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, 12 inactive CPPs (54.5%) discontinued because of 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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Jonathan C. Hale, PharmD, was a student pharmacist, Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, at the time this study was conducted; he currently is a PGY1 pharmacy practice resident, VA Tennessee Valley Healthcare System, Nashville, TN. Matthew M. Murawski, PhD, is Associate Professor of Pharmacy Administration, College of Pharmacy and Pharmaceutical Sciences, Purdue University, West Lafayette, IN. Timothy J. Ives, PharmD, MPH, BCPS, FCCP, CPP, is Professor of Pharmacy, Eshelman School of Pharmacy, University of North Carolina at Chapel Hill.

Correspondence: Timothy J. Ives, PharmD, MPH, BCPS, FCCP, CPP, Eshelman School of Pharmacy, University of North Carolina, CB 7574, Chapel Hill, NC 27599-7574. Fax: 919-966-4507. E-mail: timothy_ives@med.unc.edu

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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. 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. 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. 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%).

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, hypertension, and dyslipidemia, in those admitted for inpatient care, and in patients with congestive heart failure. In addition, pharmacists can enhance...
efficiencies of use, intensity, and fiscal aspects of health care provision, including drug costs.14

Billing for services and reimbursement were commonly cited as challenges by active and inactive CPPs. To bill for services and to obtain reimbursement through Medicare and other third-party insurers, advanced practice pharmacists used Current Procedural Terminology evaluation and management codes in an “incident to” billing model. Five established codes (among others) are used by physicians in office visits.15 Each code has an increasing level of complexity (levels 1–5), corresponding with increasing levels of reimbursement.16

Although advocated by several national pharmacy organizations,17–20 pharmacists currently do not have provider status under Medicare and billing higher than the lowest level for cognitive services rendered often is not permitted by third-party insurers.16

A recent study determined that 24 patient visits per day were required for a pharmacist to earn a salary and benefits package comparable with the marketplace while only billing at a level 1, whereas only 10 visits were required when billing at level 4.16

The emerging and expanded roles of pharmacists are being recognized now that health care is increasingly focused on effective and affordable patient care. The American Academy of Family Physicians have recognized this expanded clinical role.21 Changing the provider status of pharmacists may be needed, however, before a considerable number of pharmacists in North Carolina (or elsewhere) will perceive CPP licensure and similar advanced practice models as viable options. In recent years, although many attempts have been made to give pharmacists provider status through legislation, none have been successful.3 The recent report to the U.S. Surgeon General and the responding letter of public support called on health and legislative leadership to look for ways to optimize the role of pharmacists in patient care, to recognize pharmacists as health care providers, and to adjust compensation to sustain advanced pharmacy services.22,23

Limitations
The adjusted survey response rate of 64.3% among active CPPs and 68.8% among inactive CPPs may affect the generalizability of this study. In addition, when formulating survey questions regarding perceived successes and challenges, examples of possible responses were provided. This may have encouraged respondents to limit responses to one of the answers provided rather than formulate answers based on personal experience. Further, the survey only included the opinions of CPPs. Including the perspectives of other health care providers may have proven beneficial in determining the scope and impact of perceived successes and challenges of CPPs, and this should be considered for future studies.

One of the top responses regarding perceived successes was that CPPs “created a model of practice for learners,” and CPPs who responded accordingly may have had unique practice situations that biased their responses. Regarding further research, other suggestions may include the assessment of the clinical impact of CPPs or limitations of CPP practice to certain geographic settings (e.g., urban versus rural).

Table 2. Challenges reported by clinical pharmacist practitioners in North Carolina

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Active (%)</th>
<th>Inactive (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billing for services</td>
<td>30 (55.6)</td>
<td>12 (54.5)</td>
</tr>
<tr>
<td>Reimbursement (Medicare or other third-party insurance)</td>
<td>19 (35.2)</td>
<td>7 (31.8)</td>
</tr>
<tr>
<td>Acceptance by other health care providers/insurance companies</td>
<td>14 (25.9)</td>
<td>4 (18.2)</td>
</tr>
<tr>
<td>No challenges</td>
<td>6 (11.1)</td>
<td>1 (4.5)</td>
</tr>
<tr>
<td>Work overload</td>
<td>5 (9.3)</td>
<td>3 (13.6)</td>
</tr>
<tr>
<td>Documentation/paperwork</td>
<td>4 (7.4)</td>
<td>3 (13.6)</td>
</tr>
<tr>
<td>Lack of pharmacy leadership promoting CPP services</td>
<td>2 (3.7)</td>
<td>—</td>
</tr>
<tr>
<td>Volume of continuing education required/restrictions for relicensure too stringent</td>
<td>1 (1.9)</td>
<td>1 (4.5)</td>
</tr>
<tr>
<td>Follow-up with no-show patients</td>
<td>1 (1.9)</td>
<td>—</td>
</tr>
<tr>
<td>Maintenance of knowledge base</td>
<td>1 (1.9)</td>
<td>—</td>
</tr>
<tr>
<td>Specificity requirements of protocol</td>
<td>1 (1.9)</td>
<td>—</td>
</tr>
<tr>
<td>Limitations in scope</td>
<td>1 (1.9)</td>
<td>—</td>
</tr>
<tr>
<td>Legal issues</td>
<td>—</td>
<td>1 (4.5)</td>
</tr>
<tr>
<td>Lack of mentorship</td>
<td>—</td>
<td>1 (4.5)</td>
</tr>
</tbody>
</table>

Abbreviation used: CPP, clinical pharmacist practitioner.

