

The Office of the National Coordinator for
Health Information Technology



ONC Initiatives and Consumer Engagement

An Update from The Office of the National Coordinator

September 18, 2012

David S. Muntz, CHCIO, FCHIME, FHIMSS

Principal Deputy National Coordinator

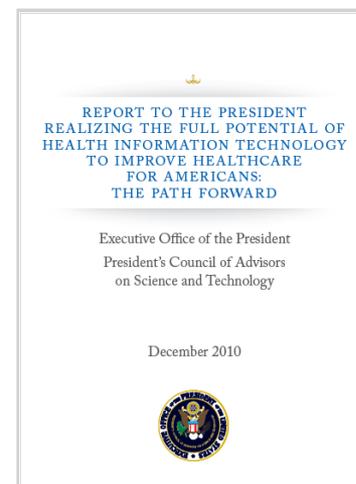
Office of the National Coordinator for Health IT

Department of Health & Human Services

Putting the **I** in **HealthIT**
www.HealthIT.gov



Increasing Public & Government Attention On Health, Patient Safety, & Clinical Quality



The Washington Post

The New York Times

THE WALL STREET JOURNAL.



Meaningful Use Graphically



Pumpkin



Meaningful Use of Pumpkin

What do I want the public to know?



- The goals to achieve Meaningful Use are ambitious, but achievable
 - Improve quality, safety, and efficiency of patient care
 - Engage patients and families
 - Improve care coordination
 - Ensure adequate privacy and security for personal health information
 - Improve population and public health
- \$22.5B of incentives offered to eligible professionals and hospitals including critical access hospitals from both Medicare and Medicaid
- The momentum is building

How do I describe MU to real people? Meaningful Use in Common Terms



General Requirements That Must Be Met:

- Certified EHR is used in a meaningful manner, including electronic prescribing
- Certified EHR is connected in a manner that allows for the exchange of health information
- Entity is capable of reporting on clinical quality measures and such other measures as selected by the Secretary of HHS

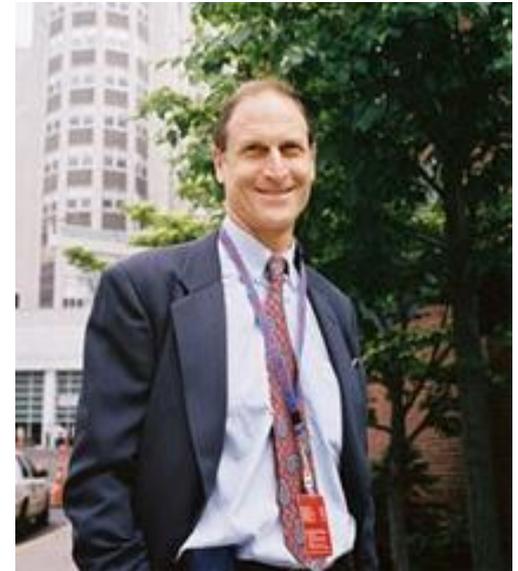
What do we all know?

“HIT Is The Means, But Not The End.”



Dr. David Blumenthal, previous National Coordinator of HIT, emphasizes,

“Getting an EHR up and running in health care is not the main objective behind the incentives provided by the federal government under ARRA. Improving health is.”



- At the National HIPAA Summit
in Washington, D.C.
on September 16, 2009

Modernizing Health Care



Dr. Farzad Mostashari, current National Coordinator of HIT, emphasizes:

“The goal of implementing health IT is to provide care that is safer, improves the quality of care, creates greater efficiency, and is more coordinated and patient-centered. Technology can help lead the nation to a place where we can prevent a million heart attacks and strokes in the next five years, where we can reduce hospital acquired conditions by 40% over the next three years, [and] reduce readmissions by 20% over the next three years.”



**- At the HIMSS Conference
on February 28, 2012**

Health IT: Helping to Drive the 3-Part Aim



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

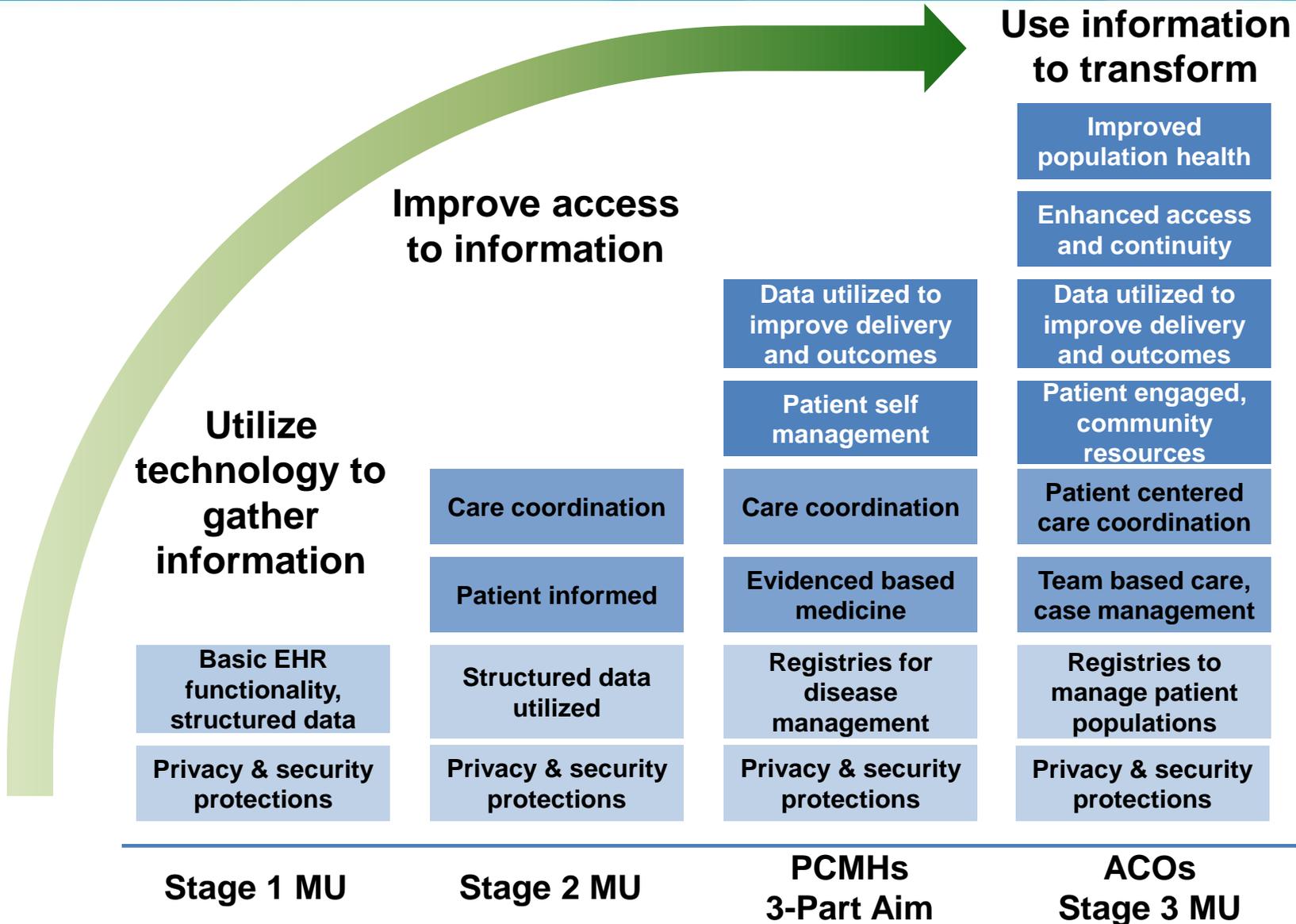


Lowering the total cost of care while improving quality, resulting in reduced monthly expenditures for Medicare, Medicaid, and CHIP beneficiaries. Supporting new models of payment.



Health Information Technology

Meaningful Use as a Building Block



“How are we doing?”



- Physicians (Source: National Ambulatory Medical Care Survey Physician Workflow study, 2011. NCHS data brief, no 98.)
 - Physician adoption of any EHR system has more than tripled since 2002, going from 17 percent to 57 percent in 2011.
 - The adoption of basic EHRs has doubled since 2008, going from 17% to 34% in 2011.
 - Adoption has grown significantly among important subgroups of physicians including small practices and rural providers.
 - Rural areas 38%
 - Overall total 34%
 - A strong majority of physicians who have adopted an EHR system (85%) were either very satisfied (38%) or somewhat satisfied (47%) with their system.
 - About three-quarters (74%) of physicians who have adopted an EHR system reported that their EHR had enhanced overall patient care within the past 30 days.
- Hospitals
 - The share of hospitals using basic EHRs has more than doubled from 16% in 2009 to 35% in 2011.

Who is helping?



- The public – patients and consumers
- The IT industry – HIT professionals and EHR vendors
- The Health Care industry – all participants across the continuum
- Professional and consumer organizations
- Other Federal agencies including but not limited to:
 - AHRQ
 - CMS
 - FCC
 - FDA
 - HRSA
 - NIH
 - NIST
 - NLM
 - NTSB
 - OCR
 - SAMHSA
 - USDA
 - WH

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 - AHRQ (Agency for Health Research and Quality)
 - CMS (Center for Medicare and Medicaid Services)
 - FCC (Federal Communications Commission)
 - FDA (Federal Drug Administration)
 - HRSA (Health Resources and Services Administration)
 - NIH (National Institutes of Health)
 - NIST (National Institute for Standards and Testing)
 - NLM (National Library of Medicine)
 - NTSB (National Transportation Safety Board)
 - OCR (Office of Civil Rights)
 - SAMHSA (Substance Abuse and Mental Health Svcs Admin)
 - USDA (United States Department of Agriculture)
 - WH (The White House)





What do hockey and EHRs have in common?

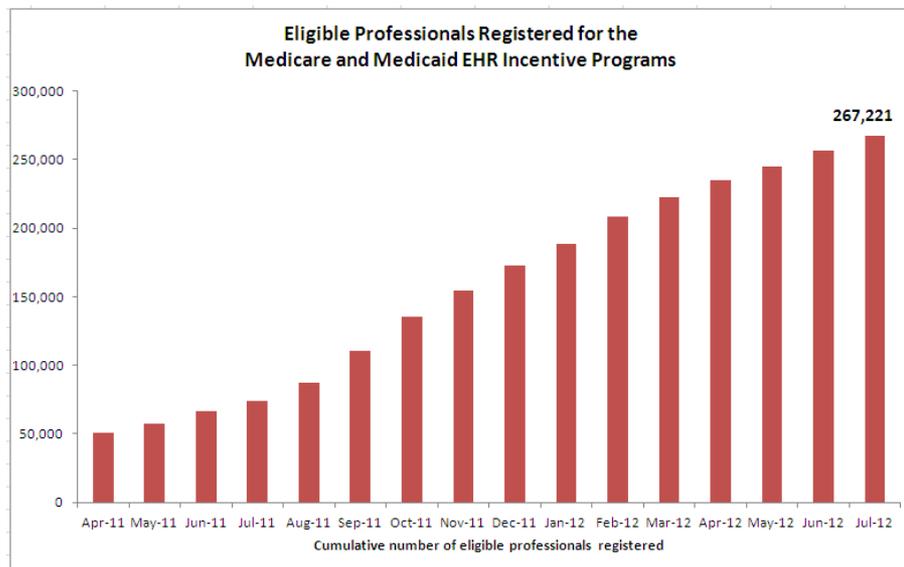


Providers Registered for Medicare and Medicaid EHR Incentive Programs as of July 31, 2012

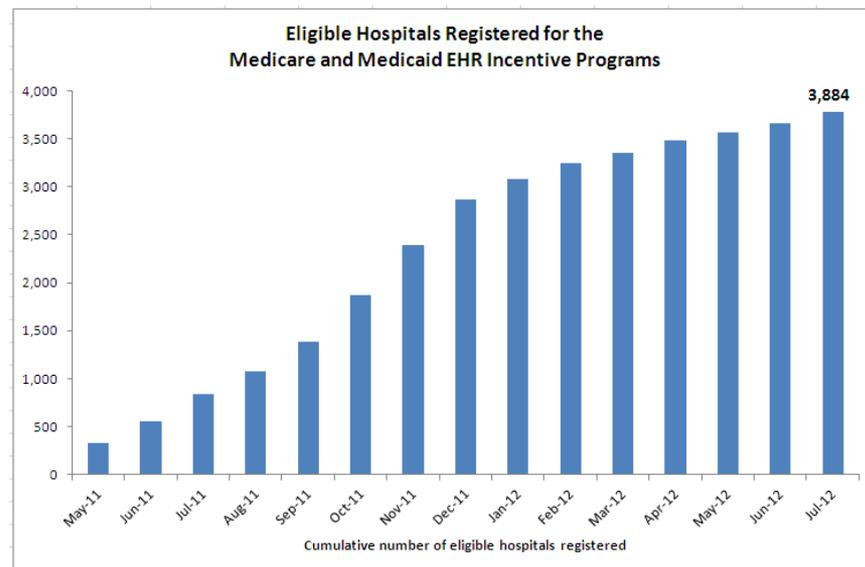


Over 270 thousand providers are registered to achieve Meaningful Use through the Medicare or Medicaid EHR Incentive Programs

