

Evaluating the Efficacy of 3 Recruitment Methods for Enrolling Patients in Chronic Care Management Services: A Pilot Study

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Abstract

Chronic Care Management (CCM) is a billable service that pharmacists can provide either in person or via telephone in ambulatory clinics or community pharmacies. Pharmacists may use this service to expand current roles in patient care and add billable services to an ambulatory care practice. The number of clinics employing CCM is steadily increasing, and to date, there has been limited information published to aid pharmacists who are considering implementing these services. The purpose of this study is to compare enrollment success in a clinic-based, pharmacist-led CCM service using three recruitment strategies to enroll patients: in person, telephone, and provider referred recruitment. This pilot study examined the success of three recruitment strategies using 94 patients eligible for CCM services in a rural health clinic. The primary outcome was successful enrollment in the CCM program with differences in recruitment strategy enrollment success examined using a Chi-square test. Overall, 42 of 94 patients (45%) were successfully enrolled in the CCM program with no statistical difference appreciated between telephone, in person, and provider referred recruitment. Nearly 33% (14/42) of patients enrolled in person, 40% (17/42) enrolled via telephone, and 26% (11/42) enrolled when referred from a provider. Ten patients (11%) declined enrollment outright. The remaining 42 patients were hesitant to enroll and requested follow up. In conclusion, there was no statistical difference in CCM enrollment success with in person, telephone, or provider referred recruitment, although more patients were enrolled via telephone than with the other two strategies. Pharmacists implementing new CCM programs may tailor their recruitment and enrollment strategy to suit their specific needs.

Keywords: chronic care management, billable pharmacy services, telephone, enrollment, disease management

Introduction

Chronic Care Management (CCM) is a billable ambulatory care service that the Centers for Medicare & Medicaid Services (CMS) recognizes as a “critical component of primary care that contributes to better outcomes and higher satisfaction for patients”.¹ Medicare beneficiaries with 2 or more chronic conditions (last ≥ 12 months) who are not on hospice or dialysis are eligible for CCM, with CMS estimating two-thirds of the total Medicare population being eligible for CCM services.¹ Even with this large population of eligible patients, clinical practice adoption of CCM has been relatively slow. A 2015-2016 Medicare claims data analysis found that only 2.3% of eligible Medicare patients received CCM services during that year.² Medicare, however, has continued to emphasize the CCM billing code in payment policy, with recent data showing increasing usage and reimbursement of CCM codes.³ In fact, a study in the *Annals of Family Medicine* examined CCM billing between 2015 and 2018 and found a significant uptick in CCM billing.⁴ The authors found CCM increased from 810,289 services in 2015 to 3,401,546 in 2018, with almost no change in denials between the two reporting years (5.7% and 5.4%, respectively).⁴

Even with the recent increase in CCM adoption, researchers have cited a variety of challenges to implementation of CCM services including low reimbursement rates, reluctance of beneficiaries to pay a copay, and challenges identifying and getting consent for eligible patients.^{2,5} Original CMS recommendations that CCM enrollment and written consent be obtained in person during a Medicare wellness visit or other office visit may have inadvertently led to complex recruitment and enrollment strategies levied in ambulatory care.⁶ Since this time, CMS has removed several of these barriers in an effort to increase use of CCM. For example, CMS relaxed enrollment requirements to allow verbal consent via telephone or during an in person visit, waived the patient copay requirement, and began allowing the billing of both CCM and Transitional Care Management (TCM) for the same patient during the same time period for rural health clinics (RHCs) and Federally Qualified Health Centers (FQHCs).¹

Offering a variety of approved enrollment options enables clinic personnel to expand their ability to offer CCM to their patients, but it also presents another decision regarding an optimal enrollment strategy during the CCM setup process. While telephone enrollment offers an appealing enrollment option, it also may present another barrier: lost personnel time due to patients not answering and/or returning phone calls. The Pew Research Center reports that Americans receive an average of 14.1 spam calls per day and 8 out of 10 report not answering calls from unknown numbers.⁶ To date, this potential barrier to

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telephone CCM recruitment and enrollment has not been formally evaluated.

As CCM usage and billing continues to increase across the country, it is likely that more community pharmacies, pharmacists, healthcare workers, and clinics will seek to implement CCM services and benefit from the revenue stream, improved patient satisfaction, and better outcomes. In particular, pharmacists have been identified as ideal participants in CCM, with many pharmacists providing positive contributions to CCM, integrating into a variety of practice models, and having positive impacts on both patient care and reimbursement.^{5,7-10} Pharmacists are also commonly involved in CCM program initiation, including initial decision making regarding participant and patient eligibility and enrollment.

