# Physician attitudes toward collaborative agreements with pharmacists and their expectations of community pharmacists' responsibilities in West Virginia

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## Abstract

***Objectives:*** To (1) investigate physicians' expectations about community pharmacist's roles and physician attitudes toward collaborative agreements with community pharmacists in West Virginia and (2) determine physicians' perceptions of pharmacists providing medication therapy management (MTM) services.

***Methods:*** A mail survey was conducted for a random sample of 500 physicians practicing in West Virginia. Survey items measured the physicians' perceptions about the roles of pharmacists, their level of comfort with pharmacists providing certain MTM services, and their attitudes toward a collaborative agreement with pharmacists.

***Results:*** 102 responses were received, yielding a response rate of 22.1%; 60% of the physicians had a favorable attitude toward supporting collaborative agreement with pharmacists. Physicians were more comfortable with certain areas of MTM services, such as general drug education and the Medicare Part D prescription drug benefit, and they expected pharmacists to identify medication errors and educate the patients about the safe and appropriate use of medications

***Conclusion:*** Of the physician respondents, 60% reported a favorable attitude toward collaborative practice agreements, but their attitude toward pharmacists' role in collaborative drug therapy management and pharmacists providing MTM services were not that favorable. Participating physicians may not have consistent expectations regarding pharmacists providing patient care.

***Keywords:*** Collaborative practice, medication therapy management services, attitudes.

*J Am Pharm Assoc.* 2009;49:797–800.
doi: 10.1331/JAPhA.2009.08111

Collaborative practice agreements (CPAs) allow the pharmacist to function according to a set protocol to provide direct patient care services within a physician's practice.[1] Studies have shown that collaboration between physicians and pharmacists can improve patient safety, reduce health care costs, and improve the quality of care provided.[2,3] Collaborative agreements can cover a variety of patient service areas, including anticoagulation monitoring and dosage adjustment, pain management, emergency contraception, and disease management of asthma, diabetes, and dyslipidemia.[4] The development of collaboration between pharmacists and physicians is a multistep and gradual process, as described by McDonough and Doucette.[5]

As of July 2006, 41 states (including West Virginia) had granted pharmacists the authority to enter into voluntary CPAs with physicians, and in some cases with other providers, to perform a variety of patient care functions under certain specified conditions and limitations.[6] Increased willingness of states to authorize collaborative practice agreements has been bolstered by studies that have demonstrated the value of collaborative working relationships in the care of patients.[7] Many physicians appear reluctant to enter collaborative agreements with pharmacists.[6,8] Exploring the attitudes of physicians toward collaborative agreement can help the pharmacy profession identify the potential barriers and facilitators to the growth of CPAs. Establishing collaborative agreements can improve the drug management process and enhance patient care.[9] Physician buy-in is essential for CPAs to succeed.

## Objectives

The objectives of this exploratory study were to (1) investigate physician expectations about community pharmacist roles and physician attitudes toward collaborative agreement with community pharmacist in West Virginia and (2) determine physician perceptions of community pharmacists providing medication therapy management (MTM) services.

Received August 25, 2008, and in revised form December 18, 2008. Accepted for publication March 28, 2009.

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**Disclosure:** The authors declare no conflicts of interest or financial interests in any product or service mentioned in this article, including grants, employment, gifts, stock holdings, or honoraria.

## Methods

### Survey procedures

A mail survey (Appendix 1 in electronic version of this article, available online at www.japha.org) was conducted for a random sample of 500 physicians practicing in West Virginia. The sample was selected from the database of licensed physicians in West Virginia maintained by the West Virginia Medical Association. This database listed 2,367 physicians who were currently practicing in West Virginia and consisted of all specialties (excluding resident physicians). Each physician was contacted up to two times throughout the survey, and one follow-up reminder postcard was sent. A cover letter and a stamped return envelope accompanied the surveys. As a token of appreciation for completing the survey and to increase the response rate, physicians' names were entered into a drawing to win one of five $50 Barnes and Noble gift certificates. The pretesting of the survey was conducted by administering the survey to a convenient sample of five physicians whose names were excluded from the sampling frame for the main study. The physicians' responses during the pilot study were used to evaluate survey instrument.

