



Promoting Successful Outcomes in Making Care Primary:

The Role and Value of Case Management



Position Paper
June 2024

Copyright



Case Management Society of America
5034A Thoroughbred Lane
Brentwood, TN 37027
cmsa@cmsa.org
<https://cmsa.org>

Copyright © 2024 by the Case Management Society of America (CMSA)

All rights reserved. No part of the material protected by this copyright may be reproduced or utilized in any form, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from the copyright owner.

Disclaimer:

This position paper is provided by the Case Management Society of America (CMSA) for educational and informational purposes only. The information presented is based on the best available evidence and expert opinion at the time of publication. CMSA, its affiliates, and contributors to this position paper shall not be held liable for any direct, indirect, consequential, or incidental damages arising from the use of the information contained herein. Furthermore, the inclusion of any specific services, organizations, or links within the position paper does not imply endorsement or recommendation by CMSA.

How to Reference This Document:

Case Management Society of America. *Promoting successful outcomes in making care primary: The role and value of case management* [position paper]. June 2024. <https://cmsa.org/promoting-successful-outcomes-in-making-care-primary/>

Follow us on Social:



Acknowledgments

CMSA extends a heartfelt thanks to all collaborators whose expertise and dedication were vital in creating this position paper. We deeply appreciate their commitment to this project and perseverance in raising awareness about the importance of case management.

Contributors

Hussein M. Tahan, PhD, RN, FAAN, FCM, **Lead Writer**

Ellen Fink-Samnick, DBH, MSW, LCSW, ACSW, CCM, CCTP, CRP, FCM

Gerri Lamb, PhD, RN, FAAN

Kathleen Moreo, RN, CMGT-BC, BSN, BHSA, CCM, CDMS, FCM, **Lead Reviewer/Editor**

Colleen Morley-Grabowski, DNP, RN, CCM, CMAC, CMCN, CMGT-BC, ACM, IQCI, FAACM, FCM

Lisa Parker-Williams, DNP, MBA, RN, CCM

Lisa Simmons-Fields, DNP, MSA, RN, CCM, CPHQ, FCM

Heaven Sims-Provo, DNP, MBA, RN, PHNA-BC, NE-BC, CCM, LNHA, CAHIMS, FCM

Special thanks go to **Mindy Owen**, RN, CRRN, CCM, FCM, for her leadership on this project.

We also commend the **CMSA CM Fellow Selection Committee** for initiating and supporting this project, and extend our gratitude to the **Case Management Fellows (FCMs)** who provided guidance.

The contributors did not receive financial or other material support for their work.



Foreword

The professional case manager has evolved into an essential and invaluable member of the healthcare team with their central focus being coordination of care activities in support of the patient. The case manager provides comprehensive oversight over the patient care process while serving first and foremost as a patient and family advocate.

As a practicing physician deeply invested in the realm of case management, I am pleased to introduce this position paper shedding light on the Making Care Primary Model from the Centers for Medicare and Medical Services (CMS). This model represents a significant step towards enhancing healthcare delivery by emphasizing a holistic approach centered around patient health and well-being. In this paper, CMSA explores the pivotal role of case management and professional case managers in bolstering care coordination, community connections and patient outcomes across primary care organizations and providers.

At the heart of effective healthcare lies the ability to seamlessly coordinate care and support patients throughout their medical and health journey. Case management, facilitated by professional case managers, offers a structured framework to achieve this goal. Through expert coordination of resources and advocacy for patients, professional case managers play a crucial role in optimizing care delivery within primary care settings and across the continuum of care. This position paper highlights the value of integrating case management into primary care practice to foster the “Quintuple Aim” by enhancing the patient experiences, improving patient outcomes and population health, reducing cost, improving care team well-being, and leading healthcare improvement for success in value based.

Alpesh N. Amin, MD, MBA, MACP, MHM, FRCP, FACC, FHFS, CPE

Associate Dean for Clinical Transformation
Professor & Chair Department of Medicine
Chief & Executive Director, Hospital Medicine
University of California, Irvine Health



Table of Contents

Position/Introduction.....	1
The Making Care Primary Model.....	1-2
Relevance of CMSA’s Standards of Case Management Practice to the MCP Model.....	2-3
Professional Case Management in Primary Care.....	3-5
<i>Exhibit 1: Systematic Literature Review: Characteristics of Case Management Practice in Primary Care.....</i>	3-5
Professional Case Management in the Making Care Primary Model.....	6-8
<i>Exhibit 2: Context, Processes, and Outcomes of Case Management in Primary Care.....</i>	6
<i>Exhibit 3: Case Management Across the Three Tracks of the Making Care Primary Model.....</i>	7-8
Behavioral Health Integration.....	8-9
Keys to Successful Implementation of the MCP Model.....	9-11
Conclusion.....	11



Position/Introduction

The Centers for Medicare and Medicaid Services (CMS) recognizes the massive clinical, fiscal, and operational burden of providing disease prevention and chronic health condition management in primary care, particularly for the nation's most vulnerable populations. Increasing strain on the healthcare workforce rendering this care adds to a current care delivery culture of reactive rather than preventive responses to patient care. It fails to address the rapidly rising incidence rates of multiple chronic conditions in various ethnic and racial groups. Among recent innovative solutions to address these concerns, CMS provides the Making Care Primary (MCP) Model as a longitudinal voluntary model launched in 2024 in primary care. MCP is intended to improve care management and care coordination, assist primary care teams including providers (physicians, advanced practice registered nurses, and physician assistants) in partnering with specialists, and connect available community resources to address a patient's health needs as well as their health-related social needs (HRSNs).¹

In alignment with the MCP Model's overarching objectives, this paper highlights the critical role of case management and professional case managers (PCMs) in augmenting care coordination and patient outcomes across primary care organizations and providers. It describes the characteristics of a successful context of case management practice based on the three Tracks of the MCP Model, PCMs' role responsibilities supporting care interventions for people with multiple chronic conditions and HRSNs, and application of the Case Management Society of America's (CMSA) standards of practice - all in primary care settings. This paper also provides key evidence-based information demonstrating potential value for the MCP Model and guidance for key strategies that primary care organizations and providers are encouraged to adopt.

