Rolling Out Centricity EMR To A Large Multi-Specialty Practice

Presented By
The Robert Wood Johnson Medical Group &
GE Healthcare

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Implementation Overview

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Medical Director of Clinical Information Systems
Robert Wood Johnson Medical Group
Robert Wood Johnson Medical Group (RWJMG)

- Faculty practice of the UMDNJ Robert Wood Johnson Medical School
- Located in Central New Jersey
- 500 physicians; 300 ambulatory providers
- 16 clinical departments
- 42 distinct specialty practices
- 8 clinical institutes
- 20 affiliated hospitals
- 243,300 annual ambulatory visits in 2010
History of RWJMG
GE Centricity Implementation

1995 – Clinicalogic installed at NJMS – Newark, Department of Medicine

2000 – Logician implementation extended to entire university (3 medical schools)
• Implementation at RWJMG incomplete (5 practices)

2007 – RWJMG contracted independently with GE for hosted Centricity EMR
• Rollout of EMR extended to entire RWJMG group (42 practices)
• Goal set to implement all practices by 12/31/2010

2009 – ARRA and meaningful use
Challenges

Previous paper medical record system fragmented with inconsistent management

Bad habits
- Poor documentation practices
- Lack of communication

Resistance to change among providers

Reluctance to trust electronic systems

Perceived slowness of using electronic systems

Concern about reducing patient loads during implementation

Concerns about patient confidentiality

Concerns about down time.
Success Factors

- Commitment and support of medical school and practice leadership to make EMR implementation official policy
- Endorsement by board of governors that includes all clinical chairs
- Dedicated staff to lead EMR implementation
- EMR implementation driven by and led by clinicians
Success Factors, cont’d

Regular, frequent team meetings
- Shared goals and expectations
- Maintain communication among team members
- Problem solving/troubleshooting

Providing as much electronic data as possible (interfaces)

Lots of hardware (computers and printers)

Providing remote access to the EMR
Meeting the Challenges

• Scheduled rollout with timelines
• Development of a medical records policy that supported use of the EMR
• Consolidation and centralization of medical records management across the group practice
• Implementing enthusiastic practices first
• Taking advantage of critical mass effect
• Flexibility in approach to documentation
• Training ancillary staff to do as many functions as possible.
Communication

- Regular reports to the board of governors
- Email notices to all faculty and all EMR users
- IT Advisory Committee with departmental representatives
- Face-to-face meetings with clinical practices
- Tips and Tricks
- EMR Wiki
What e-prescribing is

E-prescribing means transmitting prescription data electronically. For the RWJMG practice, this is done from within the GE Centricity EMR application. In order to use e-prescribing, it has to be enabled for each individual provider, and you have to select a pharmacy for the prescription that is enabled to receive electronic prescriptions. You can tell that a pharmacy can accept electronic prescriptions if there is an asterisk at the end of the pharmacy name. Once such a pharmacy is selected, the Prescribing Method will default to Electronic (but could be changed to another method).

The prescription is actually sent after it is saved and the user clicks on the “Send/Print Rx” button.
Main Page

RWJMG EMR Wiki

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2 Rollout Schedule
  2.1 Live Sites (36 sites 275 physicians)
  2.2 In Progress (0 sites, 0 physicians)
  2.3 Opening Kickoff (3 sites, 13 physicians)
  2.4 E-prescribing Rollout Schedule
3 Clinical Content
  3.1 Clinical Content Wish List
  3.2 Vital Signs Form
  3.3 Items to add to lab order form
    3.3.1 Family Medicine (Jeffrey Levine, Family Medicine)
  3.4 Centricity Document Types
  3.5 UMG Laboratory Dictionary
  3.6 Questionnaires and Intake Forms
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4 E-Prescribing
5 Personnel and Schedules
  5.1 UMDNJ Team
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  5.3 RWJMG IT Advisory Committee
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  6.2 Draft Policies (not yet approved)
7 Forms
8 Important Documents
9 Tips and Tricks

Centricity® Electronic Medical Record 9.2
Policies and Statements

Official Policies

RWJMG Legal Medical Record Policy
RWJMG Medical Records Signoff Policy
UMDNJ Prescription Blank Policy
UMDNJ Patient Confidentiality and Health Information
UMDNJ Protection and Authentication of Electronically Communicated Confidential or Sensitive Information

Draft Policies (not yet approved)

RWJMG Scanning and Indexing Policy
RWJMG Privacy and Security Policy
RWJMG Flags Policy

Forms

Subscription & Confidentiality form: Use this form to add new users to the EMR, make sure to fill out both forms and attach a copy of the UMDNJ ID badge. Fax the completed forms to Brenda Lawrence 732-235-8313.

