

## ***JMCP Award for Excellence***

The Academy of Managed Care Pharmacy approved the creation of the *JMCP Award for Excellence* in 2002. This award recognizes the article published in each calendar year that represents the best scholarly work in managed care pharmacy. The inaugural award was presented at the Awards Dinner at the Annual Meeting in Minneapolis in April 2003 for the best article published in calendar year 2002.

### **Process**

Each member of the *JMCP* Editorial Advisory Board nominates 1 or 2 articles for consideration by the judges, with justification for each nomination. A new 7-member panel of judges is convened each year, composed of 3 members of the Editorial Advisory Board and 4 *JMCP* peer reviewers who have contributed high-quality reviews. The nominated articles are evaluated by the 7 judges according to the following measures and relative weights:

1. impact on the profession or knowledge (30%)
2. scientific merit and sound methodology (30%)
3. relevance to managed care pharmacy today (20%)
4. clarity of purpose and hypothesis (10%)
5. writing quality and readability (10%)

### **Judges**

The following have served as judges for the *JMCP Award for Excellence*:

J. Daniel Allen, PharmD Robert	Steven J. Kogut, PhD, MBA
J. Anderson, PharmD Kurtis	Greg Low, BPharm, PhD
Andrews, PhD, MSPH Mitchell	Alan Lyles, ScD
J. Barnett, PharmD, MS	Daniel C. Malone, PhD, RPh
Christopher F. Bell, MS	Bradley C. Martin, PharmD, PhD
Joshua Benner, PharmD, ScD	Brenda R. Motheral, PhD
Gary Besinque, PharmD, FCSHP	C. Daniel Mullins, PhD
Diana I. Brixner, PhD	Robert P. Navarro, PharmD (twice)
Leslee J. Budge, MBA	Robert L. Ohsfeldt, PhD
Scott A. Bull, PharmD (twice)	Daniel A. Ollendorf, MPH
David Calabrese, MHP, RPh	Steven Pepin, PharmD, BCPS
Michael Callahan, PhD	Mary Jo Pugh, PhD, RN
Cathryn Carroll, PhD, MBA	Brian J. Quilliam, PhD, RPh (twice)
Norman V. Carroll, PhD	Marsha Raebel, PharmD
Mark Conklin, PharmD, MS	Liang Ruey-Tu, MS
Eric J. Culley, PharmD, MBA	Jordana Schmier, MA
Timothy Cutler, PharmD	Fadia Shaya, PhD, MPH
Gregory W. Daniel, PhD, RPh	Marvin D. Shepherd, PhD, RPh
Thomas Delate, PhD	Jason C. Simeone, PhD
Melissa S. Denno, PharmD	Denise R. Sokos, PharmD, BCPS
Joseph DiCesare, PhD	Brent Solseng, PharmD
Lisa Edwards, PharmD	Joshua J. Spooner, PharmD
Kathleen A. Fairman, MA	Linda M. Spooner, PharmD
Patrick R. Finley, PharmD, BCPP	Catherine I. Starner, PharmD
Leslie Fish, PharmD	Marilyn Stebbins, PharmD
Patrick P. Gleason, PharmD, FCCP, BCPS	Karen M. Stockl, PharmD
Charnelda L. Gray, PharmD, BCPS	Kent H. Summers, RPh, PhD
Zafar Hakim, PhD	Burgunda V. Sweet, PharmD
Ann S. M. Harada, PhD, MPH	Connie A. Valdez, PharmD, MSED
Noelle K. Hasson, PharmD, RPh	Robert J. Valuck, PhD
Mark A. Jackson, BScPhm	Peter Whittaker, PhD
Jan Kavookjian, PhD, MBA	Vincent Willey, PharmD
Kristin Khalaf, PharmD	Karen Worley, PhD
Richard A. Kipp, MAAA	

## Current Year (2012) JMCP Award for Excellence

### ***Evaluation of a program to improve diabetes care through intensified care management activities and diabetes medication copayment reduction***

The authors of this award-winning article were employed by the University of Rhode Island (Kingston, Rhode Island), Peninsula Regional Medical Center (Salisbury, Maryland) and Blue Cross & Blue Shield of Rhode Island (Providence, Rhode Island) at the time that this research was conducted:

Stephen J. Kogut, PhD, MBA, Associate Professor, University of Rhode Island  
Brian J. Quilliam, PhD, Associate Professor, University of Rhode Island  
Scott Johnson, PharmD, MS, Staff Pharmacist, Peninsula Regional Medical Center  
Tara Higgins, BS Pharm, Clinical Pharmacist, Blue Cross & Blue Shield of Rhode Island

This article was selected for the 2012 Award because it is one of the first studies assessing the clinical and economic impact of a diabetes incentive program featuring diabetes medication copayment reduction with disease management compared to a usual care concurrent control group in a real world managed care setting.

The study sample consisted of 9,698 patients with diabetes; 9,049 (93.3%) patients were identified by the insurer as patients with diabetes receiving usual care (nonintervention group) and 649 (6.7%) whom participated in the diabetes incentive program intervention offered to large employer groups and featured reduced copayments (from \$7/\$25/\$40 for generic, tier 2, and tier 3 drugs, respectively, to \$0 for generic and \$0-\$2 for brand drugs) for diabetes-related medications. Intervention patients received personalized support provided by a registered nurse and dietician, disease-related education provided by nurses, and intensified case management services, including working with a health coach to establish healthy behavioral change goals.

