Non–Face-to-Face Chronic Care Management: A Qualitative Study Assessing the Implementation of a New CMS Reimbursement Strategy

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Abstract

Diabetes and its comorbidities are leading causes of morbidity and mortality in the United States and disproportionately in Louisiana. Chronic care management (CCM) efforts, such as care coordination models, are important initiatives in mitigating the impact of diabetes, such as poorer health outcomes and increased costs. This study examined one such effort, the Centers for Medicare & Medicaid Services' non–face-to-face CCM reimbursement program, for patients with diabetes and at least 1 other chronic condition in Louisiana. This qualitative study included interviews with patients in this program and health care providers and system leaders implementing the program. Results include lessons learned from health system leadership relating to CCM design and implementation, challenges experienced, overlapping initiatives, perceived benefits, performance, billing, and health information technology. Another key finding is that co-pays seem to be a barrier to patient interest in participation in non–face-to-face CCM, especially given that the value of the program is not completely clear to patients. A common strategy to address this co-pay barrier is to target dual eligibles, as Medicaid will cover the co-pay. However, widespread use of such strategies may indirectly exclude individuals who need and may also benefit from non–face-to-face CCM.

Keywords: chronic care management, care coordination, diabetes, patient-centered

Introduction

PER THE 2012 NATIONAL Health Interview Survey, approximately half of US adults (117 million) have been diagnosed with at least 1 chronic condition such as diabetes, hypertension, coronary heart disease, arthritis, or chronic obstructive pulmonary disease.¹ The presence of more than 1 of these chronic conditions (or comorbidities) can be challenging for the patient and their health care providers. Because of the prevalence of comorbidities among medically complex patients, care coordination has the potential to be a valuable innovation toward improving efficiency and effectiveness of care for this population.^{1,2} Care coordination is a patient-centered approach that bridges gaps along the care pathway by connecting patients to providers through the

meaningful use of electronic health records (EHRs) and patient and caregiver engagement. It is intended to result in patient-centered outcomes such as improved health-related quality of life, improved health outcomes such as better glycemic control, and reduced hospitalization and emergency department visits.

Early evidence suggests that care coordination can be an effective strategy for chronic care management (CCM). More specifically, clinical studies have shown the promise of care coordination in settings such as pediatric clinics,³ primary care practices,^{4–6} and, specifically, where patient-centered medical home delivery models are implemented.^{7–9}

Despite ongoing efforts to improve health care quality, chronic conditions continue to rise among Americans, and in January 2015, the Centers for Medicare & Medicaid Services

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(CMS) implemented a new reimbursement policy to incentivize providers to engage in care coordination for Medicare patients with 2 or more chronic conditions.¹⁰ Under this new policy, non-face-to-face care coordination services for CCM are reimbursable under a unique billing code (Current Procedural Terminology [CPT] 99490) up to once per month that at least 20 minutes of non-face-to-face CCM services are delivered.

Diabetes management remains a major public health concern, especially in Louisiana where mortality from diabetes complications is high and the proportion of patients with good glycemic control is low.¹¹ Care coordination has the potential to be crucial in this setting; however, because the CMS CCM initiative is only in its second year, more research is needed that examines the use of the code as well as patient and provider experiences with this program.

The current study provides insight into patient and provider experiences, specifically for the care of patients with diabetes and multiple chronic comorbidities. It employs a qualitative approach to understanding patient experiences and health system leaders' and health care provider perspectives. This study is a component of a 5-year project, the Louisiana Experiment Assessing Diabetes Outcomes (LEAD) Study, examining the effectiveness of CCM on outcomes for patients with diabetes. To complement the assessment of the policy's impacts via the observational study, this qualitative research is the first to examine the facilitators and barriers to implementing the CMS reimbursement policy in Louisiana. It provides early insight for national policy makers and patient advocacy groups. Findings also will be of interest to health system leaders and providers making decisions about non-face-to-face CCM and use of the CMS code.

Methods

Study design

The authors to be consistent with other mentions conducted a cross-sectional study utilizing qualitative research methods to explore system leader, health care provider, and patient experiences with non-face-to-face care coordination for chronic disease management. Six health care organizations were examined for this study, which included hospitals and Federally Qualified Health Centers (FQHCs) in South-eastern Louisiana. Interviews were conducted by telephone between December 2016 and February 2017 and recorded with permission. Recordings were transcribed. Incentives were provided for participation.