The main objective of this paper is to educate the CMSA membership, PCMs, providers, and other healthcare leaders and professionals about the MCP Model and the role and value of case management in primary care settings. These case management professionals can also use this paper as a blueprint to advance participation in opportunities like the MCP Model, to enhance existing primary care case management practices, and to establish contexts of care that affect better outcomes for both patients/families and health organizations. Specifically, the paper aims to address the following:

- Introduce case management professionals in primary care to the MCP Model.
- Describe key evidence supporting the value of case management in primary care settings.
- Identify the core characteristics of the context, processes, and outcomes of effective primary care case management practice.
- Distinguish the progression of case management practice and roles of PCMs across the three MCP Model tracks: building infrastructure, implementing advanced primary care, and optimizing care and partnerships.
- Summarize strategies for the integration of behavioral health and HRSNs in case management practice within the MCP Model.
- Recommend key strategies for success in implementing the MCP Model.

The Making Care Primary Model

The Making Care Primary Model consists of three domains: care management, care integration, and community connections. Care management focuses on supporting patients and their families or personal caregivers to manage chronic diseases to ultimately reduce or eliminate unnecessary emergency department use and acute care hospitalizations. Care integration emphasizes the value of coordinated behavioral and mental health services and primary care with special focus on use of evidence-based behavioral health screening and evaluation tools to ensure patients receive holistic and personalized care. Community

connections addresses patient's HRSNs, incorporates these needs in the individualized plan of care, and facilitates access to community supports and services.¹ The MCP Model aligns with the tenets of case management and the roles of PCMs and advances their presence and impact on outcomes of care in the primary care settings.

The Making Care Primary Model also comprises three progressive tracks designed to allow primary care practices and organizations flexibility in choosing their participation track. These tracks correspond to the degree of increasing complexity and level of maturity from the perspective of value-based and accountable care in primary care settings. Each track has an associated financial reward that is based on achieved improvement in patient health outcomes.¹ Additionally, case management practice and the role of PCMs evolve along these tracks and increase in value, sophistication, and innovation. The Building Infrastructure track is foundational in implementing advanced primary care services. It focuses on risk stratification of the patient population, establishing key workflows and structures for chronic disease management, conducting HRSN screening and referrals, and transforming care to build advanced care delivery capabilities. The Implementing Advanced Primary Care track seeks partnerships with social service providers, specialists, and supports. It highlights the importance of case management services and patient screening for behavioral health conditions. The Optimizing Care and Partnerships track requires organizations to expand upon the prior two tracks through quality improvement activities to optimize workflows, care integration for better patient care management, and specialty care partnerships, especially to deepen connections to community resources.

Relevance of CMSA's Standards of Case Management Practice to the MCP Model

In this section, we relate the importance of the CMSA's Standards of Case Management Practice (SOPs) to the MCP Model and highlight their existing synergies. The SOPs promulgated by CMSA since 1995 and most recently updated in 2022 emphasize health equity, integration of mental, behavioral, and physical health, and addressing social determinants of health (SDOH) to achieve optimal wellness and care for people's health. The SOPs also stress the importance of licensed healthcare professionals collaborating with other members of the care team and serving as consumer advocates.²

The SOPs apply guidance in effective coordination of care by a case manager, whether occurring in a single healthcare setting like primary care or across multiple settings during care transitions for a patient. These SOPs' characteristics align with the MCP Model's integral features described by CMS.

The CMSA SOPs describe case management as spanning all the healthcare settings across the continuum of health and human (i.e., social) services. Like the MCP Model, the SOPs highlight the importance of patient-centeredness in the provision of holistic services; identify those with complex medical, behavioral, and psychosocial needs as at-risk patients for special case management attention; emphasize the interprofessional and collaborative nature of case management service provision; and describe patient engagement and empowerment as essential elements of care management and coordination. All these are intended to ensure desired outcomes for all parties - patients, providers, and payers.²

Additionally, the SOPs describe sixteen specific standards that comprise the PCM's qualifications, professional responsibilities, and legal and ethical practice, including advocacy and cultural competence

resource management, health information technology, and the various aspects of the case management process. This process applies to the key elements of the MCP Model and entails client selection and comprehensive assessment; identification of patient’s care needs and opportunities; planning individualized care; facilitation, coordination, and collaboration on implementation of the plan of care across providers and settings; monitoring of patient’s progress and evaluation of outcomes; and closure of professional case management services.² These standards align well with the MCP Model’s priorities and advance case management practice in primary care settings.

Board-certified case managers, such as PCMs with the Certified Case Manager (CCM) designation, come from various licensed disciplines.³ They practice in concert with CMSA’s SOPs and have demonstrated the expertise, knowledge, and practice experience required to assist patients and care teams in providing the right services at the right time, in the correct quantity, and in the optimal location. These PCMs possess a keen understanding of sites of care optimization, care coordination, care transitions, community resources and connections, patient self-management, and bridging needs associated with social drivers of health to address the patient’s HRSN. Similarly, in the MCP Model, PCMs apply their unique skill set, in addition to their clinical knowledge, to facilitate the seamless movement of patients through the care continuum of health and social care. Substantial evidence supports the active involvement of PCMs in improving outcomes with solid utility and application in the value-based care environment. Given PCMs’ complex knowledge base, it is not an easily interchanged role.

Professional Case Management in Primary Care

Many studies have discussed the characteristics of professional case management or care coordination specific to primary care settings. Exhibit 1 describes key findings and recommendations from four recent systematic literature reviews⁴ and one publication concerning lessons learned from ten years of CMS’ care coordination demonstration projects.⁵ Evidence-based findings and recommendations from these sources, as described in Exhibit 1, identify the salient role and function of case management in primary care settings to provide primary care organizations and providers with important insights in meeting MCP Model requirements and expectations, thus highlighting the essential areas of focus for success.

