

# Forging a novel provider and payer partnership in Wisconsin to compensate pharmacists for quality-driven pharmacy and medication therapy management services

Kari Trapskin, Curtis Johnson, Patrick Cory, Sarah Sorum, and Chris Decker

## Abstract

**Objective:** To describe the Wisconsin Pharmacy Quality Collaborative (WPQC), a quality-based network of pharmacies and payers with the common goals of improving medication use and safety, reducing health care costs for payers and patients, and increasing professional recognition and compensation for pharmacist-provided services.

**Setting:** Wisconsin between 2006 and 2009.

**Practice description:** Community (independent, chain, and health-system) pharmacies and private and public health care payers/purchasers with support from the McKesson Corporation.

**Practice innovation:** This initiative aligns incentives for pharmacies and payers through implementation of 12 quality-based pharmacy requirements as conditions of pharmacy participation in a practice-advancement pilot. Payers compensate network pharmacies that meet the quality-based requirements for two levels of pharmacy professional services (level 1, intervention-based services; level 2, comprehensive medication review and assessment services).

**Main outcome measures:** The pilot project is designed to measure the following outcomes: medication-use quality improvements, frequency and types of services provided, drug therapy problems, patient safety, cost savings, identification of factors that facilitate pharmacist participation, and patient satisfaction.

**Results:** The Pharmacy Society of Wisconsin created the WPQC network, which consists of 53 pharmacies, 106 trained pharmacists, 45 student pharmacists, 6 pharmacy technicians, and 2 initial payers. A quality assurance process is followed approximately quarterly to audit the 12 network quality requirements. An evaluation of this collaboration is being conducted.

**Conclusion:** This program demonstrates that collaboration among payers and pharmacists is possible and can result in the development of an incentive-aligned program that stresses quality patient care, standardized services, and professional service compensation for pharmacists. This combination of a quality-based credentialing process with a professional services reimbursement schedule is unique and has the promise to enhance the ambulatory pharmacy practice model.

**Keywords:** Quality improvement, collaboration, community pharmacy, payment systems, medication therapy management services, Wisconsin, pharmacy organizations.

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**Kari Trapskin, PharmD**, is Director of Health Care Quality Initiatives, Pharmacy Society of Wisconsin, Madison. **Curtis Johnson, PharmD**, is Professor (Emeritus), School of Pharmacy, University of Wisconsin—Madison. **Patrick Cory, PharmD**, is Pharmacy Program Director, Unity Health Insurance, Sauk City, Wisconsin, and Deputy Director, University of Wisconsin Hospital & Clinics Center for Drug Policy, Madison. **Sarah Sorum, PharmD**, is Director of Professional and Educational Affairs, and **Chris Decker, BPharm**, is Executive Vice President/CEO, Pharmacy Society of Wisconsin, Madison.

**Correspondence:** Kari Trapskin, PharmD, Pharmacy Society of Wisconsin, 701 Heartland Trail, Madison, WI 53717. Fax: 608-827-9292. E-mail: karit@pswi.org

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Health care payers and pharmacists share the common goal of improving patient outcomes through the rational, safe, and effective use of medications. Community pharmacists have repeatedly told payers, “Pay us to manage the medication therapy of your patients, and we can save you money.” Payers have said, “Prove you can save us money, and we will pay you to manage our patients’ therapies.” This dialog reflects the national call for new partnerships between pharmacists and payers that financially reward performance and quality medication use outcomes.<sup>1</sup> Although notable efforts such as the Asheville Project, the Diabetes Ten City Challenge, and case management models are often cited,<sup>2-5</sup> relatively few pharmacist–payer partnerships of this type are documented in the literature, especially those that combine the public and private payer community.

The existing business model between community pharmacy and payers has made it difficult for pharmacists to make an investment to improve the quality of the dispensing process and

provide medication therapy management (MTM) services. The current product-based reimbursement system can only result in increased prescription volume per pharmacist and less time to follow best practices in dispensing. At a time when medication safety, quality benchmarking, and continuous quality improvement (CQI) are receiving a great deal of attention and resources in other health care settings, community pharmacy has often been unable to address these issues in a systematic manner. The Institute of Medicine’s 2000 and 2001 landmark reports *To Err is Human* and *Crossing the Quality Chasm* describe the extent of suffering and death that results annually from errors in the health care system and address additional quality problems in health care, respectively. The 2000 report calls for action to make care safer, while the 2001 report calls for action to improve the quality of the American health care delivery system as a whole.<sup>6,7</sup>

Although PQA, a pharmacy quality alliance, is testing the feasibility of creating pharmacy performance measures, no accepted quality credentialing or benchmarking structure for community pharmacy currently exists. Community pharmacy quality requirements are referred to in the current work, but these requirements are distinct from the performance measures being tested in the ongoing PQA demonstration projects. However, the Wisconsin Pharmacy Quality Collaborative (WPQC) will also test the PQA measures as a demonstration site.<sup>8</sup> The PQA measures are intended to measure the quality of clinical care for patients with particular diseases (e.g., use of controller medications in asthma patients), whereas the WPQC quality requirements are targeted at day-to-day operations within a community pharmacy with a focus on safe medication dispensing processes and active identification of the need for additional professional services. The Pharmacy Society of Wisconsin (PSW), in conjunction with the University of Wisconsin–Madison School of Pharmacy Sonderegger Research Center and the University of Wisconsin–Madison Center for Health Research and Analysis, has been awarded one of the PQA demonstration project grants, for which the WPQC pharmacy network and related claims data are being used.<sup>9</sup>

