EHR Adoption: Creating an Appetite

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Questions

- What is the landscape of EHR adoption?
- What are the common characteristics of the practices that were early adopters vs. those that are just getting on board vs the holdouts?
- What is your "sales pitch" when approaching a provider to work with you?
  - Achieving MU is one area but is that a good enough incentive
  - What are other areas in which EHR utilization will benefit the practice?
- What is the impact HIT utilization has on the rest of the care team?
- How can community involvement in a EHR make an impact on patient care?

Meaningful Use Overview: Statutory Framework

- In HITECH, Congress established three fundamental criteria of requirements for meaningful use:

1. Use of certified EHR technology in a meaningful manner
2. The exchange of health information
3. Submission of clinical quality data

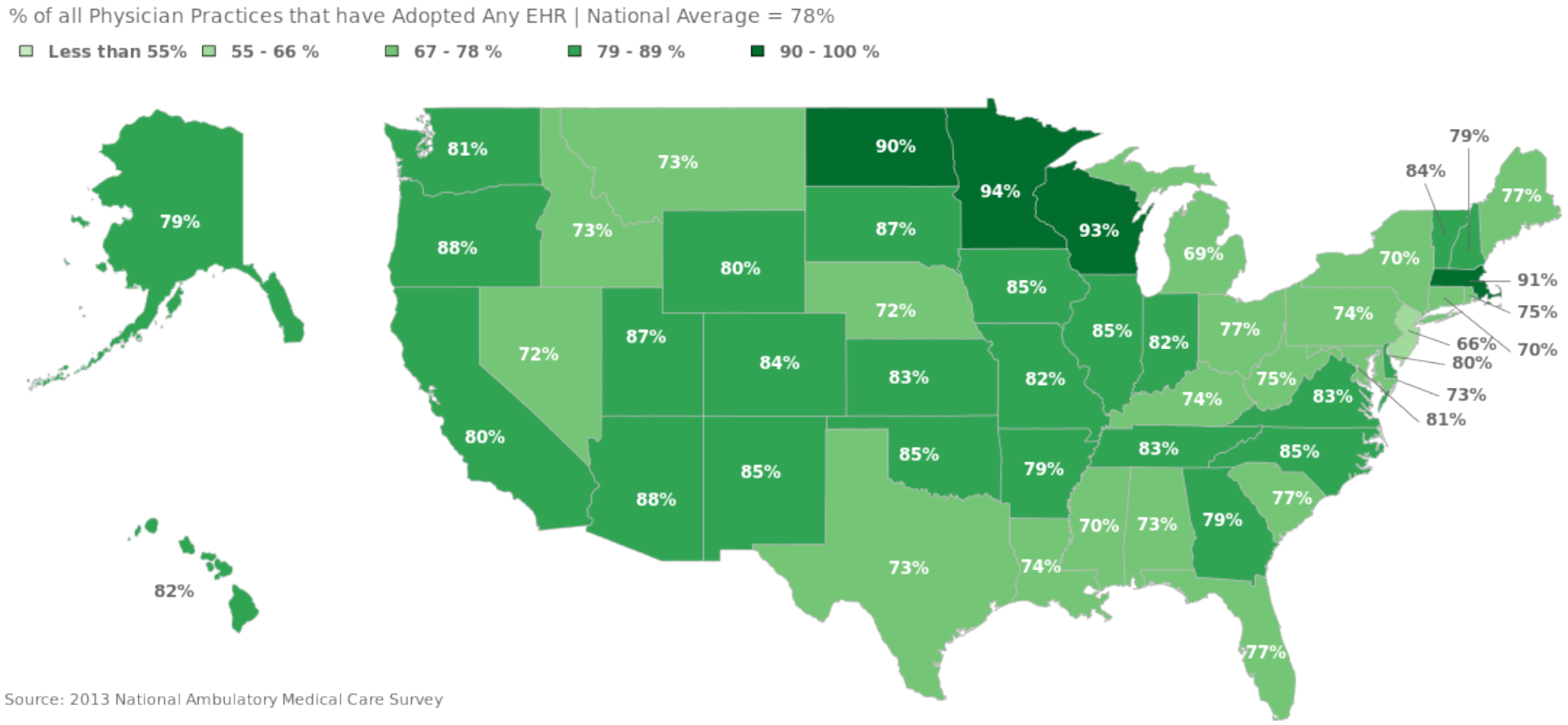
Source: Brian Wagner, Senior Director of Policy and Public Affairs, eHealth Initiative (eHI) presentation to the MN Exchange and Meaningful Use Workgroup January 15, 2010

