ACKNOWLEDGEMENTS

Support for this research was provided by Better Medicare Alliance. The views presented here are those of the authors and not necessarily those of the Better Medicare Alliance or its directors, officers, or staff.

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EXECUTIVE SUMMARY

A BLUEPRINT FOR EFFECTIVE CARE MANAGEMENT

A Fragmented System

Care fragmentation is a consistent characteristic of the U.S. health care system. On average, Medicare patients see seven physicians at four practices. A staggering 75% of hospitalized patients are unable to identify the clinician in charge of their care. The negative impact of poor coordination can be seen in the prevalence of repeated tests and conflicting information between clinicians. Nearly 20% of Traditional Fee-For-Service (FFS) Medicare beneficiaries are re-hospitalized within 30 days of discharge, and half of those patients failed to see their primary care provider (PCP) in the interim.

Fragmentation burdens providers as well, with the average primary care physician interacting with 229 physicians at 117 different practices for Medicare patients. A 2012 National Academy of Medicine (NAM) report concluded that care delivery fragmentation leads to coordination and communication challenges for patients and clinicians and estimated that $765 billion of health care spending is wasted, or leads to little improvement in health or in quality. The authors estimated that $130 billion of waste is attributable to inefficiently delivered services.

One strategy to achieve cost savings and improvements in quality care is care management. The Agency for Healthcare Research & Quality (AHRQ) defines care management as a team-based, patient-centered approach designed to assist patients and their support systems in managing medical conditions more effectively. Despite its growing popularity, the evidence supporting care management is mixed with one large demonstration failing to generate savings. Proponents of care management point to wide variation among programs. This report reviews the research and features that are prevalent among successful practices that function within the framework of Medicare Advantage.
This report examines care management under Medicare Advantage, with the premise that the financial framework of risk based, capitated payments under Medicare Advantage offers the opportunity to improve service delivery through care management to better meet patient needs and improve outcomes. It is important to identify and better define the essential elements prevalent in these successful models of care management so they can be replicated by plans and providers and incentivized by policymakers. The report concludes with the identification of essential elements of effective care management and recommendations to policymakers.
Report Methodology

In partnership with the Better Medicare Alliance, the Robert Graham Center sought to identify characteristics of effective care management and explore how it is being successfully implemented in Medicare Advantage. Review of prior literature, insights solicited from experts, and intensive site visits to identified successful models in the field provided the content for this report. The development of the blueprint for effective care management is based on an environmental scan detailed in a literature review (Appendix 1), information and insights gained from a facilitated convening of a group of Medicare Advantage and care management experts (Appendix 2), and field visits to identified Bright Spots in Medicare Advantage financed care management programs. Four Bright Spot case studies are detailed in this report (Section 2):

» CareMore, a Medicare Advantage payer and provider aligned model.

» GRACE Model Indiana University Health Medicare Advantage Plan where the GRACE Model is currently used by providers to manage a portion of their Medicare Advantage patients.

» InterMed, a physician-owned medical group with care management services available for all of its patients including their Medicare Advantage patients.

» Johns Hopkins Medicare Advantage Plan, a payer and provider utilizing community health workers to manage Medicare Advantage patients.

Bright Spots at a Glance

<table>
<thead>
<tr>
<th>GRACE Model Indiana University Health Medicare Advantage Plan</th>
<th>CareMore</th>
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<tbody>
<tr>
<td>PROVIDER</td>
<td>PROVIDER AND PAYER</td>
</tr>
<tr>
<td>States Covered: Indiana*</td>
<td>MA Care Management Plan Initiated 2011</td>
</tr>
<tr>
<td>11,000 MA PATIENTS</td>
<td>80,000 MA PATIENTS</td>
</tr>
<tr>
<td>1 MEDICAL DIRECTOR</td>
<td>60 PHYSICIANS</td>
</tr>
<tr>
<td>300 in the CM program</td>
<td>140 CASE MANAGERS, CARE EXTENDERS, AND SOCIAL WORKERS</td>
</tr>
<tr>
<td>3 TEAMS</td>
<td>Extensivists and broad care teams managing chronic disease and transitions of care</td>
</tr>
<tr>
<td>Serves Urban and Rural</td>
<td>Serves Urban Only</td>
</tr>
<tr>
<td>Transitions of care</td>
<td>Transitions of care</td>
</tr>
<tr>
<td>EMR: Cerner</td>
<td>EMR: NextGen</td>
</tr>
<tr>
<td>States Covered: California, Nevada, Arizona, Ohio, Virginia, Georgia, Iowa, Tennessee</td>
<td></td>
</tr>
<tr>
<td>AFFILIATIONS: Indianapolis VA Medical Center, Indiana ADRC Care Transitions Program, Indiana University Health MA Plan and ACO</td>
<td></td>
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<tr>
<td>AFFILIATIONS: Anthem</td>
<td>Portal Software</td>
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*In-home care that supports PC, with focus on 12 geriatric conditions.
### Bright Spots at a Glance

<table>
<thead>
<tr>
<th>PROVIDER</th>
<th>States Covered: Maine</th>
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<tbody>
<tr>
<td>InterMed</td>
<td></td>
</tr>
<tr>
<td><strong>MA Care Management Plan Initiated</strong></td>
<td>2008</td>
</tr>
<tr>
<td><strong>4,400 MA PATIENTS</strong></td>
<td><strong>89 PHYSICIANS</strong></td>
</tr>
<tr>
<td><strong>NP/PA CARE MANAGERS</strong></td>
<td></td>
</tr>
<tr>
<td>Focus on transitions of care and pod structure that foster trust and continuity</td>
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</tr>
<tr>
<td>Serves Urban and Rural</td>
<td>Transitions of care</td>
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<th>PAYER</th>
<th>States Covered: Maryland</th>
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<tr>
<td>Johns Hopkins Medicare Advantage Plan</td>
<td></td>
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<tr>
<td><strong>MA Care Management Plan Initiated</strong></td>
<td>2016</td>
</tr>
<tr>
<td><strong>5,000 MA PATIENTS</strong></td>
<td><strong>6,383 PHYSICIANS</strong></td>
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<tr>
<td><strong>3 CARE MANAGERS</strong></td>
<td>Licensed certified social work - clinical</td>
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<tr>
<td><strong>Innovative use of community health workers</strong></td>
<td></td>
</tr>
<tr>
<td>Serves Urban and Rural</td>
<td>Transitions of care</td>
</tr>
</tbody>
</table>

*Physicians in network*
Blueprint for Effective Care Management

Drawing on the environmental scan, expert convening, and Bright Spot site visits, a blueprint was developed that synthesizes the lessons learned and identifying the five key findings of effective care management. This “Blueprint for Effective Care Management” is summarized in Figure 1.

Figure 1: A Blueprint for Key Components of Effective Care Management
Blueprint Key Finding 1

VALUE BASED PAYMENT SYSTEM

Fragmentation is a consequence of a FFS Medicare payment model that incentivizes visits, procedures, and tests rather than early intervention, cost savings, and care coordination to improve the quality of care. Throughout the study period, the importance of payment as the driver of delivery and team composition was mentioned time and again. Interviewed providers stressed that Medicare Advantage has tremendous potential to facilitate effective care management.

First, Medicare Advantage allows payers and providers to “get on the same team” and align care and quality incentives. A participant at the convening commented that payers and providers have historically had adversarial relationships. The incentives inherent in Medicare Advantage’s capitated (fixed) monthly payment for patients encourage providers and payers to work together and share data at the level of population health and in real time for individual patient care. These incentives align to enable providers to think creatively about delivering care and innovate. With more flexible payment, Medicare Advantage plans are able to work with providers and patients to tailor services to meet patients’ needs with appropriate practitioners and in appropriate settings.

Second, the prospective nature of Medicare Advantage payment allows organizations to invest in the infrastructure needed to execute effective care management, including new staffing, new communication avenues, and data analysis. Finally, Medicare Advantage allows providers to manage populations, as well as individuals. With a defined panel of patients and providers, along with incentives to improve coordination and quality, interviewees reported that Medicare Advantage allows them to design systems around the needs of the patients.

With more flexible payment, Medicare Advantage plans are able to work with providers and patients to tailor services to meet patients’ needs with appropriate practitioners and in appropriate settings.
Blueprint Key Finding 2

CULTURE OF CARE MANAGEMENT

At the organizational level, these Bright Spots in Medicare Advantage care management spend considerable resources creating, maintaining, and building a new culture organization wide. In addition to training new hires on processes, these organizations select for “culture fit” and build orientation curricula around acculturation. Validating the NAM report recommendations, the Bright Spots model continuous learning, with clear intent to be open to innovations in the design and operation of standing infrastructure and operations. Use of data and involvement of staff at all levels, as well as encouragement to be flexible were concepts often mentioned as important to the culture in the successful models. For example, CareMore developed a homegrown process for generating a real-time, daily census of hospitalized patients, which includes hospitals they do not staff. All four of the Bright Spots devote resources to acquiring data about their patients and use those data to iteratively inform their risk stratification processes.

These organizations crafted cultures that value collaboration, where hierarchies are flat and all team members have a seat at the table. The staff are not merely working at the top of their license but actively contribute novel ideas to the care plans. At InterMed, all staff benefit when organizational goals are met through an incentive program. At CareMore, care managers lead team meetings to ensure that non-provider perspectives are heard. Providers are actively “stepping back to allow others to step up.”

Bright Spot team members commented that care management is most effective when incentives are aligned between payers and providers. But, in practice, InterMed does not distinguish between Medicare and MA patients with respect to the care provided. Throughout this study, interviewees pointed out the challenges payers face when trying to change provider behavior and commented frequently that it was the changed incentives that aligned payers and providers to take new actions that move everyone towards the same goal. Providers comment that the plan “gets out of the way” and allows them to “think outside the box” to take care of patient needs. While providers may seek to minimize unnecessary hospitalizations, they are not typically rewarded for doing so, with most of the financial benefit going to payers. When the payer and the provider are aligned with the goal to keep people out of the hospital, care can be provided in other settings most appropriate to patient needs. The fact that providers share in the savings that result is a strong incentive. The possibility of shared savings in value based payments to providers was mentioned at times indirectly and at times quite specifically.
Blueprint Key Finding 3

EFFECTIVE TEAMS

Experts and interviewees told stories about how the current FFS Medicare payment and IT systems contribute to poorly coordinated care. The interviewees talked about how providers are often “sharing information” without “communicating,” which leads to suboptimal care. In contrast, team members at the Bright Spots model communication leading to a shared awareness of the patient’s needs, goals and care plan. In sharp contrast to many health systems, handoffs have structured meetings with pre-specified times, consistent attendees, and clear roles and responsibilities. In the GRACE model developed at Indiana University School of Medicine, the team meets weekly to facilitate this level of communication to ensure that all the providers are in agreement and working together on the care plan for the patient.

One tactic that allows for shared awareness of the plan for the patient and real-time resolution of questions is the co-location of team members. At InterMed, team members are located in the same facility. One provider said that “it’s about turning the chair around and talking to somebody.” While co-location facilitates “getting on the same page,” these organizations are getting beyond clinic walls and into homes and communities to “see the full picture.” The GRACE model is built around home visits while community health workers at Johns Hopkins try to visit each member in their homes at least once each year. Meeting patients in their homes not only strengthens relationships but also provides the care team with important information about the safety and social needs of patients. Once needs are identified, these community health workers are uniquely positioned to connect patients with existing community resources because they are from and live in the same communities as their patients.

These “warm handoffs” help the team not only “get on the same page” but also “see the full picture.”
Blueprint Key Finding 4

CUSTOMIZED PATIENT CARE

At the patient level, successful care management programs are adept at customizing plans to individual patient needs. Effective care management is customized by identifying patient needs, uncovering the resources, competencies, goals, preferences, and values of the patients and deviating from protocols as needed to meet patients where they are. One of the experts interviewed added that care managers need to know when to deviate from protocols and that such deviations provide opportunities to generate creative solutions from broader care teams. In addition to tailoring protocols to match patient’s needs and goals, these organizations encouraged “can-do” attitudes to facilitate the right care, at the right place, at the right time, with the right person. This means addressing all barriers to improved health regardless of whether they are medical, social, financial, or psychological in nature. Johns Hopkins community health workers provide members with their direct phone numbers and ask patients to contact them for “anything they need.” At GRACE, the team will enroll spouses or widows if they see they would benefit from their services.

Finally, these Bright Spots value continuity, centered around the patient’s needs. At InterMed, nurse practitioners and physician assistants provide transitional care and work with a specific pod of physicians. These teams are rarely altered so that patients are receiving transitional and primary care from the same group. At CareMore, the same extensivist, or physicians who bridged hospital care with outpatient follow up, sees the patient in the hospital, at the skilled nursing facility, and at the post discharge visit.

Care managers need to know when to deviate from protocols and that such deviations provide opportunities to generate creative solutions from broader care teams.
Blueprint Key Finding 5

FOUNDATION OF TRUST

Elements such as value based payments and customized individual care plans are essential, but not sufficient to facilitate successful care management without a foundation of trust. To improve outcomes, it was repeatedly stated that providers have to enhance trust between the organization and the team, among team members, and between the team and the patient. The act of co-locating a care manager and provider in the same physical space does not guarantee improved coordination. Instead, the team members have to use co-location to increase face-to-face communication with each other and with patients. Interviewees commented that trust was the “missing link” in many care management programs and that effective care management had to have a very “human touch.”

Each Bright Spot took advantage of a flexible payment system and adaptive delivery models to engender trust between patients, their care teams, and between team members within care management teams. Finally, successful care management also hinged on patients, providers, and teams trusting the broader health care organization’s systems and motivations. Building this trust depended on the organization working within payment models and financial incentives that are based on quality and outcomes, not the volume of services.