Passage of the Medicare Modernization Act (MMA) in 2003 created the opportunity for pharmacists to be compensated for providing MTM services to beneficiaries of the Medicare Part D program. Under the leadership of the American Pharmacists Association (APhA), a consensus definition of MTM services was defined and supported by 11 national professional pharmacy associations.<sup>10,11</sup> The MMA legislation has prompted the development of various models of MTM services. Subsequent revisions to the consensus definition and additional documents on MTM have also been published.<sup>12-14</sup> Many of the MTM models do not use the community pharmacist to provide MTM services, and the full potential of such programs has not been realized in either the public or private sector.

A pharmaceutical care payment system to compensate pharmacists for cognitive services provided to Medicaid patients has existed in Wisconsin for more than a decade. A few private payers have offered similar programs. These public and private programs have not been widely used because of a num-

### At a Glance

**Synopsis:** The Wisconsin Pharmacy Quality Collaborative (WPQC)—a quality-based network of pharmacies and payers seeking to improve medication use and safety, reduce health care costs for payers and patients, and increase professional recognition and compensation for pharmacist-provided services—was created by the Pharmacy Society of Wisconsin. WPQC consists of 53 pharmacies, 106 trained pharmacists, 45 student pharmacists, 6 pharmacy technicians, and 2 initial payers. This pilot project has shown that collaboration among payers and pharmacists is possible and can result in the development of an incentive-aligned program that stresses quality patient care, standardized services and professional service compensation for pharmacists, and the recognition of innovative leadership on the part of participants.

**Analysis:** According to the authors, a fundamental belief of WPQC is that by improving the quality of medication use, health care expenditures will be reduced. WPQC enables participating payers to differentiate pharmacies in their network based on quality. The authors foresee that payers who historically have provided reimbursement for pharmacy services will see an increase in pharmacist participation as a result of standardization and increased opportunities for pharmacies. They also predict that participating pharmacies will have the potential to gain return on their investment by becoming more professionally engaged in the quality movement, by increasing retention and recruitment of staff pharmacists who desire involvement in initiatives such as WPQC and PQA (a pharmacy quality alliance), and by being recognized for making a commitment to quality via implementation of quality standards.

ber of factors, including nonstandardized billing and documentation requirements, difficulty incorporating services into the pharmacy workflow, pharmacist shortages, and inadequate reimbursement to justify the service.<sup>15</sup> The time has come to develop a new and comprehensive community pharmacy-based service model that will result in improved patient medication use, reduced medication-related costs, and enhanced value of community pharmacy practice.

This article describes a pharmacy services model that integrates the professionwide consensus definition of MTM services<sup>10</sup> with the current point-of-service cognitive service programs referenced above. In addition, the model integrates a quality-of-dispensing credentialing component that provides increased safety to patients and increased value to participating payers. The initiative attempts to create a sustainable model in which pharmacy compensation is provided by payers versus relying on grant funding. Creating the model will not be enough, however, if pharmacists do not embrace it and incorporate it into their practices. WPQC has the potential to transform the payer-pharmacist relationship in the community setting. If successful, this model can be transferred to other settings throughout the United States.

### Objective

The current work describes steps taken to lay the foundation for the project, details of the WPQC program, methods for providing support to the pharmacy network, the evaluation process, challenges encountered, and anticipated future plans.

### PSW

PSW, which is the sole professional pharmacy organization in Wisconsin, represents pharmacists, pharmacy technicians, and student pharmacists practicing in any setting. Pharmacist membership in PSW ( $n = 2,482$ ) represents approximately 50% of the licensed pharmacists in Wisconsin. PSW technician membership includes 377 members of the estimated 12,000 technicians in the state. A PSW organizational priority is enhancing pharmacy practice throughout the state.

Following passage of MMA in 2003, PSW members began to address the lack of incentives that currently exist in the pharmacy business model for increasing and expanding pharmacy practice quality and provision of MTM services. Recognizing the need for a new model, the PSW Board of Directors dedicated funds to establish a new and unique state-based pharmacy services program. This article defines pharmacy services as both point-of-care pharmacy services aimed at resolving medication-related problems and comprehensive medication review services as described in the MTM consensus document.<sup>11,12</sup>

In fall 2005, PSW created a new position to provide the staff leadership and management necessary for the development and launch of the initiative. The PSW Director of Health-care Quality Initiatives position is occupied by a PharmD and residency-trained pharmacist (0.6 full-time equivalent [FTE]) and supported by another PharmD and residency-trained pharmacist (0.2 FTE). The positions and other related services are

supported by PSW operational income and enhanced by numerous PSW member volunteer hours and clerkship student assistance. Since late 2005, the PSW Director of Health Care Quality Initiatives has been laying the groundwork for the successful launch of a pharmacy quality pilot project. The project includes a network of community (independent, chain, and health-system) pharmacies in Wisconsin committed to improving medication use and safety, reducing health care costs for payers and patients, increasing recognition of the profession, and providing adequate compensation for pharmacist-provided services.

