HIMSS Analytics
What's Your Number

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Healthcare IT Done Right

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Agenda

- This is a bit of a two for the price of one presentation
- What is EMRAM?
- Why should I care?
- How do I leverage this in my organization?
- Meaningful Use – Gap Analysis
- Meaningful Use – Human Resources
- Meaningful Use – Budgets
- Questions

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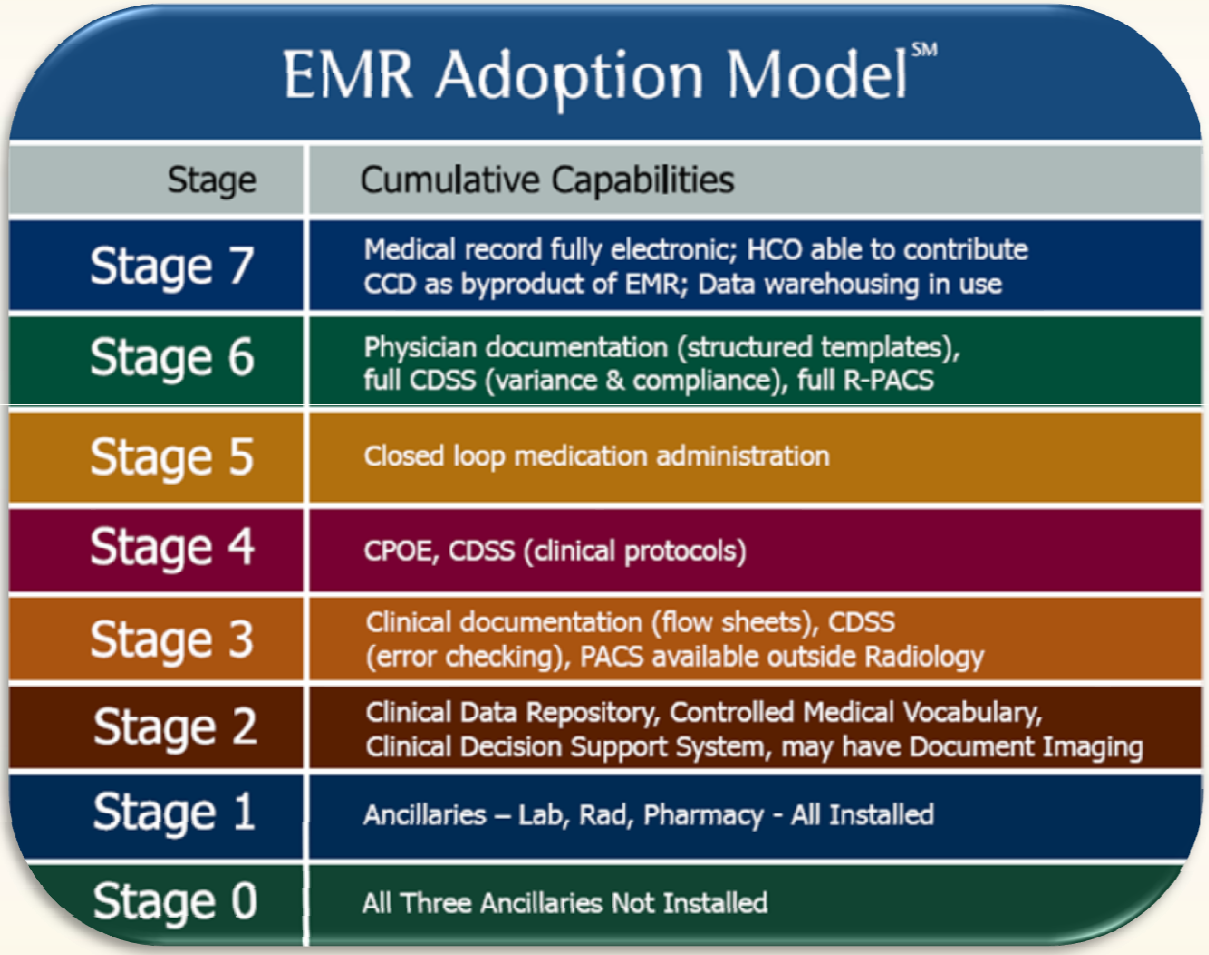
The Model



