Diabetics’ medication use and health outcomes linked

The utilization of and adherence to prescription medications essential to diabetes treatment are suboptimal among Medicare Part D enrollees with diabetes, according to UM School of Pharmacy researchers.

A research team in the Department of Pharmacy Administration and the Center for Pharmaceutical Marketing and Management reported its findings at a series of national and international presentations, including ISPOR and AcademyHealth.

In recent years, numerous clinical trials and epidemiological studies have demonstrated that adequate use of oral hypoglycemic agents, antihypertensive drug ACEI/ARBs, and statins can reduce the risk of diabetes-related complications and mortality. However, analysis of Medicare Part D claims data shows that many patients with diabetes enrolled in the Medicare Part D program in 2006 were not receiving these medications, or they were non-adherent to their prescribed medications.

According to studies conducted by the research team led by Drs. Noel Wilkin and Yi Yang, underutilization of and nonadherence to prescribed medications among Medicare Part D enrollees with diabetes are associated with a host of negative health outcomes, including all-cause hospitalizations, potentially avoidable hospitalizations, ER visits, and mortality, even after adjusting for patient demographic variables and comorbidities. With adherence to each additional class of medication as listed above, there was an 11.8 percent reduction in all-cause hospital admissions, a 9.7 percent reduction in all-cause ER visits, and a 6 percent reduction in all-cause mortality among Medicare Part D enrollees with diabetes. The research team is the first to report such findings. The research suggests that interventions should be developed to improve appropriate medication use among Medicare beneficiaries with diabetes so that these patients can achieve full benefits of pharmacological therapies.

ISPOR chapter created on campus

School of Pharmacy graduate students chartered the first ISPOR (International Society for Pharmacoeconomics and Outcomes Research) chapter at The University of Mississippi during the spring semester. President Clive Mendonca and faculty adviser Dr. Yi Yang represented the department at the ISPOR national meeting in May. The student chapter meets monthly and provides a forum for a journal club. If you are interested in speaking at an ISPOR student chapter meeting, please contact Dr. Yang at yiyang@olemiss.edu.
Greetings from the Department of Pharmacy Administration at The University of Mississippi. As a graduate of this program in 1999, I was thrilled to return as department chair last year. I completed my B.S. in pharmacy and Ph.D. in pharmacy administration from UM and then spent nine years at the University of Arkansas for Medical Sciences. I am excited to be back in the department, working with such talented faculty to provide excellent education opportunities and develop funded research programs. I would like to share with you some of the department highlights from this past year.

The department celebrated Dr. Dewey Garner’s retirement on January 30, 2009. Dr. Garner provided more than 40 years of exemplary service to this department and made such a positive difference in many of our lives. He is enjoying his retirement and still visits regularly to say hello. The department is now recruiting a new assistant professor to fill the vacant position left by his retirement.

This past year has been productive. The department faculty and graduate students obtained funding for seven research projects, made more than 25 presentations at national conferences, and published 10 articles/book chapters. We are also developing pharmacy administration electives and providing summer research experiences for pharmacy students. Additionally, we are proud of the achievements of the graduate students. They continue to present their research at national meetings and receive recognition for the quality of their work. Three students participated in summer internships at Novo Nordisk, Agency for Healthcare Research and Quality, and Medical Marketing Economics.

As Pat Summit (University of Tennessee women’s basketball coach with more than 1,000 career wins) says, “You win with people.” That is true for this department as well. Our success is because of the dedicated faculty, staff, graduate students, and alumni working together to improve the use of pharmaceuticals in this country. I invite you to continue to be involved with the graduate program. If you would like to present a workshop on campus to the students, host a summer intern, or speak at a department seminar, please let me know. If you know of someone who is looking at graduate programs, please encourage him or her to contact me. We would be glad to host prospective students on campus.

Again, thanks for your continued support. It is an exciting time here in the department, and I encourage you to visit.

Donna West-Strum
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Special Events

Graduate student Ram Sankar Basak was married to Surma on August 7, 2008, in Kolkata, India.

Dr. Alan Spies was married to Laurie Gore on March 14, 2009.

Cachetyn King was born on November 7, 2008, to Dr. Sean King and Suzanne King.

William Bouldin was born on November 17, 2008, to Jason Bouldin and Dr. Alicia Bouldin.

Diego Roberto Torres was born on December 8, 2008, to Leonardo Torres (graduate student) and Meigian Torres.

Dev Amit Patel was born on May 7, 2009, to Drs. Amit and Mansi Patel.

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Judges charmed by snake

Alicia Bouldin, associate professor of pharmacy administration, and her husband, Jason Bouldin, won “Most Unique” in the Oxford Fourth of July Parade for their entry titled “Flags of the American Revolution, A Historical and Patriotic Presentation.” Several faculty members helped fill out the snake.
Research Spotlight
Doctors less skeptical of convention exhibits

A research study conducted by a professor and a graduate student in pharmacy administration found that physicians are less skeptical of information received at medical exhibitions than they are of marketing from field sales representatives or medical journal advertisements.

