Achieving Meaningful Use with Centricity® EMR

Are you “Ready to Report”?

GE Healthcare EMR Consulting
CHUG Fall Conference
October 2010
Achieving Meaningful Use with Centricity® EMR

The EMR Consulting Team offers a “Meaningful Use Assessment” to assist our customers in their plan to meet meaningful use criteria. This assessment will help you to determine if you are “Ready to Report”.
The assessment will provide the customer with an understanding of where they are today in relation to meaningful use and what additional steps need to be taken to fully meet the current criteria, for example:

- Enhance workflows to incorporate use of **clinical decision support rules and eRx**.
- Implement new applications, such as **Patient Portal**.
- Add new interoperability and interface functions, such as **Health information exchange (HIE) and Continuity of Care Document (CCD)**.
Achieving Meaningful Use with Centricity® EMR

Key deliverables/milestones include:

- Evaluation of the current state of the customer’s EMR implementation in relation to meaningful use.
- Delivery of a “scorecard” that the customer will use as a starting point for planning required changes and updates.
- Assistance in creation of an action plan that:
  - Allows the site to make full use of the EMR capabilities.
  - Ensures that providers have timely access to the quality & cost information they need to improve care.
  - Incorporates appropriate point-of-care data collection required to meet meaningful use criteria.
  - Leverages the full range of reporting options to collect and transmit data as needed.
### Achieving Meaningful Use with Centricity® EMR

Sample items from the “Scorecard”, outlining where the practice is in relation to the meaningful use criteria. Items will have an “action plan” for next steps.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Measure</th>
<th>Current state</th>
<th>Ready to Report?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CORE:</strong> Maintain active medication allergy list.</td>
<td>More than 80 percent of all unique patients seen by the EP have at least one entry (or an indication of “none” if the patient has no medication allergies) recorded as structured data.</td>
<td>90% of patients with Allergy information as structured data</td>
<td>Green</td>
</tr>
<tr>
<td><strong>CORE:</strong> Record smoking status for patients 13 years old or older.</td>
<td>More than 50% percent of all unique patients 13 years old or older seen by the Eligible Provider.</td>
<td>Adults = 80% Adolescents = 10%</td>
<td>Yellow</td>
</tr>
<tr>
<td><strong>MENU:</strong> Provide patients with timely electronic access to their health information (including lab results, problem list, medication lists, allergies) within 4 business days of the information being available to the EP.</td>
<td>At least 10 percent of all unique patients seen by the EP are provided timely electronic access to their health information.</td>
<td>Not currently implemented</td>
<td>Red</td>
</tr>
</tbody>
</table>
Examples:
Objectives and Measures for Meaningful Use with Centricity EMR

Core Set
(1)(i) **Objective.** Use computerized provider order entry (CPOE).

(ii) **Measure.** CPOE is used for more than 30 percent of all medication orders for unique patients with at least one medication in their medication list seen by the EP.
**Objective.** Implement drug-drug, drug-allergy.

**Measure.** The EP, eligible hospital or CAH has enabled this functionality.
(3) (i) **Objective.** Generate and transmit permissible prescriptions electronically (eRx).
(ii) **Measure.** More than 40 percent of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology.
(i) **Objective.** Record the following Demographics:
(A) Preferred language. (B) Gender. (C) Race. (D) Ethnicity. (E) Date of birth.

(ii) **Measure.** More than 50 percent of all unique patients seen by the EP or admitted to the eligible hospital or CAH have the demographics specified in paragraphs (c)(5)(i)(A) through (G) of this section recorded as structured data.
(5) (i) **Objective.** Maintain an up-to-date problem list of current and active diagnoses based on ICD-9-CM or SNOMED CT ®.

(6) (i) **Objective.** Maintain active medication list.
(ii) **Measure.** More than 80 percent of all unique patients seen by the EP or admitted by the eligible hospital or CAH have at least one entry (or an indication of “none” if the patient is not currently prescribed any medication) recorded as structured data.