267,221 eligible professionals



3,884 eligible hospitals

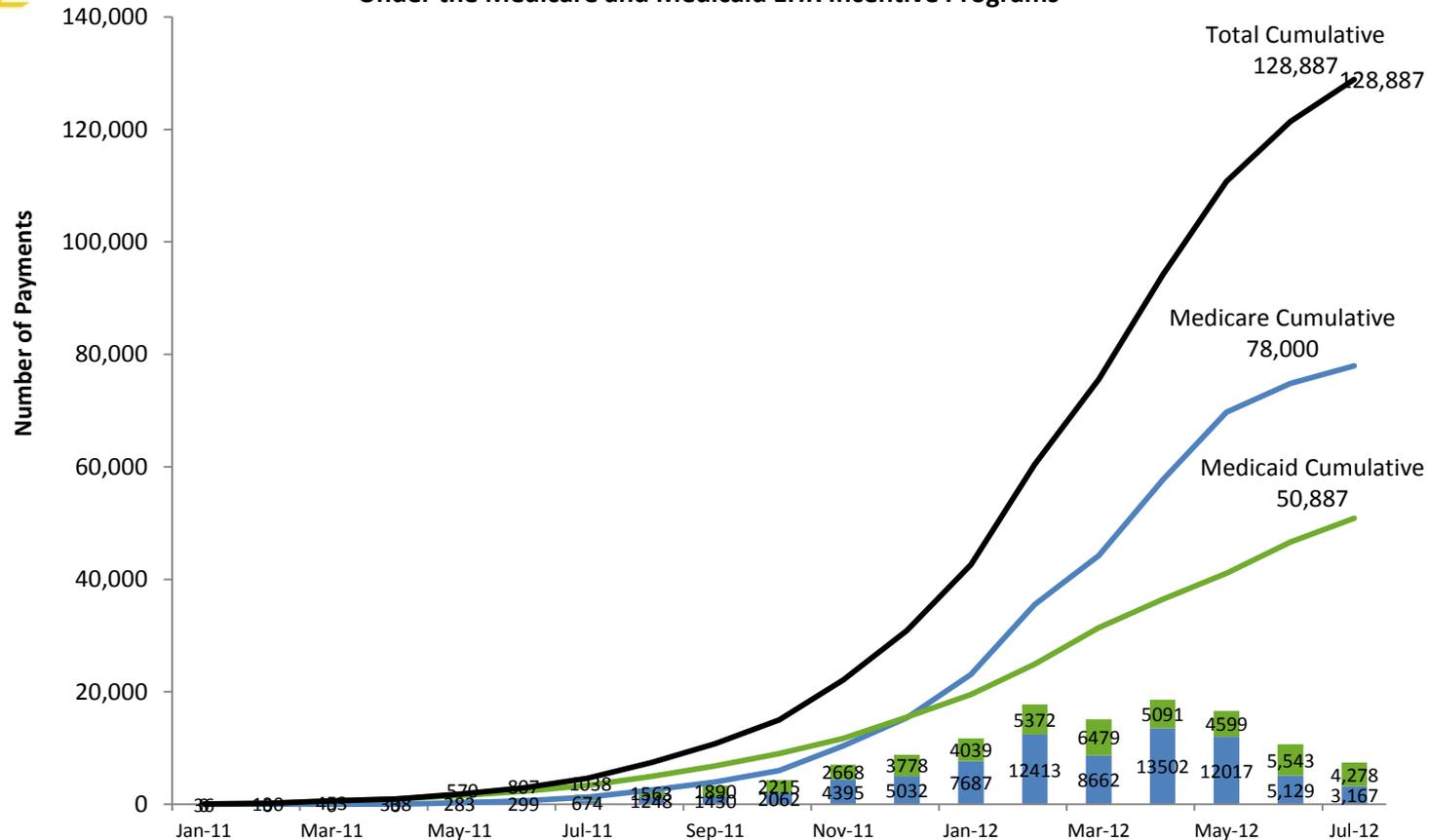


Source: CMS EHR Incentive Program Data as of 7/31/2012

Number of EHR Incentive Payments Made to Eligible Professionals as of July 31, 2012



Number of Payments to Eligible Professionals Under the Medicare and Medicaid EHR Incentive Programs



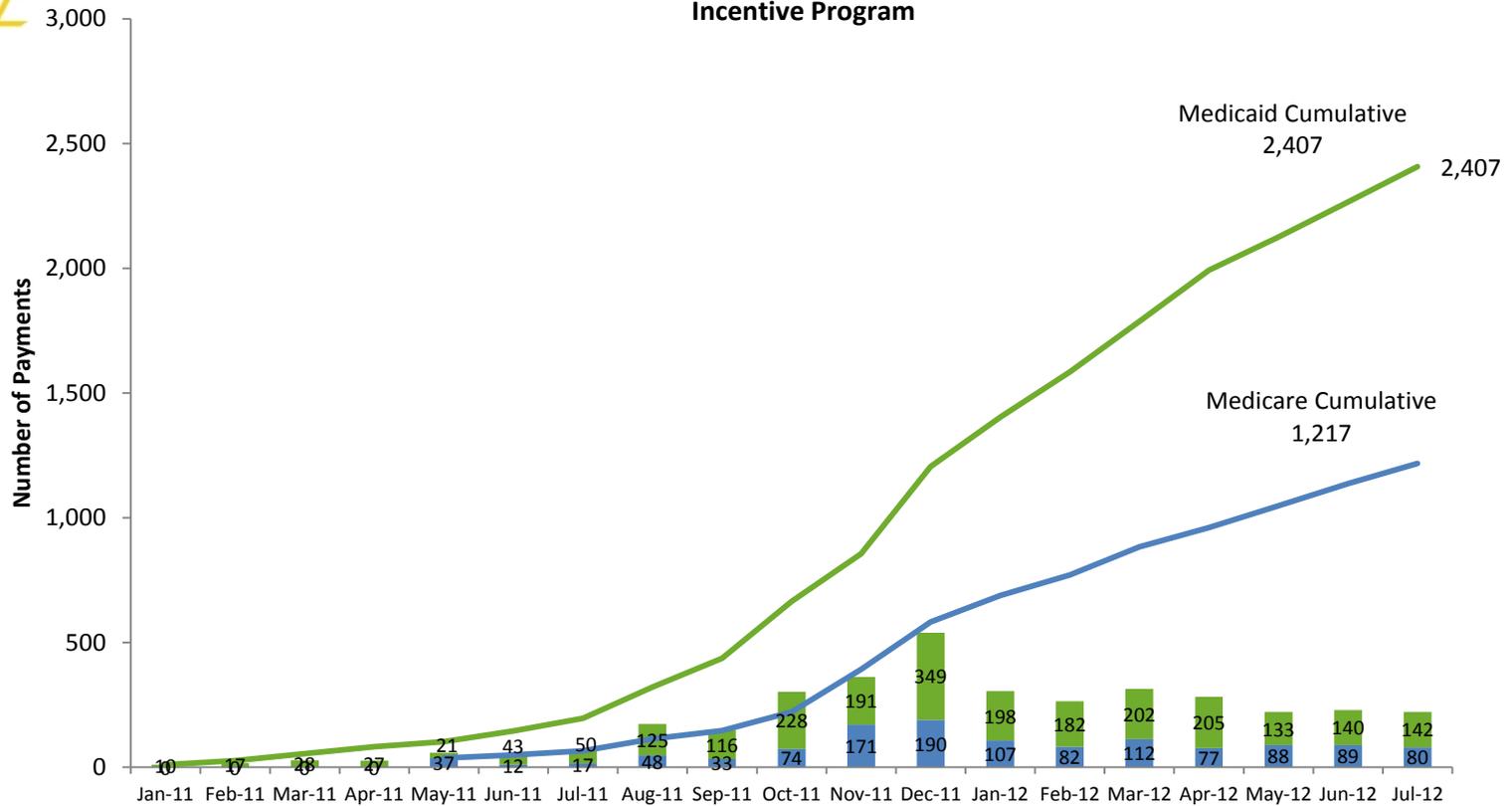
Source: CMS EHR Incentive Program Data as of 7/31/2012

Note: Medicare payments are for the meaningful use of certified EHR technology. In May 2011 hospitals who attested to Medicare were deemed MUsers for Medicaid. Some other Medicaid uses attested first for adopting, implementing, or upgrading EHR technology. Numbers include payments made to Medicare Advantage Organizations.

Number of EHR Incentive Payments Made to Eligible Hospitals as of July 31, 2012



Number of EHR Incentive Payments Made to Eligible Hospitals Under the Medicare and Medicaid EHR Incentive Program



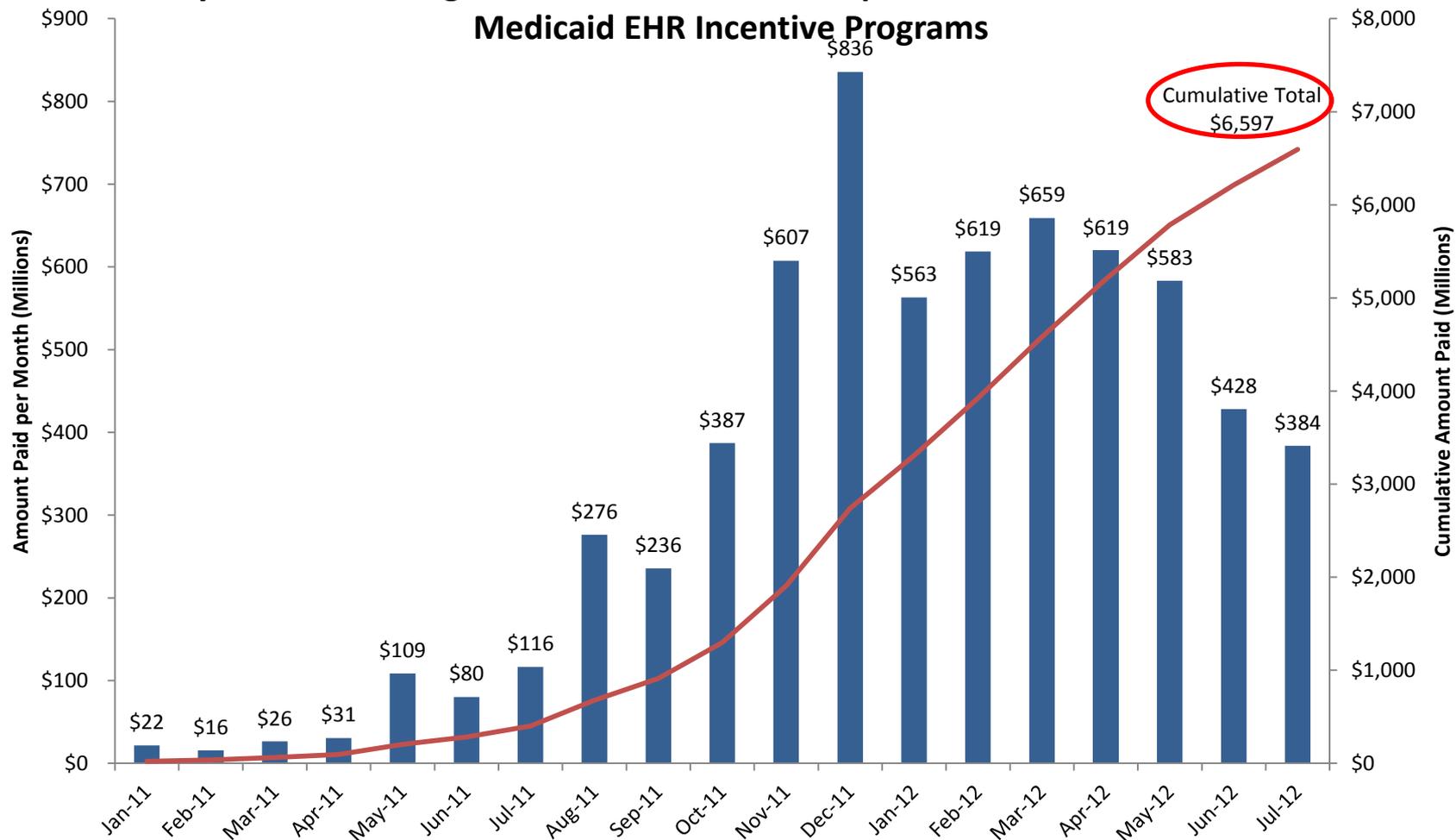
Source: CMS EHR Incentive Program Data as of 7/31/2012

Note: Medicare payments are for the meaningful use of certified EHR technology. Beginning May 2011 hospitals who attested to Medicare were deemed MUsers for Medicaid. Some other Medicaid uses attested first for adopting, implementing, or upgrading EHR technology. 792 hospitals have received payments under both Medicare and Medicaid.

Meaningful Use – All Payments As of July 31, 2012



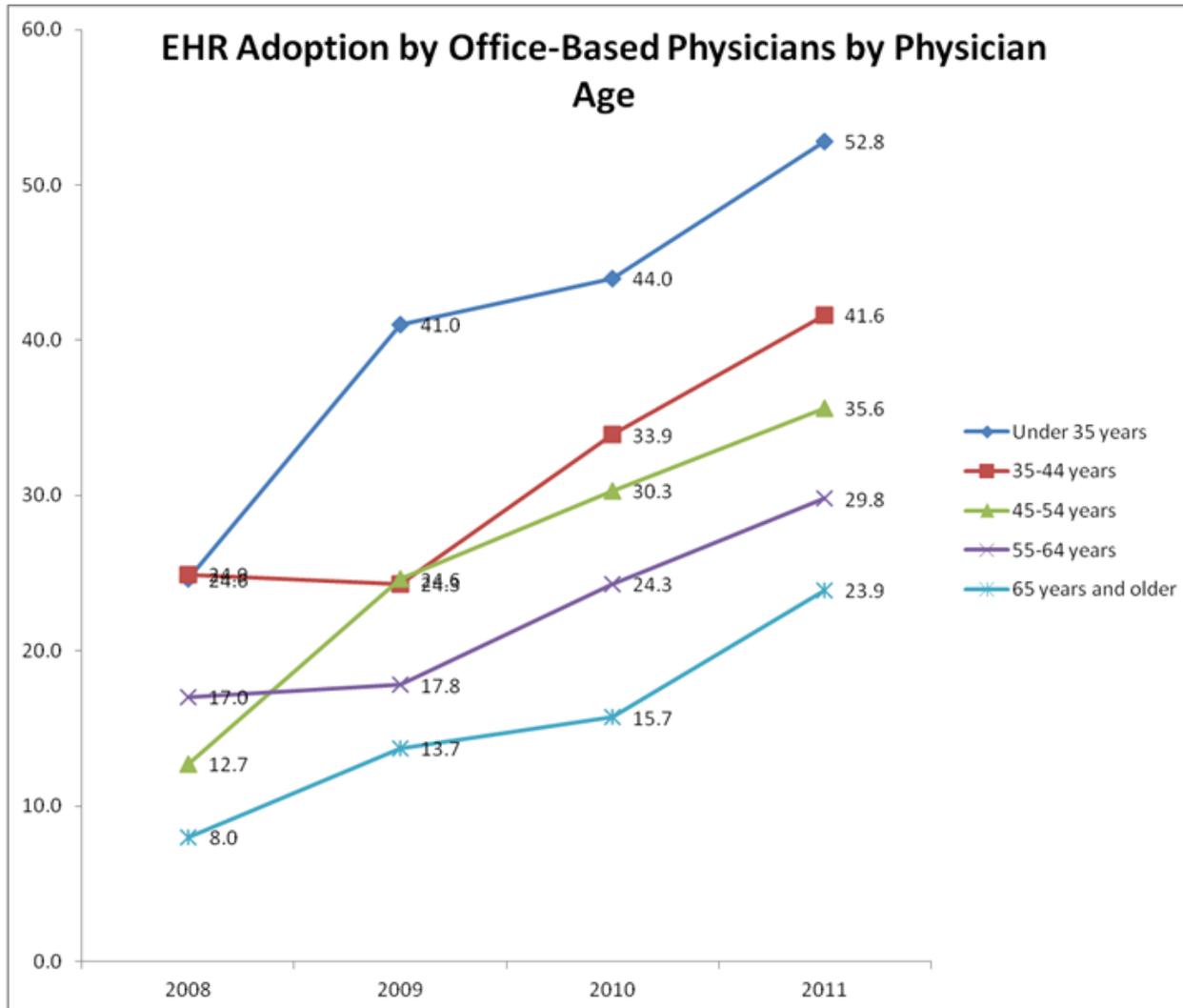
Payments to All Eligible Professionals and Hospitals Under the Medicare or Medicaid EHR Incentive Programs



Note: Payments include Medicare Advantage Organizations.

