

**HIMSS**<sup>®</sup> MANAGEMENT ENGINEERING  
PROCESS IMPROVEMENT COMMUNITY  
Networking. Process. Tools. Collaboration.



## ANNOUNCEMENTS

### Upcoming Educational Events

- January 20 – Greater Chicago HIMSS Chapter
  - ICD10 Implementation Challenges and Timelines
  - See Article for more info
- February 20 – 24 HIMSS11
  - Orlando, FL

### ME-PI Community Meetings

- Establishing a Culture of LEAN for 9,000 – January 2011
- Workflow Redesign and Stage 7 EMR Adoption – February 2011
- Change Management Sustainability Model – March 2011

## Welcome to our fourth year as an official HIMSS community!

There are many exciting events and educational opportunities being planned for the upcoming year. We hope you join us for as many as you can. To learn more about the purpose of the committee, the many creative work groups and the planned activities and deliverables for the upcoming year, please visit [www.himss.org/content/files/MEPICharter.pdf](http://www.himss.org/content/files/MEPICharter.pdf) for the FY10 to view the ME-PI work plan.

## HIMSS 2011 Update

ME-PI will host Synergy Sessions at the HIMSS11 which is being held in Orlando, FL, February 20-24. The theme this year will be **Management Engineering and Process Improvement Approaches to Enable the Transformation of Healthcare**. Here is a summary of those sessions.

### **Session 1 – Feb 21 Room #202 9:45-10:45 Partnering Systems Engineering with HIT to Improve Healthcare Delivery for Hospitalized Patients**

*Jeanne M Huddleston, MD*  
*Mayo Clinic*  
*Pauline Hogan, MBA*  
*Mayo Clinic*

Hospitalized patients present some of the most complex challenges in the healthcare delivery system. Multiple care providers, HIT systems, departments and processes are involved. Physicians and the rest of the care team increasingly rely on information from HIT systems to piece together the care puzzle in order to make process improvements. To date, many HIT systems are inept in their ability to assist in this need. This session explores case studies highlighting the need for more synergistic partnerships between systems engineering and HIT.



Developing stronger partnerships between systems engineering and HIT systems enables improvements in how care is managed and delivered – which is what matters most.

**Session 2 – Feb 21 Room #202 11:00-12:00**  
**Design Thinking: An Innovation Process for Healthcare Workflow Transformation**

*Robert G. Porter*  
 President, Programs and Services/Chief Strategy Officer  
 SSM Health Care St. Louis

*David A. Butler*  
 Director, Best Practices Center for Healthcare Operational Excellence  
 Washington University Olin School of Business

Hospitals and Health Systems are looking for innovative ways to re-engineer their operations and processes to enable improvements in quality, cost, efficiency, work flow, and patient satisfaction. Often innovation occurs when established practices in one industry are applied in another industry to solve a similar problem. The use of Design Thinking has been proven to generate innovative products and services in a breadth of consumer and industrial markets. This session will share insights as to how one innovative Health System pioneered the use of Design Thinking to re-engineer workflows within an existing hospital and then used those techniques to help design a new hospital focused on achieving breakthrough results in satisfaction, patient safety, clinical outcomes, and operating performance. The presentation will also share how a local university is exploring the use of the Design Thinking methodology as a

means to engage college students in projects to assist local hospitals in re-engineering their care delivery workflows.

**Session 3 – Feb 21 Room #202 12:15-1:15**  
**Change Management – Readiness and Sustaining Change**

*Jay Ford, Ph.D., FACHE, FHIMSS, Assistant Scientist*  
 University of Wisconsin – Madison

Research indicates that multiple organizational factors such as staff attitudes towards change and leadership support influence readiness for and sustainability of change. What if your organization could predict whether or not a planned organizational change would be successful or could take steps to improve the likelihood that the change would be sustained? How would that impact the planning process for implementing organizational change? In the content of the largest randomized trial of organizational change involving 201 addiction treatment organizations in five states, this session will

- Introduce the Organizational Change Manager and the Sustainability Index, two tools developed to assess organizational readiness and sustainability,
- Highlight how the tools were applied in the research trial and present results on how changes in the OCM and Sustainability Scores were related to study participation and impacted study outcomes and
- Discuss how other healthcare organizations might use these tools in implementing organizational change



## Work Group Update: Executive Dashboards New publication now available– Executive Dashboard 201

In 2009, the Executive Dashboard Workgroup of the Management Engineering/Process Improvement Task Force developed a paper called “Executive Dashboard Development Guide.” Shortly after its release, the task force quickly realized there were many more topics to discuss. Thus, in 2010, the Executive Dashboard Workgroup, a sub group of the ME-PI committee, began the development of the Executive Dashboard Implementation Guide.

The purpose of this guide is to share a wide array of thoughts on the entire lifecycle for dashboard development including pre- and post-implementation issues. These thoughts range from forming a governance structure to supporting the effort of measuring the dashboard value post-implementation. The information contained in this paper represents some “tried and proven” approaches, views, and perspectives – all of which will help readers in their dashboard implementation journey.

Contributing experts from this workgroup included Manual C. Co Jr., Chris Donovan, Karen Fairchild, Karen Green, Cynthia McKinney, Brenda Mollohan, Michael Whitecar, and Joyce Zerkich. The workgroup has developed this guide as a free publication available to all HIMSS members and will continue in its mission to develop educational resources in the area of executive dashboards and business intelligence.