Download Centricity EMR Subscription Request form

Change Request Form: Use this form to submit changes to the EMR, they will get evaluated by the GE-UMG EMR Core Team and put into production. Email the completed form to Linda Travers [1]

Download Change request form (PDF)

Report Request Form: Use this form to request a report from Centricity EMR. Email the completed form to Linda Travers [2]

Download Report Request Form
Linda Travers RN, MS, NE-BC
Project Manager of Clinical Outcome
GE Healthcare
The Core Project Team

Frank Sonnenberg, MD
Medical Director of Clinical Information Systems
Linda Travers, RN, MS
Project Manager

Stacy Gansfuss, RHIA
Medical Records Director
Daniel Cacace
EMR Specialist/Interface Specialist

GE Analysts
Theresa Savage, Dorothea Spencer,
Marian Conroy, RN, MS
Constantine Papasavvas

RWJMG EMR Specialists
Sonia Rosado-Mora
Amanda Kukwa
Implementing EMR is About Teamwork

An implementation is only as good as your team!
IT Advisory Committee composition

• Representatives of Clinical Departments
  – Physicians
  – Nurses and administrators

• Medical Group staff

• GE Core Team

• Medical School IT Department

• Compliance
Core Team Committee Composition

- **RWJ Participants**
  - Medical Director
  - Interface Manager
  - Medical Records Manager
  - Two EMR Specialists
  - Compliance and Nursing

- **GE Core Team**
  - Project Manager
  - Four EMR Analysts

- **Hosted Team**
  - Project Manager
  - System Engineering
  - Interfaces
# Project Plan

## 16 Week Base Plan

- **Pre-Kick off/Kick off**
- **Plan & Decisions**
- **Workflows**
- **Train & Go-Live**
- **Maintain/Circle Back/**
- **Meaningful Use**

<table>
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<th>ID</th>
<th>WBS</th>
<th>Task Name</th>
<th>Baseline Duration</th>
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<td>21</td>
<td>Practice 21</td>
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<td>84</td>
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<td>Kickoff, training, and goals</td>
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<td>85</td>
<td>21.2</td>
<td>Clinical decisions</td>
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<td>86</td>
<td>21.3</td>
<td>Workflow re-engineering</td>
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<td>21.4</td>
<td>Clinical content</td>
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<td>End-user training</td>
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<td>Go-live</td>
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<td>90</td>
<td>21.7</td>
<td>Support transition</td>
<td>5 days</td>
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## Value of Project Management & Staying on Task

<table>
<thead>
<tr>
<th>Project Planning</th>
<th>Project Integration</th>
<th>Scope Management</th>
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<tbody>
<tr>
<td>Outline the scope and</td>
<td>Assist in the integration of new technology in your facility</td>
<td>Ensure requirements are defined and incorporated into the project</td>
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<td>process of the project</td>
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<td>Time Management</td>
<td>Cost Management</td>
<td>Quality Management</td>
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<tr>
<td>Manage the execution of</td>
<td>Deliver the project on contract budget</td>
<td>Reduce and manage project risks to increase satisfaction</td>
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<td>Resource and Procurement</td>
<td>Communication Management</td>
<td>Risk Management</td>
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<td>Mgmt</td>
<td>Manage communication between resources and provide feedback to project stakeholders</td>
<td>Increase project success by managing conflicting priorities, scope, cost, and</td>
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<td>Coordinate the GE project</td>
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</table>
Identify Your Project Goals & Objectives

Stay Focused

Identify the Factors leading to installation of an EMR

What Benefits are expected from implementation?

Expectations of the system and project?

Project stakeholders’ needs and expectations?

Your project goals...

Client project goals and objectives define project "success."
Project Success is linked to......

People who are engaged

Processes that work

The Right Tools
Implementation Methodology

Dorothea Spencer
GESS Clinical EMR Specialist
GE Healthcare
Implementation cycle

Plan
Make decisions
Assess Workflows
Set up Centricity EMR
Train/Prepare Staff
Go-Live
Maintain/Improve
Shared Responsibility
- GE supplies some SW products and value added services
- Client supplies implementation manpower & HW
- 3rd Party Partners supply SW products for interfaces

3rd Party Partners Contributions
- 3rd Party Products
- 3rd Party Product Training
- Interfaces
- Consulting/Support

Client Contributions
- Goals & Objectives
- Technical Infrastructure
- Operations Knowledge
- Project Team & Implementation Manpower
- User Community

GE Contributions
- Software Product
- Product Training
- Technical Consulting
- Clinical Consulting
- Implementation Guidance
- GE Resource Coordination
- Overall Project Oversight
Key Decision Planning

• Key Decisions influence how the EMR system is set-up for use by each clinic
• The core customer project team makes decisions with the assistance of a clinical analyst
• Key decisions are documented by the clinic and become the EMR operating policy representing all functional areas of the clinic
• Key decisions will sometimes need to be re-visited for updated processes in the clinic
Clinical Content Selection

GE EMR comes with clinical content information organized in kits by specialty

• **Encounter Forms**
  - Used to document parts of or all of patient visits
  - You can create and customize these powerful data entry tools

• **Handouts and Letters**
  - The system allows the creation of personalized content to improve communication between you, your patients and your patient’s referring provider

• **Custom Lists**
  - Medications, problems, and orders
## Workflow: Refilling a Prescription Without Physician Authorization Required

