

# Quality Assurance of Offering Comprehensive Medication Reviews to 90-Day Medication Synchronization Patients

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**C**omprehensive medication reviews (CMRs) are an efficient way to manage a patient's medications and disease states. Community pharmacists can conduct CMRs using their clinical skills to find and solve drug-related problems, improve patient knowledge of medications, increase adherence, and improve patient satisfaction.<sup>1</sup> A study by Doucette et al. found that over 90% of patients feel CMRs are important for their health.<sup>2</sup> CMRs do not only increase patient health, but are also an added revenue stream for pharmacies. Medicaid reimburses pharmacies for the CMRs they conduct. Although Medicaid has strict enrollment and qualification guidelines, it can be useful in helping patients who are at higher risk of experiencing drug-related problems. Medicaid also reimburses pharmacies for three additional follow-up CMR visits per year.

Another way to optimize patient care is through medication synchronization (med sync). Med sync ensures that patients can pick up all their prescriptions at one time every month or every three months. This is convenient not only for the patients, but for the pharmacy staff as well. The pharmacy staff can limit the time they spend refilling certain medications and can spend more meaningful time with patients each month. It saves resources, and reduces the amount of calls the pharmacy staff must answer for refill requests. Plus, expensive medications are only ordered when patients confirm that they need them. Not only does med sync benefit pharmacy workflow and patient convenience, but it has also been shown to improve patient adherence. Lester et al. found that patients who refilled their medications through standard refill methods were adherent to their medications 73.6% to 76.4% of the time compared to

## Abstract

**Background:** Medication synchronization (med sync) and comprehensive medication reviews (CMRs) have each been found to improve patient outcomes. Beaver Dam Hometown Pharmacy has been successful in implementing both services, but there is an opportunity to improve follow-up CMR visits. The Beaver Dam Hometown Pharmacy already has quarterly contact with patients receiving 90-day med sync; therefore, coordinating CMR follow-ups with med sync may have a synergistic benefit. The objective of this evaluation is to assess the change in CMRs as well as patient satisfaction after combining these two services.

**Methods:** Eligible patients were identified through the Pioneerx<sup>®</sup> pharmacy software. To qualify for CMR visits, patients had to be enrolled in Medicaid, have 4 or more medications for 2 or more disease states, and at least one medication on a 90-day fill in the med sync service. Attitudes of patients toward the services were assessed after completion via a Likert scale with values ranging from "poor" to "excellent." Effects of the services on tracked pharmacy outcomes were also measured, including professional supplement sales and eCare Plans completed.

**Results:** A total of 41 patients were selected for the evaluation. Of those, 24 have completed the initial CMR at the time of their med sync date. Nineteen patients have recorded satisfaction data associated with their experience. Initial and follow-up CMRs increased by 50% compared to the same time period in the previous year. Patient satisfaction was also shown to be high.

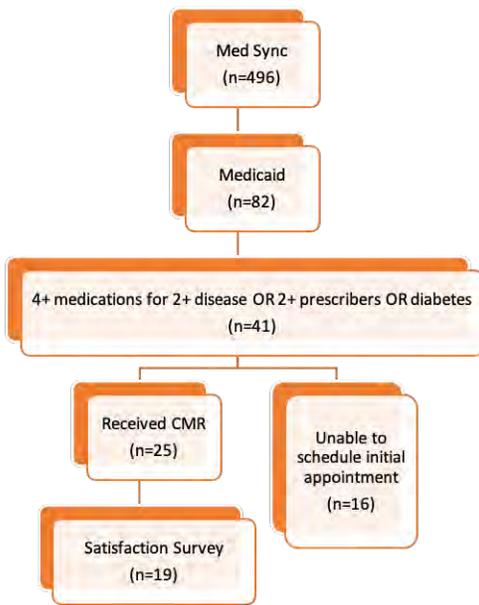
**Conclusions:** The Beaver Dam Hometown Pharmacy was able to increase the number of CMRs completed following coordination of CMRs with med sync. Survey results also demonstrated high patient and satisfaction with the service.



patients who filled with automatic refill, who were adherent to their medications 77.5% to 83.6% of the time.<sup>3</sup> In another study, White found that patients enrolled in med sync had a 3.4 to 6.1 times greater

odds of adherence compared to unenrolled patients.<sup>4</sup> Some pharmacies have found that using appointment-based med sync allows pharmacies to foster better relationships with their patients and work on improving

**FIGURE 1. Participant Disposition**



Med sync = Medication synchronization;  
CMR = comprehensive medication review

patient treatments.<sup>5</sup>

Although both CMRs and med sync offer improved outcomes for patients, combining the services may lead to better care overall. There is currently a gap in the literature addressing the possibility of increase in CMR completions when directly linked to a med sync program. Patients picking up their medications monthly or quarterly can optimize their trips to the pharmacy through scheduling CMR visits. This would allow patients to pick up their prescription medications as well as discuss any health-related items, including their disease states, drug-related problems, nutraceutical supplements, and nutrition support.