### Establishing WPQC

In late 2005, PSW convened a member task force representing community pharmacies, ambulatory clinics, and managed care organizations to discuss potential methods for addressing pharmacy quality, pharmacy professional service standardization, and MTM services. The task force developed a draft document that described the components of a potential new MTM service model for Wisconsin. The Lewin Group Report was influential in the development of this document in terms of standardization of MTM service levels, use of MTM Current Procedural Terminology (CPT) codes, standardization of billing and documentation, and realization of the importance of provider and patient support of MTM services. Evaluation and measurement of program impact to allow network expansion is a cornerstone of the program.<sup>16</sup>

The PSW Director of Health Care Quality Initiatives and PSW Executive Vice President presented the work of the task force individually to nine payer/purchaser organizations with offices in Wisconsin. Many of the organizations already had some type of pharmacy "cognitive services" program in place, and in several cases, PSW already had established relationships with a key member of the organization. Health care payers/purchasers were asked if they were content with the current state of pharmacy services being provided to their beneficiaries and their resultant medication use. Each group named at least one aspect of the current system with which it was dissatisfied (e.g., extent of adherence consultation, provision of regular consultation at the point of dispensing, inability to contact pharmacies to request review of specific patient regimens). Organizations with existing cognitive service compensation programs indicated that the programs were underused.

For many years, Wisconsin pharmacists have had the opportunity to provide and be compensated for cognitive services; however, the existing programs are difficult to use because of a lack of standardization among reimbursement models. Programs differ in covered services, documentation requirements, payment levels, and billing systems. Participants in the initial deliberations concurred that a common model based on a standard documentation and billing system would enhance use of MTM service programs.

PSW discussed with payer representatives the quality and standardization of services provided at pharmacies throughout the state and asked how payers would choose a pharmacy based on quality. Overall, payers agreed that service quality

differs not only between pharmacies but also between pharmacists who may be employed by the same pharmacy. Payers had no existing identifiable method to select or evaluate pharmacy providers by service quality.

Following these individual meetings, PSW invited the nine health care purchasers/payers, community pharmacists from the original task force and additional pharmacists from practice sites not originally represented to meet together for the first time in July 2006. The initial task force of pharmacists represented PSW members working in independent and health-system pharmacy with an interest in quality, and all of these pharmacists eventually joined the WPQC pharmacy network. As the group expanded, pharmacists were chosen based on their interest and practice site characteristics to ensure that the WPQC group would be balanced. During the ensuing 15 months, the group created a quality-based network of pharmacies with the goal of establishing a sustainable model for the provision of pharmacy services to patients, while meeting payer/purchaser goals of increasing pharmacy and health care quality in a cost-effective manner. To create an identity unique to the initiative and to establish "ownership" among its stakeholders, the group named the project the Wisconsin Pharmacy Quality Collaborative (WPQC).

### Outcome measures

This pilot project is designed to measure the following outcomes: medication-use quality improvements, frequency and types of services provided, drug therapy problems, patient safety, cost savings, identification of factors that facilitate pharmacist participation, and patient satisfaction.

Improvements in medication use will be demonstrated, the frequency and types of services provided will be documented, and resolution of drug therapy problems will be demonstrated by measuring specific outcomes such as the frequency and types of services provided (i.e., level 1, level 2, and level 1 services provided in the context of level 2 services) and drug therapy problems addressed. Our program currently includes two disease-specific medication use outcome domains. Diabetes-specific medication measures, such as percent of patients with diabetes medications exceeding recommended dosages and percent of patients with diabetes and hypertension not being treated with angiotensin-converting enzyme inhibitors or angiotensin receptor blockers, will be calculated. Also, respiratory-specific medication measures, such as percent of patients with asthma using more than five rescue inhalers within 90 days and percent of asthma patients using more than five rescue inhalers within 90 days without controller medication, will be determined. Because medication adherence also contributes to medication outcomes, quality measures such as proportion of days covered and gaps in therapy will be calculated.

Potential improvements in patient safety will be identified by measuring medication safety measures such as percent of elderly patients with claims for high-risk medications. We are initially determining payer cost-savings outcomes by calculating the return on investment for level 1 cost-effectiveness interventions using payer claims data. Evaluation of patient cost-

savings outcomes will involve correlating copay savings with level 1 cost-effectiveness intervention data.

Through surveys and pharmacist focus groups, we are identifying qualitative factors that facilitate pharmacist participation in the program. We also plan to conduct a level 2 patient survey that measures patient satisfaction, patient activation, and patient self-efficacy. Our participation in an ongoing PQA demonstration project also will enable us to distribute a pharmacy-focused Consumer Assessment of Healthcare Providers and Systems patient satisfaction survey to WPQC pharmacy patients.

### WPQC workgroups

WPQC created three workgroups: billing/documentation, return on investment, and evaluation/reporting. These groups engaged in detailed discussions that were eventually vetted through the full WPQC for consensus approval.

Legal counsel provided advice regarding antitrust regulations throughout the process. Discussion of specific payment levels was not permitted due to antitrust considerations. Instead, the return-on-investment workgroup prepared a document that projected improved patient outcomes and a positive return on investment based on previous studies for the payer/purchaser organizations.

