New York State Health Facilities Association
Audio Conference Series
December 10, 2013

The TRUTH about Electronic Medical Records

Presented by:
Veronica M. Bencivenga, CPA and Linda S. Little, RN, BSN

HMM Consulting
A division of Horan, Martello, Marrone, P.C.
About HMM Consulting...

- Division of Horan, Martello, Morrone, PC formally established in 2006
- Service clients across the Care Continuum
- Experienced industry Professionals who bring fresh perspective and are subject matter experts
- Active in Associations and Committees at the State and Local levels
- Subject matter experts who speak or present nationally and locally
- Worked with wide range of clients and EMR vendors to successfully implement EMR
Today’s Agenda...

☑️ Health Information Exchange (HIE)
☑️ Data flowing out of your building RIGHT NOW
☑️ 8 Truths about Electronic Medical Records
☑️ Phases of EMR implementation
Health Information Exchange
Health Information Exchange

Data Foot Print

- Health Information
- Consumer Information
- Financial Information
Health Information Exchange

THEN

“Keep” good records about you

NOW

“Share” and use information to achieve better outcomes
Electronic health information exchange (HIE) allows doctors, nurses, pharmacists, other health care providers and patients to appropriately access and securely share a patient’s vital medical information electronically—improving the speed, quality, safety and cost of patient care.

Appropriate, timely sharing of vital patient information can better inform decision making at the point of care and allow providers to:

- Decrease duplicate testing
- Avoid medication errors
- Avoid readmissions
- Improve Dx

www.healthit.gov/providers
Health Information Exchange

HIE Services

Health Data Sources

Value Added Services

Results Delivery
- MU Support
- Public Health Integration

Results Delivery
- MU Support
- Clinical Quality Services
- Community Health Record Access

Results Delivery
- Community Health Record System

Biosurveillance
- Reportable Conditions
- Results Delivery

Quality Reporting
- Physician Bonus Administration

De-identified, longitudinal clinical data

Source: http://healthbizdecoded.com/2013/05/hies-meeting-the-sustainability-challenge/

A division of: Horan, Martello, Morroco, P.C.
NwHIN
National Health Information Network (NHIN) is a set of standards, services, and policies that enable the secure exchange of health information over the Internet. The NwHIN is NOT a physical network that runs on servers at the U.S. Department of Health & Human Services, nor is it a large network that stores patient records.

Statewide Networks
SHIN-NY

RHIOs
Regional Health Information Exchange Organizations, or RHIOs, are the nodes connecting together the statewide health network. There are currently 11 RHIO’s in NYS.

EMR/EHR
Hospitals
SNF’s
Physicians
Specialists
Pharmacy
Lab
Radiology
Payers/Plans

PHR
Personal Health Record, or PHR, is a record with information about your health that you keep for easy reference using a computer.
- WebMD
- Microsoft Healthvault
- AHIMA MyPHR

http://www.healthit.gov/policy-researchers-implementers/nationwide-health-information-network-nwhin
http://nyehealth.org/what-we-do/statewide-network
http://www.ehealthnetworkli.net/
http://www.medicare.gov/manage-your-health/personal-health-records/personal-health-records.html
Health Information Exchange

- **Challenges**
  - **STRUCTURE**- Most EMR’s have unique architecture so they don’t easily communicate with each other – even if they are Certified!
  - **CONTENT**– Clinical information collected varies based on where it was generated and for what purpose

- **Continuity of Care Document (CCD)**
  - Determined by CMS
  - Standard format to exchange clinical data elements to prevent “loss of meaning” (Consolidated Clinical Document Architecture (C-CDA))
  - Defines required content sections (i.e., problems, allergies, medications) and coding systems (ICD-10, SNOMED, RxNorm, CPT, and LOINC)
  - Supported by Meaningful Use Stage 2 – Interoperability
  - Can be read by both people and computers
Implementing Consolidated-Clinical Document Architecture (C-CDA) for Meaningful Use Stage 2

ONC Implementation and Testing Division
April 5, 2013
Meaningful Use Stage 2 Rule (MU2) Overview

MU2 sets measurable objectives for Eligible Professionals (EPs) or Eligible Hospitals (EHs) / Critical Access Hospitals (CAHs) to obtain CMS incentives (CMS 495.6)

- MU2 objectives are categorized to reflect Health Outcomes Policy Priorities
- Pursuit of objectives within 2 of the 7 categories involve using Certified EHR Technology that has C-CDA capabilities