The staff at Hometown Pharmacy in Beaver Dam, Wisconsin, strives to improve how they care for their patients. They do this by offering services like CMRs and med sync. In 2020, the pharmacy enrolled a substantial number of patients into med sync to help ensure regular patient contact as well as better patient adherence. They also carry high-quality nutraceutical supplements and provide counseling on nutritional support based on a patient’s medication profile. Recognizing the opportunity for greater efficiency and improved patient care, the Beaver Dam Hometown Pharmacy combined CMRs and med sync to provide better care to their patients and save both

the pharmacy’s and the patients’ time. The goal of this project was to assess the change in CMR completions compared to the previous year when tied to med sync. The secondary objective was to determine patient and employee satisfaction after combining services.

## Methods

A report of pharmacy patients was filtered to include those who were enrolled in the med sync program, had 90-day fills, and received Medicaid. The CMR service was performed by phone and combined with a call to determine fill needs for a 90-day med sync. CMRs were allowed by phone due to COVID. A clinical services pharmacist had dedicated time to perform these calls. To qualify, patients needed to be enrolled in Medicaid and meet 1 of the following 3 criteria: have 4 or more medications covering 2 or more specific disease states; have 2 or more prescribers; or have diabetes. In September of 2020, patients were identified, and a schedule was created to perform the combined CMR/med sync call. The designated time period for counting CMRs and follow-up visits based on sync cycles fell between October 2020 and January 2021.

Patients received a satisfaction survey 2-4 weeks after the CMR/med sync. These surveys were performed over the phone by a pharmacy student not associated with the CMRs or Beaver Dam Hometown Pharmacy to allow for more objective data collection. Patients were asked 6 satisfaction questions based on a 5-point Likert scale with values of poor, fair, good, very good, or excellent (see Figure 4 for a list of specific questions asked). Investigators performed three informal interviews with the pharmacy staff to understand changes in workflow and workload following the combination of CMRs with med sync.

The number of CMRs was pulled from the Pioneerx<sup>®</sup> software and analyzed. Because the documentation process changed from the previous year, initial versus follow-up visits were not clearly labeled. Therefore, this comparison was unable to determine directly the number of new versus follow-up CMRs. Because nutraceuticals are an important part of the pharmacy, number of items sold during the evaluation periods were collected from the Catapult<sup>®</sup> point of sale software. These data were compared to

the same time period from the previous year (October 2019 to January 2020).

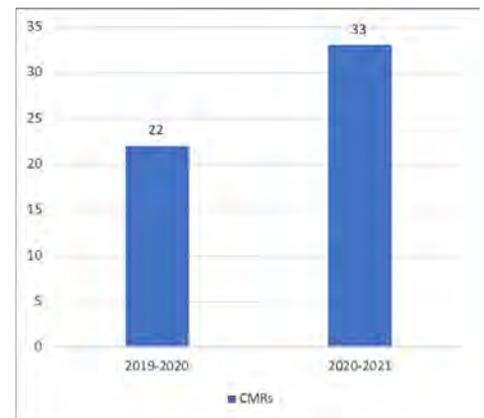
## Results

Of the 496 patients enrolled in med sync, 41 were found to meet inclusion criteria (Figure 1). CMR appointments were lined up with med sync appointments for 25 patients, of whom 19 received a post-CMR satisfaction survey. Sixteen patients could not be reached to perform the CMR and 6 patients were lost to follow-up.

During the period of October 2020 to January 2021, an increase of 11 CMRs performed was observed compared to the same time period from the previous year (Figure 2). There was an increase of 54 items sold compared to the previous year (Figure 3); however, it is not certain that this increase was directly tied to performing the CMR/med sync services.

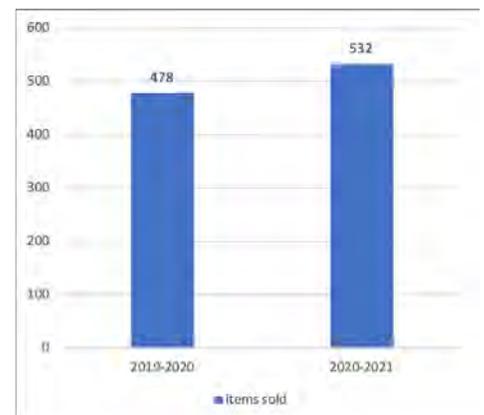
Results of the patient survey showed 53% of the overall responses were “excellent.” Eighty percent of the responses