The strengthening of all these elements together create the blueprint that makes for successful care management. The elements of this blueprint—having the same provider treating the patient in the hospital and in the outpatient setting, visiting patients in the home, stepping back to allow care managers to step up, and doing whatever it takes to tailor plans to individual needs—builds trust and this trust is essential to improving outcomes.
Barriers to Implementation

Interviewees identified multiple barriers to the implementation of effective care management programs. Many described difficulty with IT harmonization across inpatient and outpatient settings and in some cases between care management applications and electronic health record (EHR) feeds. Absent solutions, shared awareness of the full range of patient’s needs and patient’s engagement with the system is hard to achieve. Others described payment-related challenges in achieving effective care management. Absent coordination of incentives, care management programs often result in offices hosting multiple care managers. Different care managers provide different services and use different inclusion criteria. This leads to confusion for both the patient and provider, and distraction from the objectives of each program.

Finally, all of the programs had difficulty coordinating care across all settings. CareMore has providers in the hospital, skilled nursing facility, and transitional care settings, but has less exposure to primary care. InterMed provides access to primary and transitional care but is less present in the hospital. While a shrinking cohort of primary care providers follow their patients across all care settings, value based payment models provide incentives for a higher degree of continuity. Establishing a level of coordination between care settings has proven to be difficult, and yet there are effective efforts to enhance care management and comprehensive care in a wide variety of models.

Challenges aside, plans and providers across the country are taking advantage of the flexibility offered by Medicare Advantage to build care management processes that work for providers and patients. Enabling expansion of care management that is consistently available to beneficiaries provides the potential for improved care and outcomes at reduced cost for millions of beneficiaries. This report captures evidence from Bright Spots capable of informing administrators and provider about the definitions, principles and characteristics of effective care management. In doing so, we hope to support the development of mechanisms to incentivize plan, health system, and provider leadership to use care management to meet the goals of cost effective care and improved outcomes for Medicare beneficiaries.
Policy Recommendations

Effective care management is evolving and numerous Bright Spots exist that demonstrate health outcomes, lower cost, and increase patient and provider satisfaction. Medicare Advantage plans work with provider groups to align goals and incentives to drive innovation. These microenvironments require flexibility and active engagement between payers and the provider/delivery system provider/delivery system to manage complex care and improve patient outcomes. Below are key policy recommendations based on the findings in this report.

Recommendations for Service Delivery Reform Through Care Management

Continuity was found to be a key measurable feature associated with successful care management. The Bright Spot models of care management were built on the core concept of continuity of care for provider teams and the complex patients. The implementation of this care delivery focused on comprehensive, protocol-driven care, targeted to the most complex and chronically-ill patients. These concepts are central to achieving high-value care.

In the era of national health care reform driven by payment and delivery system changes, attention should be paid to the benefits of flexibility, continued innovation, and adaptability for payers and providers to achieve desired outcomes. The impact of policy, payment and protocols driven by these concepts were clearly evident in these Bright Spots in care management. Specifically, expanded use of effective care management through service delivery reform would be enhanced by:

- Further evaluation and testing of models based on the blueprint for effective care management presented in this report.
- Evaluation of differences in outcomes and cost between plans and provider organizations that use care management models and those that do not.
- Expansion of provider contracts in value based, risk assumption models that include care management under Medicare Advantage.
Recommendations for Payment Reforms Through Care Management

A key feature emerging from these Bright Spots is the power of prospective flexible payments with simple, yet clear incentives to deliver on cost and quality outcomes. This payment framework provides the foundation for effective care management strategies at the organization provider team and patient levels. Shifting focus from maximizing volume of services delivered by physicians has allowed the organizations studied to coordinate incentives aimed at critical end outcomes.

Medicare Advantage’s capitated payments enable flexibility, cultures of collaboration, and continuous learning about how best to achieve evidence-based, enhanced protocols for chronic disease management. It also promotes the development of multidisciplinary teams, which recognized data-driven, regular communication is essential for care management. More flexibility in plan design and supplemental benefits could further enable Medicare Advantage plans to develop effective care management strategies. The literature review suggests that wide implementation of care management practices will improve the care of all Medicare Advantage patients. Further implementation of effective care management through payment reforms would be enhanced by:

- Incentives for the use of risk stratification to identify high need, high risk patients.
- Coordination by primary care for each managed patient.
- Incentives for the use of care management teams that include appropriate personnel, including a Registered Nurse, Social Worker and/or a CHW working closely with clinical staff.
- Align different payment system and benefits dually eligible individuals and patients with multiple chronic conditions through the use of value based capitated payment.
- Flexibility in payment and coverage to enable providers to treat patients at the most appropriate site of care and to offer additional benefits as needed to meet care goals.

The success of the four Bright Spots highlighted in this report suggest that payer flexibility, and empowerment of providers to focus on aggregate cost and quality outcomes presents a blueprint for successful care management.
SECTION 1

EFFECTIVE CARE MANAGEMENT IN MEDICARE ADVANTAGE
Medicare Advantage

Medicare Advantage, also known as Medicare Part C, offers Medicare coverage through private health plans to provide better health care coordination and comprehensive care, and to achieve the cost savings and efficiencies received by managed care in the private sector. Under MA, providers and payers have incentives not present in FFS to work together to improve patient outcomes and achieve higher quality at a lower Medicare cost. Individuals who are over 65 and individuals with disabilities are eligible for Medicare Advantage. Medicare Advantage plans provide coverage for hospitalizations (Medicare Part A) and health care provider benefits (Medicare Part B) to their members and frequently offer additional benefits like vision, dental, and fitness support.

In 2016, approximately, one-third of Medicare beneficiaries were covered by a Medicare Advantage plan.\(^1\) Annually, the Centers for Medicare & Medicaid Services (CMS) scores Medicare Advantage plans on a variety of quality measures, on a star rating scale from 1-5, with 5 being the highest score and 1 being the lowest score.\(^2,3\)

A summary of the reviewed literature demonstrates that Medicare Advantage results in more appropriate use of ambulatory services and lower rates of avoidable hospitalizations and ER visits when compared to FFS Medicare.

This difference is potentially a result of a focus on preventive services and care management. However, few studies have examined these factors in Medicare Advantage in improving outcomes. The studies that did examine care management in a Medicare Advantage population demonstrated that each program applies care management differently.
Background

Enrollment in Medicare Advantage has been growing steadily since 2003, with nearly one in three Medicare beneficiaries (31%) enrolled in a Medicare Advantage plan in 2016. Prior work, including a study conducted by the Robert Graham Center, has documented that Medicare Advantage enrollees are less likely to have avoidable hospitalizations compared to those in Medicare fee for service. One hypothesis is that the payment structure of Medicare Advantage offers plans and providers stronger incentives to coordinate care and improve quality, with both objectives being strongly served by care management programs. While the literature on the effectiveness of care management hasn’t been conclusive to date, there are undeniably high-performing exemplars to be found in various settings, regions, payers, and populations.

The report below is a study of Bright Spots in care management in delivery systems with a large proportion of Medicare Advantage beneficiaries. This study seeks to better understand the history and innovations behind each Bright Spot’s success, to extract lessons for other providers, and, finally, to assess whether and how Medicare Advantage might uniquely influence the design, delivery, and effectiveness of exemplar care management services. For the purposes of this project, the care management definition put forward by the AHRQ was utilized which states:

Care management is a team-based, patient-centered approach designed to assist patients and their support systems in managing medical conditions more effectively.

The team approached this task by completing a literature review, convening a panel of experts, and conducting four case visits. In summer 2016, the Graham Center team, including four physician researchers, one expert in case studies, and one qualitative researcher, conducted a comprehensive review of the peer reviewed literature and sought to answer three key questions:

1. What are the common characteristics of care management programs?
2. What are the characteristics of care management programs in the Medicare Advantage population?
3. Has care management in the Medicare Advantage population led to improved outcomes?
Comprehensive Review of the Literature

The comprehensive literature review, a summary of which is attached in Appendix I, found that successful Medicare Advantage driven care management programs consistently depended on access to real-time and robust data resources. Sources of data included integrated EHRs and payer data, strong physician leadership, and successful risk stratification strategies. The review of the literature on care management successes, repeatedly found studies on the importance of patient centered, rather than service-driven care. Other studies described trust and continuity as foundational to effective care management. Finally, evaluations of successful care management programs emphasized their ability to effectively stratify patients’ risk, using real-time data paired with flexibility in matching patient needs with appropriate interventions.

Convening of Experts

On August 2, 2016, the Graham Center convened a meeting titled Effective Care Management in Medicare Advantage in Washington, D.C. The purpose of the meeting was to gain a better understanding of the successes and barriers to delivering high quality care management particularly in Medicare Advantage and primary care settings (Appendix II).

During the one-day meeting, experts with backgrounds in medicine, public health, law, government relations, as well as patient advocates discussed and identified barriers to effective care management adoption and identified solutions to overcome these obstacles. After a review and analysis of the day's proceedings, a number of themes and key findings emerged as important elements in effective care management:

PATIENT CENTERED CARE
Focus on individual needs, goals, and functionality

RISK STRATIFICATION
Match interventions with needs

CONTINUITY AND CARE TRANSITIONS
Synchronous communication through warm hand-offs allows the team to ask clarifying questions

TRUST
Essential element of team communication and patient engagement
Site Visits to 4 Effective Models of Care Management

Finally, through in-person site visits, characteristics of successful management were identified, validated, and studied to determine how these characteristics were operationalized. Four effective models of care management were identified as Bright Spots through the literature review, environmental scan, convening, and snowball sampling. To be included, the organizations had to have a care management component and be a Medicare Advantage plan or a provider group that cared for Medicare Advantage patients. Prior evaluations of Medicare Advantage plans, care management programs, and public data about plan quality were considered. Potential sites that were experimenting with novel models and strategies were included. Selections were made with attention to diversity of organization types (plans vs. providers), regions of the country, and overall strategies.

Three Bright Spots and an emerging Bright Spot with an innovative model that had recently started were selected.

During the site visits, one to two members of the research team conducted and recorded 30-minute semi-structured interviews developed by an expert in case studies, focusing on the characteristics of the program, how the care management vision is executed, facilitators and barriers to success, and future directions. The research team interviewed clinicians, care managers, administrators, information specialists, financial experts, and patients. This protocol was approved by the American Academy of Family Physicians Institutional Review Board.
SECTION 2

CASE STUDIES: BRIGHT SPOTS IN EFFECTIVE CARE MANAGEMENT IN MEDICARE ADVANTAGE
PROVIDER AND PAYER

MA Care Management Plan Initiated  2003

80,000  60
MA PATIENTS  PHYSICIANS

140 CASE MANAGERS, CARE EXTENDERS, AND SOCIAL WORKERS

Extensivists and broad care teams managing chronic disease and transitions of care

Serves Urban Only  Transitions of care  EMR: NextGen  Portal Software

States Covered: California, Nevada, Arizona, Ohio, Virginia, Georgia, Iowa, Tennessee
CareMore Key Characteristics

**COLLABORATION.** Care managers lead interdisciplinary teams so that their perspectives are heard.

**COORDINATED INCENTIVES.** CareMore is a payer and provider that views unnecessary hospitalizations as failures.

**CO-LOCATION.** Care managers and providers are co-located at CareMore Care Centers.

**CAN-DO ORIENTATION.** The CareMore culture asks employees to do “whatever it takes” to care for patients.

**CONTINUITY.** One extensivist will follow a patient at the hospital, skilled nursing facility, and outpatient setting.

Introduction

In 1993, concerned about the growing dominance of a small number of health maintenance organizations (HMOs) in southern California, Sheldon Zinberg, a gastroenterologist, started CareMore. He perceived HMOs were cutting costs by any means necessary and saw an opportunity to better coordinate care through teams of health care professionals. The formative CareMore innovation was the creation of extensivists, or physicians who bridged hospital care with outpatient follow up. Extensivists reduce hospital readmissions, and are a critical component of CareMore’s Medicare Advantage plan, which started in 2003. In 2006, JP Morgan’s CCMP Capital acquired CareMore, driving expansion outside California, and in 2011, WellPoint (now Anthem, a for-profit insurer) acquired CareMore, facilitating expansion into Medicaid managed care. Today, CareMore concurrently offers insurance products to 80,000 enrollees, employs approximately 130 advanced practice clinicians and physicians, and contracts with primary care practices.

CareMore’s payer-provider alignment influences the delivery of care. The staff understands the benefit structure of the plan and says that the “plan gets out of the way” and allows clinicians to do “whatever it takes” to take care of patient needs and “think outside the box.” Acting as the payer affords flexibility and allows CareMore to invest in promising interventions. For example, CareMore pays for remotely monitored scales to track congestive heart failure patients. When patients gain weight, suggesting that their heart failure is worsening, the CareMore nurse practitioner monitoring the data intervenes.
Care Management Program

CareMore views every hospitalization as a failure of the system and has designed its teams around this foundational belief. To reach this aspirational goal, communication between clinicians and case managers “requires clarity, bi-directional sharing of information, and specifications for discharge plans such as ownership, urgency, and necessary follow up.”

CareMore launched its first CareMore Care Center (CCC) in 1999. There are currently 40-45 CCCs nationwide each located near or on hospital campuses. One CCC is located in the hospital parking lot which allows the case manager to walk to the hospital and meet patients in person during hospitalizations. This increases the likelihood that the patient will be seen at the CCC for follow-up care. The typical CCC team consists of one extensivist, one case manager, two care extenders, one nurse practitioner, and two medical assistants (MAs) (Table 1). Each CCC has an attached Nifty after Fifty exercise facility and physical therapy program. Some CCCs also have dietitians, social workers, pharmacists, specialists (pulmonologists, cardiologists, and dermatologists), and podiatrists (Figure 2). Patients are assigned to a CCC by the zip code of their attributed PCP. Visiting a CCC is an important marker of engagement as patients who have been seen at a CCC are less likely to dis-enroll from CareMore—part of the strategy for reducing risk of hospitalization.