We recognized the need for a standardized billing, documentation, and patient management technology platform that could be easily integrated within a pharmacy's daily workflow. After a thorough review of available MTM software systems, WPQC chose to work with the McKesson Corporation, a national health care services company, to develop a new Web-based MTM software application. The WPQC pilot network of pharmacies has functioned as a testing environment for the piloting and ongoing development of this new software system application (RelayHealth MTM). The technology is not yet commercially available.

### Practice innovation: description of the WPQC program

#### Pharmacy requirements

Participating pharmacies are required to have Internet access to use the Web-based MTM application and a private or semiprivate patient care area for providing comprehensive medication review and assessment (CMR/A). Participating pharmacies must also be willing to serve as mentors and trainers for future enrollee pharmacies as the program expands. WPQC pharmacies must agree to implement 12 quality-based best-practice requirements as conditions of participation. These network requirements are intended to lend consistency to certain legal pharmacy practice requirements, in addition to elevating pharmacy practice and practice management, and represent a major commitment on the part of participating pharmacies (Table 1). PSW created policy and procedure templates to support participants in meeting these requirements. The network requirements were chosen based on best-practice guidelines developed by the Wisconsin Patient Safety Institute, Inc., and WPQC stakeholder experience.<sup>17</sup> Approxi-

**Table 1.** WPQC pharmacy network quality requirements

|   |
|---|
| <b>Pharmacy workflow</b>  |
| Performance of a brief medication history on all new patients or patients who fill medications at multiple pharmacies   |
| Consistent verification and documentation of allergies and adverse drug reactions   |
| Consistent profile review of all patients (to include documentation of weight and dose/weight or dose/body surface area for pediatric patients)                               |
| Use of a standard procedure to show each patient each medication at the time of dispensing  |
| Use of at least two unique patient identifiers for each new prescription order to verify that patient data are correct and that the correct patient receives the prescription |
| Use of a check-off form during consultation that describes what the pharmacist did from intake to consultation, when applicable   |
| Use of a process to identify patients eligible to receive level 1, level 2, and/or condition-specific services  |
| <b>Pharmacy management</b>  |
| Availability of online and/or up-to-date hardcopy pharmacy information resources  |
| Use of a continuous quality improvement program for medication risk management  |
| Participation in FDA MedWatch program   |
| Responsiveness to FDA drug safety alerts and Class I recalls from FDA or PSW  |
| Distribution of an annual patient satisfaction survey with a plan for responding to survey results  |

Abbreviations used: FDA, Food and Drug Administration; PSW, Pharmacy Society of Wisconsin; WPQC, Wisconsin Pharmacy Quality Collaborative.

mately quarterly quality assurance audits are conducted by the WPQC audit review committee to ensure adherence to the pharmacy network participation requirements. The volunteer audit review committee consists of one University of Wisconsin–Madison School of Pharmacy faculty member, one participating WPQC payer, one non-WPQC pharmacist, and two PSW pharmacist staff members. Pharmacies must meet the quality requirements to provide and bill for services. Pharmacists must have a National Provider Identifier (NPI) for identification purposes, though compensation for services is provided via the pharmacy’s NPI. Pharmacist MTM CPT codes are built into the software system for billing purposes.

Participating payers compensate pharmacies for intervention-based services (level 1; Table 2) and CMR/A services (level 2; Tables 3 and 4). Level 1 services include drug product–focused services that are compensated on a per-intervention basis. The pharmacist must contact the prescriber with each intervention. Successful billing requires that the suggested intervention be accepted by the prescriber, except in cases of the focused adherence intervention and medication device instruction intervention. The McKesson RelayHealth MTM application records whether the prescriber accepted or declined a recommendation. Initial level 2 services must be provided face to face

**Table 2.** Level 1 (intervention-based) services for which participating payers compensate pharmacies

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|--|
| Cost-effectiveness intervention (e.g., formulary interchange, therapeutic interchange, tablet splitting opportunity) <sup>a</sup>  |
| Dose/dosage form/duration change intervention (e.g., dose adjustment based on kidney function, drug–drug interaction, insufficient quantity of medication prescribed) <sup>a</sup>                                       |
| Focused adherence intervention (provision of adherence tool required) <sup>b</sup>   |
| Therapeutic duplication intervention (e.g., recommend discontinuation of duplicative therapy, resolve duplicative therapy from multiple prescribers) <sup>a</sup>  |
| Medication device instruction intervention (instruction on any device associated with a medication; instruction must be in depth, more extensive than legal consultation requirements, and last >5 minutes) <sup>b</sup> |
| Medication additions or deletions intervention (e.g., recommend addition or deletion of a medication based on clinical guidelines, contraindications, interactions, safety alerts) <sup>a</sup>                          |

<sup>a</sup>Prescriber approval and communication is required.  
<sup>b</sup>Prescriber notification is required.

by the pharmacist and will typically occur on an appointment basis. One initial visit and three follow-up visits are included in the annual WPQC-covered benefit. Each of the five steps in Table 3 must be completed in order to bill for level 2 services. Level 1 services provided in the context of level 2 services are also compensated, except for medication device instruction and focused adherence interventions. Level 2 eligibility is determined by several criteria (Table 4), which allows patients who are most likely to experience drug therapy problems to receive services. This “segmentation approach,” which is also aided by the software system, helps pharmacists to target their time to those most in need of services.<sup>18</sup> The program and software system incorporate both “push” and “pull” elements. These elements help pharmacists identify potentially eligible patients, while also allowing them to identify patients based on established relationships and clinical knowledge of patients. Although the software system is not integrated into the pharmacy dispensing system, the “push” functionality of the RelayHealth system interfaces with pharmacy claims systems in pharmacies that use RelayHealth as their switch company. A notable feature of the WPQC level 2 services benefit structure is compensation for medication reconciliation for patients who return to the community setting following discharge from the hospital or long-term care facility.

