Meaningfully Using ePrescribing: Where Are We Going?

The Evolution of HIT: Looking to the Future

April 9, 2010

POINT-OF-CARE PARTNERS
HIT Strategy & Management Consultants

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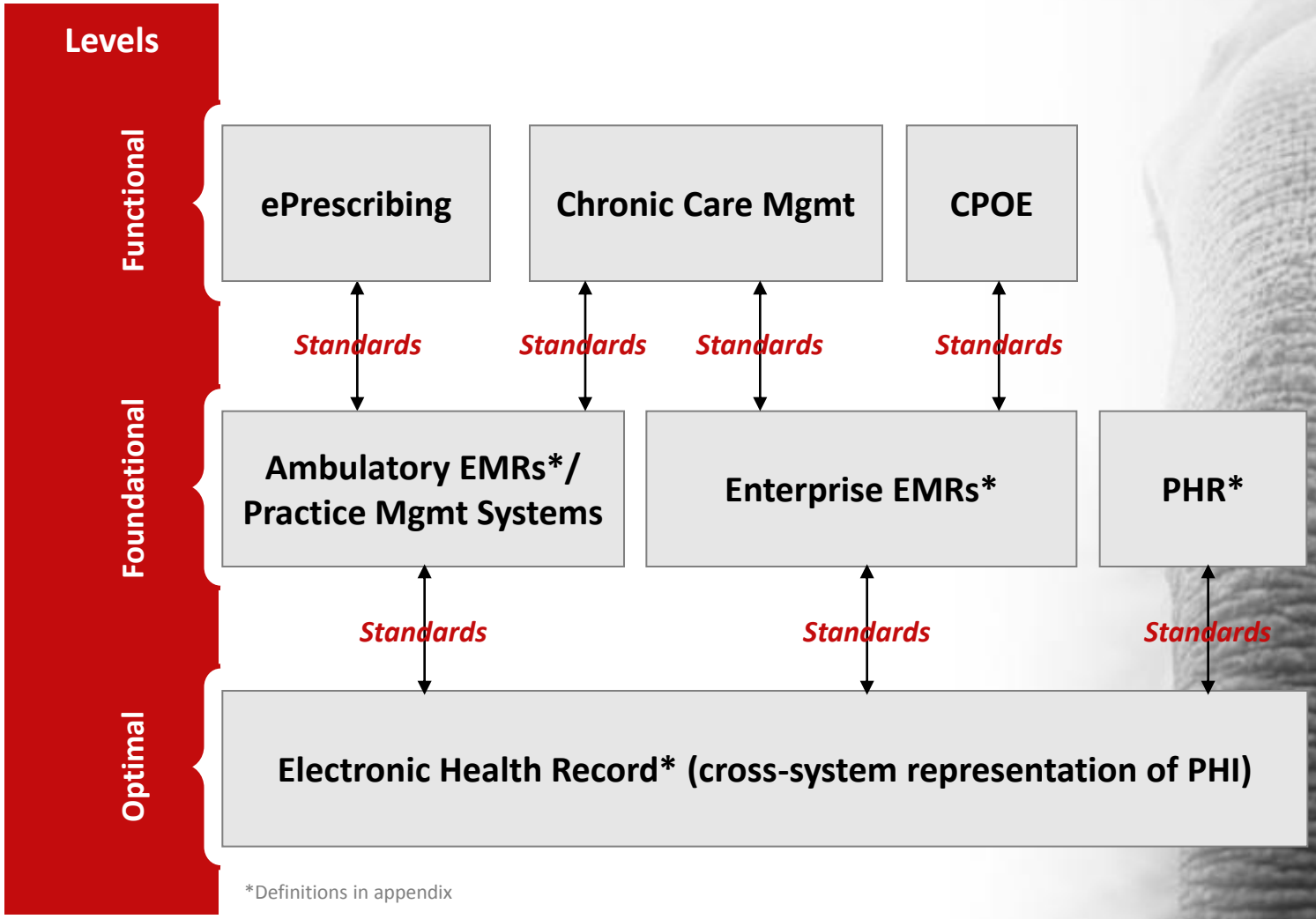
Agenda