Exhibit 1: Systematic Literature Review: Characteristics of Case Management Practice in Primary Care

First Author & Year	Number and Type of Studies Included	Key Findings and Recommendations Based on the Systematic Review
Hudon et al., 2019 ⁴	<ul style="list-style-type: none"> • 20 studies • 17 quantitative and 2 qualitative, 1 mixed method • Primary care, emergency department (ED), and transitional primary care post-hospital discharge • Special focus on patients to benefit from case management interventions 	<ul style="list-style-type: none"> • Case-finding processes are essential for case management effectiveness • Provision of high-intensity interventions with individualized care plans that integrate multiple types of providers to help improve patient care outcomes • Presence of multidisciplinary and/or inter-organizational care teams and patient’s plans of care • <u>Selected outcomes:</u> <ul style="list-style-type: none"> ◦ reduction in ED visits and hospitalization ◦ enhanced communication, referrals, and care coordination ◦ better patient engagement, motivation, self-management, and decision-making ◦ identified patient goals ◦ reductions in cost ◦ improved health status, satisfaction, and wellbeing ◦ adherence to clinic appointments

First Author & Year	Number and Type of Studies Included	Key Findings and Recommendations Based on the Systematic Review
Khatri et al., 2023 ⁶	<ul style="list-style-type: none"> • 56 studies • 7 systematic reviews, 13 quantitative, 29 qualitative, and 7 mixed methods • Thematic analysis of international publications • Focus on care coordination application in primary care 	<ul style="list-style-type: none"> • <u>Four themes in care coordination at the individual patient level:</u> <ul style="list-style-type: none"> ◦ continuity of services ◦ linkages at different stages of the patient's health condition (health promotion to rehabilitation) ◦ care across the lifespan ◦ care coordination in multiple settings (home to hospital) • <u>Five themes in organizational-level care coordination:</u> <ul style="list-style-type: none"> ◦ interprofessional care team ◦ multidisciplinary services ◦ community collaboration ◦ integrated care ◦ information in care coordination • <u>One theme in system-level care coordination:</u> <ul style="list-style-type: none"> ◦ service management involving multi-sector care coordination within and beyond health systems
Liaw et al., 2015 ⁵	<p>Not a systematic review of the literature Evaluation of four CMS demonstration projects involving care management: Medicare Coordinated Care Demonstration, Care Management for High-Cost Beneficiaries, Multi-Payer Advanced Primary Care Practice, and Comprehensive Primary Care Initiative</p> <ul style="list-style-type: none"> • Focus on lessons for primary care from these historical contexts – ten years of experience 	<ul style="list-style-type: none"> • <u>Five care coordination lessons identified:</u> <ul style="list-style-type: none"> ◦ concentrate on patients who are high utilizers of services ◦ foster relationships with both providers and patients ◦ track patients across the medical neighborhood in real time ◦ extend rather than duplicate the efforts of primary care practices ◦ minimize expenses by sharing resources and avoiding cost-ineffective interventions
Teper et al., 2020 ⁷	<ul style="list-style-type: none"> • 22 studies • Type of included studies unspecified • International publications • Focus on factors affecting case management in primary care settings • Qualitative - thematic analysis of the findings 	<ul style="list-style-type: none"> • <u>Nine barriers and facilitators to case management identified</u> • Three structural factors: family context, policy and available resources, and physician buy-in and understanding of the case manager role • Six intermediate factors: relationship building, autonomy of case managers, training in technology, relationships with patients, time pressure and workload, and team communication practices • A unifying framework developed demonstrating the relationships among the nine barriers and facilitators of case management practice in primary care settings • The structural and intermediate factors contribute to three fundamental factors: care team members' knowledge and capacity, which ultimately lead to the conduct of case management in primary care

First Author & Year	Number & Type of Studies	Key Findings & Recommendations
Valaitis et al., 2017 ⁸	<ul style="list-style-type: none"> • 34 papers • Scoping literature review • 12 descriptive papers, 7 qualitative, 7 quantitative, 5 mixed methods, and 3 unstated • International publications 	<ul style="list-style-type: none"> • <u>Three motivators/drivers for the initiation of navigation programs:</u> <ul style="list-style-type: none"> ◦ improve delivery of health and social care services ◦ support and management of specific health needs or specific population needs ◦ improve patients' quality of life and well-being • <u>Eleven factors influence the implementation and maintenance of navigation programs:</u> <ul style="list-style-type: none"> ◦ patient characteristics ◦ effective recruitment and training of navigators ◦ role clarity ◦ effective and clear operational processes ◦ adequate human, financial, and tangible resources, including technology ◦ strong intra and inter-organizational relationships and partnerships ◦ lack of available services in a community ◦ effective communication between providers ◦ program uptake and buy-in by end users ◦ valuing of navigators ◦ evaluation of navigation programs • Three main outcome categories: <ul style="list-style-type: none"> ◦ patient and caregiver outcomes (e.g., improved quality of life, improved self-efficacy and self-management, increased satisfaction, and increased access to care) ◦ provider outcomes (e.g., satisfaction with navigation programs, increased communication among primary care providers and community services, and improved care coordination) ◦ health system outcomes (e.g., reduction in ED visits and hospital admissions)

The effects of case management in primary care on patient care outcomes have also been studied for decades. Compelling findings from systematic reviews examining the impact of case management on pediatrics and adult patients with chronic conditions support the MCP Model. Caution is advised when interpreting or generalizing the findings of these studies to avoid bias and the risk of misinterpreting the results. Improvements were noted in physical, social, and functional measures of chronic illness management for individuals with diabetes, hypertension, depression,⁹⁻¹² dementia,¹³ and heart failure.¹⁴ Evidence of improved outcomes was also noted in patients with multiple chronic conditions,⁴⁻⁹ people experiencing homelessness,¹² and substance abuse.¹⁵

Moreover, in a systematic review of randomized clinical trials of case management for patients with multiple chronic illnesses,⁹ found those with one chronic disease and depression experienced significant improvements in symptoms of depression, blood pressure, and HbA1c levels. Joo & Huber¹⁵ found case management in the community setting was associated with significant improvements in clinical and social outcomes for individuals with substance abuse. Additionally, case management approaches to care were found to reduce preventable emergency department use, hospital admissions, and associated costs.^{4, 9, 11, 14, 16-22} The evidence shared here supports the use of case management in caring for people with chronic conditions in the primary care settings and the MCP Model.

Professional Case Management in the Making Care Primary Model

Findings from the systematic reviews shared in Exhibit 1 also provide key insights into the context (foundational structures including community connections), systems or processes (care management and care coordination), and outcomes of case management practice in primary care. The compelling findings are summarized in Exhibit 2 to provide a roadmap for meeting MCP Model requirements and expectations and are highlighted according to the three Model domains.

