

2015

## Identifying Community Pharmacists' Readiness to Participate in Transitions of Care

Nicole Gibson

Clark Kebodeaux

Daron Smith

Kellye Holtgrave

Nicole Gattas

Follow this and additional works at: <http://pubs.lib.umn.edu/innovations>

### Recommended Citation

Gibson N, Kebodeaux C, Smith D, Holtgrave K, Gattas N. Identifying Community Pharmacists' Readiness to Participate in Transitions of Care. *Inov Pharm*. 2015;6(3): Article 218. <http://pubs.lib.umn.edu/innovations/vol6/iss3/14>

INNOVATIONS in pharmacy is published by the University of Minnesota Libraries Publishing.

## Identifying Community Pharmacists' Readiness to Participate in Transitions of Care

Nicole Gibson, PharmD<sup>1,2</sup>; Clark Kebodeaux, PharmD, BCACP<sup>1,2</sup>; Daron Smith, RPh, AAHIVP<sup>1,2</sup>; Kellye Holtgrave, RPh<sup>1</sup>; Nicole Gattas, PharmD, BCPS<sup>2</sup>

<sup>1</sup>Walgreens Pharmacy; <sup>2</sup>St. Louis College of Pharmacy

**Funding:** No financial or material funding to be reported

**Conflicts of interest:** No conflicts of interest to be reported

**Keywords:** Transitions of care, community pharmacy, questionnaire

### Abstract

**Objective:** To determine the readiness of community pharmacists to participate in transitions of care and to identify barriers related to participation.

**Methods:** A questionnaire was developed to identify community pharmacists' willingness, attitudes, and barriers to participating in transitions of care programs. The questionnaire was piloted with community pharmacists prior to implementation. The questionnaire was distributed to a population of chain, supermarket/grocery, and independent community pharmacists (n=200). Descriptive statistics, correlations, and chi square tests were used to analyze demographic trends and final results.

**Results:** Of the 200 questionnaires distributed, 147 pharmacists responded (73.5%). Community pharmacists agreed transitions of care services have the potential to improve patients' understanding of medications (97.3%), decrease medication-related errors (95.9%), and enhance relationships with patients (96.6%). The largest pharmacist perceived barriers included time (69.7%), communication/lack of patient data (14.6%), and lack of physician acceptance (6.7%). Of the respondents who indicated time as the greatest barrier to participation, 76.9% of pharmacists were still willing to participate in transitions of care given the opportunity. Willingness to participate in transitions of care did not differ by gender ( $p=0.139$ ), years in practice ( $p=0.133$ ), or degree of education ( $p=0.382$ ).

**Conclusion:** Community pharmacists are in a unique position to widely impact patient health outcomes and decrease hospital readmission rates through improved care coordination. This research demonstrates community pharmacists' readiness and willingness to participate in transitions of care. Awareness of perceived barriers can allow stakeholders to address these areas when designing and implementing transitions of care programs with pharmacists.

### Introduction

Care transitions occur with the movement of a patient across the healthcare system.<sup>1</sup> The Medicare Payment Advisory Commission Report to Congress of 2007 identified 17.6% of Medicare patients that were readmitted to the hospital within 30 days of discharge. Of those individuals readmitted, 76% were described as being potentially preventable, resulting in an additional \$12 billion healthcare dollars spent.<sup>2-3</sup>

In 2011, the Affordable Care Act established the Hospital Readmissions Reduction Program to reduce payments for hospitals with excess readmissions. This program focuses specifically on 30 day readmissions for acute myocardial infarction, heart failure, and pneumonia. Hospitals could be penalized up to 3% for the 2015 fiscal year due to excess

readmissions. The Centers for Medicare and Medicaid Services (CMS) further expanded the applicable healthcare conditions in the 2015 fiscal year to include patients readmitted for acute exacerbations of chronic obstructive pulmonary disease (COPD) and patients readmitted for elective total hip arthroplasty (THA) or total knee arthroplasty (TKA).<sup>4</sup>

Medication discrepancies, adverse effects, non-adherence, and lack of patient understanding of treatment commonly occur in the post-discharge period. These undesirable outcomes often contribute to hospital readmission and could be prevented with improved care coordination.<sup>1, 2, 5</sup>

Community pharmacists are in a unique position to widely impact patient health outcomes and decrease hospital readmission rates by identifying and resolving drug related problems. Currently, the majority of community pharmacists are not reimbursed for transitions of care services and there is no research regarding their readiness to do so.