Office of the National Coordinator for Health Information Technology

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<table>
<thead>
<tr>
<th>Cert. Category</th>
<th>Criterion</th>
<th>Description</th>
<th>Req. Summary Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care Coordination</td>
<td>Transition of Care 170.314(b)(1)&amp;(2)</td>
<td>when transitioning a patient to another care setting, the EP or EH/CAH should provide a summary care record</td>
<td>Transition of Care/Referral Summary</td>
</tr>
<tr>
<td>Patient Engagement</td>
<td>Data Portability 170.314(b)(7)</td>
<td>when a patient transitions from provider or setting to another, a medication reconciliation should be preformed</td>
<td>Export Summary</td>
</tr>
<tr>
<td></td>
<td>View/Download/Transmit 170.314(e)(1)</td>
<td>patients must be able to view &amp; download their own medical info &amp; also be able to transmit that info to a 3rd party</td>
<td>Ambulatory or Inpatient Summary</td>
</tr>
<tr>
<td></td>
<td>Clinical Summary 170.314(e)(2)</td>
<td>provide clinical summaries for patients for each office visit</td>
<td>Clinical Summary</td>
</tr>
</tbody>
</table>
Data Requirements Example: Transition of Care

Cert. Category: Care Coordination 170.314(b)

Transition of Care 170.314(b)(1)&(2) when transitioning a patient to another care setting, the EP or EH/CAH should provide a summary care record

Summary Type: Transition of Care/Referral Summary

Common MU Data Set
- Patient name
- Sex
- Date of birth
- Race **
- Ethnicity **
- Preferred language **
- Care team member(s)
- Medications **
- Medication allergies **
- Care plan
- Problems **
- Laboratory test(s) **
- Laboratory value(s)/result(s)
- Procedures **
- Smoking status **
- Vital signs

Criterion-Specific Data Requirements
- Provider Name & Office Contact Information (Ambulatory Only)
- Reason for Referral (Ambulatory Only)
- Encounter Diagnoses **
- Cognitive Status
- Functional Status
- Discharge Instructions (Inpatient Only)
- Immunizations **

NOTE: Data requirements marked with a double asterisk (**) also have a defined vocabulary which must be used.
### HL7 Implementation Guide for CDA R2:
**IHE Health Story Consolidation, DSTU Release 1.1**
*(US Realm)*
*July 2012*

#### Document Templates: 9
- Continuity of Care Document (CCD)
- Consultation Note
- Diagnostic Imaging Report (DIR)
- Discharge Summary
- History and Physical (H&P)
- Operative Note
- Procedure Note
- Progress Note
- Unstructured Document

#### Section Templates: 60

#### Entry Templates: 82

<table>
<thead>
<tr>
<th>Document Template</th>
<th>Section Template(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuity of Care Document (CCD)</td>
<td>Allergies, Medications, Problem List, Procedures, Results, Advance Directives, Encounters</td>
</tr>
<tr>
<td>History &amp; Physical (H&amp;P)</td>
<td>Allergies, Medications, Problem List, Procedures, Results, Family History, Immunizations, Assessments</td>
</tr>
</tbody>
</table>

*Section templates in GREEN demonstrate CDA's interoperability and reusability.*
Data Collection Initiatives in your SNF
Data Collection Initiatives

- CPOE/RX
- Labs/X-ray
- MDS 3.0
- Immunizations
- eMedNY
- Claims Clearing House

Is this all?

http://www.healthit.gov/
Data Collection Initiatives

- UAS-NY
- eFINDS
- CPOE
- eMAR
- MDS 3.0
- Claims Clearing House
- Therapy
- CQM
- Meaningful Use
- Nursing Home Quality Pool
- Immunizations
- EPOC
- QAPI
- A&I Reporting
- HIE
- 5 Star Rating
- eMedNY
- Nursing Home Quality Pool
Pay for performance (quality based)

- Nursing Home Quality Pool (NHQP)
  - Three major components:
    1. Quality Measures (60 points) - MDS 3.0
    2. Compliance (20 points) – DOH Survey results and Required Reporting (RHCF, Immunizations)
    3. Potentially Avoidable Hospitalizations (20 points) – MDS 3.0 and hospital admitting diagnosis per SPARCS

Auditing and payment recovery

- Federal (MAC, RAC, CERT)
- State (OIG, OMIG, RAC)
Data Collection Initiatives

Auditing and payment recovery - Federal

Table 1. Medicare Contractors and Their Responsibilities

<table>
<thead>
<tr>
<th>Type of Contractor</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliated Contractors (ACs) – Medicare claims processing contractors such as carriers and fiscal intermediaries (FIs)</td>
<td>Process claims submitted by physicians, hospitals, and other health care providers/suppliers, and submit payment to those providers in accordance with Medicare rules and regulations. This includes identifying and correcting underpayments and overpayments</td>
</tr>
<tr>
<td>Medicare Administrative Contractors (MACs)</td>
<td></td>
</tr>
<tr>
<td>Program Safeguard Contractors (PSCs)/ Zone Program Integrity Contractors (ZPICs)</td>
<td>Identify cases of suspected fraud and take appropriate corrective actions.</td>
</tr>
<tr>
<td>Comprehensive Error Rate Testing (CERT) contractor – CERT Documentation Contractor (CERT DC) and CERT Review Contractor (CERT RC)</td>
<td>Collect documentation and perform reviews on a statistically-valid random sample of Medicare FFS claims to produce an annual improper payment rate.</td>
</tr>
<tr>
<td>Recovery Auditors</td>
<td>Identify and correct underpayments and overpayments, as part of the Recovery Audit Program.</td>
</tr>
</tbody>
</table>