Patients in the intervention and nonintervention groups were similarly likely to have all 5 recommended processes of care performed (40.1% vs. 38.9%, respectively,  $P = 0.543$ ). Younger patients received all 5 recommended care processes less frequently than older patients (30.5%, 38.0%, and 47.0% for ages 18-48 years, 49-59 years, and 60 years or older, respectively,  $P < 0.001$ ); in adjusted analyses, patients aged 60 years or older were approximately twice as likely to receive all 5 care processes compared with patients aged 18-48 years (odds ratio [OR] = 1.97, 95% CI = 1.75-2.21). Users of oral antidiabetic monotherapy were least likely to have these processes of care performed compared with users of multiple oral therapies (OR = 1.23, 95% CI = 1.11-1.36) and insulin (OR = 1.59, 95% CI = 1.41-1.78). Per Person Per Year (PPPY) prescription drug costs incurred by the plan were greater for intervention than comparison patients (means [SDs] of \$3,139 [\$3,426] vs. \$2,854 [\$3,938], respectively,  $P < 0.001$ ); and the generic-dispensing ratio was slightly lower (means [SDs] of 62.1% [22.4%] and 65.4% [23.0%], respectively,  $P < 0.001$ ). There were no significant differences between the intervention and comparison groups in mean [SD] PPPY all-cause medical care costs (\$7,475 [\$17,601] vs. \$8,577 [\$22,972], respectively,  $P = 0.213$ ) or total all-cause costs (\$10,613 [\$18,590] vs. \$11,431 [\$24,060],  $P = 0.666$ ).

Although the study did not find a positive correlation between participation in a diabetes incentive program (i.e., drug copay reduction coupled with disease management participation) and an improvement in recommended care or lower costs it is an important addition to the literature as it helps managed care providers understand the short-term (12 month) program expected impact. The lowering of diabetes drug copayments in this study is synonymous with the tenets of value-based insurance design (VBID) and thus this study provides managed care decision makers and self-insured employer human resources personnel new knowledge about the impact VBID and disease management programs can provide in total health care costs and recommended processes of care performed.

The award-winning article was published in the May 2012 issue of *JMCP*: Kogut SJ, Johnson S, Higgins T, Quilliam B. Evaluation of a program to improve diabetes care through intensified care management activities and diabetes medication copayment reduction. *J Manag Care Pharm*. 2012 May;18(4):297-310.  
<http://www.amcp.org/JMCP/2012/May/15165/1033.html>

**Honorable Mention 1 of 2 articles in 2012:**

**Generic drug discount programs: are prescriptions being submitted for pharmacy benefit adjudication?**

This article was written by researchers employed by Prime Therapeutics (Eagan, Minnesota) at the time that this research was conducted:

Alexandra Tungol, PharmD, Managed Care Pharmacy Practice Resident  
Catherine I. Starner, PharmD, BCPS, CGP, Senior Health Outcomes Researcher  
Brent W. Gunderson, PharmD, Principal Health Outcomes Researcher  
Jeremy A. Schafer, PharmD, MBA, Senior Director of Specialty Solutions—Mfr Relations  
Yang Qiu, MS, Clinical Statistician  
Patrick P. Gleason, PharmD, BCPS, FCCP, Director of Health Outcomes

The judges selected this article for *honorable mention* because of its analytic assessment of the potential impact generic drug discount programs may have on managed care pharmacy programs. Like the award-winning article, this article uses real world data to address a managed care pharmacy issue, examining the impact of generic drug discount programs in a meaningful way with recommendations for the future.

The article was published in the November/December 2012 issue of *JMCP*: Tungol A, Starner CI, Gunderson BW, Schafer JA, Qiu Y, Gleason PP. Generic drug discount programs: are prescriptions being submitted for pharmacy benefit adjudication? *J Manag Care Pharm*. 2012 Nov;18(9):690-700.  
<http://www.amcp.org/JMCP/2012/November-December/15882/1033.html>

**Honorable Mention 2 of 2 articles in 2012:**

**Rosiglitazone Prior Authorization Safety Policy: A Cohort Study.**

This article was written by researchers employed by Prime Therapeutics (Eagan, Minnesota) and Florida Blue (Jacksonville, Florida) at the time that this research was conducted:

Catherine I. Starner, PharmD, BCPS, CGP, Senior Health Outcomes Researcher, Prime Therapeutics  
Beckie A. Fenrick, PharmD, Director, Clinical Pharmacy Programs, Florida Blue at the time research was conducted  
John Coleman, PharmD, Clinical Pharmacist, Florida Blue  
Peter Wickersham MS, MBA Senior Vice President, Cost of Care, Prime Therapeutics  
Patrick P. Gleason, PharmD, BCPS, FCCP, Director of Health Outcomes, Prime Therapeutics

The judges selected this article for *honorable mention* because it is one of the first publications assessing the impact of a safety Prior Authorization policy. Like the award-winning article, this article uses real world data to assess a managed care program. The study assess both the pharmacy utilization patterns and the financial impact of a safety prior authorization policy compared to a concurrent comparison population.