**Corresponding author:** Nicole Gibson, PharmD  
Walgreens Pharmacy  
St. Louis College of Pharmacy  
Email: [gibsonn88@gmail.com](mailto:gibsonn88@gmail.com)

**Objective**

The objective of this study was to determine the readiness of community pharmacists to participate in transitions of care and to identify barriers related to participation.

**Methods**

A questionnaire (see appendix 1) was developed to identify community pharmacists' willingness, attitudes, and barriers regarding participation in transitions of care. The questionnaire was developed by researching previous surveys and questionnaires that assessed pharmacists' readiness to participate in a new clinical service.<sup>6-8</sup> This formed a guide for the types of questions included in the current questionnaire. It was reviewed by a doctor of philosophy with a specialty in public health and pharmacy, survey design and analysis, and basic research methods and statistics. Following expert review, the questionnaire was piloted by three community pharmacists prior to implementation in order to receive feedback related to clarity and organization of the survey. This information was used to ensure consistency of interpretation of the questionnaire. Quantitative responses of the pilot surveys were not collected nor used in the final results. The research project was reviewed and determined to be exempt by St. Louis College of Pharmacy IRB.

The questionnaire consisted of 11 questions to which pharmacists selected a value on a seven-point Likert scale (from 1, strongly disagree, to 7, strongly agree). Two open-ended questions allowed pharmacists to list potential challenges or barriers to participation and additional training that may be beneficial prior to participation. Demographic characteristics including year of birth, gender, level of education, years in practice, pharmacy position, pharmacy setting, and previous employment pharmacy settings were gathered.

The questionnaire was distributed to a population of chain, supermarket/grocery, and independent community pharmacists (n=200) in the St. Louis, Missouri metropolitan area. The questionnaire was distributed to pharmacists at local pharmacy meetings or delivered at the store level. If distributed at local pharmacy meetings, supervisors and study investigators were not allowed to be present during completion of the questionnaire. Participants were not required to complete the survey. Pharmacists had the option to complete and turn in a secure box or send back via fax at a later time. All questionnaires were distributed and returned from January to February 2014.

Descriptive statistics were used to represent pharmacist demographic characteristics, pharmacists' who agreed with the 11 questions on a seven-point Likert scale, and the

pharmacists' barriers to participation. Agreement was determined based on a selection of greater than or equal to five on the seven-point Likert scale. Chi square and correlations were used to determine if willingness to participate differed by pharmacist demographic characteristics.

**Results**

Of the 200 questionnaires distributed, 147 pharmacists responded (response rate = 73.5%). Table 1 presents the demographic characteristics of those pharmacists that participated. The pharmacists' years in practice was evenly distributed from less than five years in practice to greater than 20 years in practice. Chain community pharmacists were primarily represented in this study, accounting for 87% of the sample, with a smaller number of supermarket/grocery (10%) and independent (3%) pharmacists.

Community pharmacists agreed transitions of care services have the potential to improve patients' understanding of medications (97.3%), decrease medication-related errors (95.9%), and enhance relationships with patients (96.6%). Table 2 presents a complete list of the percent of pharmacists who agreed to items on the questionnaire.

Approximately 70% of pharmacists perceived time as a barrier to participation in transitions of care services. Additionally, 14% of pharmacists noted that communication with physicians and lack of patient data during the hospitalization could be potential challenges. Lack of physician acceptance (6.7%), lack of patient acceptance (6.1%), and reimbursement issues (3.0%) were also listed as possible barriers.

Despite the pharmacists' perceived barriers, a large majority of pharmacists recognized the benefits in improving patient outcomes and were willing to participate. Of the respondents who indicated time as the greatest barrier to participation, 76.9% of pharmacists were still willing to participate in transitions of care given the opportunity. Notably, willingness to participate in transitions of care did not differ by gender ( $p=0.139$ ), years in practice ( $p=0.133$ ), or degree of education ( $p=0.382$ ).

