Summer Seminar:

E-Commerce in Health Care
The Office of Health Policy and Clinical Outcomes held its 7th Annual Summer Seminar on July 13th at the Hotel Sofitel in Philadelphia. The half-day program, titled “Ecommerce in Healthcare: A Status Report,” featured five dynamic speakers, all of whom have made important technological contributions to the healthcare industry. The e-health experts shared their insights with an audience drawn from integrated delivery systems, managed care organizations, consulting companies, for-profit research groups, the pharmaceutical industry, and related healthcare organizations. The following summaries capture the key points of their presentations.

* * * * *

**David J. Shulkin, MD**  
**DoctorQuality, Inc.**  
by Dea Belazi, PharmD  
Abbott Laboratories Outcomes Research Fellow  
Office of Health Policy and Clinical Outcomes

The lack of healthcare information available to consumers might be one reason that patient satisfaction with quality of care is low. Viewed through a Six-Sigma lens, healthcare operates at a lower level than airline baggage handling, suggesting that 25 to 40 percent of medical care processes are inefficient. The mission of DoctorQuality is to improve the outcomes of healthcare by offering consumers enhanced access to personalized health information. The online service allows consumers to find a doctor using quality measures such as ease of making an appointment, patient satisfaction, and number of years the physician has been practicing. Users can also research hospitals and browse databases for pertinent information on diseases, treatments, tests, and medications. DoctorQuality believes that empowering consumers with information on healthcare services can help improve quality of care and reduce costs.

* * * * *

**Jeffrey S. Levy, MD**  
**MedCases**  
by Chureen T. Carter, PharmD  
Janssen Pharmaceutica Fellow  
Office of Health Policy and Clinical Outcomes

MedCases, Inc. uses technology as an effective tool for providing case-based learning to practicing physicians and teaching institutions. The company’s web-based programs feature simulated interactive patient encounters, threedimensional graphics of human anatomy, and other virtual learning tools. These types of programs offer many advantages. They provide medical students with a similar baseline of knowledge and exposure to a wider variety of patient cases. They allow private practitioners to obtain continuing medical education credits without leaving the office. And, they give pharmaceutical companies easy, online access to
physicians. The evidence-based content of each program is peer-reviewed, supported by current medical literature, and supplemented by textbooks. Physicians, medical schools, and medical publishers have all responded favorably to the product. MedCases currently covers five specialties in its curriculum and plans to launch at least 25 more over the next three years.

* * * * *

Steven P. James, MD, MBA
Acurian, Inc.

by Purna Lakhia, PharmD
GlaxoSmithKline Outcomes Research Fellow
Office of Health Policy and Clinical Outcomes

Patient participation in clinical trials is an important part of the drug development process. However, recruitment for these trials has become increasingly difficult due to the lack of an efficient method of communication between investigators and patients. With little direction, patients often rely on busy physicians for enrollment information. Inefficient processes and limited resources for both investigators and patients lead to high screen fail rates for trials, prolonging the expensive drug development process. At www.acurian.com, patients can learn about on-going NIH and industry trials and indicate interest in upcoming trials. In addition to a comprehensive clinical trial database, the site provides relevant news items, publications, and press releases, as well as an opportunity for patients to email physicians and other experts with questions about new medical therapies and treatment options. Acurian hopes that by attracting responsible and informed users, it can help increase participation in clinical trials as well as improve investigator-patient relationships.

* * * * *

Donald W. Rucker, MD
Siemens Medical Solutions

by Laura R. Wyatt, PharmD
Janssen Pharmaceutica Fellow
Office of Health Policy and Clinical Outcomes

Siemens Medical Solutions has a challenging role in the e-health market. In an effort to increase efficiency in hospitals, clinics, and physicians’ offices, Siemens has developed innovative products and applications, such as comprehensive electronic patient records and computerized physician order entry. While the hospital information systems of the past twenty years have been based on the premise of “result reports,” computerized physician order entry may be the way of the future. This technology is designed to close the intricate loop on medical administration, thereby decreasing medication turnaround times and reducing the risk of medication errors. Despite the setbacks of e-commerce this past year, Siemens believes that the Internet will continue to play an important role in the improvement our healthcare system.

* * * * *
E-commerce has changed the dynamics of patient, doctor, and manufacturer relationships. The patient, as a consumer, has assumed more responsibility for his or her choices. In effect, there is increased interaction between the patient and physician as they educate each other in an effort to arrive at mutual decisions. And, in response to a better-educated audience, manufacturers strive to achieve credibility while promoting their product. These new dynamics have resulted in a trend towards mass customization, which involves tailoring products to patient variability in efficacy and side effects. There is also a trend towards two-way communication or a "value web," in which manufacturers are in direct contact with customers, learning more about their individual needs. Both developments are key to the strategy behind e-health success, which is to maximize outcome benefits by offering a full range of products, services, and information in a personalized and vertically integrated on-line store.