



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

Larry Hogan, Governor - Boyd Rutherford, Lt. Governor - Dennis R. Schrader, Secretary

January 13, 2017

The Honorable Thomas M. Middleton
Chair
Senate Finance Committee
3 East Miller Senate Office Bldg.
Annapolis, MD 21401-1991

The Honorable Shane E. Pendergrass
Chair
House Health and Government Operations
Committee
241 House Office Bldg.
Annapolis, MD 21401-1991

Re: SB 242/HB 886 (Ch. 366/367 of the Acts of 2016) – Report on Telehealth Policies of Medicaid Programs in Other States and Planned Enhancements to Maryland’s Medicaid Telehealth Program

Dear Chair Middleton and Chair Pendergrass:

In keeping with the requirements of SB 242/HB 886 (Ch. 366/367 of the Acts of 2016), the Department of Health and Mental Hygiene submits the enclosed report on the telehealth policies of select Medicaid programs in other states, including reimbursement for telehealth services provided in a home setting, along with planned enhancements to the Maryland’s Medicaid telehealth program.

Thank you for your consideration of this information. If you have questions or need more information on the subjects included in this report, please contact Webster Ye, Director of Governmental Affairs at (410) 767-6480.

Sincerely,

Dennis R. Schrader
Secretary

Enclosure

cc: Michael J. (Ben) Steffen
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**Report on the Telehealth Policies of Other States' Medicaid Reimbursement for
Telehealth Services in the Home Setting and Planned Enhancements for
Maryland Medical Assistance**

Submitted by the Department of Health and Mental Hygiene

As Required by SB 242/HB 886 (Ch. 366/367 of the Acts of 2016)

Executive Summary

Pursuant to SB 242/HB 886 (Chapters 366/367 of the Acts of 2016), *Maryland Medical Assistance Program - Telemedicine – Modifications*, the Maryland Department of Health and Mental Hygiene (the Department) respectfully submits this report regarding telehealth services. Specifically, the legislation requires the Department to (1) assess the telehealth policies of select Medicaid programs in other states, including reimbursement for telehealth services provided in a home setting; and (2) detail planned enhancements to the Maryland Medicaid Telehealth Program.

Telehealth is an emerging method of delivering care to patients, where participants and providers interact through different technological mediums. Telehealth services are administered through three primary modalities—live video (synchronous), store-and-forward (asynchronous) and remote patient monitoring (RPM), often called home health monitoring or telemonitoring. Currently, Maryland’s Telehealth Program covers live video conferencing between certain originating and distant sites.

To evaluate opportunities to expand telehealth services available through the Maryland Medicaid Program further, the Department conducted a literature review, researched other states’ policies and interviewed a selection of state Medicaid programs. The literature review focused on services rendered with the participant located in their own home through RPM and live video conferencing to assess whether these telehealth services increase access to care, improve health outcomes, and result in cost-savings. Studies show that RPM is associated with improved outcomes in patients with specific chronic diseases. Studies regarding the use of live video conferencing in the home are limited and results are not definitive. The Department also reviewed telehealth coverage and reimbursement in other states. In addition, the Department spoke to several different state Medicaid programs and the Veterans’ Administration about their telehealth programs. Like Maryland, many states have expanded their programs gradually. Approaches regarding reimbursement, covered services, and providers authorized to engage in telehealth vary widely. Several states have implemented RPM programs for participants with certain chronic conditions and reported success anecdotally. However, states have not evaluated their programs.

Based on these findings, the Department proposes several changes designed to continue to expand the Medicaid Telehealth Program, including:

- Expanding coverage to include RPM for certain chronic conditions;
- Expanding coverage to include additional distant sites and services, including new substance use disorder (SUD) providers; and
- Considering modifications to how Maryland Medicaid reimburses for telehealth services in the future.

The Department believes that these recommendations will ensure Medicaid participants have access to the critical care they need through a still developing method of care delivery.

I. Introduction

Pursuant to SB 242/HB 886 (Chapters 366/367 of the Acts of 2016), *Maryland Medical Assistance Program - Telemedicine – Modifications*, the Department respectfully submits this report regarding telehealth services. Specifically, the legislation requires the Department to (1) assess the telehealth policies of select Medicaid programs in other states, including reimbursement for telehealth services provided in a home setting; and (2) detail planned enhancements to the Maryland Medicaid Telehealth Program.

II. Background & History

Overview of Telehealth and Telemedicine

The telehealth delivery model emerged in part as a way to increase access to and quality of care for individuals living in rural areas. However, it is slowly evolving into a means to augment and enhance the provision of services to all individuals, regardless of their diagnosis or location. The terms telehealth and telemedicine are often used interchangeably, with terminology and definitions varying between different states and their programs.¹ Recently, the Maryland Medicaid program proposed new regulations departing from the use of the terms telemedicine and telemental health in favor of a unified definition under the term “telehealth”. The Department defines telehealth as “the delivery of medically necessary somatic or behavioral health services to a patient at an originating site by distant site provider, through the use of technology-assisted communication.”² For consistency, the term telehealth will be used throughout this report.

Telehealth services are administered through three primary modalities—live video (synchronous), store-and-forward (asynchronous) and remote patient monitoring (RPM) (called home health monitoring or telemonitoring). Maryland Medicaid currently pays for the live video modality. Live video connects patients virtually with practitioners and may serve as an alternative to an in-person visit. The patient’s location is referred to as the originating site, and the telehealth provider’s location, the distant site. Store-and-forward uses non-real time communication to transfer clinical information and pictures, such as an x-ray or a high-resolution image, via e-mail or other electronic transmission for follow-up or evaluation. RPM allows for the collection and transfer of a patient’s vital signs or health data, such as blood pressure or heart rate, for tracking purposes while the patient is at a different site or at home. Participants or their caretakers used technologic devices to gather and report data to a provider at

¹ The Centers for Medicare and Medicaid Services (CMS) adopted the following definition of telemedicine: “[T]elemedicine seeks to improve a patient's health by permitting two-way, real time interactive communication between the patient, and the physician or practitioner at the distant site. This electronic communication means the use of interactive telecommunications equipment that includes, at a minimum, audio and video equipment. CMS views telemedicine as a potentially cost-effective alternative to the traditional face-to-face provision of medical care (e.g., in-person consultations or examinations).” Centers for Medicare & Medicaid Services (CMS), “Telemedicine,” *Medicaid.gov*, accessed September 12, 2016, <https://www.medicare.gov/Medicare-CHIP-Program-Information/By-Topics/Delivery-Systems/Telemedicine.html>.

² The Department is promulgating new regulations to refine its definition of telehealth. Current regulations distinguish between telemedicine, covering somatic services, and telemental health, covering behavioral health services. The new regulations adopt a unified definition encompassing both somatic and behavioral health services under a single term, telehealth. 43:17 Md. Reg. 943-1008 (Aug. 19, 2016), http://www.dsd.state.md.us/MDR/4317/Assembled.htm#_Toc459124759.

another location. More recently, a fourth modality has also begun to emerge in the form of mobile health or “mHealth.” Mobile health uses mobile communications devices, such as smart phones, for health services and information. Mobile health applications are increasingly used to facilitate the three traditional telehealth modalities.

Technology in the telehealth arena is evolving rapidly. Equipment used to perform telehealth services includes web-based video conferencing platforms, computers, tablets and phone applications. For RPM, electronic applications can be used to analyze vital signs including blood pressure, blood oxygen saturation, pulse rate, weight, glucose level, prothrombin time and ratios, temperature, fluid status and electrocardiogram data.

Billing and Reimbursement Considerations

One important aspect of the implementation of an effective Telehealth Program is development of a system for billing and reimbursement. States use a variety of Healthcare Common Procedure Coding System (HCPCS) codes and modifiers for this purpose. The HCPCS is the standardized code sets used to facilitate efficient and effective claims processing.³ The HCPCS has two levels, referred to as HCPCS Levels I and II. Restrictions regarding the types of services reimbursed through telehealth are common.

The HCPCS Level I contain five-digit numeric Current Procedural Terminology (CPT) codes, which physicians and other health care professionals use to identify and bill for medical services and procedures. Evaluation and management codes (E&M codes) refer to a subset of the CPT codes used to report services provided in the office or in an outpatient or other ambulatory facility. There are different E&M codes for different types of encounters such as office or hospital visits, as well as different levels of care. In many cases, states restrict reimbursement of telehealth services to a subset of CPT codes reimbursed by the Medicaid program.

The HCPCS Level II is a standardized coding system used primarily to identify products, supplies and services, such as durable medical equipment, prosthetics, orthotics and supplies not included in the CPT medical code set. These codes are alphanumeric codes consisting of a single alphabetical letter followed by four numeric digits.⁴ The HCPCS Level II codes may be permanent or temporary. The temporary codes meet short-term operational needs in the insurance sector where there is no existing national code. For example, both Q- and H-codes are temporary national codes that CMS has reserved for assignment if needed. The Q-codes are used to identify services that have not been assigned a CPT code or national Level II code, such as drugs, biological and other types of medical equipment or services.⁵ A Q-code may remain active for multiple years, if it is not converted to a permanent Level I or II code or deleted by

³ Centers for Medicare and Medicaid Services, “HCPCS - General Information. HCPCS Background Information,” *Centers for Medicare and Medicaid Services*, August 25, 2016, <https://www.cms.gov/Medicare/Coding/MedHCPCSGenInfo/index.html>.

⁴ Ibid.

⁵ Centers for Medicare and Medicaid, “Healthcare Common Procedure Coding System (HCPCS) Level II Coding Procedures” (Baltimore, MD: Centers for Medicare and Medicaid Services, November 13, 2015), <https://www.cms.gov/Medicare/Coding/MedHCPCSGenInfo/Downloads/HCPCSLevelII CodingProcedures7-2011.pdf>.

CMS.⁶ State Medicaid agencies primarily utilize H-codes to establish separate codes for identifying mental and substance use disorder (SUD) services, such as alcohol and drug treatment services.⁷ Telehealth originating sites typically bill using the HCPCS code Q3014 – “Telehealth originating site facility fee”.

Additionally, HCPCS Procedure Modifier Codes may be used with either of the two HCPCS levels.⁸ Modifier codes provide additional information about a service or item identified by the HCPCS code. These modifiers are applied when the HCPCS code description may need to be modified to describe the specific circumstances for an item or service.⁹ The Level II HCPCS modifiers are either alphanumeric or two letters that may be appended to CPT or HCPCS Level II codes to facilitate physician and health care professionals reporting special circumstances or clarifying or modifying the description of a procedure.¹⁰ A commonly used modifier in telehealth is the GT modifier, which indicates that the patient-physician interaction occurred “via interactive audio and video telecommunication systems.”¹¹

Maryland Medicaid Telehealth Program

The Department is dedicated to implementing a cost-effective telehealth policy that best serves the needs of Maryland residents enrolled in the Medicaid program. Since 2010, the Department has implemented a series of expansions to its Telehealth Program designed to increase access to care across the state. The Department supports a telehealth policy that aligns across payers.

⁶ Centers for Medicare and Medicaid Services, “Chapter 23 - Fee Schedule Administration and Coding Requirements,” in *Medicare Claims Processing Manual* (Baltimore, MD: Centers for Medicare and Medicaid Services, 2015), <https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/clm104c23.pdf>.

⁷ Centers for Medicare and Medicaid, “Healthcare Common Procedure Coding System (HCPCS) Level II Coding Procedures.” (Baltimore, MD: Centers for Medicare and Medicaid services, 2015), <https://www.cms.gov/Medicare/Coding/MedHCPCSGenInfo/Downloads/HCPCSLevelII CodingProcedures7-2011.pdf>. There are also “S” codes that are primarily used by private insurers to report drugs, services, and supplies that have no permanent CPT or HCPCS code. The “S” codes facilitate the implementation of policies, programs, or for claims processing in the private sector. However, “S” codes may also be used by Medicaid programs, and are not payable by Medicare.