EMR Adoption Model℠

Stage	Cumulative Capabilities
Stage 7	Medical record fully electronic; HCO able to contribute CCD as byproduct of EMR; Data warehousing in use
Stage 6	Physician documentation (structured templates), full CDSS (variance & compliance), full R-PACS
Stage 5	Closed loop medication administration
Stage 4	CPOE, CDSS (clinical protocols)
Stage 3	Clinical documentation (flow sheets), CDSS (error checking), PACS available outside Radiology
Stage 2	Clinical Data Repository, Controlled Medical Vocabulary, Clinical Decision Support System, may have Document Imaging
Stage 1	Ancillaries – Lab, Rad, Pharmacy - All Installed
Stage 0	All Three Ancillaries Not Installed

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Dr. Oz's – 8 Ways to Avoid Medical Mistakes

- Step 1 – Prevent infection
- Step 2 – Avoid wrong site surgery
- Step 3 – No chitchat
- Step 4 – Find a high-tech hospital
- Step 5 – Find a hospital that uses care checklists
- Step 6 – Use an accredited hospital
- Step 7 – Get to know your hospitalist
- Step 8 – Be a smart patient

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The Build Up

- How do you compare to your peers?

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The Build Up

- How do you know?

	Hospital A	Hospital B	Hospital C
Patients who reported that their nurses "Always" communicated well.	78%	83%	76%
Patients who reported that their doctors "Always" communicated well.	87%	88%	83%
Patients who reported that they "Always" received help as soon as they wanted.	58%	68%	68%
Patients who reported that their pain was "Always" well controlled.	70%	73%	69%
Patients who reported that staff "Always" explained about medicines before giving it to them.	62%	68%	61%