Table 1: CareMore Care Team Composition and Roles

<table>
<thead>
<tr>
<th>TEAM MEMBER</th>
<th>NUMBER</th>
<th>SUPPORT STAFF</th>
<th>PREFERRED LICENSING</th>
<th>ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced practice clinicians</td>
<td>~70</td>
<td>1 medical assistant</td>
<td>Nurse practitioner</td>
<td>Disease programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Physician assistants</td>
<td>Health risk assessments</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skilled nursing facility rounds</td>
</tr>
<tr>
<td>Extensivists</td>
<td>~60</td>
<td>Support staff as needed during clinic</td>
<td>Medical doctors</td>
<td>Hospital care</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Doctors of Osteopathic Medicine</td>
<td>Hospital follow up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skilled nursing facility rounds</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Preoperative assessments</td>
</tr>
<tr>
<td>Case managers, care extenders, and social workers</td>
<td>140</td>
<td>2 care extenders</td>
<td>Case managers are generally registered nurses</td>
<td>Transitional care</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Care extenders are licensed vocational nurses or medical assistants</td>
<td>Coordination of care</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Arranging support services</td>
</tr>
</tbody>
</table>
Team members interact with one another through a variety of means. First, communication occurs through shared EHRs and case management software. Several individuals commented that harmonization of disparate IT platforms is an important future goal. While the CCC clinicians have access to the hospital data, the CareMore EHR is distinct from those in the hospitals in which they operate. Furthermore, the care management software is separate from a CCC EHR. Second, the extensivists, nurse practitioners, case managers, and care extenders are co-located in CCCs. Finally, CareMore has standing, periodic interdisciplinary meetings, where the care team discusses patients who are transitioning from care setting or facility (Table 2).
Table 2: Interdisciplinary Meetings

<table>
<thead>
<tr>
<th>MEETING NAME</th>
<th>PATIENTS DISCUSSED</th>
<th>MINIMUM INTERVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Rounds</td>
<td>Hospital inpatients</td>
<td>Daily</td>
</tr>
<tr>
<td>Skilled Nursing Facility (SNF) Rounds</td>
<td>SNF inpatients</td>
<td>Biweekly</td>
</tr>
<tr>
<td>Interdisciplinary Care Team (ICT) High Risk Patients</td>
<td>Red &amp; Yellow discharged patients*</td>
<td>Biweekly</td>
</tr>
<tr>
<td>ICT Red Rounds</td>
<td>10 highest risk red patients</td>
<td>Monthly</td>
</tr>
</tbody>
</table>

*At discharge, the extensivist categorize patients into red, yellow, and green risk groups with red being the highest risk and green being the lowest.

Teams utilize predictive modeling, referrals, and health risk assessments called Healthy Start/Healthy Journey exams to care for chronic conditions. CareMore's health risk assessments tool includes; fall risk, depression, dementia, and functional status screening. Based on the results of their assessments, patients are enrolled in disease management programs that have evidence-based protocols for chronic obstructive pulmonary disease (COPD), diabetes, congestive heart failure, and hypertension. These visits are led by nurse practitioners. Visits are usually 30 minutes, and can go through multiple protocols simultaneously. Patients are enrolled in the programs until they meet pre-specified goals (typically within six months). The nurse practitioners also staff the wound care, wireless remote monitoring, and warfarin programs at the CCC.

CareMore does not own primary care practices, though this may change. The CareMore model has multiple methods for engaging the existing primary care system. This process is made challenging by the myriad of preferences and IT capacities of the primary care practices. When onboarding primary care practices, CareMore staff meet with new practices in person. PCPs can refer patients to the services at the CCC. During each interaction within the CareMore system, CareMore clinicians send notes, discharge summaries, and medication change notifications to primary care, typically via fax. PCPs have access to QuickView (a CareMore online portal for patient notes). When patients are hospitalized, extensivists call PCPs to inform them of the hospitalization and exchange information (Figure 3).
PCPs are paid via three mechanisms. First, they receive a capitated amount which approximates the amount the PCP would have received by seeing the patient in a FFS Medicare environment. Second, primary care practices have pod share agreements, which encapsulate the profit and loss balance for patients attributed to that practice, and implicitly incentivize PCPs to code appropriately and refer to preferred specialists. Finally, PCPs receive bonus payments for meeting specific quality thresholds. While in network PCPs average 50 (with a range of 25 to 800) CareMore seniors, those providers with higher penetration of Medicare Advantage have higher measures of engagement. For example, the CareMore Medical Group is exclusively Medicare Advantage, and has consistently higher quality ratings.

CareMore Academy is the organization’s corporate university required training for all staff. The first two days consists of The Art of CareMore curriculum, which includes the history and components of the model and indoctrinates the interdisciplinary ethos. For example, when going through cases, participants are grouped into interdisciplinary teams and discuss responses in the FFS Medicare versus the Medicare Advantage environments.
CareMore has a three-pronged approach to risk stratification. First, the team uses the Johns Hopkins Adjusted Clinical Groups system to identify and engage the highest risk patients by geography. At hospital discharge, extensivists assign a color risk score (red, yellow, and green) to all patients (Table 3). Hospitalization serves as a triggering event and is a key component to risk stratification. Finally, nurse practitioners enroll high risk patients into care management and CCC programs during Healthy Start exams.

Table 3: CareMore Risk Stratification Categories

<table>
<thead>
<tr>
<th>RISK CATEGORY</th>
<th>NURSE CALL FOLLOWING DISCHARGE</th>
<th>EXTENSIVISTS FOLLOW-UP VISIT FOLLOWING DISCHARGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red (High)</td>
<td>Within 24 hours</td>
<td>Within 48 hours</td>
</tr>
<tr>
<td>Yellow (Medium)</td>
<td>Within 48 hours</td>
<td>Within one week</td>
</tr>
<tr>
<td>Green (Low)</td>
<td>As needed</td>
<td>As needed (they typically follow up with their own PCP)</td>
</tr>
</tbody>
</table>

Impact on Outcomes

In 2016, CareMore’s Medicare Advantage plan received 4.5 out of 5 stars. Compared to the national average, CareMore has demonstrated 42% fewer hospital admissions and a 60% lower amputation rate. For high risk patients (based on the risk-adjusted factor, which is a measure of morbidity), the actual average annual cost of CareMore patients is $2,250 versus an expected cost of $3,500. These outcomes reflect CareMore’s commitment to reducing unnecessary hospitalizations.
Conclusion

Several factors contribute to CareMore’s success. First, CareMore is a provider organization that became a payer. This not only aligns the payer and provider but also means that the organization started with the culture and competencies of a provider group. Being a payer allows CareMore to integrate additional claims data into their systems. They have supplemented payment data with homegrown processes to create a daily census of all hospitalized patients. For hospitals where extensivists round, CareMore receives faxes daily regarding admissions, and for the remaining hospitals, care managers conduct telephonic outreach. The CareMore position statement declares that each hospitalization is a “failure of the system.” When hospital days increase, they have systems to acknowledge the increase, identify problems, and develop interventions.

Second, CareMore has created high-functioning, adaptable care teams with several defining features. The case managers are co-located with the providers at the CCC. Initially, case managers were in a remote location. By being in the CCC, they can meet patients and providers face to face. To arrange for intravenous medications, providers previously would fax requests to remote case management. Through this arrangement any clarifying questions are answered in an asynchronous manner. With co-location, the staff reports that the communication is seamless and allows for real-time resolutions.

Interdisciplinary communication is planned (rather than ad hoc), in real time, and bi-directional manner. The staff reports that this helps them “be on the same page,” a challenge for complex, high risk patients. The team has a flat hierarchy with shared ownership. CareMore staff indicated that the “team makes the decision” and is “open to suggestions” from all members. “Everyone brings something to table,” and “no one is above anyone else.” Leadership, ownership, and accountability are shared. To ensure that the case manager perspective is heard, CareMore has asked them to lead interdisciplinary meetings.

Finally, the team is trained to focus not only on protocols but also adaptability. The culture asks employees to do “whatever it takes” to care for patients. For example, the case managers discussed how they started a food bank for patients, picked up medication, and arranged pet boarding for a patient admitted to a Skilled Nursing Facility (SNF).

CareMore employees also considered areas where the model could evolve. Staff discussed broadening the scope of services. For example, the nurse practitioners operate multiple disease management programs. While the culture encourages them to have a holistic approach, these existing protocols provide little guidance when patients have complaints that fall outside the protocols’ bounds. Historically, the CCC has been an extension of primary care rather than the primary care center. However, as the CCCs expand access and broaden scope, they naturally encroach into the primary care. CareMore is piloting the concept of hiring physicians who provide primary care and extensivist services. It remains to be seen whether this strategy will allow CareMore to be more proactive in reducing hospitalizations.
GRACE Model Indiana University Health Medicare Advantage Plan

PROVIDER

| States Covered: | Indiana* |

| MA Care Management Plan Initiated | 2011 |

| 11,000 MA PATIENTS | 300 in the CM program |

| 1 MEDICAL DIRECTOR | 3 TEAMS ONE NP & SW |

| In-home care that supports PC, with focus on 12 geriatric conditions. |

| Serves Urban and Rural | Transitions of care | EMR: Cerner |

AFFILIATIONS: Indianapolis VA Medical Center, Indiana ADRC Care Transitions Program, Indiana University Health MA Plan and ACO
The GRACE Model Key Characteristics

COMMUNICATION LEADING TO SHARED AWARENESS. The care management team conducts weekly interdisciplinary rounds.

COMMUNITY PRESENCE AND ENGAGEMENT. Nurse practitioner and social worker dyads conduct multiple home visits annually and within 2-5 days of discharge from the hospital.

Introduction

Dr. Steven Counsell and colleagues developed the Geriatric Resources for Assessment and Care of Elders (GRACE) Model at Indiana University in 2002. The focus of the GRACE model is an intensive, in-home geriatric care management program for older people with chronic diseases and functional limitations. A social worker and nurse practitioner conduct in-home visits, and develop an individualized care plan using 12 standardized protocols that include advanced care planning, health maintenance, medication management, difficulty walking/falls, depression, dementia, caregiver burden, chronic pain, malnutrition/weight loss, urinary incontinence, visual impairment, and hearing impairment. The in-home team is supported by a broader interdisciplinary team led by a geriatrician, and including a mental health provider, pharmacist, and program coordinator. The team aims to complement the care provided by the PCP.

The GRACE Model leadership is based in the Geriatrics Department of the Indiana University School of Medicine. This team provides training and resources to GRACE model teams across the country. There are three GRACE Models in Indianapolis, and 18 more across the United States. The GRACE Model at Indiana University Health Methodist Hospital in Indianapolis, serves patients in the IU Health Medicare Advantage plan, which was established in 2011.

Care Management Program

The GRACE Model care approach, illustrated in Figure 4, began 16 years ago, with the goal of improving care for low-income seniors with complex medical problems to complement the work of the PCP. The idea is to address geriatric syndromes that could be contributing to the high utilization of health care services of this population. The program started as a multiyear randomized control trial that enrolled 951 patients and demonstrated reduced acute care utilization in high risk patients.1 Once proven successful, the GRACE Model worked to implement this model in other organizations throughout the United States.
The GRACE Model Care leadership team is comprised of three people: Dawn Butler, MSW, JD, Steven R. Counsell, MD, and Kathy Frank, RN, PhD. Ms. Butler started as a GRACE Model Care social worker and now serves as the Director of the GRACE Training and Resource Center. In addition to coordinating development and dissemination of training programs, she works with health care professionals and organizations to implement GRACE. Dr. Counsell, the principle investigator of the original NIH funded trial of the GRACE model, now works on GRACE Model Care dissemination initiatives. Dr. Frank served as a nurse in the original GRACE model and now helps with implementation of the model in other health systems.

The GRACE Interdisciplinary Team includes a medical director, nurse practitioners, social workers, a program coordinator, a pharmacist, a mental health liaison, and a community resource expert. One social worker and one nurse practitioner are paired together to work the same case load. These dyads go on all annual home visits together and create a care plan together. At the weekly team meeting, the nurse practitioner, and social worker dyads present to the interdisciplinary team. The patient care plans are modified based on recommendations and discussion with the team.
The nurse practitioners have three primary roles: geriatric clinicians, transitional care nurse, and care manager. In their role as geriatric clinicians, they perform comprehensive assessments in the home and develop individualized care plans using the 12 GRACE protocols. Because GRACE aims to complement primary care, the 12 protocols do not include chronic medical problems, but focus exclusively on geriatric conditions, which include advanced care planning, health maintenance, medication management, difficulty walking/falls, depression, dementia, caregiver burden, chronic pain, malnutrition/weight loss, urinary incontinence, visual impairment, and hearing impairment. As transitional care nurses, they make a point to go out to the home within two to five days of emergency department, hospital, or subacute rehabilitation facility. Upon discharge, transitional care nurses reconcile medications, assess the clinical status of the primary admitting problem, educate patients on the primary admitting problem, and find out what services ordered or advised are actually being implemented in the home. In their care management role, nurse practitioners maintain ongoing and collaborative communication with the PCP. They also act as a liaison with specialists and attempt to keep all providers involved in an individual patient’s care.

The social workers are primarily responsible for addressing any identified psychosocial needs and care management. At their initial visit, the social worker assesses each patient for which community programs they may qualify. Psychosocial needs included but not limited to: caregiver support, mental health needs, social/community involvement, access to services, financial needs, and qualifying community programs.

The medical director facilitates the team meetings and directs care plans, particularly when there are complex medical concerns. The medical director also communicates with PCPs and specialists so that they understand the GRACE program and trust the GRACE Model. In this role, they serve as the liaison between the GRACE program and PCP.

The program coordinator is the “air traffic controller.” The coordinator conducts new intakes, contacts patients to schedule initial visits, and processes referrals. They also work with all dyads to schedule visits and ensure patients are being seen and contacted at appropriate intervals, weekly, monthly, quarterly, or semi-annually, depending on the patient’s specific care plan. When the GRACE model is implemented in a new system, the program coordinator communicates with PCPs and their staff, including care managers to explain the program.