Source: CMS EHR Incentive Program Data as of 7/31/2012

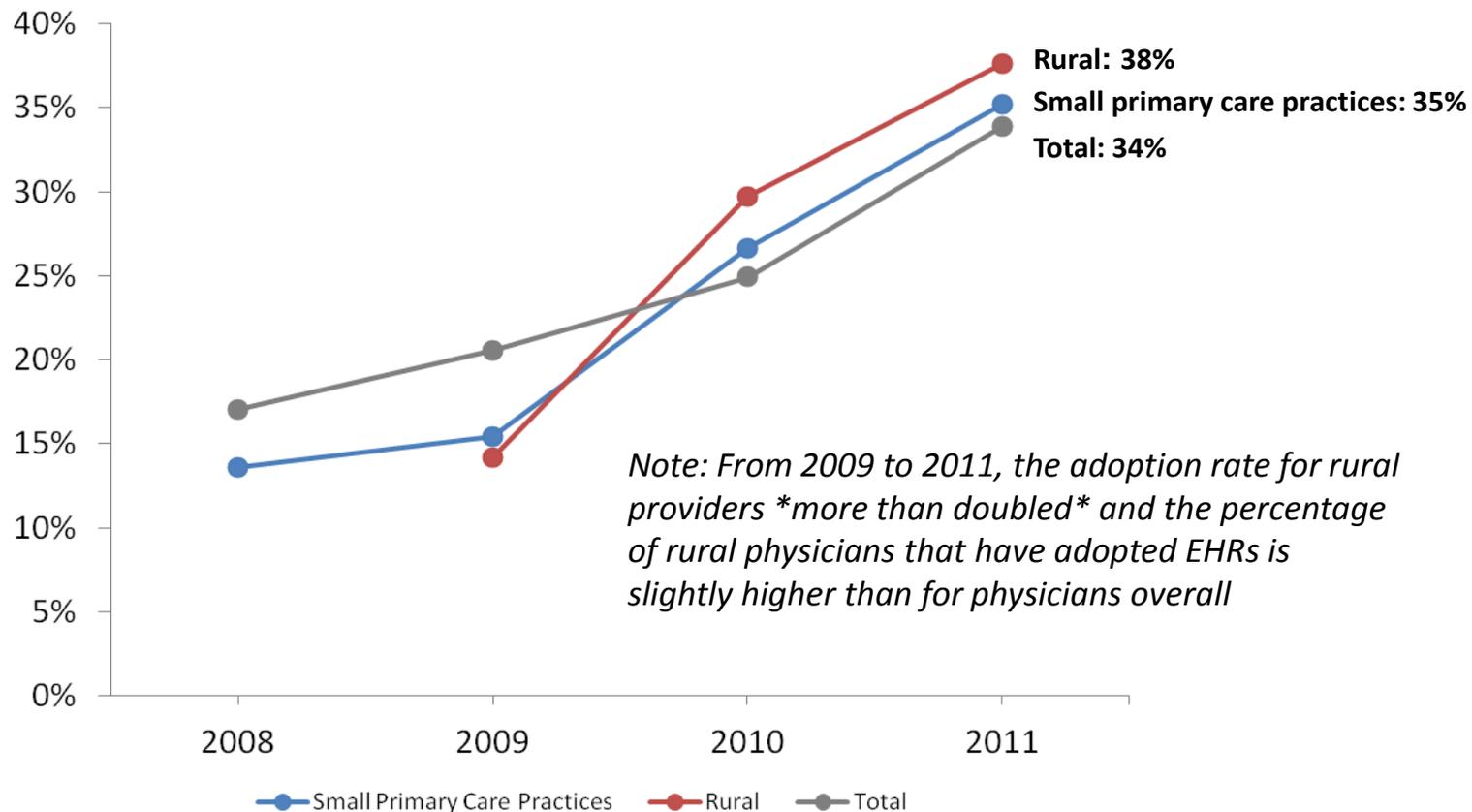
Age Discrepancies



How Are We Doing in Rural Areas?

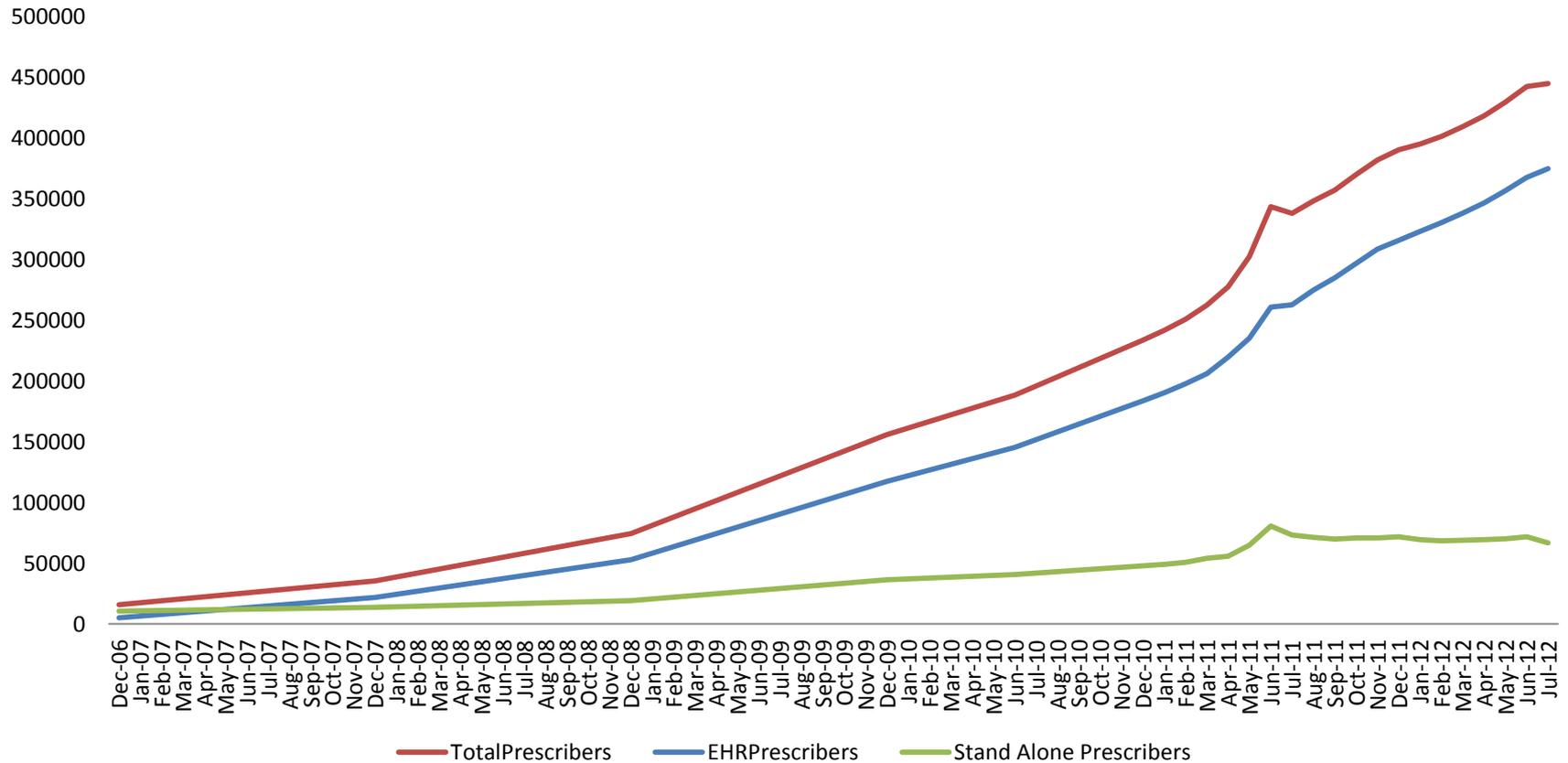


Basic EHR adoption among office-based physicians in rural areas and small primary care practices



Rural refers to physicians in a county outside of a Metropolitan Statistical Area. Small primary care practices refer to primary care physicians in practices with 10 or fewer physicians. Data source: National Ambulatory Medical Care Survey (NAMCS) Electronic Health Record Supplement mail surveys, 2008-2011.

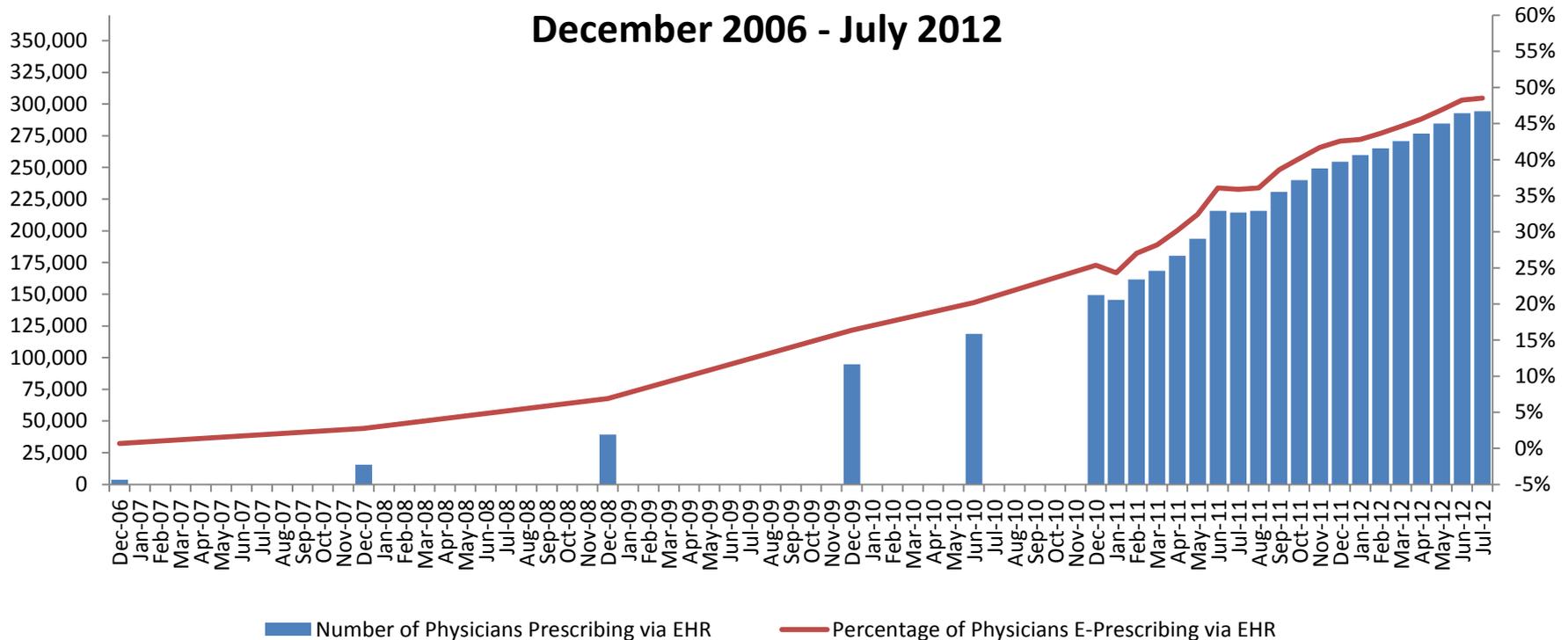
E-Prescribers On the Surescripts Network December 2006-July 2012



Physicians Using an EHR on Surescripts Network



**Number and Percentage of Physicians
E-Prescribing via EHR on the Surescripts Network
December 2006 - July 2012**





ONC Supporting Activities

**“ I BEAT CANCER
SO I COULD
DANCE AT MY
DAUGHTER’S
WEDDING. ”**

Dave deBronkart

Cancer Survivor / Health IT Advocate

Putting the **I** in Health**IT**
www.HealthIT.gov


The Office of the National Coordinator for
Health Information Technology



ePatient Dave

Cancer Survivor and Proud Father

Regional Extension Centers – Success! As of July 1, 2012



Regional Extension Center Program Dashboard from HHS Office of the National Coordinator for Health Information Technology - Windows Internet Explorer

http://dashboard.healthit.gov/rec/

File Edit View Favorites Tools Help

Regional Extension Center Program Dashboard from ...