- HIT Overview
- ARRA and Meaningful Use
- Trends
- On the Horizon

ePrescribing Overview

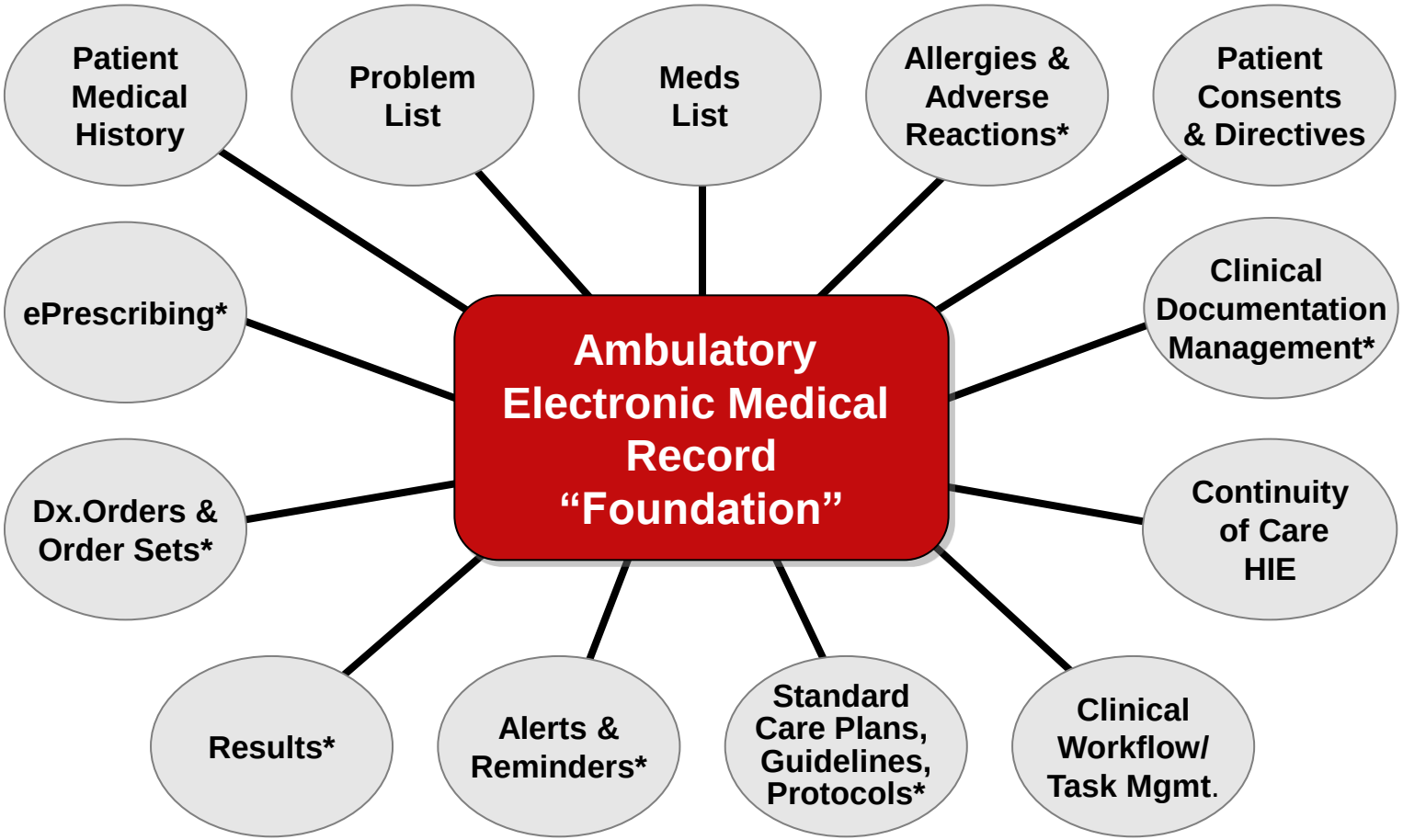
Health Information Technology



*Definitions in appendix

Elephant is reference to "The Blind Men and The Elephant," by John Godfrey Sax (see appendix)

EMR Scope & Components



* Opportunity for enhancing value via integrated clinical content
Sources: CCHIT, POCP primary research