Health care system leaders and health care providers

Representatives from each organization on the LEAD Study Steering Committee identified system leaders and health care providers involved in decision making regarding the implementation of the CMS policy in their respective organizations. These individuals were invited to participate in an interview. Interviewees included department and program directors, administrators, and implementers of the CCM program. Health care providers included nurse case managers, primary care providers, and specialists such as endocrinologists. Throughout the recruitment and interview processes, the authors monitored the representation of the 6 different health systems as well as the types and levels of leadership reflected

in the interviewees' backgrounds, roles, and perspectives to ensure comprehensive representation.

Patients

Patients were recruited from each of the 6 health care organizations examined in this study. Patients were recruited through the organizations' disease registries and patient portals. Eligibility criteria for patients participating in the interviews required that they were 65 years of age or older (Medicare eligible) and diagnosed with diabetes plus at least 1 other chronic condition. Preference for interviews was given to patients receiving non-face-to-face CCM at one of the health care organizations; however, 3 patients not yet receiving formal CCM also were included to understand their health care experiences and to inform future planning of non-face-to-face CCM programs.

Interview guides

Two interview guides were developed for this study – one for system leaders and health care providers and one for patients (see Supplementary Data S1 and S2; Supplementary Data are available online at www.liebertpub.com/pop). Interview questions were informed by 3 focus groups held in July and August 2016 with patients receiving non-face-to-face CCM, patients not receiving non-face-to-face CCM, and system leaders and health care providers. The questions were reviewed by the LEAD Study Steering Committee, which includes patient partners and clinicians who treat patients with diabetes. The authors and the Steering Committee revised the interview questions through an iterative process.

Health system leaders and health care providers

The health system leader and health care provider interview guide consisted of questions assessing program design and implementation (eg, staff involved, consent process, co-pay processes, use of technology such as EHRs and registries). The questions sought to gain an understanding of experiences, challenges, and facilitators in non-face-to-face CCM programs.

Patients

The intention of the interview questions for patients was to provide insight about patient experiences with non-face-to-face CCM and any unmet needs. Questions gauged what methods of non-face-to-face CCM the patient had experienced (eg, telephone, text, email, patient portal) and with whom (eg, a nurse care coordinator, their primary care provider), as well as what CCM services they had utilized (eg, answering patient questions, prescription management, appointment scheduling, billing and finance, self-care plans, coordination with and referral to other providers such as specialists or diabetes educators). Questions asked about patient perceptions of the program's value and their experience with co-pays and the consent process.

Participant recruitment

Health system leaders and health care providers were recruited from primary care and relevant clinics identified through the study's Steering Committee. The vast majority of

individuals interviewed worked and sought care in the New Orleans metro area. Individuals were invited via email to participate in an interview with the research team. Additional interviewees were identified through a snowball approach whereby interviewees suggested others who have a role in non-face-to-face CCM or organizational decision making about the CCM program. Each participating organization identified patients who were enrolled in a non-face-to-face CCM program or who met the inclusion criteria for the program (ie, 65 years old with a diabetes diagnosis plus 1 or more chronic conditions). Patients were invited to participate by email, letter, or through their providers' patient portal.

Analysis

Interview transcriptions were reviewed by 3 members of the research team (VAY, MKW, and AM). Using grounded theory qualitative research methods, key themes and subthemes were identified. The interview data were coded using NVivo Version 11 (QSR International, Melbourne, Australia), and interrater reliability was assessed. The study was approved by the Tulane University Institutional Review Board.

Results

A total of 33 semi-structured interviews were conducted: 19 with health system leaders and health care providers and 14 with patients. Eight major themes were identified from the interviews with system leaders and health care providers. These included CCM design and implementation, challenges experienced, patients overlapping initiatives, perceived benefits and advantages, performance, billing, and health information technology (Table 1). Four major themes were identified from the patient interviews: perceived benefit, patient understanding, patient interest, and challenges (Table 2). Subthemes also were identified. Some subthemes fit under multiple major theme categories and were cross-listed and denoted with an asterisk in Table 1.

