A Journey to HIMSS Stage 7

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Assistant Administrator, Information Management and Program Execution
President, MoHIMA

A Funny Thing Happened On The Way To HIMSS 7…
HIM Professionals

[Image of various logos with text: HIM Has A Branding Problem]
**Mission and recognition**

**Mission**
TMC is an academic health center providing accessible, state-of-the-art quality health care to our community regardless of the ability to pay.

**Recognition**
- **AHIMA 2013 Grace Award**
- **Dual HIMSS Stage 7 accreditation for both inpatient and outpatient settings across both TMC facilities**
- **CHIME-AHA Transformational Leadership Award**
- **2014 HIMSS Enterprise Davies Award Recipient**
- **Level III Patient-Centered Medical Home**
- **National Committee for Quality Assurance (NCQA)**
EHR before Go-Live (2009 and back)

Hybrid record
Citation in mock survey for inability for staff to find documentation on continuum of care

Partial electronic record
Meds, allergies, procedures, immunizations and problem list not consistently documented in one place

Duplicate records
For patients seen at two hospitals
TMC’s journey

- Contract signed, planning begins
- Light House measures
- Amb - Phase 1 (Pilot & Grp 1), Doc imaging
- Amb - Phase 1 (Grp 3&4)
- Acute rollout “Go-live with Q6”
- Women’s Health go-live
- HIMSS Stage 7

- Jul ’09
- Nov ’09
- Feb ’10
- Apr ’10
- Aug ’10
- Apr ’11
- Aug ’12

- 2007.18 Upgrade
- 2007.19 Upgrade
- Amb - Phase 1 (Grp 2), Population Health
- Amb – Phase 1 (outlying clinics), Amb – Phase 2 (all groups)
- HIMSS Stage 6
- 2010.02 Upgrade
- Most Wired

February 21, 2010
A Watershed Date in Truman HIM History
EMR Environment/ Then & Now

**Circa 2008**

- Hybrid Record – Citation in mock survey for inability for staff to find documentation on continuum of care
- Partial electronic record – meds, allergies, procedures, immunizations and problem list not consistently documented in one place
- Duplicate records for patients seen at 2 hospitals

**Now**

- One integrated system for ambulatory, inpatient - across the continuum
- Identify, monitor and report defined benefits
- Meaningful Use Stage I
- HIMSS Stage 7
- Quality reporting/ Analytics
- CPOE & e-Prescribing
- Closed loop meds admin with Bar-coding
- Medical Device connectivity
- Document Imaging

One record anytime, anywhere

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**EHR after Q6 2012**

**Better outcomes**

- Complex systems working together
- Standardization
HIMSS 7 FOR INPATIENT

Changes in Scanning Process

Stage 6:
- Paper generated throughout the patient’s stay
- Patient discharged
- Nursing/Unit Clerk breaks down the paper chart and places in a bin
- HIM picks up once a night
- HIM scans in the chart within 24 hours after getting it

Stage 7:
- Paper generated throughout the patient’s stay
- Nursing/Unit Clerk breaks down the chart twice daily
- HIM rounds at 7a and 7p each day
- STAT scans all documents
The Importance of Scanning

- Per our survey team, when a facility fails their HIMSS 7 survey, more often than not, it’s because of paper

AGENDA

7:30 – 9:15 a.m.  Introduction and Overview
9:20 – 10:10 a.m.  Med/Surg Unit Visit
10:15 – 10:35 a.m.  Radiology Visit
10:40 – 11:10 a.m.  Pharmacy Visit
11:15 – 11:55 a.m.  CCU visit
12:00 – 12:55 p.m.  Lunch
1:00 – 1:30 p.m.  ED Visit
1:35 – 2:05 p.m.  HIM Visit
2:30 – 3:00 p.m.  Wrap-up
Q6 Goals achieved/targeted

• Identify, monitor and report defined benefits
• Meaningful Use Stage 1
• HIMSS Stage 6
• Quality reporting
• CPOE and e-prescribing
• Bar-coded medication administration/closed-loop meds process
• Structured documentation
• Medical device connectivity
• Document imaging
CPOE

