Journal of Pharmacy Technology
2018, Vol. 34(2) 48–53

DOI: 10.1177/8755122517752158
journals.sagepub.com/home/pmt
SAGE

Patient Satisfaction With a Comprehensive Medication Review Provided by a Community Pharmacist

Lindsey Cardosi, PharmD[1], Kenneth C. Hohmeier, PharmD[2], Cindy Fisher, PharmD[1], and Mike Wasson, RPh[1]

Abstract

Background: The comprehensive medication review (CMR) is one of the most commonly delivered medication therapy management services, and it is a required service to be provided to Medicare Part D beneficiaries. Despite the large body of evidence available on medication therapy management benefits, and the growing value placed on it by payers, there has been little research assessing patient satisfaction with these services. **Objectives:** The primary objective of this study was to determine patient satisfaction with a face-to-face or telephonic CMR provided by a chain community pharmacist. The study secondarily assessed patients' perceived value of the service while also collecting demographic information. **Methods:** A Likert-type satisfaction survey was distributed to patients on completion of a face-to-face or telephonic CMR in either Outcomes or Mirixa by members of a clinical team (7 clinical pharmacists and 4 residents) within a chain community pharmacy. Participants were asked to return the survey in a self-addressed stamped envelope within 1 week of the CMR. **Results:** The response rate for the survey was 33% (31 of 95 surveys returned). The study found that approximately 70% (21 of 31) strongly agreed with being overall satisfied with the CMR. **Conclusion:** This research study provided insight to patients' perceptions of a CMR provided by a community pharmacist. Patient views of the CMR were positive, with patients finding CMR delivery in a community pharmacy valuable. Further investigation of specific interventions and approaches during a medication review could help identify ways to increase patient satisfaction.

Keywords

consumer preferences, community pharmacy, MTM, medication therapy management, patient satisfaction, customer satisfaction

Medication therapy management (MTM) is "a patient-centric and comprehensive approach to improve medication use, reduce the risk of adverse events, and improve medication adherence."[1] It is a growing area of practice and expertise in the community pharmacy setting, and its implementation is supported by major national pharmacy associations and colleges of pharmacy.[2] Furthermore, MTM is a reimbursable service for eligible Medicare beneficiaries, and currently, it is required to be offered by all Medicare Part D plans.[1] As a whole, MTM programs are well studied, and there is a growing amount of evidence surrounding the clinical and economic benefits for such services.[3] However, it is also important on the local level for the individual community pharmacy providing MTM to assess patient satisfaction. Such data can be used to improve current services offered to enhance patient outcomes, foster financially sustainable programs, and retain patients.

MTM is not a single service, but an umbrella term referring to direct patient care services centered on optimizing medication use.[2] These services can be placed on a spectrum, ranging from less complex targeted medication reviews to more complex services such as comprehensive medication management. A service of medium complexity, the comprehensive medication review (CMR) is an annual review of a patient's medication regimen. The CMR is one of the most commonly delivered MTM services in the community pharmacy and is a required service to be provided to Medicare Part D beneficiaries.[1] CMRs can be provided by any qualified health care professional, although the service is traditionally provided by pharmacists.[1] Unlike more complex pharmacist-provided direct patient care services, the

[1]Kroger Pharmacy, Memphis, TN, USA
[2]University of Tennessee, Nashville, TN, USA

Corresponding Author:
Kenneth C. Hohmeier, University of Tennessee College of Pharmacy, 193 Polk Avenue, Suite 2D, Nashville, TN 37210, USA.
Email: khohmeie@uthsc.edu

Table 1. Demographic Information of Survey Respondents.

Characteristics	Number of Patients (N = 31), n (%)
Age range	
51-60	2 (6.5)
61-70	8 (25.8)
71-80	11 (35.5)
81-90	10 (32.3)
Gender	
Female	21 (67.7)
Male	10 (32.3)
Use of pharmacy as primary pharmacy	
Yes	30 (96.8)
No	1 (3.2)
If yes, state of location	
Tennessee	13 (41.9)
Arkansas	8 (25.8)
Mississippi	10 (32.3)
Number of prescription medications	
0-4	2 (6.5)
5-9	21 (67.7)
10-14	8 (25.8)
Initial contact regarding medication review	
Kroger Pharmacy	29 (93.5)
Insurance company	2 (6.5)

CMRs' goals are less intensive and interventions typically involve provider recommendations or referrals, rather than prescriptive authority or adjustment of therapeutic regimens. Its main objective are the identification and resolution of medication-related problems, creation of a list of all of the patient's medication therapies, and the development of a plan for the patient written in patient-friendly language.