Health system leaders and health care providers

Because many of the non-face-to-face CCM programs are in planning or pilot phases across the health care organizations, the system leader and health care provider insights focused primarily on their respective organizations' approach to implementing the program. Best practices were identified by interviewees who had already implemented non-face-to-face CCM, including staffing models, which patients to enroll in the program, billing practices, and when and how to enroll patients. Key findings related to these aspects of program design focused on the importance of having a care coordinator physically on-site to conduct the initiation process, to assist the health care provider, and to establish a relationship with the patient in person. One provider noted, "it's almost one hundred percent enrollment [in the program] if you [initially] see them face-to-face. They understand who you are, they engage with you..." Staff fulfilling the role of care coordinators were mostly registered nurses, but some health care organizations are exploring the use of medical office assistants to support the nurses. Multiple providers expressed feeling more comfortable delegating responsibility to a care coordinator who was staff and with whom the primary care provider had already worked and who the provider knew and trusted.

All system leaders were strategically enrolling patients who are dually eligible for Medicare and Medicaid, or Medicare and a supplementary insurance, because these patients are not responsible for co-pays for the non-face-to-face CCM program and were believed to be more amenable to consenting to participation. Dual eligibles were also perceived to be better positioned to benefit from non-face-to-face CCM as they are patients with greater need because of age, financial vulnerability, or disease and disability status.

Many health systems reported using technology, specifically the use of EHRs, to document the 20-minute monthly non-face-to-face CCM service provided under the requirements of CPT code 99490, as well as the use of registries to identify eligible patients. As one health care provider noted, "So it took us about a year, year and a half, to learn how to use all these tools, and then also to understand how they would affect the patient population. But now that machinery just happens in the background. You don't even notice it on a day-to-day basis as a physician. Every once in a while a little batch of orders shows up and that's that."

Several challenges were identified consistently by health system leaders and health care providers who have already implemented a non-face-to-face CCM program in their organization. Specifically, challenges regarding the large time commitment and role of the care coordinator in providing individualized care for complex patients with multiple comorbidities were discussed frequently. Patient barriers and challenges, such as low literacy, low technology proficiency and access, and high "psychosocial" needs, also were noted by health care providers and care coordinators. When discussing the use of technology to facilitate the delivery of non-face-to-face CCM services, some care coordinators discussed the use of EHR patient portals and other web-based communication and noted that very few patients meeting the criteria for their program had the technology proficiency to participate through these means.

Other technical aspects of the non-face-to-face CCM provision also were identified as programmatic challenges, such as documenting the 20 minutes of services provided (a requirement of the CMS policy in order to bill for the service) or obtaining signed consent from the patient during the enrollment process. Several other issues were identified regarding the billing code, including that FQHCs are not able to be reimbursed for these services from Medicare or Medicaid because of the FQHC prospective payment structure with CMS. Also, issues were identified with attempting to bill for the non-face-to-face CCM services when the patient has already been billed (using the new CMS code) by another provider. This was problematic because the policy indicates that only 1 provider can bill for this service per patient. It was noted that there is no way to assess if a patient has already enrolled in the CCM program with another provider outside the health care system.

Several best practices were identified to mitigate the challenges identified. For example, EHR functionality was customized at several health care systems that enabled the documentation of non-face-to-face CCM. System leaders and health care providers expressed the utility of having the care coordinator on-site to enroll patients in non-face-to-face CCM during their visit to produce greater likelihood of patient acceptance of the co-pay and likelihood to consent to participation.