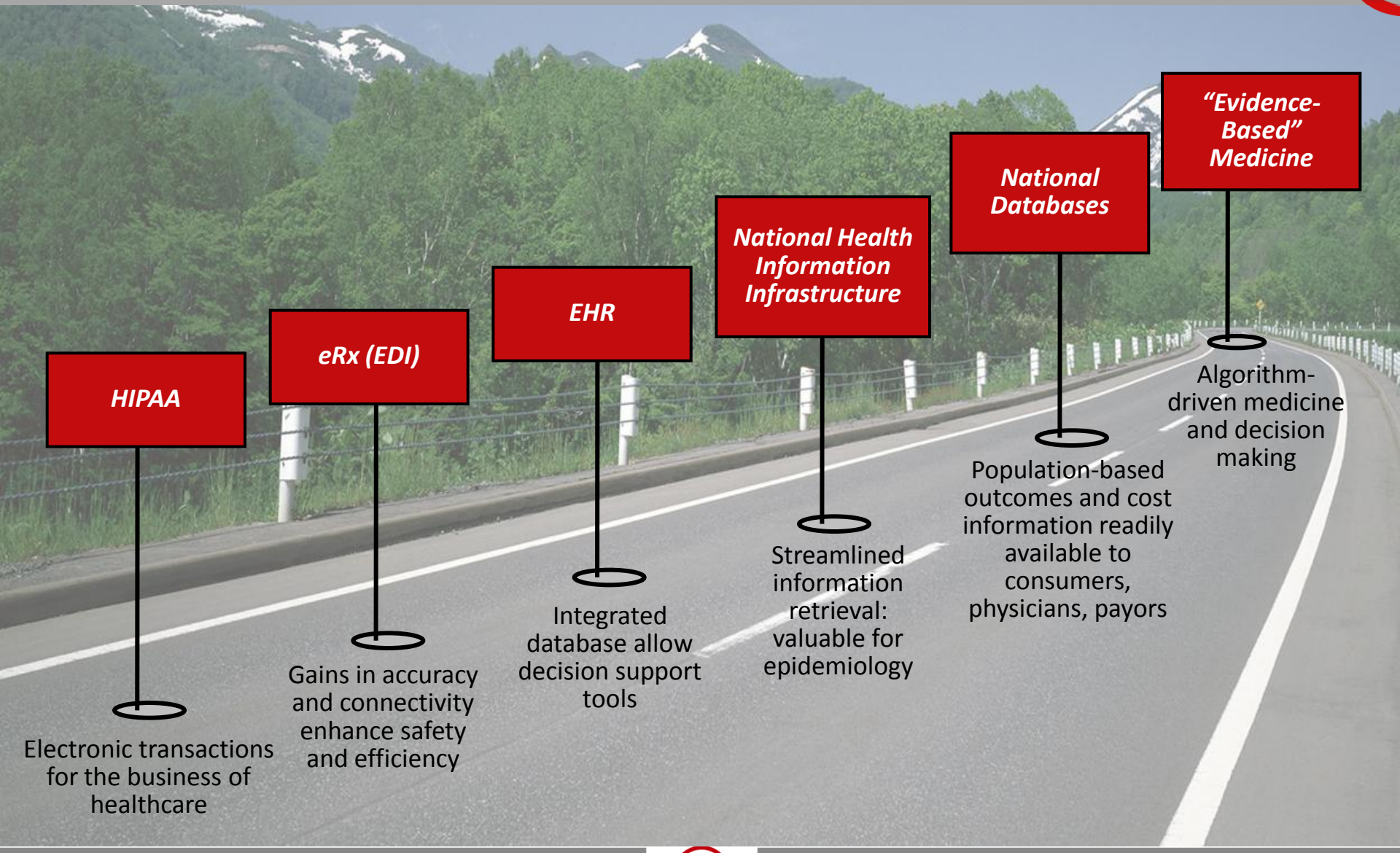
Medication Management

Set of tools that targets improvements to the medication management process, including:

- Writing of the prescription
- Transmission between the prescriber and dispenser
- Dispensing of the medication and support for its administration
- Monitoring of the impact

Adapted from Bell et al 2004

The Connectivity Roadmap



ARRA and Meaningful Use

Driving HIT Adoption and Utilization

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HIT Advocate-in-Chief

- In January, 2009, signed into law the American Reinvestment and Recovery Act of 2009 (ARRA). The HITECH component:
  - Set aside a potential $29 billion in funds to encourage adoption and use of electronic health records (EHRs)
  - Formed the HIT Policy and HIT Standards committees
  - Modified the HIPPA standards and security laws
- Strongly and firmly believes that HIT is critical to health care reform. Included in Health Reform Bill:
  - Integrating meaningful use reporting with quality reporting
  - Conducting a study examining methods to increase EHR usage
  - Creation of Independence at Home demonstration practices, which will require electronic health systems
  - Requiring the Center for Quality Improvement to align best practices with meaningful use standards
  - Grants to long-term care facilities to acquire EHRs
  - Grants to include HIT training to primary care residents
  - Bonus payments to MA plans that incorporate HIT to help manage and coordinate care for patients
  - Require the Center for Quality Improvement and Patient Safety to expand demonstration projects for improving the quality of children's healthcare and the use of HIT