The pharmacists review the medications that a patient has actually filled, and uses their knowledge of medication interactions, reactions, and understanding of what medications are on the formularies to make recommendations to the patient. Additionally, they assist with prior authorizations when necessary. The mental health provider helps to modify care plans to direct appropriate mental health care for individual patients. At the Indiana University Health Methodist Hospital site, they also played a vital role in accessing mental health records for each patient.
At the Indiana University Health Methodist Hospital site a medical assistant was added to the team to relieve the dyads from administrative work. The medical assistant helps to schedule appointments, follow up on equipment needs for individual patients, and do other office-based care coordination tasks the team needs them to do. The Indiana University Health Methodist Hospital site has found the medical assistant to be an essential addition to their program.

There are multiple ways for patients to be referred to a GRACE Model Care. The goal is to decrease emergency department and hospital utilization, however, patients are referred through visits or admissions. Some sites have a geriatric care consult service in the hospital. When they are consulted, they often consider the patients’ needs and qualifications for GRACE Model Care and refer the patient at that point, if appropriate. Health plan and hospital care managers can also refer patients to the GRACE Model Care, as well as PCPs and their staff. This is an intensive care management program, with the goal of decreasing utilization. Therefore, GRACE targets high utilizers who could thrive at home with appropriate care management. These are patients who are mobile and able to attend normal appointments, not patients requiring home based primary care. The team works with PCPs throughout the Indiana University Health system to generate referrals. As of December 2016, patients in Marion County and the counties directly surrounding were eligible for the service. Additionally, patients must be enrolled in the IU Health Medicare Advantage Plan.

The barriers posed by EMRs vary at different sites where GRACE has been implemented. At Indiana University Health Methodist Hospital, GRACE is on the same EMR as the PCPs and the hospital system. GRACE Model members put their notes into the EMR and the PCP signs off on the nurse practitioner notes. They have also worked to have the system flag patients so that inpatient teams know to contact GRACE if the patient is seen or admitted. The team admits that their use of EMRs has improved communication, though the process is still not as smooth as it could be.

When GRACE Model Care is implemented at a new site, the team at Indiana University asks for data for one year following implementation. After this initial one-year period, there is no communication requirement between the main GRACE Model and the new site GRACE Model, though many programs choose to continue communication.

Financially, GRACE Model Care has been proven through studies and continued results to save money for the system. Analysis has found GRACE to be cost neutral in the first year, and cost saving each year after that. With this finding many Accountable Care Organizations, insurance plans, and hospital systems have opted to implement GRACE Model Care.
Impact on Patient and Provider Satisfaction

During the GRACE trial, the high risk patients receiving care through the GRACE model had fewer Emergency Department visits and hospitalizations that offset the costs of the program. GRACE patients had improved quality of life, based on the SF-36 Scales, specifically in the areas of general health, vitality, and social function. In the first year of the GRACE trial, patients annual cost to the system was $10,700, $200 more than their peers in the standard of care group. However, in years 2 and 3, the GRACE patients cost the system $1,500 less each year compared to their peers receiving the standard of care.1

Conclusion

The GRACE model offers older patients an opportunity to remain at home, maintain their current primary care physician, and lead a healthier day to day existence. GRACE’s use of mid-level professionals, nurse practitioners, and social workers for in-home visits facilitates real-time changes. The team can reconcile and adjust medications, assess how the patient is completing normal household tasks, and quickly coordinate needed social services with appropriate agencies all while they are at the patient’s home. There is little or no delay in the implementation of the team’s recommendations as their training, licensure, experience, and the GRACE protocols expedite real-time changes.

GRACE enables the primary care physician to remain at the center of patient care. Patients enrolled in GRACE maintain their PCP while receiving additional care specifically focused on geriatric conditions in their home. This approach benefits patients as they are able to maintain the continuity of care with their long-term provider while also receiving special attention to geriatric conditions. The GRACE Models’ specific focus on the geriatric conditions coupled with evidence based protocols for intervening allows the PCP to focus on the patient’s overall health. The team focus on geriatric conditions lays out very clear areas of focus for the patient team allowing the providers to do what they do best without competition between providers.

The GRACE Interdisciplinary Team’s weekly meeting and case review facilitates communication between the broader GRACE Model including medical director, nurse practitioners, social workers, program coordinator, pharmacist, mental health liaison, and community resource expert. The team discusses the patient visits, calls, new patients, and any issues that come up during the week. The team can complete medication checks with the plan pharmacist to verify patient medication adherence, or recommend the pharmacist visit a particular patient at home. A mental health liaison is available to discuss behavioral health issues and can coordinate necessary care if needed. When unusual situations arise, the team works together to develop creative solutions to meet the needs of the patient. It is also an opportunity for the team to discuss outreach opportunities with plan providers to help them better understand the GRACE model.
Finally, the GRACE Model regularly spoke of seeing patients where they are versus how patients may present themselves in their providers’ offices. Sometimes, patients are struggling with the loss of a spouse, but put on a positive face for their doctor’s visit. Others may say everything is fine at home, but when the team arrives they may find there is no heat or medications have not arrived as scheduled. The team works to address these issues that patients may have viewed as an issue they did not need to discuss with their physician, which turns out to be critical to their overall health.
<table>
<thead>
<tr>
<th>PROVIDER</th>
<th>States Covered: Maine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MA Care Management Plan Initiated</td>
</tr>
<tr>
<td></td>
<td>MA PATIENTS</td>
</tr>
<tr>
<td></td>
<td>PHYSICIANS</td>
</tr>
<tr>
<td></td>
<td>NP/PA CARE MANAGERS</td>
</tr>
<tr>
<td></td>
<td>Focus on transitions of care and pod structure that foster trust and continuity</td>
</tr>
<tr>
<td></td>
<td>Serves Urban and Rural</td>
</tr>
<tr>
<td></td>
<td>Transitions of care</td>
</tr>
<tr>
<td></td>
<td>EMR: ECW</td>
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</tbody>
</table>
InterMed Key Characteristics

**CO-LOCATION.** Team members are co-located.

**CONTINUITY.** InterMed care team pods are comprised of 4-5 physicians, each with 1–2 clinical assistants, one nurse practitioner/physician assistant care manager, and a clinical assistant that supports the pod’s care manager. The teams are rarely altered and support a defined patient population.

**Introduction**

InterMed is a physician-owned medical group with three locations (Portland, South Portland, and Yarmouth) in southern Maine. It is a doctor-run and doctor-owned practice governed by an 11-member Board of Directors, all of whom are physicians. In 2014, Dr. Phyllidia Ku-Ruth, MD, was elected to serve as the President of the Board of Directors.

InterMed’s vision is to provide “care without compromise” with a stated mission of “patient centered primary care that is enhanced by integrated specialty services.” They work closely with Maine Medical Center and Mercy Hospital in southern Maine, although they are not financially tied to either facility. They do have direct access to the electronic medical records for both hospitals where a majority of their patients needing hospital care receive that care.

InterMed serves approximately 77,000 primary care patients in greater Portland, Maine. At the time of the visit, InterMed was not taking new patients. Ten percent of InterMed’s primary care patient population is covered by FFS Medicare and 5% are covered through a Medicare Advantage plan. The remaining 85% of InterMed’s primary care patients are covered by private insurance or are self-pay.

**Care Management Program**

InterMed’s care management program began through a pilot study between NovaHealth (now part of InterMed) and Aetna’s Medicare Advantage plans. In that pilot, four NovaHealth nurse practitioners/physician assistants were trained to become care managers of chronic diseases for 750 Medicare Advantage members. Aetna provided their current FFS Medicare reimbursement plus an enhanced per member per month payment for achieving mutually agreed upon quality and efficiency goals. The patient population in the pilot program had 50% fewer hospital days per 1,000 patients, 45% fewer admissions, and 56% fewer readmissions than statewide, unmanaged Medicare populations. NovaHealth’s total per member per month costs across all categories for its Aetna Medicare Advantage members were 16.5% to 33% lower than costs for members that were not in this provider organization. As a result of the successes of this program, InterMed decided to expand the pilot to all patients.
The practice is divided into pods comprised of four to five physicians, one nurse practitioner/physician assistant care manager, and one clinical assistant (either medical assistant or registered nurse) for each physician and nurse practitioners/physician assistant care manager (Figure 5). The time of the nurse practitioner/physician assistants is divided so that 50% is dedicated to care management and 50% to direct patient care. As part of care management, the nurse practitioners/physician assistant helps with transitions of care from the hospital to home, sees high needs patients on a walk-in basis, does advanced diabetes management, and reaches out to complex patients with gaps of care. Much of the success of the nurse practitioner/physician assistants hinges on protected care management time and access to accurate data.

Because of a robust business intelligence department, InterMed has been able to efficiently pull data from their electronic medical record, eClinical Works, to create a Complexity Index. They use this Complexity Index to efficiently identify disease priorities in their patient population and risk stratify patients for outreach. One of the unique aspects of the Complexity Index is the ability for the provider to override a patient’s risk score to move them “up” or “down” in terms of risk, marrying subjective and objective data.
The pods have been able to work efficiently and effectively because of mutual trust and respect. This is accomplished in many ways, but of utmost importance is continuity. The teams are rarely altered, and furthermore, for some departments, co-location of the nurse practitioners/physician assistants with the physicians has allowed for further trust building because it lends itself to collaboration. As the Chief of the Family Medicine department put it, “it’s just all about turning a chair around and talking to somebody. . . it’s very much team oriented.” The co-location allows for mentoring and teaching on the job. When speaking about the benefits of co-location, the Chief of Internal Medicine, whose department was wary at first, said “I now believe in architectural theory.”

A key to success for the care team pods has been having management and leadership that not only believe in the program, but are also organizationally set up to support them. The leadership support team at InterMed is called Clinical Systems Improvement (CSI). CSI is made up of a practice based care management lead, clinical quality coordinators, a quality improvement specialist, and chronic disease specialists including a pharmacist. The stated tasks of these groups include, but are not limited to, training, mentoring, and supporting the nurse practitioners/physician assistants; standardization of care processes; support of task forces, pilots, and subgroups; support of care teams in complex care; and monitoring and addressing quality performance.

Financing this care management program has been another important step in the model’s viability. One way that InterMed has been able to make the program viable is through it’s participating health plans. Given InterMed’s solid track record of improving patient care, and managing total medical costs, the support of these health plans have demonstrated a willingness to support the care management programming with enhanced reimbursement. Also, although the nurse practitioners/physician assistants do have dedicated care management time, they also have patient care duties to help fund their salaries. Furthermore, InterMed invests in credentialing and billing experts whose sole job is to make sure that providers are billing appropriately and there are no delays in insurance credentialing.

Impact on Patient and Provider Satisfaction

The care management program implemented by InterMed has led to improved health for patients and cost savings for their system. Yet, anecdotally, it has done much more for the patients it serves. The patients had very complex medical issues, yet felt that they were well taken care of. When first diagnosed with diabetes, one patient noted, “It’s so overwhelming at first, I was having a hard time grasping that I had this problem. . . and Laurie [Physician Assistant] just step by step helped me through.” She went on to say, “What’s very special about Laurie is she gives you the time you need. She’s not going to make goals with me that are beyond my capacity. I need a teacher and (she’s) a teacher.” Another patient noted that she had just been hospitalized for a life-threatening illness, and the day she got out of the hospital “. . . they called me. You know it makes you feel good, because sometimes you go to the doctor and you don’t feel good. To have the doctor actually call you. . . that means a lot.” Another patient noted simply, “I think they manage my care very well.”
It wasn’t only the management of complex issues that the patients raved about, it was also the stellar access to care that the care management teams provided. A patient said, “Laurie I can get to and that makes me feel secure. I don’t want to go to somebody I don’t know. She knows me… If I need to see her, that’s the thing, she just fits you in.” A patient noted that ease of access to her team was so important. She felt that InterMed had perfected a system because of the level of organization they had from her first call to the day of her appointment. When comparing her experience with another well-respected institution, she noted “… they could learn a lot about how they organize things here.”

Provider satisfaction also seemed very high. Some physicians did admit that they were skeptical of change at first, but as one physician put it, when he began working with his care manager, “she just rocked my world.” These interprofessional relationships have been built by fostering trusting relationships. The key to this was hiring the right people for the position. One provider noted, “The nurse practitioners/physician assistants we have here are the best in the business. They are top notch. Some of them are better than us.” The nurse practitioners/physician assistants have allowed for more streamlined transitions of care, more comprehensive patient education, and more efficient triage. As one provider put it, “they are a lifeline to us.” For the physicians at InterMed, having nurse practitioners/physician assistants as opposed to registered nurses or medical assistants as care managers has helped everyone work to the top of their license. Utilizing nurse practitioners/physician assistants for care management means there is less back and forth between members of the care team, and the nurse practitioners/physician assistants are able to resolve all of the patients’ issues during the appointment. In the end, all of the physicians seemed to agree that the importance of the care management program is not necessarily how much easier it made their day, but how much it improved the care of their patients. “Honestly, at the end of the day, we all want to take the best care of our patients and this [care management] has allowed us to do that.”
Conclusion

Throughout the visit, a few themes arose that seemed to account for the success of InterMed in the care management arena. First, InterMed’s distinct model of using nurse practitioners/physician assistants as care managers seemed integral to their success. Using practitioners with the advanced medical knowledge base allowed many issues to be addressed without the intervention of a physician, freeing up physician time for more complex patient care issues.

Second, InterMed’s hiring practices have helped create an environment where care management can thrive. As one physician in leadership put it, when hiring for the nurse practitioner/physician assistant position, “understanding and attitude are more important than experience.” They strive to hire staff who are flexible, teachable, and innovative. “We would rather have a position go empty, than hire the wrong person.”

Third, having real-time, accurate, and actionable data is important for the success of their program because it allows for risk stratification and appropriate allotment of resources. This could not have been achieved without their robust business intelligence department.

Fourth, having dedicated time for care management was an absolute necessity. As one physician leader put it when discussing their model, “when we first started this we made it very clear that our model was not one where we would empanel a nurse practitioner/physician assistant.” This lack of a defined patient panel and protected time for care management duties has allowed for the success of their transitional care management program and improved access to care for same-day patients with urgent needs.