⁸ Centers for Medicare and Medicaid Services, “HCPCS - General Information. HCPCS Background Information”; American Academy of Professional Coders (AAPC), “CPT - Current Procedural Terminology Codes,” 2016, <https://www.aapc.com/resources/medical-coding/cpt.aspx>.

⁹ Centers for Medicare and Medicaid, “Healthcare Common Procedure Coding System (HCPCS) Level II Coding Procedures.”

¹⁰ American Academy of Professional Coders (AAPC), “CPT - Current Procedural Terminology Codes.”

¹¹ Ibid.

Brief Overview: Progression of Maryland's Telehealth Program

2010 Telemental Health Program Begins	2012 Recommendations for Expanding Telehealth	2013 Implementation & Further Expansion	2014 Statewide Expansion of Telehealth Program	2015 Combining two programs under the same umbrella
<ul style="list-style-type: none"> • Mental Hygiene Administration and Medicaid Program implemented the Telemental Health Program. • Population Served: Participants located in designated rural counties • Originating Sites: Outpatient mental health clinics (OMHCs), hospitals and federally-qualified health centers (FQHCs) • Distant Sites: Licensed psychiatrists 	<ul style="list-style-type: none"> • In December 2012, the Department submitted a report to the General Assembly detailing its recommendations regarding use of telehealth for the Maryland Medicaid population. • Recommendations included that Medicaid cover medically necessary services that can be reasonably provided via hub-and-spoke. • The Department recommended limiting the areas that could qualify as spokes to rural counties. 	<ul style="list-style-type: none"> • In October 2013, the Department operationalized the Rural Access Telemedicine Program and implemented the Cardiovascular Disease and Stroke Telemedicine Program. • Population Served: <ol style="list-style-type: none"> (1) Beneficiaries located in one of 15 designated rural counties. (2) Beneficiaries who sought care for cardiovascular disease and stroke in a hospital emergency department, regardless of geographic location. • Provider Types: Physicians, nurse practitioners and nurse midwives • Originating Sites: Facility in one of 15 designated rural counties • Distant Sites: Consulting providers 	<ul style="list-style-type: none"> • Telehealth Program covers services on a statewide basis. • Population Served: All Medicaid participants are eligible to receive telehealth services regardless of how they qualify for benefits, whether on a fee-for-service (FFS) basis or through the HealthChoice managed care program. 	<ul style="list-style-type: none"> • Effective October 1, 2015, Maryland Medicaid combined the Telemedicine and Telemental Health Programs and renamed them as the Telehealth Program. • Population Served: Same as 2014 • Provider Types: Same as 2016 • Originating Sites: Same as 2016 • Administrative Requirements: Providers must complete an application and provider addendum to participate in the the Telehealth Program.

2016: Maryland's Telehealth Program Today

<p>Permitted Originating Sites:</p> <ul style="list-style-type: none"> • College/university student health or counseling offices • Community-based SUD providers • Elementary, middle, high or technical schools with a supported nursing, counseling or medical office • A deaf or hard of hearing participant's home or any other secure location as approved by the participant and the provider • LHDs, FQHCs, OTPs, OMHCs • Hospitals, including emergency department • Nursing facilities 	<ul style="list-style-type: none"> • Renal dialysis centers • Residential crisis services sites • Physicians, psychiatric nurse practitioners, nurse practitioners and nurse midwives offices <p>Maryland's Distant Sites for Telehealth:</p> <ul style="list-style-type: none"> • Nurse midwives • Nurse practitioners • Psychiatric nurse practitioners • Physicians • Providers fluent in ASL providing services to deaf or hard of hearing participants 	<p>Administrative Requirements</p> <ul style="list-style-type: none"> • Streamlined registration process available online for provider billing and education purposes. • Provider addendum and application process discontinued. 	<p>Providers Who Have Registered to Participate in Maryland's Telehealth Program</p> <p><u>Originating Sites</u></p> <ul style="list-style-type: none"> • 7 somatic providers • 56 behavioral health providers <p><u>Distant Sites</u></p> <ul style="list-style-type: none"> • 6 somatic providers • 40 behavioral health providers
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In 2010, the Mental Hygiene Administration and the Medicaid Program implemented the Telemental Health Program. The program limited coverage to participants located in designated rural counties, with originating sites limited to outpatient mental health clinics (OMHCs), hospitals and federally qualified health centers (FQHCs). Initially, permitted distant site providers were limited to licensed psychiatrists.

Pursuant to SB 781/HB 1149 (Chapters 579/580 of the Acts of 2012), *Health Insurance – Coverage for Services Delivered Through Telemedicine*, the Department submitted a report to the General Assembly in December 2012 that included a recommendation on how to provide telehealth for the Maryland Medicaid Program population. Based on a comprehensive literature research and review of other state Medicaid programs, the Department recommended that Medicaid cover medically necessary services that can be reasonably provided via hub-and-spoke. The hub-and-spoke model is an older variation of the live video telehealth modality, reflecting the care model's origins in increasing access to care in rural areas. Originally, the hub-and-spoke video conferencing occurred when a patient in an originating site at a remote location (the spoke) interacts with a provider at a distant site at a larger health facility (hub). When Medicaid first implemented its telehealth program, program provider participation was restricted to physicians, nurse practitioners, and nurse midwives. The Department recommended limiting the areas that could qualify as spokes to rural counties, creating the Rural Access Telemedicine Program.

In October 2013, the Department operationalized the Rural Access Telemedicine Program. The program served beneficiaries located in one of 15 designated rural counties. Simultaneously, pursuant to SB 496 (Chapter 280 of the Acts of 2013), *Maryland Medical Assistance Program – Telemedicine*, the Department also implemented the Cardiovascular Disease and Stroke Telemedicine Program, which served Medicaid participants who sought care for these conditions in a hospital emergency department, regardless of geographic location. Both programs sought to improve participant access to consulting Medicaid providers when an appropriate specialist was not available to provide a timely consultation. Reimbursement under both programs limited providers to the use of a real-time interactive two-way audio-video system.

In October 2014, the Department further expanded its Telehealth Program to include coverage of services on a statewide basis pursuant to SB 198/HB 802 (Chapter 141/426 of the Acts of 2014), *Maryland Medical Assistance Program – Telemedicine*. Effective October 1, 2015, Maryland Medicaid combined the Telemedicine and Telemental Health Programs and renamed them as the Telehealth Program. The Telehealth Program serves Medicaid participants irrespective of geographic location within Maryland.

All Medicaid participants are eligible to receive telehealth services regardless of how they qualify for benefits, whether on a fee-for-service (FFS) basis or through the HealthChoice managed care program. Maryland's current telehealth policy includes coverage for real-time audio video conferencing. Reimbursement is not available for RPM or store-and-forward service delivery models or for services provided using audio-only telephone, e-mail or fax. Telehealth services are subject to the same program restrictions, prior authorization requirements and other limitations that exist when services are provided in-person.¹²

¹² This definition is included in pending regulations. 43 Md. Reg. 943-1008 (Aug. 19, 2016), http://www.dsd.state.md.us/MDR/4317/Assembled.htm#_Toc459124759.

Telehealth providers must be enrolled in the Maryland Medicaid Program to be reimbursed for services rendered; however, certain originating site providers may participate in the Telehealth Program even though they are not eligible to enroll as a Medicaid provider. Permitted originating sites include:

1. College or university student health or counseling offices;
2. Community-based substance use disorder providers;
3. Elementary, middle, high or technical schools with a supported nursing, counseling or medical office;
4. A deaf or hard of hearing participant's home or any other secure location as approved by the participant and the provider;¹³
5. Local health departments (LHDs);
6. Federally Qualified Health Centers (FQHCs);
7. Hospitals, including the emergency department;
8. Nursing facilities;
9. The offices of physicians, psychiatric nurse practitioners, nurse practitioners and nurse midwives;
10. Opioid treatment programs (OTPs);
11. Outpatient Mental Health Clinics (OMHCs);
12. Renal dialysis centers; and
13. Residential crisis services sites.

Distant sites must be registered and enrolled in the Medicaid program. Permitted distant site providers include:

1. Nurse midwives;
2. Nurse practitioners;
3. Psychiatric nurse practitioners;
4. Physicians; and
5. Providers fluent in American Sign Language (ASL) who provide telehealth services to a deaf or hard of hearing participant.¹⁴

At this time, a number of providers have registered to participate in the Telehealth Program. These include:

Originating sites:

- Seven somatic providers:
 - Physician offices (3)
 - Nurse practitioners (1)
 - Hospitals (2)
 - Nursing facilities (1)
- 56 behavioral health providers
 - Behavioral Health Administration (BHA)-certified programs (2)

Distant site providers:

- Six somatic providers
 - Nurse practitioners (1)
 - Physicians (5)
- 40 behavioral health providers
 - Physicians (12)
 - Nurse practitioners (2)
 - Mental Health clinics with rendering physicians (26)

¹³ Addition of this site is included in pending regulations. 43:17 Md. Reg. 943-1008 (Aug. 19, 2016), http://www.dsd.state.md.us/MDR/4317/Assembled.htm#_Toc459124759.

¹⁴ Ibid.

- FQHCs (1)
- Drug clinics (1)
- LHDs (1)
- Hospitals (1)
- OMHCs (45)
- Physician offices (3)
- Residential crisis services (2)

Unlike major commercial carriers in the state, the Medicaid Telehealth Program reimburses providers for an originating site fee.¹⁵ Commercial coverage of telehealth services will be discussed later in this report. In most cases, originating site providers may bill for the telehealth transmission fee code Q3014, or if they are a Maryland-based hospital, the telehealth revenue code 0780. Originating sites billing the Q-code are eligible to receive a transmission fee of \$23.72. Medicaid instructs registered distant site providers to account for telehealth services using the GT modifier when they submit claims for services rendered via telehealth. Originating and distant site providers bill separately for the encounter as long as they provided a service covered by the program.¹⁶

The Department is promulgating additional changes to its regulations governing the Telehealth Program to make policy clarifications and simplify the administrative requirements to register as a telehealth provider as required by SB 242/HB 886 (Chapters 366/367 of the Acts of 2016), *Maryland Medical Assistance Program - Telemedicine – Modifications*.¹⁷ Specifically, the amendments clarify that the program is not limited to enhancing access exclusively to specialty services, but rather intends to promote access to *all* Medicaid covered services via real time video conferencing. The Department removed references to consultative services, which some providers perceived as restrictive. The proposed regulations also reduce the administrative burden of participating in the program. Rather than completing an application process, the Department requires providers to complete a simple online registration form.¹⁸ Finally, the proposed regulations streamline the terminology used to define the program, dispensing with the terms “telemedicine” and “telemental health” in favor of a single term, “telehealth.”¹⁹ These changes are intended to provide further clarity for providers and to communicate that the Telehealth Program is inclusive of both somatic and behavioral health services.

The tables below include an analysis of Medicaid claims data from October 2012 through August 2016. Although uptake of telehealth services to date has been limited, the Department has seen steady growth in utilization of services in recent years. Typically, data (from Maryland’s Medicaid Management Information System 2, MMIS2) are not considered complete until 12 months have passed for adjudication of FFS claims and six months has passed for submission of managed care encounters.