Associate Professor of Pharmacy Administration David McCaffrey and graduate student Su Bunniran presented their findings at the Healthcare Convention and Exhbitors Association (HCEA) Annual Meeting in Tampa, Fla., June 13-16. The report “Pharmaceutical and Medical Device Marketing Efforts: Messages Lost in Skepticism?” was underwritten by HCEA’s research grant program.

The overall objective of the study was to examine physicians’ attitudes toward information provided through various points of contact. Specifically, skepticism toward marketing messages was examined when communicated by medical convention exhibitors, field sales representatives, and medical journal advertisements. Additionally, this study addressed differences in the marketing of pharmaceuticals and the marketing of medical devices. Comparison of these three marketing contact points (primary promotional methods targeting physicians) provided a clearer understanding of physicians’ attitudes/receptivity to marketing messages when delivered using different media. Ultimately, this information can be used to inform key decision makers in not only the creation of marketing messages but also in the allocation of promotional resources.

Using a self-reply survey, 453 physicians responded to prompts of the degree of skepticism with which they view marketing messages. For both medical device and pharmaceutical companies, exhibitions were viewed with slightly less skepticism than field sales calls—and significantly less skeptically than journal advertisements. Although there were no significant differences between skepticism of information shared by sales representatives versus information shared at medical exhibits, this finding would appear to strengthen the position of medical exhibits in the overall marketing mix. As it becomes increasingly difficult and expensive to penetrate physician offices and the stringency of guidelines on promotional interaction becomes more apparent, this study points to evidence of a potential viable promotional alternative that may serve to be a more effective means of communicating with a target audience that desires effective and useful information.

Eric Allen, HCEA executive vice president, said the study helps answer questions about the effectiveness of healthcare convention marketing versus other forms of marketing. For more information on this study, go to www.hcea.org.

Oxford business owner named Alumnus of the Year

Dr. Mick Kolassa was recognized as the Department of Pharmacy Administration Alumnus of the Year during the School of Pharmacy Alumni Weekend.

Kolassa is chairman and managing partner of Medical Marketing Economics, LLC. In addition to his business accomplishments, his current academic contributions include adjunct positions at the UM School of Pharmacy and the University of the Sciences in Philadelphia.

Kolassa received his doctorate in pharmacy administration from UM in 1995 and has authored several articles and book chapters on pharmaceutical marketing and pricing, including the book The Strategic Pricing of Pharmaceuticals.
Update from the CPMM

As some of you may know, I worked in the private sector for seven years and returned to Ole Miss as a research professor in the Center for Pharmaceutical Marketing and Management (CPMM) in June 2007. This past February, I was named director of the CPMM, which is one of the two centers that comprise the Research Institute of Pharmaceutical Sciences at this time. We have been working hard to restore the research infrastructure that had previously been provided by the Pharmaceutical Marketing and Management research program and to add new infrastructure support for our big push into pharmacoepidemiology and pharmacovigilance research.

Pat Pace has worked hard this year to establish a CPMM computer network and lab that provides the security and statistical support needed for our work with large claims data sets containing personal health information (PHI). The CPMM network currently houses a full set of 2002-04 administrative claims for the Mississippi Medicaid program, and, this fall, we will install a 2006-07 set of claims (including Part D) for a national sample of Medicare beneficiaries. With these data repositories, we are effectively competing on grants and contracts for pharmacoepidemiology and pharmacovigilance research projects.

The CPMM also has a major project underway with the department that promises to help community pharmacies become more competitive and efficient while at the same time increasing the level of patient care provided. We plan to finish edition one of our RxSync for Pharmacies™ workbook, which will assist community pharmacies in adopting the RxSync Service. At this time, we have a grant to implement and evaluate the impact of the service model in five community pharmacies.

With the completion of the first edition of the workbook, we will begin negotiations for distribution agreements and will start a major push to establish a national network of RxSync Pharmacies™.

This is a very exciting time for the CPMM and its relationship with the department. With both units housed in the new swing space at the back of Faser Hall, we are physically and programmatically integrated to a level we wished for, but we were never able to achieve before. If you ever get a chance to visit or call, we would welcome a chance to tell you more about the exciting research activities happening in the CPMM and the department.

Benjamin F. Banahan
CPMM Director

Department welcomes newest faculty member

The newest addition to Oxford’s pharm ad family is Dr. Erin Holmes. She is a graduate of our program (Ph.D., 2008) and completed her Pharm.D. at Duquesne University’s Mylan School of Pharmacy. She currently teaches the Pharmacy Law and Pharmacy Management classes to second-year professional Pharm.D. students and will be teaching pharmaceutical and healthcare policy in the graduate curriculum.