The Stimulus

- 2009 American Recovery and Reinvestment Act (ARRA) - $787 B
- Health Information Technology for Economic and Clinical Health (HITECH) Act
  - $29.2 B starting in 2011 to incent Medicare- and Medicaid-participating physicians and hospitals to use certified EHR systems in a "meaningful" way
  - Starting in 2015, Medicare providers would be penalized if not meaningful users
  - As of December 2014, $28.1 B had been paid[1]

1. http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/December2014_SummaryReport.pdf

Ambulatory EHR Adoption



http://dashboard.healthit.gov/dashboards/physician-health-it-adoption.php

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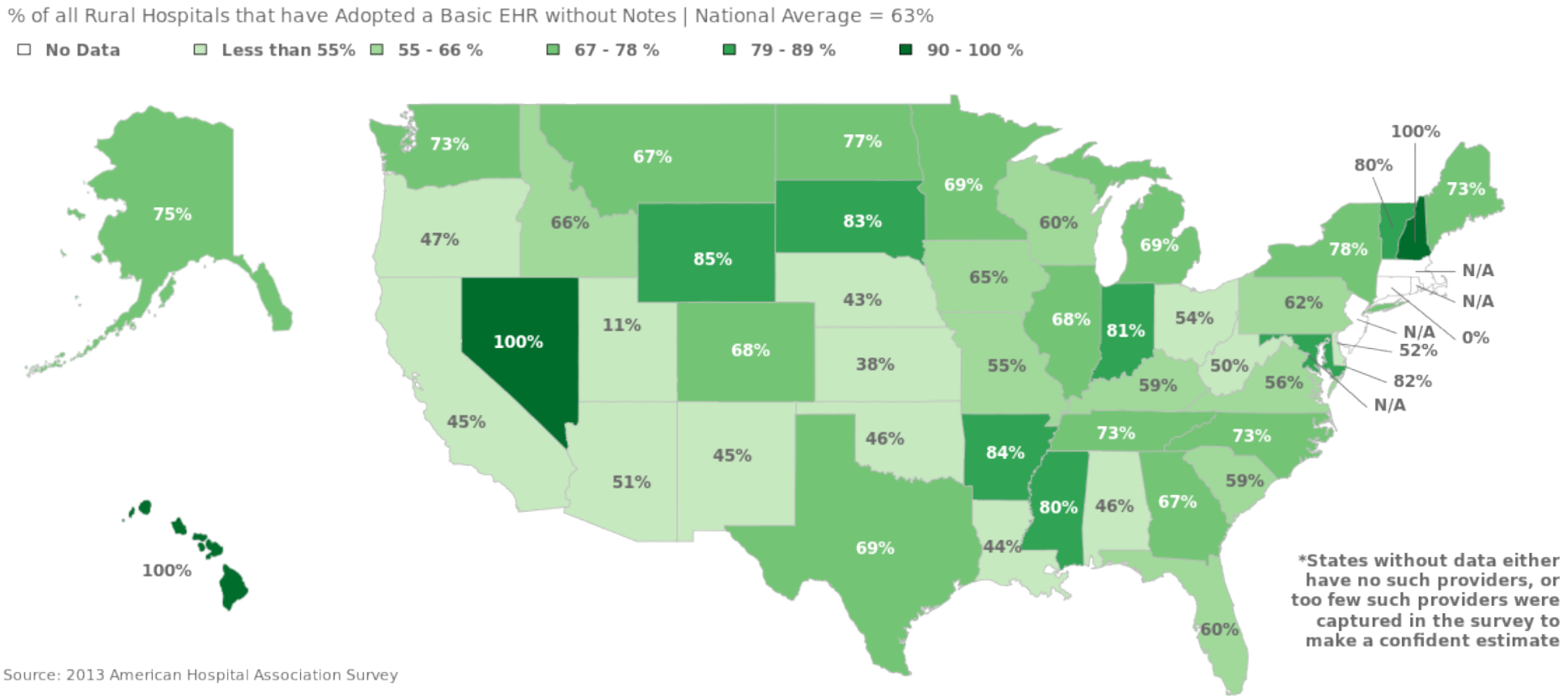
Rural Hospital EHR Adoption