All Orders

<table>
<thead>
<tr>
<th>Hospital Hill</th>
<th>12 Month Avg</th>
<th>September 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine Specialties</td>
<td>96%</td>
<td>97%</td>
</tr>
<tr>
<td>Multispecialty</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Primary Care</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Surgery Specialties</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>Women’s Health</td>
<td>96%</td>
<td>96%</td>
</tr>
<tr>
<td><strong>Lakewood</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multispecialty</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>Primary Care</td>
<td>98%</td>
<td>98%</td>
</tr>
<tr>
<td>Specialties</td>
<td>98%</td>
<td>99%</td>
</tr>
<tr>
<td><strong>Behavioral Health</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Hill</td>
<td>95%</td>
<td>99%</td>
</tr>
<tr>
<td>Lakewood</td>
<td>98%</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>97%</td>
<td>97%</td>
</tr>
</tbody>
</table>

Physician Documentation

October 2012-September 2013

<table>
<thead>
<tr>
<th>Behavioral Health</th>
<th>HH Medicine Specialties</th>
<th>HH Multispecialty</th>
<th>HH Primary Care</th>
<th>HH Surgery Specialties</th>
<th>HH Women’s Health</th>
<th>LW Medicine Specialties</th>
<th>LW Multispecialty</th>
<th>LW Primary Care</th>
<th>LW Specialty</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH Behavioral Health</td>
<td>70%</td>
<td>42%</td>
<td>61%</td>
<td>85%</td>
<td>37%</td>
<td>92%</td>
<td>74%</td>
<td>28%</td>
<td>81%</td>
<td>81%</td>
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<tr>
<td>HH Multispecialty</td>
<td>7%</td>
<td>7%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>HH Primary Care</td>
<td>3%</td>
<td>14%</td>
<td>14%</td>
<td>15%</td>
<td>7%</td>
<td>26%</td>
<td>20%</td>
<td>17%</td>
<td>9%</td>
<td>17%</td>
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<tr>
<td>HH Surgery Specialties</td>
<td>2%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>HH Women’s Health</td>
<td>3%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
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</tr>
<tr>
<td>LW Behavioral Health</td>
<td>8%</td>
<td>28%</td>
<td>35%</td>
<td>14%</td>
<td>15%</td>
<td>7%</td>
<td>26%</td>
<td>20%</td>
<td>17%</td>
<td>9%</td>
</tr>
<tr>
<td>LW Multispecialty</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
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</tr>
<tr>
<td>LW Primary Care</td>
<td>1%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
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<td>0%</td>
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<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>LW Specialty</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
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</tr>
</tbody>
</table>

% iView/PowerForm/PowerNote 70% 42% 61% 85% 37% 92% 74% 28% 81% 81% 75%
Pressure ulcer reduction


75% reduction in VTE per 1000 patient days

Avoiding cost with improved outcomes

75% reduction in VTE per 1000 patient days
Hospital Wide Utilization

Impact to Patient Care is Evident

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Health Information Exchange

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Redundant Layer 3 Design

• EMR Data is copied from Cerner to a local TMC Server
• Data is copied from TMC Server to Downtime Workstations
• Patient Data is available to Clinicians to View & Print

EMR Downtime Process

• EMR Data is copied from Cerner to a local TMC Server
• Data is copied from TMC Server to Downtime Workstations
• Patient Data is available to Clinicians to View & Print
Health Information Management

$1.9 million
2015 cost savings
Eliminated 56.5 FTEs since Nov 2010

$400,000
Real estate made available for more productive use

$87,817 decrease
Feb 2015—Jan 2016 supply cost
9% increase
Coder productivity improving billing TAT and enhancing revenue remote coding – 26 coders working from home

<table>
<thead>
<tr>
<th>Inpt Units</th>
<th>Radiology</th>
<th>Pharmacy</th>
<th>ED</th>
<th>HIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper in charts</td>
<td>Film review process</td>
<td>Dispense mechanism</td>
<td>Triage</td>
<td>Scanning TAT</td>
</tr>
<tr>
<td>CPOE</td>
<td>Safety measures</td>
<td>CPOE</td>
<td>Coding</td>
<td></td>
</tr>
<tr>
<td>Device integration</td>
<td>Savings</td>
<td>Admitting procedures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

 coder productivity improving billing TAT and enhancing revenue remote coding – 26 coders working from home
HIMSS 7 FOR OUTPATIENT

