

## Highlights from the Spring 2008 Applied Pharmacoeconomic and Outcomes Research Forum

The fourth Applied Pharmacoeconomic and Outcomes Research Forum was held April 21<sup>st</sup> at the University of California San Diego Faculty Club. The event was hosted by the Skaggs School of Pharmacy and Pharmaceutical Sciences and supported by grants from Allergan and Biogen Idec.

The topic for this Spring Forum was “**Using Large Databases to Inform Decision Making: Experience in Three Health Care Systems**”.

Four speakers, representing three perspectives of the health care system, described:

1. Types of large databases available in their organization
2. How data from these databases was being used to inform medical decision making
3. What types of decisions were being informed by data from databases

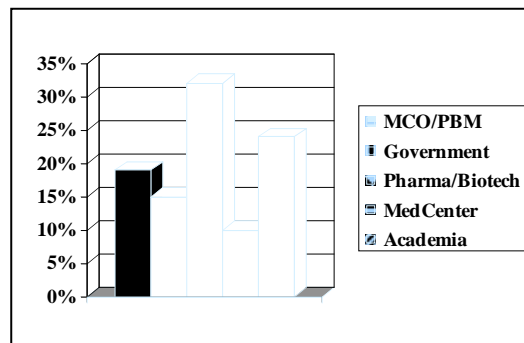
### **Speakers:**

Fran Cunningham, PharmD     Director, Center for Medication Safety PSCI  
Program Manager Pharmacoepidemiologic/  
Outcomes Assessment  
Department of Veterans Affairs PBM/SHG

Michele Spence, PhD             Pharmacy Outcomes Project Manager  
Randy Nakahiro, PharmD       Pharmacy Analytical Services  
Kaiser Permanente

Robert Schoenhaus, PharmD   Medication Use Evaluation Coordinator  
UCSD Healthcare Department of Pharmacy

Forum participants included representatives from managed care, government, pharmaceutical and biotech companies, medical centers and academia. Our moderator was Robert Schoenhaus from the UCSD Medical Center.



Participants were invited because of mutual interest in expanding the practical application of pharmacoeconomic and outcomes research to enhance decision-making.

Speaker slides are posted at <http://pharmacy.ucsd.edu/news.shtm> .

## **Summary Points**

### Department of Veterans Affairs PBM

- The VA has many integrated databases with linkages to their pharmacy database
- A wide range of data are available: demographic, diagnoses: medical and psychiatric resource utilization, laboratory data, medications, costs
- Databases used for medication safety projects, clinical decisions, and research such as:
  - Monitoring exposure rate and adverse drug reactions
  - Risk reduction programs for patients and providers

### Kaiser Permanente

- Kaiser has a wide range of data available similar to that in the VA system and limited clinical measurements such as blood pressure and smoking status are also available
- Special databases include registries (Cancer, Diabetes, HIV/AIDs) and surveys of KP physicians and patients
- KP HealthConnect is a program-wide system that integrates the clinical record with appointments, registration and billing allowing:
  - Example database uses:
    - Support drug use management initiatives and address safety questions
    - Investigate effects of patient cost-sharing
    - Evaluation of therapeutic interchange programs
    - Contribute to national policy regarding important public health issues
- Permanente Online Interactive Network Tools (POINT) examples:
  - Early Start: proactively targets pregnant women with positive tests for certain drug
  - Forecasting Database: pharmacists collect data and estimate future drug expenditures
  - Med-SMART: monitoring medication or guideline adherence (e.g. Accutane® prescription guidelines)

### UCSD Healthcare Department of Pharmacy

- The UCSD Medical Center is a unique environment for data mining, since there is no complete electronic medical
  - Data may live in multiple “silos” specific to the type of data (i.e., pharmacy, radiology, laboratory, etc.)
  - Compiling data from these different sources can be challenging, but rewarding if used to improve patient care
- Incorporating the various data available, several medication use evaluations have been completed that helped improve patient care and save resources
  - Reduction in marginal use of FVIIa within the Liver Transplant Service has reduced drug expenditure by >\$150K annually, while patient outcomes improved
  - Minimizing the use of aprotinin within UCSDMC cardiothoracic surgery has minimized risk of mortality and saved over >\$140K annually. The drug has

subsequently been removed from the US marketplace – validated the local decision

***Purpose of Applied Pharmacoeconomic and Outcomes Research Forums***

The number of individuals in the Southern California region with interest in pharmacoeconomics (PE) is growing rapidly across the healthcare system - from those involved with creation of PE data within pharmaceutical and biotech companies to those incorporating results into decision making within a plethora of managed care organizations. The region provides an excellent opportunity to gather individuals to debate issues, and propose solutions that are vetted from multiple perspectives – not just individual silos defined by employer.

The Applied Pharmacoeconomic and Outcomes Research Forum was created to facilitate this cross perspective communication. The goals of the forum are to:

1. Discuss commonly encountered obstacles to conducting or utilizing results of applied pharmacoeconomic studies and explore solutions from various perspectives of the health care system.
2. Create an environment and foundation to foster the creation of a Southern California Pharmacoeconomic and Outcomes Research Interest Group

The Forum is only one of the activities in our larger effort to promote the application of pharmacoeconomic and outcomes analyses to provide timely, actionable data for enhanced decision-making regarding the value of pharmaceuticals and medication related services for key across stakeholders in the U.S. health care system. Other activities include education, training, research, and dissemination activities, including Continuing Education Programs to support this goal.

Current steering committee members are:

Charles Daniels, R.Ph., Ph.D.  
UCSD Healthcare Department of Pharmacy

Jan D. Hirsch, R.Ph., Ph.D.  
UCSD, Skaggs School of Pharmacy  
& Pharmaceutical Sciences

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