Compensation for level 1 and level 2 services is provided as a flat fee per service based on an estimated amount of time required to perform the service. All level 1 services are compensated at the same rate, and level 2 compensation is based on initial versus follow-up services. Level 1 services provided in the context of level 2 services are compensated in addition to the base compensation for the level 2 service. Targeted compensation levels were based largely on guidance obtained from the Lewin Group Report.<sup>16</sup> Specific compensation levels were

**Table 3.** Level 2 (CMR/A) services for which participating payers compensate pharmacies**Steps 1–5 are required to bill for level 2 services**

- (1) Perform CMR/A with patient or caregiver
- (2) Create PMR for patient
- (3) Provide patient with MAP
- (4) Provide prescriber with both PMR and MAP
- (5) Document and follow-up

Abbreviations used: CMR/A, comprehensive medication review and assessment; MAP, medication-related action plan; PMR, personal medication record.

**Table 4.** Level 2 (CMR/A) eligibility

**Any high-risk outpatient covered by a participating payer is eligible for level 2 services. Payers and pharmacists will identify eligible patients. High-risk patients are defined as those who meet at least one of the following criteria:**

- (1) Take four or more prescription medications to treat or prevent two or more chronic conditions, one of which must include hypertension, asthma, diabetes, chronic kidney disease, congestive heart failure, dyslipidemia, COPD, or depression
- (2) Have diabetes (condition-specific benefit)
- (3) Receive prescriptions from three or more health care providers
- (4) Have recently been discharged from the hospital or long-term care setting
- (5) Experience health literacy issues as determined by the pharmacist and with prior authorization
- (6) Patients may be eligible upon prescriber referral, payer prior authorization, or payer identification

Abbreviations used: CMR/A, comprehensive medication review and assessment; COPD, chronic obstructive pulmonary disease.

negotiated independently with each payer by a third-party administrator.

The WPQC program and McKesson software application also focus on the high-risk conditions of diabetes and asthma and encourage pharmacists to use the software's clinical tools to guide review of the patient's medication regimen and condition(s).

### Pharmacy recruiting and contracting

Pharmacy recruitment began in mid-2007, with targeted efforts to include community dispensing pharmacies previously active in billing for pharmacy cognitive services. Community chains or health systems were limited to the involvement of no more than three pharmacy sites, given the WPQC target of enrolling approximately 50 participating pharmacies. The target enrollment of 50 pharmacies was chosen in order to limit the risk to payers and facilitate the evaluation process. Recruitment was accomplished by word of mouth and announcements via PSW's electronic newsletter and bimonthly journal publication. All pharmacies expressing interest were allowed to participate and typically corresponded with those pharmacies already active in billing for cognitive services. Two pharmacies decided not to participate after being given the opportunity.

PSW received inquiries about participation from several pharmacists practicing in nontraditional (nondispensing) pharmacy sites where MTM services were provided alongside prescribers in the clinic setting. Given the complexities involved in billing for pharmacist-provided MTM services in the clinic setting and payer concern for duplication of services, WPQC decided to initially allow only dispensing pharmacies to participate, hoping that the nontraditional model will be incorporated as the network expands. WPQC level 2 services attempt to mirror the innovative model depicted in the publications by Nichol et al.<sup>19</sup> and Howard et al.,<sup>20</sup> though potential barriers of staffing workload, inability to create overlap in the schedule, and lack of space in the community pharmacy setting are real and will need to be overcome.

A beta test program involving seven of the network pharmacies began in December 2007 and lasted through February 2008. The purpose of the beta test was to inform program development; therefore, no quantitative data are presented. At present, 53 pharmacies are included in the full pilot, which began in mid-March 2008 to include patients with the Unity Health Insurance drug benefit. Group Health Cooperative of South Central Wisconsin began participation in mid-June 2008. Of the 53 pilot pharmacies, 1 is a long-term care pharmacy that services Community-Based Residential Facilities and fills outpatient prescriptions, 6 are national chains, 7 are regional chains, 17 are health-system pharmacies, and 22 are independently owned pharmacies. The network began with 57 pharmacies; 4 have been lost as a result of lack of contract execution (2), store closure (1), and staffing issues (1).

