SIEMENS

EHR:

Friend or Foe?

Denise Dunyak, MS, RHIA
US Marketing
Siemens Healthcare

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Agenda

- Legal Health Record
- eDiscovery
- New Privacy and Security
- Outcomes – Case Studies

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

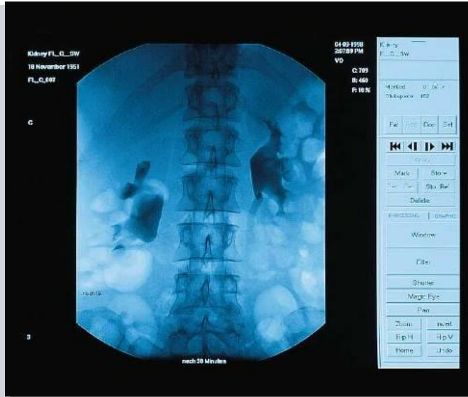
SIEMENS

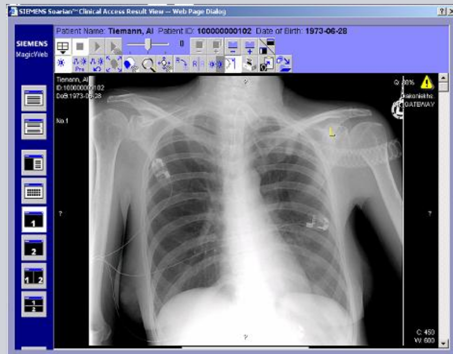
Paper chart?   Easy….

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

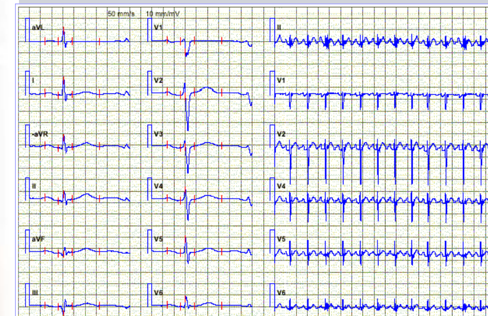
SIEMENS

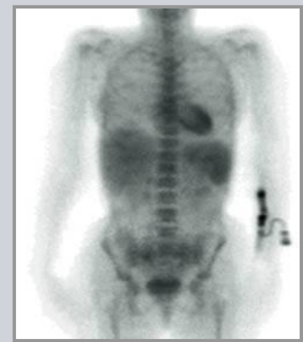
Technology? Not so easy….





Pressure Sore Analysis						
2003	2nd QTR	June				
Nurse Station	Visits	Patient Days	Daily Skin Assessment Completed	Daily Skin Assessment Escalated	Dietary Notified	Dietary Responded ≤ 4 hours
1N	173	1375	140	33	24	13.9%
1S	157	1047	112	45	32	20.4%
2N	253	1211	103	150	3	1.2%
2S	237	1079	112	125	102	43.0%
3N	176	1043	20	156	12	6.8%
3S	205	1378	201	4	59	28.8%
4N	217	1943	211	6	82	37.8%
4S	193	639	154	39	74	38.3%
Med ICU	123	257	97	26	15	12.2%
Surg ICU	79	293	63	16	10	12.7%
SNF	12	322	11	1	1	8.3%
Total	1825	10587	1224	601	414	22.7%





Regional Medical Hospital
111 Main Street
Philadelphia, PA 19101
215-231-0001

DISCHARGE SUMMARY

PATIENT NAME: ROOM: ICU-08
ACCOUNT#
ATTENDING PHYSICIAN: Scott Ross, MD

DATE OF ADMISSION:
DATE OF DISCHARGE:

The patient was admitted to the hospital after an episode of substernal chest discomfort. The patient has a past history of myocardial infarction with status post bypass grafts to the RCA, PDA, and LCX lateral branch as well as LIMA and LAD diagonal bypass graft performed by Dr. Marylyn Broadwater five years ago. Physical examination revealed a left carotid bruit, normal vital signs.

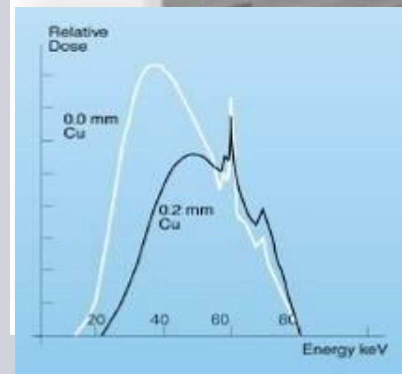
HOSPITAL COURSE: Cardiac Catheterization procedure was performed with the results of severe three vessel coronary disease with patent saphenous bypass grafts from the previous CABG. The patient also has a mildly reduced left ventricular ejection fraction.