¹⁵ Maryland Department of Health & Mental Hygiene, “Maryland Medicaid Telehealth Program: Telehealth Provider Manual” (Baltimore, MD: Maryland Department of Health & Mental Hygiene, May 2016), <https://mmcp.dhmh.maryland.gov/Documents/Telehealth%20Program%20Manual%205.3.16.pdf>.

¹⁶ Ibid.

¹⁷ *Maryland Medical Assistance Program - Telemedicine – Modifications*, 43 Md. Reg. 943-1008, 2016, http://www.dsd.state.md.us/MDR/4317/Assembled.htm#_Toc459124759.

¹⁸ Ibid.

¹⁹ Under COMAR 10.09.49.02 currently, “Telemedicine” means the delivery of medically necessary somatic services to a patient at an originating site by a distant site provider, through the use of technology-assisted communication. “Telemental health” means the delivery of medically necessary behavioral health services to a patient at an originating site by a distant site provider, through the use of technology-assisted communication.

Therefore, claims data for the most recent period of analysis—October 2015 through August 2016—should be considered preliminary.

Table 1: Number of Medicaid Participants with a Telehealth FFS Claim or MCO Encounter, by Federal Fiscal Year

	FFY 2013		FFY 2014		FFY 2015		FFY2016*	
	# of Enrollees	# of Visits						
FFS	984	3,596	1,192	4,247	1,491	4,902	2,008	6,350
MCO	1	1	27	28	78	88	52	82

* FFY 2016 data is incomplete.

Table 2: Number of Medicaid Participants with a Telehealth Behavioral Health or Somatic Service, by Federal Fiscal Year

	FFY 2013		FFY 2014		FFY 2015		FFY2016*	
	# of Enrollees	# of Visits						
Behavioral Health	915	3,333	1,113	4,010	1,435	4,769	2,010	6,352
Somatic	70	264	106	265	134	221	50	80

* FFY 2016 data is incomplete.

Maryland Health Care Commission Task Force and Grants

The Maryland Health Care Commission (MHCC) is leading efforts to study the use of telehealth and identify opportunities to expand adoption of this care delivery model. The Medicaid program has been an active participant in these initiatives since their inception. In 2010, under the direction of the General Assembly, MHCC created the Telemedicine Task Force (“Task Force”) to develop a plan for a comprehensive statewide telehealth system of care. In 2013, the General Assembly enacted legislation requiring the MHCC to study the use of telehealth by reconvening the Task Force.²⁰ The goals of the reconvened Task Force included identifying opportunities for using telehealth to improve health status and care delivery in the State; assessing factors related to telehealth; identifying strategies for

²⁰ *Telemedicine Task Force – Maryland Health Care Commission, Senate Bill 776 (Ch. 319 of the Acts of 2013)*, http://mgaleg.maryland.gov/2013RS/chapters_noln/Ch_319_sb0776E.pdf.

telehealth deployment in rural areas; and determining the ability of telehealth to meet any increased demand for health care services due to implementation of the Affordable Care Act. The Task Force's final report identified ten use cases as potential pilot projects for implementation in Maryland and made a recommendation to replace the existing state definition of telemedicine with telehealth.^{21,22} These use cases, which cover a broad spectrum of care and have been utilized by MHCC in framing requests for proposals for telehealth grants, are as follows:

1. Improve transitions of care between acute and post-acute settings through telehealth.
2. Use telehealth to manage hospital prevention quality indicators (PQIs).
3. Incorporate telehealth in hospital innovative care delivery models through ambulatory practice shared savings programs.
4. Require value-based reimbursement models to factor in reimbursement for telehealth.
5. Use telehealth in hospital emergency departments and during transport of critically ill patients to aid in preparation for receipt of patient.
6. Incorporate telehealth in public health screening and monitoring with the exchange of electronic health information.
7. Deploy telehealth in schools for applications including asthma management, diabetes, childhood obesity, behavioral health, and smoking cessation.
8. Use telehealth for routine and high-risk pregnancies.
9. Deploy telehealth services widely at community sites, connected to health care professionals and/or the statewide health information exchange.
10. Use telehealth for remote mentoring, monitoring and proctoring of health care practitioners through telehealth for the expansion, dispersion and maintenance of skills, supervision, and education.

Since fall 2014, MHCC has used its grant-making authority for issuing telehealth use case pilot projects.²³ MHCC has funded eleven proposals during four rounds of grants. The experience gained from implementing these projects will help to enable:

- 1) Better practices and industry implementation efforts;
- 2) Potential policies to support the advancement of telehealth; and
- 3) The design of large Telehealth Programs and projects across the State.

As MHCC begins to publish and finalize evaluations from their funded program, MHCC's grant program will play an important role in helping prioritize potential future Medicaid expansions. The Department

²¹ The Task Force adopted the following definition, "Telehealth is the delivery of health education and services using telecommunications and related technologies in coordination with a health care practitioner."

²² Maryland Health Care Commission, "Maryland Telemedicine Task Force: Final Report" (Baltimore, MD: Maryland Health Care Commission, October 2014), http://mhcc.maryland.gov/mhcc/pages/home/workgroups/documents/tlmd/tlmd_ttf_rpt_102014.pdf.

²³ Maryland, *Powers and Duties, Code Ann., Health General*, 2014, secs. 19-109.

will continue to review these evaluations, as many of the MHCC-funded telehealth services are not eligible for Medicaid reimbursement.

Round 1: October 2014 – October 2015

During the first round, MHCC awarded three telehealth grants, totaling \$87,888, to implement applications to improve transitions of care between hospitals and nursing homes. The three grantees were:

1. Atlantic General Hospital Corporation, in partnership with the Berlin Nursing and Rehabilitation Center (Worcester County);
2. Dimensions Health Care System, in partnership with the Sanctuary of Holy Cross (Prince George's County) and the Patuxent River Health and Rehabilitation Center (Prince George's County); and
3. University of Maryland Upper Chesapeake Health, in partnership with the Bel Air facility of Lorien Health Systems (Harford County).

The grantees used telehealth technology to coordinate care delivery between a comprehensive long-term care facility and a general acute care hospital. A final report, released in March 2016, detailed the results of the grants.²⁴ Grantees assessed the success of using telehealth to reduce hospital emergency department visits and in-patient admissions and readmissions. Although the sample size of each project was limited, initial findings among all grantees revealed successful outcomes in reducing emergency department visits and in-patient admissions and readmissions. Two out of the three organizations also identified cost saving. However, the third grantee experienced challenges engaging the provider community when implementing their program and did not demonstrate savings during the grant period. All three grantees emphasized the importance of engaging and educating providers and patients to ensure a successful program.

Round 2: June 2015 – November 2016

The MHCC awarded a second round of telehealth grants, totaling \$80,000, to demonstrate the impact of using telehealth on care delivery in school-based health clinics, residential care, and hospitals. The three grantees are:

1. Crisfield Clinic, LLC (Somerset County);
2. Lorien Health Systems (Howard County); and
3. Union Hospital of Cecil County (Cecil County).

Crisfield Clinic, a family practice clinic, is deploying telehealth in two schools to help students manage asthma, diabetes, childhood obesity and behavioral health issues. Lorien Health Systems, a skilled nursing facility and residential service agency, is using telehealth to address hospital prevention quality indicators (PQIs), such as uncontrolled diabetes, congestive heart failure and hypertension, among patients that are discharged home from the skilled nursing facility. Union Hospital of Cecil County is using telehealth to address several hospitals' PQIs, including diabetes, chronic obstructive pulmonary

²⁴ Maryland Health Care Commission, "Long Term Care and Hospital Telehealth Project Grants: Brief and Final Reports" (Baltimore, MD: Maryland Health Care Commission, April 2016), http://mhcc.maryland.gov/mhcc/pages/hit/hit/documents/Telehealth_Brief_FINAL.pdf.

disease, hypertension, heart failure and asthma, among patients discharged from the hospital to home. The use of telehealth technology aims to improve access to care, enable early provision of appropriate treatment and reduce hospital encounters. Grantees are required to implement the technology in a meaningful way, including developing clinical protocols to demonstrate improved outcomes. Grantees are also required to assess the impact of using telehealth against self-identified measures aligned with project goals.

Round 3: December 2015 – May 2017

The third round of MHCC grants, which totaled approximately \$90,000, targeted demonstrating the impact of using telehealth technology to improve the patient experience and the overall health of the population being served. The three grantees are:

1. Associated Black Charities (Dorchester County);
2. Gerald Family Care (Prince George's County); and
3. Union Hospital of Cecil County (Cecil County).

Associated Black Charities, a community association that assists minority and rural communities with navigating the health care system, is utilizing specialized mobile tablets to facilitate primary care and behavioral health video consultations with a licensed nurse care coordinator from Choptank Community Health System. Gerald Family Care is implementing telehealth video consultations and image-sharing services between patients at three family practice locations and Dimensions Health System specialists who provide gastroenterology, orthopedics, neurology and behavioral health services. Union Hospital of Cecil County is providing chronic care patients discharged home with mobile tablets and peripheral devices to capture blood pressure, pulse and weight, as well as on-demand patient education to facilitate patient monitoring by a hospital care management team and data-sharing with primary care and emergency department providers.

Round 4: June 2016 – November 2017

The MHCC awarded a fourth round of telehealth grants, totaling approximately \$117,000, to support value-based care delivery in primary care. The two grantees are:

1. MedPeds, LLC (Prince George's County); and
2. Gilchrist Greater Living (Baltimore County).

MedPeds, LLC, a family medicine practice, will be using a mobile device application with patients to facilitate 24/7 video-based telehealth with MedPeds providers, make appointments and access electronic health records with the goal of increasing patient access to primary care providers and improving outcomes for diabetic patients. Gilchrist Greater Living, a comprehensive primary care geriatric medical practice, will provide senior patients with in-home telehealth monitoring devices to support case management and early intervention for chronically ill patients in order to reduce hospital admissions. Grantees are required to demonstrate how the use of telehealth, in conjunction with existing care coordination, will be used to improve population health where the applicants aim to expand patient access to health services tailored to the needs of different communities and patient populations.

Round 5: October 2016 – April 2018

The MHCC plans to award one or more grants during a fifth round. Projects will need to demonstrate the impact of telehealth to increase access to health care and improve population health in rural communities. The proposed use cases will serve patients in at least one of the counties located on the eastern shore of Maryland (*i.e.*, Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico and Worcester). The total funding amount for the grant(s) is \$100,000 for an 18-month period.

The piloted grant programs have and will continue to provide preliminary data and information surrounding the various applications of telehealth services in Maryland, as time allows for more longitudinal analysis of their impact.

III. Literature Review

The Department conducted a literature review on telehealth technologies. The goal of this review was to identify whether services provided in home health monitoring have the potential to enhance access, improve patient outcomes and produce cost savings or are cost-neutral. This analysis focuses on use of RPM and interactive video conferencing in the home. Current research suggests that remote patient monitoring (RPM) applications have the ability to improve outcomes, and in some cases, reduce costs for individuals with certain chronic conditions. Studies examining the use of video-conferencing in a home setting are more limited.

Remote Patient Monitoring

RPM, also called home telehealth or home telemonitoring, refers to “the collection of patient data by the patient at home, usually physiological data such as blood glucose, weight, and blood pressure over time. This data is then transmitted to a health care provider or care team which reviews the data and adjusts care (often medications) based on this data.”²⁵ The patient must be provided with medical monitoring hardware and software for the collection and transmission of the patient data for RPM. These tools may be provided by the physician or a third party vendor. Participants or their caretakers use these devices to report data to a provider at another location.