(7) (i) **Objective.** Maintain active medication allergy list.
(ii) **Measure.** More than 80 percent of all unique patients seen by the EP or admitted to the eligible hospital or CAH have at least one entry (or an indication of “none” if the patient has no medication allergies) recorded as structured data.
(8)(i) **Objective.** (A) Record and chart changes in the following vital signs:
1. Height.
2. Weight.
(B) Calculate and display the body mass index (BMI) for patients 2 years and older.
(C) Plot and display growth charts for children 2 to 20 years including body mass index.

(ii) **Measure.** More than 50 percent of all unique patients age 2 years or older seen by the EP or admitted to the eligible hospital, record Height, weight, and blood pressure as structured data.
(9) (i) **Objective.** Record smoking status for patients 13 years old or older.

(ii) **Measure.** More than 50 percent of all unique patients 13 years old or older seen by the EP or admitted to the eligible hospital or CAH have “smoking status” recorded as structured data.
(10) (i) **Objective.** Implement One clinical decision support rules relevant to specialty or high clinical priority, including for diagnostic test ordering, along with the ability to track compliance with that rule.

(i) **Measure.** Implement one clinical decision support rule.

*Optional form*
(11)(i) **Objective.** Report ambulatory quality measures to CMS or, in the case of Medicaid EPs, the States.

(ii) **Measure.** Successfully report to CMS (or, in the case of Medicaid EPs, the States) clinical quality measures in the form and manner specified by CMS.

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**Percentage of Encounters with Medical Reconciliation**

Encounters from 01-Jan-2010 to 31-Dec-2010

This report calculates the percentage of Encounters with Medicaid Reconciliation for each provider.

**Numerator**

Encounters in the denominator where “Done” is entered in at least one of the following observations:

- **MEDS REVIEW** compliance with medical treatment
- **MEDRECON** populated with “Done” when “Medication list reviewed during this update” is checked in Update

**Meds**

- **MEDS REVIEW** list of meds reviewed with patient
- **MEDRECON** Medication Reconciliation
- **MEDLISTPRID** Joint Commission (JCAHO) medical reconciliation printed and given to patient
- **MEDSAFTEREC** List of Medications after reconciliation
- **REW MED NOCHG** Med list, reviewed no changes
- **FALLMEDREV** Fails risk assessment: medication review and modification

**Denominator**

All encounters - Office Visit and Office Procedure documents - with clinical date between and

<table>
<thead>
<tr>
<th>Provider</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harry Winston MD</td>
<td>1/26</td>
<td>4%</td>
</tr>
<tr>
<td>Kelly Starr MD</td>
<td>0/3</td>
<td>0%</td>
</tr>
<tr>
<td>Tess Highlander RN</td>
<td>0/1</td>
<td>0%</td>
</tr>
<tr>
<td>Lynn Choong MD</td>
<td>0/1</td>
<td>0%</td>
</tr>
<tr>
<td>Tristan Lee</td>
<td>1/50</td>
<td>2%</td>
</tr>
<tr>
<td>Sam Mitchell MD</td>
<td>0/1</td>
<td>0%</td>
</tr>
<tr>
<td>Henry Topper</td>
<td>0/9</td>
<td>0%</td>
</tr>
<tr>
<td>Jerry Quinn MD</td>
<td>0/2</td>
<td>0%</td>
</tr>
</tbody>
</table>
Meaningful Use Dashboard via MQIC Portal
### Meaningful Use