The article was published in the April 2012 issue of *JMCP*: Starner CI, Fenrick B, Coleman J, Wickersham P, Gleason PP. Rosiglitazone Prior Authorization Safety Policy: A Cohort Study. *J Manag Care Pharm*. 2012 Apr;18(3):225-233.  
<http://www.amcp.org/WorkArea/DownloadAsset.aspx?id=14970>

## Past Award Winners

### 2011 JMCP Award for Excellence

The 4 authors of this award-winning article were employed by Express Scripts (St. Louis, Missouri) at the time that this research was conducted:

Anna Vlahiotis, MA, Senior Manager, Health Services Research

Scott T. Devine, PhD, Director, Health Services Research

Jeff Eichholz, PharmD, Director, Clinical Programs

Adam Kautzner, PharmD, Director, Clinical Programs

This article was selected for the 2011 Award because of its high relevance to managed care pharmacy in the study of clinical and cost outcomes in the important therapeutic area of major depressive disorder. This study of patients with major depressive disorder found that drug therapy discontinuation in the first 6 months of initial use was not significantly different for users of generic versus brand selective serotonin reuptake inhibitors (SSRIs) or selective norepinephrine reuptake inhibitors (SNRIs). Within the first 180 days, the discontinuation rate was 44.2% for 8,704 patients starting on generic SSRIs/SNRIs versus 46.8% for 7,955 patients initiating therapy with brand SSRIs/SNRIs ( $P=0.006$ ). Although the unadjusted discontinuation rate was higher among users of brand SSRIs/SNRIs, the adjusted odds of discontinuation did not differ significantly for generic drug users compared with brand drug users (odds ratio=1.09, 95% confidence interval=0.98-1.22).

The similar clinical outcome at 6 months for generic and brand drug users was accompanied by lower costs in all 4 measures: antidepressant drug costs, total drug costs, depression-specific total health care costs, and all-cause total health care costs. All costs were defined as allowed charges, including patient cost and health plan cost, and all cost comparisons were adjusted for covariates (e.g., age, gender, Charlson Comorbidity Index score). Adjusted mean antidepressant drug costs for payers and patients were 44% lower over the first 6 months of follow-up for generic (\$174) versus brand (\$309) SSRI/SNRI users, and adjusted mean all-cause pharmacy costs were 21% lower (\$761 vs. \$965, respectively). The generic versus brand SSRI/SNRI users also incurred 29% lower depression-specific total health care costs (\$803 vs. \$1,125, respectively) and 20% lower all-cause total health care costs (\$3,660 vs. \$4,587, respectively).

This article adds to the literature in support of the comparative effectiveness of the most commonly used generic versus brand antidepressants, and this study assessed thoroughly the patient and payer costs in drug-specific, and total disease-specific and all-cause health care costs. This study adds to our knowledge of the clinical comparability of generic and brand antidepressants and supports fundamental managed care interventions including therapeutic selection, step therapy, and prior authorization.

The award-winning article was published in the March 2011 issue of *JMCP*: Vlahiotis A, Devine ST, Eichholz J, Kautzner A. Discontinuation rates and health care costs in adult patients starting generic versus brand SSRI or SNRI antidepressants in commercial health plans. *J Manag Care Pharm*. 2011;17(2):123-32.

<http://www.amcp.org/JMCP/2011/March/9010/1033.html>

**Honorable Mention** for 1 article in 2011:

### **Analysis of the Comparative Effectiveness of 3 Oral Bisphosphonates in a Large Managed Care Organization: Adherence, Fracture Rates, and All-Cause Cost**

This article was written by researchers employed by WellPoint (Indianapolis, Indiana) and HealthCore (Wilmington, DE) at the time that this research was conducted:

Karen E. Martin, PharmD, MBA, CGP, Senior Drug Information Specialist

H. Eloise Campbell, BS, PharmD, Senior Drug Information Specialist

Jacob Abarca, PharmD, MS, Outcomes Research Scientist

T. Jeffrey White, PharmD, MS, Director, Drug Evaluation and Clinical Analytics

Jingbo Yu, MHA, PhD, Senior Research Analyst, HealthCore, Inc.

The judges selected this article for *honorable mention* because of its assessment of the comparative effectiveness of 3 bisphosphonates using multiple measures including medication adherence and fracture

rates, as well as all-cause total health care costs. As with the award-winning article, this research assessed patient and payer cost by using health plan allowed charges.

The article was published in the October 2011 issue of *JMCP*: Martin KE, Yu J, Campbell HE, Abarca J, White JT. Analysis of the comparative effectiveness of 3 oral bisphosphonates in a large managed care organization: adherence, fracture rates, and all-cause cost. *J Manag Care Pharm*. 2011;17(8):596-609. [http://www.amcp.org/JMCP/2011/October\\_2011/12813/1033.html](http://www.amcp.org/JMCP/2011/October_2011/12813/1033.html)

### **2010 JMCP Award for Excellence**

#### ***Addition of Generic Medication Vouchers to a Pharmacist Academic Detailing Program: Effects on the Generic Dispensing Ratio in a Physician Hospital Organization***

The 3 authors of this award-winning article are employed by Advocate Physician Partners in Mount Prospect, Illinois:

Vinay Bhargava, PharmD

Mark E. Greg, PharmD

Mark C. Shields, MD, MBA

This article was selected for the 2010 Award because of the importance of generic drug utilization in pharmacy benefits, and because this research adds to the medical literature on the understudied subject of interventions intended to increase the generic dispensing ratio (GDR). The research described a generic voucher intervention in which patients received copayment waivers for 8 specific medications including citalopram, sertraline, and simvastatin. The research was conducted in a physician-hospital organization (PHO) composed of approximately 2,900 physicians and 7 hospitals. The study sites were 21 of 300 primary care physician (PCP) practices with at least 2 physicians each that had both high prescription volume and relatively low GDRs. These 21 PCP practices were randomized to an intervention group that received academic detailing plus vouchers for 8 generic medications or to the control group that received academic detailing only. After attrition from the PHO, 9 PCP medical practices remained in each of the 2 groups for follow-up.