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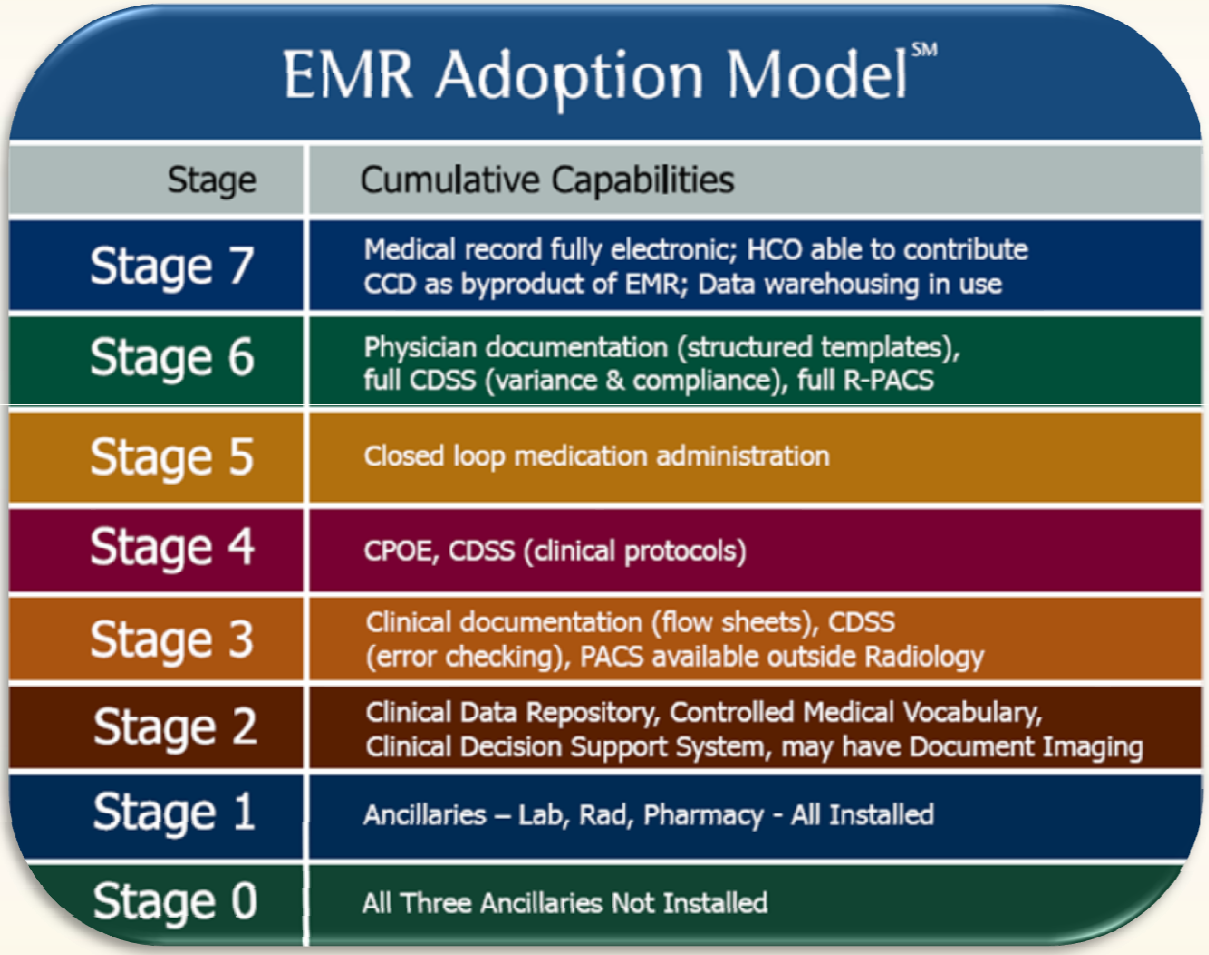

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The Stages

- Stage 0 – All three ancillaries not installed.
- Stage 1 – Major ancillary clinical systems are installed (pharmacy, laboratory, radiology).
- Stage 2 – Major ancillary clinical systems feed data to a clinical data repository. Can share clinical data with other stake holders.
- Stage 3 – Nursing / clinical documentation; nursing notes, care plan charting, and / or the electronic medication administration record (eMAR) are integrated with the clinical data repository. The first level of clinical decision support is implemented to conduct error checking with order entry. Medical image (PACS) access in Radiology.

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The Stages

- Stage 4 – Computerized Practitioner Order Entry (CPOE for use by any clinician is added to the nursing and CDR environment along with the second level of clinical decision support capabilities related to evidence based medicine protocols. One patient service area implemented.)
- Stage 5 – The closed loop medication administration environment is fully implemented. The eMAR and bar coding or other auto identification technology, such as radio frequency identification (RFID), are implemented and integrated with CPOE and pharmacy to maximize point of care patient safety for med. admin.

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The Stages

- Stage 6 – Full physican documentation / charting (structured templates) is implemented for at least one patient care service area. Level three of clinical decision support provides guidance for all clinician activities related to protocols and outcomes in the form of variance and compliance alerts. Full compliment of PACS displacing all film-based images.

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The Stages

- Stage 7 – The hospital no longer uses paper charts to deliver and manage care and has a mixture of discrete data, document images and medical images within its EMR environment. Clinical data warehouses are being used to analyze patterns of clinical data to improve quality of care and patient safety. Clinical information can be readily shared via standardized electronic transactions (i.e. – CCD) with all entities who are authorized to treat the patient, or a health information exchange. The hospital demonstrates summary data continuity for all hospital services. (i.e. – inpatient, outpatient, ED, and with any owned or managed ambulatory clinics).