Despite the large body of evidence available on MTM benefits and the growing value placed on it by payers, there has been little attention paid to patient perceptions of satisfaction with these services, and this is especially true within the community pharmacy setting.[3] Studies to date have either been centered solely on telephonically delivered (rather than face-to-face) MTM services or have been delivered in settings other than the community pharmacy.[4-7] Moreover, there have been no studies published on patient satisfaction with community pharmacist–provided CMR services in particular.

Objectives

The primary objective of this study was to determine patient satisfaction with a face-to-face or telephonic CMR provided by a chain community pharmacist. The study secondarily assessed the patient's perceived value of the service while also collecting demographic information.

Methods

A survey was disseminated to patients who received a CMR in a single division of a large, nationwide supermarket pharmacy chain located in the Delta region of the United States. The survey was composed of a Likert-type scale (see the appendix), which was developed to assess patient satisfaction and adapted from the pharmacy's internal satisfaction assessment methods. The survey aimed to assess the level of patient agreement with 1 = strongly disagree to 5 = strongly agree. An expert panel of pharmacists assessed survey content for face validity, clarity, and ease of understanding.

The survey was disseminated to patients from October 2015 through January 2016 by the pharmacy's corporate clinical team, which included 7 clinical pharmacists and 4 residents throughout the states of Tennessee, Mississippi, and Arkansas. Responses were collected through the end of February 2016. The clinical team members distributed the questionnaire to patients who were shown to have received either a face-to-face or telephonic Medicare Part D CMR via MTM platform records (Outcomes or Mirixa). CMR delivery could have been delivered by either the staff pharmacist at the pharmacy or corporate clinical team members. All CMR-providing pharmacists had received both internal organization-specific and platform-specific MTM training.

Participants were asked to anonymously complete the satisfaction survey and return it within a week of CMR completion. The survey was included in the patient's "take-away," which consisted of a personal medication record and a medication action plan. This "take-away" is required by the Centers for Medicare and Medicaid Services to be given to the participant within a week of the medication review.[8] The participants were handed the survey with a self-addressed stamped envelope if the review occurred face-to-face or mailed with the "take-away" if the review occurred by the telephone. Individual pharmacists did not collect any responses to help eliminate any potential for bias. No incentives were used, and no reminder surveys were sent. Univariate descriptive statistics were performed using SPSS version 24 (IBM Corp, Armonk, NY). The study was approved by the University of Tennessee Health Science Center Institutional Review Board prior to the start of this study.

Results

In total, 95 patients met eligibility criteria. Of the 95 total surveys distributed, 31 were completed and returned through the mail for a response rate of 33% (31 of 95 surveys).

Demographic information is reported in Table 1. The majority of respondents were >70 years of age (67.8%). Approximately 67.7% (n = 21) of the respondents were

