

# Value Framework for Providing CMM in Telehealth

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## Introduction and Background

The COVID-19 pandemic created the need for rapid adoption of telehealth technology by many health care providers and systems across the country to care for patients.<sup>1</sup> Although no standard definition of telehealth exists, the U.S. Department of Health and Human Services defines telehealth as “the use of electronic information and telecommunication technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration.”<sup>2</sup> Technologies utilized to provide telehealth may include but are not limited to video conferencing, the internet, store-and-forward imaging, streaming media and terrestrial and wireless communications. The escalation of telehealth has shed light on the opportunities that exist to increase patient access to care through virtual visits that extend beyond the traditional in-office visit. Included as an opportunity for telehealth is comprehensive medication management (CMM), a service that optimizes medication therapy and is patient-centered.<sup>3</sup> CMM is defined as “the standard of care that ensures each patient’s medications (whether they are prescription, nonprescription, alternative, traditional, vitamins or nutritional supplements) are individually assessed to determine that each medication is appropriate for the patient, effective for the medical condition, safe given the comorbidities and other medications being taken and able to be taken by the patient as intended.”<sup>4</sup> Although obstacles to telehealth delivery of CMM exist, the benefits<sup>3,5,6</sup> to providers, patients and payers outweigh the barriers. This value framework, intended for health care team members, payers for health care services and health care policy makers, proposes a guide for providing CMM services via telehealth.

## Goal for Providing Telehealth within CMM

Achieving medication optimization is the patient-centered goal of CMM, irrespective of means of delivery. The goal of expanding CMM services to telehealth is to increase access to the medication optimization care process provided during face-to-face visits. Provision of CMM via telehealth is intended to be provided as an integral part of team-based care, including the patient, their caregivers as requested, the physician, nurse practitioners, physician assistants, registered nurses, clinical pharmacists and others involved with medication-based therapy. Therefore, telehealth provides an opportunity to expand access to CMM.

## Value of CMM via Telehealth

Remote delivery of CMM services is not new, having long been employed by the Veterans Affairs (VA) health care system and in rural or urban settings to reach patients who live substantial distances from health care services or who experience significant transportation barriers. A review of the literature was conducted to specifically target evidence to support the benefits of CMM services provided via telehealth. Forty studies were identified, of which 16 either fully embodied or met the majority of CMM concepts.<sup>7-22</sup> Eight studies used a randomized controlled methodology, employing usual care as the most common control. All research was conducted in adult ambulatory populations of which six were within the VA health care system, four identified as rural and the remainder were described as physician office or health-system outpatient. Two-way audio-video technology was employed in seven studies, audio-only (telephones) was used in eight studies and one trial used remote monitoring technology.

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Many articles utilized more than one telehealth modality such as the addition of text messaging and remote physiologic monitoring. Results of the published studies suggest that CMM provided via telehealth has a significantly positive influence on clinical outcomes compared to usual care controls. Although a few studies showed no difference, none reported suboptimal results compared to usual care. Positive clinical outcomes were mainly demonstrated with intermediary outcome measures of chronic disease control, most used blood pressure goals in patients with hypertension. Other results of note were high patient satisfaction rates, improvements in no-show visit rates compared to face-to-face scheduling and a doubling of return-on-investment. In summary, positive value exists when CMM services are offered via telehealth by providing a cost-effective option for patients and improving patient outcomes, satisfaction and access to care.

In considering a change in modality of care, such as telehealth, it is important that the modality maintains or improves the quality of care and demonstrates value to each stakeholder in the process. The value elements noted below for each stakeholder are those associated with providing telehealth care in general, with an emphasis on the distinct advantages of CMM services using telehealth.

