Clinical & Operational Readiness for Enterprise EMR Implementation: Strategies for Success

SINI 2013

Greg Finnegan, Maria Koszalka, RN, EdD, Stephanie Poe, RN, DNP, Carrie Stein, RN, MSN, MBA
July 19, 2013
Countdown to Go Live

<table>
<thead>
<tr>
<th>Month</th>
<th>Location</th>
<th>Days</th>
<th>Hours</th>
<th>Minutes</th>
<th>Seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2013</td>
<td>Ambulatory JHCP Go Live</td>
<td>29</td>
<td>15</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>May 2013</td>
<td>JHBMCAmbulatory Go Live</td>
<td>71</td>
<td>15</td>
<td>20</td>
<td>7</td>
</tr>
<tr>
<td>June 2013</td>
<td>Howard County Sibley Go Live</td>
<td>87</td>
<td>15</td>
<td>20</td>
<td>7</td>
</tr>
</tbody>
</table>

© 2013 Johns Hopkins Medicine
JHM Readiness Model

Evidence-Based Practice, Safety, Operational Efficiency, Healthcare Quality

Support & Optimization
- Go Live
- Train
- Test
- Build

Epic Flight Plan
- Validate
- Discovery
- Planning

Project Team
- Champions, SMEs

Leadership
- Patient Care- Education-Research

Care Coordination
- Harmony
- Collaboration

JH Community Physicians
- JH Bayview
- Suburban Hospital
- JH Outpatient Center
- Howard County General Hospital
- Sibley Memorial

Endings
- The New Beginning
- The Neutral Zone
- Transition Process*
- End Users
- Champions, SMEs

*Bridges Transition Framework, 2009
Dimensions of Readiness

**People**
- Leadership
- Culture/Values
- Training
- Accountability
- Transition

**Processes/Workflow**
- Policies
- Procedures
- Harmonization
- Optimization
- Staffing/Backfill

**Technology**
- Devices, Hardware
- Epic EMR Build
- Interfaces
- Reports
- Security, Network
- Data Conversion

**Communication**
- Reliable information
- Governance Structure
- Go-Live Support
- Enterprise-consistent & Entity/Specialty-specific
CORRWG: Clinical, Operational & Revenue Cycle Readiness

System-wide Accountability
EL-CORRWG Coordinator/Co-Chairs monitor system-wide status, evaluate & support problem solving of risk areas, Action Plans, escalate via Project Governance Structure

Entity-level Accountability
Entity leads/CORRWG Co-chairs monitor and document dept. status; provide status reporting, risk areas, Action Plans to Entity COO & EL-CORRWG Co-chairs

Local Accountability: Specialty or clinic/department accountability
Local Dyads/Triads, dept. managers/directors/admins, complete tasks, lead at local dept. level

Accountability Structure
Project Management

- Timeline
- Resources
- Quality
Transition Management

Assess

Communicate

Act
Climate Surveys: Ambulatory

2 Surveys: Fall 2012, Spring 2013

Survey #2

- 6,441 employees began survey
  - 23% more than Survey #1

- 5,354 (83%) completed survey
  - 22% more than Survey #1, i.e., responded, “Yes”, they were impacted by Epic.

- 1,093 (17%) reported not impacted by Epic

NOTE: Many responders were taking 2nd survey during Training timeframe. Managers concerned that ratings would be low.
Manager Follow-up after Survey #1

- Engage in 3 specific action items that would directly impact four survey items
- Scores for all four items increased!
- Recommended interventions
  - Messaging: Case for Change
  - Summarize key points
  - Transition Monitoring Teams
  - Agenda item for staff meetings
  - How will work change for ME?
Survey #1
I worry most about…
Survey #2
I worry most about...
Survey #1

I am most excited about…

系统
新
信息
学习
记录
访问
整合
care
Survey #2: “I am most excited about...”
I have a clear vision of this change

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Disagree 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Strongly Agree 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I have a clear vision of this change.</strong></td>
<td>Count</td>
<td>537</td>
<td>837</td>
<td>1683</td>
<td>1190</td>
<td>770</td>
</tr>
<tr>
<td>% by Row</td>
<td>11%</td>
<td>17%</td>
<td>33%</td>
<td>24%</td>
<td>15%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

- Responses always start low!
- 2nd Survey: +7%
  - 39% rated as 4’s & 5’s
- **Vision** developed & conveyed by leaders.
- Use consistent messaging: **Case for Change**
I have clearly identified what IS and is NOT changing for me