TABLE 1. HEALTH CARE SYSTEM LEADERS AND HEALTH CARE PROVIDER
PERCEPTIONS OF NON-FACE-TO-FACE CHRONIC CARE MANAGEMENT

<i>Major theme</i>	<i>Subtheme</i>	<i>Explanation</i>
Non-Face-to-Face (NFF) CCM Design and Implementation	Best Practices	Successful practices for CCM program design and implementation
	Staff and Team Selection/Structure	Program needs for new staff, team development, or organizational restructuring
	Onboarding of Patients (Patient identification/method of onboarding)	Successes and challenges related to when and how patients were approached and asked if they are interested enrolling in the CCM program and how they are initiated
	Target Patient Population Identification	Targeting specific patient populations that are optimal for enrollment in a CCM program (eg, dual eligibles because Medicaid will pay the co-pay)
	Identification of Eligible Patients	Use of registries and EHR systems to identify eligible patients for the CCM program
	Program Types	Specific services offered through NFF CCM programs
	Electronic Health Record (EHR)	Use of EHRs for CCM program components such as patient identification or time tracking
Challenges Experienced	Consent Form Documentation of 20 Minutes*	Challenges obtaining a signed patient consent form Challenges creating a system to document the required 20 minutes of CCM
	Co-pay Time Commitment	Co-pays noted as a barrier to participating in CCM Requirement of an extensive time commitment to the NFF CCM provision
	Patient Barriers	Barriers to participating in the program such as limited cell phone access
	Patient Comorbidities	Complex clinical conditions challenge the effectiveness of CCM programs
	Psychosocial Needs	Social needs of eligible patients are complex and can complicate effective CCM service delivery
Patients	Benefitting from Program	Perception that NFF CCM will be beneficial and valuable to patients
	Tracking	Identification of the need to track patient participation and outcomes for M&E purposes
	Information Technology Barriers	Lack of access to necessary technology perceived to be a patient barrier to participating in CCM programs
	Patient Interest	Perception that patient interest in program varies depending on the patient's level of need for services
	Self-Efficacy	Perception that patient and caregiver level of self-efficacy determines needs for CCM
Overlapping Initiatives	Meaningful Use (MU)	CCM programs support/overlap with components of patient-centered medical home transformation and MU expectations
	American Medical Group Association (AMGA)	AMGA provides a model of CCM that was helpful to some health care system leaders
	Accountable Care Organizations (ACOs) Population Health	CCM activities can promote objectives of some ACOs CCM furthers health system efforts toward addressing population health
Perceived Benefits and Advantages	Care Team	Perception of benefits for the patient and the provider on care team development
	Continuity of Care	Perspective that patients experienced better continuity of care with a CCM program
	Risk Adjustment	Perception that implementing a CCM program managed health system legal risks
Performance	Patient Outcomes	Need for information related to patient outputs and clinical outcomes for M&E
	Program Outcomes	Need for information related to NFF CCM program outputs and outcomes for M&E and potential program reorganization
	Innovations	Any innovations to address issues for NFF CCM service provision that can be shared with other health systems to support other programs

(continued)

TABLE 1. (CONTINUED)

<i>Major theme</i>	<i>Subtheme</i>	<i>Explanation</i>
Billing	“Getting Reimbursed for What We Already Do”	Provision of NFF CCM to patients previously occurring; CPT Code 99490 created an opportunity to be reimbursed for these services
	20 Minute Documentation*	Challenges creating a system to document the required 20-minutes of CCM
	Cost/Revenue Analysis	Financial analysis of the CCM programs conducted (eg, return on investment analyses)
Health Information Technology	Use of Registries	Use of registries to identify patients eligible for CCM programs
	EHR*	Use of EHR for CCM program components such as patient identification or time tracking

CCM, chronic care management; M&E, monitoring and evaluation.

The primary advantage of the CCM program identified by the majority of system leaders and providers interviewed was a sense that using CPT code 99490 provided reimbursement for important services that primary care clinics have already been delivering. One provider stated, “CMS finally recognizes the fact that [primary care practitioners] especially put in an inordinate amount of work behind the scenes and there have been arguments for many, many years that physicians truly did need to be able to quantify it and get paid for it.” Interviewees expressed hope that this policy would provide the opportunity to recoup costs and enhance their services.

Another perceived benefit included an acknowledgment from health care providers and care coordinators that the program strengthened continuity of care across team members. Consequently, care teams and patient care were enhanced by the inclusion of care coordinators. From the perspective of one care coordinator, “We have a good relationship. If you’re in the clinic yourself, you’re able to talk face-to-face with the physicians and give recommendations. They’re very open.”

Many health care providers also expressed beliefs that patients benefited and were more engaged with their care

through the program. As one provider said, “You know, we thought we were sending out emails to patients who were being noncompliant. We used to use the term ‘runners,’ people who were sort of running away from the doctor; they don’t want to know about their diabetes. That’s how we perceived this group. But what we found out is that actually it was people at home waiting for the doctor to call them to come in to get their diabetes cared for. They had no objection to getting cared for. They were just sort of waiting in a passive state for someone to call them. And so that was, to us, a surprise.”

Other perceived benefits of non-face-to-face CCM include the overlap with other initiatives pursued by a health care organization. For example, many health care system leaders explained that their non-face-to-face CCM program was supported by other factors, such as achieving patient-centered medical home recognition, the 2016 Medicaid expansion in Louisiana, and supportive professional organizations such as the American Medical Group Association or American Case Management Association.