In addition to her teaching activities, Holmes is involved in a number of funded research projects, including RxSync™ Service Implementation and Evaluation Project (funded by Cardinal Health, $125,000); Community Pharmacy Technicians’ Emotional Labor and Resultant Work Life Outcomes (funded by AACP-AFPE New Investigator Program for Pharmacy Faculty, $10,000); and Managing Pharmacy Workflow to Improve Medication Adherence and Other Patient Outcomes (funded by National Community Pharmacists Association, $20,000).

Not only does Holmes have an impressive record of publications and presentations, but she is also an active participant in professional service. She currently serves on the editorial board for Research in Social and Administrative Pharmacy and as a peer reviewer for the Journal of the American Pharmacists Association and Research in Social and Administrative Pharmacy, and she serves as one of five pharmacy faculty as a pre-pharmacy adviser.

Holmes’s research and teaching interests are far-reaching. These include organizational behavior and human resource management issues in pharmacy. Other research interests include pharmacy compounding, entrepreneurship, pharmacy workflow, inventory management, and pharmacy student mentoring.

Although she is just completing her first year as a faculty member, she has already chaired one thesis committee and is a member of a second thesis committee.

The department is lucky to have such a talented individual, and we look forward to many more successes with our newest team member.
Dr. Dewey Garner received the A. Richard Bliss Grand Council Citation of Appreciation from Kappa Psi earlier this year at the APhA annual meeting. The award is presented as a public recognition of extraordinary contributions to the professional fraternity. As a member of Kappa Psi, Garner has held nearly every national office, including Grand Regent, and has served as a member of nearly every national committee. He also received the Hall of Fame award from the Mississippi Pharmacists Association.

Dr. John Bentley received recognition as an APRS-APhA Fellow at the APhA annual meeting in San Antonio, Texas.

Dr. Noel Wilkin was appointed associate provost at The University of Mississippi. Wilkin previously was chair of the School of Pharmacy’s Department of Pharmacy Administration and director of the Center for Pharmaceutical Marketing and Management.

Dr. Kyle Null was awarded the William E. Farlow Fellowship for 2009-10 by the department faculty. Null will receive funding to help support his thesis project as well as a plaque.

Medical Marketing Economics LLC, a consulting group based in Oxford, has committed $350,000 to support the School of Pharmacy. Part of this gift will be used to create and endow the MME Fellowship in Pharmacy Administration. The department expresses gratitude for MME’s support.

Graduate student Clive Mendonca was named Teaching Assistant of the Year by the P-3 pharmacy class at the School of Pharmacy awards assembly.

Su Bunniran, who is currently completing her comprehensive exams, was awarded the Graduate Achievement Award from UM. She received the award during the Honors Day Convocation on April 2. The award is based on academic performance and contribution to teaching and research.

Drs. John Bentley and Alicia Bouldin were named Thelma H. Cerniglia Distinguished Teaching Scholars by the School of Pharmacy. This award is designed to honor and reward faculty who have consistently demonstrated significant contributions to teaching.

Dr. John Bentley received his M.S. in biostatistics in summer 2008 from the School of Public Health at the University of Alabama at Birmingham (UAB). He is currently working on his Ph.D. in biostatistics. He was named the outstanding Master’s Student of the Year for the UAB School of Public Health and was initiated into Delta Omega, the Honorary Society in Public Health.
Glimpse at graduate students’ research

The department currently boasts 14 graduate students who are actively involved in research and teaching. Additionally, we are getting ready to welcome five new students in the fall. This will be one of the largest groups of graduate students we have had in the program recently. The department would like to thank Dr. David McCaffrey who served as graduate program coordinator this past year and facilitated a positive experience for the students and student applicants.

Amos S. Athavale (BSPh 08) is working on his thesis, “Relationships among Dimensions of Pharmacy Attachment and Perceived Switching Behavior in Response to the Promotion of a New Pharmacy Service” (adviser: Dr. Benjamin Banahan). He is also working on pharmaceutical market analyses for new drug molecules developed at the School of Pharmacy.

Ram Sankar Basak (BSPh 09) spent the summer working as an intern at Novo Nordisk Inc. in Princeton, N.J. He is also working on his thesis, “Off-label Prescribing in U.S. Hospitals—a survey of Hospital Pharmacists,” with Dr. McCaffrey.

Suvapun Bunniran (BSPh 03, MS 06) is working on her dissertation on social networks and health information with Dr. McCaffrey. Bunniran’s primary research area includes peer influence on patient behavior, public relations in the healthcare arena, and pharmaceutical marketing.