Table 2. Medicare Prepayment and Postpayment Claim Review Programs

<table>
<thead>
<tr>
<th>Prepayment Claim Review Programs*</th>
<th>Postpayment Claim Review Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Correct Coding Initiative (NCCI) Edits</td>
<td>Comprehensive Error Rate Testing (CERT) Program</td>
</tr>
<tr>
<td>Medically Unlikely Edits (MUEs)</td>
<td>Recovery Audit Program</td>
</tr>
<tr>
<td>Medical Review (MR)</td>
<td>Medical Review (MR)</td>
</tr>
</tbody>
</table>

* In 2012, CMS introduced the Recovery Audit Prepayment Review Demonstration, which allows Recovery Auditors to conduct prepayment reviews on certain types of claims that historically result in high rates of improper payments. The demonstration focuses on 11 states: California, Florida, Illinois, Louisiana, Michigan, Missouri, New York, North Carolina, Ohio, Pennsylvania, and Texas.
Auditing and payment recovery - Federal

• PEPPER provides provider-specific Medicare data statistics for discharges/services vulnerable to improper payments. PEPPER can support a facility’s compliance efforts by identifying where it is an outlier for these risk areas.

• Provide comparative data reports to providers and to Medicare Administrative Contractors in support of efforts to reduce Medicare fee-for-service improper payments.

Source: http://www.pepperresources.org/
Data Collection Initiatives

Auditing and payment recovery - State

- OMIG contracts with a Medicaid Recovery Audit Contractor (RAC)
- NAMI
- Bed Reservation

October 2010: MDS information is transmitted electronically by nursing homes to the national MDS database at CMS.

Federally Mandated

Medicare and Medicaid certified nursing homes

in certified nursing homes

The MDS identifies potential resident problems, strengths and preferences.
Five-Star Quality Rating System:

- **Health Inspections**
- **Staffing**
- **QM**

**QM’s**
- Measures based on outcomes from State health inspections
  - Measures based on nursing home staffing levels
  - Measures based on MDS quality measures (QMs)

**Health Inspections**

**Staffing**

[www.cms.gov](http://www.cms.gov)
Clinical Quality Measures (CQMs)

- Clinical Process Effectiveness
- Efficient Use of Healthcare Resources
- Population/Public Health
- Care Coordination
- Patient Safety
- Patient and Family Engagement
Effective QAPI programs are critical to improving the quality of life, and quality of care and services delivered in nursing homes.

5 Elements:
- Design and scope
- Governance and leadership
- Feedback and monitoring
- PI projects
- Analysis and systematic action

March 2010
Quality Assurance/Performance Improvement (QAPI)

Element 1: Design and Scope
- Ongoing and Comprehensive
- All Services Offered
- All Departments

Element 2: Governance and Leadership
- Led by Administration
- Input from staff, residents and families
<table>
<thead>
<tr>
<th>Element 3: Feedback, Data Systems and Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Systems to monitor care and services</td>
</tr>
<tr>
<td>- Data obtained from multiple sources</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element 4: Performance Improvement Projects (PIPs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Identify areas that require attention</td>
</tr>
<tr>
<td>- Examine and improve care and services</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Element 5: Systematic Analysis and Systemic Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Identify when in-depth analysis is needed</td>
</tr>
<tr>
<td>- Understand the problem, causes and implications of change</td>
</tr>
</tbody>
</table>
ICD-9
E917 - Striking against or struck accidentally by objects or persons

ICD-10
W22.02XA - Walked into lamppost, initial encounter (with or without alcohol...the next time they write it there will be a sub number for texting!!)

Effective October 1, 2014

www.cms.gov/ICD10/
October 4, 2013: Event ID: Survey Detail

Click on citation with the underscore (e.g., F319) to drill into the Plan of Correction page to enter:

- a. POC Description (i.e., your POC for the citation)
- b. Completion Date (i.e., date you expect the citation to be back in compliance)

Submit button (to submit POC)

DOH will review your POC, you will then receive a notice if your citation is rejected OR accepted by DOH

www.health.ny.gov
Benefits of an EMAR

- Easily reorder meds
- PRN Management
- Bar code scanning
- Narc counting
- Alerts & warnings
- Reduce med errors
- Better survey results
- Shorten med pass time
- Enhance res quality of care

www.healthcare-informatics.com
Computerized Physician Order Entry (CPOE)