The GDR for all drugs including the 8 voucher drugs in the intervention group increased by 7.4 points from 53.4% in the 9-month baseline period to 60.8% in the 9-month voucher period, versus a 6.2-point increase for the control group from 55.9% during baseline to 62.1% in the voucher period. The panel data regression model estimated that the medication voucher program was associated with a 1.77-point increase in overall GDR compared with academic detailing alone ( $P=0.047$ ). These results suggest that in combination with academic detailing, a voucher program that waived health plan member copayments for a 30-day supply of a generic medication produced a small but significant increase in the overall GDR compared with that of PCP medical practices that received academic detailing alone.

The award-winning article was published in the July/August 2010 issue of *JMCP*: Bhargava V, Greg ME, and Shields MC. Addition of generic medication vouchers to a pharmacist academic detailing program: effects on the generic dispensing ratio in a physician-hospital organization. *J Manag Care Pharm*. 2010;16(6):384-92. <http://www.amcp.org/data/jmcp/384-392.pdf>

### **2009 JMCP Award for Excellence**

#### ***Association of Prescription Abandonment with Patient Cost Share for High-Cost Specialty Medications***

Four of the authors are employed by the Prime Therapeutics, LLC, Eagan, Minnesota:

Patrick P. Gleason, PharmD, BCPS, FCCP, Director of Outcomes Assessment

Catherine I. Starner, PharmD, BCPS, CGP, Senior Clinical Pharmacist

Brent W. Gunderson, PharmD, Senior Clinical Pharmacist

Jeremy A. Schafer, PharmD, Manager of Formulary Development

The fifth author is H. Scott Saran, MD, Vice President and Chief Medical Officer, BlueCross and BlueShield of Illinois, Chicago.

Three of the authors of the 2008 *JMCP Award for Excellence* (Gleason, Starner and Schafer) collaborated on this year's award-winning article. The research used the pharmacy and medical claims from a pharmacy benefits management company to examine the relationship between member out-of-pocket (OOP) cost-share amount and prescription abandonment, defined as the patient never actually taking possession of the medication despite evidence of a written prescription generated by a prescriber.

This article was selected for this year's award because it addressed 2 areas of current and future importance to health plans: management of the growing utilization and cost of specialty pharmaceuticals and the influence of the amount member cost share on utilization and compliance with high-cost pharmaceuticals. The research used a large administrative claims database of more than 13 million health plan members more than 10,000 members who received a prescription for an injectable medication for either multiple sclerosis or a tumor necrosis factor (TNF) blocker (primarily for rheumatoid arthritis). This article describes an outcome (prescription abandonment) that is not well studied and informs on the relationship between physician prescribing and failure of the patient to obtain and use the prescribed therapy.

The specific findings of this research included a rate of prescription abandonment that increased as the amount of member OOP cost share increased. Among 2,791 members who presented a prescription to newly initiate an injectable medication for multiple sclerosis, 2,303 members (83%) had an OOP cost share from \$0 to \$100 per prescription and an abandonment rate of 5.7%. For the approximately 13% of multiple sclerosis patients with an OOP cost share of more than \$200 per prescription, the abandonment rate was more than 25%. Among 7,313 members who presented a prescription to newly initiate TNF blocker therapy, 6,123 (84%) had an OOP cost share of \$0 to \$100 per prescription and an abandonment rate of 4.7%. For the approximately 13% of patients with an OOP cost share of more than \$200 per prescription for a TNF blocker, the abandonment rate was more than 19%.

The award-winning article was published in October 2009 issue of *JMCP*: Gleason PP, Starner CI, Gunderson BW, Schafer JA, Sarran HS. Association of prescription abandonment with cost share for high-cost specialty pharmacy medications. *J Manag Care Pharm.* 2009;15(8):648-58. Available at: <http://www.amcp.org/data/jmcp/648-658.pdf>.

**Honorable Mention** for 1 article in 2009:

***Application of the Method of Fractal Mathematics to Improve the Forecasting and Management of Medical Costs and Events in Managed Care*** was authored by Kathleen A. Fairman, MA, and Michael L. Rucker, MS, PE. This article describes an analytical method that has been applied successfully in other disciplines including economics and the physical sciences and some recent work in the biological sciences including pharmacokinetics. The authors stretch our thinking by suggesting that the distributions of medical events and costs in populations might be examined using fractal mathematics to determine transition points that may help improve predictive modeling, for example. The authors propose that the fractal transition points have the potential to improve understanding of the causes of low- and high-intensity events and perhaps better explain and manage the care patterns that drive expenditures for clinical trends along the volume/intensity spectrum. Fractal mathematics may provide the insight to permit improvement in population care management.

This article was published in the May 2009 issue of *JMCP*: Fairman KA, Rucker ML. Fractal mathematics in managed care? How a simple and revealing analysis could improve the forecasting and management of medical costs and events. *J Manag Care Pharm.* 2009;15(4):351-58. Available at: <http://www.amcp.org/data/jmcp/351-358.pdf>.