## Value to the Provider

- Equivalent or better quality of care and clinical outcomes as compared to in-person care.<sup>5,23-29</sup>
- Expanded and reliable reach to patients residing in rural areas, patients unable to coordinate a visit during normal business hours and patients with transportation barriers.<sup>5,6,27,30-32</sup>
- Reduced no-show appointments.<sup>33</sup>
- Improved efficiency and workflow by minimizing logistical barriers.<sup>32</sup>
  - Facilitates team-based care by enabling multiple providers to concurrently participate in a patient visit or discuss a patient plan of care.<sup>27,34</sup>
  - Efficiency in collaboration with other provider types, including CMM providers in different geographical locations through e-consults or co-visits.<sup>27,30</sup>
- Improved plan of care decision making by direct observation of the patient's home and social situations and detection of errors or medication use issues.<sup>32</sup>
- Increased patient engagement and strengthened provider-patient relationship due the patient's more active role in self-monitoring (e.g., home blood-pressure, blood glucose and weight).<sup>5,35-38</sup>
- Improved patient safety by not delaying care until a face-to-face visit, leading to a more timely assessment of determining and solving problems related to the therapeutic plan of care.<sup>27,39,40</sup>

## Value for the Patient and their Caregiver or Family

- Quality of telehealth care is similar to in-person care when rated by patients surveyed.<sup>5,24,26</sup>
- Expanded access to care for people residing in rural areas, those with transportation issues or patients with work hour availability challenges.<sup>5,6,27</sup>
- Increased options and convenience to receiving care.<sup>26,34,41</sup>
  - Reduced life disruption to secure time off work or from family care responsibilities.
  - Reduced or eliminated wait times for visits.
  - Increased personal time for patients—especially those with multiple chronic diseases and providers due to frequent care visits which consume significant time in their lives.
  - Less dependency and concern when transportation is not readily available or costly.

- Increased options for patients to communicate directly with their health care team (e.g., secure email, texting, telephone and audio-video visits).
- Most medication problems occur at home, creating an opportunity for the provider to witness an adverse event in real time and mitigate the problem before it escalates to worse outcomes—leading to safer care through telehealth.<sup>27,39,40,42</sup>
- Reduced personal health care costs from travel, lost wages or other associated costs.<sup>5,24-26</sup>
- Greater access to specialized care (e.g., CMM) that may not be available in their communities.
- Improved engagement and confidence in self-management (e.g., self-monitoring of weight, blood pressure) leads to improved self-care behaviors (e.g., medication adherence).<sup>27,38,42</sup>

## Value for the Payer

- CMM reduces overall health care expenditures and improved quality and outcomes for patients and providers, even with the additional investment of telehealth.<sup>5,6,23-29,32,41,43</sup>
  - Improved health outcomes are equal or greater when CMM is delivered via telehealth as compared to traditional care delivery methods.<sup>26</sup>
- Creates a process of care and associated outcomes for value-based payment models and a new modality for delivering CMM services.
- Reduced no-show appointment rates, which may improve patient health outcomes due to needed follow-up care.<sup>33</sup>
- Decreased downstream health care utilization, potentially, with communication and resolution of acute health issues that can occur sooner or in real time.<sup>25</sup>
- Access to health care, such as CMM, not previously available to underserved communities.<sup>5,6,30,31</sup>
- Enables provider assessment of the home environment and social determinants of health that may result in more optimal therapeutic plans of care.
- Ease and efficiency of telehealth CMM services for the patient and provider may improve the management, monitoring and follow up of medication-related therapy and chronic conditions.<sup>6</sup>
  - Inadequate monitoring of medications, along with prescribing errors, account for nearly all preventable medication harm during the medication use process.<sup>44</sup>
  - Medication harm, or non-optimized medication use, costs \$528 billion annually.<sup>45</sup>
- Improved continuity of care for the CMM interprofessional care team (e.g., virtual huddles).<sup>6</sup>
- Improved medication management by building patient-provider trust, patient self-management and medication adherence. This results in better quality of care and reduced downstream costs because telehealth creates easier connections between patients and CMM providers.<sup>29</sup>
- The impact on cost savings using telehealth remains mixed and likely needs further exploration. However positive cost savings have been reported by payers.<sup>6,28,46-51</sup>
- Allowing convenient access to care and CMM services via telehealth has the potential to increase member satisfaction and competitiveness in the marketplace.<sup>52</sup>

## Value to Public Health<sup>43</sup>

Telehealth, as shown with the COVID-19 pandemic, reduces strain on the health care system during infectious disease outbreaks by promoting social distancing and reducing disease exposure. In addition, telehealth is an important modality to maintain and initiate care for those in need of CMM services.