### Training

Training of pharmacists, pharmacy technicians, and student pharmacists is important to the success of WPQC. Pharmacists were trained at live sessions held on weekdays in late 2007 and early 2008. The 1-day beta training session included 19 attendees who were employees and 4 who were independent pharmacy owners. The two non-beta test training sessions were held over 1.5 days, with an optional additional half-day of training. Training space was limited and capped given the need to have computers sufficient to provide hands-on system training. In addition to the trainees, numerous managers and supervisors participated in portions of the training to become familiar with WPQC concepts and the software capability. Each network pharmacy had at least one pharmacist in attendance. Each participant completed an 8-hour Accreditation Council for Pharmacy Education (ACPE)-accredited home study program created by PSW that included WPQC background, service definitions, video examples of level 1 and 2 services, and corresponding required exercises; suggestions for implementing the quality requirements; methods for integrating WPQC services (including medication reconciliation) into the pharmacy workflow; review of diabetes evidence-based clinical guidelines; and tools for motivational interviewing and health literacy. The live training sessions covered and reviewed WPQC background, quality network requirements, WPQC services, motivational interviewing, health literacy, tools and tips for determining eli-

gibility and providing services, MTM software application demonstrations, and hands-on case-based practice. The optional half-day round table session on implementing the quality network requirements was well attended. To be granted access to the software application, pharmacists unable to attend a live training session completed the same home study materials and received system training by a pharmacist who attended the live training. Pharmacists unable to attend the live training session also received a guide for self-training on the application software. Those unable to attend the live sessions did not benefit from the live motivational interviewing session but reviewed motivational interviewing materials in the home study and submitted test questions in order to be granted ACPE credit. Employees were compensated for attendance or for completion of the home study at the discretion of their employer.

PSW has also provided WPQC training to fourth-year University of Wisconsin–Madison School of Pharmacy students completing clerkships at WPQC pharmacies. Additionally, PSW staff has provided presentations on WPQC to University of Wisconsin–Madison School of Pharmacy students and faculty, as well as other health care and business organizations. The software application and WPQC concepts are expected to be incorporated into the 2009 pharmacotherapy laboratory course curriculum at the University of Wisconsin–Madison School of Pharmacy. Pharmacy technicians were invited to attend the initial live training sessions and received a limited-access software application login following completion of portions of the pharmacist home study process. An additional live refresher training session will be held as additional payers join the network. Software update demonstrations are conducted via Web conference after each new release of the software and as requested. Web conferences are also held regularly to collect feedback from the WPQC pharmacists, provide program updates and clarifications, and address questions. Several scheduled options are provided for conference calls and Web conferences to accommodate varying schedules. The conferences typically last 60 minutes, and the time with the highest participation seems to be 0800. We have attempted to avoid Mondays. Initially, pharmacists experienced more technical difficulties with the Web conferencing software, but the comfort level has increased with time. Over time, participation in the conferences has come to include representatives from only the pharmacies who serve patients covered by the two participating payers. PSW continues to provide WPQC-related material and updates at its educational conferences for pharmacists and technicians.

#### **WPQC network support**

PSW has supported the launch of WPQC in various ways, including communication via a WPQC listserv; a WPQC e-mail distribution list; a WPQC website; conference calls; site visits; creation of marketing materials (brochures, posters, and buttons) for patients, pharmacists, and prescribers; and involvement of physician input and dissemination of information to the Wisconsin Medical Society. WPQC pharmacies are responsible for marketing the services to patients and prescribers. Work continues in the area of marketing to enhance the visibility of the program.

#### **Evaluation**

The WPQC pilot project is being evaluated collaboratively by the University of Wisconsin–Madison School of Pharmacy Sonderegger Research Center, PSW, and the McKesson Corporation, with input from the payer organizations. The pilot project will be evaluated for the following outcomes: medication-use quality improvements, frequency and types of services provided, drug therapy problems, patient safety, cost savings, identification of factors that facilitate pharmacist participation, and patient satisfaction. The measures that are being used to demonstrate these outcomes are described in the outcome measures section above. A major focus of this project is to prove its sustainability. The following section describes how integral the payer cost-savings outcome (measured by payer return on investment) is to the success of the WPQC program.

The availability of corresponding medical data to quantify long-term outcomes and correlate them with short-term outcomes continues to be pursued.

#### **Return on investment**

Determining payer return on investment is an essential aspect of the WPQC evaluation. Level 1 (intervention-based) services are the most straightforward in terms of identifying return on investment. Although some of the services included do not result in directly quantifiable savings (e.g., medication device instruction), savings for others can be readily identified. These product-oriented services include cost-effectiveness interventions such as formulary interchanges and tablet splitting, previously recognized as contributors to a positive return on investment. More difficult to quantify are potential improvements over the standard of care provided in pharmacies today (e.g., decreased medication errors, decreased duplicative therapy, decreased frequency of sub- or supratherapeutic dosing, increased patient understanding of medications, increased patient satisfaction with their pharmacy). These returns directly affect the patient and the payer and may lead to increased member retention by the payer organization, retention of patients by pharmacies, and fewer adverse drug events that may result in office visits, emergency department visits, hospitalizations, or additional prescriptions.

Level 2 (CMR/A) services focus on high-risk patients. For most payers, a small percentage of covered patients drive the majority of costs. Through this program, payers are able to direct individual MTM services to specific patients in greatest need.

The Centers for Medicare & Medicaid Services saw the value of such services when defining the basic requirements of prescription drug plans participating in the Medicare Part D benefit.<sup>21</sup> Although the WPQC CMR/A is typically a face-to-face service, it is loosely modeled after the MTM requirement of Medicare prescription drug plans, which does not currently require face-to-face interaction with the community pharmacist. CMR/A is expected to result in the optimization of patient medication regimens, improved patient understanding of their medications and their importance, increased medication adherence, fewer adverse drug reactions, and improved attainment of clinical goals and outcomes. The impact of these ben-

efits may result in increased or decreased pharmacy costs to the payers, but the full benefit is expected to be seen in improved medical outcomes and a resulting decrease in associated medical costs (e.g., emergency department visits, rehospitalizations, office visits). Our hypothesis is that in the short term, compensation for level 1 services will offset the cost of level 2 services. By providing level 2 services, additional cost effectiveness and clinical interventions will be noted, further increasing the return on investment to the payer. Whether the value of providing pharmacy services face to face will provide additional value to the payer compared with providing telephonic MTM remains to be seen. Regardless, the notion that improving the quality of medication use will result in reduced health care expenditures is a fundamental belief of WPQC.