**2008 JMCP Award for Excellence**

***Rosiglitazone and Pioglitazone Utilization from January 2007 Through May 2008 Associated With Five Risk-Warning Events***

Three of the authors are employed by the Prime Therapeutics, LLC, Eagan, Minnesota:  
Catherine I. Starner, PharmD, BCPS, CGP, Senior Clinical Pharmacist  
Jeremy A. Schafer, PharmD, Manager of Formulary Development  
Patrick P. Gleason, PharmD, BCPS, FCCP, Director of Outcomes Assessment

Alan H. Heaton, PharmD, is Director of Pharmacy, BlueCross BlueShield of Minnesota.

This year's award-winning article presented important work performed by a pharmacy benefits management company in post-marketing surveillance of the use of the 2 thiazolidinediones rosiglitazone and pioglitazone in 2007 and 2008, following the release of 5 warnings regarding risk to patient safety, primarily for rosiglitazone. The research measured the average number of pharmacy claims per day per million members for each month for the period from January 2007 through May 2008. There were 5 formal risk-warning events, the first occurring on May 21, 2007 with release of a meta-analysis of cardiovascular events and a coincident safety alert from the U.S. Food and Drug Administration regarding increased risk of heart attack and heart-related deaths in patients taking rosiglitazone. A black-box warning regarding a safety risk for both rosiglitazone and pioglitazone when used by patients with congestive heart failure (CHF) was added in August 2007. Although rosiglitazone utilization per million members declined by more than half in 2007, about 1 in 5 of the rosiglitazone users had elevated cardiovascular risk, as determined from data in medical claims, at year-end 2007 and in May 2008. About 3% of pioglitazone users had a diagnosis of CHF in claims history in May 2007, prior to the first formal warning, which declined to 2% of pioglitazone users in May 2008.

The award judges determined that this research presented timely information about the effects on utilization of important oral diabetes drugs following patient safety warnings released by the FDA and accompanied by media attention that surrounded 5 specific risk-warning events. This research suggests that an opportunity for pharmacist intervention in medication therapy management may persist for some patients who may continue to be at risk despite widespread media attention and formal FDA patient safety warnings and label changes.

The award-winning article was published in the July-August 2008 issue of *JMCP*: Starner CI, Schafer JA, Heaton AH, Gleason PP. Rosiglitazone and pioglitazone utilization from January 2007 through May 2008 associated with five risk-warning events. *J Manag Care Pharm*. 2008;14(6):523-31. Available at: [http://www.amcp.org/data/jmcp/JMCPMaga\\_523-531.pdf](http://www.amcp.org/data/jmcp/JMCPMaga_523-531.pdf)

***Honorable Mention for 1 article in 2008:***

***Actual Versus Projected Cost Avoidance for Clinical Pharmacy Specialist-Initiated Medication Conversions in a Primary Care Setting in an Integrated Health System***

was authored by Beverly A. Kroner, PharmD, BCPS; Sarah J. Billups, PharmD, BCPS; Kathleen M. Garrison, PharmD, BCPS; Alfred E. Lyman, PharmD, BCPS; and Thomas Delate, PhD. This article provides a reality check on the cost-avoidance estimates for the interventions by clinical pharmacists in making drug therapy conversions by adjusting for factors such as noncompliance, discontinuation, and reversion to original drug therapy. A 14% difference was found between actual and projected cost avoidance associated with clinical pharmacist interventions to modify drug therapy. This article has many merits including its examination of 4 specific disease states, use of data from an integrated health care system, and creation of a method and benchmark for future research in assessment of actual medication cost avoidance.

This article was published in the March 2008 issue of *JMCP*: Kroner BA, Billups SJ, Garrison KM, Lyman AE, Delate T. Actual versus projected cost avoidance for clinical pharmacy specialist-initiated medication conversions in a primary care setting in an integrated health system. *J Manag Care Pharm*. 2008;14(2):155-63. Available at: [http://www.amcp.org/data/jmcp/JMCPMaga\\_March%2008\\_155-163.pdf](http://www.amcp.org/data/jmcp/JMCPMaga_March%2008_155-163.pdf)

## 2007 JMCP Award for Excellence

### **Comparison of Mail-Order With Community Pharmacy in Plan Sponsor Cost and Member Cost in Two Large Pharmacy Benefit Plans**

Authors (all 3 authors are employed by the College of Pharmacy at the University of Texas at Austin):

Michael Johnsrud, PhD, RPh

Kenneth A. Lawson, PhD, RPh

Marvin D. Shepherd, PhD, RPh

This year's award-winning article presented ground-breaking research that examined the widespread perception that mail order pharmacy offers plan sponsors lower pricing compared with community pharmacy. Using price per unit and price per day methods of analysis, this research showed that mail order pharmacy had lower costs for the member but not necessarily for the plan sponsor. An analysis across the top therapeutic categories showed that plan sponsors had higher daily costs for drugs dispensed through mail order for a majority of the categories. Unit prices paid for comparable generic drugs were actually higher through mail order versus community pharmacy for many of the top generic drugs for both plans that were studied. The judges determined that this research focused on cost outcomes but raised the bar in the conduct of research in this area because of its sound and transparent methodology. It was judged to be relevant and important to a wide range of pharmacy benefit sponsors and society in general.