A number of participants noted the right leadership was critical to their success. For InterMed, having the decision-making power in the hands of physicians who directly feel the impact of those decisions was important. As the one leader put it, “I wouldn’t ask my physicians to do something that I myself wouldn’t do.” The current leadership was described as innovative, which has allowed for experimentation and pilot programs, some of which led to the current design of the care management program. As one physician put it, “You as a primary care organization need to establish that this is important to you for it to work. . . How smoothly [care management] is on boarded has everything to do with leadership. That cannot be underemphasized.”

The one drawback to InterMed’s care management program is up front cost. Yet, due to the successes of the program, they are able to cover these costs through the support of payers. As their Chief Medical Officer noted, “We take very good care of our patients. We are more expensive, but the total cost of care is reduced.”
Johns Hopkins Medicare Advantage Plan

PAYER

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<th>States Covered: Maryand</th>
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</table>

MA Care Management Plan Initiated: 2016

5,000 MA PATIENTS | 6,383 PHYSICIANS*

3 CARE MANAGERS

Licensed certified social work - clinical

Innovative use of community health workers

Serves Urban and Rural

Transitions of care

EMR: Epic

Epic Software

*Physicians in network
The Johns Hopkins Key Characteristics

**COMMUNICATION LEADING TO SHARED AWARENESS.** Routine interdisciplinary meetings where they discuss patients with prolonged hospitalizations.

**CO-LOCATION.** Some care managers are co-located with primary care providers.

**COMMUNITY PRESENCE AND ENGAGEMENT.** Community health workers are from, are embedded within, and have knowledge of the communities where their patients live. They are the eyes and ears of the program and conduct yearly home visits.

**CAN-DO ORIENTATION.** Care managers and community health workers tell patients to call them for “whatever they need”.

Introduction

Johns Hopkins launched Johns Hopkins Advantage MD PPO, a Hopkins Medicare Advantage Plan, in 2016, to transition into risk bearing contracts and enter the relatively untapped Maryland Medicare Advantage market. In Maryland, 9% of the 1 million Maryland Medicare beneficiaries are in Medicare Advantage plans compared to 31% nationally.¹ The Hopkins Medicare Advantage Plan is its fourth insurance product, joining the Employer Health Program (for Hopkins employees), Priority Partners (Medicaid), and the U.S. Family Health Plan (for the Department of Defense). The Hopkins Medicare Advantage Plan is owned by Johns Hopkins Health care, which was jointly developed by the Johns Hopkins Health System and the Johns Hopkins University School of Medicine.

Care Management Program

Drawing on lessons learned from the institution’s experience with care management across the other insurance products, the Hopkins Medicare Advantage Plan has three care managers and each care manager is linked with a community health worker (CHW) (Table 4).

The Playbook: Communication leading to shared consciousness:

- Community health workers increase contact and enhance understanding of patient needs
- Shared EHRs
- Care managers co-located with primary care
- Interdisciplinary rounds allowing for synchronous, bi-directional communication
Table 4: Hopkins Medicare Advantage Plan Team Composition and Roles

<table>
<thead>
<tr>
<th>TEAM MEMBER</th>
<th>NUMBER</th>
<th>SUPPORT STAFF</th>
<th>PREFERRED LICENSING</th>
<th>ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care manager (CM)</td>
<td>3</td>
<td>1 community health worker</td>
<td>Registered Nurse Licensed Certified Social Work-Clinical</td>
<td>Telephone follow up Patient education Care coordination Arrangement of support services</td>
</tr>
<tr>
<td>Community health worker (CHW)</td>
<td>3</td>
<td>None</td>
<td>None</td>
<td>Telephone and face-to-face follow up Care coordination Home visits Safety assessments Patient education</td>
</tr>
</tbody>
</table>

The CHW component of the model originated from a previous Johns Hopkins Community Health Partnership grant with Baltimore City. This program was so successful that it was replicated institution wide. CHWs are from, are embedded within, and have knowledge of the communities where their patients live. Staff describe the CHWs as the “eyes and ears” of the care managers. CHWs review education materials, address social barriers such as transportation and nutrition, perform home safety assessments, accompany patients to provider visits, and meet patients face to face. In addition, they do “anything [the] members need” to facilitate care, providing “holistic care.” The program tries to identify and select for CHWs who have this mentality. During the three-week orientation, CHWs are trained to address patients holistically and to identify and address root problems.

CHWs are positioned to develop relationships with patients. Patients are given a direct phone line for CHWs and asked to call for anything they need. While the official hours of operation are 9 a.m. to 5 p.m., CHWs respond to inquiries after hours. Living in the community has two benefits. First, CHWs can quickly respond to requests, arriving to the patient’s house minutes after a call in some instances. Second, they have knowledge of local resources.

The Hopkins Medicare Advantage Plan conducts yearly home visits for those enrolled in the care management program. CHWs estimate that 90% of patients accept this service and say that the face-to-face visit “helps [them] connect with the person” and “build the relationship.” At the home visit, CHWs complete paperwork for patients, review bills, educate, conduct safety assessments, and listen. They observe that a majority of their patients are lonely and seek contact with others. Following the face-to-face visit, CHWs observe that patients “open up” more. One patient used to call to complain about the services that he was receiving, but following the home visit, he “saw [the CHW] as someone who could help him.”
The Hopkins Medicare Advantage Plan also leverages existing Hopkins resources. For example, several additional teams provide services for the four Hopkins insurance products, including the following (Figure 6):

» A behavioral health team connects patients who are discharged from hospitals and have psychiatric diagnoses with mental health resources
» Regional care teams identify changes in utilization, and quality to develop solutions with providers
» Additional care managers

While the three, dedicated Hopkins Medicare Advantage Plan care managers are located at the corporate headquarters, the additional care managers referenced above are embedded in provider offices. Sitting next to one another in the office allow primary care physicians and care managers to form relationships. When they have a “free minute in between patients,” PCPs talked with care managers about complex patients.

**Figure 6: Johns Hopkins Medicare Advantage Plan Team Structure**
Team communication is a central element of the success of the model. The care managers and CHWs have access to the EHRs of those patients attributed to the Johns Hopkins Community Physicians practices (approximately 40% of the Medicare Advantage patients) and have the ability to communicate with providers through EHRs. Otherwise, the communication occurs through email and telephone.

The Hopkins Medicare Advantage Plan team holds weekly rounding meetings, during which they discuss patients with inpatient or skilled nursing facility admission lasting seven days or longer. The care managers also identify patients who have been admitted multiple times. During this telephonic meeting, the Plan’s medical director, care managers, CHWs, utilization review staff, quality staff, provider relations staff, and behavioral health team members discuss patient issues. Complex patient issues include identifying social support, reviewing discharge plans, and facilitating outpatient follow-up. Staff identified the interdisciplinary meeting as an important time to develop creative solutions.

Primary care engagement is another critical component of the model. PCPs can refer patients to care management, telephonically, electronically (through the EHR), or in person to the embedded care managers. PCPs are paid FFS Medicare for visits and receive additional payments for meeting process measures. For example, they receive separate bonuses for meeting quality measures, reviewing a report that identifies gaps in care, conducting a health risk assessment (see below), and submitting EHR data. The incentive payment is given to the tax identification number organization rather than to the provider directly.

 Appropriately stratifying patients based on risk is an important way resources are allocated in the model. The Hopkins Medicare Advantage Plan identifies high risk patients through several mechanisms. First, members receive a Whole Health Exam (health risk assessment), which identifies high risk patients and closes gaps in care. Second, the team uses the Johns Hopkins Adjusted Clinical Groups (ACG) System to risk stratify patients (Table 5). Finally, patients are identified for the care management program by provider and self-referrals and during the weekly rounding meeting.

### Table 5: Hopkins Medicare Advantage Plan Risk Stratification Categories

<table>
<thead>
<tr>
<th>RISK CATEGORY</th>
<th>ADJUSTED CLINICAL GROUP SCORE</th>
<th>INTERVENTION GOALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>≥ 4</td>
<td>Stabilizing disease</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enhancing self-management</td>
</tr>
<tr>
<td>Medium</td>
<td>2-4</td>
<td>Monitoring disease</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preventing disease progression</td>
</tr>
<tr>
<td>Low</td>
<td>&lt; 2</td>
<td>Providing disease specific, patient education mailings</td>
</tr>
</tbody>
</table>
Impact on Patient and Provider Satisfaction

The Hopkins Medicare Advantage Plan is in its first year of operation; therefore, results are not currently available.

Conclusion

While the Hopkins Medicare Advantage Plan is in its early stages, there are several innovative components. In isolation, these components are likely necessary but insufficient for effective care management. However, combining multiple innovations has the potential to enhance team communication. First, the plan leverages and shares existing Hopkins resources. This arrangement exposes the Plan to Hopkins innovations (such as the CHW program), existing resources (such as a shared EHR), and other services that it may not otherwise have been able to access.

There was some disagreement among those interviewed about the relative importance of care managers being co-located with providers. Some of the staff perceived co-location with providers as being less important, particularly when messaging through EHRs allowed for asynchronous communication. One person commented that several small practices lacked space for an embedded care manager, but were engaged electronically. In contrast, others believed that co-location was very important. One person commented that patients were less likely to enroll in the care management program when they are only called by the care manager. This person observed that the adoption rate increased with a clinician referral and increased even more when the clinician recommendation was paired with a face-to-face introduction with the embedded care manager at the time of the visit. Before the care managers were embedded, providers had difficulty recalling who their care managers were.

The weekly rounding meetings allow for synchronous, bi-directional communication, at least within the Hopkins Medicare Advantage Plan team. Specifically, this forum facilitates identification of high risk patients and generates creative solutions.

Finally, Hopkins has sought to move beyond the clinic walls and into the community. The CHW program extends the reach of care management and primary care, matches needs with interventions, and provides an additional point of contact for isolated, complex patients. The model has evolved and the Hopkins Medicare Advantage Plan aims to broaden its scope.

» A mobile clinic will provide chronic disease management (such as checking hemoglobin A1cs, eye exams, and kidney disease screening) and preventive services (such as mammograms and bone density screening).

» It will expand a house calls program that is already in existence at a Hopkins hospital.

» It will launch Welcome Home, transition of care program, which will identify discharges through the regional health information exchange, follow up with discharged patients weekly for four weeks, arrange support services, and enroll vulnerable patients into ongoing care management.
CONCLUSION: KEY COMPONENTS OF EFFECTIVE CARE MANAGEMENT IN MEDICARE ADVANTAGE
Patient Advocate Stories

“A woman who... is in her nineties... fell and [fractured] her hip... [She] was admitted for hip replacement surgery and while she was waiting to be discharged from surgery, they identified that she had some other issues being in her nineties... Now she has some cardiac issues... She wanted out, and [the hospital team] didn’t really get involved with her geriatrician, but they weren’t focused on what she wanted... They eventually discharged her to a home setting with a visiting doc that came and they wanted her to go to a cardiologist and a GI [doctor]... and all sorts of things that she did not want... Basically, the cardiologist, GI [doctor], and the visiting doctor all communicated with each other [and] made time to figure out how to have a phone call... They discussed with each other what they knew, and they even... brought in the general practitioner that she had seen for years and years... There were four... clinicians involved in this care coordination and basically they explained all the positives and risks... to her and she decided to be at home and not go and have [additional procedures]... She has been living now for three years [and]... is functioning as best as a 98 year old can... They were using common sense to get on the same page.”

– Story from a patient advocate about a positive care coordination case

“There was a person who had a mental health issue... She was in her early forties, and she had a list of mental issues... there were approximately six clinicians involved with her... They were each top-level people. They were highly regarded and highly recommended... They... needed to be on the same page as each other, and they were going to set up a phone call every week for a half hour. They were getting paid privately... They were all too busy to find the same half hour to talk to each other, so they asked for permission to instead email each other. The email chain reached about two thousand pages. So they were actually communicating by email, but nobody was listening... They were all supposedly coordinating... The communication just wasn’t there... To the extent that communication involves speaking and hearing, the hearing part was missing. They were all just putting in their two cents but no one was circling back to get questions or answers... I feel that there is a lot of discussion in the field of advocacy about how the culture of medicine needs to change. Part of the culture that needs to be changed is more of an effort saying... we can’t do our job if we are going to be living in siloes.”

– Story from a patient advocate about a negative care coordination case
Creating a Blueprint for Effective Care Management

There are numerous examples of successful care management programs in Medicare Advantage, and implementation science has demonstrated that innovations from these programs can be identified, shared broadly, and used across settings to provide effective care management. Consistent use of the blueprint and its essential elements of care management is necessary for success.

Blueprint Development

To develop this blueprint, lessons were drawn from the literature review, expert convening, and Bright Spot site visits. The literature review illustrated the importance of patient centered care, trust and continuity, and risk stratification in the delivery of effective care management. A convening of experts in care management, Medicare Advantage, and patient advocates identified patient centered care, risk stratification, continuity, care transitions, and trust as the key elements of effective care management. There is substantial overlap in the two lists that reinforce the importance of these elements in care management programs. The identification of these key elements guided site visit semi-structured interviews, during which additional insights were gathered.

A Blueprint Describing Key Components of Effective Care Management

Care management offers the opportunity to meet patients’ needs and enhance provider and patient satisfaction. Patients benefit by receiving higher quality care. Providers benefit by working within high functioning care management teams that share tasks and think creatively with team members. While the evidence on the impact of care management on costs is mixed, this report hypothesizes care management programs that use the blueprint will be more effective, achieving greater opportunity for improved outcomes and lower costs.