### Survey design, measures, and analysis

The survey began with the following brief introduction about MTM services and the collaborative practice concept to provide a clear explanation of the research topic:

"Medication Therapy Management (MTM) services have been introduced in the last two years as a result of the Medicare Modernization Act (Medicare Part D). MTM services are multidisciplinary processes for selecting appropriate drug therapies, educating patients, monitoring patients, and continually assessing outcomes of therapy. Providing MTM services by pharmacists can be more effective if collaborative practice agreements between physicians and pharmacists are established. These collaborative agreements have been successful in most states but only recently possible in West Virginia. Collaborative practice allows the pharmacist to function according to a set protocol to provide direct patient care services within a physician's practice."

The physicians' expectations about pharmacist roles were measured using nine items adopted from Smith et al.[11] on a 5-point Likert-type scale (1, strongly disagree; 2, disagree; 3, neutral; 4, agree; 5, strongly agree) for each statement. Physician perceptions of 10 different MTM services (general drug education, smoking cessation, anticoagulation, diabetes, therapeutic drug monitoring, osteoporosis, immunization, dyslipidemia, asthma, and Medicare part D prescription drug benefit) were measured on a 5-point Likert-type scale (1, strongly uncomfortable; 2, uncomfortable; 3, neutral; 4, comfortable; 5, strongly comfortable). Physicians' attitudes toward collaborative agreement with pharmacists in conducting MTM services was measured by using a single item on a 5-point Likert-type scale (1, strongly disagree; 2, disagree; 3, neutral; 4, agree; 5, strongly agree). The survey also included items about practice characteristics and demographics such as prescription volume, specialty type, years of practice, gender, practice setting and size, age, and academic affiliation setting. Statistical analysis of survey results was conducted using SPSS 15.0 (SPSS, Chicago).

## Results

The survey was conducted between March 15, 2008, and May 1, 2008. Of the 500 mailed surveys, 38 were returned as undeliverable and the adjusted sample size was 462. A total of 102 responses were received giving an adjusted response rate of 22.1%. The characteristics of the respondents are described in Table 1.

With regard to physician expectations about pharmacist role (Table 2), the three areas in which the physicians expected the most from pharmacists were identifying and preventing prescription errors, educating patients about the safe and appropriate use of medications, and taking reasonable steps to ensure that patients have their medications refilled on time. Regarding physician perceptions about the various MTM services provided by pharmacists (Table 3), providing general drug education and explaining Medicare Part D prescription drug benefits were the areas in which physicians felt the most

**Table 1.** Characteristics of survey respondents (n = 102)[a]

| Characteristic | All respondents No. (%) |
|---|---|
| **Gender** | |
| Men | 76 (74.5) |
| Women | 26 (25.5) |
| Age, years (mean ± SD) | 52.09 ± 12.1 |
| **No. prescriptions (weekly)** | |
| 1–20 | 24 (24.0) |
| 21–50 | 23 (23.0) |
| 51–100 | 27 (27.0) |
| >100 | 26 (26.0) |
| **Primary specialty** | |
| Primary care physician | 47 (46.1) |
| Specialists | 55 (53.9) |
| **Years of practice** | |
| ≤5 | 11 (10.8) |
| 6–10 | 19 (18.6) |
| 11–15 | 13 (12.7) |
| 15–20 | 11 (10.8) |
| ≥20 | 48 (47.1) |
| **Academic affiliation** | |
| Yes | 63 (62.4) |
| No | 38 (37.6) |
| **Practice size** | |
| Solo practice | 34 (33.3) |
| Small practice (2–10) | 39 (38.2) |
| Large practice (≥11) | 29 (28.4) |
| **Practice setting** | |
| Private | 64 (64.6) |
| University | 35 (35.4) |

[a]Total no. varies due to item nonresponse.