ARRA Entitlement Funding

$27 billion in gross outlays

Program	Distribution Agency	Use of Funds
Medicare Payment Incentives	CMS	Incentive Payments through Carriers
Medicaid Payment Incentives	CMS and States	Incentive Payments through State Agencies

Recipients

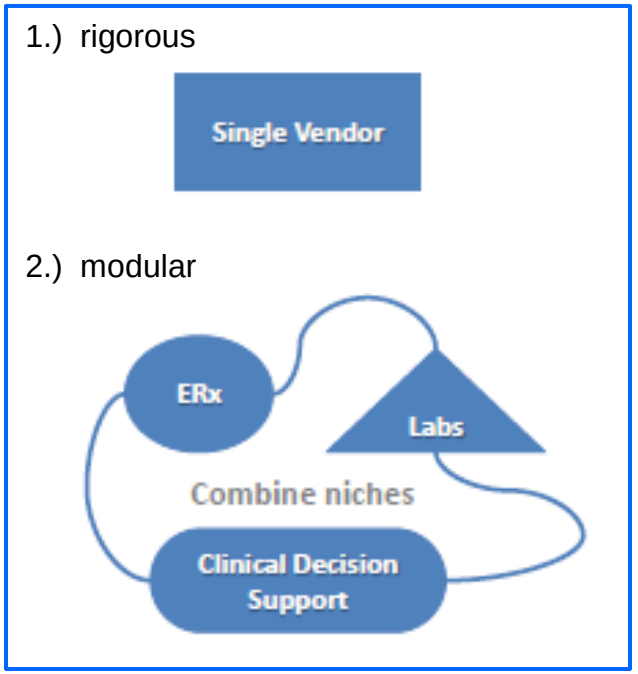
Acute Care and Children's Hospitals

Nurse Practitioners and Midwives

For providers 1) using ***certified electronic health records*** 2) that are ***"meaningful users"***

Certification for meaningful use

- On March 2nd 2010 ONC issued a Notice of Proposed Rulemaking (NPRM) regarding the formation of a temporary and permanent HIT certification program.
- While the two programs ultimately will achieve the same end, the temporary program would authorize organizations for both testing and certification. Ultimately these functions will be separate.
- ONC will issue separate final rules for the temporary and permanent programs.
- Personal Health Record (PHR) systems as well as Health Information Exchanges (HIEs) could also be certified under the permanent program subject to public comment and final rule.



Adapted from Circle Square 2009

ePrescribing Components of Meaningful Use

Stage 1 Meaningful Use Criteria	Metric
Implement drug-to-drug, drug-to-allergy, formulary checks	**attestation of enabled features**
Generate and transmit permissible ePrescriptions	**75% of all permissible prescriptions written by EP**
Maintain active medication lists	**80% with at least one entry**
Maintain active medication allergy list	**80% with at least one entry**
Record demographics information	**80% with at least one entry**
Perform medication reconciliation	**80% of relevant encounters and transitions of care**
Check insurance eligibility electronically	**for at least 80% of individual patients**
Generate lists of patients by specific conditions	**at least 1 report must be generated**
Implement 5 clinical decision support rules	**Attestation of 5 rules relevant to clinical quality metrics**

ARRA Incentives by Adoption Year

Medicare Incentives

Certified Meaningful User	2010	2011	2012	2013	2014	2015	2016	Total Incentive
2011		$18,000	$12,000	$8,000	$4,000	$2,000		**$44,000**
2012			$18,000	$12,000	$8,000	$4,000	$2,000	**$44,000**
2013				$15,000	$12,000	$8,000	$4,000	**$39,000**
2014					$12,000	$8,000	$4,000	**$24,000**
2015+								**$ Penalties**

Medicaid Incentives

Cap on Net Average Allowable Costs, per the HITECH Act	85 percent Allowed for Eligible Professionals	Maximum Cumulative Incentive over 6-year Period
$25,000 in Year 1 for most professionals	$21,250	**$63,750**
$10,000 in Years 2-6 for most professionals	$8,500	
$16,667 in Year 1 for pediatricians with a minimum 20 percent patient volume, but less than 30 percent patient volume, Medicaid patients	$14,167	**$42,500**
$6,667 in Years 2-6 for pediatricians with a minimum 20 percent patient volume, but less than 30 percent patient volume, Medicaid patients	$5,667	

Medicare Improvements for Patients and Providers Act of 2008 (MIPPA)

- MIPPA provides both carrots and sticks to prescribers around ePrescribing.
- Physicians qualify by having ePrescribing functionality and writing 50% of their Rxs electronically
- Criteria is self-reported to CMS.

