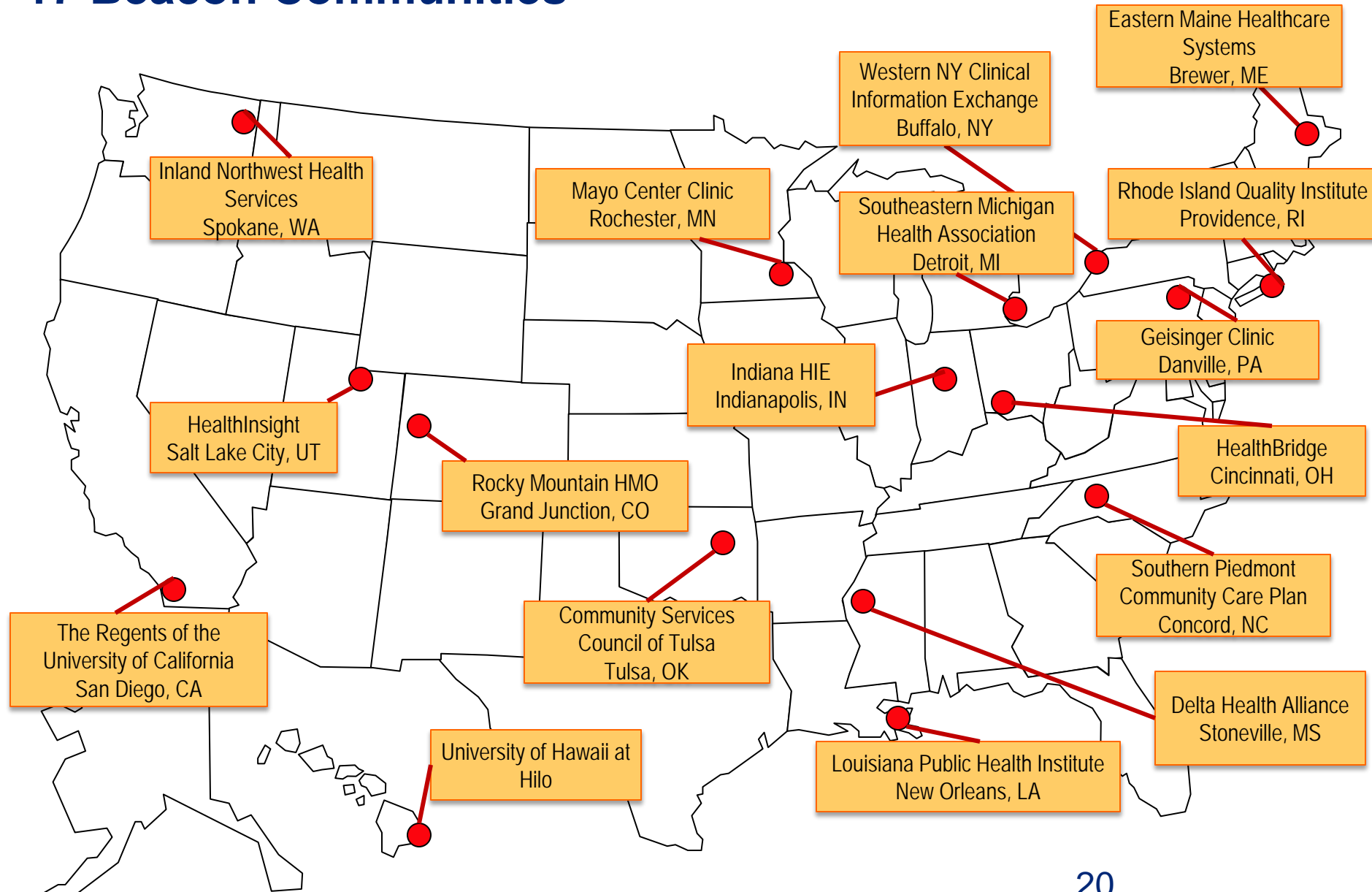
The Beacon Community Program

Goal: Share best practices that help communities achieve cost savings and health improvement

17 demonstration communities that will:

- Build and strengthen their HIT infrastructure and exchange capabilities and showcase the Meaningful Use of EHRs
- Provide valuable lessons to guide other communities to achieve measurable improvement in the quality and efficiency of health services or public health outcomes