Dr. Marylyn Broadwater was called in for consultation. She recommended transfer for further study.

The patient was transferred via ambulance in stable condition.

Scott Ross, MD

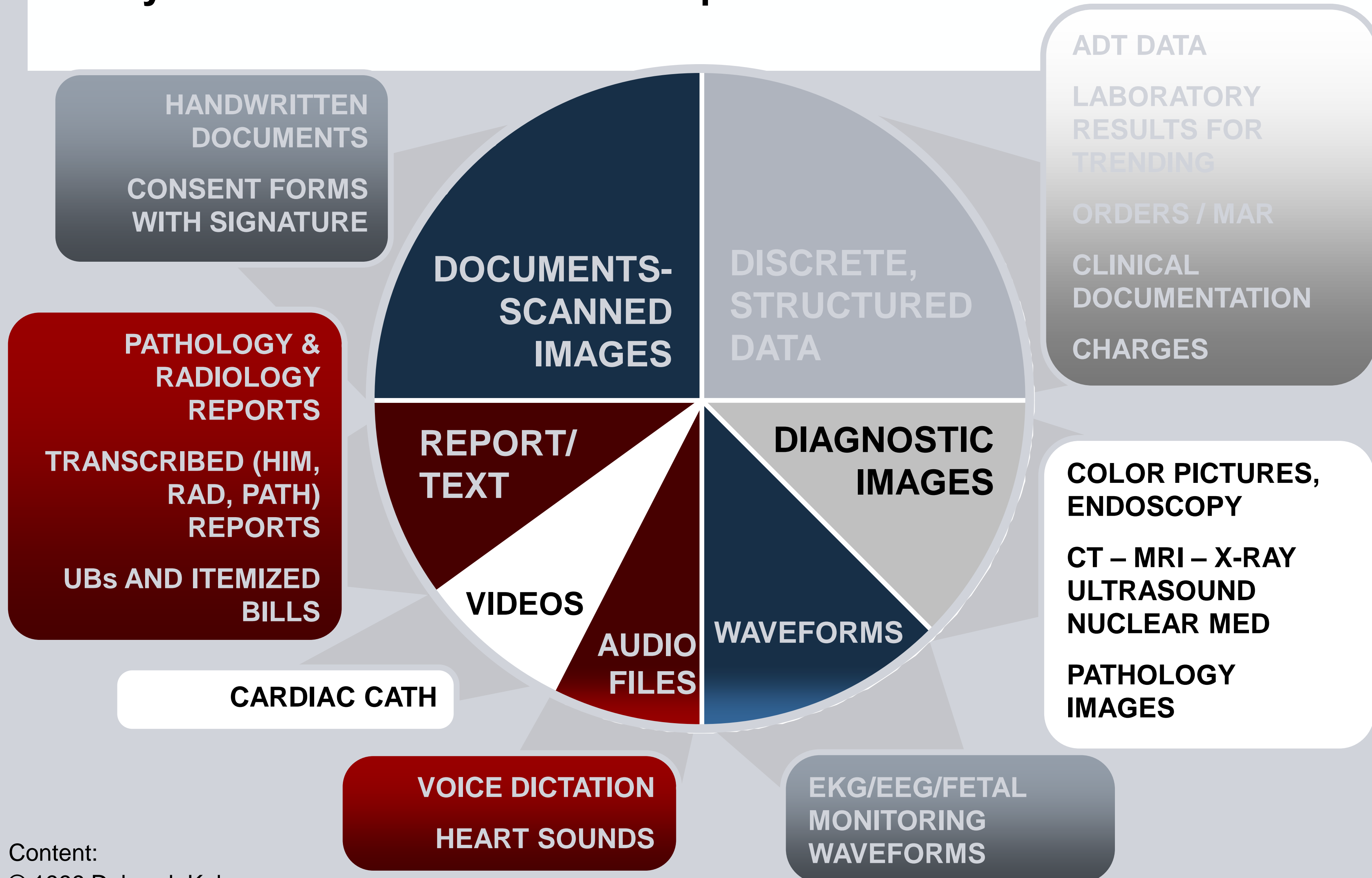
SR/TM
D: 00/00/00
T:00/00/00



Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

Why a 'medical record' is so complex...