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>VALUE</th>
<th>N</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>001: Diabetes Mellitus; Hemoglobin A1c Poor Control in Diabetes Mellitus</td>
<td>29.8%</td>
<td>180</td>
<td>540</td>
<td>9</td>
</tr>
<tr>
<td>002: Diabetes Mellitus; Low Density Lipoprotein (LDL-C) Control in Diabetes Mellitus</td>
<td>49.1%</td>
<td>205</td>
<td>540</td>
<td>73</td>
</tr>
<tr>
<td>003: Diabetes Mellitus; High Blood Pressure Control in Diabetes Mellitus</td>
<td>53.7%</td>
<td>340</td>
<td>610</td>
<td>3</td>
</tr>
<tr>
<td>006: Coronary Artery Disease (CAD); Oral Antplatelet Therapy Prescribed for Patients with CAD</td>
<td>86.2%</td>
<td>60</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>007: Coronary Artery Disease (CAD); Beta-Blocker Therapy for CAD Patients with Prior Myocardial Infar 0.0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>110: Preventive Care and Screening; Influenza Immunization for Patients ≥ 50 Years Old</td>
<td>13.0%</td>
<td>36</td>
<td>292</td>
<td>1</td>
</tr>
<tr>
<td>111: Preventive Care and Screening; Pneumonia Vaccination for Patients 65 Years and Older</td>
<td>41.0%</td>
<td>7</td>
<td>17</td>
<td>10</td>
</tr>
<tr>
<td>112: Preventive Care and Screening; Screening Mammography</td>
<td>0.0%</td>
<td>0</td>
<td>231</td>
<td>0</td>
</tr>
<tr>
<td>121: Chronic Kidney Disease (CKD); Laboratory Testing (Calcium, Phosphorus, Intact Parathyroid Hormone) 0.0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>183: Hepatitis C: Hepatitis A Vaccination in Patients with HCV</td>
<td>0.0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>184: Hepatitis C: Hepatitis B Vaccination in Patients with HCV</td>
<td>0.0%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Data as of 13-Feb-2010 Patient Count = 0

Please select measures and click on Show Patient List.

Not for Patient Use - Product Under Development
Data Submission

2011 via CMS Portal

2012 via Automated PQRI Format XML
(12) (i) **Objective.** Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, and allergies) upon request.

(ii) **Measure.** More than 50 percent of all patients of the EP who request for an electronic copy of their health information are provided it within 3 business days.
Provide CCD via secure media

<table>
<thead>
<tr>
<th>Problem Name</th>
<th>Problem Code</th>
<th>Onset Date</th>
<th>Status</th>
<th>Entry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONGESTIVE HEART FAILURE</td>
<td>ICD-428.0</td>
<td>2002/04/03</td>
<td>Active</td>
<td>2003/09/27</td>
</tr>
<tr>
<td>Symptoms of HOARSE VOICE QUALITY</td>
<td>2002/04/03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFFUSION, PLEURAL</td>
<td>ICD-511.9</td>
<td>2003/03/25</td>
<td>Active</td>
<td>2003/09/27</td>
</tr>
<tr>
<td>EDEMA</td>
<td>ICD-782.3</td>
<td>2003/03/25</td>
<td>Active</td>
<td>2003/09/27</td>
</tr>
</tbody>
</table>

Allergies, Adverse Reactions, Alerts

No known active allergies or adverse reactions

Medication List

<table>
<thead>
<tr>
<th>Medication</th>
<th>Instructions</th>
<th>Start Date</th>
<th>Stop Date</th>
<th>Product Name</th>
<th>NDC</th>
<th>Generic Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZAROXOLYN TAB 5MG</td>
<td>1 po qd</td>
<td>2002/04/03</td>
<td></td>
<td>ZAROXOLYN</td>
<td>00585085071</td>
<td>METOLAZONE</td>
</tr>
<tr>
<td>Furosemide TABS 20 MG</td>
<td>1 po bid</td>
<td>2002/04/03</td>
<td></td>
<td>Furosemide</td>
<td>00005370823</td>
<td>Furosemide</td>
</tr>
</tbody>
</table>
(13) (i) **Objective.** Provide clinical summaries to patients for each office visit.

(ii) **Measure.** Clinical summaries provided to patients for at least 80 percent of all office visits.
(14)(i) **Objective.** Capability to exchange key clinical information among providers of care and patient authorized entities electronically.

(ii) **Measure.** Perform at least one test of certified EHR technology's capacity to electronically exchange key clinical information.