Finally, all system leaders and providers interviewed noted that they are still collecting performance data to develop a formal evaluation of their programs. Health system

TABLE 2. PATIENT PERCEPTIONS OF NON-FACE-TO-FACE CHRONIC CARE MANAGEMENT

<i>Major theme</i>	<i>Subtheme</i>	<i>Explanation</i>
Perceived Benefits	Types of Benefits	Perceived specific benefits from being a part of the program and how these benefits differed from the period before enrollment in the program
	Patient Outcomes	Perceived health outcomes based on the services provided through the program
	Impact on Health	Perception that the program has had an impact on their overall health (statements were positive, neutral, and negative)
	Services Offered	Specific services offered by the program and which services patients use and do not use and why
Patient Understanding	Consent Process	Awareness of consent process and expectations associated with consent
	Co-pay	Awareness and understanding of any program co-pays and perceptions of co-pays and program value
	Patient Empowerment	Program role in patient empowerment for health improvement and lifestyle change
Patient Interest	Patient Care Plan	Perception and understanding of any care plans; care plan acceptability and suggestions/needs
	Applicability	Applicability and appropriateness of the program and perceived value
Challenges	Challenges/needs	Anything that a patient thinks needs improving

leaders with more-developed or longer-standing non-face-to-face CCM programs reported initial success at enrolling and maintaining patients in the program. No formal information related to patient outcomes was available from any participating health system. The interviews yielded mixed reports regarding the financial viability of the programs. System leaders and providers expect more program performance and patient outcomes data to be available for analysis after the programs are more fully established.

Patients

Results from the patient interviews demonstrated that there were mixed perceptions about the value of the program. Although most patients agreed that non-face-to-face CCM is beneficial and convenient, few patients expressed specific ways that it has been valuable.

Multiple patients reported positive experiences with the vast array of CCM support services, such as transportation scheduling to and from doctor's visits, medication prescription coupons and discounts, scheduling visits with specialists, providing educational reading materials, and assisting in providing necessary medical devices and equipment. Scheduling visits with specialists was the most commonly mentioned benefit by interviewees.

Many patients appreciated the amount of interaction they had with their care managers and the ease of access in speaking with someone about their health-related needs. Specifically, patients reported that the amount of time they could spend speaking with their care managers was far greater than the amount of time their doctor would have with them. A patient said, "I mean it's not like we spent hours on the phone, but I knew that I could get in everything I wanted to ask her. I'm not saying nothing bad about the doctor, but like I say, it always seem like there is a time period and once that clock hit that time, that's it. Everything stops and I see you at your next appointment."

Many patients reported that the CCM program was applicable to their health care needs and was useful in providing valuable information and support that was important to their health. One patient said, "They help me manage what I need. I like the nurse practitioner because she's very personable. She works very closely with my physician. She keeps up with all my information. She has excellent bedside manner."

Although most patients appreciated the services offered, some patients shared negative experiences with the program. Specific examples included the paper-based reading materials sent via mail. One patient stated, "She sent me all of this literature and I said, 'I've got this stuff 100 times over. Please don't send me anymore. I mean I've read it all. I know it by heart and I just throw it all away.' She was telling me stuff I knew that I had lived through and I had a hard time convincing her of that. I think she wanted to do her job so well that she overdid it. I got a little irritated." Another patient said, "The biggest [frustration] was when she kept sending me all of this crap." Patients reported that additional information sent by care managers was redundant and did not provide value to their health care needs. Another patient stated, "I mean if I would have been a brand-new patient, maybe that would have been one thing, but after all I've been through and all I've taken care of over the years, you know, she couldn't understand how I made my own appointments."

Patients suggested a lack of clarity or challenges with certain aspects of the program including: (1) following care plans provided to them (eg, nutritional programs), (2) understanding the consent process and how they came to be involved in the program, (3) understanding the role of the care manager, and (4) knowledge of how this program improves their overall health status. It was most common that patients were not aware there was a consent process or did not remember signing a document stating they were joining a non-face-to-face CCM program. All patients interviewed reported that they did not incur a co-pay for being a part of the program. Based on knowledge gained from interviews with health system leaders, this was in part because of the patients having dual eligibility for Medicare and Medicaid with co-pays covered by Medicaid.

Regarding co-pays, responses varied when asked what amount the patient would be willing to pay for non-face-to-face CCM services if they were expected to cover their own co-pay. More than half of the patients interviewed stated that if the monthly co-pay was more than \$18 they would not be interested in being a part of the program. However, patient interviewees typically were willing to pay an \$8 monthly co-pay for receiving CCM services. For example, one patient stated, "A citizen my age can't afford to pay anything more than \$8.00 or \$9.00."