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US EMR Adoption Model℠

Stage	Cumulative Capabilities	2011 Q2	2014 Q3	
Stage 7	Complete EMR, CCD transactions to share data; Data warehousing; Data continuity with ED, ambulatory, OP	1.1%	3.4%	+209%
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS	4.0%	16.5%	+313%
Stage 5	Closed loop medication administration	6.1%	29.5%	+384%
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	12.3%	14.5%	
Stage 3	Nursing/clinical documentation (flow sheets), CDSS (error checking), PACS available outside radiology	46.3%	23.9%	
Stage 2	CDR, Controlled Medical Vocabulary, CDS, may have Document Imaging, HIE capable	13.7%	5.3%	-45%
Stage 1	Ancillaries – Lab, Rad, Pharmacy – All Installed	6.6%	2.5%	-50%
Stage 0	All Three Ancillaries Not Installed	10.0%	4.4%	-42%

Data from HIMSS Analytics® Database

N = 5439 N = 5458

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Canada EMR Adoption Model℠

Stage	Cumulative Capabilities	2011 Q2	2014 Q3
Stage 7	Complete EMR; CCD transactions to share data; Data warehousing; Data continuity with ED, ambulatory, OP	0.0%	0.0%
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS	0.5%	0.6%
Stage 5	Closed loop medication administration	0.2%	0.6%
Stage 4	CPOE, Clinical Decision Support (clinical protocols)	1.7%	3.4%
Stage 3	Nursing/clinical documentation (flow sheets), CDSS (error checking), PACS available outside radiology	33.2%	32.1%
Stage 2	CDR, Controlled Medical Vocabulary, CDS, may have Document Imaging, HIE capable	23.9%	29.5%
Stage 1	Ancillaries – Lab, Rad, Pharmacy – All Installed	12.2%	14.6%
Stage 0	All Three Ancillaries Not Installed	28.3%	19.1%
		N = 639	N = 638

Data from HIMSS Analytics® Database

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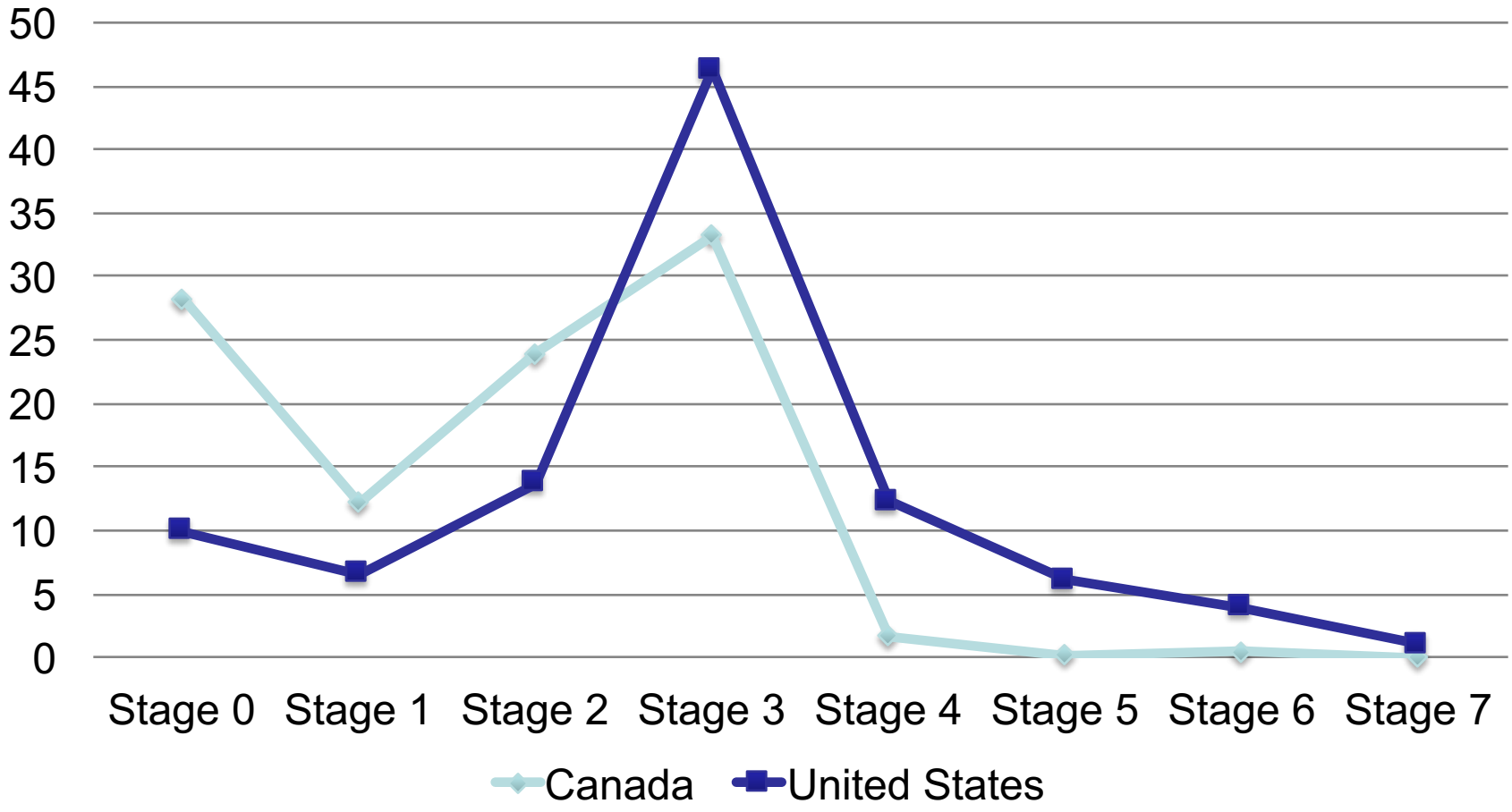
Hospital EMRAM Scores 2011