Conclusion
Although CPPs reported improved patient care outcomes, billing for services and obtaining reimbursement were the most prevalent challenges reported and may have played a major role in CPPs becoming inactive.
References
Appendix 1. Demographic survey of clinical pharmacist practitioners

CPP Status

1. Please characterize the status of your CPP licensure.
   - Active
   - Inactive

2. If the status of your licensure is INACTIVE, please specify the reason (check all that apply).
   - Moved from North Carolina
   - New position that did not require CPP licensure
   - Insurmountable challenges that made it difficult to continue working as a CPP
   - Retirement
   - Other (Please specify)

3. Why did you become a CPP (check all that apply)?
   - Need to generate more income
   - Desire to practice pharmacy at a higher level
   - A requirement for practice
   - Other (Please specify)

Qualifications

4. What degrees do you have (check all that apply)?
   - BS (Pharmacy)
   - BS (Any Discipline)
   - PharmD
   - MS (Pharmacy)
   - MS (Any Discipline)
   - MBA
   - MPH
   - MHA
   - PhD (Pharmacy)
   - PhD (Any Discipline)

5. Have you completed a residency?
   - Yes
   - No (skip to question #11)

6. If you have completed a residency, please select the option that best characterizes the PGY 1 program.
   - Community Pharmacy
   - General Pharmacy (Hospital)
7. Did you complete a PGY2 program?
   - Yes
   - No

8. If you did complete a PGY2 program, please specify the program.

9. Did the residency program incorporate a graduate degree program (e.g. a Health Systems Pharmacy Administration residency may include an MS program)?
   - Yes
   - No

10. If you answered “yes” to question #9, please specify the degree received.

11. Have you completed a fellowship?
    - Yes
    - No

12. Do you have certification with the Board of Pharmaceutical Specialties (BPS)?
    - Yes
    - No (skip to question #14)

13. If you have a BPS certificate, what is the specialty (please check all that apply)?
    - Ambulatory Care
    - Nuclear Pharmacy
    - Nutrition Support
    - Oncology
    - Pharmacotherapy
    - Psychiatry

14. Do you hold another certification?
    - Yes
    - No (skip to question #16)

15. If you do, which one (please select all that apply)?
    - Certification in Geriatric Pharmacy
    - Certification in Diabetes Education
    - Other (please specify)

16. Have you completed any certificate programs through the N.C. Center for Pharmaceutical Care (NCCPC) or the American Council on Pharmaceutical Education (ACPE)?
    - Yes
    - No (skip to question #18)

17. If you have completed a certificate program, please specify the number of certificate programs that you have completed.
Experience

18. What other types of pharmacy experience do you have (please check all that apply)?
   - Community
   - Industry
   - Hospital
   - Ambulatory care
   - Long-term care
   - Veterinary
   - Other (Please Specify)

19. How many years of pharmacy experience do you have (please specify)?

20. How much clinical experience did you have before applying for CPP licensure?
   - Less than 3 years
   - 3-5 years
   - More than 5 years

Practice Characteristics

21. Please characterize the practice setting where you work as a CPP (Please check all that apply).
   - Physicians’ office (Group Practice)
   - Physicians’ office (Single Practitioner)
   - Hospital clinic
   - Free standing clinic
   - Community pharmacy (Independent)
   - Community Pharmacy (Chain)
   - VA Hospital
   - Long-term care center
   - Hospital inpatient setting
   - Other (Please specify)

22. Please characterize the geographic setting of your practice site.
   - Urban
   - Suburban
   - Rural

23. Is your practice associated with an academic health center (either a university-based medical center or a medical center that has a residency program)?
   - Yes
   - No
24. Characterize the area of your CPP practice (check all that apply)
   - Oncology
   - Hyperlipidemia
   - Diabetes
   - Asthma
   - Smoking Cessation
   - Hypertension
   - Anticoagulation
   - Heart Failure
   - Pain Management
   - Osteoporosis
   - Epilepsy
   - Obesity
   - Infectious Diseases
   - Mental Health
   - Medication Therapy Management (MTM)
   - Other (Please Specify)

25. Does your work as a CPP constitute full-time employment?
   - Yes (skip to question #28)
   - No

26. If it does not constitute full-time employment, what percentage of your weekly work is as a CPP?
   - 0-25%
   - 26-50%
   - 51-75%
   - 75-100%

27. In what practice setting do you work the remainder of the time (please check all that apply)?
   - Other pharmacy related practice (dispensing, etc.)
   - Teaching
   - Research
   - Administration
   - Other (please specify)

28. How do you get paid for your patient care services (please check all that apply)?
   - Patient billing
   - Paid by the institution
   - Other (please specify)
29. What successes have you had as a CPP?

-Examples may include:
  -Improved efficiency of health care services
  -Improved patient care outcomes
  -Created a model of practice for learners (students, residents)
  -Increased career opportunities
  -Expanded scope of practice

30. What challenges have you experienced as a CPP (please specify)?

-Examples may include:
  -Billing for services
  -Documentation and paperwork
  -Work overload
  -Acceptance by physicians
  -Acceptance by other pharmacists
  -Acceptance by other health care providers
  -Acceptance by patients
  -Reimbursement for services by Medicare

31. If you care to elaborate on any of the answers you have provided in this survey, please do so.

**Demographic Information**

32. What is your age?
   -25-30
   -31-40
   -41-50
   -51-60
   -Over 60
   -Do not care to respond

33. Gender?
   -Male
   -Female
   -Do not care to respond
34. Race?
   - White
   - Black
   - Hispanic
   - Asian
   - American Indian/Alaska Native
   - Hawaiian/Pacific Islander
   - Do not care to respond
   - Other (Please Specify)

35. What year did you receive your entry-level pharmacy degree (that allowed you to practice)? If you do not care to respond, please leave the answer blank.

36. If you wish to receive a copy of the results of this survey upon its completion, please provide your email address in the space below.