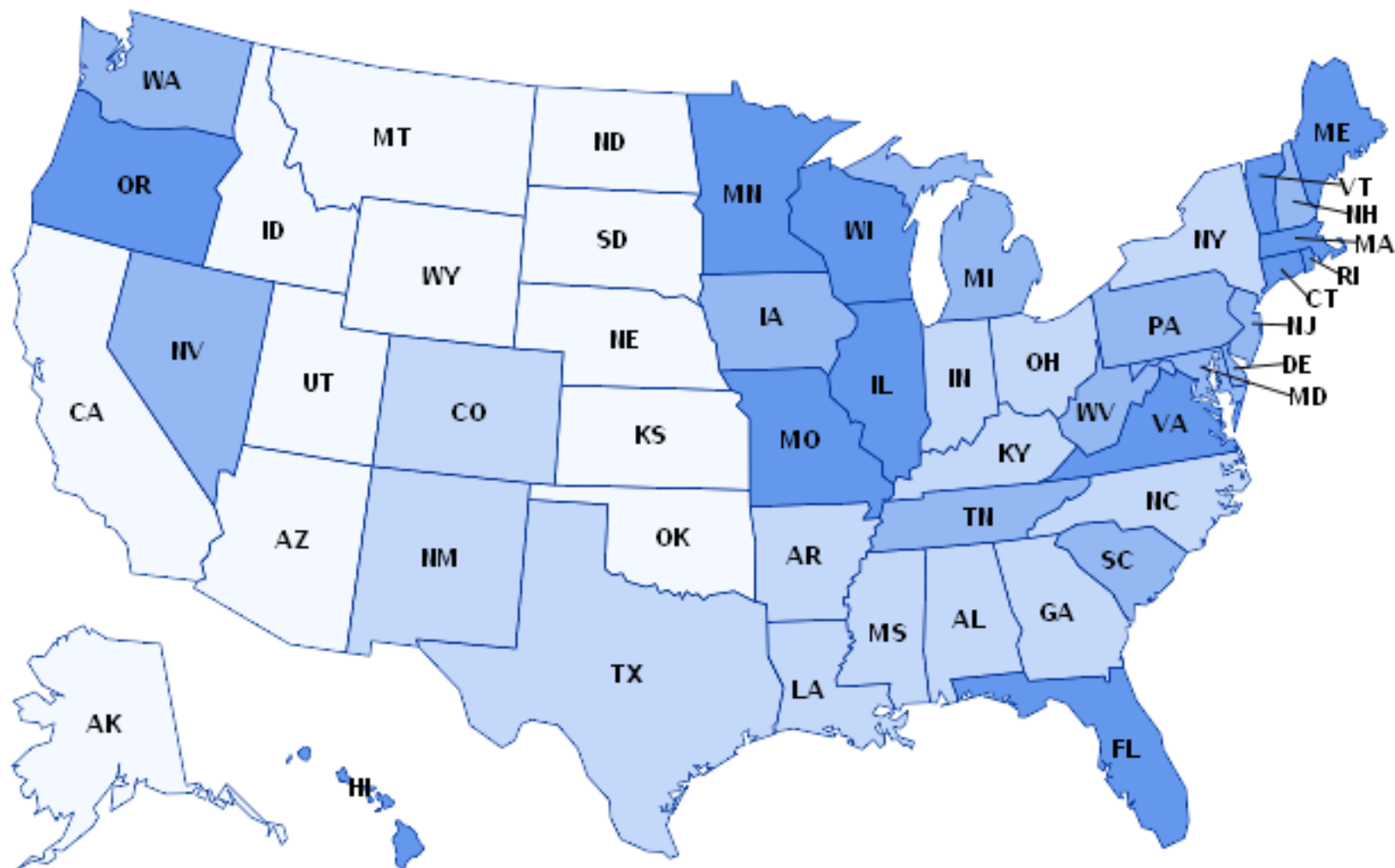
17 Beacon Communities





The Federal Government's Perspective – Status of HIT in the Public and Private Sector