HealthIT Dashboard BETA

MAP ONLY GRID VIEW EXPORT PRINT HELP

CHARTS & GRAPHS MAP OPTIONS ABOUT

Nationwide Key Performance Indicators

Total Providers Enrolled: **143,890**

Percent to "Enrollment" Goal: **134%**

Percent to "Live on EHR" Goal: **85%**

Percent to "Demonstrate Meaningful Use" Goal: **17%**

Progress to Primary Care Providers Goal

Specialties of Primary Care Providers Enrolled with RECs

Regional Extension Center (REC) Cooperative Agreement Program

Enrollment: PCPs by State or County

National

Colorado: 2545

Enrolled Providers

- 0 - 500
- 501 - 1,500
- 1,501 - 2,500
- 2,501 - 3,500
- 3,501 - 5,000

Last Updated: 07/01/2012

Summary and Citations

To promote health information technology (health IT) adoption and meaningful use, the Health Information Technology for Economic and Clinical Health Act (HITECH) authorized the Office of the National Coordinator for Health Information Technology (ONC) to implement the Health IT Regional Extension Center (REC) Cooperative Agreement Program. The REC Program provides information, guidance, and technical assistance to health care providers to support and accelerate their efforts to become meaningful users of electronic health records (EHR). The REC program is funded to provide technical assistance for EHR implementation to 100,000 primary care providers through 62 sites located nation-wide.

Regional Extension Centers (RECs)

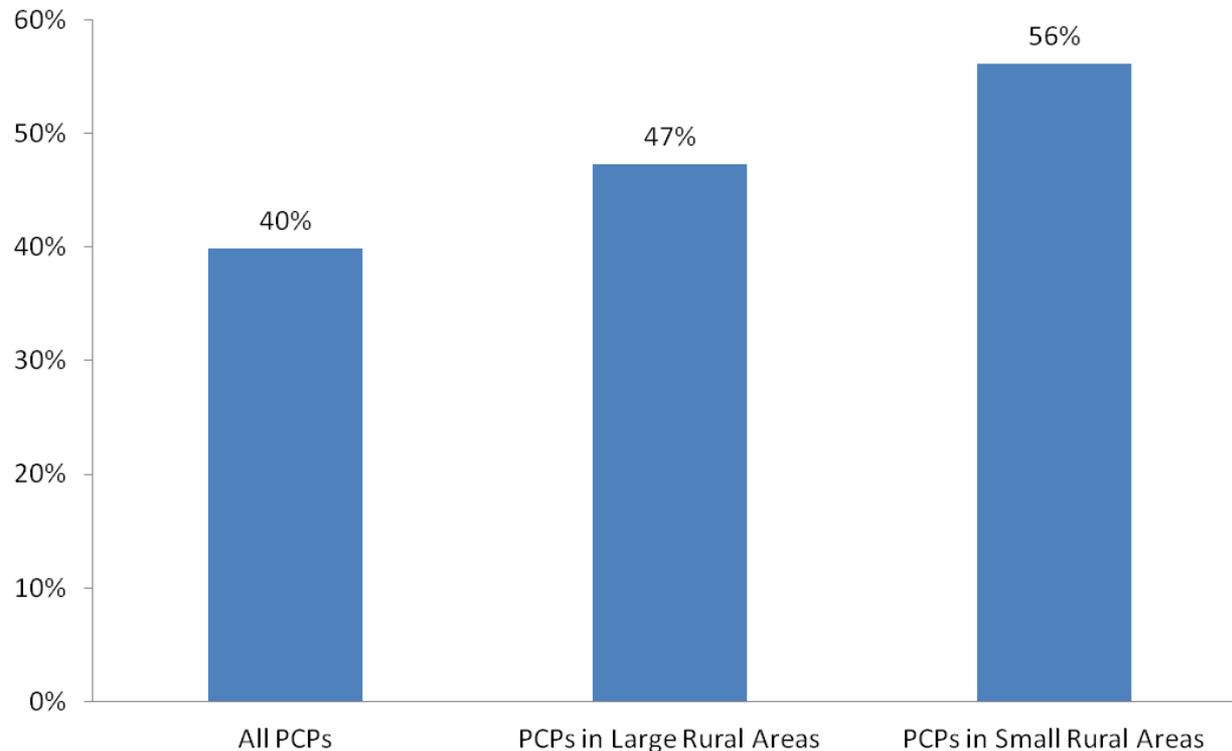


Enrollment Among Primary Care Providers in Rural Areas

As of February 2012

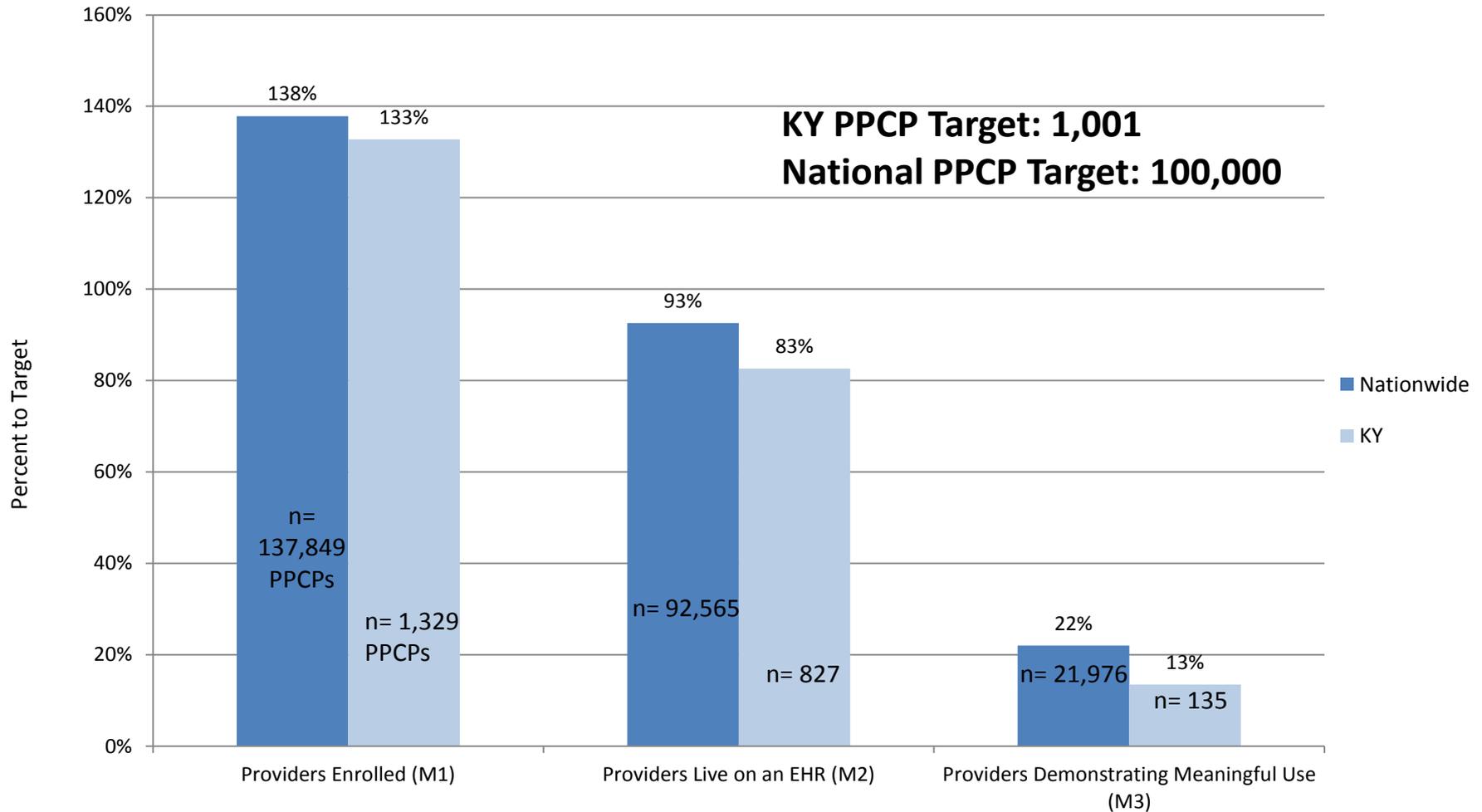
Nationwide, over 130,000 primary care providers are enrolled with an REC.

Working with 963 Critical Access Hospitals (CAHs) and 85 rural hospitals, all of whom have 25 beds or less.

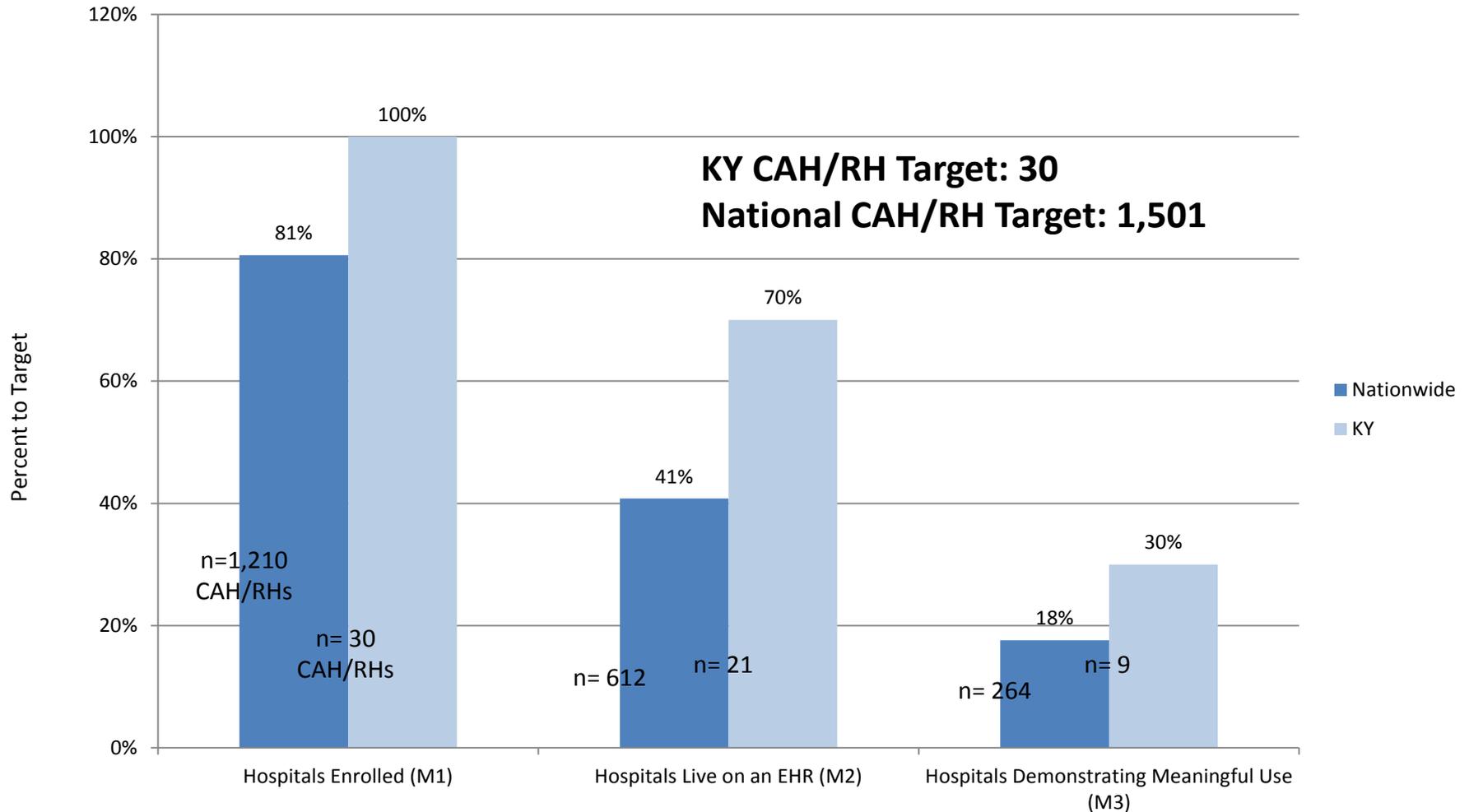


“Large rural areas” are counties in a micropolitan statistical area (contains an urban core of at least 10,000, but less than 50,000, population). “Small rural areas” are counties outside a core based statistical area. PCPs are primary care physicians, nurse practitioners, and physician assistants from SK&A 2011.

Priority Primary Care Providers (PPCPs) at REC Milestones, % to Target



Critical Access and Rural Hospitals at REC Milestones, % to Target





- **2616 Certified EHR Products**

	Ambulatory	Inpatient	Total
Complete EHR	1055	250	1305
Modular EHR	689	622	1311
Total	1744	872	2616

- **861 EHR Vendors/Developers**

This table shows the total count of products. All product versions are included.