AGENDA

<table>
<thead>
<tr>
<th>Time</th>
<th>Location</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 – 11:00am</td>
<td>Intro/ Overview</td>
<td>CIO</td>
</tr>
<tr>
<td></td>
<td>Welcome and Introductions</td>
<td>CEO</td>
</tr>
<tr>
<td></td>
<td>TMC Overview</td>
<td>CIO</td>
</tr>
<tr>
<td></td>
<td>IT Governance</td>
<td>CMIO/ Dir. Nursing Infor./ Clinic Director</td>
</tr>
<tr>
<td></td>
<td>System Overview/Pervasiveness of Use</td>
<td>Admin. BI/ MD Quality</td>
</tr>
<tr>
<td></td>
<td>Clinical and Business Intelligence</td>
<td>CTO</td>
</tr>
<tr>
<td></td>
<td>Health Information Exchange</td>
<td>CTO</td>
</tr>
<tr>
<td></td>
<td>Disaster Recovery/ Business Continuity</td>
<td></td>
</tr>
<tr>
<td>11:00am – 12:00pm</td>
<td>Hospital Hill Medical Pavilion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Family/Internal Med, Women’s Health, Surgery, Psych)</td>
<td></td>
</tr>
<tr>
<td>12:00pm – 1:00pm</td>
<td>Team Lunch</td>
<td></td>
</tr>
<tr>
<td>1:00pm – 2:00pm</td>
<td>Gray Clinic Visit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Derm, Rheum, ID, Psych)</td>
<td></td>
</tr>
<tr>
<td>2:00 – 2:30pm</td>
<td>Evaluation Team Meeting</td>
<td></td>
</tr>
<tr>
<td>2:30 – 2:50pm</td>
<td>Decision Presentation</td>
<td></td>
</tr>
<tr>
<td>3:00pm</td>
<td>Depart</td>
<td></td>
</tr>
</tbody>
</table>
Addressing chronic conditions

Provides clinicians with a summary of pertinent clinical information for patients with chronic conditions.

- Real-time information
- View lab/rad results relevant to the condition
- Trended values
- Lab values/impact of changed meds
- Provider orders from here

Addressing language disparities

Dashboard calculates and displays:

- Language contacts by day and time
- Productivity by interpreter
- Percentage compliance of screening for preferred language
- Patients receiving language services from qualified interpreters
Driving Improvement Change

Additional Examples:
- Medical Home: tracking no-show rates, referrals, and same-day appointments
- Clinic real time capture of patient satisfaction
- Diabetes: City Contract outcome measures
- Kaizen post Sentinel Event:
  - Improvement in the ED depart process to ensure discharge plan has been checked off and agreed upon by multidisciplinary team before discharge information can be printed.
- Teleconnectivity video follow up in home, with vital signs estimation

Integral to High Reliability
Patient portal - myTruHealth

Patients have access to all labs, notes, medications, radiology results, pathology reports and can message all providers and clinics.

Marketing the portal via text message reminders, Facebook, YouTube, TMC’s internet page, flyers, bookmarks, etc.

11,000+ patients enrolled over a 200% increase in users over the last 6 months.

Cerner Direct Connect

Electronic referral creation, management, real-time tracking and completion.

Exchange of key clinical information between caregivers to improve coordination of care.

Thirty-five different institutions across the Kansas City metro area utilize Cerner Direct Referral.

Over 50,000 referrals received since go-live in 2012.
Electronic Referrals

<table>
<thead>
<tr>
<th>Replaced KC CareLink</th>
<th>Cerner Direct Inbox</th>
<th>Cerner Direct Referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/3/2012</td>
<td>1/3/2012 – 7/16/2012</td>
<td>7/16/2012 - present</td>
</tr>
</tbody>
</table>

- Original pilot: 9 Safety Net organizations in Kansas City, MO operating on 6 different EMR’s, are sending 1,000+ messages per month using Cerner Direct to ensure secure transport.
- Recently Added: Mission of Hope, Shared Care Free Clinic, Swope Health Services,
## Changes in Departmental Staffing and Needs

<table>
<thead>
<tr>
<th>Traditional, Paper-Based Model</th>
<th>Electronic Environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Record kept at individual facilities managed by different workforces*</td>
<td>* All records stored electronically, work can be done centrally*</td>
</tr>
<tr>
<td>* Paper records require onsite staff to code*</td>
<td>* Systems can be accessed remotely allowing coders (and others) to work from home*</td>
</tr>
<tr>
<td>* Tagging and tracking paper records for deficiencies requires extra time to look at both the hybrid EHR and paper record; manually update deficiencies*</td>
<td>* Deficiencies auto-generated, fewer items to check allow for expanded analysis program (ED's, conscious sedation, outpatient, etc)*</td>
</tr>
<tr>
<td>* Copying and printing records for release is time consuming and costly*</td>
<td>* Release records electronically to save time and supplies*</td>
</tr>
<tr>
<td>* HIM department needs a lot of real-estate for records and staff*</td>
<td>* Unnecessary paper-files and remote workers frees up space for patient care*</td>
</tr>
</tbody>
</table>
What’s Paperless Anyway?