Maintaining telehealth services provides public health and providers a means to connect health care to people and communities that are isolated due to social issues, weather, environmental disasters, chronic medical conditions or mental health needs.

## Challenges and Solutions to Achieving Telehealth Provided CMM

Despite the value of utilizing telehealth for patients, providers and payers, the implementation of services is not without challenges. Prior to the COVID-19 pandemic, payment coverage of telehealth was limited and varied significantly amongst payers.<sup>49</sup> During the pandemic, payment coverage and restrictive rules were relaxed. For sustainability of both telehealth and CMM provided via telehealth, effort from multiple stakeholders is needed to address the challenges that exist or may persist in a post-pandemic environment. The gaps hindering effective CMM telehealth services fall into several major categories: regulatory challenges including privacy regulations; insurance coverage and reimbursement for telehealth services; technology infrastructure, interoperability and literacy challenges; and knowledge of how and where to best utilize telehealth versus standard care delivery.

Impediments to telehealth implementation and adoption along with recommendations to mitigate these gaps and concerns are noted below:

### ***Current telehealth regulations impede provision of telehealth services.***<sup>6,53,54</sup>

- The types of services that can be provided through telehealth among payers, patients and providers is not well understood.
  - *Solution:* Ensure parity and fairness in payment for telehealth services to ensure their sustainability.
  - *Solution:* Define services that can safely and effectively be provided via telehealth, identify best practices and widely disseminate this information.
- Variable and restrictive reimbursement rules and regulations for telehealth services increase complexity, create confusion and limit patient access to care (e.g., geographical restrictions and limitations to narrow networks of providers for telehealth services).<sup>54</sup>
  - *Solution:* A rigorous evaluation of the telehealth provided during COVID-19 can identify services that demonstrated value.
  - *Solution:* Synchronize and standardize telehealth rules and regulations to mirror the same service when provided face-to-face to increase simplicity, familiarity and create ease of access for patients and provision of care by providers.
- Telehealth improves access by allowing health care providers to deliver care without geographic limits. However, many state laws restrict providing care across state lines in licensure rules.
  - *Solution:* Support and facilitate efforts for reciprocity among states to allow telehealth to be provided with an active professional license in good standing in any state for all licensed health care providers.<sup>55</sup>
- Restrictive regulations in current telehealth rules encourage care that is siloed to only certain members of the health care team.
  - *Solution:* Payment for telehealth services must be team-based and include CMM services, especially when medication use is prevalent in the population being served.
  - *Solution:* Where required, allow general or audio-visual supervision of clinical staff team members.

- Concern for unsafe and insecure telehealth technology software connections impede its implementation.
  - *Solution:* Set standards for CMM telehealth processes using only the most current security techniques and infrastructure, including clear informed consent procedures.

***Health insurance payment strategy and coverage for telehealth services do not meet the current need or demand.***<sup>5,53,55-57</sup>

- *Solution:* Grow telehealth's reputation as a 21st century tool that uses advances in technology to overcome barriers to optimal patient care that can reduce costs and meet patient goals. CMM via telehealth should be a standard benefit within health insurance policy and equitably available for all patients who may benefit from the service.
- *Solution:* Collaboratively collect data demonstrating value, ideally outcomes and cost data through electronic health records, to support and identify best practices for telehealth via CMM.
- *Solution:* Support CMM via telehealth in fee-for-service and value-based models to enable organizations and health care teams to pivot services and resources as needed to meet their patients and population needs.
- *Solution:* Have sufficient payment structures to support high quality, efficient team-based care via telehealth that best meets patient needs.

