Chapter 11
Accountable Care Organizations: A Case Study in the Use of Care Coordination: Montefiore Medical Center

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America's health care system is neither healthy, caring, nor a system.

– Walter Cronkite

Abbreviations

ACO	Accountable Care Organization
CMHCB	Care Management for High Cost Beneficiaries
CMO	Montefiore Care Management Organization
CMS	Center for Medicare & Medicaid Services
DRG	Diagnosis Related Group
ED	Emergency Department
FFS	Fee-for-Service
HMO	Health Maintenance Organization
MIPA	Montefiore Integrated Provider Association
PCMHs	Patient Centered Medical Homes

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Introduction

John[1] is a 68 year-old Bronx resident with diabetes, hypertension, end-stage renal disease (ESRD), diminishing visual acuity, and poor hearing. To manage his ESRD, John undergoes dialysis over 3–4 h sessions per week at a free-standing dialysis center. Due to John's hearing impairment, he has had difficulty arranging transportation to dialysis and is frequently late or misses sessions. John sees his nephrologist at dialysis a few times monthly. Care is focused on his kidney disease, hypertension, and diabetes. He has not sought help with his hearing and visual impairments, as he is uncertain where to obtain services, is unsure who will pay for hearing aids and glasses, and does not have the time or energy to seek further medical care beyond the time spent in dialysis. As a result, he has not seen his primary care physician to discuss the other conditions, preventive care, or other specialty care. He feels socially isolated and overwhelmed at the prospect of navigating all of his healthcare needs. John has sought care in the emergency room due to uncontrolled diabetes, a respiratory infection, declining vision, and other complaints, averaging two visits and one inpatient admission per month.

John's story is not unique. Individuals across the United States increasingly suffer from multiple chronic conditions [1] and fragmented care, spread across many medical providers. An average Medicare patient sees two physicians and five specialists in a year, rising to 13 physicians a year if they have a chronic disease [2]. This level of fragmentation is compounded by social burdens, such as lack of social supports or a caregiver, unstable housing, domestic violence, and poverty. The implications of fragmentation are significant: patients may obtain duplicative care, receive discordant diagnoses or medications, or use emergency departments as one-stop-shop sources of services [3, 4], thereby missing out on continuity of care for chronic conditions or preventive care.

Accountable care organization (ACO) models described in the prior chapter, as well as other care coordination models like Patient Centered Medical Homes (PCMHs), seek to break this pattern. These models presume that if delivery systems help patients navigate and manage their conditions across healthcare settings, they will get the right care, in the right place, at the right time.

Care coordination, broadly speaking, is defined by the Agency for Healthcare Research and Quality as "deliberately organizing patient care activities and sharing information among all of the participants concerned with a patient's care to achieve safer and more effective care" [5]. This chapter describes how Montefiore Medical Center has implemented care coordination efforts within the context of ACO and ACO-like programs.

[1] Composite based upon multiple cases.

Montefiore Medical Center: Transforming Managed Care into Care Management

Montefiore Medical Center is an urban academic medical center based in the Bronx, and lower Westchester County, New York, which serves over one million individuals annually. Montefiore's integrated delivery system spans five general and one children's hospital, over 20 community-based primary care centers, seven mobile healthcare units, four emergency departments, three major specialty care centers, a home care agency, and other specialty programs.

Montefiore, initially established in 1884 to serve individuals with chronic disease, has a mission to serve vulnerable, underserved populations within its community [6]. In 1950, Montefiore created the nation's first Hospital Department of Social Medicine, followed by a residency program in social medicine and pediatrics, designed to train future healthcare providers to deploy clinical expertise to communities with poor access and a high intensity of social and health problems [6, 7].

Since that time, Montefiore has expanded its service delivery via a wide range of hospital and community-based programs to provide high quality medical care and social supports to a rapidly expanding and increasingly diverse community. The history of some of these activities is described below, along with specific discussion of Montefiore's activities in the context of the Pioneer ACO program.[2]

Care Coordination at Montefiore

Early on, Montefiore sought to promote continuity of care for its patient population by developing a robust network of providers beyond the hospital walls. In the 1960s, Montefiore was deeply involved in the establishment of an early federally designated neighborhood health center, the Dr. Martin Luther King Health Center, with an explicit mission to deliver "social rehabilitation of a whole neighborhood, as a way to break the vicious cycle of poverty" [8, 9].