<table>
<thead>
<tr>
<th>Week Ending F_YR</th>
<th>Color</th>
<th>Clinic</th>
<th>Inpatient</th>
<th>Same Doc Type</th>
<th>Loose Sheets</th>
<th>Emergency Services</th>
<th>Ambulatory Surgery</th>
<th>Total Scanned Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>F2012</td>
<td>257,864</td>
<td>217,126</td>
<td>22,756</td>
<td>253,551</td>
<td>76,695</td>
<td>15,672</td>
<td>843,717</td>
<td></td>
</tr>
<tr>
<td>F2013</td>
<td>930,012</td>
<td>326,673</td>
<td>83,077</td>
<td>958,619</td>
<td>277,873</td>
<td>20,466</td>
<td>2,630,362</td>
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<tr>
<td>F2014</td>
<td>975,263</td>
<td>322,309</td>
<td>41,931</td>
<td>1,002,995</td>
<td>349,514</td>
<td>828</td>
<td>2,619,019</td>
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</tr>
<tr>
<td>F2015</td>
<td>794,099</td>
<td>313,908</td>
<td>33,216</td>
<td>1,343,226</td>
<td>362,233</td>
<td>1,747</td>
<td>2,948,232</td>
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<tr>
<td>F2016</td>
<td>521,004</td>
<td>322,609</td>
<td>29,359</td>
<td>609,515</td>
<td>244,431</td>
<td>414</td>
<td>1,039,427</td>
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<tr>
<td>Report total</td>
<td>3,308,133</td>
<td>1,944,764</td>
<td>209,039</td>
<td>4,134,087</td>
<td>1,308,633</td>
<td>85,724</td>
<td>11,031,777</td>
<td></td>
</tr>
</tbody>
</table>

TMC

Information Management & Program Execution

Truman Medical Centers

Better. For Everyone.
Reduced or Eliminated Roles

- Abstracting
- Assembly
- Analysis
- Filing/Retrieval/Storage
- Document Identification
- Statistical Keeping (manual)

- Try not to eliminate, but transition staff

Analytics Coordination Team (ACT)

- Purpose: Drive TMC’s Information Governance program

- Department’s Represented:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>IT Security</th>
<th>CMIO</th>
<th>Quality Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMO</td>
<td>HIM</td>
<td>Data Integrity</td>
<td>Compliance</td>
</tr>
<tr>
<td>BI</td>
<td>IT</td>
<td>Nursing</td>
<td>Property Mgmt.</td>
</tr>
<tr>
<td>Practice Mgmt.</td>
<td>Decision Support</td>
<td>Business Operations</td>
<td>MU</td>
</tr>
</tbody>
</table>

- RHIA Led Project:
  - Associate Administrator, RHIA – Chair of ACT
  - Corporate Director of Data Exchange/Integrity, RHIA – 3 group leader
  - Assistant Administrator, RHIA – 1 group leader
CAC Benefits

<table>
<thead>
<tr>
<th></th>
<th>Pre-CAC</th>
<th>Post-CAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of accounts coded within 4 business days</td>
<td>68.9%</td>
<td>83.5%</td>
</tr>
<tr>
<td>HH Days/Charges Pending (DNFC/1 Days Charges)</td>
<td>5.1</td>
<td>2.4</td>
</tr>
<tr>
<td>LW Days/Charges Pending (DNFC/1 Days Charges)</td>
<td>5.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Average number of Medicare charts pending</td>
<td>1,000+</td>
<td>700</td>
</tr>
<tr>
<td>Average number of Medicaid charts pending</td>
<td>1,000+</td>
<td>800</td>
</tr>
</tbody>
</table>

Reporting and Tracking

- Important reporting needs with the EHR:
  - Documents Not Forwarded:
    - Track documents created by Residents where they did not forward them to the attending for signature
  
  - Documentation TAT:
    - Track how quickly certain areas completing their documentation after the patient leaves the clinic; impact to DNFB

- PQ's:
  - Track and trend how quickly providers are completing coding physician queries
New Areas of Expertise

HIM

- Referral Management
- MU
- Report scoring
- CDI re-vamp
- Birth/Death Certificates
Summation

• Begin strategic planning now

• Create educational timeline

• Built stronger bridges with IT

• Plan for employees with HR

• Begin developing a transitional model to new roles/responsibilities

Stand up for HIM!

What Do You Think?

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816-404-3355