***Lack of investment or incentives for infrastructure and concerns for fraud and abuse hinder growth.***<sup>5,57</sup>

- *Solution:* Investment in technology infrastructure that insures efficient, safe and effective CMM via telehealth.
- *Solution:* Add guardrails in systems and processes to minimize fraud and abuse to maximize the benefit patients will receive from telehealth CMM services.
- *Solution:* Increase the use of value-based and other alternative payments as optimal strategies to reduce incentives to provide unwarranted services.

***The current telehealth landscape has inequalities in patient technology access, insufficient provider technology infrastructure, insufficient interoperability to provide optimal patient care and poor technology literacy among those providing and receiving care.***<sup>6,32,53</sup>

- Inequalities to technology access to broadband internet are a barrier to service delivery.
  - *Solution:* Advocate for state and federal policy that improves technology infrastructure and creates universal accessibility to broadband internet.
  - *Solution:* Create affordable data usage plans for providers and the public targeted for the delivery of health care services.
- Inequalities in access to and affordability of hardware to support telehealth affect its viability.
  - *Solution:* Explore innovative solutions to provide and reimburse telehealth technology for both patients and providers.
  - *Solution:* Standardize core infrastructure and process components at the federal health IT level to incentivize and support low-cost vendors for telehealth.
- Lack of interoperability and effective sharing of patient information leads to ineffective care when all health care team members, including those providing CMM, do not have full access to patient information.

- *Solution:* Patient care policies and standards must allow the entire care team, including the clinical pharmacist, to access patient clinical information and data at the point-of-care regardless of geographical location.
- *Solution:* Technology used in telehealth provides access to a patient's complete clinical and diagnostic information housed in electronic health record software and is easy and readily available for all members of the health care team.
- Payment models do not fully support sustainability of CMM telehealth services.
  - *Solution:* Do not brand telehealth as a new service. Instead, brand as a service using 21st century technology to its fullest potential to ensure all valued services, including CMM, are provided and reimbursed at a sustainable level.
  - *Solution:* Create payment models that allow health care teams to determine and employ the best sustainable services to improve patient outcomes of their unique populations.
- Patients with low telehealth technology literacy are a challenge to telehealth delivery.
  - *Solution:* Technology interfaces for patients and the health care team should be standard, easy to use and have simple user-friendly instructions that employ various educational mediums.
  - *Solution:* Advocate for telehealth vendors to prioritize and create software and hardware that is easy to use.
  - *Solution:* Allow patient portals to facilitate telehealth communication.
  - *Solution:* Allocate resources to support telehealth training (e.g., care team, patients).

***Lack of knowledge in understanding how to optimally utilize telehealth can be a challenge.*<sup>32</sup>**

- Concern regarding the safety and efficacy of telehealth services can be a barrier to its utilization.
  - *Solution:* Inform stakeholders that telehealth is not a new type of service, but a method to maximize current technology to meet gaps in providing health care services.
  - *Solution:* Measure outcomes on a broad scale using standard quality metrics.<sup>56</sup>
  - *Solution:* Develop solutions for equity in services for those most at risk for suboptimal telehealth experiences.
- Certain populations may have challenges for optimal utilization of telehealth services (e.g., hearing and vision impaired, mental health challenges, language barriers).
  - *Solution:* Advocate telehealth vendors to collaborate with organizations representing these populations to develop innovative strategies (e.g., closed caption) to meet needs.
  - *Solution:* Payment models should support the use of proxies and caregivers to assist patients with special needs.
- Potential for telehealth to further fragment care.
  - *Solution:* Create rules, regulations and payment that incentivizes and supports interprofessional team-based care.

## Conclusion

For patient-centered care, health care practices and payers must adapt to meet evolving patient-care needs. The integration of telehealth services is an essential step that has proved to be beneficial in meeting the goals of CMM. The implementation of these services provides value to patients and

providers by increasing accessibility, improving work-flow efficiency and contributing to improvements in health outcomes. Although further research is needed to better describe the value and quality of care provided with CMM telehealth visits, the outlook is particularly promising.

*Developed by the Telehealth Delivery of CMM Subgroup of the GTMRx Payment and Policy Solutions Workgroup*

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