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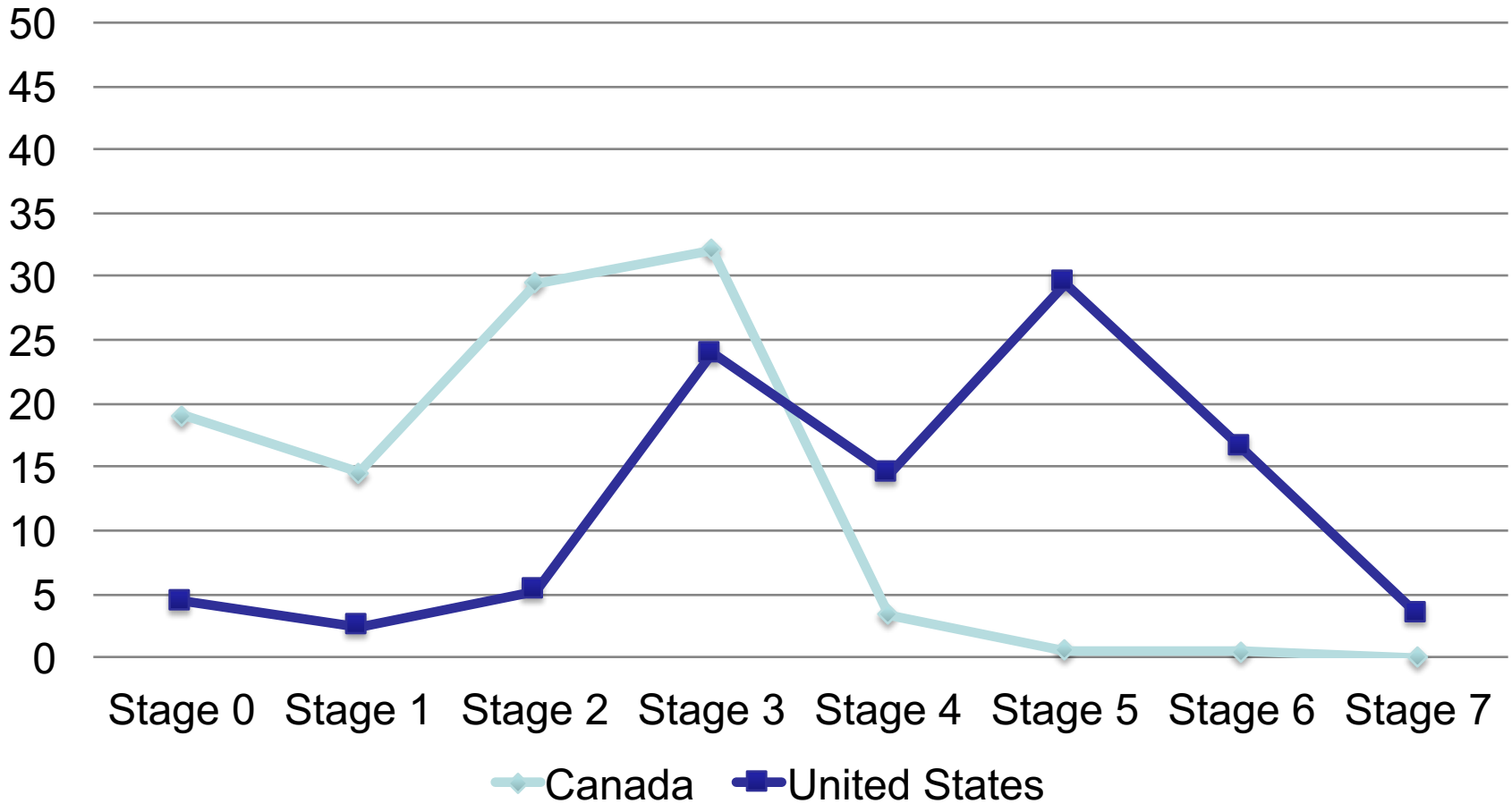
Hospital EMRAM Scores 2014