The award-winning article was published in the March 2007 issue of *JMCP*: Johnsrud M, Lawson KA, Shepherd MD. Comparison of mail-order with community pharmacy in plan sponsor cost and member cost in two large pharmacy benefit plans. *J Manag Care Pharm.* 2007;13(2):122-34. Available at: <http://www.amcp.org/data/jmcp/p122-34.pdf>

### **Honorable Mention for 2 JMCP articles in 2007:**

**Evaluation of the Relationship Between a Chronic Disease Management Program and California Pay-for-Performance Diabetes Care Cholesterol Measures in One Medical Group** was authored by Timothy W. Cutler, PharmD; James Palmieri, PharmD; Maninder Khalsa, MD, MBA; and Marilyn Stebbins, PharmD. This research analyzed preliminary data from 165 patients with diabetes managed in a chronic disease care management (CDCM) program in a medical group operating under a small pay-for-performance (P4P) financial incentive. Higher rates of LDL-C lab testing and goal attainment were found in the CDCM patients compared with routine care. Had these higher rates of LDL-C testing and goal attainment achieved in the CDCM patients been extended to the entire P4P population with diabetes, this medical group would have generated incentive payments under the P4P program and ranked higher in publicly available quality scores. This is the first published study to show the potential impact that CDCM may have on the P4P rankings and financial payouts for a medical group.

This article was published in the September 2007 issue of *JMCP*: Cutler T, Palmieri J, Khalsa M, Stebbins M. Evaluation of the relationship between a chronic disease care management program and California pay-for-performance diabetes care cholesterol measures in one medical group. *J Manag Care Pharm.* 2007;13(7):578-88. Available at: [http://www.amcp.org/data/jmcp/JMCPMaga\\_Sept%2007\\_578-588.pdf](http://www.amcp.org/data/jmcp/JMCPMaga_Sept%2007_578-588.pdf)

**Relationship of the Magnitude of Member Cost-Share and Medication Persistence With Newly Initiated Renin Angiotensin System Blockers** was authored by Dongmu Zhang, PhD; Angeline M. Carlson, PhD; Patrick P. Gleason, PharmD; Stephen W. Schondelmeyer, PhD, Jon C. Schommer, PhD, Bryan E. Dowd, PhD; and Alan H. Heaton, PharmD. Among pharmacy benefit members newly initiating angiotensin-system blocking medication, each \$1 in patient cost-share for the initial pharmacy claim was associated with (a) 2.8% greater odds of being nonpersistent at 6 months after initiating therapy, and (b) a 1.9% increase in total medication gap in therapy. The lowest copay tertile (\$0.00 to \$8.30) was associated with the highest proportion of patients persistent on drug therapy.

This article was published in the October 2007 issue of *JMCP*: Zhang D, Carlson AM, Gleason PP, Schondelmeyer SW, Schommer JC, Dowd BE, Heaton AH. Relationship of the magnitude of member cost-share and medication persistence with newly initiated renin angiotensin system blockers. *J Manag*

**2006 JMCP Award for Excellence**

***Analysis of the Effectiveness and Cost Benefit of Leukotriene Modifiers in Adults With Asthma in the Ohio Medicaid Population***

Authors (all authors except Dr. Johnston are employed by the College of Pharmacy at the University of Cincinnati; Dr. Johnston was employed at the University of Cincinnati Medical Center):

Pamela C. Heaton, PhD, RPh

Jeff J. Guo, PhD

Richard W. Hornung, DrPH

Joseph A. Johnston, MD, MSc

Raymond Jang, PhD

Charles J. Moomaw, PhD

Robert J. Cluxton, Jr., PharmD

This article presented research that examined clinical as well as cost outcomes. Asthma patients that used leukotriene modifiers had higher direct costs of care but did not have improved outcomes as measured by emergency room visits, hospitalizations, or use of steroid bursts compared with asthma patients that did not use leukotriene modifiers. This article was determined by the judges to represent research of particular importance to health plans, employers, and pharmacy benefit managers.

This award-winning article was published in the January-February 2006 issue of *JMCP*: Heaton PC, Guo JJ, Hornung RW, Johnston JA, Jang R, Moomaw CJ, Cluxton RJ. Analysis of the effectiveness and cost benefit of leukotriene modifiers in adults with asthma in the Ohio Medicaid population. *J Manag Care Pharm.* 2006;12(1):33-42. Available at: [http://www.amcp.org/data/jmcp/research\\_33-42.pdf](http://www.amcp.org/data/jmcp/research_33-42.pdf).

***Honorable Mention for 2 JMCP articles in 2006:***

***Evaluation of Product Switching After a State Medicaid Program Began Covering Loratadine OTC 1 Year After Market Availability***

was authored by Troy K. Trygstad, PharmD, MBA; Richard A. Hansen, PhD, RPh; and Steven E. Wegner, MD, JD. This research found that delaying coverage of a therapeutically equivalent drug (loratadine) for allergy that became available over the counter (OTC) resulted in Medicaid recipients using substitute, higher-cost drugs that were covered by the program, creating avoidable costs for this Medicaid program. The delay in coverage of the OTC drug resulted in immediate and ongoing drug costs that were avoidable.

This article was published in the March 2006 issue of *JMCP*: Trygstad TK, Hansen RA, Wegner SE. Evaluation of product switching after a state Medicaid program began covering loratadine OTC 1 year after market availability. *J Manag Care Pharm.* 2006;12(2):108-20. Available at: [http://www.amcp.org/data/jmcp/research\\_108-120.pdf](http://www.amcp.org/data/jmcp/research_108-120.pdf).

