Achieving HIMSS Stage 7: Realizing the Benefits of Your EHR

Session #282, March 8, 2016

Kris K. Wilson, Chief Information Officer, Hilo Medical Center
Christine B. Takahashi, EHR Director, Hilo Medical Center
Conflict of Interest

Kris K. Wilson, Ph.D
Has no real or apparent conflicts of interest to report.

Christine B. Takahashi, RN
Has no real or apparent conflicts of interest to report.
Agenda

• Background, Hilo Medical Center
• Choosing to Attest
• HIMSS Stage 7 Specifications
• Project Planning
• Preparing for the Site Visit
• Building a Case Study
• Closing Thoughts
• Questions
Learning Objectives

• Explain the process of HIMSS Stage 7 Certification, what is involved, what is measured, and what the site visit will consist of

• Develop a project plan for your preparation of HIMSS Stage 7 objectives, determining timelines, and establishing a HIMSS Stage 7 project team

• Recognize what you do well as an organization, how to tell your story for HIMSS Stage 7, and how to effectively organize your efforts to meet required measures

• Describe the elements for a good case study

• Show attendees how our organization successfully accomplished HIMSS Stage 7 certification in 2013 and recertification in 2016
Hilo Medical Center

- **Beginnings:** 1897 10-bed hospital, erected by the Hawaiian Government in 1897
- **Present Facility:** 157 acute licensed beds (including a 20 bed Behavioral Health Unit), 119 extended care licensed beds, nine outpatient clinics
- **Employment:** approximately 1200 employees

- ✓ 15 Facility System
- ✓ Safety Net Hospital System
- ✓ Public Benefit Corporation
- ✓ Collective Bargaining
- ✓ State Funding
- ✓ Corporate Board
- ✓ Five Regional Boards
Local Healthcare Facts

2013

Hawai‘i Island: Limited Health Care Resources In A Large Area

Hawaii Island is the same size as the state of Connecticut

Major Hospitals

Hawaii Island

Connecticut

34

3

Hawaii Island: Limited Health Care Resources In A Large Area

Hawaii Island is the same size as the state of Connecticut

Shortage Of Physicians

179

Current # Of Physicians

289

16% of Hawaii Island residents reported not having a personal doctor

Hawai‘i Physician Workforce Assessment

• By year 2020 we will be short 800 physicians
• Speciality shortages for the Big Island include Primary Care, Psychiatry, Orthopedics, and OB/Gyn services

Hawai‘i Rankings by County

• Hawaii County Ranks lowest in the state


Local Physician Workforce

Year 2015

Year 2020

Year 2025

All Providers

Primary Care
Taking the Leap

STAGE
- 7 Complete EMR, Data Analytics to improve care
- 6 Physician Documentation (templates), Full CDSS, Closed Loop Medication Administration
- 5 Full R-PACS
- 4 CPOE, Clinical Decision Support (clinical protocols)
- 3 Clinical Documentation, CDSS (error checking)
- 2 CDR, Controlled Medical Vocabulary, CDS, HIE Capable
- 1 All Three Ancillaries Installed — Lab, Rad, Pharmacy
- 0 All Three Ancillaries Not Installed

http://www.himssanalytics.org/emram
Taking the Leap

Why not Hilo?
Study the Facts

Start with the EMRAM Information Sheet

STAGE

7

Complete EMR, Data Analytics To Improve Care

- The hospital no longer uses paper charts to deliver and manage patient care and has a mixture of discrete data, document images, and medical images within its EMR environment.

- Data warehousing is being used to analyze patterns of clinical data to improve quality of care, patient safety, and care delivery efficiency.

- Clinical information can be readily shared via standardized electronic transactions (i.e., CCD) with all entities that are authorized to treat the patient, or a health information exchange (i.e., other non-associated hospitals, ambulatory clinics, sub-acute environments, employers, payers and patients in a data sharing environment).

- The hospital demonstrates summary data continuity for all hospital services (e.g., inpatient, outpatient, ED, and with any owned or managed ambulatory clinics).

