Wisconsin Pharmacy Quality Collaborative:
Improving Health Outcomes through Pharmacy Medication Therapy Management

A Reference Guide for Physicians and Other Health Care Providers
What is the Wisconsin Pharmacy Quality Collaborative (WPQC)?

The Wisconsin Pharmacy Quality Collaborative (WPQC) is a network of pharmacies with pharmacists who provide medication therapy management (MTM) services such as comprehensive medication reviews to patients. The ultimate goal of WPQC is to resolve drug therapy problems, improve adherence and engage patients in their own care.

To view the list of participating WPQC pharmacies, please visit www.pswi.org/WPQC.

WPQC is offered throughout Wisconsin, with participating pharmacies committing to higher standards for medication management, patient education, quality assurance, and patient safety.

Certified pharmacists who have received specific training meet privately with patients to review medication regimens, communicate potential opportunities to improve medication use with physicians and other health care providers, and educate patients on the appropriate use of their medications.

WPQC expanded statewide under a three-year Centers for Medicare and Medicaid Healthcare Innovations grant and is now implemented in pharmacies across the state.

The WPQC program aims to reduce health care costs by optimizing medication use to enhance patient outcomes, improve patient adherence, and reduce hospital readmissions.

Participating WPQC locations can be found in almost every county in Wisconsin.
What is the goal of WPQC?

The goal of WPQC is to establish a standardized set of pharmacist-provided medication therapy management (MTM) services that can be received by patients throughout the state. Pharmacists collaborate with physicians to implement recommended changes. Patients receive the services at no cost provided they have prescription coverage through a participating WPQC health plan.

The aims of WPQC are to improve health, health outcomes and reduce total health care costs in the state of Wisconsin by implementing a redesign of community pharmacy practices and facilitating medication management services for eligible patients of commercial and government health plans.

WPQC Program Standards

In order to participate in WPQC, a pharmacy must comply with a set of rigorous standards to become a WPQC-accredited medication therapy management center.

WPQC Aims

- Transition community pharmacists from medication dispensers to medication therapy managers
- Enhance patient engagement in their care
- Improve medication use and health outcomes
- Reduce prescription drug costs and unnecessary health care utilization for participants and health plans
What is Medication Therapy Management (MTM)?

WPQC Medication Therapy Management services are a distinct group of value-added services provided by pharmacists, which include comprehensive medication review and assessment visits. The intent is to work collaboratively with physicians to enhance therapeutic outcomes by improving medication adherence and aligning with evidence-based guidelines.

The pharmacist will not make any changes to the patient's medication regimen without health care prescriber approval.

### Comprehensive Medication Review & Assessment Process:

1. **Preparation**  
   Review of medication history and available health information

2. **Face-to-face visit**  
   Assessment of prescription and over-the-counter medications, adherence discussion, medication device instruction, identification of drug therapy problems and cost effectiveness solutions

3. **Patient materials**  
   Medication action plan (MAP), personal medication list (PML)

4. **Communication with physician**  
   Consideration of pharmacist’s recommendations for change, updated personal medication record, visit summary

5. **Referral to physician**  
   for follow-up care or when concerns arise

6. **Follow-up visits**  
   as needed to prevent adverse drug events, monitor medication efficacy, safety and adherence
What are the expected benefits of the WPQC program?

1. Improved medication use among participating patients
2. Improved patient safety (identification and resolution of drug-related problems)
3. Reduced health care costs for participating patients and payers
4. Decreased hospital readmissions
5. Partnership between pharmacists and physicians to improve quality and attain desired performance metrics (e.g. PQRS, WCHQ)

Pharmacists are a tremendously underutilized resource in the health care system. The WPQC program is an extremely useful tool to help me take better care of my patients. The careful comprehensive review of patients’ medications has led to better patient engagement and educated patients. I am a strong advocate for their services and recommend them to my colleagues.

Philip Bain, MD, Fellow of the American College of Family Physicians-Site Chief, Dean Clinic East Internal Medicine

2015 Physician Quality Reporting System (CMS) Pharmacy-Related Measures

<table>
<thead>
<tr>
<th>Condition</th>
<th>Measures</th>
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<tbody>
<tr>
<td>Diabetes</td>
<td>Obtain LDL less than 100 mg/dL</td>
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<tr>
<td>Patients age 18 – 75 with A1c greater than 9.0%</td>
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<tr>
<td>COPD</td>
<td>Bronchodilator therapy</td>
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<tr>
<td>Medication Reconciliation</td>
<td>Reconciliation of medications within 30 days of inpatient discharge for patients 18 years and older</td>
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<tr>
<td>Asthma</td>
<td>Inhaled corticosteroid or appropriate long-term control alternative</td>
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<tr>
<td>Patients age 5 to 50</td>
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<tr>
<td>Tobacco use screening and cessation counseling intervention</td>
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<tr>
<td>Hypertension</td>
<td>Blood pressure within goal &lt;140/90 mmHg</td>
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<tr>
<td>Patients age 18 to 85</td>
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Why Develop Relationships with Community Pharmacists?