- **Benefits:**
  - Reduces Medical errors
  - Improves Healthcare Quality
  - Electronically submitted
  - Can create progress notes from eMAR, Care Plans and Tasks
  - Able to run numerous reports including but not limited to:
    - Coumadin PT/INR’s
    - Side effect and Behavior tracking reports
    - Administration Audit Report
    - Labs/Radiology
    - Weights and vitals
    - Diet Type Report
    - Tube Flush Report
    - PRN Sheets Report

www.cms.gov/Regulations

Ability to replicate commonly used forms in software and transmit orders electronically Pharmacy, Lab, Radiology, Physician referrals, etc.
Effective October 17, 2011
Electronic incident reporting system, will allow nursing homes to report incidents through the HCS
The new form will replace the previous telephone hotline method for reporting incidents
Facilities will no longer call the Nursing Home Complaint Hotline (unless they are unable to access the web page)
Information on incidents will be obtained by CCIU accessing the web site, and then entered into ACTS
DOH has created a defined list of reportable incidents
The Department has developed an online reference manual for clarification of reportable incidents
The manual lists “elements” or relevant components, that if present, render the incident reportable

www.health.ny.gov/professionals/nursing
Features of Therapy Software:
RUG billing, Part-B Cap management, contract therapy invoicing, regulatory requirements such as CCI edits, the 8-minute rule and Local Coverage determinations (LCDs), patient scheduling, rehab orders, MDS management, rehab documentation, staff time & attendance, treatment scheduling, planning, charges, documentation, billing and reporting.
In March 2013, The UAS-NY will be used in the following programs and plans: Adult Day Health Care, Assisted Living, Care at Home I and II, Managed Long Term Care, Long Term Home Health Care, Personal Care, Consumer Directed Home Care, Nursing Home Transition and Diversion Waiver, and Traumatic Brain Injury Waiver. The transition to the UAS-NY is expected to be completed by March 2014.

<table>
<thead>
<tr>
<th>UAS-NY Assessment Instruments</th>
<th>Benefits Of UAS-NY</th>
<th>UAS-NY Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>• UAS-NY Community Assessment</td>
<td>• Establishes uniformity of assessment across assessors.</td>
<td>• Single record for individuals engaged in MLTC system.</td>
</tr>
<tr>
<td>• Pediatric Assessment for Ages 4 through 17</td>
<td>• Uses assessment outcomes to guide Care Planning</td>
<td>• Secure system accessed through HCS web portal</td>
</tr>
<tr>
<td>• Pediatric Assessment from Birth through Age 3</td>
<td>• Uses consumer assessment history data to guide program and service planning.</td>
<td>• Role-based system</td>
</tr>
<tr>
<td></td>
<td>• Supports Quality Improve</td>
<td>• Immediate access to reporting functionality</td>
</tr>
<tr>
<td></td>
<td>• Supports improved management activities.</td>
<td>• Ability to use online and offline</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ad hoc reporting capability</td>
</tr>
</tbody>
</table>

http://www.health.ny.gov/
In July 2013 DOH instituted eFINDS program. In the event of a public health event, such as a storm, flood, non natural incident or practice/drill.

- Sharing resident location information
- Secure, real time & easy
- Promotes data accuracy
- Time saving
- Collaboration between facilities

Actions of an evacuating facility:
- Register patient/resident
- Update patient/resident
- Generate barcode spreadsheets

Actions of a receiving facility:
- Update patient/resident

www.health.ny.gov/facilities/
creates the electronic file (the claim) then (uploads) claim to your clearinghouse account then *scrubs* the claim checking it for errors then once the claim is accepted, *securely transmits* the electronic claim to the specified payer Plain and simple, using a clearinghouse greatly simplifies and speeds up your claims processing.

www.clearinghouses.org
The TRUTH about Electronic Medical Records
8 Truths of EMR Implementation:

- Selecting an EMR is **HARD** – There is **NO PERFECT EMR**
- **People** make decisions, EMR is just a **TOOL** that helps
- EMR **WILL NOT** fix poor workflow/performers
- **ALL** departments need to be included in planning
- Project management and training are **CRITICAL** to success
- Workflow **MUST** be changed
- Productivity is **REDUCED** in the early stages causing overtime and increased staffing
- EMR is a series of overlapping investments whose benefit accumulates **OVER TIME**
EMR Project Phases
Three EMR Project Phases

**Phase 1**
**PLANNING**
(3-9 Months)
- Establish Scope, Goals and Objectives
- Assessment
- Project Team
- Vendor Search
- Project timeline and milestones

**Phase 2**
**IMPLEMENTATION**
(3-4 Months)
- System build
- Testing
- Training
- Go-Live

**Phase 3**
**INTEGRATION**
(6-12 Months)
- Guide and monitor utilization
- Training and Re-Training
- Update policies and procedures
- QA/QI
Phase 1
PLANNING
## Phase 1 - Planning

### Establish Scope, Goals and Objectives
- Start with the end in mind
- Re-visit often and revise as needed during the Planning Stage

### Assessment
- Management commitment
- Utilization of existing systems
- Effectiveness of current workflow practices
- Computer skills
- Current IT Infrastructure (Network, computers, databases, interfaces, bandwidth, etc.)