Incentive*	Year	Penalty*
+2%	2009	None
+2%	2010	None
+1%	2011	None
+1%	2012	-1%
+.5%	2013	-1.5%
None	Beyond	-2%

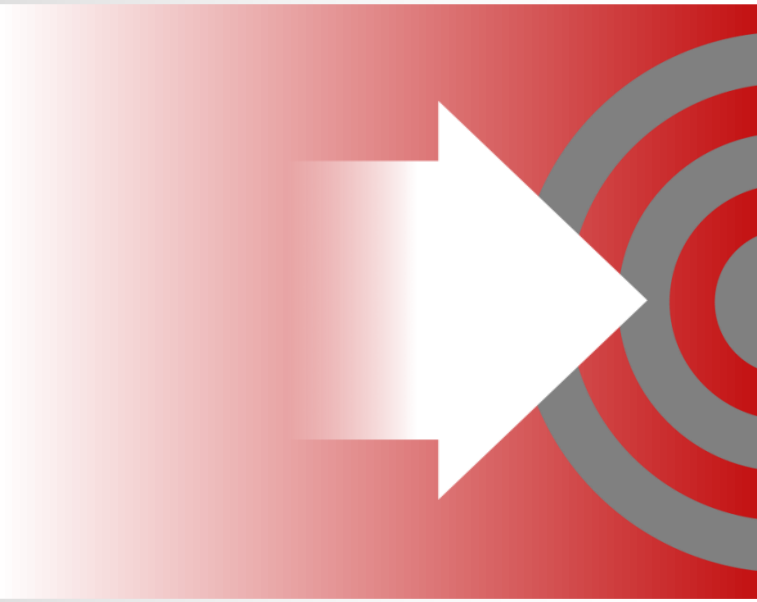
* Increase or decrease in Medicare Part B revenue

ePrescribing Forecast Model (2009, 2010)	
Patients per day	24
% of Practice Medicare	33%
Medicare Patient Per Day	8
Revenue per Medicare Patient	$85
Days per year	250
Medicare Revenue Per Year	$168,300
Potential % Increase	2%
Incremental Revenue per MD per Yr	**$3,366**

Source: Allscripts

Trends

Where Are We Projected to Go?



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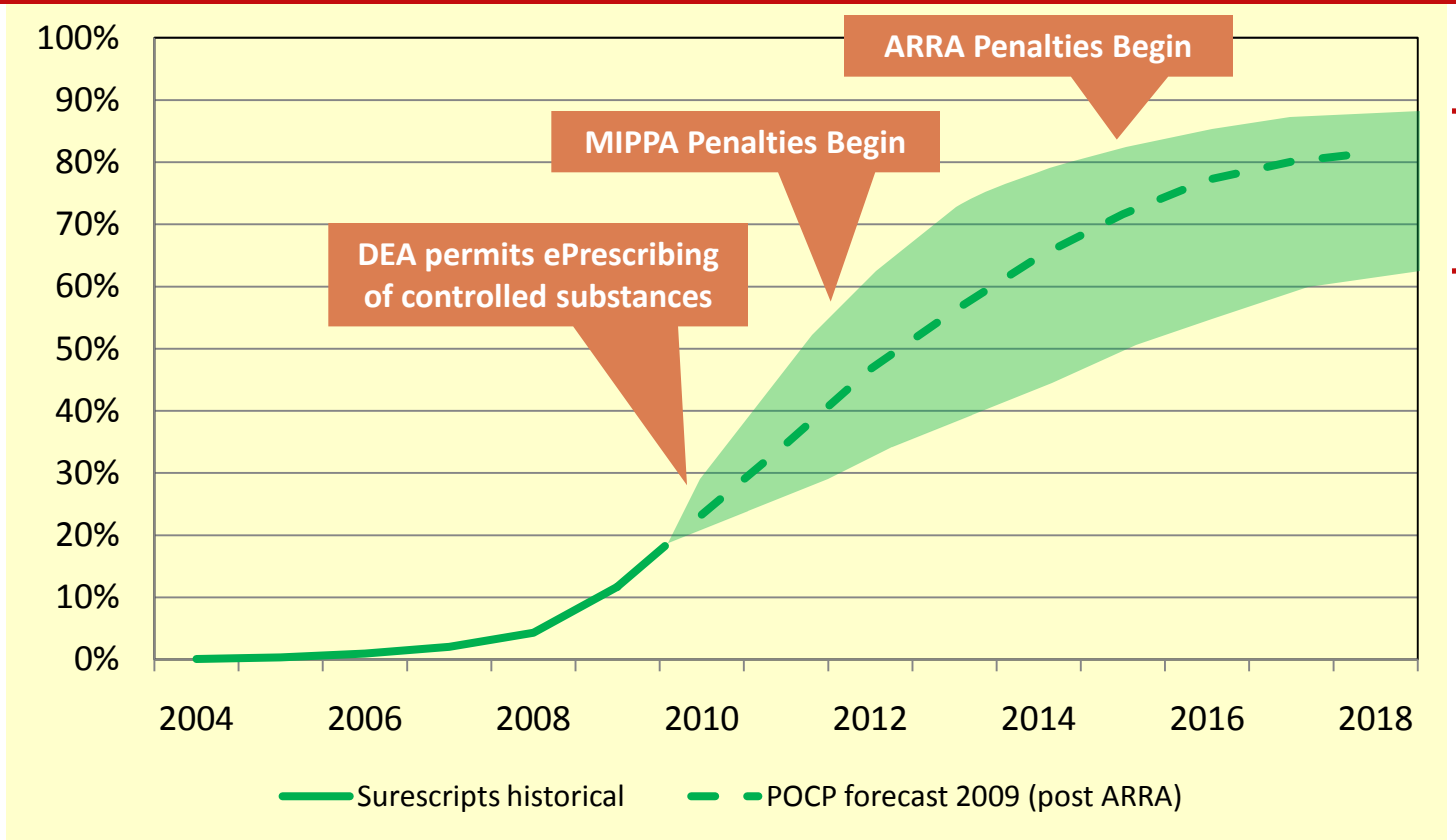
Impact of Federal Actions on ePrescribing