Early RPM models focused on the provision of services through home health agencies and hospitals. Home health agencies needed services to be pre-approved by a physician and were reimbursed per case, similar to hospital reimbursement methodology for RPM in settings such as the intensive care unit (ICU). Some of the earlier hospital-based pilot studies used RPM to provide 24-hour monitoring in ICUs that were fully staffed during the day and had limited staff at night and these studies found RPM to be ‘medically and economically’ effective. RPM was then adapted and used by some managed care organizations to support disease management.²⁶ Multiple studies spanning decades catalogue the evolution of RPM.

²⁵ AM Totten et al., “Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews,” Technical Brief (Prepared by the Pacific Northwest Evidence-based Practice Center under Contract No. 290-2015-00009-I.) AHRQ Publication No.16-EHC034-EF (Rockville, MD: Agency for Healthcare Research and Quality, June 2016), <http://www.ncbi.nlm.nih.gov/books/NBK379320/>.

²⁶ Field MJ and Grigsby J, “Telemedicine and Remote Patient Monitoring,” *JAMA* 288, no. 4 (July 24, 2002): 423–25, doi:10.1001/jama.288.4.423.

Studies from 1998-2002 of RPM for disease management demonstrated that RPM can be used effectively to monitor cardiovascular, hematologic, respiratory, neurologic, metabolic, urologic and Ob-Gyn diseases, as well as drug therapy.²⁷ A systematic review of these studies found that asthma, chronic obstructive pulmonary disease (COPD) and chronic heart failure are the most common applications of RPM. Additionally, this review found that RPM led to improved clinical outcomes, such as stabilization and improvement of chronic diseases. Finally, it found that RPM was cost-effective for pediatric pacemaker patients and patients suffering from chronic diseases.²⁸ For patients with chronic conditions, such as cardiovascular and respiratory diseases, recent studies of RPM have also shown positive results.²⁹ A review of studies found that telemonitoring reduced readmissions and improved quality of care, particularly for high-risk, chronically ill patients.³⁰ Additional studies support these findings. A multi-national systematic review of economic evaluations of home health telemonitoring for management of chronic diseases, such as congestive heart failure, diabetes, COPD and multiple conditions, found evidence for reduced hospitalization and emergency department costs.³¹ An examination of the review's studies of data from the United States found cost savings associated with reduced hospitalizations, ER visits, and nurse home visits.³² These studies, however, do not focus on the Medicaid population or evaluate different reimbursement methodologies.

In June 2016, the Agency for Healthcare Research and Quality (AHRQ) conducted a systematic review of telehealth studies to examine the forms of services that were most and least effective.³³ This report found that RPM for COPD, heart failure (HF), diabetes, and multiple chronic diseases decreased hospitalizations and emergency department visits. AHRQ also found that RPM was an effective modality for providing telehealth services, and it was the most studied telehealth modality.³⁴ However, AHRQ determined that RPM for implanted cardioverter defibrillators reported that outcomes were the same as regular office visits with no significant reduction in cost, hospitalizations or emergency department visits. This study also found that RPM for ICUs and surgery support had no significant benefits.³⁵ However, there are conflicting studies with regards to the benefits and cost effectiveness of RPM for high-risk pregnancies, infants and preterm births.³⁶

In addition to successful outcomes, studies have examined the differences in program implementation to determine the factors that contribute to effective RPM. A meta-analysis of multinational randomized controlled trials of patients with chronic heart failure conducted across a 10-year span (2003-2013) found that RPM efficacy was associated with frequency of measurement and illness severity, as well as

²⁷ Stephane Meystre, "The Current State of Telemonitoring: A Comment on the Literature," *Telemedicine Journal & E-Health* 11, no. 1 (2005): 63-69.

²⁸ Ibid.

²⁹ Totten et al., "Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews."

³⁰ Parker et al., "Exploring Best Practices in Home Health Care: A Review of Available Evidence on Select Innovations."

³¹ Julie Polisena et al., "Home Telehealth for Chronic Disease Management: A Systematic Review and an Analysis of Economic Evaluations," *International Journal of Technology Assessment in Health Care* 25, no. 3 (July 2009): 339-49, doi:10.1017/S0266462309990201.

³² Ibid.

³³ Totten et al., "Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews."

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.; Meystre, "The Current State of Telemonitoring."

with the speed of intervention and medication management.³⁷ The efficacy of RPM tends to be greater in patients with higher symptom severity and with increased measurement frequency. An increase in measurement frequency allows health care practitioners to capture changes in vital signs with “greater sensitivity,” thus allowing for active dose adjustment in response to changes in patient vital signs.³⁸ This study found that daily review and monitoring of patient vital signs and symptoms by nurses enabled rapid and appropriate management of patients. As such, RPM was deemed highly effective in a “rapid intervention RPM system where a patient’s dose was adjusted daily based on their vital signs.” However, such systems have historically been constructed for only a small number of patients.³⁹

Based on the literature, an effective RPM program would need to have certain key components. It would need to focus on specific diseases to ensure effectiveness. Disease severity, frequency of measurement and rapid intervention would also need to be included in any potential RPM program development. This aligns with the current RPM programs found in other state Medicaid programs including those interviewed, which are discussed in detail below. Each program incorporates at least two of the above components, a focus on chronic disease and disease severity. State RPM programs frequently focus on beneficiaries with multiple emergency department visits and hospitalizations for chronic diseases such as COPD, congestive heart failure, asthma and diabetes.⁴⁰

Live Video-Conferencing in the Home

While RPM in a home setting has been studied extensively, live video communication with the patient in the home and its cost-effectiveness has not. Although studies demonstrate that video-conferencing has the potential to expand care to patients in ICUs, critical access hospitals and rural areas with shortages of health care providers; there have been limited studies examining its application in the home.⁴¹ Additionally, studies indicate that “the frequency of communication and monitoring appears to be more effective in RPM than video-conferencing.”⁴²

A systematic review, including 27 studies, examined videoconferencing in community settings when used for mental health issues, neurological conditions, long-term care patients, oncology, rehabilitation,

³⁷ Naoto Nakamura, Tadashi Koga, and Hiroshi Iseki, “A Meta-Analysis of Remote Patient Monitoring for Chronic Heart Failure Patients,” *Journal of Telemedicine and Telecare*, December 18, 2013, 1357633X13517352, doi:10.1177/1357633X13517352.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ New York, *Telehealth Delivery of Services, Public Health Law*, vol. Public Health Law 29G, 2014, sec. 2999-cc, <http://law.justia.com/codes/new-york/2014/pbh/article-29-g/2999-cc/>; Colorado Department of Health Care Policy & Financing, “Home Health Telehealth,” 2016, <https://www.colorado.gov/pacific/hcpf/home-health-telehealth>; Kansas Department of Health & Environment, “Kansas Medical Assistance Program: Fee-for-Service Provider Manual, HCBS Frail Elderly,” 2016, https://www.kmap-state-ks.us/Documents/Content/Provider%20Manuals/HCBS_FE_02222016_16011.pdf; Maine Department of Health & Human Services, “MaineCare Benefits Manual, Home and Community Benefits for the Elderly and for Adults with Disabilities, 10-144 Ch. II, Sec. 19,” MaineCare Benefits Manual, accessed August 22, 2016, <http://www.maine.gov/sos/cec/rules/10/ch101.htm>; Mississippi, *Telehealth Services, Code of MS Rules*, vol. 23–225, Rule 2.3, accessed August 22, 2016, <http://www.sos.ms.gov/ACProposed/00021320b.pdf>.

⁴¹ Totten et al., “Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews.”

⁴² Ibid.; Nakamura, Koga, and Iseki, “A Meta-Analysis of Remote Patient Monitoring for Chronic Heart Failure Patients.”

obesity, angina-heart failure, diabetes and Human Immunodeficiency Virus (HIV). The majority of studies included in this review focused on mental health (n=11) and neurological conditions (n=6) with 1 to 2 studies focusing on the other diseases. The studies on mental health found cost savings when using videoconferencing. However, the studies of neurological and other diseases were inconclusive, as the results showed no potential benefits or showed potential benefits that were considered not significant due to a low number of participants.⁴³

AHRQ's systematic review also examined videoconferencing for psychotherapy, as well as communication and counseling.⁴⁴ AHRQ found psychotherapy provided via videoconferencing in a home setting improved clinical outcomes for patients with mental health issues. However, AHRQ only cited one study showing cost savings, which were the result of reduced travel.⁴⁵ Communication and counseling was associated with improved clinical outcomes for chronic diseases such as diabetes and mixed chronic conditions, but there were no reports of cost savings.⁴⁶

IV. Review of States' Medicaid Telehealth Programs and Other Payers

Other State Medicaid Programs: Overview

The Department conducted a review of other states' Medicaid policies for telehealth; this included an analysis of key differences in modalities covered, service limitations, and variation in reimbursement models.⁴⁷ Appendix I includes an overview of each individual state. In an effort to better understand the telehealth policies that other agencies have implemented, the Department also conducted interviews with several states by phone.⁴⁸ Each state defines telehealth slightly differently, but for consistency of the report, all services will be described using the term telehealth. Unfortunately, none of the states interviewed has completed a comprehensive evaluation of their Telehealth Program.

In total, 48 states and the District of Columbia provide reimbursement for live video telehealth interactions through their Medicaid programs. Only seven states reimburse for the live video conferencing in a home setting. Coverage of store-and-forward delivered services is also limited and reimbursed by only 13 states with most including significant restrictions. However, coverage for remote patient monitoring by Medicaid programs continues to grow—18 states reimbursed for services in 2016,

⁴³ Jennifer A. Mallow et al., "The Use of Video Conferencing for Persons with Chronic Conditions: A Systematic Review," *E-Health Telecommunication Systems and Networks* 5, no. 2 (2016): 39.

⁴⁴ AHRQ defines this category as the use of technology to facilitate the exchange of information between a patient and health care provider as well as the provision of advice. This could be synchronous, as is the case with videoconferencing and chat or asynchronous such as via Web sites or e-mail. These interventions are intended to increase access and may replace or supplement face-to-face interactions with health care professionals.

⁴⁵ Steven Martin et al., "Effectiveness and Impact of Networked Communication Interventions in Young People with Mental Health Conditions: A Systematic Review," *Patient Education and Counseling* 85, no. 2 (November 1, 2011): e108–19, doi:10.1016/j.pec.2010.11.014.

⁴⁶ Totten et al., "Telehealth: Mapping the Evidence for Patient Outcomes from Systematic Reviews."

⁴⁷ The Department's outreach was guided in part by a 2013 study by the American Telemedicine Association that identified four states as models for best practices for remote patient monitoring. American Telemedicine Association and others, "State Medicaid Best Practice: Remote Patient Monitoring and Home Video Visits," 2013, <http://www.americantelemed.org/docs/default-source/policy/state-medicare-best-practices-remote-patient-monitoring-and-home-video-visits.pdf?sfvrsn=4>.

⁴⁸ Ibid.

up from six states in 2013. Six states reimburse for services for all three modalities, although certain limitations apply.

Some states elect to reimburse additional costs through the provision of an originating or distant site fee to offset technical support, transmission charges and equipment. These add-on costs can be incorporated into fee-for-service rates or separately reimbursed as an administrative cost by the state. If they are separately billed and reimbursed, the costs must be linked to a covered Medicaid service.⁴⁹ Of the Medicaid Programs that currently reimburse for telehealth services, nearly forty percent (19 in total), do not reimburse originating or distant sites for an additional facility or transmission fee.