### Project Team
- Interdisciplinary
- Project Manager
**Phase 1 - Planning**

**Vendor Search**

- **FACT:** There is NO perfect EMR
- Base decision on:
  - Features, functionality (product demonstrations, site visits)
  - Delivery model that supports your organizational goals and objectives
  - Customer Support (dedicated support, e-learning, webinars, news letters, etc.)
  - Results of Vendor due diligence including reference checks, plans for **future product development**, **financial health** and longevity of vendor
- Maturity Model for adoption of EMR
Phase 1 - Planning

Vendor Search (continued)

• Delivery Model Options:
  • **Single Solution vs. Multi-Vendor**
    • Ability of in-house Software Administrator to manage multiple vendors and interfaces
  • **Hosted (ASP, SaaS) VS. Local**
    • Understanding of current infrastructure, growth plans and the trade off between control (security/compliance) and cost
Vendor Search (continued)

- **Multiple Vendors** – how are they linked?
  - **Upload**
    - Manual process
  - **Interface**
    - Electronic push/pull
    - Separate logins
  - **Integrate**
    - Vendors partner to create seamless bi-directional data flow.
    - Single login for both systems
    - Looks/acts like a single system
## Single Solution vs. Multi-vendor

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>Multi</td>
</tr>
<tr>
<td>• True single point of entry for data (seamless data flow)</td>
<td>• Unbalanced vendor expertise (strong Clinical/weak Financial or weak Document Management/strong Physician Orders)</td>
</tr>
<tr>
<td>• Better workflow management</td>
<td>• Bypass/disable logic checks</td>
</tr>
<tr>
<td>• Better accountability for issue resolution</td>
<td>• Systems may not interface well causing workflow issues (i.e. duplicate data entry, etc.)</td>
</tr>
<tr>
<td>• One database</td>
<td>• “Finger-pointing&quot; among vendors when issues arise</td>
</tr>
<tr>
<td>• Can provide specialty specific functionality (Rehab, Financial, Pediatrician, Oncologist)</td>
<td>• Multiple databases</td>
</tr>
</tbody>
</table>
EMR Software Delivery Options

### Hosted vs. Local Solution

<table>
<thead>
<tr>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Low up front investment in hardware (can use existing)</td>
<td>• Security concerns (third parties have access to confidential data)</td>
</tr>
<tr>
<td>• Minimal licensing (subscription) costs</td>
<td>• Disaster Recovery concerns if solution provider fails</td>
</tr>
<tr>
<td>• Minimal IT support required on-site</td>
<td></td>
</tr>
<tr>
<td>• Control over all systems and custody of all data</td>
<td>• Requires dedicated on-site IT staff</td>
</tr>
<tr>
<td>• Full control over disaster recovery</td>
<td>• Initial infrastructure investment is high (servers)</td>
</tr>
<tr>
<td>• Physical control of access</td>
<td>• Licensing and support costs higher</td>
</tr>
</tbody>
</table>

Hosted vs Local Solution

- **Hosted**
  - Low up front investment in hardware (can use existing)
  - Minimal licensing (subscription) costs
  - Minimal IT support required on-site
- **Local**
  - Control over all systems and custody of all data
  - Full control over disaster recovery
  - Physical control of access
## Key EMR Modules and Functionality

<table>
<thead>
<tr>
<th>Clinical Modules</th>
<th>Financial Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Care Plans</td>
<td>• Billing/Claims Management</td>
</tr>
<tr>
<td>• Physician Orders</td>
<td>• Accounts Receivable</td>
</tr>
<tr>
<td>• Assessments</td>
<td>• Collections</td>
</tr>
<tr>
<td>• Progress Notes</td>
<td>• Patient Trust</td>
</tr>
<tr>
<td>• e-MAR/e-TAR</td>
<td>• Referral Management</td>
</tr>
<tr>
<td>• Weights/Vitals</td>
<td>• Accounts Payable</td>
</tr>
<tr>
<td>• Point of Care</td>
<td>• General Ledger</td>
</tr>
<tr>
<td><strong>Third Party Software:</strong></td>
<td>• Fixed Assets</td>
</tr>
<tr>
<td>• Therapy</td>
<td></td>
</tr>
<tr>
<td>• QI/QA (eInteract, COMS)</td>
<td></td>
</tr>
</tbody>
</table>
Key functionality to look for:

- **“Built-in” workflows**
  - Logical and effective
  - “Drive” through documentation process or “alert” to documentation required

- **Clinical Decision Support Software (CDSS) and other logic checks**
  - Alerts/Warnings/Messaging
    - Parameters exceeded (temps outside of normal range)
    - Documentation to be completed
    - Duplicate orders (Rx, lab or other tests)
    - Past due accounts
    - Claims data missing (onset date, diagnosis code)
Key functionality (continued):

- **Electronic submission of physician orders (CPOE)**
  - Ability to replicate commonly used forms in software and **transmit orders electronically**
    - Pharmacy, Lab, Radiology, Physician referrals, etc.