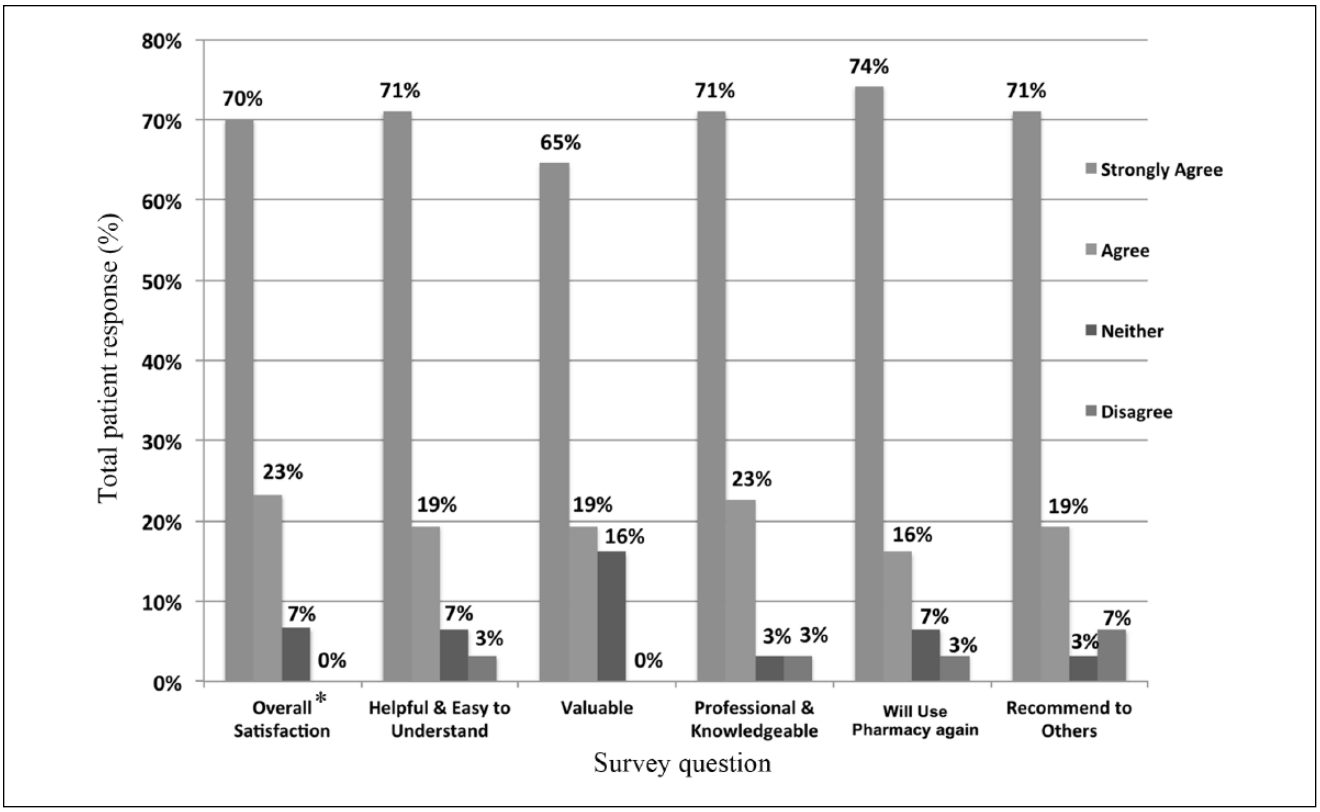

Figure 1. Percent response for each satisfaction statement assessed.
*One survey returned with this answer omitted (n = 30).

female in gender. A large majority (96.8%, n = 30) responded that the study pharmacy is their primary pharmacy. There was a fairly even distribution of surveys returned from each state that participated in the study. The average range of prescription medications the participant took on a regular basis was 5 to 9 (67.7%, n = 21). Most patients were initially contacted by the pharmacy to schedule the CMR session (93.5%, n = 29).

Patient satisfaction data are reported in Figure 1. In total, 70% (n = 21) of the patients strongly agreed they were overall satisfied with the medication review provided by the pharmacist. The majority of participants (71%, n = 22) strongly agreed that the discussion with the pharmacist was helpful and easy to understand and that the pharmacist was professional and knowledgeable about the medications. When asked if the participant felt the review was valuable, 64.5% (20 of 31) strongly agreed with that particular statement. Finally, when evaluating if the participants would recommend this service to family and friends, 71% (22 of 31) strongly agreed.

Comments were collected via an open-ended question at the end of the survey. Negative comments were related to a "lack of customer service" and cost-comparison versus mail-order pharmacy. Positive comments included themes such as "felt like the pharmacist cared," "the service was professional," and "helpful and useful information."

Discussion

The present study is the first to report patient satisfaction of community pharmacist–provided CMR services. This supports previous research, which also found that patients view pharmacist-provided direct patient care positively.[4-7] Patients were overall satisfied with the medication review provided by the community pharmacist. Furthermore, they indicated the service was helpful and were willing to recommend the service to others.

Little research exists on patients' satisfaction with MTM services. This is understandable given the relative newness of MTM services, and the fact that the services are varied and provided across many settings. A study in 2010 in a large, integrated health care system found that 95.3% of patients agreed or strongly agreed that their overall health and well-being had improved because of the general MTM services provided by health-system pharmacists.[4] A second satisfaction study was also conducted in a large, integrated health care system, but this study investigated patient satisfaction with a single Medicare Part D plan's MTM program.[7]

Similar to the 2010 study, researchers found overall satisfaction of above 90%, and these results mirror satisfaction levels found in the present study, where 93% and 90% of patients agreed or strongly agreed that they were satisfied with the CMR provided and that the appointment was helpful, respectively. The fact that patient satisfaction levels remained consistently high when investigating the community pharmacist as a care provider is important, especially as community pharmacists continue to develop and implement new direct patient care services across the United States.