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Strongly Disagree 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Strongly Agree 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have clearly identified what IS and IS NOT changing for me.</td>
<td>Count: 833</td>
<td>1098</td>
<td>1674</td>
<td>1017</td>
<td>571</td>
<td>5193</td>
</tr>
<tr>
<td></td>
<td>% by Row: 16%</td>
<td>21%</td>
<td>32%</td>
<td>20%</td>
<td>11%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

- 2nd Survey: +9%
  - 31% rated as 4’s & 5’s
- Staff meeting agenda item: At least 1/month.
- What does NOT change?
  - Patient care… Caring for each other
I feel well-informed about Epic project

<table>
<thead>
<tr>
<th>Survey Results</th>
<th>Strongly Disagree 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Strongly Agree 5</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel well-informed about the Epic project.</td>
<td>Count</td>
<td>812</td>
<td>1189</td>
<td>1639</td>
<td>1036</td>
<td>542</td>
</tr>
<tr>
<td>% by Row</td>
<td>16%</td>
<td>23%</td>
<td>31%</td>
<td>20%</td>
<td>10%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

- 2nd Survey: +10%
- 30% rated as 4’s & 5’s
- Managers need to summarize written stories
- Our publications have lots information but… They don’t read it… don’t assume they do
READINESS TOOLKIT
• Milestone Checklists
  – Co-chair Risk Grid
  – Manager/Department Leads: @ 120-, 90-, 60-, 30-, 10-days
  – Accountability Profiles: By application
  – High Risk Workflows
  – Reports to monitor: Who? When?

• Entity/Wave-specific Dashboards
  – Red, Yellow, Green
# Sample Checklist: 120-day

<table>
<thead>
<tr>
<th>Task</th>
<th>120-day Milestone Checkpoints</th>
<th>Days before Go-Date</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attend monthly Dyad/Triad readiness meeting.</td>
<td>Acquire, Review, and complete In scopeثقايل</td>
<td>Communication/Risk Mgmt</td>
<td>120 day</td>
<td>12/4/12</td>
</tr>
<tr>
<td>2. Review &quot;In scope&quot; documentation for your entity, know what area of your unit/dept. will be live with Epic for each Wave (and any areas that are not, i.e., procedure areas) and which information systems in your area will be continued and which will no longer be in use as of Go Live. Communicate to your unit/dept. members.</td>
<td>Communication/Risk Mgmt</td>
<td>120 day</td>
<td>12/4/12</td>
<td></td>
</tr>
<tr>
<td>3. Review your Accountability Profile and add critical departmental workflow changes and document them in your Accountability Profile with an action plan.</td>
<td>Workflow</td>
<td>120 day</td>
<td>12/4/12</td>
<td></td>
</tr>
<tr>
<td>4. Document plan.</td>
<td>Staffing/Volume</td>
<td>120 day</td>
<td>12/4/12</td>
<td></td>
</tr>
<tr>
<td>5. Begin documenting plan for department/unit staffing and backfill plan during Super User training, Training and during the 2 weeks of Go-live.</td>
<td>Staffing/Volume</td>
<td>120 day</td>
<td>12/4/12</td>
<td></td>
</tr>
<tr>
<td>6. Determine vacation black-out dates and communicate those to staff.</td>
<td>Staffing/Volume</td>
<td>120 day</td>
<td>12/4/12</td>
<td></td>
</tr>
<tr>
<td>7. Identify end users who need to take the computer competency assessment. Assign those identified in the LMS: <a href="http://restricted.hopkinsmedicine.org/epic/_training/index.html">http://restricted.hopkinsmedicine.org/epic/_training/index.html</a> Send List of those who did not pass to Jeff Ostrow, and work with him to plan additional computer competency skills training.</td>
<td>Training</td>
<td>120 day</td>
<td>12/4/12</td>
<td></td>
</tr>
<tr>
<td>8. Plan for your end users to attend training (Resource: Wave Course Catalog) minimizing impact on operations with your staffing plan. Document staffing coverage plan.</td>
<td>Training</td>
<td>120 day</td>
<td>12/4/12</td>
<td></td>
</tr>
<tr>
<td>Complete Super User Plan, including ratios; identify any Super user gaps and communicate to Administrator/Chair/Entity Super User Coordinator (and Super User)</td>
<td>Training</td>
<td>120 day</td>
<td>12/4/12</td>
<td></td>
</tr>
</tbody>
</table>
What is going well… Where we need to focus more…