***Utilization and Drug Cost Outcomes of a Step-Therapy Edit for Generic Antidepressants in an HMO in an Integrated Health System***

was authored by Jeffrey D. Dunn, PharmD, MBA; H. Eric Cannon, PharmD; Matthew P. Mitchell, PharmD; and Frederic R. Curtiss, PhD, CEBS. This integrated health system with approximately 500,000 health plan members implemented a step-therapy intervention in January 2005 that required use of a generic selective serotonin reuptake inhibitor (SSRI) as first-line therapy prior to coverage of a brand-name antidepressant. Compared with a group of employers with approximately the same number of covered beneficiaries who did not have the step-therapy intervention, there were drug cost savings of 9.0% for the entire class of antidepressants, associated with a small (-1.5%) decrease in use of antidepressants in the intervention group, which was less than the 5.0% decrease in utilization of antidepressants in the comparison group.

This article was published in the May 2006 issue of *JMCP*: Dunn JD, Cannon HE, Mitchell MP, Curtiss FR. Utilization and drug cost outcomes of a step-therapy edit for generic antidepressants in an HMO in an integrated health system. *J Manag Care Pharm.* 2006; 12(4):294-302. Available at: [http://www.amcp.org/data/jmcp/research\\_294-302.pdf](http://www.amcp.org/data/jmcp/research_294-302.pdf).

## 2005 JMCP Award for Excellence

### ***Product-Line Extensions and Pricing Strategies of Brand-Name Drugs Facing Patent Expiration***

Authors:

Song Hee Hong, PhD (University of Arkansas Medical Sciences, Little Rock)

Marvin D. Shepherd, PhD (University of Texas, Austin)

David Scoones, PhD (University of Victoria, British Columbia)

Thomas T.H. Wan, PhD (University of Central Florida, Orlando)

This article was determined to be unique in managed care pharmacy and JMCP and represented innovative research in this field. This research found that a product-line extension introduced for an original brand drug contributes to price rigidity despite the entry of generic competitors facilitated by the 1984 Drug Price Competition and Patent Term Restoration Act.

This award-winning article was published in the November/December 2005 issue of JMCP: Hong SH, Shepherd MD, Scoones D, Wan TTH. Product-line extensions and pricing strategies of brand-name drugs facing patent expiration. *J Manag Care Pharm.* 2005;11(9):745-54. Available at:

[http://www.amcp.org/data/jmcp/formular\\_746-754.pdf](http://www.amcp.org/data/jmcp/formular_746-754.pdf).

**Honorable Mention** for 2 JMCP articles in 2005:

***Gastrointestinal Bleeding Rates Among Managed Care Patients Newly Started on COX-2 Inhibitors or NSAIDs*** was authored by Karen Stockl, PharmD; Lori Cyprien, MS; and Eunice Y. Chang, PhD. This research examined medical and pharmacy claims for 75,014 COX-2 and NSAID users and concluded that COX-2 users did not have a reduced risk of a gastrointestinal (GI) bleed compared with patients with similar baseline characteristics who used nonselective NSAIDs.

This article was published in the September 2005 issue of JMCP: Stockl K, Cyprien L, Chang EY. Gastrointestinal bleeding rates among managed care patients newly started on COX-2 inhibitors or nonselective NSAIDs. *J Manag Care Pharm.* 2005;11(7):550-58. Available at:

[http://www.amcp.org/data/jmcp/Original%20Research\\_550\\_558.pdf](http://www.amcp.org/data/jmcp/Original%20Research_550_558.pdf).

***Effect of Patient Notification of Formulary Change on Formulary Adherence*** was authored by Thomas Delate, PhD, and Rochelle Henderson, MPA. This research involved a randomized controlled trial research design. The formulary-change notification program using letters sent by mail to patients was more effective in converting patients to the preferred (formulary) drugs compared with the control group that did not receive letter notification.

This article was published in the July/August 2005 issue of JMCP: Delate T, Henderson R. Effect of patient notification of formulary change on formulary adherence.

*J Manag Care Pharm.* 2005;11(6):493-98. Available at: <http://www.amcp.org/data/jmcp/5.pdf>

## 2004 JMCP Award for Excellence

### ***Randomized Controlled Trial of a Dose Consolidation Program***

Authors: (all employed by Express Scripts, Inc., St. Louis, MO)

Thomas Delate, PhD

Kathleen A. Fairman, MA

Shelly Carey, MMR

Brenda R. Motheral, PhD

The judges concluded that this article employed a sound methodology to test the impact of a tool used in managed care pharmacy. The findings of this study might be used by others in decision making about allocating scarce resources to influence the outcomes of managed care pharmacy interventions.

This award-winning article was published in the September/October 2004 issue of JMCP: Delate T, Fairman KA, Carey S, Motheral BR. Randomized controlled trial of a dose consolidation program.

*J Manag Care Pharm.* 2004;10(5):396-403. Available at: <http://www.amcp.org/data/jmcp/Research-396-403.pdf>.