SIEMENS



Content:
© 1999 Deborah Kohn

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Health Information Characteristics

- **Operational**
  - Provide patient care
    - Structured data or combination of structured and non-structured data
    - Example: Structured Lab Results
      - Graphical display
      - Clinical decision support

- **Archive**
  - Retrospective view or non-patient care activities
  - May include static reports and documents with less structure
  - Example: Cumulative Lab Report
    - Static document
    - Release of information

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

What we know:
Legal Health Record Definitions/Guidelines

SIEMENS

American Health Information Management Association

No one size fits all definition exists, only common principles

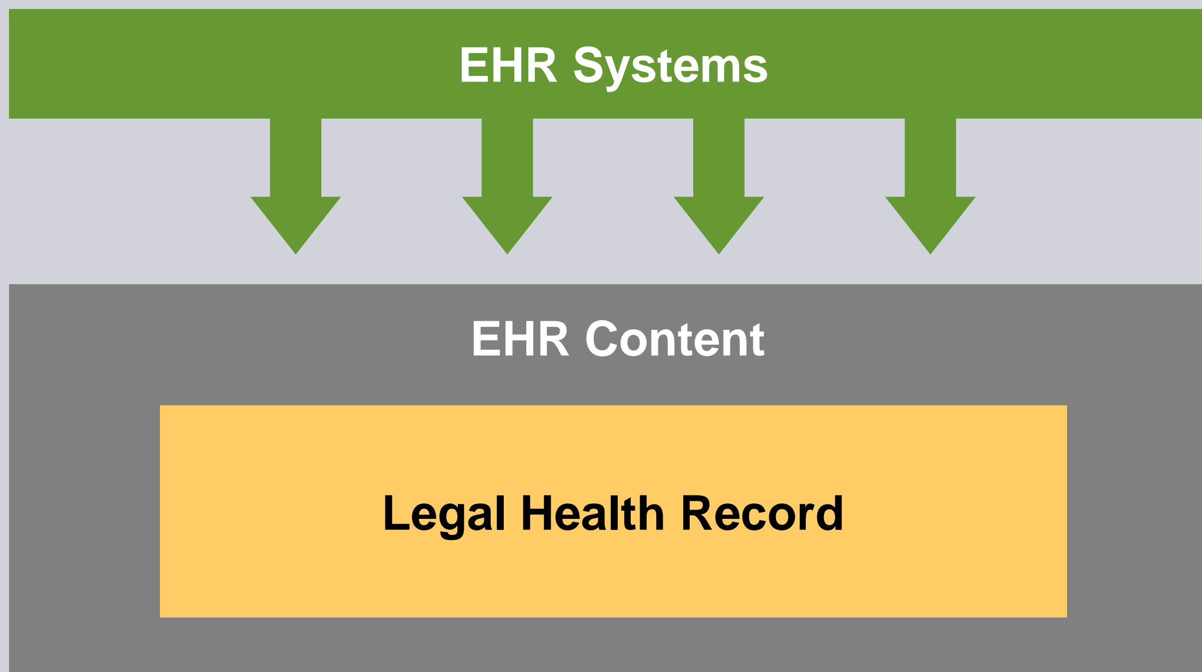
Regardless of a health record's format—paper, hybrid or fully electronic—healthcare organizations must ensure that it meets the requirements of a legal health record.

http://www.ahima.org/press/press_releases/05.0901.asp

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

The Legal Health Record is a Subset of EHR Systems

SIEMENS



Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Legal Health Record:

- **Defined Location of Legal Health Record …still Hybrid**
  - Document Imaging
  - Combination Document Imaging, Clinical Repository, Paper, Other Media

- **Clearly Defined Policies and Procedures**
  - Capture
  - Authentication
  - Retention
  - Auditing
  - Production
  - Paper/Electronic Purge

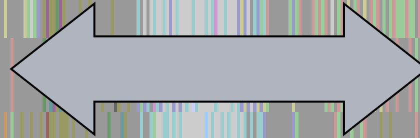
- **Policies/Procedures Modified Regularly**

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Transition

Legal Health Record



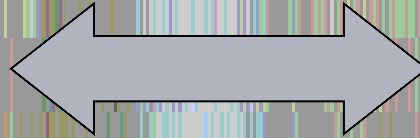
eDiscovery

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Transition

Legal
Health Record



eDiscovery

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

eDiscovery: What We Know

- Federal Rules of Civil Procedure
- Effective since December 2006
- Everything Electronic is Discoverable – Unless You Define Your Business Record
  - No single definition of what constitutes a record
  - Record is generally defined as a complete set of information required to provide evidence of a business transaction
  - Defining a “record” has become increasingly more complicated when you move from paper to electronic media to perform transactions
- Need to re-evaluate processes surrounding information requests and release