SAMPLE ENTITY DASHBOARDS & RISK REPORTS
## Sample Entity Dashboard

<table>
<thead>
<tr>
<th>Cadence Prelude</th>
<th>90 day</th>
<th>Cadence Prelude</th>
<th>60 day</th>
<th>Cadence Prelude</th>
<th>30 day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td><strong>Training</strong></td>
<td></td>
<td><strong>Risk Manager</strong></td>
<td></td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
<tr>
<td>0/1/01</td>
<td>0/1/01</td>
<td>0/1/15</td>
<td>1/0/1</td>
<td>0/1/01</td>
<td>0/1/01</td>
</tr>
</tbody>
</table>

 records reflect the status of various entities over different time periods (90, 60, and 30 days).
Overall Dashboard Progress

• # of Days prior to Go Live
  – 120
  – 90
  – 60
  – 30
  – 10
## SAMPLE
### Risk Report #1

<table>
<thead>
<tr>
<th>Area of Risk</th>
<th>Status &amp; Mitigation Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Workflow: Impact to Operations</td>
<td>Go-live volume reductions being finalized with Administrators. Security access workgroup decisions by March 8 related to In Basket routing configuration.</td>
</tr>
<tr>
<td>3. Technology/Communication: TDR/Printer Mapping</td>
<td>Technical Dress Rehearsal (TDR) 95% complete (2240 computers tested). Encouraging Application Project team &amp; LAN administration to meet with clinic manager/clinic to review &amp; finalize mapping.</td>
</tr>
</tbody>
</table>
### Area of Risk | Status & Mitigation Strategy
--- | ---
6. Workflow: Revenue Cycle | Incomplete front-to-back integrated registration & financial clearance scenario testing. Formed comprehensive task force of SMEs to test high risk scenarios.
7. Workflow: Revenue Cycle | Financial clearance not performed until after conversion due to timing of days out. Financial clearance performed post Epic12 conversion, but before Go-live and DOS. Working on securing access to system production environment.
Community Division: Status by Readiness Domains

**People**
- Leadership, Accountability, Transition Mgmt: Mtg weekly
- Training- Schedule updated; maintain ops (trending upwards)

**Processes/Workflow**
- Review, Sign off on workflows - In process
- Harmonization with CD
- Staffing/Backfill - on track
- Revenue Cycle workflow

**Technology**
- Devices, Hardware - In process
- Epic EMR Build – SMEs involved
- Interfaces - On track
- Security, Network
- Data Conversion– Scheduled
- Document scanning

**Communication**
- Governance Structure- CIC, Command Center/EpiCenter Plan - just beginning
- Newsletters
- Communication with Project team (trending upwards)
TIMELINES & LESSONS LEARNED
## Training Timeline

<table>
<thead>
<tr>
<th>Implementation</th>
<th>Training Schedule Available &amp; Registration in LMS</th>
<th>eLearnings Available</th>
<th>Credentialled Trainer 6-Week Program</th>
<th>Super User Training Start Date</th>
<th>End Date</th>
<th>End User Training Start Date</th>
<th>End Date</th>
<th>At-The-Elbow Support Training Start Date</th>
<th>End Date</th>
<th>Go Live Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ambulatory Wave 1</strong>&lt;br&gt;(includes all JHCP sites including SOM practices @ JHCP, JH @ Odenton, Wilmer @ Frederick, All Scheduling/Registration Staff)</td>
<td>12/10/12</td>
<td>12/20/12</td>
<td>12/17/12 To 02/01/13</td>
<td>02/04/13</td>
<td>02/16/13</td>
<td>02/18/13</td>
<td>03/30/13</td>
<td>04/01/13</td>
<td>04/03/13</td>
<td>04/04/13</td>
</tr>
<tr>
<td><strong>Ambulatory Wave 2</strong>&lt;br&gt;(JH Bayview, JH Greenspring Station, CRU &amp; JH White Marsh)</td>
<td>01/14/13</td>
<td>01/14/13</td>
<td></td>
<td>04/01/13</td>
<td>04/13/13</td>
<td>04/15/13</td>
<td>05/11/13</td>
<td>05/13/13</td>
<td>05/15/13</td>
<td>05/16/13</td>
</tr>
<tr>
<td><strong>Ambulatory Wave 3</strong>&lt;br&gt;(JHH and Howard County SOM Practices)</td>
<td>02/25/13</td>
<td>02/25/13</td>
<td></td>
<td>05/13/13</td>
<td>05/25/13</td>
<td>05/28/13</td>
<td>06/22/13</td>
<td>06/24/13</td>
<td>06/26/13</td>
<td>06/27/13</td>
</tr>
<tr>
<td><strong>Ambulatory Wave 4</strong>&lt;br&gt;(Rubenstein Pediatric Practices, Good Sam and SOM practices at GBMC, UPCH)</td>
<td>03/18/13</td>
<td>03/18/13</td>
<td></td>
<td>07/01/13</td>
<td>07/13/13</td>
<td>07/15/13</td>
<td>08/10/13</td>
<td>08/12/13</td>
<td>08/14/13</td>
<td>08/15/13</td>
</tr>
<tr>
<td><strong>Community Division</strong>&lt;br&gt;(HCGH and Sibley Memorial)</td>
<td>03/13</td>
<td>3/13</td>
<td>02/25/13 to 04/05/13</td>
<td>04/08/13</td>
<td>04/20/13</td>
<td>04/22/13</td>
<td>05/28/13</td>
<td>05/29/13</td>
<td>05/31/13</td>
<td>06/01/13</td>
</tr>
<tr>
<td><strong>Post Go-Live</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sept-Oct 2013</td>
</tr>
</tbody>
</table>