Exhibit 2: Context, Processes, and Outcomes of Case Management in Primary Care

Context	Processes (Care Management, Care Coordination/Integration, & Community Connections)	Outcomes
<ul style="list-style-type: none"> • Presence of interdisciplinary or interprofessional care teams with the PCM as a key member • Focus on care coordination across providers and settings of the continuum of health and social care • Community collaborations and connections • Clearly defined case manager role, responsibilities 	<ul style="list-style-type: none"> • Case finding for case management effectiveness (high-risk patients and populations (such as patients with past high access to services)) • Individualized care plans integrating multiple types of providers from a comprehensive assessment of patient health and social needs • Provision of high-intensity interventions with integrated physical and behavioral health services and community resources • Care coordination across multiple settings and various providers • Patient engagement for self-management 	<ul style="list-style-type: none"> • <i>Patient-related</i> such as improved quality of life, improved engagement including self-efficacy and self-management, increased satisfaction, and increased access to care • <i>Healthcare provider-related</i> such as increased communication among primary care providers and community services, improved care coordination and integration • <i>Healthcare organization-related</i> such as reduction in unnecessary ED/hospital admissions, lower cost, enhanced continuity of care

The interactions by PCMs with the interprofessional team are apparent in Exhibit 2. CMSA’s commitment to fostering interprofessional team collaboration for all healthcare stakeholders underscores the dedication of its workforce to partner with primary care practitioners toward the success of the MCP Model. CMSA defines case management as “a collaborative process of assessment, planning, facilitation, care coordination, evaluation, and advocacy for options and services to meet an individual’s and family’s comprehensive health needs through communication and available resources to promote patient safety, quality of care, and cost-effective outcomes.”² The MCP Model incorporates care management which, like case management is a unique approach to the provision of health and social services to help patients meet their goals.¹ Both the MCP Model and the process of case management include a specially trained care manager or coordinator who collaborates with the care team in managing resource-intensive interventions to ensure the right patients receive the right care at the right time in an optimal setting. In line with the MCP Model, CMSA’s definition is grounded in values that emphasize comprehensive, patient/family-centered care, individualized and holistic care plans, teamwork, and the importance of each component of the quintuple aim for US healthcare – improved experience, better outcomes, lower cost, better clinician wellbeing, and health equity.

PCMs engaged in primary care settings may comprise care coordinators and care managers who are either registered nurses or social workers. They integrate care coordination and chronic disease management functions for various patients, including those with multiple chronic illnesses and social risk factors (i.e., social care needs). Their interventions focus on enabling these patients and their caregivers to navigate the complex healthcare system, receive the services and resources they need when they need them, and develop self-management knowledge and skills necessary for adherence to health regimens and treatment plans to avoid unnecessary access to acute care services.²⁰ PCMs work collaboratively with the primary care team, specialty care consultants, and other care support providers, such as psychologists, counselors, dietitians, therapists, and those based in the community.

This collaboration aims to ultimately ensure the delivery of appropriate services based on patient needs, avoid unnecessary use of acute care resources, and enhance quality, safety, and cost-conscious care outcomes.⁴ Care integration efforts of PCMs ensure patients receive timely and effective primary care services that are coordinated, person-centered, accountable, and of utmost value.

The MCP Model encompasses three tracks committed to transforming primary care organizations and practices into patient-centered, holistic, and socially responsive entities: Building Infrastructure, Implementing Advanced Primary Care, and Optimizing Care and Partnerships. These essential elements can elevate focus from just medical conditions to integrating the full spectrum of factors influencing a person’s health and well-being needs.²³⁻²⁵

In the MCP Model, the PCM’s responsibilities are evident across all three tracks and substantiate the importance of the role and function of PCM in primary care settings. Exhibit 3 summarizes the essential responsibilities of PCMs in each of the three MCP Model tracks and relates them to care integration and collaboration. The identified processes and interventions provide a clear roadmap for evolving the increased complexity and diversity of case management practice along the tracks and as the MCP Model matures.

Exhibit 3: Case Management Across the Three Tracks of the Making Care Primary Model

MCP Model Track	Professional Case Manager’s Responsibilities	Collaborations and Integrations
Building Infrastructure	<p><i>Foundational stage.</i></p> <p>PCMs are primarily focused on establishing the groundwork for effective SDOH screening and intervention.</p> <p>PCMs identify patients’ immediate social needs that can be quickly addressed, setting the stage for more comprehensive interventions later.²⁵</p>	<p>PCMs work closely with primary care teams to coordinate care, ensuring that social needs are considered alongside medical needs.</p> <p>PCMs are critical in facilitating communication across a multidisciplinary team, ensuring that all aspects of a patient’s health, including social factors, are considered in care planning and delivery.²⁵</p> <p>PCMs and other care team members develop protocols for SDOH screening and initiating the first steps in building a network of community resources and partnerships.^{26, 27}</p>
Implementing Advanced Primary Care	<p><i>A systematic and integrated approach to SDOH management.</i></p> <p>PCMs implement comprehensive screening processes for all patients, identifying a broader range of social needs and ensuring that these needs are addressed in the care plan’s needs.²³</p> <p>PCMs work becomes more data-driven, with ongoing assessment and adjustment of interventions based on outcomes, enhancing the precision and effectiveness of the care provided.</p>	<p>PCMs collaborate more closely with community partners to design and implement interventions that are tailored to the patient’s specific social needs identified through screening.^{28, 29}</p> <p>The integration of case management into the care team deepens, with PCMs playing a pivotal role in coordinating care across care settings and a broader array of health and social services.</p>

MCP Model Track	Professional Case Manager's Responsibilities	Collaborations and Integrations
<p>Optimizing Care and Partnerships</p>	<p>Mature expression of the MCP Model.</p> <p>PCMs engage in advanced quality improvement initiatives, utilizing data and analytics to continuously refine and personalize interventions to meet each patient's unique social and health needs.²⁶</p> <p>PCMs are key players in developing strategies to optimize workflows and enhance care integration, ensuring that the entire care team is responsive to the dynamic and complex needs of patients.^{24, 28}</p>	<p>PCMs contribute to the full integration of SDOH into the fabric of patient care planning and delivery, reflecting a sophisticated understanding of how social factors interplay with medical conditions to affect health outcomes needs.²³</p> <p>PCMs not only address individual patient needs but also contribute to broader organizational learning and improvement, influencing the strategic direction of the primary care practice within the context of the MCP Model.²⁹⁻³¹</p>

Behavioral Health Integration

The quality of physical, behavioral, and social health outcomes is an industry imperative. It is dependent on the true integration of these aspects of the patient's holistic care and case management services. This integration is also a core area of focus in the MCP Model. Primary care providers are at the gateway of care for these patients, who require considerable time, attention, and coordination of resources that enhance access to identified treatment and resources. Case management's interdisciplinary workforce has historically partnered with physicians, nurse practitioners, and physician assistants to achieve care outcomes, especially for populations with complex and multiple chronic conditions across practice settings. Compelling studies affirm the priority of primary care in assessing the interplay of HRSNs and chronic physical and behavioral health conditions across populations. Early randomized trials have observed Medicare and Medicaid beneficiaries to experience significantly higher rates of multiple co-existing chronic health conditions requiring increasing care needs. Upwards of 75% of these populations experience the HRSNs along with more formally diagnosed severe mental illnesses such as bipolar disorder, major depression, and schizophrenia.³²⁻³⁹