**Discussion**

Hospital readmissions result in billions of extra healthcare dollars spent each year, much of which is preventable.<sup>2,3,9</sup> The Affordable Care Act produced the Hospital Readmission Reduction Program (HRRP) in an effort to improve the quality of patient care by penalizing hospitals for 30-day readmissions.<sup>4,9</sup> There is now incentive to coordinate care as

the patient transitions from the hospital to an outpatient location.<sup>9</sup>

Community pharmacists are in a unique position to decrease hospital readmission rates through improved care coordination. Pharmacists in the community setting have the ability to resolve medication discrepancies, improve patient understanding of medications, and address adverse effects.<sup>1,2,5</sup> These factors can all affect a patient's adherence to medications and may be improved by pharmacist interventions in the post-discharge period.

The results of this questionnaire indicate that community pharmacists recognize their potential value in transitions of care and 91.2% were willing to participate in these services given the opportunity. Time was the largest perceived barrier and was listed by 69.7% of pharmacists. Perhaps the most significant finding from this questionnaire was that despite the time potentially required, 76.9% of pharmacists were still willing to participate.

While the majority participants were willing to participate in transitions of care services given the opportunity, only 53.7% indicated they had a clear idea of the role of a community pharmacist in providing transitions of care services. There are in fact a variety of transitions of care services and a limitation is that this term may have different meanings to separate individuals. This could be a potential area of future study to compare what transitions of care means to community pharmacists—an important member of the healthcare team during a care transition.

Prior to community pharmacists' participation in transitions of care programs, it was noted that there should be some form of financial reimbursement. This may come from hospitals or from the insurance plan, both of which benefit if hospital readmissions are decreased. Community pharmacists across the United States already widely participate in medication therapy management (MTM) services through large platforms such as Mirixa or Outcomes. A similar platform could be used in the future to provide reimbursement for transitions of care programs.

### Limitations

The results of this study may not be generalizable to all community pharmacists due to the inability to randomly sample the population. This study was limited to the St. Louis metropolitan area and included a large percentage of chain community pharmacists, with fewer supermarket/grocery and independent community pharmacists who attended local pharmacy meetings. Another possible limitation is the ability of the questionnaire to accurately portray community

pharmacists' willingness, attitudes, and barriers regarding participation in transitions of care due to the varying definitions of transitions of care.

### Conclusions

Community pharmacists are in a unique position to widely impact patient health outcomes and decrease hospital readmission rates through improved care coordination. This questionnaire demonstrates that community pharmacists are ready and willing to participate in transitions of care. Awareness of perceived barriers can allow future stakeholders to address these areas when designing and implementing transitions of care programs with pharmacists.

### References

1. Hume AL, Kirwin J, et. al. Improving care transitions: current practice and future opportunities for pharmacists. *Pharmacotherapy*. 2012;32(11):326-337.
2. Kirwin J, Canales AE, et. al. Process indicators of quality clinical pharmacy services during transitions of care. *Pharmacotherapy*. 2012;32(11):338-3347.
3. Novak CJ, Hastanan S, Moradi M, Terry DF. Reducing unnecessary hospital readmissions: the pharmacist's role in care transitions. *Consult Pharm*. 2012;27(3):174-179.
4. Readmission reduction program. Centers for Medicare and Medicaid Services Website. <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>. Accessed May 20, 2014.
5. Haynes KT, Oberne A, Cawthon C, Kripalani S. Pharmacists' recommendations to improve care transitions. *Ann Pharmacother*. 2012;46(9):1152-1159.
6. Bryant LJ, Coster G, Gamble GD, McCormick RN. General practitioners' and pharmacists' perceptions of the role of community pharmacists in delivering clinical services. *Res Social Adm Pharm*. 2009 Dec;5(4):347-362.
7. El Hajj MS, Al Nakeeb RR, Al-Qudah RA. Smoking cessation counseling in Qatar: community pharmacists' attitudes, role perceptions and practices. *Int J Clin Pharm*. 2012;34(4):667-676.
8. Fitzgerald N, Watson H, McCaig D, Stewart D. Developing and evaluating training for community pharmacists to deliver interventions on alcohol issues. *Pharm World Sci*. 2009;31(2):149-153.
9. Kocher RP, Adashi EY. Hospital readmissions and the Affordable Care Act: paying for coordinated quality care. *JAMA*. 2011;306(16):1794-1795.