Leigh Ann Bynum (BA 93, MS 95) is pursuing her Ph.D. with an emphasis in management. Bynum’s primary research interests are in psychological contracts, equity sensitivity, employee satisfaction, and work-flow management.

Krutika Jariwala (BSPh 08) is pursuing her master’s degree and working on her thesis, “Perceived Barriers Related to Mississippi Physicians’ Adoption of Electronic Prescribing” (adviser: Dr. Erin Holmes). Her primary research interests include electronic health records, patient safety, and health outcomes research.

Tasneem Lokhandwala (BSPh 08) is pursuing her Master of Science. She is oriented toward health outcomes research and pharmacoeconomics. She is currently working on her thesis titled “Statins and Their Effect on the Outcomes of Asthmatic Patients.”

Clive Mendonca (BSPh 05) is working with Dr. McCaffrey on his thesis, “Condition-specific and Product-specific Direct-to-Consumer Drug Advertising: An Investigation of Post-exposure Information Search Behavior.” Mendonca is part of the team examining quality intervention measures using Medicare and Medicaid data.

Kyle D. Null (PharmD 05) is working on his thesis, “Consumer Adoption of Health-related Technologies: Incorporating Perceived Health Risk into the Technology Acceptance Model” (adviser: Dr. Alicia Bouldin). Null is also working on a project evaluating the utility of Medicare claims data for post-marketing surveillance.

Tushar Padwal (BSPh 07) is pursuing his Master of Science with a marketing emphasis. Padwal’s primary research interests are in drug pricing and health-outcomes research. His thesis is titled “Understanding Pharmacy School Selection Criteria of Graduate Students in Pharmaceutical Sciences” (adviser: Dr. McCaffrey).

Douglas Paul (PharmD 98) is working on his dissertation regarding patient belief formation (adviser: Dr. Noel Wilkin). Paul is also a partner at Medical Marketing Economics, a company built with three other Ole Miss pharmacy administration graduates that develops value-based strategies for pharmaceutical companies.

Philip Schwab (BSPhS 01) is completing his thesis, “Tobacco Sales in Pharmacy: An Examination of the Relationship Value of Customers Who Purchase Cigarettes in Retail Pharmacies” (adviser: Dr. John Bentley). He is also working on a proposal for a project to examine the effect of prescription drugs on heat-related injury in athletes.

Vennela Thumula (BSPh 05) is working on her thesis to explore the epidemiology of type II diabetes in children and adolescents in a Mississippi Medicaid population and to conduct a cost analysis of pediatric type II diabetes from Medicaid’s perspective (adviser: Dr. Yi Yang).

Leonardo Roberto Torres (BSPh 93) is working on his thesis, “Opioid Pain Medications: Pharmacists’ Use of Available Information When Deciding Prescription Validity,” with Dr. Wilkin. Torres’s primary research interest includes behaviors by pharmacists, patients, and physicians as influenced by decisions.

Sumit Verma (BSPh 08) is pursuing his Master of Science degree. His research interests include patient decision making, factors that drive demand for pharmaceutical products, and forecasting of new drug products. Also as a part of his thesis, he is looking at the “value drivers for inhaled insulin as perceived by diabetic patients.”
Faculty research presented at major national meetings

The Department of Pharmacy Administration was well-represented in a wide variety of professional meetings throughout the country during the 2008-09 academic year. Some of those presentations are listed here:


Dr. Yang presents at AACP, July 2009.

Graduate students present at ISPOR, May 2009.
Who doesn’t remember a time when you got something more than initially expected? Thanks to the generosity of alumni and friends, pharmacy administration graduate students benefit from learning opportunities beyond the classroom. The graduate program is considered one of the best because students have opportunities to pursue innovative research ideas, network with leaders in the pharmaceutical industry, and engage in summer internships. Many of these opportunities are available because of the department’s alumni and friends.

Financial donations have strengthened the graduate program. Donations have been used to assist students in completing their dissertation projects as well as attend regional and national meetings. Five students presented posters at national meetings this past year. Additional computers and software programs also were purchased with donated funds.

Please consider a gift of your time or talents to enhance the graduate student experience. It doesn’t take much. Our alumni are the foundation of our program, and your little something extra will help us build for the future. If you would like to contribute to the graduate program, please contact Sarah Hollis at shollis@olemiss.edu (662-915-1584) or Donna West-Strum at dswest@olemiss.edu (662-915-1071).

Pharmacy Alumni Weekend is scheduled for March 26-27, 2010. All alumni and friends of the school are asked to mark their calendars for the weekend’s events.

Weekend festivities will kick off with the return of the School of Pharmacy Golf Tournament, followed by the Dean’s Reception. For those graduates who are sports fans, the 2010 Pharmacy Weekend will also feature a home baseball series against the Florida Gators. For more information about the weekend, contact Scott Thompson at thompson@olemiss.edu or 662-915-7375.