



In the Spotlight

Jim Carpenter, R.Ph., M.S.

Clinical Decision Support Pharmacist

Regional Information Services

Providence Health & Services, Portland, Oregon

Biography

Jim Carpenter graduated from the Medical College of Virginia / VCU School of Pharmacy in 1992. In 2002, he earned an MS in Medical Informatics from Oregon Health and Science University. He recognized the impact that computerization of medication management could have in practice very early in his career and started to become interested in Medical Informatics. He was hooked after attending his first AMIA conference in 1996 in Washington, DC.

Jim was a staff Clinical Pharmacist at Richmond Memorial Hospital in Richmond, VA until 1997 and a Staff Pharmacist at Legacy Good Samaritan Hospital in Portland, OR from 1997-2002. From 2002 to 2004, Jim was the Pharmacy Operations Systems Specialist for Legacy, where he focused on BCMA implementation, establishment of a pharmacy clinical knowledge base, development of medication list – problem list mismatch algorithm for use by pharmacy staff, and automation planning for Legacy’s new Salmon Creek Hospital. Since 2004, Jim has worked as a Clinical Decision Support Pharmacist in Regional Information Services at Providence Health and Services, where he is primarily engaged in Computerized Physician Order Entry (CPOE) implementation.

Role

Jim is currently a Clinical Decision Support Pharmacist, supporting Providence’s implementation of CPOE for our eight hospitals in the Oregon Region. Providence has 28 hospitals in California, Oregon, Washington, Montana, and Alaska. The Providence Portland facility was the first to go forward with inpatient CPOE. While at Providence, Jim has served as CPOE team lead, has been engaged in a pilot effort for organization-wide Knowledge Sharing (social media), and is a member of enterprise Pharmacy, Patient Safety, and Clinical Informatics Councils. Since 2000, he has also served as a consultant in OHSU-based informatics research, the Physician Order Entry Team (POET) group led by Dr. Joan Ash. POET’s research focus has been on success factors, barriers, and unintended consequences around health information system implementation – particularly for CPOE. The group’s focus is now on decision support implementation within these systems.

The Journey to CPOE: Communication is Key

Very early in the CPOE journey for Providence they established a multidisciplinary Clinical Decision Support Committee to oversee clinical content development for the application. A very real challenge for his organization is getting multidisciplinary agreement on CPOE clinical content across all eight of their (geographically dispersed) Oregon region hospitals. Jim implemented a state-wide collaboration site (for Oregon) to support this – DSCIS: Decision Support Collaboration, Inventory, and Sharing (on a Sharepoint platform) - to support asynchronous collaboration and management of clinical content across the region through request, development, and implementation phases. The discussion forum allows for day to day vetting of clinical content simultaneously (as it is being developed) across all eight facilities without having to rely on email or conference calls. The platform maintains discussion context very well, and creates a searchable history of content discussions (who said what and when) as they go forward. They were able to cancel recurring Clinical Decision Support Committee meetings for a time and relied exclusively on having the DSCIS site be the only support for communications and content approval for the committee – a committee that has met twice monthly for years. However, they discovered that there is a loss of some of the conversation “richness” when relying on this forum exclusively. Content development decision-making, vetting, and communication for our eight facilities going forward will likely rely on a combination of the DSCIS site for day-to-day discussions and recurring (monthly) state-wide webinars.

Next Steps

After having implemented CPOE in the Providence Portland facility, Jim will begin working on rollout to other Oregon Region facilities. The idea is to take the successes from the Providence Portland facility and mirror these at the subsequent facilities. During this process the CPOE team has had terrific engagement from the pharmacy, the Director of the Hospitalist service and the Chair and key members of the P&T Committee. Getting engagement from specialty physicians remains a challenge.

Opportunities for Pharmacists Interested in Informatics

The American Recovery and Reinvestment Act (ARRA) funding and the Meaningful Use discussion “has invigorated the area of Clinical Informatics in a way that I’ve not seen before in my career,” said Jim. “Opportunities abound! Many health systems (and vendors) are desperate for pharmacists willing to contribute to these efforts. While the pace of system implementation is significantly accelerated, it’s vital that pharmacists be engaged and feel particular responsibility for building and implementing these products with patient care and patient safety as a primary mission.”

Challenges

The speed at which organizations want to roll out CPOE Systems can be a challenge. Jim warns that you have to be careful to just not meet timelines to meet timelines. “You have to keep in mind that in the end what you are doing is going to help improve patient care. Informatics pharmacists need to remain the champions for making sure patient safety is paramount in these systems.” Another challenge is finding the best way to engage extremely busy clinicians. The reality is that they don’t have the time or sometimes don’t appreciate the importance of their engagement in the development process.

Advice

Jim spent many years in the trenches before deciding to pursue a formal training program in Medical Informatics. There are several programs throughout the country for those interested in formal training. “I think most would agree that this is hardly a necessity, especially with the invigoration currently taking place in the industry,” said Jim. “Opportunities for chipping in on these projects are there, especially for experienced clinicians with an inclination to tackle technical projects. The Clinical Informatics team at Providence is made up almost entirely of clinicians, and they’ve always felt that it’s easier to train a clinician to do informatics-related tasks than to train a technically superior analyst to all of the nuances of clinical workflow, behaviors, and culture. Having clinically savvy staff that have a few years of staffing and real life pharmacy experience on the front lines is ideal.” In addition, an appreciation for unintended consequences that these systems may introduce is also very important.

The Value of ASHP Membership

“Membership in ASHP offers a tremendous opportunity to collaborate with other pharmacy informaticists, particularly through participation in the Section of Pharmacy Informatics and Technology. Participation in the Section has allowed me to stay current with other topics in Pharmacy Informatics outside of my current focus of CPOE and Clinical Decision Support implementation. Since it’s starting to be a few years since I’ve been engaged in front-line inpatient staffing, ASHP membership (via AJHP, list-servs, and new discussion boards) also allows me to stay up to date with other current topics in pharmacy practice.”