- **Electronic signature**

- **Document Management**
  - Ability to incorporate third party documents to ensure chart integrity and completeness
    - Lab, radiology results, Physician consults, etc.
    - Healthcare Proxy, DNR, or other Advanced Directives
    - Benefit Cards (Medicare, Medicaid, Other Insurance)
Key functionality (continued):

- **Dashboards**
  - Static (snapshot) or Live (real time)

- **Reporting/Analytics**
  - Robust canned reports and flexibility to customize and export

- **Secure Messaging built in**
  - Physicians
  - Clinical Staff
  - i.e., TigerText, PingMD, Startel
Phase 2 IMPLEMENTATION
Phase 2 - Implementation

System Build

- Creates the foundation (tables, rules, parameters, security templates etc.) and drives information flow
- **Most clinical data is paper based so a lot of data entry required to populate the initial database (like active medication orders, etc.)**
- Even electronic clinical data is rarely a 1:1 match to new format so manual data entry or manipulation of data required
- Clinical data that is “imported” or “populated” will not trigger the logic checks and controls in the system

Testing

- Work with Pharmacy, Lab and Radiology vendors to validate information exchange
- The best testing happens in the first 4-6 weeks after “Go-Live” once real data is in the system
Phase 2 - Implementation

Training

- Limit training of new information to 4hrs
- **ALL staff, ALL shifts must be trained**
- Offer additional “Open Training” sessions for anyone who needs extra help
- Work closely with Nurse Scheduler to ensure proper staff coverage during training and **distribution of trained staff on each shift** (buy her something nice before, during and after training)

Go-Live

- **Go-Live when you walk out of training**
- Hands on support of every shift absolutely critical the first few weeks after each module goes live
Phase 3
INTEGRATION
Phase 3 – Integration

Guide and monitor workflow/utilization

• Users need to know what to do when they back to their desk
• Establish process for reporting issues, resolving them and communicating findings back to the users (special e-mail address, notebook on the unit, morning meeting)
• This is evolutionary and should go on for 6-12 months

Training and Re-training (yes, more training)

• Establish training policy for new employees
• Schedule and support re-training and new training for existing employees several times a year
• Monitor for new features and schedule training for applicable staff
Phase 3 – Integration

Update policies and procedures

- Best to update after first year using system as process will evolve as users get better with the system and provide feedback about what works and what doesn't from the original plan

QA/QI

- Begin utilizing reports ASAP and scrubbing or fine tuning as needed
Nursing homes use quality measures to review and improve the quality of the care they give to residents.

Clinical measures for nursing home residents, such as the percent of residents with pressure ulcers, with moderate to severe pain, or residents who have changes in their ability to move about. This information is collected as LIVE data and entered in the EMR by the nursing home on all residents and shows how well nursing homes care for their residents’ physical and clinical needs.

The EMR system allows for you to organize, track, search and report on your indicators.
Quality Measures (QA/QI)

**Indicators**
- Indicator Data Set-up
- To identify trends, patterns and exceptions
- Measurable
- Real time data

**Quality Improvement**
- Track tasks and progress of any improvements to address trends and patterns identified
- Valuable insight into Clinical issues
- Utilization of facility specific data for QA

**Reports**
- Interdisciplinary
- Can be broken down by Diagnosis, Unit, Staff, Assessment etc…
- Accurate data leads to quality information that is required for quality decision making and resident care.
Nursing home quality measures have four primary purposes:

1. Help you choose a nursing home for yourself or others;
2. Understand care at nursing homes where you or family members already live;
3. Facilitate discussions with nursing home staff regarding the quality of care; and
4. Provide data to help with quality improvement efforts.

The nursing home quality measures come from resident assessment data, that collected into the EMR provides real time documentation. Real time data provides the most accurate information. The assessment data is converted to develop quality measures that give consumers another source of information to show how well nursing homes are caring for their resident's physical and clinical needs.
QA monitoring is critical for early detection of care delivery issues, ensuring complete and timely records, and auditing workflow processes.