As part of telehealth services, thirty-five percent of states cover RPM.⁵⁰ Program and benefit design varies by state. The majority of states that cover RPM have criteria in place that participants must satisfy to qualify for services; these guidelines align with the research findings discussed earlier. For example, participants commonly must have one or more chronic conditions, such as diabetes, and have had a recent hospitalization related to that chronic condition.⁵¹

New York's Telehealth Program

New York's Telehealth Program began in 2007 on a limited scale and has since slowly expanded. Currently, New York's program includes three modalities: live video conferencing, store and forward technology and RPM.⁵² New York permits the home as an originating site only for purposes of RPM. A variety of health care services may be provided via telehealth, including assessment, diagnosis, consultation, treatment, patient education, care management and assistance with self-management of a patient. As is the case in Maryland, telephone conversations, e-mail correspondence and fax transmissions between a practitioner and a participant or between two practitioners are not considered telehealth. Remote consultations between practitioners for the purposes of teaching or skill building also fall outside the definition of telehealth and are not reimbursable.

New York's Telehealth Program permits both somatic and behavioral health providers to participate and covers a more expansive group of providers than Maryland. Authorized provider types include physician specialists, Certified Diabetes Educators, Certified Asthma Educators, psychiatric nurse practitioners, dentists, genetic counselors, clinical psychologists, speech language pathologists, audiologists, licensed clinical social workers (LCSWs) and licensed master social workers (LMSWs).⁵³ Guidelines and protocols to support the use of telehealth in New York State Office of Alcoholism and Substance Abuse Services (OASAS) certified programs, including SUD behavioral care host models are under development.⁵⁴

⁴⁹ Centers for Medicare & Medicaid Services (CMS), "Telemedicine," *Medicaid.gov*, accessed September 12, 2016, <https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Delivery-Systems/Telemedicine.html>.

⁵⁰ Center for Connected Health Policy, "State Telehealth Policies and Reimbursement Schedules: A Comprehensive Scan of the 50 States and District of Columbia" (Center for Connected Health Policy, March 2016), <http://cchpca.org/sites/default/files/resources/50%20State%20FINAL%20April%202016.pdf>.

⁵¹ *Ibid.*

⁵² New York, *Telehealth Delivery of Services*, vol. Public Health Law 29G, sec. 2999-cc.

⁵³ New York, *Credentialing and Privileging of Health Care Practitioners Providing Telemedicine Services.*, vol. Public Health Law 28, 2015, sec. 2805u, <http://law.justia.com/codes/new-york/2015/pbh/article-28/2805-u>.

⁵⁴ NY State Department of Health, "Approaches to Integrated Care, Frequently Asked Questions, January 2016 - Updated August 12, 2016" https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/2016/2016-01_integrated_care_faqs.htm#telehealth.

New York's distant and originating sites for telehealth are hospitals, facilities providing dental services, Diagnostic and Treatment Centers (DTCs), FQHCs that have opted into Ambulatory Patient Groups, non-FQHC school based health centers and practitioners' offices.⁵⁵ In New York, for reimbursement and billing purposes, only one payment is made when both the distant and originating sites are part of the same network or billing entity. In such cases, the distant site bills Medicaid for the telehealth visit and is responsible for reimbursing the in-network originating site facility or practitioner.⁵⁶

Initially established as a pilot, New York is currently developing regulations to implement its RPM program statewide. The RPM program will target individuals with unstable or uncontrolled conditions that require frequent monitoring. Proposed covered conditions range from diabetes and blood pressure monitoring to congestive heart failure and COPD. Patients who are the highest utilizers of the health care system may also be targeted.⁵⁷ To commence RPM services, the practitioner (a physician, nurse practitioner or midwife) must have an established, documented and ongoing relationship with the patient. Registered nurses are authorized to receive and review patient data. Periodic in-person appointments may be required, and RPM is not seen as a substitute for care. Once a patient's condition is stable or controlled, RPM is no longer considered medically necessary and should be discontinued.

Similar to Maryland, an evolving issue related to telehealth is billing for the services. New York uses H-Codes, CPT codes, and GT modifiers. When a qualified practitioner is present with the patient during the telehealth encounter at the originating site and provides a separately reimbursable medical service, the facility bills the appropriate E&M code.⁵⁸ Similarly, when the originating site is a hospital, and a physician is present with the patient, the physician bills the appropriate E&M code.⁵⁹ If the qualified practitioner at the originating site is not providing medical services and is only providing a telehealth link to the distant site, the originating site bills the CPT code Q3014.⁶⁰ This code (Q3014) will only be paid to spoke facilities when billed as a stand-alone service. If the "originating" site is providing and billing for medical services that take place at the time of the telehealth encounter, Q3014 is not reimbursed. The New York Medicaid program does not cover the cost of telehealth equipment. While the state requires providers to furnish any necessary equipment, the state does not have a set standard on the actual equipment type.⁶¹ New York only requires that the equipment must be Health Insurance Portability and Accountability Act (HIPAA) compliant and meet federal requirements.⁶²

⁵⁵ New York, *Credentialing and Privileging of Health Care Practitioners Providing Telemedicine Services.*, vol. Public Health Law 28, 2015, sec. 2805u.

⁵⁶ NY State Department of Health, "Medicaid Update: Continued Medicaid Enrollment for Hospitals, Portable X-Ray Providers, Chiropractors, Nurse Practitioners, Physician Assistants, Nurse Midwives and Nurses," Newsletter Vol. 31, No. 5 (NY State Department of Health, Medicaid Program, March 2015), https://www.health.ny.gov/health_care/medicaid/program/update/2015/mar15_mu.pdf.

⁵⁷ New York, *Telehealth Delivery of Services*, vol. Public Health Law 29G, sec. 2999-cc.

⁵⁸ NY State Department of Health, "Medicaid Update: Continued Medicaid Enrollment for Hospitals, Portable X-Ray Providers, Chiropractors, Nurse Practitioners, Physician Assistants, Nurse Midwives and Nurses."

⁵⁹ Ibid.

⁶⁰ Ibid.

⁶¹ New York, *Telehealth Delivery of Services*, vol. Public Health Law 29G, sec. 2999-cc.

⁶² New York Medicaid, Interview Notes for New York Medicaid Telehealth Program, July 21, 2016.

Unfortunately, New York has not evaluated its Telehealth Programs. The uptake of services has been minimal and the data are not yet sufficient to draw any conclusions; the RPM pilot program has also not been evaluated.

Colorado's Telehealth Program

Unlike some states, Colorado includes large isolated rural areas. Colorado's Medicaid program differs from Maryland's in that the majority of the population receives care on a fee-for-service (FFS) basis. Colorado's Telehealth Program began approximately six years ago and continues to evolve as the demands and need for services grow. Colorado offers telehealth services, which include coverage for live video conferencing and RPM provided by Home Health Agencies.⁶³ Colorado distinguishes between telemedicine services, which it defines as occurring when a patient sees a provider through live video conferencing, and telehealth, which it defines as the monitoring of member's vital signs by their home health nurse through electronic submission of the vital sign information from the member's residence to the member's home health agency.⁶⁴ To date, Colorado has not performed a comprehensive evaluation of its telemedicine and telehealth programs.

Colorado's list of covered telehealth providers for video conferencing is extensive. Permitted provider types include physicians, nurses, podiatrists, physical therapists, physical therapist assistants (PT assistants), occupational therapists, speech-language pathologists, physician assistants, psychologists and certified nurse aides.⁶⁵ Colorado views telehealth as a means of connecting participants who live in rural areas to geographically distant providers.⁶⁶ It gives the participant access to specialty providers. Participants have options of receiving preventative and routine medical care, oncology consultations, chronic-disease management, psychotherapy and obstetrical ultrasounds with live video conferencing.⁶⁷ It is not meant to replace seeing a provider in-person when one is available.

Similar to other states the Department reviewed, Colorado's RPM program is limited to very specific conditions.⁶⁸ According to Colorado's provider manual, to commence RPM services, an individual must meet the following criteria:

1. A client must have one or more of the qualifying diagnosis or conditions in order to be eligible for telehealth monitoring:
 - a. Congestive Heart Failure;
 - b. Chronic obstructive pulmonary disease;

⁶³ Colorado, *Medical Assistance: Home and Community Based Services for the Developmentally Disabled (HCB-DD) Waiver, 10 CCR*, vol. 2505–10, n.d., sec. 8.524, <https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=5999&fileName=10%20CCR%202505-10%208.500>.

⁶⁴ Colorado Department of Health Care Policy & Financing, "Home Health Telehealth."

⁶⁵ Colorado, *Medical Assistance: Physician Services, 10 CCR*, vol. 2505–10, n.d., sec. 8.200.2, <http://www.sos.state.co.us/CCR/10%20CCR%202505-10%208.200.pdf?ruleVersionId=5783&fileName=10%20CCR%202505-10%208.200>;

Colorado Medical Assistance Program, "Telemedicine Manual," https://www.colorado.gov/pacific/sites/default/files/Telemedicine_0.pdf.

⁶⁶ Ibid.

⁶⁷ Colorado, *Medical Assistance: Physician Services*, vol. 2505–10, sec. 8.200.2.

⁶⁸ Colorado Department of Health Care Policy & Financing, "Home Health Telehealth." The Department or its designee has the authority to authorize coverage for other diagnoses or conditions at its discretion.

- c. Asthma;
 - d. Diabetes;
 - e. Pneumonia; or
 - f. Other diagnosis or condition deemed eligible by the Department or its designee
2. The client shall require ongoing and frequent monitoring, a minimum of 3 times weekly, to manage his or her chronic diagnosis, as defined and ordered by a qualified physician;
3. The client must demonstrate a need for ongoing monitoring as evidenced by:
 - a. Required medical intervention (including emergency room visits and hospitalizations) two or more times in the last twelve months for conditions related to the qualifying diagnosis;
 - b. An acute exacerbation of a qualifying diagnosis that requires telehealth monitoring;
 - c. New onset of a qualifying disease that requires ongoing monitoring to manage the client in his or her Residence;
 - d. Client has demonstrated history of poor management or compliance of their qualified diagnosis.
4. The client and/or caregiver must be willing and able to comply with the telehealth monitoring as ordered by the qualified physician.

Once RPM services commence, a registered nurse or licensed practical nurse must review all data within 24 hours of receipt of the ordered transmission. Periodic in-person visits are required every 14 days, and RPM is not considered a substitute for regular care. In the event the participant or caregiver misses more than five data transmissions in a thirty-day period, RPM services are discontinued. Once a patient's condition is stable or controlled, RPM is no longer considered medically necessary and should be discontinued.

Like New York and Maryland, Colorado uses Q3104 to permit originating sites to bill for a facility fee for live video conferencing.⁶⁹ The originating provider may also bill for any office, outpatient or inpatient E&M service that precedes a telehealth consultation and for other Medicaid covered services.⁷⁰ Similar to Maryland and New York, Colorado also requires the use of GT modifiers for distant sites. Generally, Colorado does not reimburse distant sites for a transmission fee. However, distant site providers who bill for services from a small subset of procedure codes are eligible for reimbursement of a five-dollar transmission fee.⁷¹ Colorado's Medicaid program is determining if new codes for telehealth are needed or if they can continue to use the same codes used for in-person visits, since telehealth services are meant to mirror in-person visits. For RPM, Colorado reimburses both a one-time installation fee of \$55.49 and a daily telehealth rate of \$10.49, which can be billed if a home health unit is billed for the same day.⁷²

⁶⁹ Colorado Medical Assistance Program, "Telemedicine Manual," 2013, https://www.colorado.gov/pacific/sites/default/files/Telemedicine_0.pdf

⁷⁰ Colorado Medical Assistance Program, "Telemedicine Manual," 2013, https://www.colorado.gov/pacific/sites/default/files/Telemedicine_0.pdf.

⁷¹ Ibid.