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*Centricity Practice – Clinical Messenger features shown*
(15)(i) **Objective.** Protect electronic health information created or maintained by certified EHR technology through the implementation of appropriate technical capabilities.

(ii) **Measure.** Conduct or review a security risk analysis in accordance with the requirements under 45 CFR 164.308(a)(1) and implement security updates as necessary.

Sec. 164.308 Administrative safeguards.

(a) A covered entity must, in accordance with Sec. 164.306:

(1)(i) Standard: Security management process. Implement policies and procedures to prevent, detect, contain, and correct security violations.

(ii) Implementation specifications:

(A) Risk analysis (Required). Conduct an accurate and thorough assessment of the potential risks and vulnerabilities to the confidentiality, integrity, and availability of electronic protected health information held by the covered entity.

(B) Risk management (Required). Implement security measures sufficient to reduce risks and vulnerabilities to a reasonable and appropriate level to comply with Sec. 164.306(a).

(C) Sanction policy (Required). Apply appropriate sanctions against workforce members who fail to comply with the security policies and procedures of the covered entity.

(D) Information system activity review (Required). Implement procedures to regularly review records of information system activity, such as audit logs, access reports, and security incident tracking reports.
Examples:
Objectives and Measures for Meaningful Use with Centricity EMR

Menu Set
Select 5 of 10 Objectives including 1 public health criteria
(1)(i) **Objective.** Implement drug formulary checks.
(ii) **Measure.** The EP, eligible hospital or CAH has enabled this functionality.
(2)(i) **Objective.** Incorporate clinical lab-test results into EHR as structured data.

(ii) **Measure.** At least 50 percent of all clinical lab tests results ordered by the EP or authorized provider of the hospital during the EHR reporting period whose results are either in a positive/negative or numerical format are incorporated in certified EHR technology as structured data.
(3) (i) **Objective.** Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research and outreach.

(ii) **Measure.** Generate at least one report listing patients of the EP, eligible hospital or CAH with a specific condition.
(4) (i) **Objective.** Send reminders to patients per patient preference for preventive/follow-up care.

(ii) **Measure.** Reminder sent to more than 20 percent of all unique patients 65 years of age and older or 5 years old or younger were sent an appropriate reminder during the reporting period.

*Centricity Practice Solution features shown*
(5)(i) **Objective.** Provide patients with timely electronic access to their health information (including diagnostic test results, problem list, medication lists, and allergies) within 4 business days of the information being available to the EP.

(ii) **Measure.** More than 10 percent of all unique patients seen by the EP are provided timely electronic access to their health information subject to the EP’s discretion to withhold certain information.
(6)(i) **Objective:** Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient if appropriate

(ii) **Measure:** More than 10% of all unique patients seen by the EP are provided patient-specific education resources

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**Chickenpox**

Chickenpox is a common but serious infection caused by a virus. This infection can be spread very easily from person to person. It is most common in children (under 15 years old). If your child has not already had the chickenpox, they can get a chickenpox shot after 12 months of age. Children less than 13 years old need one dose of the vaccine while teenagers and adults need two doses given 4 to 6 weeks apart.

**HOME CARE**

Children with chickenpox may have these problems:

- Fever.
- An itchy red rash that starts on the front or back of the body. It can start out looking like bug bites. This rash then spreads all over the body. It usually starts as red bumps and then changes to a red fluid filled blister. These blisters dry up and form scabs.
- The child may feel sick to their stomach and be throwing up.
- The child may have stomach pain or not be hungry.
- Do not let your children be around others who may have chickenpox. Children with chickenpox will be sick for about 7 to 10 days.
- Do not send your child to school or daycare until all of the sores have dried or crusted.

What to do for chickenpox:

- Take the child's temperature at least every four hours in the way your doctor has told you.
(7)(i) **Objective.** Perform medication reconciliation at relevant encounters and each transition of care.

(ii) **Measure.** Perform medication reconciliation for more than 50 percent of relevant encounters and transitions of care.