HIT Industry – Venture Capital Investment



Venture Capital Investment into U.S. Health IT Companies
Medical Software



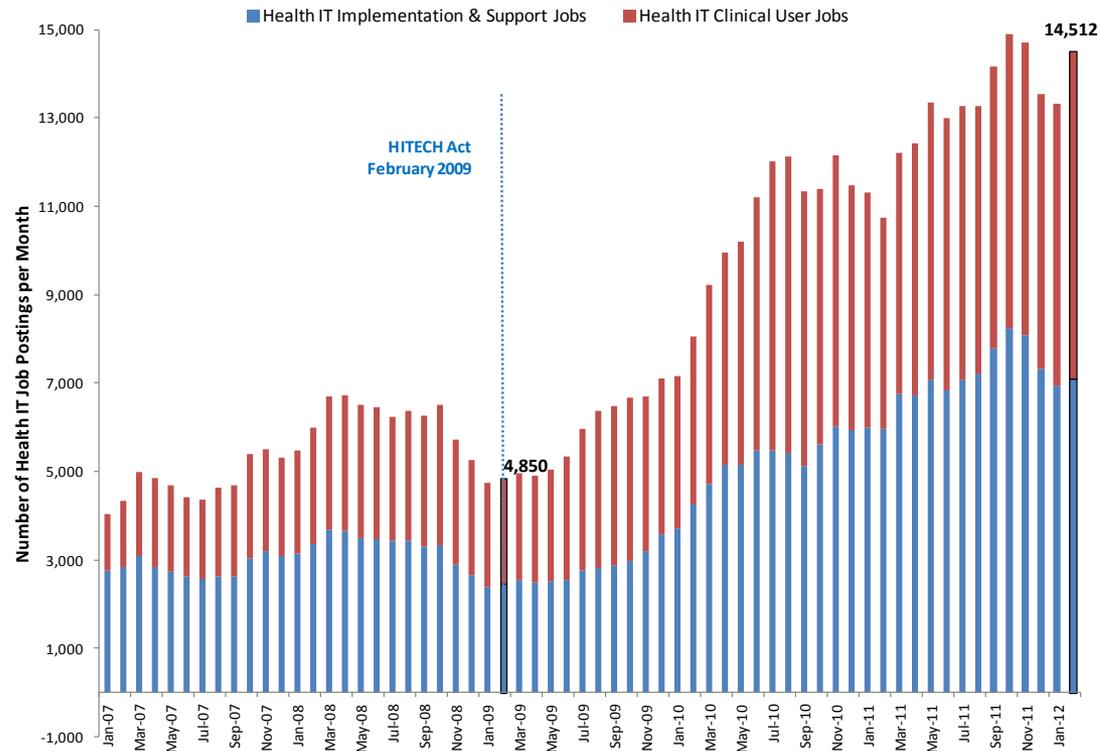
Source: Dow Jones VentureSource

HIT Industry – Size Estimates



Source	Supposed Market Definition	Year	Size (\$ billions)		
Frost & Sullivan	Ambulatory EHR Revenue	2009	1.3		
		2012	2.6		
		2013	3.0		
		2016	1.6		
	Hospital EHR Revenue	2009	1.0		
		2012	6.5		
IDC Health Insights	Ambulatory MU (Software & Maintenance Costs)	2009	0.6		
		2015	1.4		
	Inpatient MU (Software & Maintenance Costs)	2009	1.3		
		2015	2.4		
Kalorama	EHR + Related Services Revenue	2008	12.5		
		2009	13.8		
		2010	15.7		
		2011	17.9		
		2012	5.3		
Millennium Research Group	EHR Revenue	2013	5.9		
		2014	6.6		
		2015	7.4		
		2016	8.3		
		MarketsandMarkets	EHR (end user purchases of components and applications)	2009	2.2
				2015	6.1
Global Market Direct	US Health IT (EHR, Practice Management, CPOE, eRx, Labs, Picture archiving, Radiology Images)	2008	4.1		
		2015	11.5		

Online Job Postings Have Grown Substantially



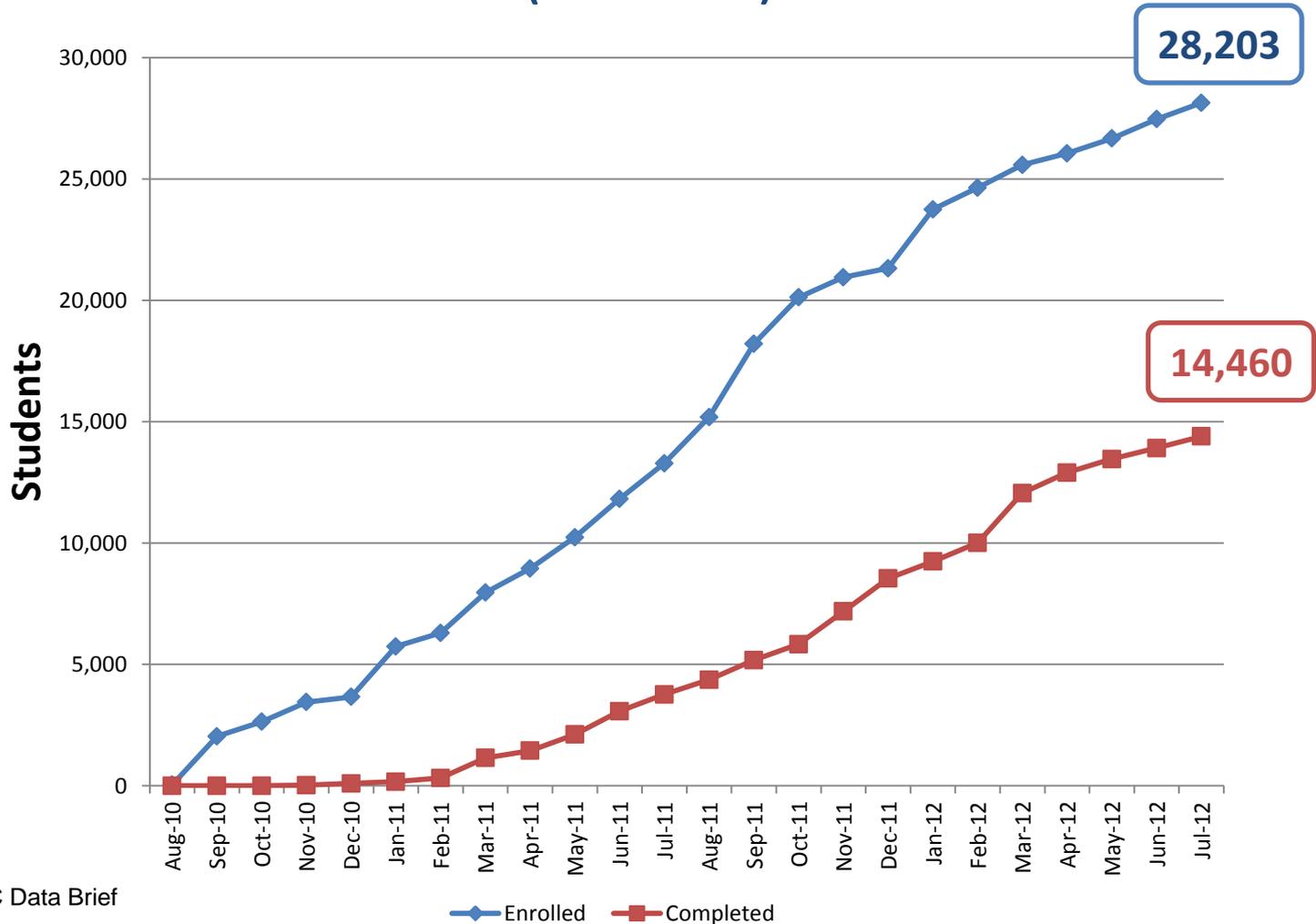
SOURCE: ONC analysis of data from O'Reilly Job Data Mart

- Supporting activities
 - Community College Consortia
 - University Based Training
 - Curriculum development
 - Competency Exam

Community College Consortia As of July 31, 2012



Students Enrolled and Students Completed (Cumulative)

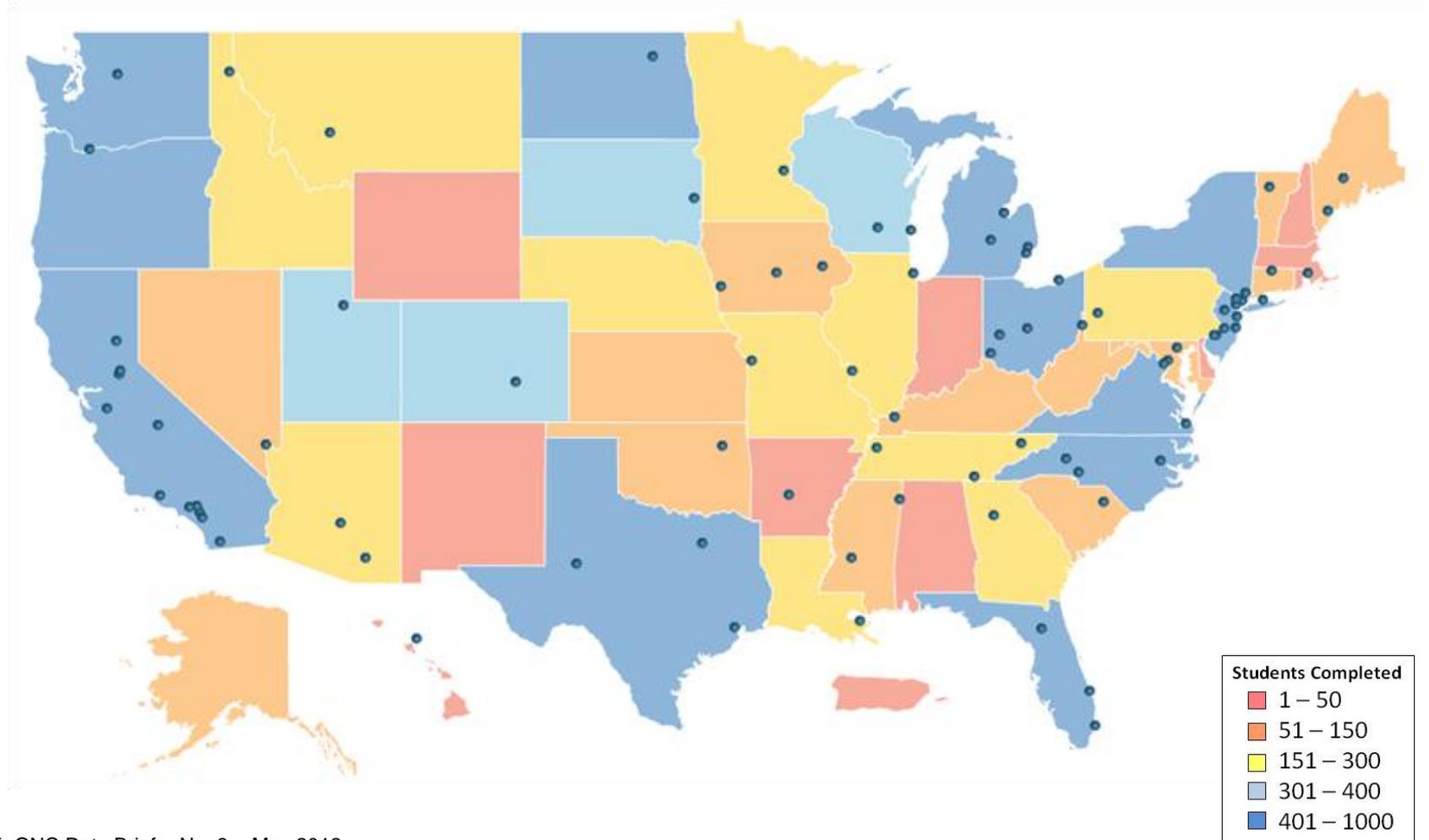


SOURCE: ONC Data Brief

The Community College Consortia Program has trained students in all 50 states.

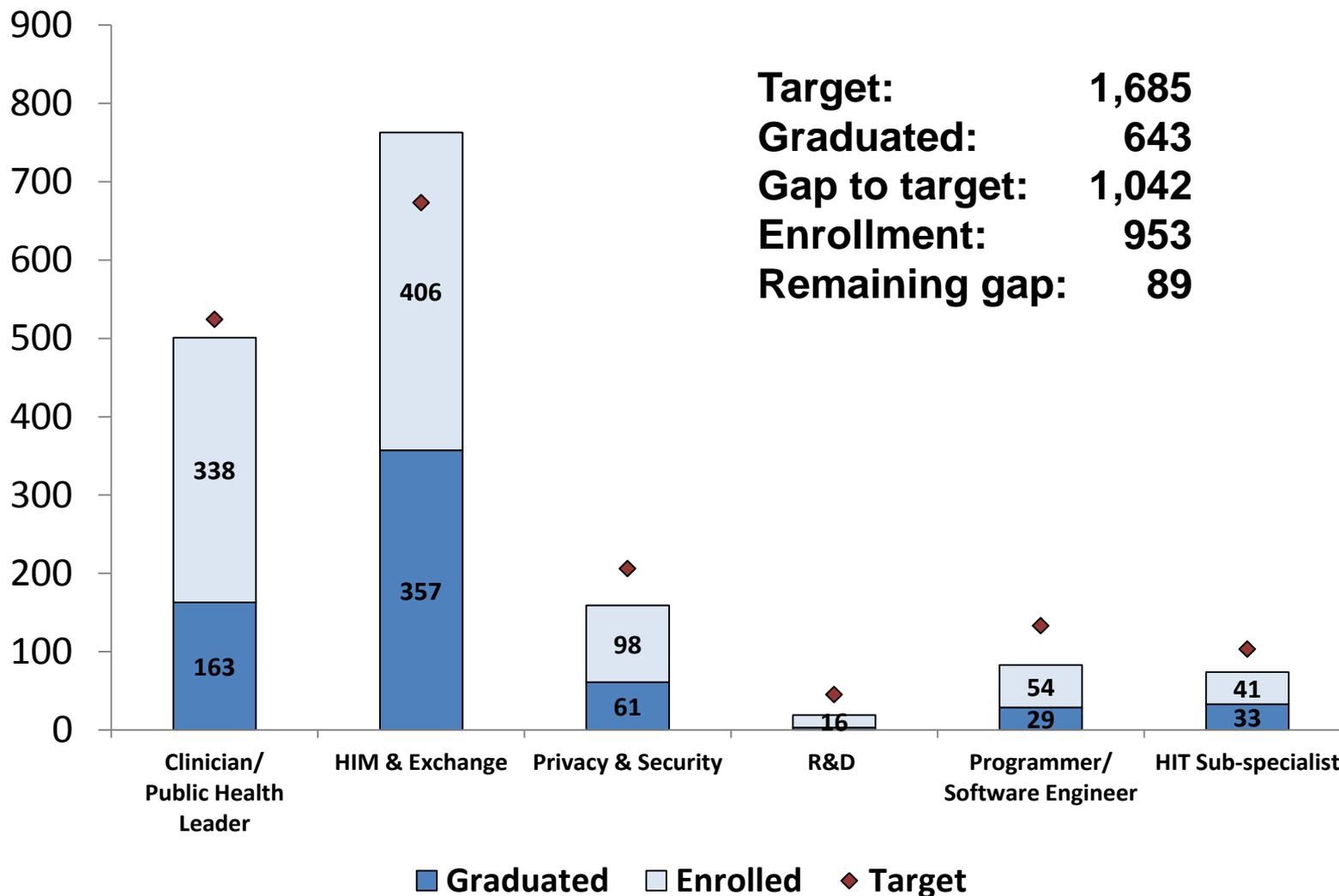


Number of students who successfully completed the Community College Consortia Program by state: March 31, 2012