After integrating information from interviews, the environmental scan, the convening, and site visits, a number of key themes in effective care management emerged, which have been categorized into five key findings of effective care management (Figure 7).
Figure 7: A Blueprint for Key Components of Effective Care Management

**VALUE BASED PAYMENT SYSTEM**
- Aligned incentives
- Flexibility
- Innovation

**CULTURE OF CARE MANAGEMENT**
- Organization wide buy-in
- Investments in infrastructure and personnel
- Education and training

**EFFECTIVE TEAMS**
- Communication
- Transitions of Care
- Clear roles and responsibilities
- Continuity
- Co-location of team members
- Community presence and engagement

**CUSTOMIZED CARE**
- Identify patient needs
- Individual care plans
- Removal of barriers
- Risk Stratification

**TRUST**
- Relationships
- Top down and bottom up
- Patient buy-in
Blueprint Key Findings: Effective Components of Care Management at the Organizational Level

The 2012 NAM Report, Better Care at Lower Cost, identifies two components of a continuous learning culture – leadership-instilled culture of learning and supportive system competencies. The report describes a learning health care system as one that is “stewarded by leadership committed to a culture of teamwork, collaboration, and adaptability in support of continuous learning as a core aim.” These systems constantly refine “complex care operations…through ongoing team training…, system analysis and information development, and creation of the feedback loops for continuous learning…. “⁷

The Bright Spots studied operationalized continuous learning. Leadership in these organizations devoted resources to selecting team members for cultural fit and trained team members in organizational processes. In addition, these organizations adapted to fill in gaps in organizational capacity through continuous learning. Each Bright Spot had a strategy for risk stratification that combined data and human input. The use of data was a key element of the infrastructure in each of the Bright Spots. Further evidence of the different methods used would be valuable to determine effectiveness.

The Bright Spots review studied the cultures that created high value collaboration, where hierarchies are flat and all team members have a seat at the table. The staff are not only working at the top of their license, but actively contributing novel ideas to the care plans. Providers are actively “stepping back to allow others to step up.”¹²

The interviewees commented that care management is most effective when incentives are coordinated. Unlike most payers, CareMore started as a provider group and became a payer. Throughout this study, interviewees noted the challenges forced by payers when trying to change provider behavior. Aligned incentives were key to enabling payers and providers to coordinate and to meet shared goals. Providers commented that the plan “gets out of the way” and allow them to “think outside the box” to take care of patient needs. One of CareMore’s core tenets is that every hospitalization is viewed as a failure of the system. While providers have sought to minimize unnecessary hospitalizations, they have not been historically rewarded to do so, with most of the financial benefit going to payers. As the payer and the provider, CareMore is able to pass savings at the system level to providers.
Blueprint Key Findings: Effective Components of Care Management at the Team Level

“I have had situations in which physicians were not really communicating. They were sharing information, and they weren’t really communicating with horrible outcomes.”

– Patient advocate

The study participants identified the prevalence and consequences of poorly coordinated care in health systems. During the expert convening, participants talked about errors that occur at hospital discharge as a result of suboptimal handoffs where information is communicated through densely written summaries. They envisioned a system where the communication was synchronous, verbal, and bidirectional, where the receiving care team could ask clarifying questions. Bright Spot team members spoke of face-to-face communication strategies that led to a shared awareness of patient care coordination needs and goals. These warm handoffs helped teams not only “get on the same page” but also “see the full picture” because they are purposefully collating information from diverse perspectives. These meetings have pre-specified times, regular attendees, and clear objectives.

“In order to be on the same page, we need to communicate and coordinate to make sure that we have a full picture that includes the patient and includes other clinicians. We need to be able to make time for people to truly communicate.”

– Patient advocate

Through Indiana University’s GRACE model, the team meets weekly to facilitate a high level of communication. The Johns Hopkins team meets weekly to discuss patients with inpatient or SNF admissions lasting seven days or longer. The CareMore team meets daily to discuss hospitalized patients, and biweekly and monthly for other groups of high risk patients.

One component that allows for shared awareness, face-to-face communication, and real-time resolution of questions is the co-location of team members. One Johns Hopkins physician noted that patients were less likely to enroll in the care management plan when only called by a care manager. The adoption rate increased with a clinician referral and increased even more when the clinician recommendation was paired with a face-to-face introduction with the embedded care manager at the time of the visit.
Before the care managers were embedded, providers had difficulty recalling who their care managers were. At InterMed, team members are located in the same facility and some in the same office. One provider stated, “I believe in architectural theory now, and I want to physically tear down the walls in my department.” One provider said that “it's about turning the chair around and talking to somebody.” At CareMore, care managers were initially in a remote location. To arrange for intravenous home medication, providers would fax requests to the remote care managers with clarifying questions being answered in an asynchronous manner. With co-location, the staff reports that the communication is seamless and problems are resolved in real time.

While co-location facilitates “getting on the same page,” these organizations are moving beyond clinic walls and into communities and homes in order to “see the full picture.” The GRACE model is built around home visits while CHWs at Hopkins try to visit each member in their homes at least once each year. These face-to-face home visits build relationships. One Hopkins patient used to call to complain about the services, but following the home visit, he “saw [the CHW] as someone who could help him.”

Blueprint Key Findings: Effective Components of Care Management at the Patient Level

“If I were going to start from scratch…I would develop a very strong program that prioritizes, stratifies, and assess[es] people as to what they need and how much they need. I would develop some very strong protocols and guidelines…. You need to have a very solid framework for how you’re starting and then know exactly what things trigger a deviation. And those deviations are probably where you ought to have a team approach….For most…situations, you don’t need to bring back to the team and discuss the assessment….I think the team approach should focus on where you have the deviations.”

– Former medical director at a health plan

At the individual patient level, these programs are adept at customizing plans to fit individual needs. While interviewees frequently touted evidence based disease protocols, they also discussed adapting those protocols to match the needs, competencies, and resources of the individual patients. In reference to an InterMed nurse practitioner, a patient said, “she’s not going to make goals with me that are beyond my capacity. I need a teacher and (she’s) a teacher.” At the convening, a patient advocate conveyed a story of a care manager who conducted a home visit and completed all of the protocols without addressing what the patient actually needed. Better ensuring this does not occur relies on every team member seeing beyond the problem and protocols and identifying next steps.
In addition to tailoring protocols to match patient needs, these organizations exhibit can-do orientations and purposefully sought to “do whatever it takes” to facilitate the right care, at the right place, at the right time, with the right person. “Doing whatever it takes” is one of CareMore’s core principles. CareMore case managers started a food bank for patients, picked up and delivered medications, and arranged for pet boarding for a hospitalized patient. The Hopkins CHWs provide members with their direct phone numbers asking the patients to contact them for “anything they need.”

Finally, they value continuity centered around the patient’s needs. At InterMed, nurse practitioners provide transitional care and work with a specific pod of providers. These teams are rarely altered so that patients are receiving transitional and primary care from the same group. The GRACE Model at Indiana University Health Methodist Hospital, gives patients a chance to stay at home and receive care at home all while maintaining their PCP. At CareMore, the same extensivist sees the patient in the hospital, at the skilled nursing facility, and at the post discharge visit.

**Blueprint Key Finding: An Overarching Theme Driving Effective Care Management: Trust**

“A good care management plan is one that has a human touch, a very human decision process, and a process to engage meaningfully with the patient.”

— A payer

Throughout this process, trust was identified as foundational to effective care management. Interviewees commented that trust was the “missing link” in many care management programs, and that effective care management must enhance relationships. The patients had to trust their care team. The team members had to trust each other. And everyone had to trust the organization’s systems and motivations. During the convening, participants reported that the ability to develop trust is not necessarily innate, but can be developed through training. As evident through the examples cited above, the Bright Spots have multiple strategies for enhancing trust and building this skill within team members. The report hypothesizes that many of the blueprint’s elements facilitate trust and that this trust is essential to meeting patient needs and improving outcomes.
Barriers to Implementing the Blueprint

Implementing these organizational, team, and person domains effectively is a challenge for most organizations, and interviewees identified multiple barriers to effective care management. First, many described difficulty with IT harmonization. Specifically, the EHR in the hospital differed from that in the outpatient setting which differed from the care management software. This impeded their ability to achieve shared awareness and see the whole picture. At InterMed, the business intelligence group works with the teams to improve the functionality of their technology and created a risk stratification report that pulls data from the EMR instead of the care teams pouring through patient files to find the patients most in need of the care management services. In addition to identifying patients at risk, the team created override functions so providers can adjust the list to those patients who really need the care management services.

Others described the challenges around payment. Payers have their own care management programs. With multiple payers, single offices can have multiple care managers running disparate programs with distinct inclusion criteria. This leads to confusion from both the patient and provider perspectives. CareMore is the exception as the CareMore providers only see patients enrolled under the CareMore plan. Finally, all of the programs had difficulty coordinating care across all settings. CareMore has providers in the hospital, skilled nursing facility, and transitional care settings with less exposure to primary care. InterMed provides access to primary and transitional care, but is less present in the hospital. While a shrinking cohort of PCPs follow their patients across all care settings, value based payment models provide incentives for effective continuity across providers and settings. Replicating this level of comprehensiveness has proven difficult.

Future Work to Build on Care Management Research

A number of ideas meriting further investigation emerged as a result of this study. There is variation in team composition across the Bright Spots in care management, and there is not yet a scalable best practice for providers to use as a model. Interestingly, three of the Bright Spots chose to deploy nurse practitioners and physician assistants in the central role within the care management team while the emerging care management program, the Hopkins Medicare Advantage Plan, has elected to use CHWs in a parallel position. Future research should examine the impact of the care management team’s composition on health outcomes.

Additionally, the Bright Spots used differing methods for risk stratification. Further analysis of data and methods relative to benefits and costs would inform these strategies. While the literature richly describes methods to capture continuity, the effectiveness of each component of the blueprint are not readily quantified. Researchers should develop methods to measure the impact of these components as well as the blueprint as a framework across the three levels. This foundational work will allow the care management community to determine which aspects of the model are most strongly associated with improved outcomes. Finally, the Bright Spot site visits were conducted at large practices, and it is unknown whether report insights apply to care delivered at solo and small practices.
Policy Recommendations

Effective care management is evolving and numerous Bright Spots exist that demonstrate health outcomes, lower cost, and increase patient and provider satisfaction. Medicare Advantage plans work with provider groups to align goals and incentives to drive innovation. These microenvironments require flexibility and active engagement between payers and the provider/delivery system provider/delivery system to manage complex care and improve patient outcomes. Below are key policy recommendations based on the findings in this report.

Recommendations for Service Delivery Reform Through Care Management

Continuity was found to be a key measurable feature associated with successful care management. The Bright Spot models of care management were built on the core concept of continuity of care for provider teams and the complex patients. The implementation of this care delivery focused on comprehensive, protocol-driven care, targeted to the most complex and chronically-ill patients. These concepts are central to achieving high-value care.

In the era of national health care reform driven by payment and delivery system changes, attention should be paid to the benefits of flexibility, continued innovation, and adaptability for payers and providers to achieve desired outcomes. The impact of policy, payment and protocols driven by these concepts were clearly evident in these Bright Spots in care management. Specifically, expanded use of effective care management through service delivery reform would be enhanced by:

- Further evaluation and testing of models based on the blueprint for effective care management presented in this report.
- Evaluation of differences in outcomes and cost between plans and provider organizations that use care management models and those that do not.
- Expansion of provider contracts in value based, risk assumption models that include care management under Medicare Advantage.
Recommendations for Payment Reforms Through Care Management

A key feature emerging from these Bright Spots is the power of prospective flexible payments with simple, yet clear incentives to deliver on cost and quality outcomes. This payment framework provides the foundation for effective care management strategies at the organization provider team and patient levels. Shifting focus from maximizing volume of services delivered by physicians has allowed the organizations studied to coordinate incentives aimed at critical end outcomes.

Medicare Advantage’s capitated payments enable flexibility, cultures of collaboration, and continuous learning about how best to achieve evidence-based, enhanced protocols for chronic disease management. It also promotes the development of multidisciplinary teams, which recognized data-driven, regular communication is essential for care management. More flexibility in plan design and supplemental benefits could further enable Medicare Advantage plans to develop effective care management strategies. The literature review suggests that wide implementation of care management practices will improve the care of all Medicare Advantage patients. Further implementation of effective care management through payment reforms would be enhanced by:

- Incentives for the use of risk stratification to identify high need, high risk patients.
- Coordination by primary care for each managed patient.
- Incentives for the use of care management teams that include appropriate personnel, including a Registered Nurse, Social Worker and/or a CHW working closely with clinical staff.
- Align different payment system and benefits dually eligible individuals and patients with multiple chronic conditions through the use of value based capitated payment.
- Flexibility in payment and coverage to enable providers to treat patients at the most appropriate site of care and to offer additional benefits as needed to meet care goals.

The success of the four Bright Spots highlighted in this report suggest that payer flexibility, and empowerment of providers to focus on aggregate cost and quality outcomes presents a blueprint for successful care management.
APPENDIX I

LITERATURE REVIEW: EFFECTIVE CARE MANAGEMENT IN MEDICARE ADVANTAGE

Summary

Health care systems across the country are trying to identify ways to provide higher quality care for a lower cost. Care management has emerged as an important tool in meeting these aims and the Medicare Advantage program, with its goals of providing more comprehensive and coordinated care, is a logical place to incorporate this tool. Although care management is a promising idea, each practice defines it differently and it is unclear whether it leads to improved outcomes. The goal of this research was to define the successful characteristics of care management, and explore how it is being successfully implemented in the Medicare Advantage population. Available literature was searched to answer the following questions:

What are the common characteristics of care management programs?

What are the characteristics of care management programs in the Medicare Advantage population?

Has care management in the Medicare Advantage population led to improved outcomes?

The following literature review summarizes the findings.
Introduction

To achieve better patient experience, improved population health, and lower costs – providers and health care systems nationwide are transforming practices to provide higher quality care for less cost. Care management has become an essential tool in managing patient populations with the hopes of achieving these goals. The AHRQ has defined care management as a team-based, patient-centered approach designed to assist patients and their support systems in managing medical conditions more effectively.

Care management also encompasses those care coordination activities needed to help manage chronic illness. It consists of three key services: care coordination, self-management support, and patient outreach. Within care management lies the important concept of care coordination, often used interchangeably with care management in the literature. Care management can be seen as a tool to manage patient populations, care coordination can be seen as a tool to help with the care of an individual patient. The Care Coordination Measures Atlas created by the AHRQ outlines the different components of care coordination, but states that no consensus exists on its definition.

