The CMM in Primary Care Study

<table>
<thead>
<tr>
<th>Societal Problem</th>
<th>CMM as a Solution</th>
<th>Clinical Pharmacy’s Challenge</th>
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<tbody>
<tr>
<td>More than 50% of Americans have at least one chronic condition, and &gt; 40% have two or more.</td>
<td>Pockets of strong evidence exist across the US in single health systems and practices that CMM improves patient outcomes, decreases cost, and contributes to a more positive patient and clinician experience.</td>
<td>Lack of specificity of clinical intervention.</td>
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<td>Nonadherence has been shown to result in $100 billion each year in excess hospitalizations.</td>
<td>Inconclusive evidence of uniform benefit of medication management services across outpatient settings is likely due to inconsistency in magnitude and precision of intervention and metrics rather than lack of impact.</td>
<td>Lack of implementation supports to ensure fidelity to a defined intervention.</td>
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<td>$528 billion spent on misuse, underuse, and overuse of medications each year.</td>
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<td>Inconsistent recognition of value by external stakeholders.</td>
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<td>Approximately 50%–75% of patients do not take their medications as prescribed.</td>
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<td>Lack of a sustainable business model to support clinical services.</td>
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Comprehensive medication management (CMM) is a patient-centered approach to optimizing medication use and improving patient health outcomes that is delivered by a clinical pharmacist working in collaboration with the patient and other health care providers. This care process ensures each patient’s medications (whether prescription, nonprescription, alternative, traditional, vitamins, or nutritional supplements) are individually assessed to determine that each medication has an appropriate indication, is effective for the medical condition and achieving defined patient and/or clinical goals, is safe given the comorbidities and other medications being taken, and that the patient is able to take the medication as intended and adhere to the prescribed regimen.

Summary of the Challenge

Although evidence supports CMM’s impact on the Quadruple Aim of healthcare, the lack of systematic and conclusive evidence has been attributed, in large part, to implementation variability, which limits replication and scaling of the intervention. Ensuring consistent CMM delivery is a critical first step to demonstrating reproducible value and recognition of CMM as an evidence-based intervention. Further, a sustainable business model to support widespread scale of clinical services is essential.

The Opportunity: Applying Implementation Science to the CMM Practice Model

Implementation science is fundamental to the design of useable and successful interventions.

Goal of the Implementation Arm of the Study: Utilizing the expertise and experience of pharmacists embedded in 35 primary care practices providing CMM9 and building upon prior work10-14, identify best practices in CMM delivery in order to a) establish a shared philosophy of practice for CMM, b) explicitly define and operationalize the intervention, and c) frame the foundational elements core to managing the CMM practice in primary care.

Why is This Important? The concept of a “usable innovation” is derived from the implementation science literature, which establishes that for an intervention or service to be consistently implemented, reliably produce outcomes, and be sustained, it must include:15-17
1. A clear description of the guiding principles or philosophy of practice,
2. A clear description of the essential functions that frame the intervention,
3. A clear description of the operational definitions that explicitly define how each essential function will be operationalized, and
4. A practical assessment of the performance of practitioners who are delivering the service (i.e., fidelity), which helps to ensure that the intervention is being implemented as intended.

New Insights and Contributions to Practice from this Research

- Refined philosophy of practice including 5 core philosophical tenets of CMM,18
- Identified essential functions and operational definitions to create a common language for the CMM Patient Care Process and developed an accompanying self-assessment tool,19
- Identified the CMM Practice Management Framework and Core Components to implementing and sustaining CMM in practice and developed an accompanying self-assessment tool,20,21
- Developed a Fidelity Assessment System for CMM to measure the extent to which an intervention is implemented as intended.22
The CMM in Primary Care Study: Assessing Impact of CMM on the Quadruple Aim

Goal of the Effectiveness Arm of the Study: As a secondary goal of the study, we sought to evaluate the impact of CMM on the Quadruple Aim: a) clinical quality measures, b) the patient experience, c) the clinician experience, and d) healthcare costs. The primary focus of the study (i.e., the implementation arm) required a retrospective design of the effectiveness evaluation.

Why is This Important? These data add to the existing evidence base for CMM as a value-added service to improve patient care.

Creating a CMM Implementation System

To optimize medication use, improve patient care, and control costs, it is necessary to demonstrate that interventions like CMM produce consistently positive outcomes. This goal can be accomplished by reducing implementation variability. Ensuring that CMM can be implemented as intended requires customizing and applying implementation supports that can serve as a roadmap to those interested in the implementation and delivery of CMM.

The CMM Implementation System will be released via a website platform (v2.0) in early 2021. Resources include: assessment of readiness to implement CMM, team charters, philosophy of practice, self-assessment tools for the CMM patient care process and CMM practice management, plan-do-study-act templates, implementation outcome measures, and more.

Key Study Take-Aways

- Created a set of evidence-based CMM implementation tools and resources to facilitate consistent implementation, replication, and scale of CMM in practice and facilitate implementation research.
- Added to the existing evidence base to support the value proposition for CMM aligned with the Quadruple Aim.

Find a complete list of study deliverables here.

Select Future Applications

Practice: Establish a commitment to consistent use of CMM terminology; use the CMM implementation system (coming 2021) and its tools and resources to guide the design, implementation, and improvement of CMM in practice.

Education: Use the CMM Patient Care Process to guide the education, training, and assessment of the Joint Commission of Pharmacy Practitioners Patient Care Process in curricula and apply the CMM practice model and fidelity assessments in residency training.

Research: Conduct prospective studies of CMM, in partnership with a single payer, to rigorously evaluate the impact on outcomes and return-on-investment, and establish local data to scale; apply CMM implementation tools and resources in continued CMM research throughout the profession.
Executive Summary Citations