⁷² Colorado Department of Health Care Policy & Financing "Home Health Rates Effective July 1, 2016-June 30, 2017," <https://www.colorado.gov/pacific/sites/default/files/FY%202016-17%20Home%20Health%20Rate%20Schedule.pdf>.

Currently, Colorado also has a pilot project underway to evaluate a new online-based tool designed to increase access to specialty care, the Accountable Care Collaborative eConsult Program.⁷³ Colorado's eConsult Program uses telehealth technology to exchange patient information with providers and specialty physicians. The software is HIPAA-compliant and uses an online consultation system. Primary care medical providers use an online portal to enter clinical questions, medical information, test results, consultation notes and images for specialists to review. Specialists can easily respond to clinical questions and provide recommendations for ongoing care. eConsult's purpose is to provide better access to specialty care and to minimize provider workflows, as the online portal is available at all times. Maryland will continue to monitor ongoing developments of this program.⁷⁴

Kansas's Telehealth Program

Kansas' Telehealth Program is housed within its Medicaid and Home and Community-Based Services' Frail and Elderly (HCBS-FE) programs.⁷⁵ Since June 2004, the Kansas Medicaid program has reimbursed select consultations, office visits, individual psychotherapy and pharmacological management services at the same rate as face-to-face services when provided via telecommunication technology.⁷⁶ Home telehealth services are reimbursed by the Kansas HCBS-FE program.⁷⁷

Kansas refers to telehealth services as telemedicine, which it defines as the use of communication equipment to link health care practitioners and patients in different locations.⁷⁸ Similar to Maryland, Kansas does not reimburse for e-mail, telephone and fax transmissions. Documentation requirements are the same as face-to-face services.⁷⁹ The participant must be present at the originating site. Originating sites may bill using the Q-code Q3014.⁸⁰ Distant site providers must bill using a GT modifier; however, not all codes are eligible for reimbursement. Kansas limits reimbursement to a small selection of CPT codes and H-Codes.⁸¹ Additionally, consultation codes are no longer recognized for payment (CPT codes 99241-99245 and 99251-99255).

⁷³ <https://www.colorado.gov/pacific/sites/default/files/Project%20ECHO%20eConsult%20Update.pdf>

⁷⁴ Colorado Medical Assistance Program, Interview Notes on Colorado Telehealth Program, August 19, 2016; JD Belshe, "Email Exchanges: Colorado Telehealth Program," August 23, 2016.

⁷⁵ Kansas Department of Health & Environment, "Kansas Medical Assistance Program: Fee-for-Service Provider Manual, HCBS Frail Elderly." (Kansas Department of Health & Environment, February 2016), https://www.kmap-state-ks.us/Documents/Content/Provider%20Manuals/HCBS_FE_02222016_16011.pdf.

⁷⁶ Kansas Medical Assistance Program, "General Providers Bulletin: Telemedicine Coverage" (Kansas Medical Assistance Program, June 2004), <https://www.kmap-state-ks.us/Documents/Content/Bulletins/General%2006-04.pdf>; Kansas Department of Health & Environment, "Kansas Medical Assistance Program: Fee-for-Service Manual, General Benefits" (Kansas Department of Health & Environment, January 2014), https://www.kmap-state-ks.us/Documents/Content/Provider%20Manuals/Gen%20benefits_01092014_14006.pdf.

⁷⁷ "Kansas Medical Assistance Program: Fee-for-Service Manual, General Benefits" (Kansas Department of Health & Environment, July 2016), https://www.kmap-state-ks.us/Documents/Content/Provider%20Manuals/Gen%20benefits_07062016_16112.pdf; Kansas Department of Health & Environment, "Kansas Medical Assistance Program: Fee-for-Service Provider Manual, HCBS Frail Elderly."

⁷⁸ Kansas Department of Health & Environment, "Kansas Medical Assistance Program: Fee-for-Service Manual, General Benefits."

⁷⁹ Ibid.

⁸⁰ Kansas Medical Assistance Program, "General Providers Bulletin: Telemedicine Coverage."

⁸¹ Codes eligible for reimbursement as of July 2016: 90785GT, 90791GT, 90792GT, 90832GT – 90838GT, 90839GT, 90840GT, 90847GT, 90863GT, 99201GT - 99205GT, 99211GT - 99215GT, 99221 – 99223, 99304 – 99306,

Kansas defines home telehealth as a remote monitoring system provided to a participant with one or more qualifying chronic diseases.⁸² The program permits monitoring of a participant’s vital sign measurements from his or her home setting to prevent a crisis episode. To qualify for home telehealth services, the participant:

1. Must need disease management consultation and education,
2. Must have had two or more hospitalizations, including emergency department visits, within the previous year related to one or more diseases, or
3. Must participate in Money Follows the Person (MFP) to move from a nursing facility into the community.

This service modality is not available to participants living in an assisted living facility, a residential health care facility or a home plus facility.⁸³ If a participant fails to perform daily monitoring for seven consecutive days, the case manager must be notified to determine if continuation of the service is appropriate.

Home health agencies or county health departments may act as home telehealth providers and are eligible for reimbursement.⁸⁴ A registered nurse or a licensed practical nurse with registered nurse supervision must set up, supervise and provide participant counseling. Monthly status reports to the physician and case manager are also required. The home telehealth program reimburses for the installation and the daily use of the monitoring equipment. Equipment costs are not eligible for reimbursement. Kansas reimburses up to seventy dollars for the installation of and training with the equipment. This is billed as a unit that is equivalent to one installation using an S code (S3015). The number of installations is limited to twice per calendar year. Kansas will reimburse for one unit daily, which is equal to one day of service. Each unit is reimbursed at six dollars per unit and billed using an S code (S0317). Providers can include home health agencies or county health departments with system equipment capable of monitoring beneficiary vital signs daily. This includes, at a minimum, heart rate, blood pressure, mean arterial pressure, weight, oxygen saturation, and temperature. Also, the provider must have the capability to ask the beneficiary questions which are tailored to his or her diagnosis. The provider and equipment must have needed language options such as English, Spanish, Russian, and Vietnamese. Kansas has not evaluated their Telehealth Program.

Maine’s Telehealth Program

Maine’s largely rural geography in tandem with its harsh winters creates challenges for individuals seeking to access care. As a result, Maine has implemented a Telehealth Program that is more expansive than many other states, including Maryland. Maine’s Telehealth Program started in 2009 and

99366 – 99368, H0001GT, H0032HA, H0004GT, H0005GT, H0006GT, H0007GT, H0038GT, H0038HQGT, and T1023. https://www.kmap-state-ks.us/Documents/Content/Provider%20Manuals/Gen%20benefits_07062016_16112.pdf.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Kansas Department of Health & Environment, “Kansas Medical Assistance Program: Fee-for-Service Provider Manual, HCBS Frail Elderly.”, https://www.kmap-state-ks.us/Documents/Content/Provider%20Manuals/HCBS_FE_02222016_16011.pdf.

has continued to grow.⁸⁵ Maine’s Department of Health and Human Services administers the Telehealth Program within its Medicaid program (MaineCare). Maine defines telehealth services as “the use of information technology by a Health Care Provider to deliver clinical services at a distance for the purpose of diagnosis, disease monitoring, or treatment.” Maine allows telehealth services to be a combination of video and audio or via phone.⁸⁶ Maine’s Telehealth Program covered services are interactive telehealth services, telephonic services, and RPM services.⁸⁷ Interactive telehealth services are defined as “real time, interactive visual and audio telecommunications whereby a Member and a Health Care Provider interact remotely through the use of technology.”⁸⁸ Telephonic services mean “the use of telephone communication by a health care provider to deliver clinical services at a distance for the purpose of diagnosis, disease monitoring, or treatment.”⁸⁹ RPM services mean “the use of information technology to remotely monitor a Member’s health status through the use of clinical data while the Member remains in the residential setting. RPM may or may not take place in real time.”⁹⁰

To enroll in Maine’s Telehealth Program, providers must register by writing a letter to the Department of Health and Human Services and providing a detailed description of the telehealth services participants can expect to receive.⁹¹ Maine’s telehealth regulations do not restrict the provider types that can perform telehealth services, so long as the provider is enrolled in MaineCare, acting within the scope of his/her license and otherwise eligible to deliver the underlying covered services.⁹² Maine requires all providers to comply with federal, state and local regulations to protect patient safety. When using telecommunication, all equipment must have security protocols, and any network services must be HIPAA-compliant.⁹³ The burden of implementing confidentiality protocols is on the provider and can include use of unique passwords or identifiers for each employee or person with access to a telehealth transmission to prevent unauthorized access to a telehealth transmission. The originating site is most commonly a health care provider’s office, although a participant’s residence is also eligible if proper equipment for telehealth services is available. The distant site—or receiving (provider) site—is defined as the site at which the health care provider delivering the service is located at the time of service delivery.⁹⁴

Interactive telehealth services may be provided at a provider’s facility or the member’s home; services must be medically appropriate and covered by the Medicaid program. Prior authorization to use interactive telehealth services is only required if the underlying covered service requires prior

⁸⁵ “Maine State Telemedicine Policy,” *eVisit® Telemedicine Solution*, 2016, <https://evisit.com/maine-telemedicine-policy/>.

⁸⁶ Maine Department of Health & Human Services, “10-144 Chapter 332: MaineCare Eligibility Manual,” accessed August 22, 2016, <http://www.maine.gov/sos/cec/rules/10/ch332.htm>.

⁸⁷ “Maine State Telemedicine Policy.” Maine calls their program telemonitoring but for consistency of the report it will be referred to as RPM.

⁸⁸ Maine Department of Health & Human Services, “10-144 Chapter 101: MaineCare Benefits Manual, Chapter I, Section 4, Telehealth Services,” April 2016, <http://www.maine.gov/tools/whatsnew/attach.php?id=675355&an=2>.

⁸⁹ *Ibid.*

⁹⁰ *Ibid.*

⁹¹ Maine Department of Health & Human Services, “10-144 Chapter 332: MaineCare Eligibility Manual.”

⁹² Maine Department of Health & Human Services, “10-144 Chapter 101: MaineCare Benefits Manual, Chapter I, Section 4, Telehealth Services.”

⁹³ *Ibid.*

⁹⁴ *Ibid.*

authorization, and no prior face-to-face encounter is required.⁹⁵ Telephonic services may be reimbursed if interactive video telehealth services are unavailable, and a telephonic service is medically appropriate for the underlying covered service. Reimbursement is not provided for communications solely between providers and members when such communications would not otherwise be billable and reimbursement for telephonic services is only available for E&M codes 99446 through 99449. Certain services are expressly excluded from telehealth coverage, including, but not limited to: pharmacy services for certain prescribed drugs, assistive technology services, services that require direct physical contact with a recipient by a health care provider and that cannot be delegated to another health care provider at the site where the recipient is located and any service medically-inappropriate for delivery through telehealth services.

Like other states, Maine has established eligibility criteria for its RPM program. To qualify for services, an individual must:

- Be eligible for home health services;
- Have a current diagnosis of a health condition requiring monitoring of clinical data at a minimum of five times per week, for at least one week;
- Have had two or more hospitalizations or emergency department visits related to their diagnosis in the past year, be in need of continuous monitoring during the previous calendar year or have continuously received RPM services during the previous calendar year and have a continuing need for such services, as documented by an annual note from a health care provider;
- Have RPM services included in their plan of care;
- Reside in a setting suitable to support RPM equipment; and
- Have the physical and cognitive capacity to effectively utilize the RPM equipment or have a caregiver willing and able to assist with the equipment.⁹⁶

Additionally, only providers who are certified home health agencies can be reimbursed for RPM services.⁹⁷ The provider ordering services must have prescribing privileges and document a face-to-face encounter before the patient is eligible for RPM services.⁹⁸ A registered nurse, nurse practitioner, physician, or physician's assistant must review all collected data.