For the first time, WPQC enables participating payers to differentiate pharmacies in their network based on quality. Payers already providing reimbursement for some of the services will see an increase in pharmacist participation as a result of standardization and increased opportunities for pharmacies. Payers will have the future opportunity to offer patient services to assist in retaining their members.

Participating pharmacies also have the potential to gain return on their investment by becoming more professionally engaged in the quality movement, by increasing retention and recruitment of staff pharmacists who desire involvement in initiatives such as WPQC and PQA, and by being recognized for making a commitment to quality via implementation of quality standards. Prescribers will benefit by receiving clinical and patient-specific information from participating pharmacists regarding patient adherence and other information obtained during provision of MTM services.

## Results

As of May 2009, the WPQC pharmacy network consisted of 53 pharmacies, 106 pharmacists, and 2 payers, representing approximately 77,000 lives in Wisconsin. A total of 121 pharmacists, 6 pharmacy technicians, and 45 student pharmacists have been trained on WPQC. The 45 students completed the WPQC home study and were trained by PSW staff while completing rotations at WPQC pharmacies. Fifteen pharmacists who were initially trained are no longer participating in WPQC because of employment changes or their pharmacy is no longer enrolled in WPQC.

A McKesson Corporation subsidiary, AccessHealth, functions as the third-party administrator (TPA) and facilitates billing and payment for services provided. Each payer organization has signed a business associate agreement and contract with the health services company/TPA.

Four of the nine payers involved in the initial WPQC discussions signed a letter of intent to participate during the third quarter of 2007 and continued to work through the contracting process during 2008 and 2009. The first two payers under contract were Unity Health Insurance, a regional network model health maintenance organization (HMO) that insures approximately 42,000 individuals for drug coverage, and Group Health Cooperative–South Central Wisconsin, a regional staff model

HMO that insures approximately 35,000 individuals. United Health Care Wisconsin, a national health plan that insures approximately 700,000 people in Wisconsin, continues to work through the contracting process. The State of Wisconsin Department of Health Services has expressed their intent to include the state's health plans in WPQC. Additional payer recruitment continues, including but not limited to the additional five payers that contributed to WPQC program development.

A WPQC steering committee consisting of participating payer representatives, WPQC pharmacists, PSW staff, and a Wisconsin Medical Society representative has replaced the initial WPQC task force and continues to guide the direction of the WPQC pilot. Anecdotal communication with WPQC pharmacists indicates that participating pharmacists have seen positive results from implementing quality requirements and that patients have been affected positively. Since the beta testing period began, the number of intervention-based and CMR/A services provided and reimbursed has increased steadily. Pharmacists have reported that the quality network requirements, though initially time consuming to incorporate consistently, have made differences in patient care. In particular, the process of showing each patient each medication at the time of dispensing, the consistent process for pediatric dose checking, and CQI process requirements have received praises from WPQC pharmacists and are each anecdotally associated with successful outcomes.<sup>22,23</sup>

The first quality network requirement audit was completed during the fourth quarter of 2008. The audit focused on "Pharmacy Management requirement #2: Utilization of a continuous quality improvement (CQI) program for medication risk management." In addition to using the WPQC quality-assurance policy to guide the review process, a standardized rubric was developed by the faculty member on the audit committee. Submissions included policies and procedures and answers to several other questions that would help to demonstrate to the committee the presence of an active CQI program. Submissions were reviewed by two members of the committee to ensure that the review process was as standardized as possible. The rubric has not been formally validated; however, the small review committee discussed the rubric at length before and after completion of the initial dual review process. Validation of audit tools will be the focus of a future article. Each pharmacy was mailed the audit results, which included the quality-assurance policy, the rubric, copies of the material submitted, the average network audit score, and a letter describing whether follow-up action was required. Pharmacies requiring the most follow-up action were telephoned to ensure understanding of the letter prior to its receipt. Additional details of the audit process and subsequent pharmacy follow-up will be the subject of a future report.

## Discussion

The development of the WPQC consortium and the WPQC network of pharmacies and payers has been exciting but challenging. However, we believe that each challenge encountered has led to the development of processes that have resulted in

the provision of higher levels of quality service and that our experience in overcoming these challenges will inform others embarking on new models of MTM services.

We have gained a deeper understanding of the complexity of the contracting and implementation process between the TPA and payers and the TPA and pharmacies. PSW was not directly involved in the contracting process, but business associate agreements and contracts were necessary for data to be transferred into the software system. This directly affected the speed with which the program could launch. After contracts were signed, a great deal of interaction was required between payers and the McKesson Corporation to coordinate the routine transfer of eligibility and claims data. The incremental addition of payers has also proven challenging given the geographical location of the 53 pharmacies and the distribution of covered patients throughout the state. If successful contracting occurs with the next two payers in the queue, every pharmacy throughout the full WPQC network will have the ability to provide services to covered patients from at least one payer group.