The authors of the AHRQ review developed a broad definition of care coordination as “the deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient’s care to facilitate the appropriate delivery of health care services.”

Care management in different patient populations

What are the common characteristics of care management programs?

Given that the definition of care management and care coordination are so broad, the literature was examined for specific characteristics of care management that seem to be most successful in patient outcomes. The FFS Medicare coordinated care demonstration programs, as well as studies on the care of patients with complex health needs, provide some background on the more promising features of care management. Nelson investigated the six major Medicare demonstrations, which attempted to involve 34 programs using disease management and care coordination programs to reduce hospital admissions and, thus, Medicare expenditures.
We found considerable variation in the effects of the individual programs. However, programs which involved substantial direct interaction between a care manager and physicians reduced hospital admissions by an average of 7 percent and reduced regular Medicare expenditures by an average of 6 percent. Additionally, those programs with significant in-person interaction between patients and care managers reduced hospital admissions by an average of 7 percent and reduced FFS Medicare expenditures by an average of 3 percent. Another investigation of the Medicare Coordinated Care Demonstration identified six features of these programs which appeared to be important for success:

1. Supplementing telephone calls to patients with frequent in-person meetings
2. Occasionally meeting in person with providers
3. Acting as a communications hub for providers
4. Delivering evidence-based education to patients
5. Providing strong medication management
6. Providing timely and comprehensive transitional care after hospitalizations

Other studies examining the successful characteristics of care management focused on patients with complex health needs. Goodell, Bodenheimer, and Berry-Millett concluded care management improves quality for these patients, but the effect on costs is less conclusive. The authors indicate it may take time to see results from these programs. The authors found that the most successful care management programs, that is, those programs which reduced hospitalizations and costs, are ones targeting patients discharged from hospitals. In their study, the five keys to successful care management were:

1. In-person encounters
2. Training and personnel (they cite low workloads per manager)
3. Physician involvement
4. Involving informal caregivers
5. Coaching patients and caregivers to identify early warning signs of disease progression.
Through a series of case studies, Hong, Siegel, and Ferris also examined successful primary care integrated complex care management programs and identified the core operational attributes and best practices of successful programs. In this study, the keys for success included:

1. Customize the approach to local contexts and caseloads
2. Use a combination of qualitative and quantitative methods to identify at risk patients
3. Use a dedicated care coordinator
4. Have the care coordinator focus on building trusting relationships with patients as well as their PCPs
5. Match team composition and interventions to patient needs
6. Offer specialized training for team members
7. Use technology to bolster their efforts.

Although the studies reviewed differed in characteristics for successful care management, a few themes did appear. First, having a person in charge of care coordination other than the physician was critical to success. Second, all studies stressed the importance of building trusting relationships between all members of the health care team and the patient. They cite in-person visits as well as communication between the care coordinator and physician as important means of accomplishing this objective. Third, they highlighted the ability to efficiently extract real-time data such as hospital discharge notifications and medication information from an integrated EHR. Fourth, they emphasized the importance of risk stratifying the patient population and allocating more resources to the highest need population.

**Care management in Medicare Advantage populations**

**What are the characteristics of care management programs in the Medicare Advantage population?**

The studies above synthesized what is known about successful care management programs, but did not focus on care management in the Medicare Advantage population. This study seeks to take what is known about care management and apply it to studies of the Medicare Advantage population in particular to examine if similar themes arose.
Medicare Advantage was established to authorize Medicare to contract with private plans to provide coverage to Medicare-eligible beneficiaries in exchange for a risk-adjusted per person per-month payment. The stated goals of Medicare Advantage are to offer better health care coordination and comprehensive care, and to achieve the cost savings and efficiencies received by managed care in the private sector. Medicare Advantage has been shown to result in more appropriate use of ambulatory services and lower rates of avoidable hospitalizations and ER visits when compared to FFS Medicare, which is known as Medicare Parts A and B.8,9,10,11,12 This difference is potentially a result of a focus on preventive services and care management, however, few studies have actually examined the factors intrinsic to Medicare Advantage.

The available literature looking at the intersection of Medicare Advantage and care management is case based and usually limited to a study of one particular health care system or medical practice. Claffey, Agostini, Collet, Reisman, and Krakauer described a collaboration between Aetna Medicare Advantage and NovaHealth in Portland, Maine. This pilot program focused on dedicated care management resources, data reporting, and quality measurement. The collaboration was successfully able to hit and exceed targets for the five pre-determined clinical measures, including measures designed to assess access, avoidable inpatient stays, care coordination, and chronic disease management. The analysis showed the covered patients were also associated with a decreased per-member-per-month cost relative to patients of NovaHealth who were not enrolled in the program. The authors identified strong physician leadership and commitment, adequate information systems, protected time for practice-based care management, and integration of specialty care as key aspects of the collaboration’s success. They believed these interventions primarily allowed physicians to spend more time engaged with complex patients because care coordinators were alleviating the burden of complaints which did not require a physician’s level of training.1

In another study of the system-specific care management of Medicare Advantage patients, Maeng et al. investigated how the Geisinger Health System’s advanced patient-centered medical home (PCMH) model (referred to as ProvenHealth Navigator) impacted the total cost of care for an elderly Medicare Advantage patient population. The authors separately estimated the association between a clinic’s exposure to the Navigator and (1) each component of the total cost of care (outpatient, inpatient, professional, and prescription drugs) and (2) the clinic-level acute inpatient admission rate. They found that total costs in the Navigator exposed clinics were 7.9 percent lower with the largest savings coming from a $34 per member per month cost savings in acute inpatient care. Additionally, longer exposure to the Navigator was associated with lower acute inpatient admission rates.14
A similar study conducted by Phillips et al. investigated WellMed, Inc., a mature primary care-based payer and provider organization that follows a PCMH model. The study focused on Medicare Advantage patients in this ACO, and found that the adjusted mortality rate is half that of the state for people older than 65 years. Although hospitalizations, readmission rates, and emergency department visits had not changed over time, preventive services improved. They reported that the characteristics of the organization that may have contributed to the improvement included reduced panel size, clinical teams consisting of care coordinators and health coaches, on-site support services such as pharmacies and transportation services, and a primary care infrastructure that allowed the efficient use of data for quality improvement and strategic referrals. Unfortunately, they could not separate out which attributes of the organization actually led to the improved outcomes.¹

Overall, if one assumes the PCMH model can be used as a proxy for a care management program, these two articles offer evidence that care management reduces costs for a Medicare Advantage beneficiary population while improving health outcomes.

Unfortunately, the effect of the care management program cannot be distinguished from the effects of other elements of the PCMH model such as patient-centered primary care, performance management, and a value-based reimbursement model.

These studies were the only ones that looked at care management in a Medicare Advantage specific practice. The larger scale studies investigating the crossover between Medicare Advantage as a whole and care management tend to focus on high risk Medicare Advantage populations that depend on care management, such as those with specific disease processes or patients transitioning out of the hospital. For example, Cohen, Lemieux, Schoenborn, and Mulligan describe Care Improvement Plus, a Medicare Advantage plan and Medicare's largest special needs plan. The patients enrolled in this program had similar illnesses and risk-score characteristics as patients covered by FFS Medicare, but had decreased hospital admission rates and shorter hospital stays. The authors focused on several key care management programs to explain this disparity including a House Calls program. The program consists of individual home visits for patients, a nurse care management system including a hotline and coaching calls, a program designed to ensure the safe and effective use of medications, and risk stratification of enrollees.¹⁶
In an analogous study looking at Medicare Advantage patients who had recently transitioned out of the hospital, Naylor et al. examines the impact of implementing the Transitional Care Model (TCM) which was designed to improve care and make transition from hospital to home easier. The authors performed a quasi-experimental study examining Aetna Medicare Advantage beneficiaries who received care under the TCM. The health status and quality of life of the patients, along with physician satisfaction, was measured between one and two months’ post intervention. The model incorporates a care team of physicians, nurses, social workers, and more.

**Results showed all health status and quality of life indicators improved post-intervention compared to pre-intervention.**

Another significant result showed TCM was associated with a short-term decrease in health care spending. The authors concluded the transitional care model can be successfully translated into a health care plan benefiting elderly patients who are chronically ill.¹

When looking at successful care management in Medicare Advantage programs specifically, a few common themes arise. These programs all seem to incorporate:

1. Care coordination between different points of care via a care coordinator
2. Integrated EHRs
3. Strong physician leadership and buy in
4. The ability to risk stratify patients

Interestingly, these characteristics were like those in care management programs for the non-Medicare Advantage population, suggesting that there is some generalizability to these features.

**Has care management led to better outcomes for the Medicare Advantage population as a whole?**

Care management, as defined by the studies reviewed above, improves outcomes for Medicare Advantage patients in certain practices, and with certain high risk diseases. However, the question remains as to whether it improves outcomes for all Medicare Advantage beneficiaries. No studies were located that looked at this directly. Yet, if it is assumed that outcomes, such as more appropriate use of outpatient services, lead to a decrease in avoidable hospitalization, then Medicare Advantage beneficiaries as a whole may benefit from care management practices. To investigate the effect of care management on the Medicare Advantage population as whole, studies were analyzed that directly or indirectly measured the outpatient care of a large segment of Medicare Advantage enrollees.
During a period of rapid growth of Medicare Advantage plans (2003-2009), Landon et al. found Medicare Advantage enrollees had lower rates of emergency department (ED) visits and ambulatory surgeries, and fewer hip and knee replacements than a matched sample of FFS Medicare enrollees. Although fewer ED visits are correlated with better outpatient care, one could argue that fewer ambulatory surgeries may not be as highly correlated, and may even point to worse outpatient care if they were, in fact, needed procedures. Yet, other markers of well managed outpatient care such as rates of appropriate preventive services are higher in the Medicare Advantage population and seem to support the conclusion that Medicare Advantage enrollees have more appropriate use of outpatient services.

For example, studies that have compared Medicare Advantage and FFS Medicare based on a select set of Health Care Effectiveness Data and Information Set (HEDIS) measures such as breast and colon cancer screening, fasting lipid measurements and hemoglobin A1C’s for diabetic patients, have found better scores on all measures in Medicare Advantage as compared to FFS Medicare.

Conclusions

Has care management in the Medicare Advantage population led to improved outcomes?

In short, a review of the literature has shown that there are certain characteristics of care management that improve outcomes not only in the general population, but also the Medicare Advantage population. Although many different characteristics were mentioned, the themes that kept emerging included:

1. Effective care coordination using a dedicated care coordinator to perform in-person visits. Patients must also communicate effectively with the remainder of the health care team
2. Integrated EHRs that allow for efficient data retrieval
3. The ability to risk stratify patient panels to allocate resources appropriately

All of the studies demonstrating how care management improved outcomes for a Medicare Advantage population were disease or site specific. No studies could be located analyzing the outcomes of effective care management for the Medicare Advantage population as a whole.

Yet when compared to FFS Medicare, if we assume that reduced ER visits, better HEDIS metrics, and reduced avoidable hospitalizations are markers of effective care management, then we can assume that wide implementation of care management practices will improve the care of all Medicare Advantage patients, not just those in specific practices or with specific disease processes.
APPENDIX II

CONVENING SUMMARY: EFFECTIVE CARE MANAGEMENT IN MEDICARE ADVANTAGE

The Robert Graham Center convened a meeting entitled *Effective Care Management in Medicare Advantage*, on August 2, 2016, in Washington, D.C. The meeting was sponsored by Better Medicare Alliance as part of a comprehensive project studying Bright Spots in Care Management. The purpose of the meeting was to gain a better understanding of the successes and barriers to delivering high quality care management particularly through the Medicare Advantage framework, as well as, to propose possible solutions to overcome those barriers, to gain a better understanding of what is known from the academic literature, and to identify gaps. Important insights on care management were gained from the experts assembled.

During the one-day meeting, experts with backgrounds in medicine, public health, law, government relations, and patient advocates discussed and identified barriers to adoption of effective care management and identified solutions to overcome these obstacles. This report highlights some of the key themes that emerged during the convening.

To clarify and focus the discussion, the Robert Graham Center put forward key definitions and terms for the group, and provided a brief summary of the related literature to date. Below you will find key definitions and descriptions agreed upon by the participants.

**Definition of Care Management**

To focus the discussion, the team asked the convening participants to use the definition for care management put forward by the AHRQ: “a team-based, patient-centered approach designed to assist patients and their support systems in managing medical conditions more effectively.” There was agreement that care management consists of three key services:

1. **Care coordination**: Organizing patient care—both information and activities—with the patient, family, and all care providers in a coordinated fashion with the patient, placing the patient’s care wishes at the center of the activities.¹

2. **Self-management support**: Helping patients cope with all aspects of their illness when they are outside of the health care system.

3. **Patient outreach**: Reaching out to patients, and caregivers, before, after, and in between health care visits by phone, mail, electronically, or in person.
A summary of the care management research at the time of the convening indicated three key components of care management:

1. Patient centered care: Identifying a person in charge of care coordination other than the physician was paramount to success.
2. Trust and continuity: It is essential to build trusting relationships between all members of the health care team and the patient using in-person visits.
3. Risk stratification: The ability to efficiently extract real-time data, such as hospital discharge notifications and medication information from an integrated EHR, and risk stratifying the patient population facilitates allocating more resources to the highest need population.

Summary of Medicare Advantage Framework

Medicare Advantage provides an effective framework to care for our country’s growing Medicare population. Medicare Advantage, also known as Medicare Part C, offers Medicare coverage through health plans to provide better health care coordination and comprehensive care, and to achieve the cost savings and efficiencies received by managed care in the private sector. Individuals who are over 65 and individuals with disabilities who are eligible for Medicare, may choose Medicare Advantage. Medicare Advantage plans provide all Medicare benefits: coverage for hospitalizations (Medicare Part A) and health care provider benefits (Medicare Part B). In addition, Medicare Advantage plans frequently offer additional benefits like vision, dental, or fitness support. In 2015, approximately, one-third of Medicare beneficiaries chose to receive their care through a Medicare Advantage plan.2 Annually, the Centers for Medicare and Medicaid Services (CMS) gives Medicare Advantage plans a quality rating based on a variety of quality measures. Plans are rated using a 5-star system, with 5 being the highest score and 1 being the lowest score.3,4

A summary of the reviewed literature demonstrated that Medicare Advantage has been shown to result in more appropriate use of ambulatory services and lower rates of avoidable hospitalizations and ER visits when compared to FFS Medicare.