**2003 JMCP Award for Excellence**

***Do Decision-Analytic Models Identify Cost-Effective Treatments? A Retrospective Look at Helicobacter Pylori Eradication***

Authors: (both employed by Express Scripts, Inc., St. Louis, MO)  
Kathleen A. Fairman, MA  
Brenda Motheral, PhD

This was selected as the best article in 2003 primarily based upon the criterion of potential impact on the profession or knowledge. This article sets forth guidance for managed care pharmacy to reassess the assumptions used in pharmacoeconomic decision-analytic models through the application of actual health plan data once these data become available. This is an important principle in drug formulary decision making and is inherent in the AMCP *Format for Formulary Submissions*. This research was also found to be unique in the U.S. literature (but found in the foreign literature) with only one similar article published.

This award-winning article was published in the September/October 2003 issue of *JMCP*: Fairman KA, Motheral BR. Do decision-analytic models identify cost-effective treatments? A retrospective look at *Helicobacter pylori* eradication. *J Manag Care Pharm*. 2003;9(5):430-40. Available at: <http://www.amcp.org/data/jmcp/Formulary%20Management-430-440.pdf>.

***Honorable Mention for 2 JMCP articles in 2003:***

***Retrospective Drug Utilization Review: Incidence of Clinically Relevant Potential Drug-Drug Interactions in a Large Ambulatory Population*** was authored by Catherine C. Peng, PharmD, BCPS; Peter A. Glassman, MBBS, MSc; Iny R. Marks, PharmD; Curtis Fowler, PharmD; Brenda Castiglione, PharmD; and Chester B. Good, MD, MPH, FACP. The objective for this paper was to determine the incidence of clinically relevant potential drug-drug interactions in a large population of ambulatory patients utilizing a computerized, retrospective drug utilization review program followed by clinical pharmacist audit.

This article was published in the November/December 2003 issue of *JMCP*: Peng CC, Glassman PA, Marks IR, Fowler C, Castiglione B, Good CB. Retrospective drug utilization review: incidence of clinically relevant potential drug-drug interactions in a large ambulatory population. *J Manag Care Pharm*. 2003;9(5):513-22. Available at: <http://www.amcp.org/data/jmcp/Research-513-522.pdf>.

***Examination of the Evidence for Off-Label Use of Gabapentin***. In her paper, Alicia Mack, PharmD, concluded that in the majority of circumstances where gabapentin was prescribed for "off-label" use, it was not the optimal treatment. The article supports development of programs to restrict the use of gabapentin to specific evidence-based situations, where there is solid research support, such as diabetic neuropathy and prophylaxis of frequent migraine headaches.

This article was published in the November/December 2003 issue of *JMCP*: Mack A. Examination of the evidence for off-label use of gabapentin. *J Manag Care Pharm*. 2003;9(5):559-68. Available at: <http://www.amcp.org/data/jmcp/Contemporary%20Subject-559-568.pdf>.

## 2002 JMCP Award for Excellence

### ***Effects of a Tablet-Splitting Program in Patients Taking HMG-CoA Reductase Inhibitors: Analysis of Clinical Effects, Patient Satisfaction, Compliance, and Cost Avoidance***

Authors (all employed by the Veterans Affairs Palo Alto Health Care System)

Michael Gee, PharmD

Noelle K. Hasson, PharmD

Terri Hahn, BSPHarm

Russell Ryono, PharmD

This was selected as the best article in 2002 for reporting research that measured clinical, service, and cost outcomes of pharmacist interventions with managed care patients.

This award-winning article was published in the November/December 2002 issue of *JMCP*: Gee M, Hasson NK, Hahn T, Ryono R. Effects of a tablet-splitting program in patients taking HMG-CoA reductase inhibitors: analysis of clinical effects, patient satisfaction, compliance, and cost avoidance. *J Manag Care Pharm*. 2002;8(6):453-58. Available at: <http://www.amcp.org/data/jmcp/Research-453-458.pdf>.

### ***Honorable Mention for 2 JMCP articles in 2002:***

***Relationship of Clinical Factors to the Use of COX-2 Selective NSAIDs Within an Arthritis Population in a Large HMO*** was authored by Scott A. Bull, PharmD; Carol Conell, PhD; and David H. Campen, MD. This research found that the use of a gastrointestinal-risk tool and managed care guidelines were associated with a 5.5-fold difference in utilization of COX-2 selective NSAIDs among patients determined to be in the highest-risk decile versus patients in the lowest-risk decile.

This article was published in the July/August 2002 issue of *JMCP*: Bull SA, Conell C, Campen DH. Relationship of clinical factors to the use of COX-2 selective NSAIDs within an arthritis population in a large HMO.

*J Manag Care Pharm*. 2002;8(4):252-58. Available at: <http://www.amcp.org/data/jmcp/Research-252-258.pdf>.

***Neuroleptic Drug Exposure and Incidence of Tardive Dyskinesia: A Records-based Case-Control Study*** was authored by Donna L. Marshall, PharmD; Thomas K. Hazlet, PharmD, DrPH; Jacqueline S. Gardner, PhD; and David K. Blough, PhD. This research found no significant difference in the risk of tardive dyskinesia for users of conventional neuroleptics versus users of atypical neuroleptics.

This article was published in the July/August 2002 issue of *JMCP*: Marshall DL, Hazlet TK, Gardner JS, Blough DK. Neuroleptic drug exposure and incidence of tardive dyskinesia: a records-based case-control study. *J Manag Care Pharm*. 2002;8(4):259-65. Available at: <http://www.amcp.org/data/jmcp/Research-259-265.pdf>.