© 2013 Johns Hopkins Medicine
## Training Remaining/Completions*

<table>
<thead>
<tr>
<th>Application</th>
<th>Enrolled</th>
<th>Complete</th>
<th>Enrolled</th>
<th>Complete</th>
<th>Enrolled</th>
<th>Complete</th>
<th>Enrolled</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WAVE 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadence/Prelude</td>
<td>1,912</td>
<td>1,601</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1,917</td>
<td>1,601</td>
</tr>
<tr>
<td>Clinical</td>
<td>378</td>
<td>415</td>
<td>1,059</td>
<td>0</td>
<td>443</td>
<td>0</td>
<td>1,880</td>
<td>415</td>
</tr>
<tr>
<td>Clinical Support</td>
<td>428</td>
<td>436</td>
<td>777</td>
<td>0</td>
<td>286</td>
<td>0</td>
<td>1,491</td>
<td>436</td>
</tr>
<tr>
<td>HIM</td>
<td>39</td>
<td>14</td>
<td>32</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>71</td>
<td>14</td>
</tr>
<tr>
<td>Identity</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Kaleidoscope Clinical</td>
<td>50</td>
<td>34</td>
<td>61</td>
<td>0</td>
<td>26</td>
<td>0</td>
<td>137</td>
<td>34</td>
</tr>
<tr>
<td>Kaleidoscope Technician</td>
<td>17</td>
<td>48</td>
<td>21</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>42</td>
<td>48</td>
</tr>
<tr>
<td>Research</td>
<td>0</td>
<td>0</td>
<td>226</td>
<td>0</td>
<td>63</td>
<td>0</td>
<td>289</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,834</strong></td>
<td><strong>2,553</strong></td>
<td><strong>2,181</strong></td>
<td><strong>0</strong></td>
<td><strong>822</strong></td>
<td><strong>0</strong></td>
<td><strong>5,837</strong></td>
<td><strong>2,553</strong></td>
</tr>
</tbody>
</table>

*As of 3/3/13, Training Manager
Enrolled = Remaining Enrollment
If we were to do it again…

• Lessons learned
  – Training
  – Content
  – Reports
  – Workflow
  – Infrastructure
  – Timelines & Documentation
Resources

- CORRWG SharePoint site
- Project (testing) schedule
- Training Tips & Tricks
- Communications Toolkit
- Epic@JHM  http://www.hopkinsmedicine.org/epic
Clinical & Operational Readiness for Enterprise EMR Implementation: Strategies for Success

QUESTIONS...

Thank you Pat Zeller, Laura Barrett, Katie Anicich; CORRWG Co-chairs & Leads: Eric Aldrich, Bryan Barshick, Michelle Campbell, Kelly Cavallio, Kelly Clark, John Flynn, Gene Green, Sharon Hadsell, Tammie Hull, Suzanne Lindlaw, Josh Leslie, Nancy Smith, Renay Tyler. Joan Vincent, Hasan Zia

For more info, contact Carrie Stein, RN, MSN, MBA, Clinical & Operational Readiness Coordinator, Director of Clinical Informatics, JHBMCC, cstein7@jhmi.edu