AHA Survey – implementation % by state of at least Basic EHR



At Least Basic 7.33 - 23.27 25.38 - 33.89 34.80 - 43.77 43.80 - 66.84

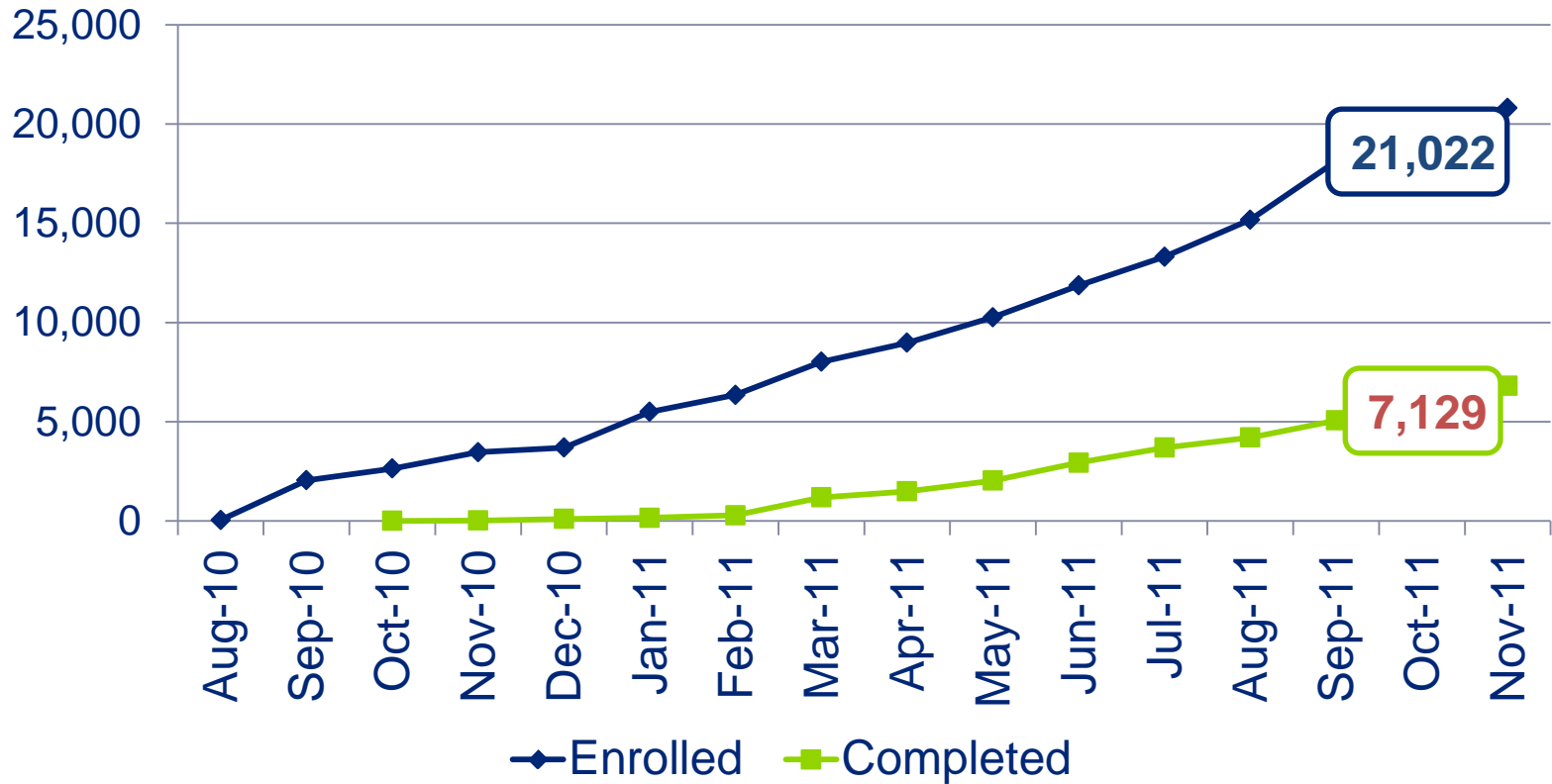


Workforce Training Programs

- Goal: Help train up to 50,000 new HIT workers to assist providers in becoming Meaningful Users of EHRs
- Four distinct programs that aim to support the education of new HIT professionals, including:
 - Community college consortia
 - Curriculum development centers
 - University-based training
 - Competency examination program



Community College Consortia – Students Enrolled and Students Completed (Cumulative)



How to make data actionable

Open HHS data can help power applications, products, services, and features that help consumers take control of their health and health care, doctors and nurses provide better care, and community leaders make better-informed decisions.