---

**Medication Hx from prescribing network** received 07/07/2010 at 09:36

<table>
<thead>
<tr>
<th>Description</th>
<th>Instructions</th>
<th>Quantity</th>
<th>Refills</th>
<th>Written</th>
<th>Filled</th>
<th>Prescribing Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIPITOR 20 MG TAB</td>
<td>TAKE 1 TAB...</td>
<td>60</td>
<td>0</td>
<td>07/07/2010</td>
<td>BUTLER, E</td>
<td>CCI</td>
</tr>
<tr>
<td>ZANTAC 150 MG TAB</td>
<td>TAKE 1 TAB...</td>
<td>12</td>
<td>0</td>
<td>07/05/2010</td>
<td>BUTLER, E</td>
<td>CCI</td>
</tr>
<tr>
<td>ACTOS 30 MG TAB</td>
<td>TAKE 1 TAB...</td>
<td>30</td>
<td>0</td>
<td>07/06/2010</td>
<td>DOE, JOHN</td>
<td>CCI</td>
</tr>
<tr>
<td>SYNTHROID 112 MCG</td>
<td>TAKE 1 TAB...</td>
<td>30</td>
<td>0</td>
<td>07/04/2010</td>
<td>DOE, JOHN</td>
<td>CCI</td>
</tr>
<tr>
<td>LISINOPRIL 5 MG TAB</td>
<td>TAKE 1 TAB...</td>
<td>30</td>
<td>0</td>
<td>07/03/2010</td>
<td>DOE, JOHN</td>
<td>CCI</td>
</tr>
<tr>
<td>warfarin sodium 5 mg</td>
<td>TAKE 1 TAB...</td>
<td>30</td>
<td>0</td>
<td>07/02/2010</td>
<td>DOE, JOHN</td>
<td>CCI</td>
</tr>
</tbody>
</table>

---

**Current Meds in Chart**

<table>
<thead>
<tr>
<th>Description</th>
<th>Instructions</th>
<th>Start Date</th>
<th>Last Refill</th>
<th>BMN</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIPITOR 20 MG TAB</td>
<td>1 Tablet by mouth each evening</td>
<td>04/14/2003</td>
<td>#30 x 3, 06/29/2010, Samuel A. Jones...</td>
<td>No</td>
</tr>
<tr>
<td>ZANTAC 150 MG CAPS</td>
<td>1 Tablet by mouth each morning</td>
<td>04/14/2003</td>
<td>#30 x 3, 06/29/2010, Samuel A. Jones...</td>
<td>No</td>
</tr>
<tr>
<td>ACTOS 30 MG TAB</td>
<td>1 Tablet by mouth daily</td>
<td>04/14/2003</td>
<td>#30 x 3, 06/29/2010, Samuel A. Jones...</td>
<td>No</td>
</tr>
<tr>
<td>SYNTHROID 112 MCG TAB</td>
<td>1 Tablet by mouth on an empty stomach</td>
<td>04/14/2003</td>
<td>#30 x 3, 06/29/2010, Samuel A. Jones...</td>
<td>No</td>
</tr>
<tr>
<td>LISINOPRIL 5 MG TAB</td>
<td>1 Tablet by mouth daily</td>
<td>04/14/2003</td>
<td>#30 x 2, 07/02/2010, Internist E. Dul...</td>
<td>No</td>
</tr>
<tr>
<td>GLUCOSAMINE CHONDROITIN 500-400 MG CAPS</td>
<td>1 Capsule by mouth two times a day</td>
<td>04/14/2003</td>
<td>#30 x 3, 07/09/2010, Internist E. Dul...</td>
<td>No</td>
</tr>
<tr>
<td>FLAVIX 75 MG TAB</td>
<td>1 each day</td>
<td>07/09/2010</td>
<td>#30 x 3, 07/09/2010, Internist E. Dul...</td>
<td>No</td>
</tr>
</tbody>
</table>
Medication Reconciliation Option
(8) (i) **Objective.** Provide summary care record for each transition of care and referral.

(ii) **Measure.** Provide summary of care record for more than 50 percent of transitions of care and referrals.