Prescriptions transmitted electronically*



*as defined by Surescripts

Impact of Eligibility-Informed Formulary

25% MDs prescribing electronically[1]

85% Pharmacies enabled for ePrescribing[1]

191M Prescriptions sent online to Pharmacies[1]

230M Surescripts F&B contracted lives[1]

$29B Potential annual ePrescribing savings[2]

Eligibility Transactions in 2009[1]		Successful Hits (Surescripts[1])		Encounters		Average # of Rxs / Encounter		Rxs Impacted by Surescripts		Total Scripts (that can be transmitted[1]		**Rxs Impacted by Surescripts formulary**
303,000,000	x	.68	=	206,040,000	x	3	=	618,120,000		1,591,000,000	=	39%

1 Surescripts, *National Progress Report on ePrescribing*, April 2010
2 Center for Information Technology Leadership, 2004

On the Horizon

What's Next Relative to ePrescribing?

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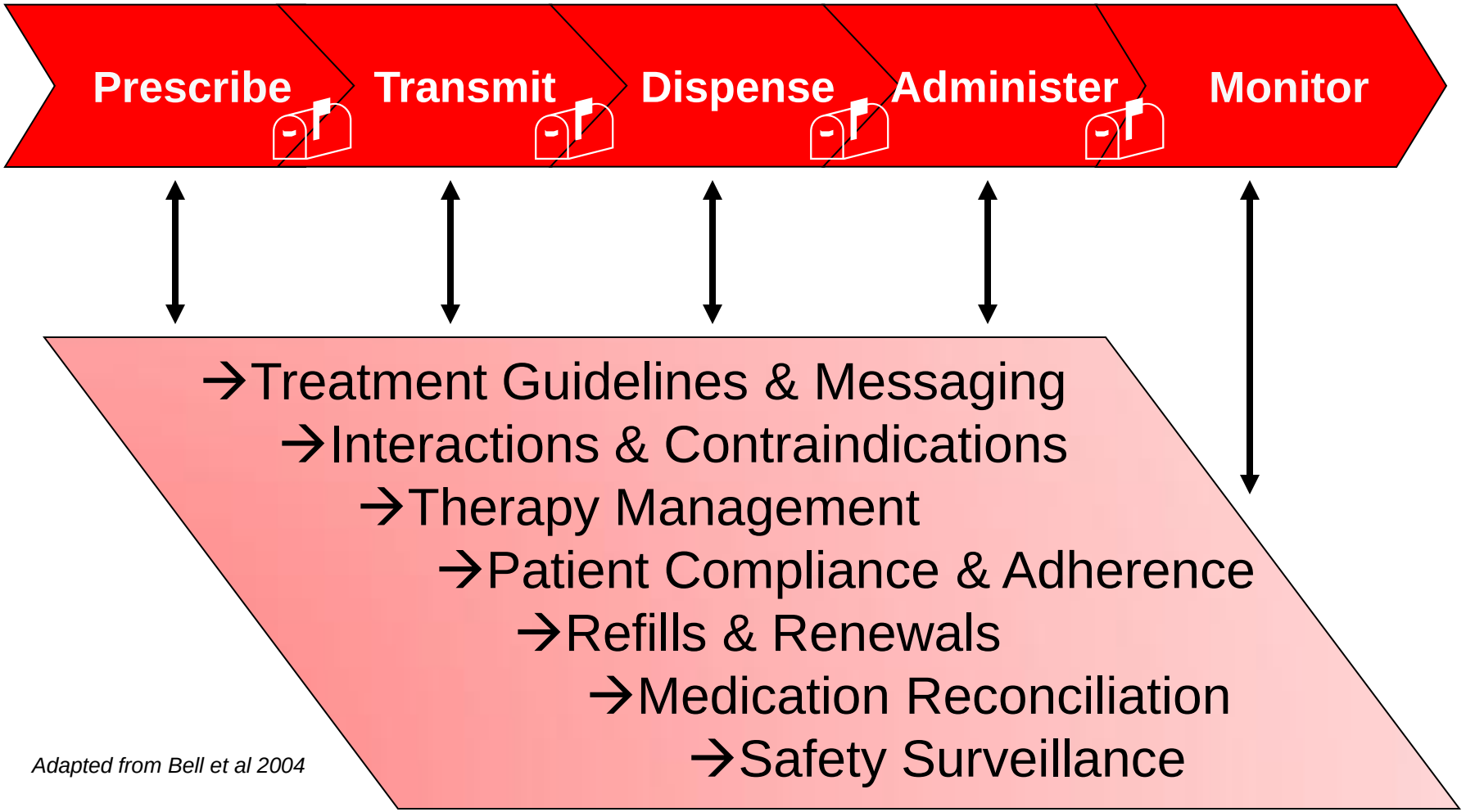
DEA Rule on ePrescribing

- On March26, 2010 the Drug Enforcement Administration (DEA) finally issued a long-awaited regulation that permits e-Prescribing of controlled substances.
- The DEA has taken over two years to promulgate this rule, which addresses issues and hundreds of comments received on the draft rule that came out in 2008.
- The new interim final rule is expected to be officially published in the *Federal Register* on March 31. Provisions will go into effect 60 days following publication.

Authentication: Accessing the ePrescribing system must be done using two of three methods: hard token, password and biometric.
Identity proofing: No single individual will have the ability to grant access to an electronic prescription application or pharmacy application.
Extra review and digital "signoff" needed: DEA is requiring that the ePrescribing application display a list of controlled substance prescriptions for the practitioner's review before the practitioner may authorize the prescriptions.