## Local HIMSS Chapter Offering ICD10 Educational Program

*The Healthcare Information and Management Systems Society welcomes diverse points of view and this publication is solely authored by members of the MEPI community without HIMSS editorial contributions. The information and opinions presented herein do not necessarily reflect the position of HIMSS or its affiliates.*

The Greater Chicago Chapter – HIMSS in partnership with local chapters of HFMA and AHIMA is offering an educational program on ICD10

### **Title: ICD10 Implementation Challenges and Timelines**

*Date: Thursday, January 20, 2011*

*Time: 6:00 – 9:00 PM*

*Location: O’Hare Hilton Garden Inn  
2930 South River Road,  
Des Plaines, Illinois, USA 60018*

The program will feature international experts on ICD10 and the implementation challenges of converting from ICD9, with a local panel of hospital CIO and CFO experts describing their timelines and processes for engineering this core taxonomy replacement in time for the 2013 deadline imposed by CMS.

Keynote speaker is Caroline Piselli from 3M followed by a panel discussion moderated by Cindy Grant from Courtyard Group. Our panelists include representatives from NorthShore University Health System, University of Chicago, and other local organizations.

A pre-event survey will be sent out to gauge the level of preparation underway among our membership, for conversion to ICD10.



## **Case Study**

### **Real-Time Location and Visibility Solution for Asset Management**

*Submitted by Kathi Cox, CPHIMS, Director, IT Solutions at Texas Health Presbyterian Hospital Dallas (THD)*

The initial implementation of the Real-Time Location Solution at our hospital includes more than 6,000 tagged and tracked items across 1.6+ million square feet across multiple buildings and departments. The system is used by both Clinical and Operational staff.

Our RTLS solution includes software applications and connectivity platform (the Enterprise Visibility Platform by Intelligent InSites) and a ZigBee-based wireless sensory network (Skytron Asset Manager powered by Awarepoint). Utilizing Intelligent InSites' expertise and asset management methodologies we were able to collect extensive data prior to the solution going live. This enabled us to build a projected ROI model from RTLS asset management, with hard-dollar monthly cost savings generated from reduced equipment shrinkage, reduced rental expenses, and right-sized equipment inventories. These hard-dollar cost savings fully justified our investment in RTLS. We were positively surprised that our initial (conservative) ROI projections were exceeded by almost 100%, making the final ROI truly spectacular.

We were very well prepared for implementation and launch of the solution which resulted in highly-successful system rollout. We have now over 100 super users trained which helps with a

smooth use of the system on a day-to-day basis. Here are some comments from our staff:

*"One of the quietest launches I have ever seen, not that I'm complaining!" – Project Manager*

*"I have been through many 'launches' during my tenure here and this one was different in that the users could see the benefits RIGHT AWAY!!!" – IT Solutions*

Here are just some of the benefits we are experiencing after implementing the solution:

#### ***Understanding the Actual Utilization Rates of Resources***

Our staff knows exactly where the equipment is, who is using it, and the amount of time it is being used. With this information, we better understand the inventory levels we need on hand, whether future purchases are required, and how to maintain our inventory at optimum levels. The results: by "right-sizing" our inventory levels we save tens of thousands of dollars each month.

#### ***Knowing When to Rent Equipment***

One of our goals was to figure out if we actually need to rent. That becomes a fairly easy decision to make when we know the status of all our owned equipment. The next opportunity was making sure that we don't keep equipment rented for longer than we actually require. Monitoring the usage of rental equipment independently, and providing alerts to the proper people if rental equipment is sitting idle or being used in an unexpected manner, added up to dramatic savings opportunities for us. We are now averaging over \$30,000 of rental savings per month.



### ***Figuring Out Where the Missing Equipment is Going***

There was an obvious value for us in being able to stop equipment from wandering, sometimes caused by theft but a lot of times just by equipment being misplaced. Now, automated alerts are delivered to the right people so that they can take action if these situations occur.

### ***Giving Staff the Ability to Find What They Need in Seconds***

Our staff never has to spend more than a few quick seconds to find an item. As an added benefit, the ability to tell if a piece of equipment is clean, in use, or in need of maintenance helps us become even more efficient. We have experienced substantial improvements in staff efficiency, and we get a tremendous conversion of Non-Value-Added to Value-Added time. We estimate we are adding tens of thousands of available "Value-Added Time" hours annually for our staff.

Since the beginning, we wanted to leverage the previous investments we made in hardware, software, and processes. We also needed a solution that could accommodate for our future growth and expansion. That is why we selected a flexible software platform rather than a single RTLS hardware technology (such as Wi-Fi or ultrasound). With Intelligent InSites' Enterprise Visibility Platform serving as a core foundation, we can collect data from multiple systems, including RTLS and other sensory network data, within the hospital. We can then use this data to drive process improvements which make a difference for our patients and staff.

Location-enabled asset management is just the beginning for our organization. We already plan

to enhance, with the use of the location and condition-sensing platform, approximately 30 different processes, including patient flow (ED, OR, Inpatient), bed management, staff duress/alert, automated sign-in/out and encounter documentation, and supply chain/inventory tracking.

In terms of results, we have experienced reduced equipment shrinkage, reduced rental expenses, and improved asset utilizations which translate into hard-dollar cost savings. But we are also able to gain operational insights in real time. Now each movement, interaction, and usage of equipment is documented and applied against logical rules that help us proactively identify where issues or process inefficiencies might exist. This information will be used to make decisions that will help us further reduce costs, improve revenues, and positively impact patient care.

Here are some additional comments from our staff:

*"I wish everything was tagged as then I would have no frustration at all. This is an incredible satisfaction for me and my staff as we don't waste valuable time looking for what we need to do our jobs."*

*"This system is a blessing for Biomed. We are now able to find and complete all our scheduled PM's on infusion pumps."*

*"Recent recall on IV pumps, we had one out of 600 that matched the serial numbers. I was able to go directly to that unit instead of going from pump to pump looking for the correct one. This saved me countless hours."*