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The Stages and Meaningful Use

- Stages 3 & 4 for 2011 – Stats for 0-100 beds:
  - Stage 2 between 84%-92%
  - Stage 3
    - 75% have implemented CDR (LOINC codes issue)
    - 60% have Clinical Decision Support
    - 79% have Nursing Documentation
    - 15% using Clinical Decision Support System Guidelines
    - 44% using eMAR
    - 55% using template based Nursing Documentation that supports documentation of the required measurement criteria

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The Stages and Meaningful Use

- Stages 3 & 4 for 2011 – Stats for 0-100 beds:
  - Stage 4
    - Have CPOE – 31%
    - Have mandated use of CPOE System-wide – 1.38%
    - Physicians using CPOE – 5.32%

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Key Performance Metrics

- Implementation of Software and…
  - Staff ratios to peer groups
  - Budget
  - Workload statistics
  - Capital and Operating expenditures
  - Ability to report on quality metrics

"It is not possible to manage what you cannot control and you cannot control what you cannot measure!"

"What gets measured gets done."

–Peter Drucker

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What's Your Number?

- How do I get a score?
  - To learn more about participating in HIMSS Analytics' Annual Study, contact us at: 866-546-2900 or itexec.services@himssanalytics.org
  - Learn more here:

    http://www.himssanalytics.org/docs/HA_Perks_SellSheet10.pdf

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Meaningful Use

Software installations are not the way to achieve meaningful use!

(exception: Medicaid - AIU)

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Meaningful Use

Meaningful Use is a project that must be managed.

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Meaningful Use – Gap Analysis

- Need to know where you are in relation to the Core and Menu sets of criteria

Process Group Score						
Process Group	**Core Set**			**Menu Set**		
	Total	Implemented	%	Total	Implemented	%
Clin Doc	3	3	100%	0	0	NA
Decision Support	1	0	0%	0	0	NA
Health Info Mgmt	3	0	0%	2	1	50%
Meds Mgmt	3	3	100%	2	2	100%
Orders Mgmt	1	0	0%	1	1	100%
Registration	1	1	100%	1	1	100%
Regulatory Compliance	1	0	0%	0	0	NA
Reporting	1	0	0%	4	1	25%

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Meaningful Use – Gap Analysis

Core Set †	Provide an electronic copy of hospital discharge instructions on request	Clinical summaries provided to patients for more than 50% of all office visits within 3 business days; more than 50% of all patients who are discharged from the inpatient department or emergency department of an eligible hospital or critical access hospital and who request an electronic copy of their discharge instructions are provided with it.	Health Info Mgmt	Aware of Requirement, No Project
Core Set †	On request, provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies, and for hospitals, discharge summary and procedures)	More than 50% of requesting patients receive electronic copy within 3 business days	Health Info Mgmt	Project Approved and Funded
Core Set †	Computer provider order entry (CPOE) for medication orders	More than 30% of patients with at least one medication in their medication list have at least one medication ordered through CPOE	Orders Mgmt	Project Approved and Funded
Core Set †	Implement drug-drug and drug-allergy interaction checks	Functionality is enabled for these checks for the entire reporting period	Meds Mgmt	Fully Implemented
Core Set †	Implement capability to electronically exchange key clinical information among providers and patient-authorized entities	Perform at least one test of EHR's capacity to electronically exchange information	Health Info Mgmt	Project Identified and Under Consideration
Core Set †	Implement one clinical decision support rule related to high clinical priority and ability to track compliance with the rule	One clinical decision support rule implemented	Decision Support	Project In Progress and Scheduled to meet MU date

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Meaningful Use – Gap Analysis

- All the criteria and software in the world will do you no good if you have no reliable servers, network switches and end user devices to run it on.
  - Some of the gaps that must also be assessed are:
    - Network Infrastructure
    - Backend Server capacity / redundancy
    - Helpdesk, Support and Application Update disciplines
    - Backup and recovery strategies
    - End User devices
    - Project Management capability
    - Security
    - Report writing tools and expertise
    - Human Resource – IT Staff, Superusers

