Perceived successes and challenges of clinical pharmacist practitioners in North Carolina

Jonathan C. Hale, Matthew M. Murawski, and Timothy J. Ives

Abstract

Objectives: To describe the successes and challenges reported by current (active) and formerly practicing (inactive) CPPs and to determine the reasons why inactive CPPs discontinued advanced practice.

Methods: A sampling frame, consisting of all active and inactive CPPs, was obtained from the North Carolina Boards of Medicine and Pharmacy. An electronic survey was sent to 84 active and 32 inactive CPPs. Respondents were queried regarding qualifications, experience, and practice characteristics, perceived successes, and perceived challenges.

Results: 54 active and 22 inactive CPPs responded. Among active CPPs, 28 (51.9%) reported improved patient care outcomes and 27 (50.0%) reported an expanded scope of practice. Regarding challenges, 30 (55.6%) identified billing for services and 19 (35.2%) noted reimbursement through third parties. Among inactive CPPs, 14 (63.6%) experienced improved patient care outcomes and 11 (50.0%) said their licensure created a practice model for learners. Billing (54.5%) and reimbursement (31.8%) were the top challenges experienced by inactive CPPs. A total of 12 inactive CPPs (54.5%) discontinued CPP licensure because it was not a requirement of their current position. Three (13.6%) discontinued because of insurmountable challenges that made it difficult to continue practice.

Conclusion: Although CPPs held a perception of improved patient care outcomes, billing for services and obtaining reimbursement were reported as the most prevalent challenges and may have played a major role in CPPs becoming inactive.

Keywords: Billing, clinical pharmacists, collaborative drug therapy management, North Carolina, reimbursement.

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Collaborative drug therapy management[1] is legislatively permitted in 46 states[2]; however, several states, including North Carolina, follow a more progressive model of pharmacy practice, allowing for broader prescriptive authority.[2,3]

The Clinical Pharmacist Practitioner Act became effective in North Carolina on July 1, 2000. Under this law, pharmacists, meeting certain requirements[3] and in collaboration with a physician, are given additional privileges allowing practice at a more advanced level. Pharmacists that enter such agreements are called clinical pharmacist practitioners (CPPs) and are licensed jointly by the North Carolina Boards of Pharmacy and Medicine.[4]

Although North Carolina law expanded the scope of pharmacy practice more than a decade ago, only 1.1% of all registered pharmacists in North Carolina have obtained CPP licensure,[5] with an increase of only 57 CPPs since 2004.[6] Understanding the perceived successes and challenges faced by CPPs could inform discussion between pharmacists and local legislators working together to maximize the ability of CPPs and encourage the establishment of similar laws elsewhere.

Objectives

We sought to describe the successes and challenges reported by current (active) and formerly practicing (inactive) CPPs and to determine the reasons why inactive CPPs discontinued advanced practice.

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Methods

After obtaining an exemption from the Institutional Review Board at the University of North Carolina at Chapel Hill, a survey (Appendix 1 in the electronic version of this article, available online at www.japha.org) consisting of 36 multiple-choice and free-text questions was used to determine the background and practice environment of CPPs. The survey was an original instrument administered using a Web-based survey application (www.esurveypro.com). An online format was chosen to facilitate distribution and collection of responses.[7] Two CPPs, who were not involved in the design, reviewed and piloted the survey to ensure question clarity and appropriateness. Selecting multiple answers was permitted for many of the multiple-choice questions.

Because knowledge of the successes and challenges facing CPPs was limited, questions regarding perceived successes and challenges were designed as free-text questions to allow for more openness in responses. Example responses for each of these questions were provided.

The sampling frame was based on a list of all current and previously licensed CPPs that was obtained from the North Carolina Boards of Pharmacy and Medicine; it included 87 active and 55 inactive CPPs (n = 142). Valid e-mail addresses were unavailable for 3 active and 23 inactive CPPs. Therefore, the questionnaire was sent electronically on three successive occasions (May 26, June 13, and June 27, 2011) to 84 active and 32 inactive CPPs (n = 116) in accordance with a modified Dillman method.[8] The Dillman method was modified in that no presurvey announcement was sent and the survey was transmitted to all respondents in each wave rather than only to those who had not responded. Four inactive CPPs were removed from analysis because they were no longer practicing (e.g., because of retirement or death), and 22 were removed from the analysis because of "return to sender" responses. The number of responses for each multiple-choice question was entered by the answer choice, and the free-text answers were transcribed. Free-text responses pertaining to perceived successes and challenges were analyzed qualitatively by thematic content analysis.[3] Percentages were calculated for each multiple-choice answer. Analysis of individual items used all available data, including responses from partial cases.

Results

Responses were obtained from 54 (64.3%) active and 22 (68.8%) inactive CPPs. For perceived practice successes (Table 1), improvement of patient care outcomes was the most commonly cited success among active (51.9%) and inactive (63.6%) CPPs, followed by an expanded scope of practice (50.0%), improved efficiency of health care services (33.3%), and the creation of a model of practice for learners (33.3%) among active CPPs. Other successes reported by inactive CPPs included the creation of a model of practice for learners (50.0%) and an expanded scope of practice (40.9%).

Table 1. Successes reported by clinical pharmacist practitioners in North Carolina

	Active No. (%)	Inactive No. (%)
n	54	22
Improved patient care outcomes	28 (51.9)	14 (63.6)
Expanded scope of practice	27 (50.0)	9 (40.9)
Improved efficiency of health care services	18 (33.3)	7 (31.8)
Created a model of practice for learners	18 (33.3)	11 (50.0)
Increased career opportunities	8 (14.8)	6 (27.2)
Increased respect and recognition	6 (11.1)	5 (22.7)
Job satisfaction	3 (5.6)	—
Opportunities for mentorship	2 (3.7)	—
No benefit	2 (3.7)	—
Improved patient satisfaction	1 (1.9)	2 (9.1)
Too numerous to annotate	1 (1.9)	—
Flexibility in schedule	1 (1.9)	—
Expansion of services to the uninsured	1 (1.9)	—
Reduction in medication errors	1 (1.9)	—
Improved patient adherence and understanding	1 (1.9)	—
Improved provider adherence to standards of practice	1 (1.9)	—
Improved knowledge		1 (4.5)

Regarding perceived challenges (Table 2), the most common responses were similar between active and inactive CPPs. These challenges were billing for services, reimbursement, acceptance by other health care providers, work overload, and documentation/paperwork. Billing for services was the most common challenge (active CPPs 55.6%, inactive CPPs 54.5%), followed by reimbursement (active CPPs 35.2%, inactive CPPs 31.8%).

Among CPPs who left advanced practice, 12 (54.5%) reported obtaining a new position that no longer required CPP licensure, 3 (13.6%) moved from North Carolina, and 3 (13.6%) confronted insurmountable challenges (e.g., billing for services and reimbursement by third parties) that made it difficult to continue practicing as CPPs.

Discussion

Active and inactive CPPs commonly cited improved patient care outcomes and improved efficiency of health care services as successes. Recent meta-analyses and systematic reviews have concluded that pharmacist interventions can improve outcomes in patients with diabetes,[9] hypertension,[10] and dyslipidemia,[11] in those admitted for inpatient care,[12] and in patients with congestive heart failure.[13] In addition, pharmacists can enhance