- Blood products and human milk are included in the closed-loop medication administration process.
Note the ‘Must Haves’

- CPOE
- PDOC
- Scanning within 24 Hours
- Blood scanning
- Paperless workflows
- Integrated applications

- CCD transmission
- Health information exchange
- Data warehouse or DR
- Closed loop medication reconciliation
- Electronic nursing documentation
Getting the Green Light!

• Telephone Interview:
  • Be ready with your facts
  • Write down information relevant to the Site Visit
  • Ask questions!
Project Timeline

Review Facts for Stage 7

- Decide if your organization is ready (wk 36-32)
- Host pre-HIMSS Call (wk 30-28)
- Deliberate on Go-No Go (wk 28-24)

Commit to Achieving HIMSS Stage 7

- Compile Project Team (wk 24)
- Delegate assignments (wk 22)
- Confirm visit date (wk 20)
- Confirm required metrics (wk 18)
- Research case studies (wks16-18)
- Confirm 3 subjects for Case Studies (wk 12)
- Start presentation build (wks 12-10)
- Confirm participants for interview (wks 8-6)
- Ready departments for visit (wks 8-2)
- Prepare final preparation on units and final presentation review (1wk)

HIMSS Stage 7 Visit!
Project Planning

Building a Project Team

Executive Management Team

Medical Executive Committee
Pharmacy & Therapy Committee
Infection Control
Quality Improvement & Patient Safety Committee

Medical Committee
Quality Committee
Medical Records Committee
Ethics Committee

Department of Surgery & OB/GYN
Internal Medicine
Pediatrics

Emergency Department
Behavioral Health
Long Term Care

Medical Informatics Subcommittee
Department of Radiology
Hospitalist
Laboratory

Application Steering Committees
Admissions
Billing
Imaging
PCS/PCM
Orders Management
Pharmacy
Laboratory
Emergency Department
Quality Management
Project Planning

Team Assignments:
• Research, Data Collection, Interviews (2-5 Months)
• Workflow and Documentation Evaluation (2-5 Months)
• Implementation of any outstanding workflows/documentation (1 Month)
• Presentation Build (12 Weeks)
• Practice (2 Weeks)
Preparing for the Site Visit

Site Visit Agenda- What to Expect

• Four hour PowerPoint presentation
• Question and answer Session
• Hospital department tour (nursing units, HIM, Emergency Room, Imaging)
• Final Q & A (if needed) have your team ready
• Final Decision: Pass or No-Pass
Developing your PowerPoint

PowerPoint: Tell your story!

- Background on your Health care organization
- Include what makes you unique
- Include required metrics
- Deliver a compelling case study
Focus on Key Indicators

Follow the HIMSS Stage 7 Checklist

- CPOE
- Clinical Decision support in Physician Documentation
- Closed Loop Medication Administration
- Medication Reconciliation, eMAR
- Nursing Documentation
- Pharmacy
- Radiology
- Clinical and Business Intelligence Case Studies
- Health information Exchange
- Disaster Recovery and Business Continuity
- Governance
Building a Case Study

Problem

Intervention

Outcome
Building a Case Study

• Have a pulse and be alert to every sector in the organization
• Interview key stakeholders and ask the question – “What are we doing really well and do we have the data to support outcomes?”
  – Quality
  – Financial
  – Patient Care
  – Pharmacy
  – Physicians
Building a Case Study

• Begin by listing potential case studies
• Start breaking it down in terms of how the EHR assisted in
  – Alerts, Notifications and Reminders
  – Mandatory documentation for nurses, physicians, rehab, etc.
  – Order Sets
  – Ease of data collection or reporting
• Work with quality or report writers with data collection
Case Study - CAUTI

START → Catheter Order → Catheter Documentation I & O

Output (ex. chest tubes, drains, wound vac)

<table>
<thead>
<tr>
<th>Output, Urine by Void (ml)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Output, Urine by Catheter (NOT CBI) (ml)</td>
<td>200</td>
</tr>
</tbody>
</table>
Case Study - CAUTI