Patient acceptance of level 2 service offers is at times disappointingly low—a response we attribute to a lack of patient expectations for pharmacist-provided CMR/A services. Pharmacist anecdotes suggest that the patient population covered by the first two participating payers may be younger and healthier compared with the expected Medicaid population. As described in the report by Cranor and Christensen<sup>24</sup> on the Asheville Project (diabetes program), different groups can conceivably have different outcomes, including satisfaction with pharmacy services. Similarly, patients covered by different payers may differ in their need for CMR/A, perception of need for CMR/A, and health status. Our evaluation will attempt to discern reasons for patient nonparticipation. We continue to believe that prescriber referral of eligible patients may provide the impetus and reinforcement that patients need to embrace this opportunity.

The pharmacy quality requirements for participation require extraordinary effort to implement. The literature does not clearly describe the components of community pharmacy best practices and does not indicate how to measure or implement the best practices incorporated into the WPQC program. Implementing quality requirements has required some creativity on the part of participating pharmacies. Auditing pharmacies on the requirements should prove a useful learning tool and be helpful for program expansion following the pilot. Implementation of the quality requirements, especially for pharmacies who do not have a participating payer in their region or pharmacies who have relatively few WPQC payer-covered patients, is not without expense to the pharmacies. This project attempts to create a financially feasible program from the business perspective. We realize that initial investment of paid and volunteer time given to project start up is substantial. If a model such as ours is to be financially sustainable, the eventual pharmacy return on investment must be positive—a goal we anticipate reaching. After we have sufficient payer participation, we will conduct an extensive pharmacy return-on-investment analysis to determine the economic future of the program.

Other challenges have included use of the “train-the-trainer” method after the live training sessions, using a software application that continues to evolve with periodic new releases, troubleshooting pharmacy-specific issues to meet the program requirements (e.g., one community chain pharmacy does not routinely provide Internet access to pharmacists; this was overcome by allowing access to the RelayHealth website at the specific participating stores but required a lengthy internal corporate process in order to be implemented), the time-consuming nature of providing PSW support to the pharmacy network, maintaining accurate records of active participating pharmacists given employment changes and ensuring that new pharmacists are adequately trained, marketing to patients and prescribers, and maintaining momentum among the network pharmacists who are being asked to introduce fundamental changes into their practices. Pharmacists who had the opportunity to attend live training sessions have a deeper commitment to the WPQC program, given the live nature of the programming. We have received numerous requests for additional live sessions for those unable to attend the original sessions and for those pharmacists who have replaced pharmacists who were initially trained. Those attending the sessions appreciated the networking and momentum that was generated at the sessions. We anticipate that additional live training and the development of online software training options will help to positively impact the use and momentum of the program. Challenges related to the program evaluation have included obtaining access to related medical claims data, determining an accurate eligible population for level 1 and 2 services based on pharmacy claims data, and anticipating the addition of other payers and patients.

## Conclusion

WPQC has created a model for practice advancement. We anticipate that this pilot will be sustainable and allow the pharmacy and payer network to expand across the state of Wisconsin. We are demonstrating that collaboration among payers and pharmacists is possible and can result in the development of an incentive-aligned program that stresses quality patient care, standardized services and professional service compensation for pharmacists, and the recognition of innovative leadership on the part of participants. This combination of a quality-based credentialing process with a professional services reimbursement schedule is unique and has the promise to enhance the community and ambulatory pharmacy business model.

The 2005 APhA Pinnacle Awards keynote speaker Andrew Webber echoed many of the points that WPQC has focused on during development of the program.<sup>25</sup> First, according to Webber, employers are the ultimate purchasers of health services; they need to take responsibility and demand quality health care for their employees and need to reform the current payment system to reward quality. His second theme described a “new deal” in health care or a “shared common vision” of value-based purchasing. The only way to achieve this is by aligning the economic incentives in the current system to reward

better quality. Third, he described the five pillars of value-based purchasing: performance measurement, transparency, differential reimbursement (pay for performance), informed consumer choice, and leadership. The last point focused on leadership and the importance of leading change at the community level so that it is sustainable. He challenged the pharmacy community to rethink and reengineer its role in health care. Similar to many groups nationally, WPQC has strived to create a program that will allow pharmacies to reengineer and expand their roles.

As described in the training section above, PSW has made considerable efforts to integrate the WPQC program into the University of Wisconsin–Madison School of Pharmacy student experience by holding regular student WPQC training sessions, providing presentations for faculty and students at the school, helping to facilitate use of the McKesson application in the pharmacotherapy laboratory courses, and serving as clinical instructors for the school. We have been pleased and encouraged by the interest and skills demonstrated by students. Students are prepared to perform CMR/As and have exceptional communication skills, although the number of practice sites where these skills are practiced during clerkship rotation may not afford all students the opportunity to practice. Our belief is that this grassroots effort is strengthened by educating students to expect opportunities like WPQC as they graduate and move into practice, whether in the community, health-system, or long-term care setting.

We have noted barriers and challenges experienced thus far in the WPQC project; however, by persevering to overcome the barriers and continuing to market our unique services, we will succeed in demonstrating the value of pharmacy services to patients, prescribers, and payers. We will continue to share experiences and results of the project as they become available.

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