Here are some of the many examples of how open data has already been leveraged to do so:



The Healthline search engine has ingested massive amounts of data from HHS agencies (e.g., CDC, NIH, CMS, AHRQ, FDA, etc.) and other sources to help make internet search on health topics and issues substantially more reliable, accurate, and helpful.



Aetna has integrated HHS data on everything from care provider quality to the availability of eldercare support services to the latest medical education information for patients into an “IT cockpit” for nurse case managers in its call centers to help these nurses provide information-rich support for patients.



iTriage, a rapidly growing mobile and web platform that allows patients to make better informed health decisions, has used HHS health facility locator databases to help consumers find nearby care providers that are right for them.

How to make data actionable

data.directrelief.org - Windows Internet Explorer

http://data.directrelief.org/home.html

File Edit View Favorites Tools Help

data.directrelief.org

Direct Relief INTERNATIONAL

BETTER HEALTH THROUGH OPEN DATA

Sign In

Direct Relief International provides **medical assistance to improve the quality of life** for people affected by poverty, disaster, and civil unrest at home and throughout the world. Direct Relief provides essential material resources — medicines, supplies and equipment — to over 70 countries globally and 1,000 clinics and health centers in the United States.

WHAT IS DATA.DIRECTRELIEF.ORG?
A Source for Understanding Health Data Sets
 Search, analyze, and understand a variety of federal, state, and local government data.

WHAT ARE THE GOALS?
Maximize Human Resources
 Empower intelligent, creative and analytical people by giving them access to the best available tools to work with data.

Support Fact-Based Management
 Help agencies to make better and faster decisions that are based on the most complete and current data available.

Direct Relief International Dataset
 This dataset contains approximately 50,000 records of shipments made by DRI to agencies world-wide. | [Video Demo](#)
EXPLORE THE DATASET

Health Resources and Services Administration Dataset
 The Health Resources and Services Administration (HRSA), an agency of the U.S. Department of Health and Human Services, focuses on improving access to health care services for people who are uninsured, isolated or medically vulnerable.
 This dataset contains approximately 700,000 records of service delivery statistics reported by federally qualified health centers. | [Video Demo](#)
EXPLORE THE DATASET

A Resource for Citizens and **Achieve Transparency**

Done Internet 100% 11:14 AM

Txt4Health Campaign Objectives

- Provide **targeted outreach** to (at-risk and undiagnosed) adults through mobile devices
- Reduce burden of diabetes in adult populations through **risk awareness, education, and behavior change**
- **Link individuals to care and community resources**










Crescent City (New Orleans) - Marketing Collateral/Creative

Are You or a Loved One

At Risk for Diabetes?

Find out: Text **HEALTH** to **300400***



* Signing up for txt4health is FREE but standard text messaging rates do apply. Please contact your mobile phone carrier for questions about text messaging rates. Txt4health is available for Greater New Orleans area residents. For terms & conditions visit www.txt4health.com. Text 'STOP' to discontinue messages or 'HELP' to receive assistance.

Outdoor billboard



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Txt4health is a mobile health information service designed to help people understand their risk for type 2 diabetes and become more informed about the steps they can take to lead healthy lives. People who sign up for txt4health by **texting HEALTH to 300400*** will receive SMS text messages each week with timely, relevant information to help them improve and manage their health.








* Signing up for txt4health is FREE but standard text messaging rates do apply. Please contact your mobile phone carrier for questions about text messaging rates. Txt4health is available for Greater New Orleans area residents. For terms & conditions visit www.txt4health.com. Text 'STOP' to discontinue messages or 'HELP' to receive assistance.

Rx Pad

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what is

Diabetes?