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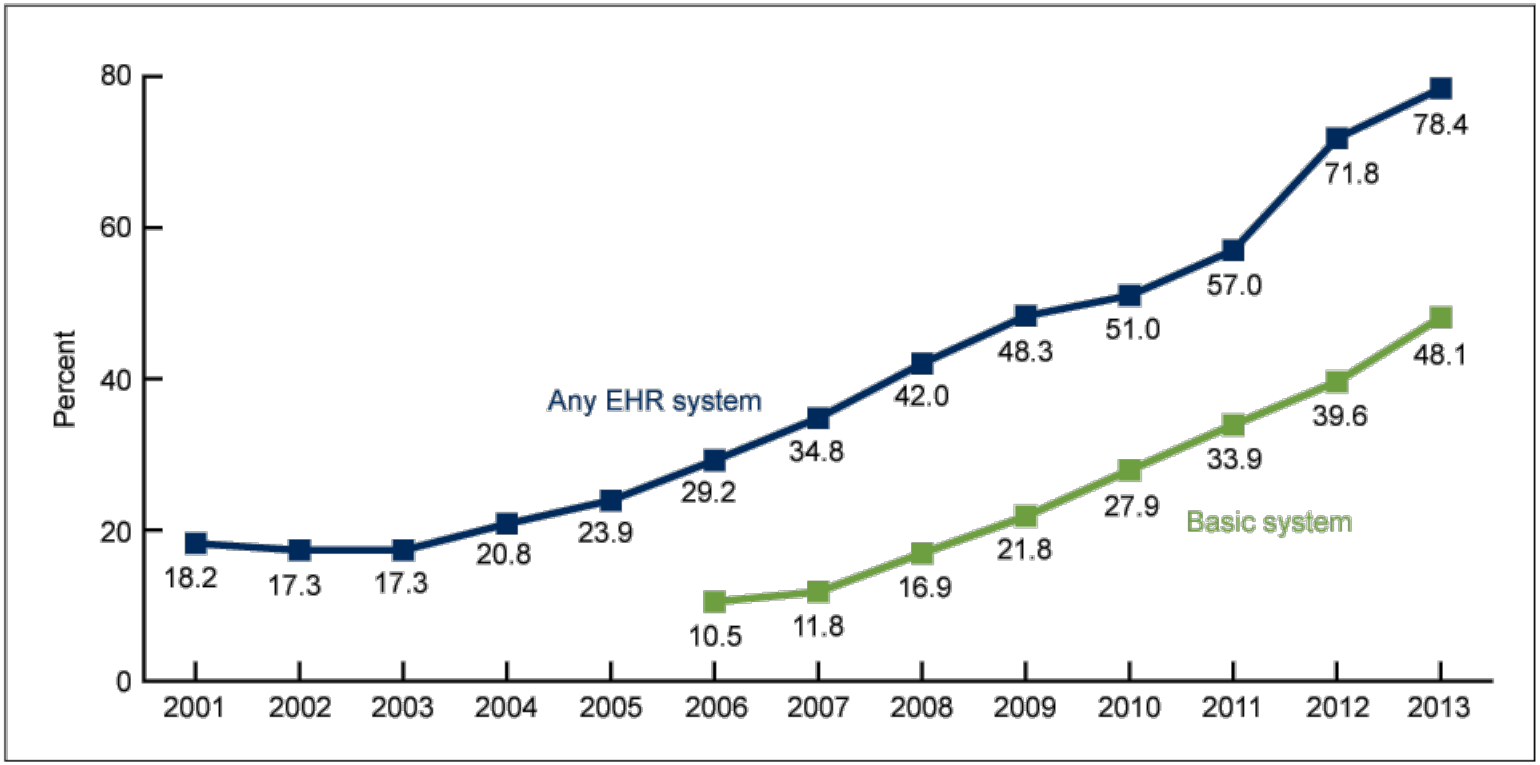
Ambulatory Adoption