Recognizing a tremendous ongoing need for such services, Montefiore continued to expand its network of primary care centers in the Bronx, including some federally qualified health centers, as well as other practices. Montefiore also opened the first Home Care Program and added a long-term care facility to its expanding list of services. By the early 2000s, Montefiore was running over two dozen primary care practices along with targeted primary care services located in schools, homeless shelters, and other settings [6].

Concurrent with efforts to expand the population served and the continuum of health care services, Montefiore undertook partnerships with health plans to alter

[2] Montefiore Medical Center is operating New York's only Pioneer Accountable Care Organization (ACO). The Pioneer ACO is a federal demonstration to promote high quality coordinated care for Medicare FFS beneficiaries; the model is described at length in the previous chapter.

the framework for payments in order to incentivize a holistic model of patient care. In the 1980s, Montefiore executed an agreement with Maxicare, a Los Angeles based Health Maintenance Organization (HMO), to begin organizing its providers to collaborate with U.S. Healthcare, later acquired by Aetna.

Through this partnership and mirroring a model Maxicare pioneered in California, Montefiore participated in a group of local providers that assumed responsibility for managing hospital services and costs. Another group of providers situated within Montefiore's outpatient sites took responsibility for outpatient services. Under these arrangements, the two groups provided determinations of medical necessity (also known as utilization management [10]) on behalf of U.S. Healthcare and monitored penalties for non-timely submissions of claims for patients receiving care within and outside of the Montefiore system.

Other changes in hospital reimbursement had an impact upon Montefiore's relationships with health plans. In the 1970s and 1980s, a number of states, including New York, sought to reduce dramatic increases in hospital spending by transferring control of payment rate setting to state institutions [11]. In New York, this system evolved to one where Medicare and Medicaid paid the same rate to hospitals for given Diagnosis Related Groups (DRGs) [12], while commercial payment rates were pegged to 113 % of rates paid by non-profit insurer Blue Cross [11]. This practice eventually drew to a close in the mid-1990s with the New York Health Reform Act of 1996, which eliminated the fixed DRG payment system and required hospitals to negotiate directly with health plans to establish payment rates [13].

The changing reimbursement environment, the growing number of managed care plans nationally, and the demise of Maxicare in the New York market [14], all created a catalyst for further innovation within the Montefiore system. Building upon Montefiore's longstanding commitment to community-based care across the continuum and early population management activities, Montefiore consolidated the two groups that had managed hospital and outpatient costs into a single integrated practice association, the Montefiore Integrated Provider Association (MIPA), in the mid-1990s.

The purpose of the MIPA was to collectively act as a liaison to health plans and, wherever possible, advance arrangements through which health plans would delegate utilization management responsibility to Montefiore. The idea of such delegation, as had been the case in earlier years with Maxicare, was that staff with close ties to the delivery system would be optimally positioned to make decisions about medically necessary services. Under such arrangements, plans would share a percentage of premium dollars to Montefiore to take on this responsibility.

The Montefiore Care Management Organization (CMO) was established in parallel to the IPA as a separate wholly-owned subsidiary, tasked with training and deploying staff to provide utilization management. Montefiore also created University Behavioral Associations to assume expertise in managing behavioral health needs. The CMO was structured as a separate entity so that there was meaningful separation between financial negotiations and clinical determinations. Of note, this provider-driven care management approach far pre-dated accountable care organization models (Fig. 11.1).

