Section of
PHARMACY INFORMATICS
AND TECHNOLOGY

In the Spotlight – January, 2012

Name: John L. Woon, Pharm.D, FASHP
Title: Manager, Pharmacy Informatics
Work Location: Providence Sacred Heart Medical Center and Children's Hospital and Providence Holy Family Hospital, Spokane Washington

Biography

John Woon earned his undergraduate pharmacy degree at the University of Montana in 1980 and received his Doctor of Pharmacy from the University of Illinois at Chicago in 1995. During his career he has held a diverse range of clinical, academic and managerial positions. He has been very active professionally both on a state and national level being honored as a fellow of the American Society of Health-System Pharmacists in 1999.

John started his pharmacy career at Montana Deaconess Medical Center (MDMC) as a staff pharmacist in Great Falls, Montana. While at MDMC, he held a variety of clinical positions such as a pharmacology specialist and the clinical pharmacy coordinator before being promoted to the director of pharmacy in 1993. From Montana, John relocated to Portland, Oregon where he worked at Legacy Emanuel Hospital & Health Center as a neonatal clinical pharmacist. Over time, John transitioned to a position with Pfizer as a clinical education consultant. While working for Pfizer, he moved to the company's outcomes division, based out of their New York offices. . This work focused on pharmacoeconomics and outcomes projects. John's skills in computer technology were brought to full use as the senior manager of clinical applications. In this position, he was responsible for development of computer based modules used to assist providers globally with the collection and analysis of data for disease state management. In October 2000, John decided to venture fully into the realm of health care informatics as a co-founder and vice president of product management of Virtual Health Solutions, Inc., a chronic disease software and consulting company. He has since been the project lead for pharmacy services during the construction, licensing and staffing of Legacy Salmon Creek Hospital; and Clinical Associate Professor of Pharmacy for Idaho State University. Currently John is the pharmacy informatics manager for Providence Sacred Heart Medical Center and Children's Hospital and Providence Holy Family Hospital in Spokane, WA.

Role

As the pharmacy informatics manager, John is responsible pharmacy technologies that service 916 licensed patient care beds, an outpatient pharmacy and two anticoagulation/pharmacy therapy clinics. His informatics team includes three informatics pharmacist and two full time analysts. Currently John is involved in Providence Health & System's conversion to the EPIC system. This build will be installed in all Providence hospitals and clinics in Alaska, Montana, Oregon, Washington, and eventually California, including the Providence hospitals located in Spokane. He has contributed to this undertaking both operationally and clinically. In the initial phase of implementation, John was involved with the collaborative build group which determined the operational features and functions for the pharmacy department. He is also pharmacy lead for the hospital medicine clinical advancement team. This team is responsible for the development of hospital medicine order set content that will be used in the Providence hospitals. Additionally, John works with the pharmacy formulary workgroup and collaborates with other multidisciplinary groups to further optimize the electronic clinical decision systems within the Providence system.

Opportunities for Pharmacists Interested in Informatics

"The role of informatics pharmacists is to bridge the user to the electronic systems in place. John noted with the increasing number of electronic systems/applications within the healthcare environment, many health-systems are becoming even more data rich and information poor. Part of the clinical informatics role is to assist in making the data useful information. Additionally, advancing technology can create its own risks, such as the potential for busy users to over delegate responsibility to these computerized systems. This can create an over-reliance by end-users such as nursing, pharmacy, or physicians, to accept or react to displayed data without thorough consideration of the context of the data. Pharmacists who specialize in informatics provide insight from both the operational and clinical realms. Conceptually it seems easy, but there is so much of what a pharmacist processes on a day to day basis. When dealing with computerized systems it is very easy to lose sight on the practice environment that we are trying to support. Clinical decision systems (CDS) are rapidly changing with these systems continually becoming more robust and complex. Pharmacy informatics specialists have a fundamental role of making CDS more valuable from both a patient safety and an end-user perspective. "

Challenges

John stated one of the challenges of an informatics pharmacist is the traditional view of medical informatics. John is concerned that in the field of informatics,"pharmacy tends to be

somewhat marginalized in comparison to nursing and physicians. This is similar to the early days of clinical pharmacy when we were trying to convince people of the value of pharmacist in non-traditional roles. Additionally, we need to continue building close relationships with other medical informatics specialists [nurses, physicians, other health care professionals]". Another challenge is the sheer volume of the data that informatics pharmacists work with on a day to day basis. This is increasingly important as we become reliant on the abilities of computerized systems to generate more logic driven alerts and recommendations. "We have to be diligent to validate the data of any CDS that it is doing what we think it is doing. A primary risk of relying on a CDS is not the false positives, but the false negatives".

Advice

A pharmacist interested in informatics "should have experience and a good working knowledge of pharmacy operations as well as a love or interest in technology and its clinical applications". John notes that "this specialty area can be discouraging, as we tend to only hear about the problems", and not as much about the successes. Additionally, we must remind ourselves why this technology exists. "We have to be careful not get caught up in the attributes of the newest applications brought to market and remember why we are here in the first place, to provide best care possible for the patient without becoming overly complicated. . A pharmacy informatics specialist should keep their hands in the profession and always keep in contact with the end users. We must remember that "change is frequent, evitable, and uncomfortable", and informatics pharmacists must be "change agents" with the rapid implementation of new technologies. Lastly, "we need to continue to educate other healthcare providers of the realities and limitations of any new technology and help to identify what systems we should engage for solutions."

Value of ASHP

"ASHP has always been a well respected organization, and over the past 25 year or so it has become the centerpiece of advance pharmacy practice recognized worldwide. ASHP provides a highly credible and reputable voice, not only at the professional level but also at the legal regulatory level, and the cross discipline level having close working relationships other healthcare colleagues and other organizations. From an informatics standpoint it's great to belong to an organization with that level of visibility and credibility. Additionally, the value of ASHP originates from is its ability to address the needs members, providing opportunities in the many areas of health-system pharmacy practice, including informatics. This allows us to adapt professionally and keep up to date to rapidly developing changes."