Figure 1. Percentage of office-based physicians with EHR systems: United States, 2001–2013

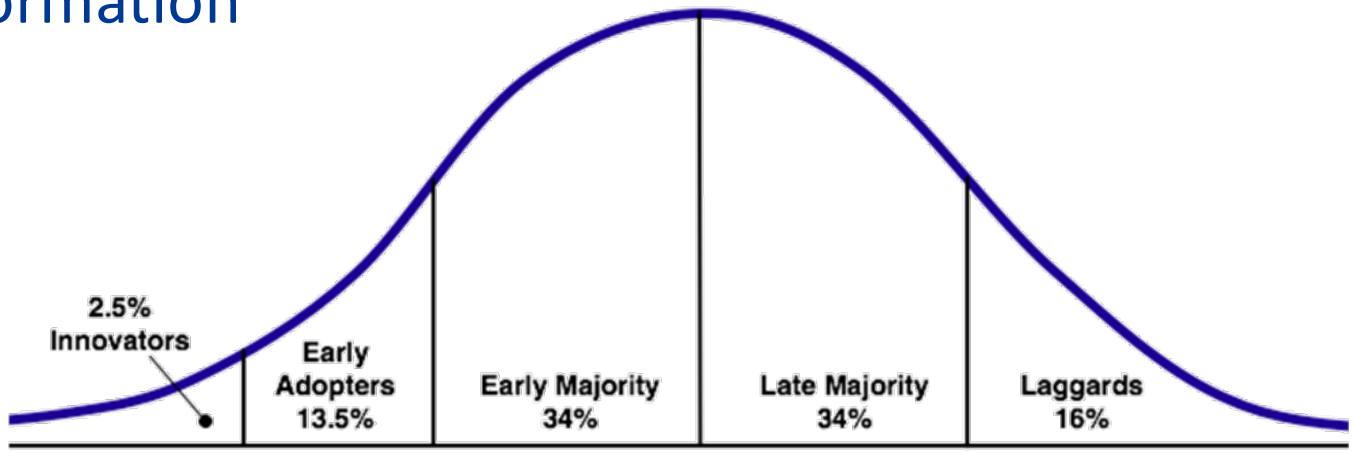


NOTES: EHR is electronic health record. "Any EHR system" is a medical or health record system that is either all or partially electronic (excluding systems solely for billing). Data for 2001–2007 are from in-person National Ambulatory Medical Care Survey (NAMCS) interviews. Data for 2008–2010 are from combined files (in-person NAMCS and mail survey). Estimates for 2011–2013 data are based on the mail survey only. Estimates for a basic system prior to 2006 could not be computed because some items were not collected in the survey. Data include nonfederal, office-based physicians and exclude radiologists, anesthesiologists, and pathologists.