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

eDiscovery: What We Know

- Components of Electronic Health Records (“EHRs”) may hold Electronically Stored Information (ESI)
- **Sources**
  - Administration
  - Clinical
  - Ancillary services

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

eDiscovery: More Challenges

Assessing/defining goes beyond the traditional medical record

- E-mail/pictures
- Metadata
- Secondary systems

Record Management Changes

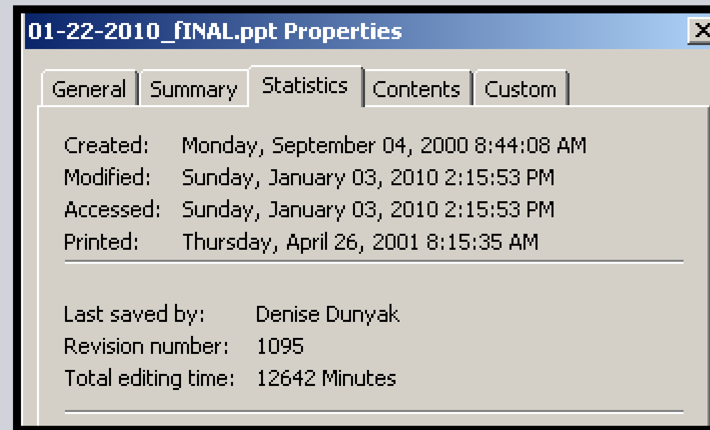
- Record retention
- Paper/Electronic
- Producing
- Preserving
- Destruction

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

Metadata

SIEMENS

- **Metadata is a key concept within the Electronic Legal Health Record**


01-22-2010_fINAL.ppt Properties

General | Summary | Statistics | Contents | Custom

Created:	Monday, September 04, 2000 8:44:08 AM
Modified:	Sunday, January 03, 2010 2:15:53 PM
Accessed:	Sunday, January 03, 2010 2:15:53 PM
Printed:	Thursday, April 26, 2001 8:15:35 AM

Last saved by:	Denise Dunyak
Revision number:	1095
Total editing time:	12642 Minutes

- **Three kinds of court identified metadata:**
  1. **Substantive:** application based, can contain modifications, edits, comments – can be scrubbed
  2. **System-based:** audit log type information and author, dates of creation and modification
  3. **Embedded:** text, numbers, content input directly, may not be visible on output, spreadsheet formulas and hyperlinks

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Metadata

- In eDiscovery case, make copies of data, documents, and metadata to prevent spoliation
- Remember opening files alters the last access date
- Copy file changes creation date on copy, be aware this could be spoliation
- What is relevant depends on the case
  - “present for surgery”

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

Litigation Response Team

Consider establishing a team to educate counsel on the structure and operation of the organizations information systems.

The Team

- Health Information Management
- Information Technology
- Legal Counsel
- Medical Informatics
- Risk Management
- Security

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Best Practices

Prepare

- Identify Electronically Stored Information (ESI)
  - Catalog what and where information is stored
- Assemble response team: HIM, Hospital - Executive, IS personnel, Counsel
- Understand scope of ESI in advance
  - What, Where, and if not, then Why
- Identify experts for each source system that may have to assist with record release if deep eDiscovery is undertaken during litigation
- Determine what ESI is not reasonably accessible due to financial costs or other burdens
- Determine and show what ESI is protected from discovery (Privilege, HIPAA)

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Best Practices (continued)

Policies

- Separate PHI from regular business files to avoid inadvertent disclosures
- Retention/Destruction Policies
  - document, educate, adhere, and enforce
- Treat email communications like other business records
- Potential litigation – duty to preserve evidence
  - establish and notify personnel
  - should supersede current destruction policies
- Modify as ARRA HITECH and HIPAA rules are implemented

Test

- Mock Trial
  - determination of what must be provided, perhaps ‘reasonably’ and ‘not reasonably’ accessible documents

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

eDiscovery: What did the Clinician see on screen?