University-Based Training

July 2012

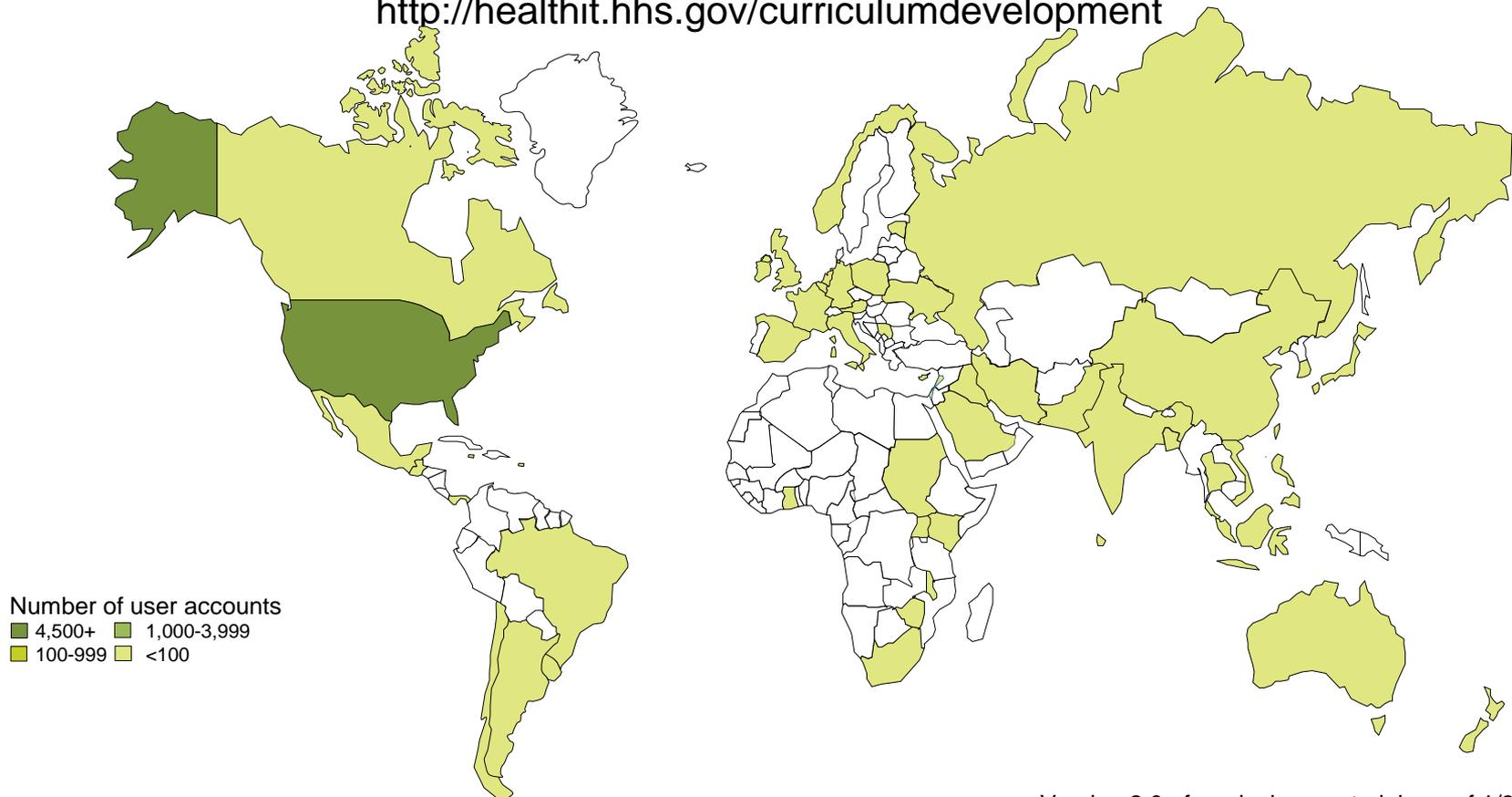


Global adoption of ONC health IT curriculum materials



Users in 60 countries across 6 continents

<http://healthit.hhs.gov/curriculumdevelopment>



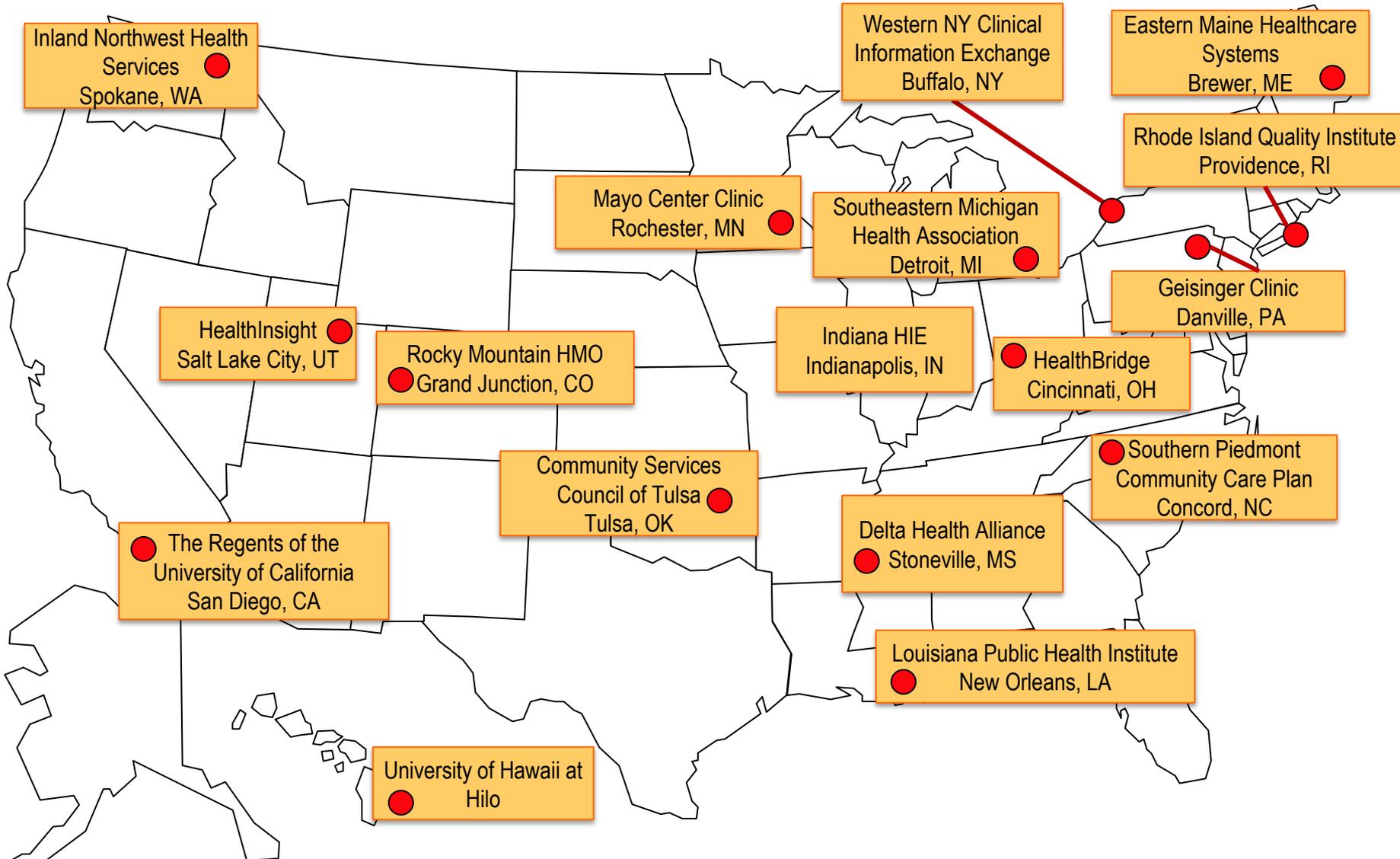
Version 2.0 of curriculum materials as of 1/31/12



- **Focus** - Give providers viable options to meet MU exchange requirements
 - E-prescribing
 - Care summary exchange
 - Lab results exchange
 - Public health reporting
 - Patient engagement
-
- **Approach**
 - Make rapid progress
 - Build on existing assets and private sector investments
 - Every state different, cannot take a cookie cutter approach
 - Leverage full portfolio of national standards



17 Beacon Communities



SHARP – Strategic Health IT Advanced Research Projects



SHARPS

Security of Health IT : Innovations in security and privacy required to build public trust in health IT systems



Automated complex decisions around health record exchange, assuring regulation compliance



Developed techniques to analyze health records access logs to catch policy violations



Patient-Centered Cognitive Support: Innovations in health IT usability and clinical decision support



Piloted Rapid Usability Assessment Protocol for EHRs



Comparing usability across EHR systems via Usability Lab

SHARP – Strategic Health IT Advanced Research Projects



Healthcare Applications: New health IT architectures enabling substitutable applications



Created **SMART platform** – a test-bed for the substitutable app development



SMART-enabled i2b2, a data analytics platform, and Indivo, a PHR



Secondary Use of EHR Data: Enabling exchange through creating tools, services for large-scale data sharing



Conversion and normalization of lab messages & medication orders



Extraction of medication from narrative clinical documents

A problem has been detected and windows has been shut down to prevent damage to your computer.

DRIVER_IRQL_NOT_LESS_OR_EQUAL

If this is the first time you've seen this stop error screen, restart your computer, If this screen appears again, follow these steps:

Check to make sure any new hardware or software is properly installed. If this is a new installation, ask your hardware or software manufacturer for any windows updates you might need.

If problems continue, disable or remove any newly installed hardware or software. Disable BIOS memory options such as caching or shadowing. If you need to use safe Mode to remove or disable components, restart your computer, press F8 to select Advanced Startup options, and then select Safe Mode.

Technical information:

*** STOP: 0x000000D1 (0x0000000C,0x00000002,0x00000000,0xF86B5A89)

*** gv3.sys - Address F86B5A89 base at F86B5000, DateStamp 3dd991eb

Beginning dump of physical memory
Physical memory dump complete.

Contact your system administrator or technical support group for further assistance.

Investing in Innovation (i2)



- ONC's Challenges and Prizes program spurring private-sector innovation and engaging developers to address health problems that touch **every person in America:**
 - Care Transitions
 - Cancer Research
 - Heart Disease
 - Population Health
 - Sexual Abuse
 - Disabilities
- Over 100 new applications developed
- Winners have received **\$195,000** in prizes
- Over 25 new challenges planned

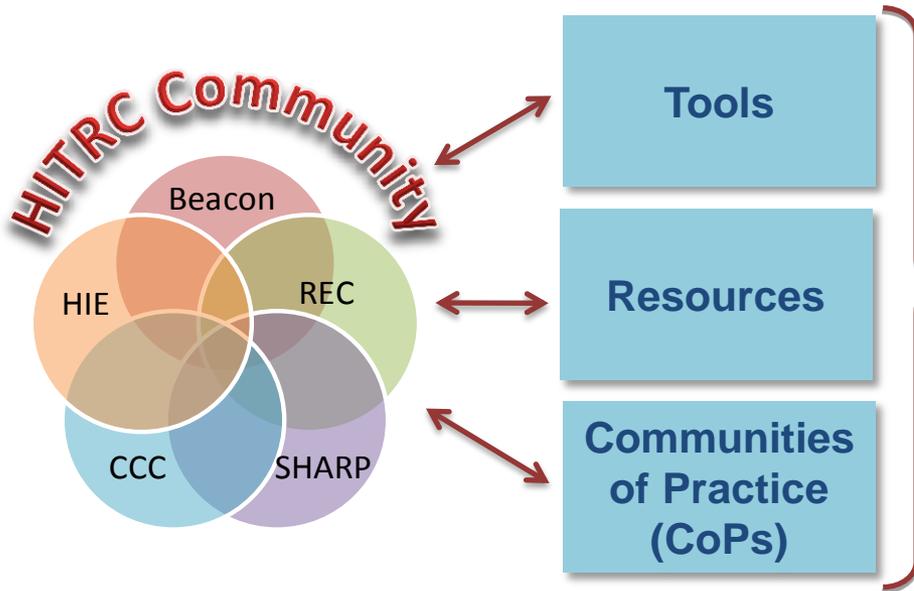


Dr Funky's Blood Pressure Management Rx
<http://bloodpressure.challenge.gov/submissions/7498-dr-funky-s-blood-pressure-management-rx>

Health IT Resource Center



Work with REC
community and shares
knowledge



Work with external
communities and shares
knowledge





- Office of the CMO (Chief Medical Officer)
 - Safety
 - Usability
 - Clinical Decision Support
 - Quality including metrics and measurement development
 - Significant involvement with our wide array of clinical stakeholders
- **Office of Consumer e-Health**
- Office of Certification
- Office of Science and Technology – a merger



Consumer and Patient Empowerment



continuuminnovation.com

Consumer e-Health Pledge Program

www.healthit.gov/pledge



375+ organizations have Pledged to provide access to personal health information for 100 million (1/3) of Americans...

PLEDGE

to Empower Individuals to be Partners in Their Health Care

Who is Pledging IT?

Augue porttitor, nunc scelerisque, porta uma, in augue arcu, mattis, integer sociis vel elementum, magna phasellus sit ultricies tincidunt porttitor! Ridiculus vel cum ut. Hac sed hac montes nec, lectus a ut tempor. Mus. Pulvinar dis egestas sed rhoncus, lectus amet turpis. Habitasse ac magna pulvinar, cursus, egestas dis turpis placerat, lorem.