Pharmacists have a specialized skill set and expertise that, when partnered with physicians and other members of the health care team, complement and supplement the team-based care approach to improve patient health outcomes.

Reasons to involve pharmacists in physician-led, multi-disciplinary health care teams:

**KNOWLEDGE:**
Pharmacists receive advanced training about the effective use of medications which allow them to identify and resolve medication-related problems and optimize medication therapy based on evidence-based medicine.

**ACCESS:**
Many patients see their pharmacists more often than any other health care professional and regularly fill prescriptions. On average, there is a pharmacy within two miles of every home and pharmacists typically have established relationships with their patients.

**TEAM-BASED CARE:**
Pharmacists are ideally positioned to complement the care physicians provide by coordinating medication therapy regimens and facilitating medication reconciliation for patients with multiple physicians and chronic conditions.

As we look toward the future, physician-led, team-based medical practice offers promise for our American health care system — a system that provides the most effective, efficient and cost-effective care for our growing patient population.

Steven Stack, MD

Innovative practice models need to be considered in order to address the challenges of increased care for chronic diseases, limited access to care, and decreased provider workforce.

Improving Patient and Health System Outcomes through Advanced Pharmacy Practice: A Report to the U.S. Surgeon General 2011
Evidence Supporting the Impact of MTM Programs Involving Community Pharmacists

<table>
<thead>
<tr>
<th>Asthma:</th>
<th>Diabetes:</th>
<th>Patient Safety:</th>
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<tr>
<td>The Asheville Project, a 2006 study, followed 207 adult patients with asthma who received MTM services. The patients in the intervention group experienced the following benefits:</td>
<td>A 2007 meta-analysis examined the impact of pharmacist intervention on A1c. Pooled results from 16 trials showed the mean A1c dropped a full percentage point (1.00% + 0.28, p&lt;0.001) for patients in the pharmacist intervention group, while patients in the control group had a non-significant change in their A1c (-0.28% + 0.29%, p&gt;0.05)</td>
<td>The following outcomes resulted from a MTM program where 201,000 prescriptions were dispensed and 1,503 interventions were made by community pharmacists:</td>
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<tr>
<td>- Missed worked hours decreased by 400% (10.8 days/year to 2.6 days/year)</td>
<td>A community-based pharmacy MTM intervention involving 256 patients found a mean drop in A1c of -0.8% (p&lt;0.001) during the one-year follow-up period, and LDL dropped 8.9 mg/dL (p&lt;0.001)</td>
<td>- 16% avoided a potential drug-related hospital admission</td>
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<td>- Total health care costs decreased by $725/patient/year</td>
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<td>- 32% prevented likely harm</td>
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<td>- Patients were SIX times less likely to visit the emergency department or be hospitalized after program intervention</td>
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<td>- 24% had the potential to improve the efficacy of the intended therapeutic plan</td>
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<td></td>
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<td>- 50% improved the clinical outcome and could have saved a visit to the general practitioner</td>
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**Transitions of Care and Medication Reconciliation**

Froedtert Hospital implemented a transitions of care program that included both inpatient and community pharmacists to ensure continuity of care post-discharge.

As a result of the program, post-discharge 30 day readmission rates for patients with heart failure, pneumonia, diabetes or a history of myocardial infarction dropped from 30.4% to 20.1%.
Pharmacists’ Impact on Hypertension

STUDY 1

BACKGROUND:
Physicians partnered with pharmacists in a prospective, randomized trial involving 179 patients with hypertension. For the intervention group (n=101), primary outcomes were overall blood pressure reduction and percentage of patients at or below blood pressure goal. Goal blood pressure was less than 130/80 for patients with diabetes or chronic kidney disease, and less than 140/90 for all other patients (JNC 7 guidelines).8

INTERVENTION:
Pharmacists recommended appropriate anti-hypertensive agents to physicians based on individual patient characteristics, educated patients with poor adherence and provided tips to overcome adherence barriers, and taught patients how to self-monitor their blood pressure.