Vilendrer et al.⁴⁰ detailed how CMS' mandatory screening of HRSNs under the 2024 Inpatient Prospective Payment System poses additional stress and burden to primary care providers and requires support from other care team members such as PCMs. In their research, Vilendrer et al.⁴⁰ estimated that over 51% of patients had positive screens for one or more social determinants of health (SDOH) during encounters that required intense care coordination activities and community-based resources and support. In direct response to these challenges, the healthcare industry must adopt evidence-based, whole-person care approaches as described in the MCP Model to manage the human condition and its associated costs more effectively and efficiently. Primary care provider shortages and burnout and the rising complexity of patients' chronic health conditions support the need for innovative care approaches that align with team-based care, like the MCP Model.⁴¹ Such models present opportunities to engage case managers, improve patient safety, and decrease disparities, especially for the most vulnerable patient populations, including those in disadvantaged communities or suffering from multiple chronic and complex illnesses.

Integrated care models like the Collaborative Care Model (CoCM) have been utilized to treat behavioral health conditions in primary care. Collaboration by care/case managers and psychiatric consultants has yielded positive outcomes in managing the complexity of behavioral health within primary care across the lifespan.³⁷ The CoCM was at the forefront of demonstrating the efficacy of integrated care partnerships across assorted demographics and practice settings.

Early randomized trials with adolescents experiencing depression who were seen in primary care yielded significant improvement in symptoms over 12 months compared to usual care models.⁴² Reist et al.³⁷ analyzed peer-reviewed clinical, meta-analysis, and observational studies that amplified the model's success across geriatrics, perinatal health, and patients experiencing substance use and addiction. The combined approach of a primary care provider, behavioral health case manager, and psychiatrist has been deemed effective through integrative reviews across demonstration projects including older adults with moderate and severe anxiety and depression diagnosed with chronic respiratory conditions, veterans with comorbid substance use, post-traumatic stress disorder and cancers, and other populations.^{34, 37, 39}

Ee, et al.³³ referenced the high efficacy of CoCM for patients with co-occurring severe mental illness and substance use with other chronic conditions (e.g., asthma, cancers, cardiovascular disorders, diabetes). The experience with the CoCM emphasizes the importance of medical and mental health care integration, which is a core element of the MCP Model, therefore providing an opportunity for continued enhancement of case management practice in primary care.

Older adults frequently benefit from proactive screening and assessment of co-existing chronic conditions (e.g., congestive heart failure, chronic obstructive pulmonary disease, diabetes, renal disease) and substance use with psychopharmacological management for anxiety, depression, and insomnia.^{43, 44} Carron et al.⁴⁵ conducted an overview of systematic reviews that identified how primary care delivery for the population is most successful when using interprofessional teams and integrated care models; higher levels of patient engagement and satisfaction and greater treatment adherence were of note. Again, behavioral health integration has proven itself through increased patient engagement and treatment adherence, as well as decreased patient morbidity and mortality with treatment. The research reinforces how the MCP Model's focus on prevention is optimized through the use of a unified primary care and case management approach.

Keys to Successful Implementation of the MCP Model

Primary care practices and organizations face numerous challenges in improving outcomes, patient engagement, and lowering costs on a day-to-day basis. Although not directly stated, the MCP Model advances the use and importance of the patient-centered medical home (PCMH) concept, which has been adopted for some time as a proven approach to care management in primary care, especially for patients with multiple chronic conditions. The MCP Model, like the PCMH, is poised to provide a value-based care context and enhance patient care management and clinical operations within the primary care practice settings. It also necessitates the availability of interprofessional care teams working collaboratively to improve patient populations' health outcomes; PCMs are integral members of these care teams as the hub of care coordination, integration, and community connections. Additionally, the goal of the MCP Model is also synergistic with the PCMH's, emphasizing that patients receive the care they need, when needed, by the right providers and at the right time and quantity.

The team-centered approach involves communication, collaboration, and access to care.⁴⁶ The American Medical Association (AMA) describes team-based care as a collaborative system where team members work together to produce efficient, high-quality patient care – an important objective of the MCP Model. The primary care practice team members outlined by the AMA guide the composition of the MCP Model's team, which includes physicians, nurse practitioners, physician assistants, registered nurses, medical assistants, front desk staff, and other practice-specific team members such as pharmacists, behavioral health specialists, social workers, physical therapists, and care coordinators.⁴⁷ According to the National Academies of Sciences,

primary care practice teams highlight the critical role supporting staff (e.g., community health workers (CHWs), health coaches, and behavioral health specialists) play on these teams.⁴⁸ The goals of the PCMH and value-based care arrangements, like the MCP Model, lead to the same overarching goal of improving health outcomes, patient engagement, and lowering costs.⁴⁹

Primary care physicians and other providers, such as nurse practitioners and physician assistants, spend more time assessing and managing their patients' health conditions and defer to other care team members to look for community resources and services to help these patients reach their optimal potential. As key members of primary care teams, PCMs in the MCP Model can apply the guiding principles of case management to effectively design a plan that is beneficial to the patient's self-identified health outcomes while effectively collaborating with the entire healthcare team to ensure the needed community resources and services are available to patients. This approach strengthens discipline-specific care goals, creating a holistic care plan to benefit the patient.

PCMs engage in care management and care coordination activities that connect various settings and providers including the payer, primary and specialty care, community services, and acute care. When we attempt to address the complexities of care transitions, the disconnect is often between the health payer and the primary care setting or the hospital and the primary care setting. The CMSA SOPs direct the PCM to be equipped with the necessary skills, tools, and resources to provide optimal care management and integration services for patients, eventually improving their health outcomes, increasing their engagement and self-management, and reducing costs. The skill set of PCMs warrants their presence in the primary care practice settings as integral members of the MCP Model.

According to Malouin et al.,⁵⁰ research shows that when PCMs who are either registered professional nurses or social workers provide evidence-based care using shared decision-making along with a collaborative approach to engage patients and improve health outcomes, they engage a practical implementation to improve outcomes in the primary care practice setting. Research by the Michigan Primary Care Transformation (MiPCT) project sheds some light on what is needed to improve patient outcomes, increase patient engagement, and decrease health costs.⁵¹ The current primary care practice model must change, and a collaborative primary care team built on evidence-based practice is needed to meet the objectives of the MCP Model.