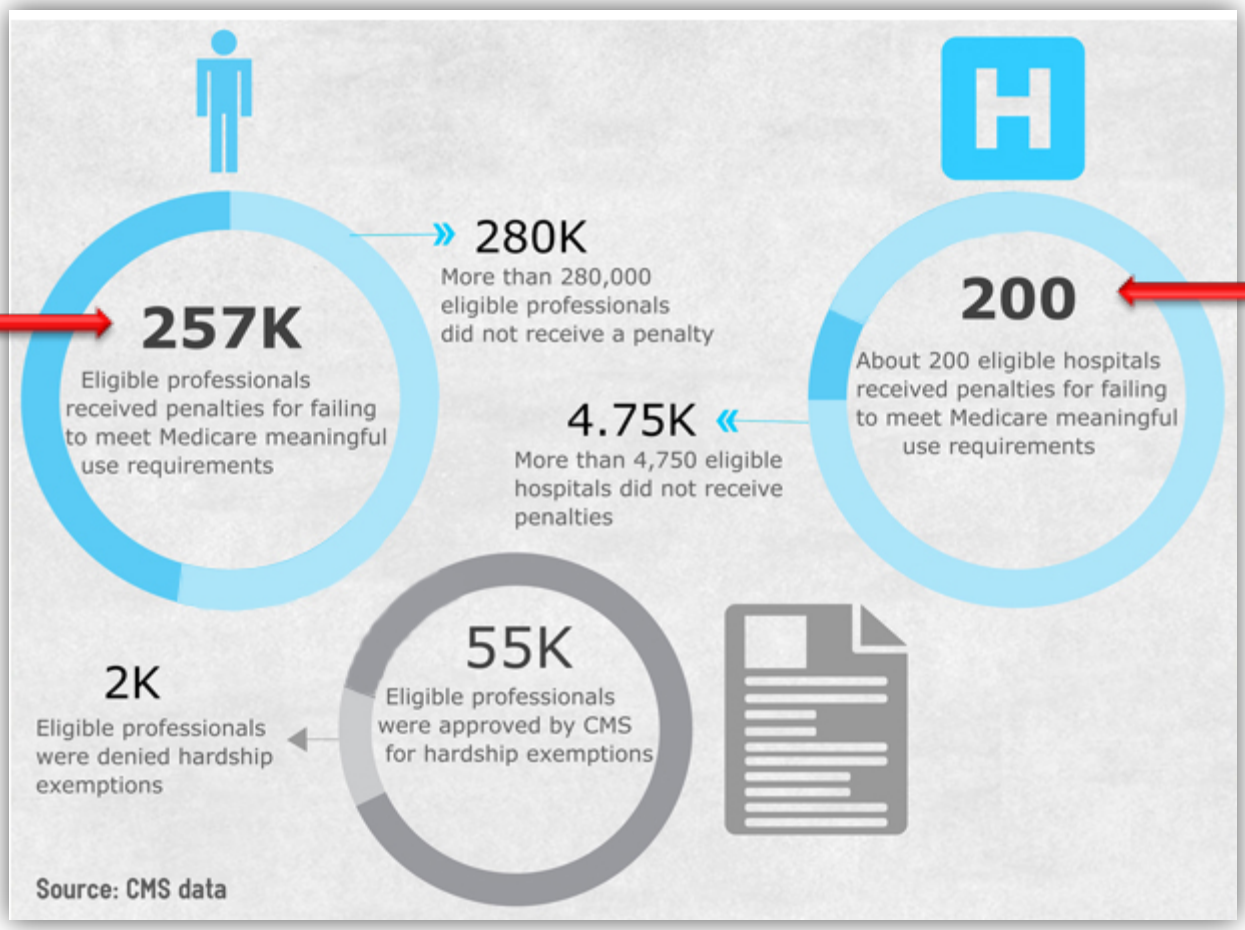
SOURCE: CDC/NCHS, National Ambulatory Medical Care Survey and National Ambulatory Medical Care Survey, Electronic Health Records Survey.

We Have Reached the Tipping Point

- Change in the number of providers and hospitals with EHRs
- Public reporting of quality measures
- Growing public expectation of access to their health information



But all is not well…



http://www.ihealthbeat.org/picture-of-health/2015/how-many-eligible-professionals-hospitals-are-being-hit-with-medicare-meaningful-use-penalties

The Diffusion of Innovations

Innovators	Innovators are willing to take risks, have financial liquidity, are social and have closest contact to scientific sources and interaction with other innovators. Their risk tolerance allows them to adopt technologies that may ultimately fail. Financial resources help absorb these failures.
Early adopters	These individuals have the highest degree of opinion leadership among the adopter categories. Early adopters have financial liquidity, advanced education and are more socially forward than late adopters. They are more discreet in adoption choices than innovators. They use judicious choice of adoption to help them maintain a central communication position.
Early Majority	They adopt an innovation after a varying degree of time that is significantly longer than the innovators and early adopters. Early Majority have contact with early adopters and seldom hold positions of opinion leadership in a system.
Late Majority	These individuals approach an innovation with a high degree of skepticism. Late Majority are typically skeptical about an innovation, little financial liquidity and little opinion leadership.
Laggards	Individuals in this category show little to no opinion leadership. These individuals typically have an aversion to change-agents. Laggards typically tend to be focused on "traditions", lowest financial liquidity and oldest among adopters.

Adapted from: http://en.wikipedia.org/wiki/Diffusion_of_innovations

Characteristics of Late Adopters / Resistors

- Have been burned before
- Read the literature on no demonstrated cost savings
- Understand that it increases physician time
- Believe it is a detriment to the physician-patient relationship
- Believe they are doing a good job
- Are nearing retirement
- Are concerned about the security of medical records
- Cannot type

Unintended Consequences of Meaningful Use

- Treating the check boxes as opposed to the patients
- Finding the important points in a sea of information of questionable importance
  - Transfer of care summaries with all labs
- Software released before it is ready followed by fixes
- Information collected to meet requirement as opposed to patient need
- Software that works in a testing environment may not work in the field
  - Scenario-Based Testing