Patients felt that the non-face-to-face CCM program provided opportunities for personal health empowerment, including care plans. They acknowledged that care plans were individually designed based on their needs. Patients said their care managers spent long periods of time with them assessing their health needs and goals, and viewed this as a benefit to their health; however, they often were unable to follow their plans. In reference to a plan for daily physical activity, one patient said, "I got to admit, I haven't been sticking to it."

When asked about their perception of the impact of the non-face-to-face CCM program, most patients did not see any significant difference in their overall health. The greatest impact perceived was that of the tangible services offered and increased direct communication with their health care provider. A patient said, "She answers and she always calls. She calls when I don't call her." Most patients reported that their attention to their health care regimen improved (ie, attending appointments, managing their care plan, monitoring diet) but they did not notice any specific changes in their health.

Discussion

In January 2015, CMS implemented a new reimbursement policy to incentivize providers to engage in care coordination for Medicare patients with 2 or more chronic conditions.¹⁰ The current study provides insight into patient and provider experiences with non-face-to-face care coordination, specifically for the care of patients with diabetes and multiple chronic comorbidities. Findings from this study identified policy concerns, implementation and programmatic challenges, and best practices in using Medicare's non-face-to-face CCM code.

The following findings may be informative for policy makers concerned with expanding the non-face-to-face CCM program. Co-pays seem to be a barrier to patient interest in participation in non-face-to-face CCM, especially given that the value of the program is not completely clear to patients.

As co-pays likely will increase because of the recent policy changes for the code (from \$8 to \$18), the co-pay will be prohibitive for patients who do not have a second insurance (eg, Medicaid or private insurance) to cover the co-pay.¹² Health care providers understand this barrier and, as such, have focused on enrolling individuals who are dually eligible for Medicare and Medicaid. Such strategies may miss individuals who also would benefit from the non-face-to-face CCM program. Additionally, patients in states that have not expanded Medicaid may be less likely to be offered the program and receive the benefits it can provide.

Findings also suggest that not all providers fully understand the non-face-to-face CCM program and its policies. In fact, some have contracted with outside consultants and falsely believed that they could bill private insurers for the non-face-to-face CCM services. Ultimately, this resulted in wasted resources for the initiation of non-face-to-face CCM provision to patients who ultimately could not be enrolled in the program. In these circumstances the program was not continued. Guidance provided by professional organizations such as the American Case Management Association and the American Medical Group Association has been beneficial to understanding the policies among some organizations, although not all health care organizations have accessed this support.

In terms of implementation and programmatic concerns, findings identified a challenge with providers not being able to discern when patients have been enrolled in the non-face-to-face CCM program by another provider. This creates issues because patients can be billed by only 1 provider and raises questions of how this will work if a patient changes providers or, as was found in this study, patients do not know that they are enrolled in the program already (by another provider). This issue presents a potential for wasted resources as enrollment typically entails extensive time commitments in developing care plans. Furthermore, if the written consent forms are no longer required, it may be challenging for providers to be able to validate that the patient agreed to participate in this program via their office if they are being billed by another office.

The required documentation of the 20 minutes of monthly non-face-to-face CCM services may be an implementation challenge for those who have yet to initiate the program. Those who have started resolved the documentation requirement through EHR tracking, which often was an additional cost to starting up the program. Such costs may be a resource issue for some organizations.

Findings also identified possible best practices that may inform organizations considering implementation of the non-face-to-face CCM program. For example, having on-site care coordinators was found to be most effective in enrolling new patients as it establishes a rapport with patients. It was also believed to bring cohesiveness to the care team. Both patients and providers expressed appreciation for the CCM care coordinators. Specifically, patients valued the relationship and the amount of time they receive with their coordinators. Providers reported initially being cautious about delegating patient care and support to CCM coordinators; however, over time the providers felt more comfortable and appreciative of the support of the coordinators.

EHRs are essential to efficiencies in the documentation/automatic capture of the time spent providing CCM and the identification of eligible patients. Specifically, it was noted that population health functionalities in EHR systems can be

used to identify patients who will benefit the most from non-face-to-face CCM (eg, patients failing treatment, non-compliant patients, patients missing visits).

Patients perceived the most value from CCM that included pharmaceutical and medical device support, identification of community health resources, transportation support, and telephone contact. Purposeful telephone contact was most appreciated. Hard copies of health education materials, which is one form non-face-to-face CCM that patients have received, were perceived to be the least valuable form of support.