[View All >](#)

Take the Pledge

Enim dignissim augue et enim ut cursus hac in augue ultrices duis aerean dignissim parturient, integer tincidunt dignissim parturient. Nisi proin, uma pellentesque adipiscing porttitor parturient turpis arcu.

PLEDGE NOW >

This is a voluntary program. Pledging does not signify endorsement by ONC or HHS.

 American Nurses Association	 Alliance for Nursing Informatics	 Beth Israel Deaconess Medical Center
 Children's Hospital Boston	 The College of Healthcare Information Management Executives (CHIME) Continuum Health Alliance	 Cleveland Clinic
 Consumers Union <small>Nonprofit Publisher of Consumer Reports</small>	 Continua <small>HEALTH ALLIANCE</small>	 Dossia
 EHRA: HIMSS Electronic Health Record Association	 Floyd Medical Center	 GE Healthcare
 Harbin Clinic	 HealthBridge <small>Cincinnati Beacon Text4Health Program in partnership with HealthBridge</small>	 Health Record Banking Alliance
 Healthrageous	 Microsoft HealthVault	 Healthcare Information Management Systems Society
 IATRIC Systems	 Indiana Health Information Technology, Inc.	 Intel
 Kaiser Permanente	 National eHealth Collaborative	 National Health Council

Changing Role for and Demands from Patients



- Unbounded expectations
- Primary or secondary coordinator of care
- Community or affinity group participant
- Custodian of records
 - Facile exchange between all participants
 - Ability to control privacy and security
 - Download and manage
- Predictable interests
 - Search for clinical trials
 - Desire for “plain language” interactions
 - Multi- not just bi-lingual websites
- Consumer demand for quality and price
 - DrAngiesList.com
- Access
- Focus on the provider AND the patient



SENSORS

Home sensing & control 	Weight Scale 
Bed / Chair Sensors 	Blood-pressure 
Implant Monitors 	Glucose Meter 
Baby Monitors 	Pulse Oximeter 
PERS 	Spirometer 
Consumer Electronics 	Medication Tracking 
	Pedometer 
	Fitness equipment 

CONNECTIVITY



MICS / MEDS

Ethernet



AGGREGATION COMPUTATION



PC



Personal Health System



Cell Phone



Set Top Box



Aggregator

NETWORK (POTS, Cellular, BB)

SERVICES

Healthcare Provider Service


Disease Management Service


Diet or Fitness Service


Personal Health Record Service


Implant Monitoring Service


- Sphygmomanometer
 - Blood pressure
 - Pulse



- Digestible RFID Pills



- Glucometer
 - Blood sugar



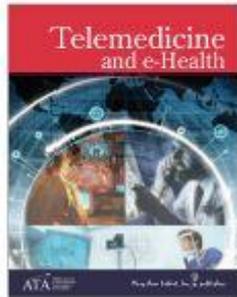
- Smart Band-Aids
 - Chemistry



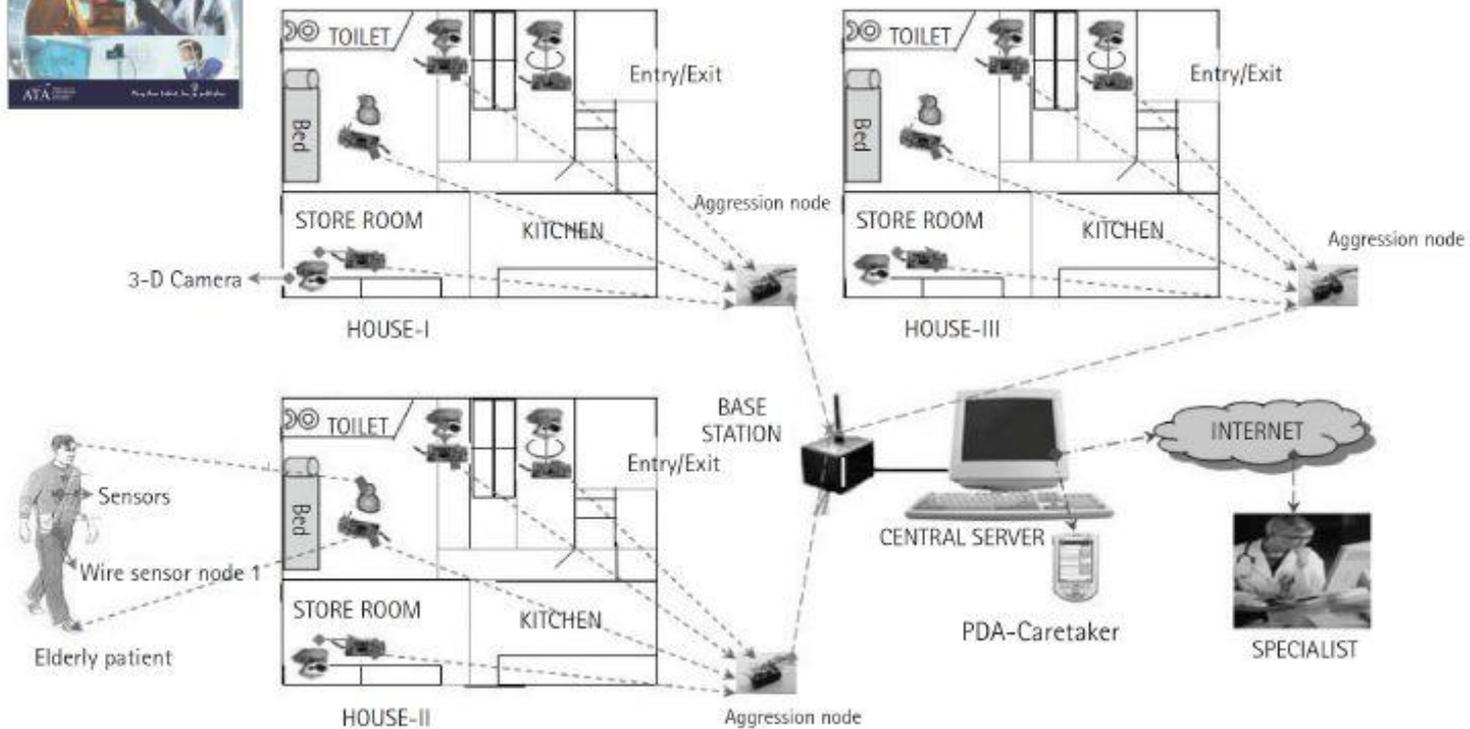
- Bathroom Scale
 - Weight
 - Water loss/gain



The Smart Home



Elderly Patient Monitoring System Using a Wireless Sensor Network



The Smart Car

- Seat
 - Weight
 - Blood pressure
 - Breathing rate
- Steering Wheel
 - Pulse
 - EKG
 - Blood oxygen (PO_2)

Walter, Eilebrecht ET AL
Personal and Ubiquitous Computing
November 2010

Per Ubiquit Comput
DOI 10.1007/s00779-010-0350-4

ORIGINAL ARTICLE

The smart car seat: personalized monitoring of vital signs in automotive applications

Marian Walter · Benjamin Eilebrecht ·
Tobias Wartzek · Steffen Leonhardt

Received: 3 April 2010 / Accepted: 20 November 2010
© Springer-Verlag London Limited 2011

Abstract Embedded wireless sensors are important components of mobile distributed computing networks, and one of the target applications areas is health care. The preservation of mobility for senior citizens is one of the key issues in maintaining an independent lifestyle. Thus health technologies inside a car can contribute both to safety issues (supervision of driver fitness) as well as healthcare issues by monitoring vital signs imperceptibly. In this paper, three embedded measurement techniques for non-contact monitoring of vital signals have been investigated. Specifically, capacitive electrocardiogram (cECG) monitoring, mechanical movement analysis (ballistocardiogram, BCG) using piezo-foils and inductive impedance monitoring were examined regarding their potential for integration into car seats. All three sensing techniques omit the need for electroconductive contact to the human body, but require defined mechanical boundary conditions (stable distances or, in the case of BCG, frictional connection). The physical principles of operation, the specific boundary conditions regarding automotive integration and the results during wireless operation in a running car are presented. All three sensors were equipped with local intelligence by incorporating a microcontroller. To eliminate the need for additional cabling, a wireless Bluetooth communication module was added and used to transmit data to a measurement PC. Finally, preliminary results obtained during test drives on German city roads and highways are discussed.

Keywords Distributed sensor network · Wireless sensor · Non-contact monitoring · cECG · BCG · MIT · Automotive · Vehicle seat

1 Introduction

Research on wearable monitoring systems has attracted much attention and activities during recent years [1, 2]. It is thought that smart embedded sensing systems are one of the possible options to control future costs of health care in aging societies. The demographic changes that many countries are going to face will be accompanied by an increasing number of elderly car drivers, and thus automotive medical support is expected to attract further attention by insurances, health care providers or emergency services. Two typical use cases might be defined for such a scenario. Driver fitness monitoring is of major concern, when acute health problems impair the ability to drive safely. A car-integrated medical sensor system could be capable of detecting such critical conditions and initiate appropriate measures ranging from drive interventions (e.g. safety auto pilot) to emergency services (e.g. car to car or car to emergency communication services, qualified ambulance call). If the sensor system inside the car is able to acquire validated physiological data on a regular basis, the vital signs data can also be used in a broader context as part of a general home-health monitoring system, extending the range of coverage and connectivity.

To monitor vital signs, like electrical and mechanical heart activity as well as breathing rate, we investigated and subsequently implemented three non-contact methods, namely capacitive ECG monitoring (cECG), mechanic heart activity monitoring using ballistocardiograms (BCG), and magnetic impedance monitoring to measure mechanic

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Published online: 07 January 2011

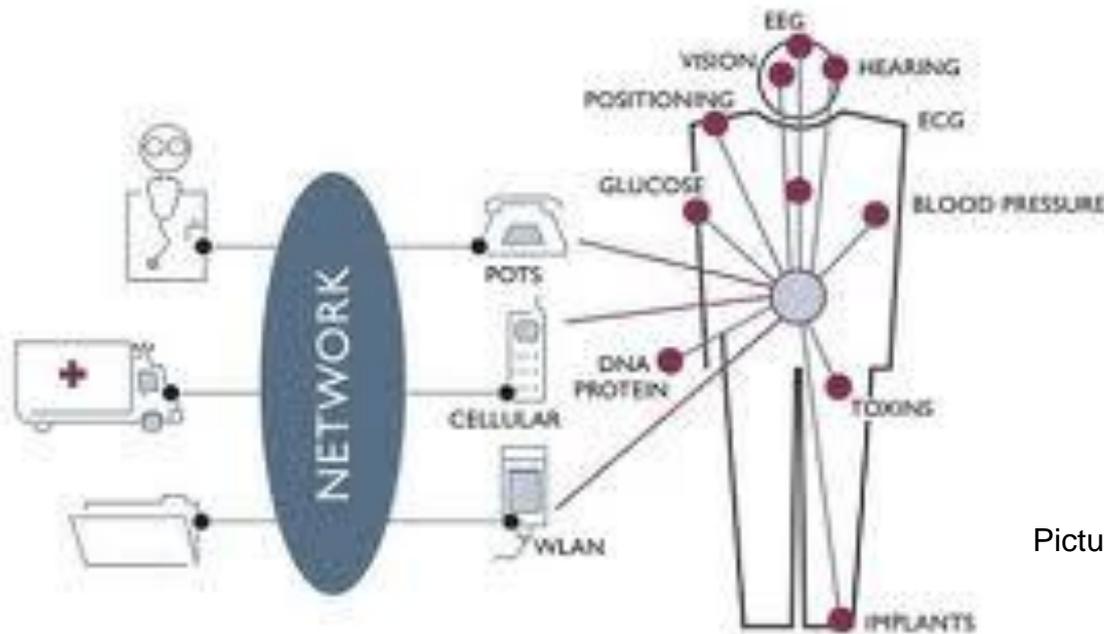
Springer

The Smart Patient



[FCC Issues Final Rule Allocating Wireless Spectrum for MBANs](#)

The Federal Communications Commission has released a final rule to allocate wireless spectrum for **medical body area networks** starting Oct. 1, 2012. FCC said the spectrum allocation will help improve patient care and safety by reducing the need to physically connect sensors to patients. The agency has yet to designate a frequency coordinator to oversee use of MBANs. *Modern Healthcare*. September 2012



Picture source: Jack E. Brown
6/23/2012

ONC's Three A's for Consumer Engagement



Access

- Give consumers secure, timely electronic access to their health information.

Action

- Support the development of tools that help consumers to take action using information.