Unfortunately, there is a relative dearth of information surrounding the most effective methods for patient recruitment and enrollment into CCM. This data could be very helpful as the team considers how to identify, recruit, and enroll eligible patients. Without available evidence and guidance, enrollment projections and the decision of telephone, in person, and/or provider referred recruitment is left to a 'best guess,' personal preference, or convenience. Given the personnel time required to recruit and enroll patients as well as the large impact enrollee volume has on reimbursement, it is important to consider if significant differences exist in enrollment strategies. The primary objective of this study was to compare the success of in person, telephone, and provider referred CCM recruitment strategies on patient enrollment in a new clinic-based, pharmacist-led CCM program in a Rural Health Clinic (RHC).

Materials and Methods

This pilot study received no funding and was approved by the hospital Institutional Review Board (IRB) as exempt research. The study was conducted at a single, rural health clinic (RHC) that is a part of a larger health system composed of 7 hospitals, 4 nursing homes, and 34 clinics. As defined by CMS, a RHC is a clinic located in a rural area that is also designated as a shortage area. This clinic is located in rural North Mississippi, serves a local population of around 30,000 people, and is approximately 30 miles from two area hospitals and numerous specialty providers. The clinic on average completed approximately 20-30 patient visits a day during this trial period. The clinic payer mix is about 80% Medicare, with most clinic patients having 2 or more chronic diseases and an estimated 85% qualifying for CCM services.

This study was conducted over a 12 month period, with investigators attempting to enroll patients into a new, pharmacist-led CCM program between August 2018 and July 2019. A Pharmacist had never worked in this clinic with patients and all providers had no prior experience working with a pharmacist in ambulatory care. Data was collected and

analyzed during the active patient recruitment and enrollment process. For the purposes of this study authors define "enrollment" as obtaining verbal consent to participate in the CCM program and completion of the first CCM visit. Patient information was de-identified, entered into a Microsoft Excel® worksheet, and stored on a HIPAA-compliant, encrypted computer.

A hybrid patient recruitment and enrollment strategy (using in person, telephone, and provider referred recruitment) was utilized based on convenience and clinic request. Due to this being a pharmacy faculty clinic, the pharmacist, pharmacy residents, and pharmacy students were physically present in the clinic on the same 2 days each week. In person enrollment was used on days when eligible patients had provider appointments and the pharmacy team was present in the clinic. Telephone enrollment was used for patients deemed eligible but without an upcoming appointment or with an appointment on a day without the pharmacy team present. Provider referred recruitment was used when the pharmacy team was on site and clinic providers identified and referred eligible patients for CCM services on the same day.

In order to standardize enrollment procedures, a standardized script was used by the investigators with all three recruitment strategies. After the initial discussion, patients who were hesitant to enroll and/or requested follow-up were again contacted 4 weeks from the initial encounter using the same script. Patients recruited via telephone were called on clinic telephones in order to limit the likelihood of an 'unknown number' displaying on the patient's phone. Patients unable to be reached were followed up 1 week after the initial phone call for a maximum of 4 attempts. Voicemails were left requesting a callback to the clinic on the same day or on the next day the pharmacy team was on site.

Data collected during the study included patient enrollment status, date(s) contacted, type of recruitment (in person, telephone, or provider referred), and date enrolled (if enrolled). Statistical analysis for differences in enrollment strategy success was performed using a Chi-square test in order to evaluate potential differences in the nominal data, with all analyses performed using Microsoft Excel®.

Results

A total of 94 patients were successfully contacted for enrollment in the CCM program: 37 in person, 33 via telephone, and 24 as provider referrals. Twenty-two patients were contacted via telephone but were unable to be reached after multiple attempts. Enrollment was successful in 14/37 (38%) in person enrollments, 17/33 (52%) of telephone enrollment, and 11/24 (46%) of those referred from a provider. In total, regardless of recruitment strategy, 42 of 94 (45%) patients were successfully enrolled. The 52 patients who were not enrolled in CCM were either unsure about enrolling (some requested

follow up) or they declined outright. For patients questioned in person, 20 were unsure and 3 declined; for those questioned via telephone, 12 were unsure and 4 declined; and for those referred from a provider, 10 were unsure and 3 declined. (See Figure 1) Overall, 8% (3/37) in person, 12% (4/33) via telephone, and 12% (3/24) of provider referred patients declined enrollment outright.