- Track new antibiotic orders, Infections report; UTI monitor to assist with the identification of UTI’s which is now being used as part of fall assessment
- Monthly Report of Nosocomial Infections – which calculates monthly attack rate, break down by unit as well as individual type of infections;
- PT/INR orders for all Residents on Coumadin.
- O2, G/T and Foley audits, Restraint audit, Hypnotic/psychotropic review,
  - look for any antipsychotics that are ordered PRN. Review chart to ensure order has a specific duration (i.e., 1 week, and have appropriate documentation in place).
- Identify if the facility is triggering any specific areas that might need improvement (i.e., falls, pain etc…)
Quality Measures (QA/QI)

QA monitoring (continued):

- Weight loss reports to identify causes and prevent further losses
- Occurrence Reports to facilitate identification of trends and causal factor
- Foley Catheter Use and UTI’s
- Advance directive reports:
- Reports to ensure all documentation requirements by Physicians have been completed
- CNA ADL coding to insure capturing of highest RUG
Symptoms of Project Failure

An IT project has failed when:

- The users are happy because they can make the new system work just like the old system (successful failure)
- Users are “working around” the system to get their job done, creating inefficiencies
- The users are utilizing less than 20% of the functionality of the system after 6 months (the Menu Test)
- No critical business processes were changed during the project
- Users can’t identify 3 ways the new system is better than what they had before
Critical ingredients for EMR success:

- **Project Management**
  - Utilize internal or external resources to keep the project on target and moving forward
- **Sufficient planning**
  - Understand the scope of the project and the effect on the organization’s operations
  - Evaluate and improve core business processes. Goals need to be clear and changes need to “make sense”.
- **Commitment** (EMR adoption is an ongoing process)
  - Budget resources for future maintenance and development
  - Training, training and more training
  - Designate a “Software Administrator”
- **Manage expectations**
  - Guide expectations of all stakeholders (staff, department heads, Owners, Board of Directors, etc.) with respect to what can be achieved, by whom and when
Managing EMR Expectations:

- **Timeframe**
  - No instant gratification – multiple stages over months or years

- **Productivity/Workflow**
  - Workflow WILL/MUST change
  - Users will experience inefficiencies at various stages of the project (expect overtime)
  - There will be trial and error
  - Won’t fix poor performing employees

- **Resources**
  - Clearly identify point person
  - ANNUAL BUDGET for project management, hardware, initial training, on-going training

- **Compliance**
  - Monitor and enforce consistent utilization by all users
  - Update Policies and Procedures, Staff education, etc.
  - Tie compliance to job performance
Certified EMR
According to CMS EMR certification means:

Certified EHR technology gives assurance to purchasers and other users that an EHR system or module offers the necessary technological capability, functionality, and security to help them meet the meaningful use criteria.

Meaningful Use basics:

- Medicare and Medicaid EHR Incentive Programs - provide financial incentives for the “meaningful use” of certified EHR technology to improve patient care.

- “Meaningful use” (MU) is based on meeting specified “core” and “menu” objective established by CMS for eligible professionals (EP’s) or eligible hospitals (EH’s) and CAHs, and reporting clinical quality measures

- MU has three stages
  - Stage 1: Data Capture & Sharing - Electronic capture of health information in a structured format
  - Stage 2: Advanced Clinical Processes - Quality improvement at the point of care and electronic exchange of information
  - Stage 3: Improved Outcomes - Improvements in quality, safety, and efficiency clinical decision support & patient self-management tools
Certified EMR

Staged Approach

2011-2012
Current CMS NPRM

Stage 1
- ePrescribing
- Lab results into EHRs
- Send clinical summary to providers and patient
- Public health reporting
- Quality reporting (2012)

2013-2016
Future CMS Rule

Stage 2
- Patient PHR access
- ePrescribing refills
- Electronic summary record
- Receive health alerts
- Immunization information

2015-2016
Future CMS Rule

Stage 3
- Access comprehensive patient data
- Automated real-time surveillance

http://hss.state.ak.us/hit/programs/meaningfuluse/default.htm
Certified EMR

- Certification criteria are established by the Office of the National Coordinator for Health IT (ONC)

- Use of ONC-Authorized Testing and Certification Body (ONC-ATCB) certified EHR technology is a required first step in qualifying for incentive funding under the American Recovery and Reinvestment Act (ARRA).

- List of Certified EHR’s: http://oncchpl.force.com/ehrcert
## 2014 Edition EHR Certification Criteria Required to Satisfy the Complete EHR Definition