## Appendix 1

## Transitions of Care Questionnaire

Transitions of care is defined as the movement of a patient across the healthcare system.

For the purpose of this questionnaire, the focus will be on the transition from a hospital discharge to the patient's home.

	Strongly Disagree	Strongly Agree
1. Community pharmacists should be involved in transitions of care services	1 2 3 4 5 6 7	
2. Being involved in transitions of care services is important to me	1 2 3 4 5 6 7	
3. I have a clear idea of the role of a community pharmacist in providing transitions of care services	1 2 3 4 5 6 7	
4. Transitions of care services offered by community pharmacists have the potential to decrease medication-related errors	1 2 3 4 5 6 7	
5. Transitions of care services offered by community pharmacists have the potential to improve patients' understanding of medication	1 2 3 4 5 6 7	
6. Participating in transitions of care services would enhance my relationship with physicians	1 2 3 4 5 6 7	
7. Participating in transitions of care services would enhance my relationship with patients	1 2 3 4 5 6 7	
8. I have sufficient training to participate in transitions of care services	1 2 3 4 5 6 7	
9. I do not have time to discuss post-discharge medication-related issues with patients	1 2 3 4 5 6 7	
10. I am willing to participate in transitions of care services given the opportunity	1 2 3 4 5 6 7	
11. It would be rewarding to participate in transitions of care	1 2 3 4 5 6 7	

12. What do you anticipate as potential challenges or barriers to participating in transitions of care services?

13. What additional training would be beneficial prior to participating in transitions of care services?

14. Year of Birth:

15. Gender:

Male

Female

16. Level of education/training (select all that apply):

B.S. Pharmacy

Pharm.D.

Residency/Fellowship

Other: \_\_\_\_\_

17. Number of years in practice:

< 5 years

6-10 years

11-15 years

16-20 years

> 20 years

18. Pharmacy position (select all that apply):

Staff pharmacist

Pharmacy manager

Part-time

Full-time

Other: \_\_\_\_\_

19. Pharmacy setting (select all that apply):

Chain

Supermarket or Grocery

Independent

Other: \_\_\_\_\_

20. Previous settings employed as a pharmacist (select all that apply):

Hospital

Long-term care

Managed care

Other: \_\_\_\_\_

<b>Table 1: Pharmacist Demographic Characteristics (n=147)</b>	
<b>Age (years), mean (SD)</b>	38 (9.5)
<b>Female, number (%)</b>	85 (58)
<b>Pharm.D., number (%)</b>	88 (60)
<b>Years in Practice, number (%)</b>	
< 5 years	41 (28)
6-10 years	33 (22)
11-15 years	27 (18)
16-20 years	14 (10)
> 20 years	32 (22)
<b>Pharmacy setting, number (%)</b>	
Chain	128 (87)
Supermarket/Grocery	15 (10)
Independent	4 (3)

<b>Table 2: Percent of Pharmacists' Who Agree</b>	
1. Community pharmacists should be involved in transitions of care services	89.8%
2. Being involved in transitions of care services is important to me	74.8%
3. I have a clear idea of the role of a community pharmacist in providing transitions of care services	53.7%
4. Transitions of care services offered by community pharmacists have the potential to decrease medication-related errors	95.6%
5. Transitions of care services offered by community pharmacists have the potential to improve patients' understanding of medication	97.2%
6. Participating in transitions of care services would enhance my relationship with physicians	81.6%
7. Participating in transitions of care services would enhance my relationship with patients	96.6%
8. I have sufficient training to participate in transitions of care services	61.9%
9. I do not have time to discuss post-discharge medication-related issues with patients	47.3%
10. I am willing to participate in transitions of care services given the opportunity	91.2%
11. It would be rewarding to participate in transitions of care	87.1%