Clinical Flowsheet - Nursing Documentation

Physician Documentation

Clinical Panel

Bowel Movement

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Comment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foley Catheter</td>
<td>Yes</td>
<td>No</td>
<td>Discontinue when ambulatory</td>
</tr>
</tbody>
</table>

Additional Findings
Case Study – CAUTI - Outcomes

Reported Infections

Rate per 1000 Device Days

<table>
<thead>
<tr>
<th>Year</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.6</td>
</tr>
<tr>
<td>2010</td>
<td>3.1</td>
<td>1.5</td>
<td>1.1</td>
<td>1.1</td>
<td>3.1</td>
</tr>
<tr>
<td>2011</td>
<td>2.4</td>
<td>3.3</td>
<td>0.6</td>
<td>0.9</td>
<td>3.3</td>
</tr>
<tr>
<td>2012</td>
<td>1.0</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>2013</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

- EMR Implementation
- Physician Documentation
Case Study – CAUTI - Outcomes

Reported CAUTI Infections

Rate per 1000 Device Days

Jan-17  Feb-17  Mar-17  Apr-17  May-17  Jun-17  Jul-17  Aug-17  Sep-17  Oct-17  Nov-17

0.0  1.1  0.0  0.0  0.0  0.0  0.0  1.1  1.2  0.0  0.0

Rate per 1000 Device Days

2009  Q1 '10  Q2 '10  Q3 '10  Q4 '10  Q1 '11  Q2 '11  Q3 '11  Q4 '11  Q1 '12  Q2 '12  Q3 '12  Q4 '12  Q1 '13  Q2 '13

3.6  3.1  1.5  1.1  1.1  2.4  3.3  0.6  1.0  0.9  0.0  0.5  0.0  0.0  0.0
Site Visit Interviews

• Physician(s)
• Nursing Staff
• Infection Control
• Risk Management
• Health Information Management
• Emergency Room
• Imaging
Preparing for the Visit

• “Red Carpet Treatment”
• “Clean Your House” as you would for company
• Schedule the meeting rooms, food & beverages, lei’s
• Schedule and reserve key people who will be present during kick off
• Plan on a casual dinner before the visit with key members – Physician leader, IT/EHR leaders, Administration, do not over invite
• Test everything before the visit, pay attention to details - AV and technology testing, room set up, etc.
• Practice, practice, practice, practice
How to Maintain your HIMSS Status

3-Year Revisit

• Maintain the Stage 7 initiatives by reviewing reports and results monthly.

• Over communicate results monthly in the first year and quarterly thereafter.

• Re-evaluate new workflows and documentation every quarter with end users and the EHR build team

• Keep abreast of the EHR vendor’s best practice updates
What we Learned

• Reaching Stage 7 was not impossible as we found data was hiding plain site. If you believe, it will happen and it did happen achieving both Stage 6 and Stage 7 within a year. Find your believers.

• Through the process of reaching Stage 7 the Quality Department gained trust and acceptance of the EHR data.

• The data for the case studies presented in 2013 continue to offer great value and are maintained and monitored.

• Achieving Stage 7 allows the organization to fulfill future achievements and improvements such as Leapfrog recognition, MACRA/MIPS, Community engagements, Nursing Beacon Award, Sepsis initiatives, other Quality and Joint Commission measures, the list is endless.
What we Learned

• Our EHR is a powerful tool, it makes a difference.
• We are doing great work for our patients, community, and hospital; often we lose sight of our accomplishments
• HIMSS Stage 7 takes work… but it forces you to emphasize your achievements that otherwise would be taken for granted.
Closing Thoughts

*Nothing is particularly hard if you divide it into small jobs - Henry Ford*

- Break your project down into smaller pieces; divide and conquer
- Know your metrics, know your processes, and use your data
- Tell your story!
Questions

• kwilson@hhsc.org
  • https://www.linkedin.com/in/kris-wilson-307b4369

• ctakahashi@hhsc.org

Please complete online session evaluation