A high-functioning primary care team may include a broad spectrum of professionals such as physicians, nurse practitioners, physician assistants, other specialty care providers, pharmacists, social workers, registered nurses, professional case managers, counselors, medical assistants, and community health workers. Each dedicated care team member is positioned to work at the top of their specific training, competencies, certification, and respective licensure to optimize their associated roles and contribute to patient care outcomes. There are many practice-specific considerations for the launch of the MCP Model. Support team members can assume certain delegated functions within the primary care practice to reduce the providers' burden and achieve optimal outcomes for the patient under MCP. The composition of the primary care team in the MCP Model with both licensed professionals and support staff can then ensure the availability of appropriate resources for better care outcomes. It is essential here to close the gap identified when comparing current with needed resources under the MCP Model.

Necessary resources in the MCP Model can be embedded in the primary care practice, centralized and telephonic services, and/or functions implemented through a hybrid approach. Providing wrap-around services for patients and their families requires listening and partnerships. This also benefits from care delivery approaches that ensure the efforts of various care team members are simple and efficient.

Referrals to licensed professionals (e.g., PCM) and paraprofessional (e.g., CHW) staff within the care teams need to have clear workflows and role responsibilities. Embedded care team members must be part of daily communications (e.g., huddles) and weekly care conferences for better care management and care

coordination. Care team visibility and sharing patient stories with providers formally or informally during patient care rounding/conferences help to ensure these team members clearly understand their roles and how to best allocate the resources based on identified patient needs.

To facilitate top-of-license practice, all care team members must have a mutual understanding of roles and responsibilities. Training within all organizational layers will ideally support this knowledge transfer within the team. Ultimately, increased understanding aids in timely internal referrals, hand-off communication, and closed communication loops among care team members and patients, yielding a high-functioning team. Training is generally offered as part of the standard onboarding process, with incremental updates thereafter. With proper training, each member can maximize the time spent on a respective primary function while allowing the other team members to function within their assigned scopes.

In planning to launch the MCP Model, evaluation of the suitability, role optimization, and role delineation of individual members of the interprofessional care team is paramount. It is essential to fully consider staffing needs, particularly when consolidating multiple roles. While cross-training of some care team members is anticipated,⁵² it is necessary to be proactive in mitigating potential role ambiguity, conflict, and overload, which can contribute to role stress and burnout.⁵³ When roles face the challenges of multitasking in various capacities, the inherent risk is that clinicians may need help to fully perform any function optimally. This disparity has the potential to jeopardize the success of the MCP Model overall. While the thought of increasing resources may be concerning, the MCP Model design presents opportunities for funding via infrastructure payments within the allowable categories, track designation, and value-based remuneration.

Upstream measurement will support a continuous feedback loop as leading outcomes keep the practice and care team informed, given claims lag time. Key performance indicators (KPIs) or measures are essential to benchmark the internal trends and outcomes at the primary care practice and organizational level. Systematic measurement and tracking of quality measures and other data points are well-suited to drive care management worklists, patient outreach and follow-up, and other essential touchpoints during the patient's care journey. Patient and provider stories, along with KPIs, highlight the importance of the MCP Model in care delivery, which ultimately supports improved outcomes. How many referrals or specialty provider consults are initiated? What is the average turnaround time? What are the referral outcomes (i.e., closed-loop referrals)? Establishing the proper framework and infrastructure augments the MCP Model's sustainability to benefit patients and practice initiatives for many years.

Conclusion

As an integral member of the interprofessional primary care team, PCMs can be instrumental in providing the necessary coordination of care, integration of behavioral and physical care interventions, collaborating with internal and external primary and specialty team members, navigating the complexities of the healthcare system, and ensuring a patient-centric approach to care that is individualized to the patient's whole-person needs. Evidence from the literature review findings shows that case management promotes patient engagement and shared decision-making, decreases utilization of unnecessary resources, improves the quality of care and outcomes, and enhances both the experience of clinicians and the recipients of care. The MCP Model underscores the critical role of case management in primary care, especially in the context of managing HRSN and SDOH, ensuring patients receive support beyond medical care in all areas affecting their health and well-being. Additionally, the MCP Model is served well when integrating case management and the role of PCMs as key ingredients supporting the Model's three tracks and domains.