- Depositions are changing
- Input vs. Output at the time of care vs. time of disclosure/ discovery

Bayside-SEDILLO, LORALEE ALDON-Encounter #1944858783 9/3/2008 Lab Result - 9/4/2008 - 1 pg

Laboratory Report

Patient MRN:
Patient ID:
Age:

Orgz: EMRC
Loc: 5
Svc: O- EMERGENCY CARE

Race:
Sex:

Diagnosis: BLOOD IN STOOL
Report for:

HEMATOLOGY
HEMATOLOGY

TESTS	00/00/0000 9:20	REFERENCE RANGE	UNITS
WBC	10.2	4.8-10.8	x10E3/uL
RBC	4.81	4.20-5.40	x10E6/uL
Hemoglobin	15.3	12.0-16.0	g/dL
Hematocrit	43.8	37.0-47.0	%
MCV	90.9	79-100	fL
MCH	31.8	27-33	pg
MCHC	34.9	32-36	%
RDW	12.8	12.0-16.2	%
Platelet Ct	20	140-440	/mm3

Pressure Sore Analysis

2003 2nd QTR June

Nurse Station	Visits	Patient Days	Daily Skin Assessment Completed	Daily Skin Assessment Escalated	Dietary Notified	Dietary Responded < 4 hours
1N	173	1375	140	33	24	13.9%
1S	157	1047	112	45	32	20.4%
2N	253	1211	103	150	3	1.2%
2S	237	1079	112	125	102	43.0%
3N	176	1043	20	156	12	6.8%
3S	205	1378	201	4	59	28.8%
4N	217	1943	211	6	82	37.8%
4S	193	639	154	39	74	38.3%
Med ICU	123	257	97	26	15	12.2%
Surg ICU	79	293	63	16	10	12.7%
SNF	12	322	11	1	1	8.3%
Total	1825	10587	1224	601	414	22.7%

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

HIPAA Security

- **Basically PHI must be secured as it exists in electronic states:**
  - Data at rest
  - Data in motion
  - Data in use
  - Data destroyed
- **Being cited for HIPAA Privacy & Security violations could introduce legal liabilities, especially if there is harm potential**

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

Breach Notification

SIEMENS

- HITECH is definitely pushing for all PHI to be secured, methods of disclosing that are unsecured (i.e. paper & faxes) are not encouraged
- ‘Breach’ defined as the unauthorized acquisition, access, use or disclosure of PHI which compromises the Privacy & Security of unsecured PHI.
- Breach reporting to HHS in effect!
  - Not limited to provider (Business Associates must report as well)
- Cases of PHI Breach will require patient notification of all breaches of their unsecured PHI that were determined to have the potential for harm.
  - If over 500 patients are involved notices must sent to HHS and the Media and also your website must updated to declare the breach

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

HIPAA Privacy Enforcement/Penalties

SIEMENS

- HIPAA’s criminal penalties now extends to individuals
  - Fines of $50,000 to $250,000
  - 1 to 10 years in jail
- Improved HIPAA enforcement, increases the amount of civil monetary penalties under HIPAA rules
- Can impose violations even if CE or BA ‘Did Not know’

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Categories of Violation and Respective Penalty Amounts Available

- Did Not Know
  - $100–$50,000 (each violation) up to $1.5M
- Reasonable Cause
  - $1,000–50,000 (each violation) up to $1.5M
- Willful Neglect—Corrected
  - $10,000–50,000 (each violation) up to $1.5M
- Willful Neglect—Not Corrected
  - $50,000 (each violation) up to $1.5M

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

Cyber Liability

SIEMENS

- There are now insurance programs for 'Cyber Liability' for Health care clients.
- All of these issues (and more) come with the migration to electronic records
  - Coverage for Privacy, Identity Theft, Media, Electronic Theft, network security liability
  - eDiscovery costs
  - Recovery costs, punitive damages, Business interruption, privacy notification
- Plaintiff's attorneys are becoming more adept at eDiscovery and electronic health record legal issues

Content:
© 2010 Kelly McLendon

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

New opportunities - challenges

SIEMENS

- Record management becomes computer centric with EHR
  - New skill sets required
  - Collaboration with IT
- HIM will be asked to perform some or many MU related processes
- Ambulatory become more integral
- New leaders and specialists in all aspects of the *data* side of EHRs will be needed
  - HIE Coordinators
  - Privacy Officers, Coordinators, Auditors
  - Data Integrity/MPI Integrity Coordinators
  - EHR Program Manager
  - And then some….