Statistical analysis comparing enrollment strategy and outcome using chi square analysis found no statistically significant difference between in person, telephone, and provider referred recruitment ($p=0.66$; chi square statistic 2.4). (See Figure 2)

Discussion

To the best of our knowledge, this is the first study that evaluates the enrollment success of 3 recruitment strategies during the initiation of a pharmacist-led CCM program at a RHC. Results demonstrated that there was no difference in enrollment success between the three strategies utilized in this study, thereby suggesting that when considering CCM implementation, the enrollment strategy chosen should best match the needs of each individual practice setting. It is also important to note that authors do not currently know an exact number of patients eligible for CCM within the clinic population as it's not a feature of the Electronic Health Record to sort patients, but it is substantially more than the 94 contacted for this pilot.

Although the data suggest all enrollment strategies offer similar enrollment success, there are several aspects of each strategy that should be considered when selecting a recruitment strategy. The investigators found telephone enrollment to be the most time intensive, with many patients unable to be reached via telephone, even after multiple attempts. Clinicians were plagued with patients having invalid telephone numbers, no active voicemail accounts in order to request a return phone call, and poor cellular phone reception due to rural locale. This study did not specifically evaluate why the 22 patients were unable to be contacted via telephone, but it is plausible some patients may have been screening calls due to the large number of spam calls this population receives. In contrast, telephone recruitment and enrollment does allow for the clinician to be offsite and still participate in the enrollment process. This may allow for the site to use other personnel during the enrollment process, thereby allowing clinic staff to remain in patient care.

In person and provider referred recruitment has a potential advantage with face-to-face, clear communication and although not evaluated, may lead to improved patient understanding of CCM opportunities and planning. Non-verbal clues, auditory perception, and tactile information conveyed through body contact are not transferrable during telephone communication, and also many telephoned patients were unable to meet and get to know the pharmacist who would be providing the CCM services.

When evaluating rationale for patient declinations, investigators found that when questioned regarding why they were hesitant to enroll in CCM, many patients said that they did not see an immediate personal benefit or reason to enroll in CCM with some requesting follow-up after they thought about it more and/or talked more to their doctor.

Limitations of this study include a small sample size of 94 patients, suspicion of patients of a new pharmacist and new service, single RHC site, general scheduling challenges and time limitations with pharmacy team presence in clinic only 2 days a week, and confounding variables including variation in recruitment personnel (pharmacist, pharmacy student, pharmacy resident). The rural location of the study also limits the applicability of the findings to similar areas, with the patient population in rural areas being more limited in health literacy, technology availability, and knowledge. Future studies should attempt to include a larger sample size, involve a broader range of ambulatory clinics in both rural and urban areas, and evaluate other telehealth services to help confirm the findings of this small, pilot study. Additionally, future research should evaluate potential variation in enrollment based on pharmacist practice site in a clinic or community pharmacy.

The investigators hope that community and ambulatory care pharmacists who are looking to establish new CCM services can use this study to help anticipate enrollment success and justify potential financial benefit for their site. Based on this pilot study and anecdotal experience, hybrid enrollment using a variety of available options may be the most beneficial initial enrollment strategy. Investigators subjectively found the hybrid model to offer numerous benefits, as it potentially allows for greater patient enrollment numbers and involvement of all clinic providers due to the in-person and telephone presence during the enrollment process. Being in person and involving clinic personnel during patient enrollment subjectively improved buy-in from clinic staff and providers and has subsequently enhanced the long-term success of the program although this was not formally evaluated in this pilot study.

Conclusion

Overall, telephone, in person, and provider-referred recruitment had similar success in enrolling patients in CCM services at a RHC. Although more patients were enrolled using telephone enrollment, the difference was not statistically significant. When determining enrollment strategy during CCM service implementation, each clinic should determine the best fit for their site based on their specific needs.

Acknowledgments: Authors would like to thank the leadership and staff of the clinic along with Dr. Sujith Ramachandran for his assistance with statistical analysis.

Conflicts of Interest: We declare no conflicts of interest or financial interests that the authors or members of their immediate families have in any product or service discussed in the manuscript, including grants (pending or received), employment, gifts, stock holdings or options, honoraria, consultancies, expert testimony, patents, and royalties.

The opinions expressed in this paper are those of the authors.