Maine's reimbursement model closely resembles Maryland's although the circumstances in which an originating site fee may be billed are more limited. MaineCare reimburses originating sites differently depending on the scope of services provided. If the originating site has provided clinical services on-site on the same day as the telehealth service, a provider may bill for those services, but not for an originating site transmission fee. If an originating site is providing only a room and telecommunications equipment to facilitate a telehealth encounter but no other services, the site may bill for an originating site facility fee using code Q3014 for coordinating the telehealth service. The Q-code may not be billed when the recipient is located at an originating site in the home. When submitting claims for telehealth

⁹⁵ Ibid.

⁹⁶ Maine Department of Health & Human Services, "10-144 Chapter 101:MaineCare Benefits Manual, Chapter II, Section 40, Home Health Services," 2016, <http://www.maine.gov/sos/cec/rules/notices/2016/072716.html>.

⁹⁷ Maine Department of Health & Human Services, "10-144 Chapter 101: MaineCare Benefits Manual, Chapter I, Section 4, Telehealth Services."

⁹⁸ Ibid.

services, the distant site must bill using the claim codes for the underlying service and the GT modifier.⁹⁹ No separate transmission fees are available to distant sites. Although considered within the scope of telehealth in Maine, reimbursement for telephonic services is restricted. Telephonic services are not eligible for reimbursement using the GT modifier and providers may only bill for telephonic services using a limited set of CPT codes (99445-99449). Home health agencies billing for RPM are reimbursed at a monthly flat fee of \$84.55, using the code S9110.¹⁰⁰ Only the provider at the distant site is paid for services. Maine has not evaluated its Telehealth Program.

Mississippi's Telehealth Program

Mississippi implemented its program in an effort to improve care after being ranked as one of the lowest performing states for health.¹⁰¹ In October 2003, the University of Mississippi Medical Center piloted a Telehealth Program that focused on RPM for individuals with diabetes. Currently, Mississippi's Medicaid program covers medically necessary health services to Medicaid patients via telehealth.¹⁰² Mississippi's Medicaid program reimburses for all three modalities of telehealth.

Mississippi Medicaid covers medically necessary health services to eligible Medicaid participants. In the case of live video conferencing, services ineligible for reimbursement in a traditional in-person encounter are also ineligible for reimbursement through telehealth. Mississippi restricts the originating site to the following locations:

- Physician or practitioner offices;
- Outpatient Hospitals (including Critical Access Hospitals (CAHs));
- Rural Health Clinics (RHCs);
- FQHCs;
- Community Mental Health/Private Mental Health Centers;
- Therapeutic Group Homes;
- Indian Health Service Clinics; or
- School-based Clinics.

Mississippi does not cover phone conversations, e-mails, faxes or internet services for online medical evaluations, or the cost to install or maintain any telecommunication devices, as telehealth services. At this time, there are no specific restrictions limiting the location of the provider at the distant site.

Mississippi covers RPM services when they are medically necessary and ordered by a physician, physician assistant or nurse practitioner.¹⁰³ Mississippi covers medical devices used for RPM including implantable pacemakers, defibrillators, cardiac monitors, loop recorders and external mobile cardiovascular telemetry. Participants can also qualify for services if they (1) have been diagnosed with one or more chronic conditions—diabetes, congestive heart failure or COPD—and (2) have had two or

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ David Pittman, "Mississippi Emerges as Telemedicine Leader," *Politico*, February 26, 2015, <http://www.politico.com/story/2015/02/mississippi-telemedicine-115515>.

¹⁰² "Mississippi: The New Health Care Leader?," *Mississippi Development Authority*, March 1, 2015, <https://www.mississippi.org/mississippi-stories/mississippi-the-new-health-care-leader/>.

¹⁰³ Mississippi, *Title 23: Medicaid Part 225 Telemedicine, Code Ann*, vol. 43-13-121, 2015, <https://medicaid.ms.gov/wp-content/uploads/2015/07/Admin-Code-Part-225.pdf>.

more hospitalizations in the previous twelve months for qualifying chronic conditions. The participant's primary provider must recommend the use of disease management services via RPM.¹⁰⁴ Hospitalizations for two different chronic conditions cannot be combined to satisfy the two or more hospitalizations requirement. Finally, the participant must be capable of using the equipment and transmitting the necessary data or have help to do so. In Mississippi, RPM services must be provided in the participant's private residence.¹⁰⁵

Reimbursement for telehealth is similar to programs in other states. For live video conferencing, Mississippi pays the originating site provider facility fee per completed transmission.¹⁰⁶ The provider cannot bill for an encounter or E&M code unless a separate identifiable service is performed.¹⁰⁷ Mississippi Medicaid pays the distant site for the telehealth service provided at the same rate as an in-person visit.¹⁰⁸ A GT modifier is used to indicate that services were rendered via telehealth.¹⁰⁹ For RPM, reimbursement for a daily monitoring rate to allow for the review of beneficiary information is limited to one unit per day, regardless of the number of chronic diseases or conditions being monitored.¹¹⁰ Mississippi Medicaid will also pay a one-time set-up visit fee to install any necessary equipment and train the beneficiary. Mississippi Medicaid does not reimburse for the duplicate transmission or interpretation of remote monitoring data.

Mississippi has not formally evaluated its Telehealth Program to determine whether it has meaningfully impacted outcomes or cost-savings. As was reported by other states Maryland spoke with, uptake of telehealth services has been limited, although it has been increasing over time.

Other Payers' Telehealth Programs

In addition to examining other states' Medicaid Telehealth Programs, the Department also reviewed Medicare's Telehealth Program, the Department of Veterans Affairs' program, and the Telehealth Program administered by private payers located in Maryland. The Department interviewed the Department of Veterans Affairs by phone.

Medicare's Telehealth Program

Medicare coverage for telehealth is limited to live video interactions.¹¹¹ However, pilot programs testing store-and-forward services are underway in Hawaii and Alaska through demonstration projects.¹¹²

¹⁰⁴ Ibid

¹⁰⁵ Mississippi, *Title 23: Medicaid Part 225 Telemedicine*.

¹⁰⁶ Mississippi Medical Assistance Program, "State Plan under Title XIX of the Social Security Act. Medical Assistance Program. Telehealth Service," 2015, <https://www.medicaid.ms.gov/wp-content/uploads/2015/04/SPA-15-003.pdf>.

¹⁰⁷ Ibid.

¹⁰⁸ Ibid.

¹⁰⁹ Mississippi Medicaid, Interview notes on Mississippi Medicaid Telehealth Program, September 1, 2016.

¹¹⁰ Mississippi, *Title 23: Medicaid Part 225 Telemedicine*.

¹¹¹ Health Resources and Services Administration, "What Are the Reimbursement Issues for Telehealth?," *U.S. Department of Health and Human Services*, accessed August 22, 2016, <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Telehealth/whatarethereimbursement.html>.

Overall, telehealth costs account for a small portion of Medicare’s overall annual expenses—approximately \$5 million—less than 0.001% of its expenditures in 2012.¹¹³ The implicit concern is that telehealth coverage will lead to excess use, which aligns with overall abuse and fraud concerns other Telehealth Programs vocalized.¹¹⁴

Reimbursement is limited to select services covered by certain HCPCS and CPT codes.¹¹⁵ Examples of covered services include annual wellness visits, kidney disease, behavioral health, substance abuse, nutrition therapy in a group or individual setting, cardiovascular disease behavioral therapy, pharmacological management and nutrition therapy.¹¹⁶ Certain services such as End-Stage Renal Disease -related services requires that the provider must furnish at least one hands-on, in-person visit each month in addition to any telehealth encounters to examine the vascular access site.¹¹⁷

Medicare’s authorized originating sites are very limited in comparison to most states, both geographically and by provider type. Medicare beneficiaries are eligible for telehealth services only if they are present at an originating site located in a rural Health Professional Shortage Area (HPSA) located either outside of a Metropolitan Statistical Area (MSA) or in a rural census tract or a county outside of a MSA.¹¹⁸ There are no restrictions mandating a specific distance between the originating site and distant site. The originating sites authorized by law are the offices of physicians or practitioners; hospitals; Critical Access Hospitals; Rural Health Clinics; FQHCs; Hospital-based or CAH-based Renal Dialysis Centers (including satellites); Skilled Nursing Facilities; and Community Mental Health Centers (CMHCs). Independent Renal Dialysis Facilities are not eligible originating sites. Providers authorized to participate as a distant site are physicians; nurse practitioners; physician assistants; nurse-midwives; clinical nurse specialists; certified registered nurse anesthetists; clinical psychologists, clinical social workers and registered dietitians or nutrition professionals.

Reimbursement for telehealth services and applicable codes through Medicare are reviewed annually.¹¹⁹ Providers must use the GT modifier to indicate that the service was provided via telehealth. Medicare

¹¹² Centers for Medicare & Medicaid, “Medicare Learning Network: Telehealth Services” (U.S. Department of Health & Human Services, 2016), <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/telehealthsrvcfsctst.pdf>.

¹¹³ E. Ray Dorsey and Eric J. Topol, “State of Telehealth,” *New England Journal of Medicine* 375, no. 2 (2016): 154–161; Jonathan D. Neufeld and Charles R. Doarn, “Telemedicine Spending by Medicare: A Snapshot from 2012,” *Telemedicine and E-Health* 21, no. 8 (2015): 686–693.

¹¹⁴ Bernie Monegain, “Telemedicine Market to Soar Past \$30B,” *Healthcare IT News*, August 4, 2015, <http://www.healthcareitnews.com/news/telemedicine-poised-grow-big-time>; Jonathan D. Neufeld and Charles R. Doarn, “Telemedicine Spending by Medicare: A Snapshot from 2012,” *Telemedicine and E-Health* 21, no. 8 (2015): 686–693.

¹¹⁵ Centers for Medicare & Medicaid, “Medicare Learning Network: Telehealth Services”.

¹¹⁶ Medicare Payment Advisory Commission, “Medicare and the Health Care Delivery System. Chapter 8: Telehealth Services and the Medicare Program,” Report to the Congress, (June 2016), [http://medpac.gov/documents/reports/chapter-8-telehealth-services-and-the-medicare-program-\(june-2016-report\).pdf?sfvrsn=0](http://medpac.gov/documents/reports/chapter-8-telehealth-services-and-the-medicare-program-(june-2016-report).pdf?sfvrsn=0).

¹¹⁷ Ibid.

¹¹⁸ Centers for Medicare & Medicaid, “Medicare Learning Network: Telehealth Services.”

¹¹⁹ Health Resources and Services Administration, “HRSA - Medicare Telehealth Payment Eligibility Analyzer,” *HRSA Data Warehouse*, accessed August 23, 2016, <http://datawarehouse.hrsa.gov/tools/analyzers/geo/Telehealth.aspx>.

reimburses an originating site facility fee of \$25.¹²⁰ The distant site providers are reimbursed at their full rate. The Medicare beneficiary pays 20 percent of the Medicare-approved amount for the provider services for both the originating and distant sites, as well as any other Part B deductible that may apply.¹²¹ Similar to Maryland's program, RPM is not covered under the current Medicare policy.

Department of Veterans Affairs

Of the Telehealth Programs reviewed, the Department of Veterans Affairs (VA) had the most comprehensive Telehealth Program. The VA Telehealth Program was implemented initially to reach rural veterans but has since expanded. The VA has worked extensively to increase enrollment, as it mandates its providers to enroll at least three percent of their patients enrolled in some version of telehealth.¹²² The VA has RPM services and allows providers to participate in telehealth services from their homes.¹²³ Video conferencing services are also permitted.