<table>
<thead>
<tr>
<th>BASE EHR DEFINITION</th>
<th>Ambulatory</th>
<th>Inpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computerized provider order entry</td>
<td>§ 170.314(a)(1)</td>
<td></td>
</tr>
<tr>
<td>Demographics</td>
<td>§ 170.314(a)(3)</td>
<td></td>
</tr>
<tr>
<td>Problem list</td>
<td>§ 170.314(a)(5)</td>
<td></td>
</tr>
<tr>
<td>Medication list</td>
<td>§ 170.314(a)(6)</td>
<td></td>
</tr>
<tr>
<td>Medication allergy list</td>
<td>§ 170.314(a)(7)</td>
<td></td>
</tr>
<tr>
<td>Clinical decision support</td>
<td>§ 170.314(a)(8)</td>
<td></td>
</tr>
<tr>
<td>Transitions of care</td>
<td>§ 170.314(b)(1) &amp; (2)</td>
<td></td>
</tr>
<tr>
<td>Data portability</td>
<td>§ 170.314(b)(7)</td>
<td></td>
</tr>
<tr>
<td>Clinical quality measures</td>
<td>§ 170.314(c)(1) - (5)</td>
<td></td>
</tr>
<tr>
<td>Authentication, access control, &amp; authorization</td>
<td>§ 170.314(d)(1)</td>
<td></td>
</tr>
<tr>
<td>Auditable events &amp; tamper resistance</td>
<td>§ 170.314(d)(2)</td>
<td></td>
</tr>
<tr>
<td>Audit report(s)</td>
<td>§ 170.314(d)(3)</td>
<td></td>
</tr>
<tr>
<td>Amendments</td>
<td>§ 170.314(d)(4)</td>
<td></td>
</tr>
<tr>
<td>Automatic log-off</td>
<td>§ 170.314(d)(5)</td>
<td></td>
</tr>
<tr>
<td>Emergency access</td>
<td>§ 170.314(d)(6)</td>
<td></td>
</tr>
<tr>
<td>End-user device encryption</td>
<td>§ 170.314(d)(7)</td>
<td></td>
</tr>
<tr>
<td>Integrity</td>
<td>§ 170.314(d)(8)</td>
<td></td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Ambulatory</th>
<th>Inpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug-drug, drug-allergy interaction checks § 170.314(a)(2)</td>
<td></td>
</tr>
<tr>
<td>Vital signs, BMI, &amp; growth charts § 170.314(a)(4)</td>
<td></td>
</tr>
<tr>
<td>Electronic notes § 170.314(a)(9)</td>
<td></td>
</tr>
<tr>
<td>Drug-formulary checks § 170.314(a)(10)</td>
<td></td>
</tr>
<tr>
<td>Smoking status § 170.314(a)(11)</td>
<td></td>
</tr>
<tr>
<td>Image results § 170.314(a)(12)</td>
<td></td>
</tr>
<tr>
<td>Family health history § 170.314(a)(13)</td>
<td></td>
</tr>
<tr>
<td>Patient list creation § 170.314(a)(14)</td>
<td></td>
</tr>
<tr>
<td>Patient-specific education resources § 170.314(a)(15)</td>
<td>eMAR § 170.314(a)(16)</td>
</tr>
<tr>
<td></td>
<td>Advance directives § 170.314(a)(17)</td>
</tr>
<tr>
<td>Electronic prescribing § 170.314(b)(3)</td>
<td></td>
</tr>
<tr>
<td>Clinical information reconciliation § 170.314(b)(4)</td>
<td></td>
</tr>
<tr>
<td>Incorporate lab tests &amp; values/results § 170.314(b)(5)</td>
<td>Transmission of electronic lab tests &amp; values/results to ambulatory providers § 170.314(b)(6)</td>
</tr>
<tr>
<td>View, download, &amp; transmit to 3rd party § 170.314(e)(1)</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Ambulatory</th>
<th>Inpatient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical summary § 170.314(e)(2)</td>
<td>Immunization information § 170.314(f)(1)</td>
</tr>
<tr>
<td>Secure messaging § 170.314(e)(3)</td>
<td>Transmission to immunization registries § 170.314(f)(2)</td>
</tr>
<tr>
<td></td>
<td>Transmission to public health agencies – syndromic surveillance § 170.314(f)(3)</td>
</tr>
<tr>
<td></td>
<td>Transmission of reportable lab tests &amp; values/results § 170.314(f)(4)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety-enhanced design § 170.314(g)(3)</td>
<td>Quality management system § 170.314(g)(4)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer case information § 170.314(f)(5)</td>
<td>Accounting of disclosures § 170.314(d)(9)</td>
</tr>
<tr>
<td>Transmission to cancer registries § 170.314(f)(6)</td>
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</tr>
</tbody>
</table>

Optional

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ONC-Authorized Testing and Certification Bodies

The following organizations have been selected as ONC-Authorized Testing and Certification Bodies (ATCBs):

- **Surescripts LLC** &lt;Arlington, VA
  Date of authorization: December 23, 2010.

- **ICSA Labs** &lt;Mechanicsburg, PA
  Date of authorization: December 10, 2010.
  Scope of authorization: Complete EHR and EHR Modules.

- **SLI Global Solutions** &lt;Denver, CO
  Date of authorization: December 10, 2010.
  Scope of authorization: Complete EHR and EHR Modules.

- **InfoGard Laboratories, Inc.** &lt;San Luis Obispo, CA
  Date of authorization: September 24, 2010.
  Scope of authorization: Complete EHR and EHR Modules.

- **Certification Commission for Health Information Technology** &lt;CHIT - Chicago, IL
  Date of authorization: September 3, 2010.
  Scope of authorization: Complete EHR and EHR Modules.

- **Drummond Group, Inc.** &lt;DGI - Austin, TX
  Date of authorization: September 3, 2010.
  Scope of authorization: Complete EHR and EHR Modules.
Thank you.

Questions?
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