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Figure 1: CCM Enrollment Strategy and Success Rate

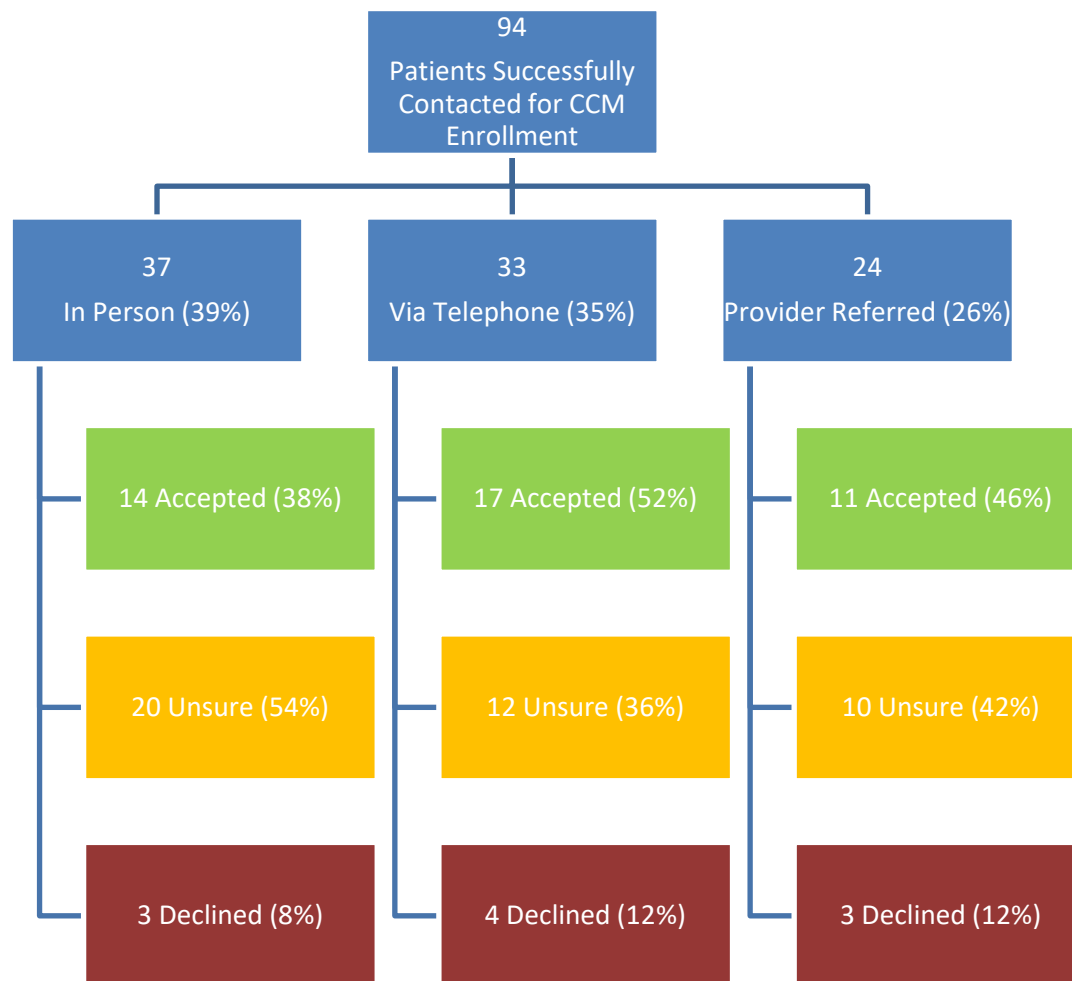


Figure 2: Chi Square Comparison of CCM Enrollment Success with In Person, Telephone, and Provider Referred Recruitment

Contact Method	Patients Accepting Enrollment	Patients Unsure about Enrollment	Patients Declining Enrollment	TOTAL
	observed (expected) [p-value]	observed (expected) [p-value]	observed (expected) [p-value]	
In Person	14 (16.53) [0.39]	20 (16.53) [0.73]	3 (3.94) [0.22]	37
Telephone	17 (14.74) [0.34]	12 (14.74) [0.51]	4 (3.51) [0.07]	33
Provider Referred	11 (10.72) [0.01]	10 (10.72) [0.05]	3 (2.55) [0.08]	24
TOTAL	42	42	10	94

Appendix 1: CCM Script

Opening-

Rule #1 is simply be nice and inviting

Hello this is _____ from Dr. _____'s office here in New Albany with the pharmacy team. I'm calling because Dr. _____ thought you may be a good candidate for a new program we're offering here at the clinic called Chronic Care Management. It would be free and would involve monthly follow-up calls or in-person meetings with the pharmacist. Basically, we would work closely with you to address anything that is affecting your health overall. You'd help us set personal goals that we would work on together. Ideally, this is not something you'll be in long term and at some point you'll "graduate" and we'll have met your goals. Does this sound like something you'd be interested in?