<table>
<thead>
<tr>
<th>Step</th>
<th>Task</th>
<th>EMR Steps</th>
<th>Front Desk</th>
<th>Clinical Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Take call (or pick up message or fax) and find the patient's chart</td>
<td>Find patient chart</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>
| 2    | Start prescription update, complete refill information, verify pharmacy, set who authorized refill, end update, and route to clinical staff | 1. Click Refills.  
2. Check the Refill box for each refill.  
3. Confirm or select patient pharmacy.  
4. Click Close.  
5. Click End Update.  
6. Enter a summary and for Provider, select someone from the clinical staff.  
7. Verify routing to clinical staff.  
8. Click Hold Document. |            | ✔              |
| 3    | Review refill request, record any actions, end update, and sign      | 1. Open the document.  
2. Review requested refills.  
3. Verify the refill’s authorized provider, prescribing method, and state.  
4. Call patient if refill is denied or more information is needed.  
5. Click Sign Rx and click Close.  
6. Call refill into pharmacy.  
7. Record your action in the chart note.  
8. Click End Update.  
Customization and Content

- Keep Customization to a minimum (this usually changes after go live)
- Utilizing Encounter Form Editor additional forms created to meet the documentation needs
- Birth History forms were specialized for Pediatric Practices
- Peds Endocrinology- Needed system that calculated standard deviation score (SDS) for weight, length/height
Preload Planning

Process of getting information into EMR

How much information entered depends on many factors including staff, budget, time, and the state of current paper charts.

Commonly Preloaded Items

- Current Problems (Diagnosis Codes)
- Current Medications
- Current Allergies
- Advanced Directives
- Family History
- Immunizations (Pediatrics)
- Recent Tests & Services
- Recent Vital Signs
- Height and Weight for Pediatrics
Post Implementation

- Identify super users in each practice
- Train the trainer classes - Promote the development of super users
- Dedicated EMR Specialists/Onsite Team
- On-going training needs of New staff
- Circle Back Process- Assess minimal /Meaningful use
Interfaces &
Pulling it all together

Daniel Cacace
EMR Specialist/Interface Manager
Robert Wood Johnson Medical Group
Medical Records

The importance of consolidation and standard operating procedures
Document Management Lessons

- Consolidate scanning & indexing staff when possible!
- Standardize document type classification scheme, provide examples and training to staff tailored to the standards.
- Plan on pre go-live scanning to reduce provider dependence on the paper chart.
- Use Crystal Reports to audit the indexing process, determine standard metrics and publish results to push users to increase performance.
Integration of Add-Ons

Expand your Centricity EMR environment with add-on software
Our Centricity EMR Add-Ons

Kryptiq ConnectIQ Document Management
Centricity Advanced ePrescribing
Centricity Clinical Content (CCC)
Crystal Reports XI
Dragon Medical 10.1 & Clinically Speaking

Coming soon
- Kryptiq/Indxlogic Advanced Auto Indexing
- Centricity Patient Online
- Kryptiq Secure Messaging
- BISCOM CV Plus for e-fax
- Ignis Systems EMR-Link
Interfaces

Improving patient care through data exchange
Identify and Prioritize Potential Interaces

• Identify the lab/radiology/hospitals with the largest volume for your practice.

• Prioritize interfaces that benefit the entire group above those that only benefit one clinic.

• Identify and engage key personnel involved with each interface.

• Create a project plan for each interface project and distribute to all parties involved.
Learn to Love HL7

- The “Managing Interfaces with Centricity EMR” documentation should become your new best friend.
- Third party software like 7scan or 7edit will make your life much easier.
- Don’t be afraid to experiment!
An Interface Engine is Crucial

- An interface engine will allow you to accept HL7 messages that do not conform to EMR standards and translate them to something the EMR can import.

- We use GE ConnectR but newer EMR versions come packaged with Centricity Clinical Gateway with Cloverleaf, there are also various third party options available. Plan to implement one ASAP.
Zen and the Art of LinkLogic Maintenance

• As the number of interfaces and messages grew, so did the number of messages that hit the LinkLogic error queue.

• Plan to have a detail-oriented person clear the queue several times a day.

• Often the error queue is the first place you will see evidence of problems with an interface.
Initial Interface Configuration

- LabCorp ORU HL7
- Quest ORU HL7
- RWJUH Radiology MDM HL7
- IDX ADT HL7
- MSADTS
- EMR DB

Inbound Interface Internal Connection
Current Interface Configuration

Inbound Interface
Outbound Interface
Internal Connection

ConnectR Interface Engine

Lab/Pathology
- Quest ORU HL7
- LabCorp ORU HL7
- RWJUH Lab ORU HL7
- RWJUH Pathology MDM HL7

Radiology
- RWJUH Radiology MDM HL7
- ViewPoint US MDM HL7
- University Radiology MDM HL7

Transcription
- Entrada MDM HL7
- Medical Transcribing MDM HL7
- Alltype Dictation MDM HL7

Misc
- RWJUH Documents MDM HL7
- Connect IQ MDM HL7
- eScriptsMessenger ORU HL7

Registration/Scheduling
- RWJUH Registration Centricity Business ADT HL7
- Centricity Business ADT HL7
- Centricity Business SIU HL7

EMR DB
MSADTS1
RWJDTS2
University Radiology Orders Outbound ORM HL7
THANK YOU!