Future work should examine experiences across health care delivery interventions affected by the Medicare reimbursement policy change. It may be beneficial to explore similarities in patient and provider experiences and identify any lessons learned or best practices that might be valuable to providers implementing these new delivery interventions. For example, there may be lessons in the use of and reimbursement of telehealth. Like non-face-to-face CCM, telehealth reimbursement policy has unique restrictions (ie, geographic restrictions) that may relate to provider acceptance and use of the intervention as well as patient experiences with the intervention.

Limitations

This study has numerous strengths and limitations. It is the first study to qualitatively examine experiences with Medicare's non-face-to-face CCM program. However, a limitation of the study is that not all health systems had implemented their non-face-to-face CCM programs when this work was being conducted in 2016. Another limitation related to duration of the program is that, for the health systems that had recently implemented their program, patients who were enrolled in the program may not have been participating for very long. Additionally, because the non-face-to-face CCM programs explored in the study were relatively recently initiated, minimal performance and evaluation data were available regarding patient outcomes or financial viability. This study examined the use of non-face-to-face CCM programs in an urban setting in 1 state; thus, findings may not be generalizable to experiences in other geographic locations. Lastly, as is common in qualitative studies of this nature, recall bias and social desirability bias may have influenced the perceptions shared in interviews.

Conclusions

This study examined facilitators and barriers to translating the non-face-to-face CCM policy into practice. Perspectives of system leaders, health care providers, and patients involved in non-face-to-face CCM have not been evaluated or available for lessons learned to date. This study provides early insight about Medicare's non-face-to-face CCM program. These findings affirm changes in recently implemented CMS policy regarding non-face-to-face CCM, which include 3 additional reimbursement codes aiming to assist health systems in developing their programs to increase the uptake of CCM. These revised 2017 reimbursement policies may resolve some of the barriers to adopting CPT code 99490. CPT codes G0506, 99487, and 99489 provide enhanced reimbursement for the 99490 initiation visits as well as for

complex CCM.¹³ Future qualitative research is needed to assess the impact of these new CCM codes.

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References

1. Ward BW, Schiller JS, Goodman RA. Multiple chronic conditions among US adults: a 2012 update. *Prev Chronic Dis* 2014;11:E62.
2. US Department of Health and Human Services. HHS Initiative on Multiple Chronic Conditions. www.hhs.gov/ash/initiatives/mcc/index.html Accessed February 28, 2013.
3. Antonelli RC, McAllister JW, Popp J. Making care coordination a critical component of the pediatric health system: a multidisciplinary framework. New York: The Commonwealth Fund, 2009.
4. O'Malley AS, Tynan A, Cohen GR, Kemper N, Davis MM. Coordination of care by primary care practice: strategies, lessons, and implications. *Res Brief* 2009;1–16.
5. Hess BJ, Lynn A, Holmboe ES, Lipner RS. Toward better care coordination through improved communication with referring physicians. *Acad Med* 2009;84(10 suppl):S109–S112.
6. Pham HH, O'Malley AS, Back PB, Saiontz-Martinez C, Schrag D. Primary care physicians' links to other physicians through Medicare patients: the scope of care coordination. *Ann Intern Med* 2009;150:236–242.
7. Bitton A, Martin C, Landon BE. A nationwide survey of patient centered medical home demonstration projects. *J Gen Intern Med* 2010;25:584–592.
8. Crabtree BF, Chase SM, Wise CG, et al. Evaluation of patient centered medical home practice transformation initiatives. *Med Care* 2011;49:10–16.
9. Harbrecht MG, Latts LM. Colorado's patient-centered medical home pilot met numerous obstacles, yet saw results such as reduced hospital admissions. *Health Aff (Millwood)* 2012;31:2010–2017.
10. Centers for Medicare & Medicaid Services. Connected Care: The Chronic Care Management Resource. <https://www.cms.gov/About-CMS/Agency-Information/OMH/equity-initiatives/chronic-care-management.html> Accessed December 20, 2016.
11. Kochanek KD, Murphy SL, Xu J, Tejada-Vera B. Deaths: final data for 2014. *Natl Vital Stat Rep* 2016;65:1–122.
12. Moore KJ. Chronic care management and other new CPT codes. *Fam Pract Manag* 2015;22:7–12.
13. Moore KJ, Hayes B. New codes, new payment opportunities for 2017. *Fam Pract Manag* 2017;24:7–11.

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