Prescription content and formats: Content may not be altered during transmission, although intermediaries may alter formats and certain legally allowed changes may be made at a pharmacy after receipt. Intermediaries may not convert an electronic controlled substance prescription into a fax.
Record retention: Once a prescription is created electronically, all records of the prescription must be retained electronically.

ePrescribing & Medication Management



Adapted from Bell et al 2004

Other Items of Interest

- ePA
  - New standard has been developed and is awaiting testing; currently recruiting health plans to participate
- Stand Alone ePrescribing Vendors
  - Will be challenged to remain free-standing
- Adherence and Compliance
  - RxFill not currently being widely utilized
  - New emphasis on leveraging HIT to address medication adherence beyond medication history
- Structured and Codified Sig / Rx Norm
  - Standards being worked on

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Appendix – Additional Slides

Key Federal Stakeholders

- **HIT Policy Committee** - formed by ARRA, the committee will advise the National Coordinator of HIT on a range of HIT issues; skewed toward clinicians &researchers, with some with more practical experience (e.g. CEO of Epic)
- **HIT Standards Committee** – also formed by ARRA, the committee will largely execute on policies emanating from the policy committee; has 3 workgroups: 1) clinical quality, 2) clinical operations and 3) privacy & security
- **CMS** – office of eHealth standards & security (OESS) playing a key role in standards & meaningful use; Medicaid required tamperproof pads or ePrescribing
- **ONC** – office of the national coordinator for HIT (ONC) codified by ARRA, given substantial responsibility under ARRA to spend $2B and coordinate HIT.
- **AHRQ** – Agency for Healthcare Research & Quality (AHRQ) charged with distributing grants in support of HIT; very much aligned with priorities of OESS
- **NIST** National Institute for Standards & Technology (NIST) and **NSF** National Science Foundation called out in ARRA, though not traditional HIT players