**FIGURE 2. CMRs Completed**

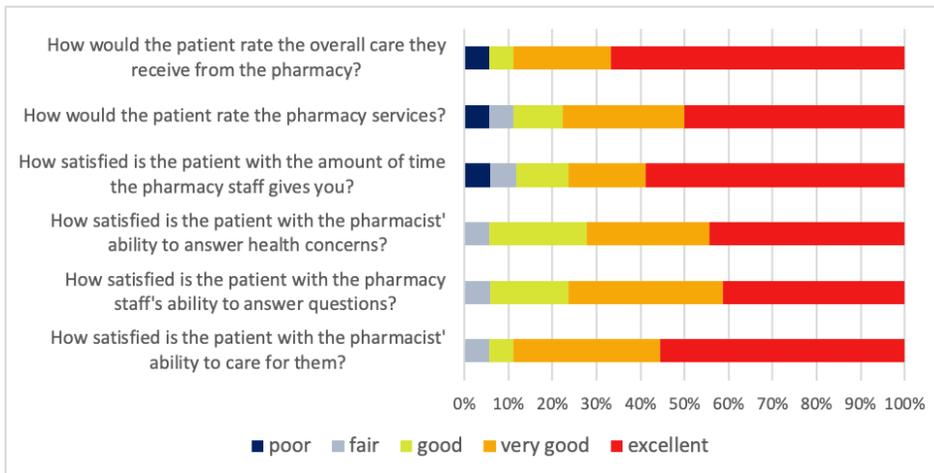


CMR = comprehensive medication review

**FIGURE 3. Nutraceuticals Sold**



**FIGURE 4. Patient Satisfaction Survey Results**



averaged as very good or better (Figure 4).

From informal interviews with three members of the pharmacy staff who were involved in the med sync and CMR programs, it was discovered that combining the services extended the reach of the pharmacy. Effectiveness and efficiency were improved. The clinical services pharmacist identified how easy it is to flow from a med sync call into a CMR call.

**Pharmacist 1:** "Combining these services has allowed us as a pharmacy to reach our patients with more of our services. The tools we have available to help our patients are being maximized through this program."

**Pharmacist 2:** "It's much easier catching these CMR opportunities. It flows smoothly from a med sync call to reviewing changes we discussed last time."

**Technician:** "This program really makes things more efficient. We're able to contact patients just once rather than several times for similar services."

## Discussion

After combining med sync and CMR services, an increase was seen in the number of CMRs completed and the number of nutraceutical supplement sales made. Combining med sync and CMR services optimized pharmacy efforts, allowing for multiple beneficial services while minimizing resources required for each individual service. For example, during the time of this project, CMRs could be performed over the phone, which was

typically a 25- to 30-minute phone call. Many of the patients that qualified for this study had more than 4 medications. A separate med sync phone call for the same patient would also take a significant amount of time. By combining these services, the pharmacy staff was able to optimize their time spent on the phone.

Patient and pharmacy satisfaction with the program was high. It is logical that patients would feel satisfied with the combined service. They receive close attention to their medications and have time to ask questions. They receive multiple services from the pharmacy that help them feel cared for. For example, one patient expressed her satisfaction having switched to this pharmacy. She felt the whole staff gave her the attention she needed. For the pharmacy, staff can maximize resources and redistribute workflow. The clinical services pharmacist can alleviate additional work for other staff members. Billable services are better organized and extended to their full potential.

## Limitations

The small study size is a limitation. As a single pharmacy serving a small community, the population of the study was fairly homogeneous, which can limit external validity.

Quantification of health outcomes was not assessed in this study. This study specifically addressed the number of completed CMRs following coordination of CMRs and med sync, and did not address potential benefits of combining these services such as increased adherence,

increased patient safety, and improved health outcomes for patients.

It is unclear whether CMR follow-ups had a direct impact on nutraceutical sales. The CMR recipients in this evaluation were often on Medicaid, and therefore are likely lower-income households. The nutraceutical supplements the pharmacy sells are more expensive than standard over-the-counter supplements, so Medicaid patients may have needed to make significant adjustments to their budget to afford these supplements. Even though the clinical pharmacist recommended supplements during CMR appointments, it is unlikely that performing the CMR follow-ups had a direct impact on nutraceutical sales. It is possible that the clinical pharmacist recommending supplements to other patients at the pharmacy or other concurrently running initiatives had a greater impact.

## Future Direction

This 3-month period only begins to capture how well med sync calls catch follow-up CMR opportunities. Historically, patients at this pharmacy have not always received the optimal number of follow-up CMRs. With the synergy of combining CMRs with med sync, the likelihood that patients will continue to receive the benefits of clinical pharmacist care is increased.

Beaver Dam Hometown Pharmacy will continue to track follow-ups for CMRs to ensure patients continue to receive the highest possible care and services available. Accepted interventions will also be tracked and monitored over time. The pharmacy will expand the program to all qualifying patients. Plans also exist to share this process with other in-network pharmacies. Through video-based and in-person presentations, other pharmacies will learn how to find qualifying patients and extend the CMR benefit within their current workflow.

## Conclusions

At Beaver Dam Hometown Pharmacy, combining med sync and CMR services led to an increase in the number of CMRs completed compared to previous years. Survey results also showed high patient and pharmacy staff satisfaction. Future directions include determining the proportion of interventions that are accepted, and expansion of the pairing of CMRs with med sync at other pharmacies.



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**PR** This article has been peer-reviewed.  
The contribution in reviewing is greatly appreciated!

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