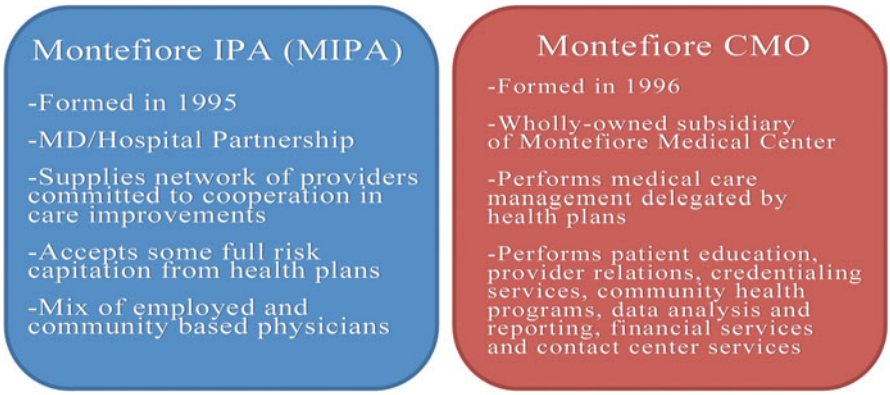

Fig. 11.1 Montefiore IPA versus the CMO

In addition to reimbursement changes, Montefiore's patients molded the eventual structure of its approach to population management. The Bronx is the poorest urban county in the nation, with more than a quarter of the population living below the poverty line [15]. The acute and chronic disease burden within the Bronx is higher than elsewhere in New York City and the nation. The county posts the highest rates of diabetes, asthma, and chronic obstructive pulmonary disease hospitalizations in New York City [16] and in the South Bronx, nearly a quarter of residents do not have a doctor they visit regularly [17].

Given this environment, the CMO's scope of activities expanded beyond determinations of medical necessity to a broader "care guidance" approach that today targets not simply medical conditions, but the underlying social determinants of health. This expansion of scope was magnified in 2000, when Montefiore assumed ownership of a number of outpatient sites across the region that had previously been owned by the Health Insurance Plan of New York (HIP), and care management responsibility for tens of thousands of patients who sought medical care at those sites. Additionally, over time, the care management approach evolved as both health plan payers become more acquainted with the model and Montefiore formalized and broadened its strategies for managing care for larger populations.

Currently, the Montefiore IPA and CMO manage care for more than 200,000 beneficiaries (Fig. 11.2). The following section describes the CMO's care management approach, known as the care guidance program, in greater detail.

Component Parts of the Montefiore Care Guidance Program

Over time, Montefiore has refined its process for managing care for large populations and identifying where to focus resources.

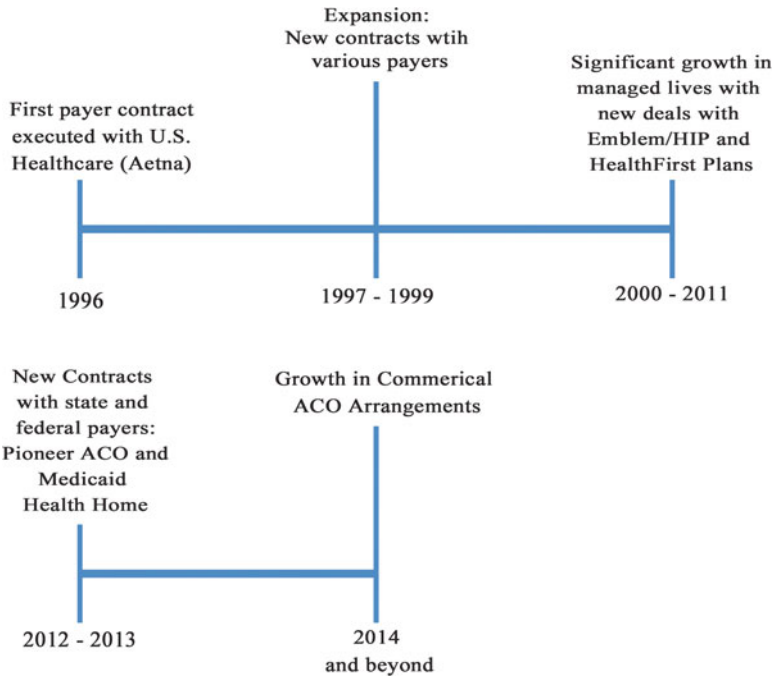

Fig. 11.2 Montefiore IPA and CMO population management timeline

Staff

When the Montefiore CMO began operations, a small group of registered nurses, physicians, and administrative staff carried out clinical activities. Over time, the CMO has expanded its scope of care management operations requiring the addition of other professional staff, including licensed practical nurses, social workers, nurse practitioners, pharmacists, dieticians, health educators and others, to facilitate engagement with patients and improve the quality and accessibility of their care. Non-clinical personnel are often best suited to engage with patients beyond the services provided by physicians and registered nurses, particularly if social issues, such as housing, impede compliance with medical management.