This difference is potentially a result of a focus on preventive services in primary care and care management; however, few studies have actually examined the factors intrinsic to Medicare Advantage. The studies that did examine care management in a Medicare Advantage population demonstrated that each program applies care management in a different way.

A summary of the Medicare Advantage literature as of August 2016, indicated four key components of Medicare Advantage:

1. Care coordination between different points of care utilizing a care coordinator
2. Integrated EHRs
3. Strong physician leadership and buy-in
4. The ability to risk stratify patients
Examples of Successful Care Management

Throughout the research convening, the group was broken out into a series of large and small group discussions with care management at the center of each discussion. Within this format, attendees shared accounts of successful care management. Below are two examples of the types of successful care management experiences shared by the group.

Frank was regularly admitted to different ERs, for nothing serious. His PCP struggled to get him to adhere to recommendations. Eventually, the physician was able to get a nurse practitioner into Frank’s home. Once she was in the home, on a monthly basis, she was able to understand that he was having difficulty getting medications, food, and getting out. She was able to address these issues. Once his medications and food were taken care of, he was able to adhere to his physician recommendations. It has been some time since Frank visited an ER.

An 85-year-old man was discharged from the hospital. He was being hospitalized on a monthly basis. In an effort to keep him out of the hospital his physician sent a nurse to his home. Within his first few days’ home from his latest hospital discharge, a nurse visited him in his home. She asked the patient “What do you do every day that is strenuous for you and what are your goals?” He mentioned that he walked to his mailbox at the end of his driveway, which was 800 meters daily. He experienced shortness of breath on his walk to the mailbox. With this information, the nurse started Congestive Heart Failure exacerbation prevention. The man also told the nurse that he wanted to go to Ireland to see family one last time. The patient’s granddaughter was going to travel with him, but she was concerned about his health. Together, the nurse and patient developed a plan to support him during the trip. He was able to go to Ireland with his granddaughter without incident. In addition to successfully making the trip to Ireland, they were able to cut his annual hospitalizations in half.
Key Findings

From the experiences and expertise of the group, key themes emerged related to effective care management:

1. Patient centered care
2. Risk stratification
3. Continuity and care transitions
4. Trust

Patient Centered Care

Participants emphasized the importance of placing the patient at the center of the care management process. The group agreed this means engaging the patient in an iterative manner through conversations around goals of care (including functionality) and adapting interventions to fit the needs of the individual. However, the group was weary of checklists as an effective tool to improve care since a checklist may not capture the nuance of a particular patient. Seasoned care managers, who place the person at the center of the process and can think creatively about helping patients, caregivers, and families, were deemed essential in putting the patient at the center of care.

For some convening participants, person-centered care resonated more strongly as a cornerstone of effective care management. The group agreed a person-centered approach includes more than the physical health of the patient, but encompasses all the needs of the patient. Participants shared examples of person-centered care that included a care manager finding an in-patient alcohol treatment program to help a patient focus on adhering to a complex medication regime, or finding a home for a patient that is safe to avoid additional medical complications. Over and over, the group emphasized the importance of identifying more than just the medical resources a patient needs, individual social service needs must also be met.

Some of the patient centered discussion focused on the care team and the benefit of a multi-disciplinary team.

Often participants spoke of care managers leading the team. Such a team allows physicians to focus on the patient’s health, while other team members address the social, mental, physical, and nutritional aspects of the patient’s life.

In addition to the care team, participants advocated for family involvement to help keep the patient at the center of care delivery.
Risk Stratification

Effective risk stratification was identified as a successful tool to identify patients who could benefit from more support. Participants stated that most initial risk stratification is done by mining EHRs, stating this works well to bring complex patients to the top of the list. However, convening participants emphasized the importance of individual empowerment to adjust risk stratification based on experience and relationships. Participants highlighted the tension between data-driven risk stratification and person-based risk stratification. There was agreement that one approach to risk stratification was not sufficient, and the mix of data-driven, individually-adjusted data was ideal in determining risk stratification. When discussing the relative contributions of qualitative (the provider’s subjective assessment of the patient’s future risk) and quantitative data, one participant indicated that his organization found, “quantitative data to be a more reliable predictor of future risk than clinician referral to the care management program.”

Risk stratification was often seen as one way care management programs could efficiently allocate scarce resources to those patients that needed the most support. Programs could be tailored to patient needs at specific points in time and altered as the patient’s health evolves. The group agreed the process of risk stratification needs to be iterative; as an individual’s needs fluctuate so does the care management. When done right, participants said risk stratification will identify and stratify patients before illnesses escalate so that interventions can help patients to avoid visits to the ER and hospitalizations. Convening participants said:

“Everyone coming out of hospital needs some level of support, but not everyone needs everything. Maybe it’s a text or call. Maybe it’s a home visit by a provider.”

“Risk stratification includes stratification of people but also interventions.”

Participants said risk stratification includes the stratification of people into services, but it also includes tiered interventions. Ideally, risk stratification is forward looking, not backward and can be a preventive tool. The group articulated the need to look forward, rather than backward, by focusing on preventing the hospitalizations of people who could be hospitalized in the next six months rather than patients who were hospitalized in the past six months.

Participants agreed by preventing expensive medical events, care management can pay for itself through prevention.
In addition to risk stratification, the group discussed examples of disease specific care management. Participants agreed these programs can successfully target individuals with specific chronic diseases and conditions, and offer very specific services to improve patient health. Examples of diabetes and pre-diabetes groups were widely discussed, but other disease specific care management programs were also hailed as exciting approaches to chronic care management.

**Continuity and Care Transitions**

Participants were unified in their assessment that continuity was foundational to effective care management. Continuity could be measured across several domains, including organizational (patient is seen by personnel from the same organization), electronic (the care team has access to EHRs in multiple settings), insurance plan (in network vs. out of network), and provider (a single provider or care manager is following the patient across the medical neighborhood). They believed that continuity spanning across multiple domains would be more effective than continuity in a single domain. One participant’s care management program stressed the importance of provider continuity. In this example, one physician was responsible for the care of the same patient in the hospital, skilled nursing facility, and outpatient settings.

Participants said care transitions are closely related to continuity, with a focus on the key moments when patients move through different parts of the health care system. Several participants discussed the importance of the warm handoff, which they described as synchronous and bi-directional communication. They highlighted the magnitude and frequency of errors that occur as a result of poor handoffs, which often occur through asynchronous, written documents. They identified the key features of a warm handoff, which include:

» Verbal communication
» Team communication with the opportunity to ask clarifying questions
» Re-visiting of care goals

One organization had daily huddles regarding each hospitalized patient to ensure team members agreed on a common plan. Convening participants said:

> “Transitions are where coordination falls apart.”

> “There is a need for a written clinical visit summary, which includes current medications, rescue plans, and follow-up information. It should reflect the same information that a concerned family member would write down during a visit.”
Trust

One participant called trust, “the missing link” in ineffective care management programs. Participants thought building trust could be taught, and that trust is not merely an innate skill of certain care managers. Specifically, one participant described the process in his organization where care managers routinely asked a series of questions designed to enhance trust in the care team and with patients. Others described robust hiring and training practices that helped develop trust skills in care managers ranging from supervisor mentorship, to selecting the best care managers, to cutting ties with those unable to foster trust. Participants reported the need for adequate exposure between patients and care managers and a customer service mentality that focused on consistent expectations. Another participant cited Eric Coleman’s Care Transitions Intervention as an exemplar, which provides in person simulation of best practices. Convening participants said:

“Care coordinators need to be taught to build trust with patients.”

“Trust can be taught, and some places are teaching it to their teams.”

“Supervisors need to be able to identify and hire and oversee the best employees.”

There was discussion regarding the importance of the physical co-location of care managers, providers, and patients. One participant indicated success can occur when care managers are embedded with providers specifically for trust building and in-person encounters with patients. Others commented that the physical location and medium of communication was less important as long as trust could be established through alternative means.
Barriers to Delivering Effective Care Management

Barriers to delivering care management were a key discussion of the day. The convening participants specifically discussed some of the individual provider and system level barriers to delivering effective care management. Barriers included lack of patient involvement, limited provider buy-in, analysis paralysis, community-clinical discontinuity, trouble with the team, problems with scalability, lack of value-based reimbursement models, and payer-provider misalignment. The barriers identified by convening participants are described in greater detail below:

Lack of Patient Involvement: Participants said effective care management requires patient participation. This means building care management teams with patients at the center. Establishing patient trust could be a barrier to the care management model, with one convening participant stating:

“Trust between coordinator and patient/family needs to be established first. Care coordinators need to make an empathetic connection with the patient to have the most successful care management.”

Limited Provider Buy-in: Participants identified that negative physician opinions of care management were a barrier when physicians felt programs were imposed on them by payers or health plans. In one participant’s experience this barrier could be overcome through relationship building between the plan and provider, frequent meetings to discuss patient panel metrics, and financial incentives for achieving quality measures. One suggestion to improve provider buy-in included, “relationship building, frequent meetings, financial incentives for good measures.”

Analysis Paralysis: Delayed decision making while waiting for more data was perceived as another barrier by some participants. In spite of a sizeable amount of data that have already been collected, participants expressed concerns that health policy experts and regulators wanted to add layers of reporting. Other participants believe that the necessary data for care management are not collected in a timely way and that data are not communicated back to providers efficiently. One participant stated “I know the local [Medicare Advantage] plan is better than FFS, but I don’t have good data for patients without chronic diseases.” The participant said this is particularly problematic given the significant limitations in collecting representative and timely population health data.

Community-Clinical Discontinuity: Many respondents commented on the difficulty following patients from medical care into the community. They noted the regulatory barriers that prevented hospitals from referring patients to preferred nursing facilities could be problematic. Additionally, they expressed concerns that it was difficult for payers and providers to know the quality of services being provided through community organizations.
Trouble with the Team: Participants identified the need to change the historically hierarchical model of the physician as “captain of the ship” as a potential barrier. Some said care management changes this paradigm to a team-based approach where all members of a practice must contribute to patient care. “Coming from residency when everything (i.e., social, follow-up, etc.) was my job, it was difficult to trust the Medicare Advantage and registered nurse with team based care. I had to be told by older MDs that it was OK to let it go. I had to be reminded that this system had been in place for many years AND worked well.” There was agreement that shared responsibility for the well-being of a panel of patients must exist among a group of physicians and among of team of health professionals.

Problems with Scalability: On the other hand, participants felt that more evidence was needed to establish that Medicare Advantage enrollees have better outcomes. There is sufficient evidence that Medicare Advantage plans for patients with chronic diseases or institutionalized patients have improved outcomes while containing health care costs. Participants said this deficit could be overcome with additional analysis of Medicare Advantage plans serving the general population.

Lack of Value-Based Reimbursement Models: Medicare Advantage plans represent a significant opportunity to pay providers according to a quality-based system, but participants felt that physicians were still mostly being reimbursed in a quantity-based system. Under FFS Medicare payment models, it was noted that many providers experienced financial constraints in hiring care managers. One convening participant said, “[with] the FFS plans, physicians have no incentives to do anything differently. Want to pay these physicians for access to EMRs and then try to offer them plans with guidelines for risk stratification of the highest utilizers.”

Additionally, participants said many providers were not reimbursed for coordinating care transitions—an activity that has been identified as an essential component of care management. Medicare Advantage allows providers to support this activity. Another convening participant said, “effective care management has the opportunity to improve patient care and outcomes. Medicare Advantage is uniquely suited to support care management with its focus on primary care, coordination, and chronic care management.”

Payer-Provider Misalignment: In addition to the need to reimburse for value, group members discussed the absence of transparency in the relationship between the payer and provider. If care management leads to a return on investment, participants agreed providers should know where those funds are redistributed. Additionally, participants noted there is no care management platform alignment between payers, which prevents providers that see patients from multiple Medicare Advantage plans from effectively managing patient care. Some participants said Medicare Advantage is specifically positioned to create alignment, because most providers have a wide array of payers.
Conclusion

Effective care management is the key to improving the quality and value of care for beneficiaries and the Medicare system at large. This tool is especially important within a capitated system, such as Medicare Advantage, which incentivizes the use of care management. Finding out which care management approaches are most effective and sharing those best practices amongst providers is crucial to improving care delivery.

This research study aims to gain insights into care management, identify barriers to delivering care management, and propose solutions to overcome barriers to delivery of successful care management. Over the course of the discussion, four key themes emerged:

1. Patient centered care
2. Risk stratification
3. Continuity and care transitions
4. Trust

These elements represent key components of effective care management. To effectively offer care management services, participants agreed that these elements must be included in the delivery of effective care management services.

Challenges persist in offering care management services from the patient to the plan. The barriers identified include a lack of patient and provider buy-in, a lack of data, and payment alignment. However, many of these barriers can be overcome with a greater focus on value-based care, developing an effective care management team, and by putting the patient and his/her goals at the center of the care management process. Going forward, it will be important to identify ways in which care management services can be expanded to more Medicare beneficiaries.

Finally, providers, administrators, and researchers will need to find ways to measure the effectiveness of the care management interventions as well as manage the relevant data essential to care management delivery.
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Executive Summary: A Blueprint for Effective Care Management


Section 1: Effective Care Management in Medicare Advantage


Section 2: Case Studies: Bright Spots in Effective Care Management in Medicare Advantage

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The GRACE Model Developed at Indiana University School of Medicine


Johns Hopkins Medicare Advantage Plan: An Emerging Bright Spot

Section 3: Conclusion: Key Components of Effective Care Management in Medicare Advantage


Appendix I: Literature Review: Effective Care Management in Medicare Advantage


Appendix II: Convening Summary: Effective Care Management in Medicare Advantage