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Meaningful Use – Human Resources

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Meaningful Use - Human Resources

http://content.nejm.org/cgi/reprint/NEJMp1006114.pdf

Example of a Core criteria:

Computer provider order entry (CPOE) for medication orders:

"Over 30% of all unique patients with at least one medication in their active medication list have at least one of those medications ordered through CPOE"

Final Rule – Meaningful Use Specifics can be found here:

http://edocket.access.gpo.gov/2010/pdf/2010-17207.pdf

(Core set starts on page 58, menu set starts at bottom of page 60)

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Meaningful Use – Human Resources

- Project Manager
  - Startup, Planning, Execution, Closedown (review)
  - Has to have the self discipline
  - Experience matters
  - Reporting structure matters
  - Executive support and understanding
  - Communication is king

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Meaningful Use – Human Resources

PROJECT GOVERNANCE

* = staff with multiple roles in project
* SME = Subject Matter Expert

STEERING COMMITTEE (CHANGE CONTROL)
--- project scope oversight (change request review) --- addresses major issues --- allocates resources

(CNO) (CFO) (COO) (CIO) (Physician Champion) (PM)

PROJECT OFFICE
--- coordinates project, assists Core Team --- documents & tracks all meetings, status, issues, scope changes --- overall vendor liaison
--- communicates tasks & milestones

(Facility PM) (Primary Vendor PM) (Project Sponsor)

PROJECT CORE TEAM
--- primary vendor liaison (per area) --- coordinates SME Team projects --- defines current/new processes --- reports issues as arise
--- attends Train-the-Trainer classes --- creates test plans for functions --- performs functionality testing --- gives end-user training

(Bus Ofc/Reg SME) Sander (HIM SME) (RAD SME) (Clin Anlyst) (Educ SME) (Bus Ofc SME) (Accting SME) (RX SME) (Inf Ctrl SME) (Nutr Svc SME) (LAB SME) (Fnc Anlyst) (HR SME) (OB SME) (Med/Surg SME) (ER SME) (OR SME/Nursing Project Manger) (RT SME) (RX SME) (PT/OT SME)

NOTE: Clinical Analyst will be Liaison for the following Departments as needed:
Speech Therapy Cardiovascular Cardiac Rehab Ambulance
Social Services Utilization Review Nutrition Therapy

RESOURCES/SUPER USERS
---populates system from specs ---implements processes as directed --- performs end-user system training

[NOTE: Each Core Team Member needs to designate their Departmental Resources]

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Meaningful Use – Human Resources

- Non-IT Organization (People)
  - SuperUsers – Subject Matter Experts
    - Technical "whiz kids" need not apply
    - Focused on their functional area
    - Responsibilities during and after the implementation
    - Written job description
  - Champions
    - Physician, Executive, Business / Financial, Board, Medical Records

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Meaningful Use – Human Resources

- IT Organizational (People) Components
  - Disciplines (focus) and expertise
    - Leadership – "Business" Savvy IT Leadership
    - Project Management
    - Database Administrator
    - Report Writers
    - Security
    - Analysts
    - Systems Administrator
    - Helpdesk
    - Interface and Communications Specialist

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Meaningful Use - Budgets

- Vendor quotes are generally half or less of the total project budget.
- IT Operating Budgets on average for 100-200 bed hospitals are trending between 3 and 4% of total Operations annually.
- Average capital spending allocated to IT is expected to be approximately 47% of total budget for the next three to 5 years for same sized facilities.
- Don't overlook the "small" stuff
  - Workstation devices
  - Single Sign On
  - Microsoft licensing
  - Overtime pay
  - Network Switches
  - Backup / Recovery systems

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Questions?

"Nike said it best."

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