OUTCOMES:
After 9 months, blood pressure was controlled in 89.1% of patients in the intervention group and only 52.9% of patients in the control group (OR 8.9, p< 0.001). Further, for hypertensive patients with diabetes, blood pressure was controlled in 81.8% of patients in the intervention group and only 23.5% for patients in the control group (OR 40.1; p=0.002). Overall, systolic blood pressure was 8.7 mmHg lower and diastolic blood pressure was 5.4 mmHg lower in the intervention group compared to the control group.

CONCLUSION:
Physician-pharmacist collaboration led to a further reduction in blood pressure and more patients at or below goal pressure as compared to standard of care.
The Community Preventive Services Task Force recommends team-based care to improve blood pressure control on the basis of strong evidence of effectiveness in improving the proportion of patients with controlled blood pressure and in reducing systolic and diastolic blood pressure.


**BACKGROUND:**
The Asheville Project was a community-based, pharmacist-directed MTM program in which pharmacists partnered with the City of Asheville, North Carolina, to assist their state employees with control and management of their hypertension.9

**INTERVENTION:**
Community pharmacists received cardiovascular certificate training and followed guideline-based therapy (JNC 7) for managing hypertension. Physicians provided pharmacists with the patients’ blood pressure goals. Pharmacists provided 30 minute face-to-face consultations with patients and provided medication therapy improvement recommendations via fax to the patient’s physician after the visit. The majority of patients had a follow-up appointment with the pharmacist three months after their initial visit.

**OUTCOMES:**
Over the course of the study, 423 patients with hypertension received pharmacist services. The mean systolic blood pressure dropped from 137.3 to 127.3 mmHg (p<0.0001), and the mean diastolic blood pressure dropped from 82.6 mmHg to 77.8 mmHg (p<0.0001). The percentage of patients at or below their blood pressure goal rose from 40.2% to 67.4%.

Additionally, the risk of cardiovascular events decreased by 53% (OR 0.47), and utilization of hospital and emergency departments reduced by 54% (OR 0.46).

**CONCLUSION:**
Physician-pharmacist collaboration to reduce blood pressure in the community setting led to a higher percentage of patients achieving their blood pressure goal and a reduction in cardiovascular events, as well as hospitalization and emergency department visits.

**IMPACT OF MTM PROGRAM ON ATTAINMENT OF BLOOD PRESSURE GOALS**

<table>
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<tr>
<th>% of Patients</th>
<th>Baseline</th>
<th>End of Follow-Up</th>
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<tr>
<td>At Goal BP</td>
<td>40.2</td>
<td>67.4</td>
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**PHARMACISTS CAN:**
- Measure patients' blood pressure at the pharmacy
- Teach and encourage patients how to accurately monitor their blood pressure at home
- Participate in initiatives, such as Million Hearts®, to emphasize cardiovascular health across patients, providers, communities, and other stakeholders

**STUDY 2**

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Who is Eligible for WPQC Services?

Physician referral automatically qualifies patients for WPQC MTM services. Even if a patient does not meet WPQC's standard eligibility criteria, physicians are encouraged to refer any patient he or she feels would benefit. Currently, there is a WPQC pharmacy in almost every county in the state.

For a complete listing of participating WPQC locations, visit this website: www.pswi.org/WPQC.

WPQC Physician Referral Process, It’s as Easy as 1 2 3

1. Determine if the patient’s prescription insurance participates in WPQC.
   - The WPQC pharmacy can check patient eligibility.
   - Please visit www.pswi.org/WPQC for a list of participating health plans.

2. Assess if the patient would benefit from a comprehensive medication review and assessment. Any patient referred by a physician is eligible for services. However, patients with the following conditions or circumstances are likely to benefit from a comprehensive medication review and assessment:
   - Multiple medications to treat or prevent chronic conditions
   - Receives prescriptions from multiple providers
   - Recent discharge from the hospital or long term care setting
   - Low health literacy

3. Call in a verbal order or fax an order to a WPQC-accredited pharmacy requesting the patient receive a comprehensive medication review and assessment.

   Comprehensive medication review and assessment visits can be conducted at any time, whether prior to or following regularly-scheduled physician visits.
Physician Testimonial

As a physician, I am highly skilled in diagnosis. Advanced practice nurses are skilled in care management. Social workers are specialists in the understanding of the behavioral and social sciences that underlie health and illness behavior. Finally, and critical to the integrity of the team, is the pharmacist who masterfully manages each patient's complex drug therapy to achieve positive patient outcomes. Some physicians worry about the fact that pharmacists may displace the role of the physician; however, all providers complement one another on behalf of the highest attainable patient care outcomes. There is no competition for the patient; rather, there is only synergy on behalf of the shared vision of high-level patient care.

Hershey S Bell, MD MS, FAAFP
Pharmacy Report to Surgeon General April 2012

References


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