Rural Health Care

- One patient, one doctor
- One patient, one (paper) chart
- One provider (or team) provides hospital, ambulatory, nursing home and home care
- The majority of the are is local
- They all believe they provide excellent care

Rural Challenges

- Physician engagement
  - Challenge in seeing the value
- Physician shortage
  - Difficult in convincing them to adapt
- MU Incentives
  - RHC provider eligibility came late (if at all)
- Staff
  - Difficult to find staff with skills to optimize the EHR

More Rural Challenges

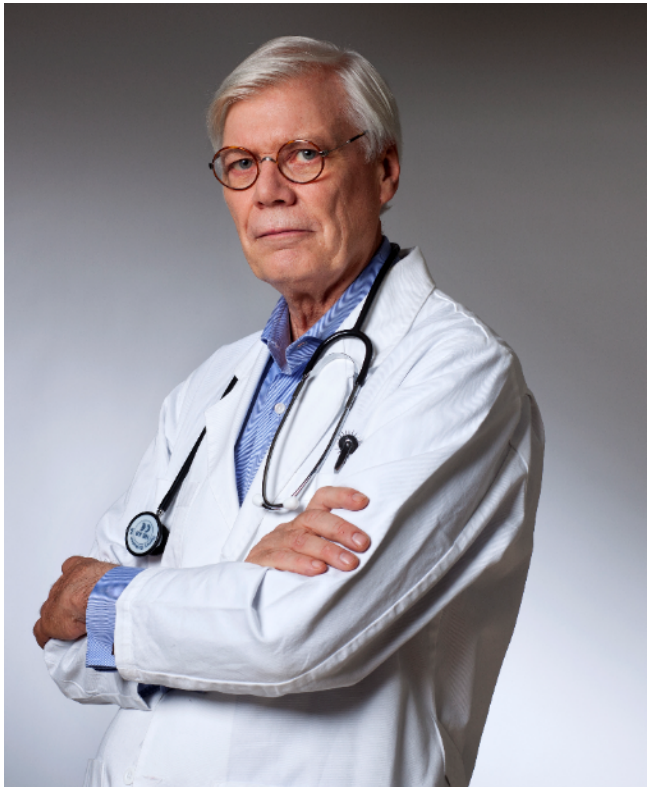
- Technical skills
  - Maintaining their own EHR and network infrastructure
  - Building and maintaining order sets and clinical decision support rules
  - Workflow optimization
- EHR Vendor issues
  - Integration between ambulatory and inpatient products
  - Hospital software that is a generation behind
  - Localization when a “health system” is the vendor
- Analytics support
  - Not an out-of-the box feature

And More Challenges:

- Funds
  - When it is a choice between repaving the parking lot and upgrading the EHR…
- Geographic isolation
  - Difficult to get support: technical, workflow or emotional
- Exchange technologies
  - Barriers to integrating information from other locations

Is the Carrot / Stick Good Enough?

- For some, no. At least not yet.
- Peer pressure will play a role
- Accountable care and outcomes based reimbursement will provide pressure
- Patients will begin to demand it
- Reimbursement will suffer without it



The Sales Pitch

- It is becoming a standard of care
- The chart is never lost, can have multiple users, allows remote access, and rapid retrieval of information
- Looming value based reimbursement
- Allows you to be more thorough with each visit
- Will allow you to demonstrate quality since you can measure it

Other Areas in Which EHR Utilization Will Benefit a Practice

- Quality Improvement
- Care coordination
- Team practice
- Ease of medication refills
- Can remind you of things you might otherwise forget
- Helps to prevent you from making mistakes
- Enables patient participation in their care

Impact on the rest of the care team

- Multiple individuals can be working on the chart simultaneously
- Legible notes that can be seen immediately
- CDS can be directed to other team members so care responsibilities can be shared
- Provides an additional method of communication

How can community involvement in a EHR make an impact on patient care?

- Patient / community expectations can impact adoption
- It can improve the quality of information in a patient's record
- Long term care, home care, social services and others who care about an individual will want to participate
- Public health which cares about the population will want access
- Healthy community initiatives can feed data into the EHR

The Big Picture

- The stages of meaningful use were intended to get us started – to create a critical mass
- The elements in MU are elements of good patient care – the challenge is the sometimes bizarre ways we need to document that we did it.
- Implementation is the first step; EHR value is achieved when the chart is populated and its use is optimized
- It is our job to give them that vision, to help them see the big picture so they will see the challenges of today will pay off tomorrow.

Questions