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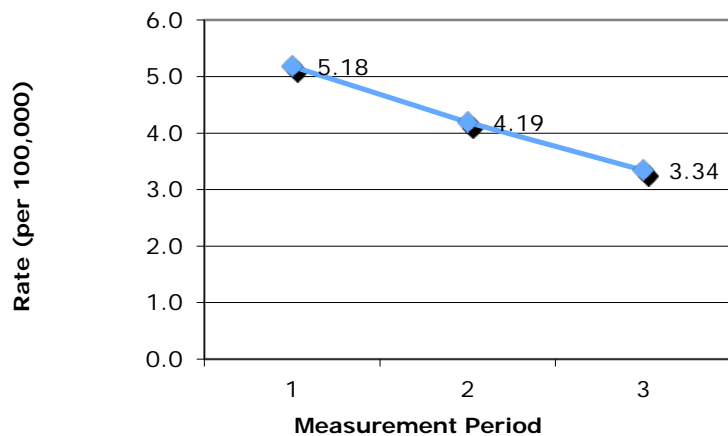
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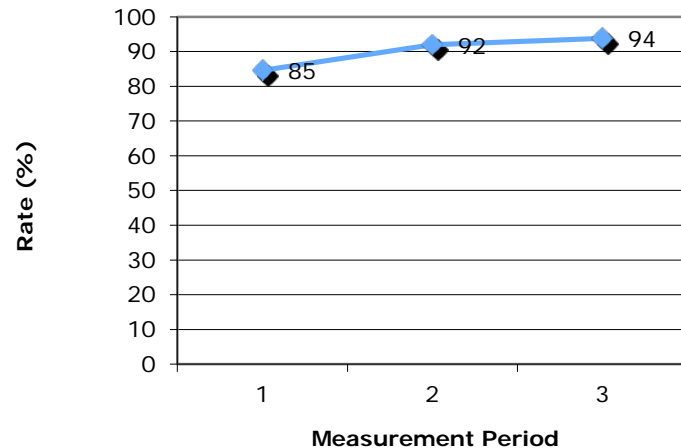
Television Ad

17 Beacon Communities

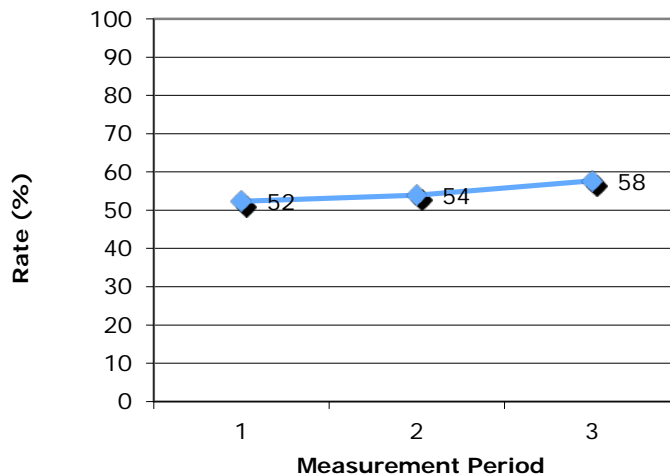
**Colorado Beacon Consortium
Uncontrolled Diabetes Admissions
(AHRQ PQI #14)**



**Bangor Maine Beacon Community
Cardiovascular Disease: Blood Pressure Control
($< 140/90$ mmHg)**



**Utah IC3 Beacon Community
Diabetes Control: HbA1c ($575 < 8$)**



Source: Self-reported data from Beacon Program Quarterly submission.



The Expansion and Role of HIT in People's Health and Well-being

Why Should You Use Health IT to Engage Your Patients?