*Centricity Practice – Clinical Messenger features shown*
(9) (i) **Objective**: Capability to submit electronic data to immunization registries and actual submission where required and accepted.

(ii) **Measure**: Performed at least one test of certified EHR technology's capability to submit electronic data to immunization registries.
(10)(i) **Objective.** Capability to provide electronic syndromic surveillance data to public health agencies and actual transmission according to applicable law and practice.

(ii) **Measure.** Performed at least one test of certified EHR technology's capacity to provide electronic syndromic surveillance data to public health agencies (unless none of the public health agencies to which the EP, eligible hospital or CAH submits such information have the capacity to receive the information electronically).
Achieving Meaningful Use with Centricity® EMR

Sample of enhanced reporting capabilities that will be available to providers at the point of care.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Value</th>
<th>Threshold</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c</td>
<td>7.6</td>
<td>7</td>
<td>04/10/2008</td>
</tr>
<tr>
<td>BP diastolic</td>
<td>78.0</td>
<td>80</td>
<td>06/15/2008</td>
</tr>
<tr>
<td>BP systolic</td>
<td>127.0</td>
<td>130</td>
<td>06/15/2008</td>
</tr>
<tr>
<td>LDL</td>
<td>139.0</td>
<td>100</td>
<td>04/10/2008</td>
</tr>
<tr>
<td>Eye Exam</td>
<td>pass</td>
<td></td>
<td>06/15/2008</td>
</tr>
<tr>
<td>Foot Exam</td>
<td>not pass</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Achiving Meaningful Use with Centricity® EMR

The following outlines the phases and milestones for full customer engagement with all services teams for a “Meaningful Use Implementation”.

- **Initiate**
- **Plan**
- **Prepare**
- **Design**
- **Go-Live**
- **Execute**
- **Growth**
Achieving Meaningful Use with Centricity® EMR

**INITIATE**

- Determine / confirm overall goals for the project.
- Outline a phased approach for integrating new data collection as part of EMR documentation
- Ensure physician involvement.
- Evaluate current state of clinical data collection and quality reporting.
- Deliver and review “Meaningful Use Scorecard” and create action plan.
Achieving Meaningful Use with Centricity® EMR

Plan

- Plan for a phased approach.
  - Stage 1: 2011 – 2012
  - Criteria for Stages 2 & 3 will be further refined by 2013.
- Start early to achieve maximum clinical and financial benefits.
- Leverage existing systems, workflows and reports.
Achieving Meaningful Use with Centricity® EMR

Design

• Determine new hardware required.
• Design integration implementations and create test plans.
• Determine adjustments required in EMR setup.
• Build and/or edit content to capture additional data as needed.
• Document new workflows as needed.
Achieving Meaningful Use with Centricity® EMR

**Prepare**

- Install new hardware as needed.
- Upgrade to latest version of EMR as needed.
- Install / test third-party applications, such as patient portal, as needed.
- Install and test new interpretability functions, such as HIE and CCD, as needed.
- Finalize and test new content.
- Prepare Super Users for new features and functionality
EXECUTE

- Ensure that current workflows are being followed and that current forms are completed appropriately.
- Confirm Go Live Readiness on all new features and applications for phase one.
- Train staff on new or updated workflows and new functionality.
Go-Live

• Go Live with additional components or applications, such as eRX and patient portal, as needed.
• Go live with new interfaces and interoperability options, such as HIE or CCD, as needed.
• End users Go-live with enhanced workflows and reporting.
• Create schedule for regular monitoring.

Achieving Meaningful Use with Centricity® EMR
GROWTH

• Perform regular monitoring of meaningful use criteria.
• Review Stage 2 and 3 criteria as they are refined and published.
• Continue to incorporate advanced clinical processes as needed to improve patient care outcomes through 2015.
Achieving Meaningful Use with Centricity® EMR

Meaningful Use Implementation

Initiate

Plan

Design

Prepare

Execute

Go-live

Growth
Thank you!