The CMO also works intimately with physician leaders and providers assisting them to help their patients obtain the care that they require. The Montefiore CMO employs a medical director and a team of associate medical directors to assist in overseeing utilization management activities, provide input into clinical programs, and, in some cases, manage particularly challenging patients. This team also helps in the development of outpatient PCMH activities in Montefiore network practices. Finally, the CMO medical directors serve as important peer liaisons to other physicians in the community and hospital, providing education about the care management approach and potential areas for collaboration.

CMO Structure

The Montefiore CMO operates in a primarily telephonic, centralized manner, as many patients see multiple providers across a variety of sites and needs arise outside of the doctor's office. Having a flexible, centralized resource allows clinical staff to often reach patients before an emergency situation arises and to more easily coordinate transitions of care across settings. Every day, hundreds of care management staff within the Montefiore CMO interact with patients, their providers, and care givers through the phone to develop, implement, and monitor care management interventions.

The Montefiore Care Management organization is entirely integrated with the delivery system, with some staff and resources physically situated within doctor's offices or hospitals, or deployed within the community. In Montefiore's experience, the hybrid centralized and field-based approach maximizes the ability to meet patients where they are most comfortable.

Other elements of the care management approach at Montefiore include Emergency Department (ED) navigators, who identify patients under management who seek care in the ED. The navigators alert relevant CMO staff, and, with input from those staff along with other ED personnel, devise a reasonable discharge plan and services. Additionally, Montefiore CMO certified diabetes educators work in outpatient practices to coach patients on dietary choices and other factors that impact their disease. Finally, Montefiore manages a house calls program through which providers deliver care at home for patients who are unable to travel to appointments.

Care Guidance Approach

The care guidance approach consists of standard component parts, described below. Montefiore has also developed a sophisticated information technology platform to help support these activities (Fig. 11.3):

- **Identification of Eligibility:** Montefiore has an in-house data analytics process to identify individuals who may require targeted interventions to address their

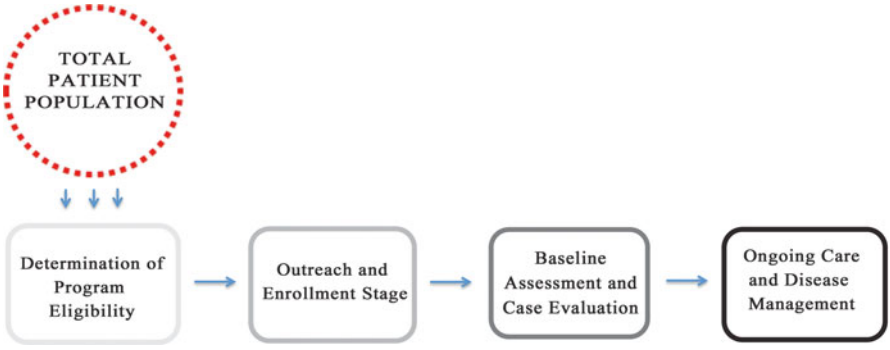

Fig. 11.3 Montefiore care guidance approach

health and social needs, based upon claims and utilization patterns; the CMO also accepts referrals from providers within the delivery system. In order to be eligible, individuals must be enrolled in a health plan with which Montefiore has a relationship or be involved in a demonstration program (the Pioneer ACO, for example) in which Montefiore participates.

- **Outreach and Enrollment:** During this stage, Montefiore CMO staff reaches out to all identified individuals and refer those who are willing to a team for a more detailed baseline assessment. Participation is entirely voluntary and free to the patient.
- **Baseline Assessment and Evaluation:** For those who are willing, the CMO staff conduct a comprehensive medical and psychosocial assessment to evaluate the full spectrum of individuals' needs. This assessment often requires multiple conversations, not simply with patients, but with care givers, and other providers. At the close of the baseline assessment and evaluation, CMO staff develop a care plan consisting of a problem list of areas requiring attention and proposed interventions to address these issues.
- **Ongoing Management:** Depending on the results of the baseline assessment and evaluation, patients may be connected to various programs:
  - *Disease Management:* the CMO operates programs to address diabetes, end-stage-renal disease, chronic kidney disease, heart failure, asthma, COPD, behavioral care, and is planning other initiatives.
  - *Intensive Case Management*: In certain cases involving individuals with very serious illness, the CMO will also connect them to interdisciplinary care teams that provide more intensive case management.
  - *Other Supports:* The CMO has a number of other specialized programs to support patients, such as a palliative care program, a pharmacy management program, and a "housing at risk" program for individuals who have no or unstable housing arrangements.