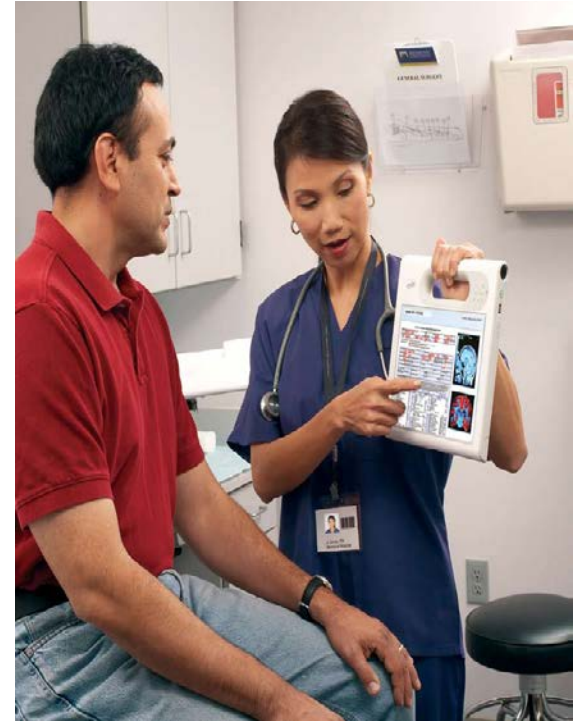
- Patient as Partner
- Engaged patients demonstrate better health outcomes
- Patients increasingly expect engagement via IT, as in many other aspects of their lives
- Meaningful Use criteria

66% of Americans say they would consider switching to a physician who offers access to medical records through a secure Internet connection – according to a 2011 Deloitte Survey

Between Clinical Encounters

Some Relevant Information

- Approximately 50 million Americans (roughly 20%) have accessed their health information online . (Manhattan Research, 2011)
- More than half (52%) of Americans say they would use a smart phone or PDA to monitor their health if they were able to access their medical records and download information about their medical condition and treatments. (Manhattan Research, 2011)
- 26% of Americans use mobile phones for health. This has more than doubled since the previous year. (Manhattan Research, 2011)
- Remote patient monitoring is expected to grow by 25% per year (Kalorama Information, 2011)



Examples: helping consumers take control of their health and health care



- iTriage
- Healthline
- Castlight
- Patients Like Me
- Asthmapolis
- Food Oasis



[Symptom Search](#) | [Treatment Search](#) | [Doctor Search](#) | [Drug Search](#)

[Home](#)

[Health A to Z](#)

[Healthy Living](#)

[Check Your Symptoms](#)

Your Search: **total knee replacement**

Showing 1 to 10 of 230

[total knee replacement](#)

Sponsored Links

Call Today For An Appointment & Get Help w/Your Orthopedic Needs!
www.WebsterOrtho.com

[Do You Have Knee Pain?](#)

Top 5 Knee Pain Signs. What The Doctor Is Not Telling You.
Blog-Med.com

Learn more about Total Knee Replacement



Total Knee Replacement is a treatment for Osteoarthritis, Rheumatoid Arthritis, **Knee Pain**, and Osteoarthritis of **Knee**. **Knee replacement** is a procedure in which the surgeon removes the damaged or diseased **knee** joint and replaces it with a new artificial joint...

[Procedure Overview](#)
[Evaluate Your Knee Pain](#)
[Types of Knee Implants](#)

[Questions to Ask Your Surgeon](#)
[Preoperative Evaluation](#)
[Risks and Complications](#)

[Estimate Procedure Costs](#)
[Compare Local Hospitals](#)

Explore the Knee



Explore the knee and related anatomy in 3D with Healthline's Body Maps. Rotate, look inside and learn about it how.

[Explore the Knee in 3D](#)

ASTHMAPOLIS
Weekly report
January 26-31, 2011

This week
We expect poor air quality in Madison. Keep an eye on the weather.

Uncontrolled
Based on your frequent nighttime symptoms.

Tip for you
Talk with your physician about changing the timing of your evening dose.

Daily controller medication
Last week: 55%
This week: 45%

January 2011
Su Mo Tu We Th Fr Sa
1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31

Your asthma this week

Asthma symptoms	You	Community
Cough	23%	15%
Wheezing	20%	10%

Asthma triggers	You	Community
Air pollution	30%	20%
Tobacco smoke	30%	15%

Examples: helping care providers deliver better care (and succeed as accountable delivery systems)

- Aetna
- Essence Group/Lumeris
- Doximity
- Press Ganey
- Rise Health
- ElizaLIVE



Blue Button
Download
My Data



How Health IT is Changing America

Why does America need to modernize using Health IT?

- Enable providers to securely and efficiently exchange patient health information.
- Give providers the right information, at the right time to offer their patients the right care.
- Give consumers tools to know their health information so that they can improve their health.
- Foundational to building a truly 21st century health system where we pay for the right care, not just more care.

What is America doing to modernize its Healthcare System through Health IT?