References

1. Making Care Primary (MCP) Model | CMS. www.cms.gov. Accessed April 7, 2024. <https://www.cms.gov/priorities/innovation/innovation-models/making-care-primary>.
2. Case Management Society of America. CMSA Standards of Case Management Practice, 2022 Revision - CMSA. cmsa.org. Published 2022. <https://cmsa.org/about/standards-of-case-management-practice/>.
3. Commission for Case Manager Certification. *Code of Professional Conduct for Case Managers*; 1996. Accessed April 5, 2024. <https://ccmcertification.org/sites/ccmc/files/docs/2023/Code%20of%20Professional%20Conduct%20for%20Case%20Managers%20FINAL%202023.pdf>.
4. Hudon C, Chouinard MC, Pluye P, et al. Characteristics of case management in primary care associated with positive outcomes for frequent users of health care: A systematic review. *The Annals of Family Medicine*. 2019;17(5):448-458. doi:10.1370/afm.2419.
5. Liaw W, Moore M, Iko C, Bazemore A. Lessons for primary care from the first ten years of medicare coordinated care demonstration projects. *The Journal of the American Board of Family Medicine*. 2015;28(5):556-564. doi:10.3122/jabfm.2015.05.140322.
6. Khatri R, Endalamaw A, Erku D, et al. Continuity and care coordination of primary health care: A scoping review. *BMC Health Services Research*. 2023;23(1). doi:10.1186/s12913-023-09718-8.
7. Teper MH, Vedel I, Yang XQ, Margo-Dermer E, Hudon C. Understanding barriers to and facilitators of case management in primary care: A systematic review and thematic synthesis. *The Annals of Family Medicine*. 2020;18(4):355-363. doi:10.1370/afm.2555.
8. Valaitis RK, Carter N, Lam A, Nicholl J, Feather J, Cleghorn L. Implementation and maintenance of patient navigation programs linking primary care with community-based health and social services: A scoping literature review. *BMC Health Services Research*. 2017;17(116). doi:10.1186/s12913-017-2046-1.
9. Baker JM, Grant RW, Gopalan A. A systematic review of care management interventions targeting multimorbidity and high care utilization. *BMC Health Services Research*. 2018;18(1). doi:10.1186/s12913-018-2881-8.
10. McDonald KM, Sundaram V, Bravata DM, et al. Closing the Quality Gap: A Critical Analysis of Quality Improvement Strategies (Vol. 7: Care Coordination). Rockville (MD): Agency for Healthcare Research and Quality (US); 2007 Jun. (Technical Reviews, No. 9.7.) Available from: <https://www.ncbi.nlm.nih.gov/books/NBK44015/>.
11. Rohwer A, Toews I, Uwimana-Nicol J, et al. Models of integrated care for multi-morbidity assessed in systematic reviews: A scoping review. *BMC Health Services Research*. 2023;23(1). doi:10.1186/s12913-023-09894-7.
12. Weightman AL, Kelson MJ, Thomas I, et al. Exploring the effect of case management in homelessness per components: A systematic review of effectiveness and implementation, with meta-analysis and thematic synthesis. *Campbell Systematic Reviews*. 2023;19(2). doi:10.1002/cl2.1329.
13. Khanassov V, Vedel I. Family physician-case manager collaboration and needs of patients with dementia and their caregivers: A systematic mixed studies review. *The Annals of Family Medicine*. 2016;14(2):166-177. doi:10.1370/afm.1898.
14. Huntley AL, Johnson R, King A, Morris RW, Purdy S. Does case management for patients with heart failure based in the community reduce unplanned hospital admissions? A systematic review and meta-analysis. *BMJ Open*. 2016;6(5):e010933. doi:10.1136/bmjopen-2015-010933.
15. Joo JY, Huber DL. Community-based case management effectiveness in populations that abuse substances. *International Nursing Review*. 2015;62(4):536-546. doi:10.1111/inr.12201.
16. Albertson EM, Chuang E, O'Masta B, Miake-Lye I, Haley LA, Pourat N. Systematic review of care coordination interventions linking health and social services for high-utilizing patient populations. *Population Health Management*. 2021;25(1):73-85. doi:10.1089/pop.2021.0057.
17. Chang E, Ali R, Seibert J, Berkman ND. Interventions to improve outcomes for high-need, high-cost patients: A systematic review and meta-analysis. *Journal of General Internal Medicine*. Published online October 11, 2022. doi:10.1007/s11606-022-07809-6.
18. Checa C, Canelo-Aybar C, Suclupe S, et al. Effectiveness and cost-effectiveness of case management in advanced heart failure patients attended in primary care: A systematic review and meta-analysis. *International Journal of Environmental Research and Public Health*. 2022;19(21):13823. doi:10.3390/ijerph192113823.
19. Joo JY, Liu MF. Case management effectiveness in reducing hospital use: a systematic review. *International Nursing Review*. 2016;64(2):296-308. doi:10.1111/inr.12335.
20. Karam M, Chouinard MC, Poitras ME, et al. Nursing care coordination for patients with complex needs in primary healthcare: A scoping review. *International Journal of Integrated Care*. 2021;21(1):1-21. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7977020/>.

21. Smith SM, Wallace E, O'Dowd T, Fortin M. Interventions for improving outcomes in patients with multimorbidity in primary care and community settings. *Cochrane Database of Systematic Reviews*. Published online March 15, 2016. doi:[10.1002/14651858.cd006560.pub3](https://doi.org/10.1002/14651858.cd006560.pub3).
22. Stokes J, Panagioti M, Alam R, Checkland K, Cheraghi-Sohi S, Bower P. Effectiveness of case management for “at risk” patients in primary care: A systematic review and meta-analysis. *Quinn TJ, ed. PLOS ONE*. 2015;10(7):e0132340. doi:[10.1371/journal.pone.0132340](https://doi.org/10.1371/journal.pone.0132340).
23. Campagna V, Mitchell E, Krsnak J. Addressing social determinants of health: A care coordination approach for professional case managers. *Professional Case Management*. 2022;27(6):263-270. doi:[10.1097/ncm.0000000000000590](https://doi.org/10.1097/ncm.0000000000000590).
24. Kostelanez S, Pettapiece-Phillips M, Weems J, et al. Health care professionals’ perspectives on universal screening of social determinants of health: A mixed-methods study. *Population Health Management*. 2021;25(3). doi:[10.1089/pop.2021.0176](https://doi.org/10.1089/pop.2021.0176).
25. Moreo K. Community and case management interventions to address social determinants of health in infectious disease. *Professional Case Management*. 2021;26(1):4-10. doi:[10.1097/ncm.0000000000000453](https://doi.org/10.1097/ncm.0000000000000453).
26. Boch S, Keedy H, Chavez L, Dolce M, Chisolm D. An integrative review of social determinants of health screenings used in primary care settings. *Journal of Health Care for the Poor and Underserved*. 2020;31(2):603-622. doi:[10.1353/hpu.2020.0048](https://doi.org/10.1353/hpu.2020.0048).
27. Pinto AD, Bloch G. Framework for building primary care capacity to address the social determinants of health. *Can Fam Physician*. 2017 Nov;63(11):e476-e482. PMID: 29138172; PMCID: PMC5685463.
28. Davidson KW, Kemper AR, Doubeni CA, et al. Developing primary care–based recommendations for social determinants of health: methods of the U.S. preventive services task force. *Annals of Internal Medicine*. 2020;173(6):461-467. doi:[10.7326/m20-0730](https://doi.org/10.7326/m20-0730).
29. DeVoe JE, Bazemore AW, Cottrell EK, et al. Perspectives in primary care: A conceptual framework and path for integrating social determinants of health into primary care practice. *The Annals of Family Medicine*. 2016;14(2):104-108. doi:[10.1370/afm.1903](https://doi.org/10.1370/afm.1903).
30. Bonnell LN, Crocker AM, Kemp K, Littenberg B. The relationship between social determinants of health and functional capacity in adult primary care patients with multiple chronic conditions. *The Journal of the American Board of Family Medicine*. 2021;34(4):688-697. doi:[10.3122/jabfm.2021.04.210010](https://doi.org/10.3122/jabfm.2021.04.210010).
31. Katz A, Chateau D, Enns JE, et al. Association of the social determinants of health with quality of primary care. *The Annals of Family Medicine*. 2018;16(3):217-224. doi:[10.1370/afm.2236](https://doi.org/10.1370/afm.2236).
32. Adepoju OE, Liaw W, Patel NC, et al. Assessment of unmet health-related social needs among patients with mental illness enrolled in medicare advantage. *JAMA Network Open*. 2022;5(11):e2239855. doi:[10.1001/jamanetworkopen.2022.39855](https://doi.org/10.1001/jamanetworkopen.2022.39855).
33. Ee C, Lake J, Firth J, et al. An integrative collaborative care model for people with mental illness and physical comorbidities. *International Journal of Mental Health Systems*. 2020;14(1). doi:[10.1186/s13033-020-00410-6](https://doi.org/10.1186/s13033-020-00410-6).
34. Holmes A, Chang YP. Effect of mental health collaborative care models on primary care provider outcomes: An integrative review. *Family Practice*. 2022;39(5). doi:[10.1093/fampra/cmab026](https://doi.org/10.1093/fampra/cmab026).
35. Isaacs AN, Mitchell E. Mental health integrated care models in primary care and factors that contribute to their effective implementation: A scoping review. *International Journal of Mental Health Systems*. 2024;18(1). doi:[10.1186/s13033-024-00625-x](https://doi.org/10.1186/s13033-024-00625-x).
36. National Institute on Drug Abuse. Part 1: The connection between substance use disorders and mental illness. National Institute on Drug Abuse. Published September 27, 2020. Accessed April 8, 2024. <https://nida.nih.gov/publications/research-reports/common-comorbidities-substance-use-disorders/part-1-connection-between-substance-use-disorders-mental-illness>.
37. Reist C, Petiwala I, Latimer J, et al. Collaborative mental health care: A narrative review. *Medicine*. 2022;101(52). doi:[10.1097/md.00000000000032554](https://doi.org/10.1097/md.00000000000032554).
38. Ryan JL, Franklin SM, Canterberry M, et al. Association of health-related social needs with quality and utilization outcomes in a medicare advantage population with diabetes. *JAMA network open*. 2023;6(4):e239316-e239316. doi:[10.1001/jamanetworkopen.2023.9316](https://doi.org/10.1001/jamanetworkopen.2023.9316).
39. Vogel ME, Kanzler KE, Aikens JE, Goodie JL. Integration of behavioral health and primary care: current knowledge and future directions. *Journal of Behavioral Medicine*. 2016;40(1):69-84. doi:[10.1007/s10865-016-9798-7](https://doi.org/10.1007/s10865-016-9798-7).
40. Vilendrer S, Thomas SC, Belnap T, et al. Screening for social determinants of health during primary care and emergency department encounters. *JAMA network open*. 2023;6(12):e2348646-e2348646. doi:[10.1001/jamanetworkopen.2023.48646](https://doi.org/10.1001/jamanetworkopen.2023.48646).
41. Health Resources & Services Administration. *State of the Primary Care Workforce*; 2023. <https://bhwh.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/state-of-primary-care-workforce-2023.pdf>.
42. Richardson LP, Ludman E, McCauley E, et al. Collaborative care for adolescents with depression in primary care. *JAMA*. 2014;312(8):809. doi:[10.1001/jama.2014.9259](https://doi.org/10.1001/jama.2014.9259).