There are likely several reasons for why patient perceptions remained high in the community pharmacy setting, despite the community pharmacy not being a traditional site for direct patient care services. As community pharmacists are primarily responsible for medication distribution and prescription adjudication, they are potentially the health care provider with the most practical expertise on medication cost and health plan formulary navigation. Implementing interventions related to reducing patient out-of-pocket spending is likely to affect patient satisfaction scores.[9] Previous research indicated that when patients were asked what they valued most about MTM, information to reduce medication "costs" was the most common response identified.[5] Another factor contributing to high satisfaction of the community pharmacist is strong patient relationships. The more pharmacist-patient interactions that occur, the higher both trust in the pharmacist and their perceptions that a pharmacist can serve in a clinical role.[10]

Although this was the first study to investigate patient satisfaction with CMR delivery in a community pharmacy, previous studies have investigated the delivery of "cognitive services" in this setting. In a survey-based, controlled study across 90 pharmacies in the United States, patient perceptions were found to be equivalent between pharmacies providing asthma-based care and traditional care.[11] Several factors were attributed to the equivalence, including the fact that patients felt that they had already been counseled by their physician. In contrast, the CMR is unlike any service provided in the United States health care system to date, with its focus on important items such as achieving optimal adherence, resolving medication-related problems, and addressing medication cost issues. Future studies should similarly explore patient satisfaction between traditional care and pharmacies offering CMR services.

Limitations

There were several limitations to this study. Foremost the study yielded a low response rate, and may reduce generalizability of the results. However, this response rate was similar to other satisfaction surveys conducted in the community pharmacy setting.[12] There are several variables that could have led to this response rate, including the surveys being paper-based and needing to be returned via the mail. Because of the time restraints of the data collection period, surveys could have been returned after data collection ended or lost in the mail. An online survey may have increased the sample size; however, because of the age range of the participants, the investigators decided a paper survey would be more to this patient population. Although the survey was reviewed by a convenience sample of staff pharmacists within the organization for content, clarity, and ease of patient understanding, it was not pretested with any Medicare beneficiaries; thus, there could have been patient misinterpretation of statements assessed on the survey. Furthermore, initial patient perceptions of pharmacy services were not collected, and the fact that patients had a preexisting relationship with the pharmacist may have biased results. Mode of delivery (face-to-face vs telephonic) was not evaluated and compared with patient satisfaction. Last, the age range of patients were skewed toward those over the age of 71, and this may not represent a true Medicare population.

Further research should be conducted on why some participants were not satisfied and identify ways to increase this satisfaction. Qualitative or mixed-methods study designs would lend themselves to exploring these lines of research questions. Future research into patient satisfaction with these services should not be overlooked when investigating MTM-related outcomes, as it is an important factor for community pharmacist consideration as this setting continues to take an active role in improving the health care of its patient population.

Conclusion

This research study provided insight to patients' perceptions of a CMR provided by a community pharmacist. Patients' views of the CMR were positive, with patients finding CMR delivery in a community pharmacy valuable. Further investigation of specific interventions and approaches during a medication review could help identify ways to increase patient satisfaction.

Appendix

Patient Information

1. Please select your age range:

   a 18-30
   b 31-40
   c 41-50
   d 51-60
   e 61-70
   f 71-80
   g 81-90
   h 91+

2. Please select your gender:

   a Female
   b Male

3. Do you currently have prescriptions filled at Kroger Pharmacy

   a Yes
   b No

If yes, please select the state where your Kroger Pharmacy is located:

- TN
- MS
- AR
- MO
- KY

4. How many prescription medications do you take on a regular basis?

   a 0-4
   b 5-9
   c 10-14
   d 15+

5. How were you contacted about the opportunity for a medication review?

   a Kroger Pharmacy
   b Insurance Company

Thinking about your medication review, please select the response that best describes your satisfaction with the service provided by the Kroger Pharmacist:

6. I am overall satisfied with the medication review provided by the Kroger Pharmacist.

   a Strongly disagree
   b Disagree
   c Neither disagree or agree
   d Agree
   e Strongly agree

7. The discussion about my medication with the pharmacist was helpful and easy to understand.

   a Strongly disagree
   b Disagree
   c Neither disagree or agree
   d Agree
   e Strongly agree

8. I feel the medication review was valuable

   a Strongly disagree
   b Disagree
   c Neither disagree or agree
   d Agree
   e Strongly agree

9. The pharmacist was professional and knowledgeable about my medications

   a Strongly disagree
   b Disagree
   c Neither disagree or agree
   d Agree
   e Strongly agree

10. Based on this medication review, are you likely to use Kroger Pharmacy to fill your prescriptions?

    a Strongly disagree
    b Disagree
    c Neither disagree or agree
    d Agree
    e Strongly agree

11. I would recommend this service to family and friends.

    a Strongly disagree
    b Disagree
    c Neither disagree or agree
    d Agree
    e Strongly agree

12. Please provide any additional comments to help us improve our services:

Authors' Note

The results of this study have been presented at the American Pharmacists Association Annual Meeting; Baltimore, MD; March 5, 2016; and at the Research in Education and Practice Symposium; Chapel Hill, NC; May 16, 2016.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

1. US Centers for Medicare & Medicaid Services. Center for Drug and Health Plan Choice. 2010 Call letter. http://www.cms.hhs.gov/PrescriptionDrugcovcontra/downloads/2010callletter.pdf. Published March 30, 2009. Accessed October 16, 2017.
2. American Pharmacists Association; National Association of Chain Drug Stores Foundation. Medication therapy management in pharmacy practice: core elements of an MTM service model (version 2.0). *J Am Pharm Assoc (2003)*. 2008;48:341-353. doi:10.1331/JAPhA.2008.08514.
3. Chisholm-Burns MA, Graff Zivin JS, Lee JK, et al. Economic effects of pharmacists on health outcomes in the United States: a systematic review. *Am J Health Syst Pharm*. 2010;67:1624-1634. doi:10.2146/ajhp100077.
4. Ramalho de Oliveira D, Brummel AR, Miller DB. Medication therapy management: 10 years of experience in a large integrated health care system. *J Manag Care Pharm*. 2010;16:185-195. doi:10.18553/jmcp.2010.16.3.185.
5. Moczygemba LR, Barner JC, Brown CM, et al. Patient satisfaction with a pharmacist-provided telephone medication therapy management program. *Res Social Adm Pharm*. 2010;6:143-154. doi:10.1016/j.sapharm.2010.03.005.
6. Holsclaw SL, Olson KL, Hornak R, Denham AM. Assessment of patient satisfaction with telephone and mail interventions provided by a clinical pharmacy cardiac risk reduction service. *J Manag Care Pharm*. 2005;11:403-409. doi:10.18553/jmcp.2005.11.5.403.
7. Pindolia VK, Stebelsky L, Romain TM, Luoma L, Nowak SN, Gillanders F. Mitigation of medication mishaps via medication therapy management. *Ann Pharmacother*. 2009;43:611-620. doi:10.1345/aph.1L591.
8. US Centers for Medicare & Medicaid Services. Medicare Part D Medication Therapy Management (MTM) programs 2008 fact sheet. https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovContra/Downloads/CY2017-MTM-Fact-Sheet.pdf. Accessed December 28, 2017.
9. Alexander GC, Casalino LP, Meltzer DO. Patient-physician communication about out-of-pocket costs. *JAMA*. 2003;290:953-958. doi:10.1001/jama.290.7.953.
10. Law AV, Okamoto MP, Brock K. Perceptions of Medicare Part D enrollees about pharmacists and their role as providers of medication therapy management. *J Am Pharm Assoc (2003)*. 2008;48:648-653. doi:10.1331/JAPhA.2008.07084.
11. Slowiak J, Huitema BE. Reducing pharmacy wait time to promote customer service: a follow-up study. *Qual Manag Health Care*. 2015;24:9-20. doi:10.1097/QMH.0000000000000045.
12. Kradjen WA, Schulz R, Christensen DB, et al. Patients' perceived benefit from and satisfaction with asthma-related pharmacy services. *J Am Pharm Assoc (Wash)*.1999;39:658-666.