Applying Care Guidance in a Fee-For-Service (FFS) Context: The Pioneer ACO

To start, Montefiore applied its care guidance approach to populations of patients enrolled in Medicare, Medicaid, and commercial managed care plans. Eventually, Montefiore began taking responsibility for managing fee-for-service (FFS) populations in the Medicare program.

Unlike individuals who enroll in managed care plans, Medicare FFS populations do not have to choose a primary care provider and have only minimal restrictions on the network of providers whom they can see. Several organizations, including the Medicare Payment Advisory Commission, have noted that the FFS reimbursement system frequently results in poorly coordinated care: duplicative medical testing, polypharmacy, limited communication among providers, compromised care transitions, and avoidable emergency department use [18].

These features make care coordination all the more important in a FFS context. Montefiore first began coordinating care for Medicare FFS beneficiaries through the

Center for Medicare & Medicaid Services' (CMS) Care Management for High Cost Beneficiaries (CMHCB) demonstration program, which was undertaken at six organizations nationally, including Montefiore, in 2005.

Under the CMHCB, participating organizations were paid a monthly fee to manage and coordinate care for defined populations of high cost Medicare FFS beneficiaries with chronic conditions. Organizations could also access further dollars if they reduced costs associated with these beneficiary populations by 5 %, beyond the costs of the care management fee. At the outset of this demonstration, the CMO formalized its care guidance approach, establishing a standard baseline/assessment process and a supporting information technology (IT) infrastructure.

In 2012, Montefiore was chosen as 1 of 32 organizations nationally to participate in a new federal demonstration called the Pioneer ACO initiative to serve Medicare FFS beneficiaries (see prior chapter for detailed discussion). Unlike CMHCB, the Pioneer ACO program encompasses a broader population of Medicare FFS beneficiaries beyond those incurring high costs, and has different financial parameters.

Montefiore brought its experience in the CMHCB demo and years of population management to bear in this more recent FFS demonstration. From the CMO's vantage point, the Pioneer ACO has represented another variation on the theme of its existing population management activities. In other words, because FFS is simply a reimbursement type rather than a clinical classification, ACO patients receive the same care guidance supports that any other patients served by the CMO receive.

The Pioneer ACO has, however, enabled the CMO to access claims information about the Medicare FFS population it serves, enabling better insights into utilization and activities outside of the Montefiore system and therefore more comprehensive care management. The ACO initiative has also spurred on important new information exchange and further program development, including regular meetings of clinical leaders within the Montefiore system, community-based providers, and hospital administrators, to address quality improvement, technical challenges, and other implementation issues.

Montefiore is currently in the third year of the Pioneer ACO demonstration and early results are very promising. Montefiore was the top financial performer in the program in the first year of the demonstration and achieved notable outcomes among the ACO population, including a 10 % reduction in inpatient admissions and a 45 % reduction in inpatient admissions for patients with diabetes.[3]

Conclusion

John, the Bronx resident facing diabetes, hypertension, ESRD, speech and hearing impairments, was eventually connected to the Montefiore CMO for evaluation and was enrolled in one of the CMO's intensive case management programs known as Chronic Care Management.

[3] Based upon internal analysis

Through this program, John was connected with a CMO care manager who helped arrange transportation to dialysis appointments, assisted him in obtaining a hearing evaluation and hearing aids, and scheduled an eye examination which resulted in a new eyeglass prescription. The care manager has provided nursing support and organized physician home visits to help John manage his other medical conditions and ensure that he receives preventive care such as vaccinations. As a result, John's utilization of the emergency room and hospital has dramatically dropped off; he has been admitted to the hospital once in the past 6 months and had one additional ED emergency room visit during this timeframe, compared to nearly monthly visits previously.

The care manager also worked with the New York City Parks Department to identify a low-cost gym membership for John so that he could focus on strength training, which may now enable him to be eligible for kidney transplantation. As his health has stabilized, his outlook on life has improved and he has resumed social contact with friends from his church.

John's story illustrates how care management interventions that extend beyond episodic interactions in doctor's offices or emergency rooms and address the social determinants of health can yield meaningful results.

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