43. Siddique SM, Tipton K, Leas B, et al. Interventions to reduce hospital length of stay in high-risk populations: A systematic review. *JAMA Network Open*. 2021;4(9):e2125846-e2125846. doi:[10.1001/jamanetworkopen.2021.25846](https://doi.org/10.1001/jamanetworkopen.2021.25846).
44. Solimeo SL, Steffen MJA, Gardner EE, et al. Using the PACT resources framework to understand the needs of geriatric primary care teams. *Journal of the American Geriatrics Society*. 2020;68(9):2006-2014. doi:[10.1111/jgs.16498](https://doi.org/10.1111/jgs.16498).
45. Carron T, Rawlinson C, Arditi C, et al. An overview of reviews on interprofessional collaboration in primary care effectiveness. *International Journal of Integrated Care*. 2021;21(2). doi:[10.5334/ijic.5588](https://doi.org/10.5334/ijic.5588).
46. Patient-Centered Medical Home - Horizon Blue Cross Blue Shield of New Jersey. www.horizonblue.com. Published 2015. <https://www.horizonblue.com/members/health-programs/patient-centered-programs/patient-centered-medical-home>.
47. American Medical Association. Team-Based Care Improve Patient Care and Team Engagement Through Collaboration and Streamlined Processes. edhub.ama-assn.org. Published September 19, 2023. <https://edhub.ama-assn.org/steps-forward/module/2702513>.
48. National Academies of Sciences E, Division H and M, Services B on HC, et al. Primary Care in the United States: A Brief History and Current Trends. National Academies Press (US); 2021. <https://www.ncbi.nlm.nih.gov/books/NBK571806/>.
49. Lewis C, Horstman C, Blumenthal D, Abrams M. Value-Based Care: What It Is, and Why It's Needed. The Commonwealth Fund. Published February 7, 2023. <https://www.commonwealthfund.org/publications/explainer/2023/feb/value-based-care-what-it-is-why-its-needed>.
50. Malouin JM, Malouin RA, Sarinopoulos I, et al. Physician and staff acceptance of care managers in primary care offices. *The Journal of the American Board of Family Medicine*. 2017;30(2):140-149. doi:[10.3122/jabfm.2017.02.160246](https://doi.org/10.3122/jabfm.2017.02.160246).
51. Shaohui Zhai P, Rebecca A. Malouin P, Jean M. Malouin MD, Kathy Stiffler MA, Clare L. Tanner P. Multipayer primary care transformation: Impact for medicaid managed care beneficiaries. *The American Journal of Managed Care*. 2019;25(11). <https://www.ajmc.com/view/multipayer-primary-care-transformation-impact-for-medicare-managed-care-beneficiaries>.
52. Keller SC, Cosgrove SE, Arbaje AI, et al. Roles and role ambiguity in patient- and caregiver-performed outpatient parenteral antimicrobial therapy. *The Joint Commission Journal on Quality and Patient Safety*. 2019;45(11):763-771. doi:[10.1016/j.jcjq.2019.07.003](https://doi.org/10.1016/j.jcjq.2019.07.003).
53. Stepanek S, Paul M. Umbrella summary: Role Stress | Quality Improvement Center for Workforce Development. www.qic-wd.org. Published 2022. <https://www.qic-wd.org/umbrella/role-stress>.