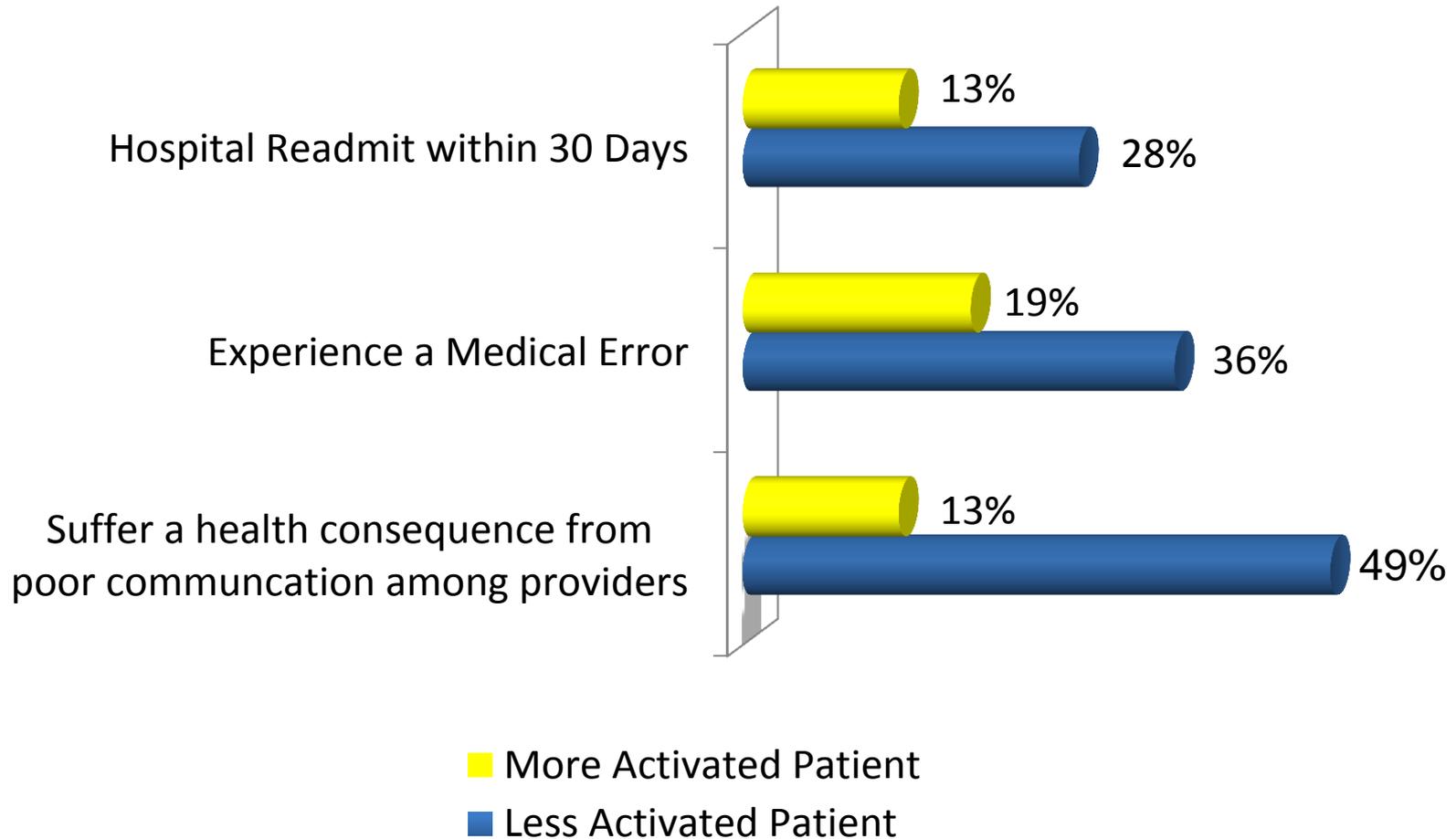
Attitude

- Help expectations about consumer (and provider) roles to evolve.

Consumers Looking for a Trusted Source



Consumer Engagement = Better Care



There's a Gap between Reality & Potential



- 15% have renewed a prescription online
- 10% have a personal health record (PHR)
- 8% of consumers have e-mailed their provider

Million Hearts – Provider Goals



Million Hearts - Individuals - Be One in a Million Hearts - Windows Internet Explorer

http://millionhearts.hhs.gov/individuals.html

million hearts pledge

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Million Hearts - Individuals - Be One in a Million Hearts

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The Initiative About Heart Disease & Stroke **Be One in a Million Hearts™** Resources Stay Connected News & Events

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Be One in a Million Hearts™

Individuals | Health Care Providers | Pharmacists & Pharmacies | Consumer, Community, & Patient Organizations | Hospitals & Health Care Organizations | Employers & Private-Sector Organizations | State, County, & Local Health Officials

Preventing 1 million heart attacks and strokes in five years will require the work and commitment to change from all of us. There are steps that each of us can take to reach this goal as a nation. Be one in a Million Hearts™ and see how your actions can make a positive difference. A Million Hearts™ begins with you.



As an Individual

- **PREVENT** heart disease and stroke in your family by **UNDERSTANDING** the risks.
- **GET UP** and **GET ACTIVE** by exercising for 30 minutes on most days of the week.
- **KNOW** your ABCS:
 - Appropriate Aspirin Therapy
 - Blood Pressure Control
 - Cholesterol Management
 - Smoking Cessation
- **STAY STRONG** by eating a heart-healthy diet that is high in fresh fruits and vegetables and low in sodium, saturated and trans fats, and cholesterol.
- **TAKE CONTROL** of your heart health by following your doctor's instructions for medications treatment.

** Required Fields.*

First Name:

Last Initial:

City/State: State

Count Me In

Disclaimer

Learn More

- AHA MyLifeCheck—Life's Simple 7 Success Plan [American Heart Association](#)
- Million Hearts™: Strategies to Reduce the Prevalence of Leading Cardiovascular Disease Risk Factors [Centers for Disease Control and Prevention](#)
- The American Heart Association and the Million Hearts™ Initiative: A Presidential Advisory From the American Heart Association [PDF-289q](#) [American Heart Association](#)
- The "Million Hearts™" Initiative Preventing Heart Attacks and Strokes [New England Journal of Medicine](#)

Note: PDF documents available from this page require the free [Adobe Acrobat Reader](#).

Trusted sites 75%

Consumer e-Health Challenge



Challenge.gov powered by ChallengePost

LOG IN

SIGN UP



Beat Down Blood Pressure

VIDEO CHALLENGE

FOLLOW



49 followers



19 days left to submit



\$5,500 in prizes



Rules

Enter a Video

Discussions

Resources

FAQ

Share how you use technology to help “know your numbers” and achieve blood pressure control.

ACCEPT THIS CHALLENGE

Get notified of important changes and opportunities for participants.



Get started: [explore resources](#) from [ONC](#), [Million Hearts](#), and the [American Heart Association](#)!

Blue Button and ABBI



**Blue Button
Download
My Data** [®]

Automate Blue Button S&I Initiative (ABBI) Participants



- Access My Records, Inc.
- Aetna
- ADHS
- Allscripts
- American Academy of Family Physicians
- American College of Physicians
- AORN
- BCBS-A
- Cerner
- Data Exchange Specialist California Immunization Registry
- Department of Defense (Booz Allen Hamilton - Contractor)
- Dossia
- Ep-Con
- eRECORDS, Inc
- Florida Hospital
- CakeHealth
- Humetrix
- Gartner
- GE Healthcare
- Gorge Health Connect, Inc.
- Health Information Xperts
- HealthURL
- Healthwise and HITSC FACA
- HHS
- Hunter College
- IMS Health
- IPS Technology Services
- KirbyIMC.com
- Laboratory Corporation of America
- Louisiana Dept of Health and Hospitals
- McKesson
- Microsoft
- Napersoft
- NoMoreClipboard
- Optum
- OrionHealth
- Sager Systems
- Patient First
- Patients as Partners
- Regulatory Informatics
- RelayHealth
- Ricoh Healthcare
- Sutter Medical Center of Santa Rosa
- Thotwave Technologies, LLC.
- Transformations at the Edge (TATE)
- UnitedHealth Group
- US Army
- Veterans Affairs
- Videntity
- WellSpan Health
- Wittie, Letsche & Waldo, LLP

And more...



Musings



Market Forces



- Changing roles for caregivers
- Gaming
- Genomics and proteomics
- Precision (or personalized) medicine
- Ubiquitous sensors
 - Environmental
 - Embedded
- Regenerative medicine
- Telepresence
- Robotics
- Demographics
- Alternative medicine acceptance in the mainstream
- New computing platforms
 - Apps
 - Clinical decision support modules
 - Inference engines
- **Payment reform**



piperreport.com



Value

Evidence of Value – E-Records Linked to Fewer Malpractice Claims



“Harvard study shows dramatic dip after paper files are replaced, but exact connection isn't clear.”

Randy Dotinga
MONDAY, June 25, 2012 (HealthDay News)

“The researchers estimate that medical malpractice claims were about 84 percent less likely after electronic medical records were put into place.”

The study says factors other than electronic health records could account for the difference in claims. Physicians who used the records, for example, could be "early adopters" whose style of medicine was less likely to spawn malpractice claims. Also, Massachusetts made major changes to the state's health care system in 2006.

And, the researchers pointed out in their letter published in the June 25 online edition of *Archives of Internal Medicine*, the study was limited to only those doctors in Massachusetts who were affiliated with Harvard Medical School.”

Evidence of Value – Better Clinical Decision Support in Cardiology



Study: Decision-support tool reduces inappropriate cardiac tests

AuntMinnie.com
July 23, 2012

“A new decision-support tool using American College of Cardiology appropriateness criteria led to an increase in appropriate cardiac imaging tests, including myocardial perfusion scintigraphy, from 49% in the first two months of a pilot study to 61% in the last two months, according to findings presented at a cardiology meeting. The frequency of inappropriate exams also fell from 22% in the first two months to 6% in the last two months, according to the study. The automated tool took the place of radiology benefits managers in the study.”

Evidence of Value – Better Clinical Decision Support Reduces Risk of Delirium



Deleting delirium

Hospital uses IT to help identify at-risk patients

By [Maureen McKinney](#)

Posted: September 8, 2012 - 12:01 am ET

In early 2011, a team of clinicians and information technology specialists at Hartford (Conn.) Hospital convened a work group to address one of the most dangerous, costly and often-overlooked complications affecting ...affecting roughly a quarter of general-medicine geriatric patients and as many as 75% to 80% of patients over age 65 in intensive-care units.

Estimated per-patient costs of delirium range from \$16,000 to as high as \$64,000, while total annual costs to the healthcare system are more than \$100 billion, according to recent figures.

Read more: Technology helps identify delirium risk Modern Healthcare

<http://www.modernhealthcare.com/article/20120908/MAGAZINE/309089961#ixzz26ODPaGVZ?trk=tynt>

Evidence of Value – Improved Quality and Efficiency



Using Electronic Health Records to Improve Quality and Efficiency: The Experiences of Leading Hospitals – The Commonwealth Fund July 2012

Abstract: An examination of nine hospitals that recently implemented a comprehensive electronic health record (EHR) system finds that clinical and administrative leaders built EHR adoption into their strategic plans to integrate inpatient and outpatient care and provide a continuum of coordinated services. Successful implementation depended on: strong leadership, full involvement of clinical staff in design and implementation, mandatory staff training, and strict adherence to timeline and budget. The EHR systems facilitate patient safety and quality improvement through: use of checklists, alerts, and predictive tools; embedded clinical guidelines that promote standardized, evidence-based practices; electronic prescribing and test-ordering that reduces errors and redundancy; and discrete data fields that foster use of performance dashboards and compliance reports. Faster, more accurate communication and streamlined processes have led to improved patient flow, fewer duplicative tests, faster responses to patient inquiries, redeployment of transcription and claims staff, more complete capture of charges, and federal incentive payments.

Evidence of Value – When Disaster Strikes . . .



Evidence of Value – When Disaster Strikes . . .



- Last year, a devastating tornado struck Joplin, Missouri, a community of 50,000 people
 - 134 killed
 - Partially destroyed St. John's Hospital
 - Paper records were blown to the winds
 - Some records were found in Springfield, 75 miles from Joplin
- Fortunately, 3 weeks before the storm, St. John's implemented an EHR hosted by its parent company, Sisters of Mercy Health System of St. Louis.
- EHRs were crucial after the storm.
 - Helped the hospital reopen,
 - Relocate each and every patient
 - Resume patient care operations in record time

Why is HIT important?

Patients are not averages. They are part of a community.



59 year-old woman in Dallas, TX who was diagnosed with glaucoma in 1982 and has been taking Timoptic eye drops daily.

On Sunday, April 15, 10 minutes after entering the water for the first leg of a mini-triathlon she suffered what was eventually diagnosed as a non-STEMI cardiac event. She was admitted to the Heart Hospital at Baylor Plano.



During the admission, she received personalized risk assessment forms, was placed on standardized order sets. Medication reconciliation was done. She was sent to the Cath Lab for an angiogram. Prior to and after her procedures, telemetry results were entered automatically into the EHR.

Using an EHR with imaging, her physician was able to review her angiogram with her on the TV screen in her room and discuss the potential risks of an additional beta blocker to ensure the best possible outcome. Personalized discharge instructions were given to her spouse. The outcome and prognosis are good.



We need your help!



The next 3 pages have sites which may be of use to you.

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CMS News

- Over 1.2 million now served by Accountable Care Organizations
- Chicago Health Care Fraud Prevention Summit – April 4, 2012
- Making Medicare plans better: 2013 rates and call letter
- 2012: The Year of Meaningful Use
- Expanding Medicaid coverage: states get federal funding

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CMS Provides Health Coverage for
100 Million People...



Information for people with Medicare, Medicare open enrollment, and benefits.

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CMS References for Stage 2



<https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/index.html>

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[Home](#) > [Regulations and Guidance](#) > [EHR Incentive Programs](#) > Overview

EHR Incentive Programs

- [Path to Payment](#)
- [Eligibility](#)
- [Registration](#)
- [Certified EHR Technology](#)
- [Clinical Quality Measures \(CQMs\)](#)
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Overview



The Official Web Site for the Medicare and Medicaid Electronic Health Records (EHR) Incentive Programs

The Medicare and Medicaid EHR Incentive Programs will provide incentive payments to eligible professionals, eligible hospitals and critical access hospitals (CAHs) as they adopt, implement, upgrade or demonstrate meaningful use of certified EHR technology.

[Registration for the Medicare and Medicaid EHR Incentive Program](#) is now open. Participate early to get the maximum incentive payments!

Attestation for the Medicare EHR Incentive Program is now open. Visit the [Attestation](#) page for more information.

Check on the links below for up-to-date, detailed information about the Electronic Health Record (EHR) Incentive Programs.

- Use the [Path to Payment](#) page to find out how to participate in these programs.
- [Overview of the Medicare EHR Incentive Program.](#)
- [Overview of the Medicaid EHR Incentive Program.](#)
- [Calendar of important dates.](#)
- [Downloads and related links.](#)

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<http://www.scribd.com/HealthIT/>



<http://www.flickr.com/photos/healthit>



[Health IT Buzz Blog](http://www.healthit.gov/buzz)



Thank you!

*For additional comments or questions please contact
David.Muntz@HHS.gov*