Definition of Key Terms

- Ambulatory EMR
  - Electronic medical record and clinical applications designed specifically to support physician office workflow.
- Enterprise EMR
  - Electronic medical record and application architecture originally designed to support hospital workflows; extensions to support physician offices may exist
- Personal Health Record (PHR)
  - A ***web-based*** set of tools enabling individuals to ***self-manage*** their health information, health, and health care:
    - Comprehensive and longitudinal view of a person's health and health care
    - Owned and managed by the individual
    - Separate and complementary to provider- and payer-sourced health records
    - Hub for communications with trusted sources
- Electronic Health Record
  - In contrast to EMRs, which are legal records of the provider organization, EHRs are owned by the patient or stakeholder
  - Contain a subset of info from various providers where patient has had encounters
  - Provides interactive patient access & the ability for the patient to append info
  - Designed to connect into the National Health Information Network (NHIN)

Sources: HIMSS Analytics (2005), POCP

Stage 1 Elements of Meaningful Use: Ambulatory

1. Use Computerized Provider Order Entry (CPOE)	**15. Check insurance eligibility electronically from public and private payers**
2. Implement drug-to-drug, drug-to-allergy, formulary √s	16. Submit claims electronically to public and private payers
3. Maintain up-to-date problem list of current and active diagnoses based on ICD-9-CM or SNOMED CT	17. Provide patients with electronic copy of their health info
4. Generate and transmit permissible ePrescriptions	18. Provide patients with an electronic copy of their discharge instructions (Hospital only)
5. Maintain active medication lists	19. Provide patients with timely electronic access to their health info
6. Maintain active medication allergy list	20. Provide clinical summaries for patients
7. Record demographics	21. Capability to exchange key clinical information
8. Record and chart changes in vital signs for children 2-20 years including BMI	22. Provide summary care record for each transition of care, referral
9. Record smoking status for patients 13 years or older	23. Perform medication reconciliation at relevant encounters and each transition of care
10. Incorporate clinical lab-test results into EHR as structured data	24. Capability to submit electronic data to immunization registries and actual submission EHRe required and accepted
11. Generate lists of patients by specific conditions	25. Capability to provide electronic submission of reportable lab results to public health agencies (Hospital only)
12. Report ambulatory quality measures to CMS and the states	26. Capability to provide electronic syndrome surveillance data to public health agencies
13. Send reminders to patients per patient preference for preventative/follow up care	27. Protect electronic health information created or maintained by the certified EHR technology
14. Implement 5 clinical decision support rules	

“The Blind Men and the Elephant”

It was six men of Indostan
To learning much inclined,
Who went to see the
Elephant~(Though all of them were blind),
That each by observation~Might satisfy his mind.

The First approached the Elephant,
And happening to fall
Against his broad and sturdy side, ~ At once began to bawl:
"God bless me! but the Elephant ~ Is very like a wall!"

The Second, feeling of the tusk,
Cried, "Ho! what have we here?
So very round and smooth and sharp? ~
To me 'tis mighty clear
This wonder of an Elephant ~ Is very like a spear!"

The Third approached the animal,
And happening to take
The squirming trunk within his hands, ~
Thus boldly up and spake:
"I see," quoth he, "the Elephant ~ Is very like a snake!"

The Fourth reached out an eager hand,
And felt about the knee.
"What most this wondrous beast is like
~ Is mighty plain," quoth her;
"'Tis clear enough the Elephant ~ Is very like a tree!"

The Fifth who chanced to touch the ear,
Said: "E'en the blindest man
Can tell what this resembles most; ~
Deny the fact who can,
This marvel of an Elephant ~ Is very like a fan!"

The Sixth no sooner had begun
About the beast to grope,
Than, seizing on the swinging tail ~ That fell within his scope,
"I see," quoth he, "the Elephant ~ Is very like a rope!

And so these men of Indostan
Disputed loud and long,
Each in his own opinion ~ Exceeding stiff and strong,
Though each was partly in the right ~
And all were in the wrong!

ARRA Appropriated Funds

$2 billion in gross outlays

Program	Distribution Agency	Use of Funds
HIE Planning and Development	ONC	Planning Grants Implementation Grants
EHR Adoption Loan Program	ONC	Loan Funds
Health IT Extension Program	ONC	Health IT Research Center Regional Extension Centers
Workforce Training Grants	HHS, NSF	Medical Health Informatics EHR in Medical School Curricula
New Technology Research and Development Grants	NIST, NSF	Health Care Information Enterprise Integration Research Centers

Recipients