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

Next Steps For You

SIEMENS

- **Educate, educate, and educate:**
  - HIPAA
  - Meaningful Use
- **Become invaluable resource to IT**
  - Regardless of Media, HIM must preserve PHI
- **Become organization advocate:**
  - Privacy
  - Legal Health Record
  - Data Quality and Management
  - Health Information Exchange
  - Personal Health Records

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Benefits

- Improved Patient, Employee, Clinician and Community Satisfaction
- Decrease Materials and Costs
- Decrease Accounts Receivables Days
- Improved Productivity
- Improved Workflow Efficiencies
- Increased Security
- Improved Compliance

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

Customer Outcomes and Testimonials

Mountain States Health Alliance:

- From 05/2006 to 03/2009, our overall delinquency rate for 14 facilities dropped from 23% to 5%. At Johnson City Medical Center, our largest facility, we saw an improvement from 46% to 6% in that same time frame.
- Reduced AR days by 1.2 days in 6 months.

CentraState:

- Prior to Soarian HIM implementation in January 2007, CSHS had a delinquent chart count of 853. In April 2009, the count is 249, a reduction of 71%.
- Reduced registration times by 13% by implementing signature capture pads

Pinnacle

- “We've been able to give our physicians access from their homes and offices. This has helped the workflow within our department to move more efficiently.”
- “By freeing up space where the physician's used to work on their incomplete charts, we were able to expand the Emergency Room.”

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

More Customer Outcomes and Testimonials

Yakima Valley Memorial Hospital

- With the implementation of Soarian Enterprise Document Management and HIM, Yakima Valley Memorial Hospital has seen the following outcomes from the the implementation kick-off meeting in March of 2008 to December of 2008:
  - Decrease in number of delinquent medical records from 293 to 35 or 88%.
  - Decrease in Joint Commission Delinquency Rate from 4.4% to .40 % for an improvement of 91%.
  - Decrease in turn around time from discharge to physician from 7 days to 2 days for an improvement of 71%.
  - Decrease in number of copies made from 300 to 85 for an improvement of 72%.
  - Decrease in number of days to respond to correspondence request from 5 days to 1 day for an improvement of 80%
  - Decrease in supply costs from $16,040 to $12,110 for an improvement of 25%.

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

More Customer Outcomes and Testimonials

Health Alliance

- HealthAlliance has seen a reduction in delinquency rate from 28% in 2005 to 11% in 2009 - a 61% improvement.
- HealthAlliance has seen a reduction in analysis turn around time from 5 days in 2005 to 3 days in 2009 - a 40% improvement.
- HealthAlliance has seen a reduction in response to Correspondence from 15 days in 2005 to 8 days in 2009 – a 47% improvement.
- HealthAlliance has seen a reduction in beeper requests to department for records on weekdays from 43 a day in 2005 to 1 a day - a 98% improvement.
- HealthAlliance has seen a reduction in chart pulls for studies from 582 per month in 2005 to 33 per month in 2009 - a 95% improvement.
- HealthAlliance has seen a reduction in chart pulls for the OR from 625 per month in 2005 to 385 per month in 2009 - a 49% improvement.

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

More Customer Outcomes and Testimonials

SIEMENS

Gaston Memorial Hospital

- reduced their medical record delinquency rate by 91%
- reduced the number of incomplete medical records by 24%
- reduced the number of charts pulled for quality reviews by 94%
- reduced the number of charts pulled for patient care by 78%.
- reduced the number of telephone calls into their Medical Records Department by 28%.
- reduced the amount of unbilled accounts receivable in medical records by 49%
- reduced the amount of unbilled accounts receivable by physicians by 51%.
- realized annual savings of over $100,000 by eliminating copy service charges

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

SIEMENS

More Customer Outcomes and Testimonials

Nacogdoches Memorial Hospital

Customer results include a reduction in:

- AR days by 18%
- delinquent records by 40%
- un-coded records by 45%

Other benefits include:

- Easy chart review process for surveyors/auditors – no more chart pulls
- Greater compliance on chart completion in focus areas such as verbal orders signed within 48 hours
- Reduction in phone calls by physician staff to HIM or Business Office for copies of face sheets, insurance information, etc. (office staff has access to necessary documentation)

" Our greatest achievement has been removing barriers for physicians. There is no longer contention for a single chart, therefore reducing excuses for record completion. Physicians can access records from anywhere, anytime, from home, office, or a hotel lobby while on vacation."

Jane Ann Bridges, Chief Financial Officer

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.

Questions?

Copyright © 2010 Siemens Medical Solutions USA, Inc. All rights reserved.