The VA program has several unique features designed to protect the privacy of the patient and prevent fraud. Individuals who submit information for RPM are provided with a special code used to confirm their identity. Medical providers must also verify the individual's identity prior to commencing video conferencing services by verifying at least two identification data points, such as Social Security number, date of birth or VA identification number.

Unlike models adopted by state Medicaid programs, VA providers are authorized to provide services from their home, so long as the equipment used and the home environment is HIPAA-compliant.¹²⁴ They do not have to be in the office and the provider's home can serve as the distant site. However, this activity is subject to significant oversight and providers are monitored and audited regularly. Additionally, providers must attend 15 or more trainings, including HIPAA and equipment training, before being authorized to participate in telehealth and provide services from their own home.¹²⁵

In 2015, with resources totaling \$1.05 billion, the VA's telehealth services program provided more than 2 million consultations to over 677,000 veterans, 45% of whom were in rural areas. In 2017, the VA expects to deliver telehealth-based services to nearly 762,000 veterans.¹²⁶ Thousands of veteran patients are regularly using home telehealth devices, from blood pressure monitors to more complex devices, to coordinate their care. Most of the VA's patients easily learn how to use these devices and are highly satisfied with home telehealth services. Some of the home telehealth devices that connect veteran patients with their care coordinator can also provide information about overall health, their specific conditions, and the various treatments that may be offered. These home telehealth devices can also make it possible for the veterans to become more actively involved in the actual medical care. A

¹²⁰ Medicare Payment Advisory Commission, "Medicare and the Health Care Delivery System. Chapter 8: Telehealth Services and the Medicare Program."

¹²¹ Centers for Medicare and Medicaid Services, "Medicare & You 2016" (U.S. Department of Health & Human Services, 2016), <https://www.medicare.gov/Pubs/pdf/10050.pdf>.

¹²² U.S. Department of Veteran Affairs, "2017 Congressional Submission: Budget Brief," 2016, <http://www.va.gov/budget/docs/summary/Fy2017-BudgetInBrief.pdf>.

¹²³ Dr. Lois Freeman, Interview Notes - Department of Veteran Affairs Telehealth Program, August 2016.

¹²⁴ Ibid.

¹²⁵ Ibid.

¹²⁶ U.S. Department of Veteran Affairs, "2017 Congressional Submission: Budget Brief."

care coordinator will work with the veteran to help them learn ways to self-manage their care needs.¹²⁷ Veterans can participate in RPM if they have chronic diseases such as diabetes, chronic heart failure, COPD, depression or post-traumatic stress disorder.

The VA's home telemonitoring program measures vital signs at home. This allows providers and nurses to change medications or other treatment goals and prevent serious health problems from developing. Unlike some state Medicaid RPM programs, the VA permits the veteran to connect with a VA hospital using regular telephone lines, cellular modems—these act as doors for the transmission of information—and cell phones (using an interactive voice response system). While not every VA patient would benefit from home telemonitoring, for those that would, it can help them to remain at home and live independently.

Private Payers

Pursuant to SB 781/HB 1149 (Chapters 579/580 of the Acts of 2012), *Health Insurance – Coverage for Services Delivered Through Telemedicine*, Maryland's Insurance Code requires commercial carriers to reimburse for telehealth services.¹²⁸

CareFirst BlueCross BlueShield (“CareFirst”) refers to its Telehealth Program as telemedicine and initiated a reimbursement policy for telehealth visits across medical disciplines effective October 13, 2010, revising its policy effective August 17, 2015.¹²⁹ CareFirst's policy requires that “telemedicine services for diagnosis, consultation, or treatment must meet all the medical policy requirements of a face-to-face consultation or contact between a health care provider and a patient.”¹³⁰ For new patients, initial telehealth visits are limited to consultations; subsequent telehealth visits may be for other types of services. CareFirst requires documentation (*i.e.*, in medical records) to prove that services were indeed rendered. CareFirst does not provide for any technical fees or costs, such as transmission or facility fees, for the provision of telehealth services, or for any services delivered through telehealth services that are not covered when provided face-to-face. Deductibles, copayments or coinsurances apply to telehealth services just as they do for face-to-face diagnoses, consultations or treatment services.¹³¹

¹²⁷ Tracey E. Barnett et al., “The Effectiveness of a Care Coordination Home Telehealth Program for Veterans with Diabetes Mellitus: A 2-Year Follow-Up,” *ResearchGate* 12, no. 8 (September 1, 2006): 467–74; Susanna Spinsante, “Home Telehealth in Older Patients with Heart Failure - Costs, Adherence, and Outcomes,” *Smart Homecare Technology and TeleHealth*, September 2014, 93, doi:10.2147/SHTT.S45318.

¹²⁸ Maryland, *Health Insurance, General Provisions, Insurance Code Ann.*, vol. 15–139, 2012, <http://www.lexisnexis.com/hottopics/mdcode/>.

¹²⁹ Carefirst Blue Cross Blue Shield, “Medical Policy Operating Procedure: 10.01.012A Archived Telemedicine (Unified Communications),” *CareFirst Medical Policy Reference Manual*, August 17, 2015, <http://notesnet.carefirst.com/ecommerce/medicalpolicy.nsf/vwWebTableX/556772832AF462B785257EA50068EB67?OpenDocument>; Carefirst Blue Cross Blue Shield, “Medical Policy: 2.01.072 Telemedicine (Unified Communications),” *CareFirst Medical Policy Reference Manual*, August 17, 2015, <http://notesnet.carefirst.com/ecommerce/medicalpolicy.nsf/vwWebTableX/A14DB2FB5FF7D24685257E8100699BBE?OpenDocument>.

¹³⁰ Carefirst Blue Cross Blue Shield, “Medical Policy: 2.01.072 Telemedicine (Unified Communications).”

¹³¹ *Ibid.* Medtronic bills CareFirst monthly; however, they charge daily per member for number of days enrolled in the monitoring program.

Additionally, CareFirst offers an Enhanced Monitoring Program for CareFirst members with chronic conditions, which may need ‘careful monitoring’ in order for the patient to avoid unnecessary ED use or hospitalization.¹³² This service is provided through Medtronic, which has entered a provider agreement with CareFirst and bills a monthly rate for services rendered to eligible members.¹³³ Medtronic, formerly known as Cardiacom, is an independent company that provides home health telemonitoring services to members in CareFirst's Patient-Centered Medical Home (PCMH) Program who have active care plans. This service monitors a patient’s vital signs and symptoms daily and immediately transmits that data to the provider to help the patient manage their condition at home. It also alerts the providers to changes in the patient’s condition so that they can potentially intervene early to help avoid unscheduled hospitalizations and emergency department visits. The patient receives a compact monitor in their home or at work to optimize their experience through voice and written communication channels allowing highly qualified nurses to monitor their status.¹³⁴

V. Recommendations

Following a series of expansions culminating in extending coverage of telehealth services on a statewide basis, the Department is considering what additional changes to make to enhance its existing Telehealth Program. Medicaid recipients now have the ability to access both somatic and behavioral health services using this important modality of care. Provider interest in telehealth also appears to be increasing. With technology in this area rapidly advancing, engaging in interactive telehealth encounters is also becoming easier and more affordable for providers and their patients. Additionally, the body of research studying telehealth’s efficacy and cost-effectiveness continues to develop as adoption of telehealth by health insurers, including Medicaid programs across the country, increases. Many potential areas for expansion, such as live video conferencing into the home, remain understudied, and evaluation of the impact of telehealth services on Medicaid programs is still in its early stages. Concerns regarding the possibility for fraud and privacy breaches also persist. Given these limitations, many of the states the Department interviewed have adopted an approach similar to Maryland and have gradually expanded their Telehealth Programs incrementally over time. Despite these challenges, there are several options for expanding the Maryland Medicaid Telehealth Program. Given these considerations, the Department proposes several changes including (1) expanding coverage to include a new modality, remote patient monitoring, (2) expanding coverage to include new permitted distance sites and billable services to improve access to substance use disorder services and other types of care, and (3) monitoring the reimbursement trends in other states.

¹³² Carefirst Blue Cross Blue Shield, “Telemonitoring for Your High-Risk Patients,” August 8, 2014, <https://provider.carefirst.com/providers/news/telemonitoring-for-high-risk-patients-2014.page>; Carefirst Blue Cross Blue Shield, “Program Description and Guidelines for the CareFirst Patient-Centered Medical Home Program (PCMH) and Total Care and Cost Improvement (TCCI) Program.”

¹³³ Carefirst Blue Cross Blue Shield, “Program Description and Guidelines for the CareFirst Patient-Centered Medical Home Program (PCMH) and Total Care and Cost Improvement (TCCI) Program” (Carefirst Blue Cross Blue Shield, 2016), <https://provider.carefirst.com/carefirst-resources/provider/pdf/pcmh-program-description-guidelines.pdf>.

¹³⁴ Carefirst Blue Cross Blue Shield, “Telemonitoring for Your High-Risk Patients”; Carefirst Blue Cross Blue Shield, “Program Description and Guidelines for the CareFirst Patient-Centered Medical Home Program (PCMH) and Total Care and Cost Improvement (TCCI) Program.”

Coverage Expansion: Remote Patient Monitoring

Studies demonstrate that remote patient monitoring can be an effective means of managing certain chronic conditions and reducing hospital admissions and unnecessary utilization of emergency care; thus, improving patient outcomes and in some cases, resulting in cost savings.¹³⁵ Given these findings, the Department believes that authorizing coverage for remote patient monitoring services for individuals with certain chronic health conditions and those who are high utilizers of services may be a logical next step in the expansion of its Telehealth Program.

Approximately half of all adults in the United States had at least one chronic health condition in 2012, with one quarter of all adults having at least two comorbid conditions. These individuals nationally accounted for approximately 86% of medical costs in 2010.¹³⁶ In Maryland, three of the top ten leading causes of death (heart disease, chronic lung disease, and diabetes) are chronic conditions.¹³⁷

Eleven of the eighteen state Medicaid programs that cover remote patient monitoring limit eligibility for services to individuals with certain chronic diseases or health condition instability evidenced by frequent hospitalizations or emergency room use.¹³⁸ In alignment with the vast majority of other states, the Department recommends no reimbursement for the purchase of electronic monitoring devices. The health care provider should create a plan of technologies that will be used, along with a process for loaning monitoring tools to patients. The loan period may be temporary or patients may be requested to use application-based technologies, which are available for use on smartphone, tablet, or computer, to interact with software applications given to them by the provider as long as all technology and software applications are HIPAA compliant.

Developing a program expansion that aligns with these precedents could represent a logical next step for Maryland. Specifically, the Department proposes that remote patient monitoring be limited to patients that meet the following guidelines:

- Has been diagnosed with at least one of the following chronic conditions:
 - diabetes,
 - congestive heart failure, or
 - chronic obstructive pulmonary disease (COPD);
- Has had two or more hospitalizations in the previous year for one of the chronic conditions listed above; and

¹³⁵ A Broderick and V Steinmetz, "Centura Health at Home: Home Telehealth as the Standard of Care" (Commonwealth Fund, January 2013), <http://www.commonwealthfund.org/publications/case-studies/2013/jan/telehealth-centura>; Ryan Spalding and Gordon Alloway, "Medicaid HCBS/FE Home Telehealth Pilot: Final Report for Study Years 1-3" (University of Kansas Medical Center, Center for Telemedicine and Telehealth, 2010), http://media.khi.org/news/documents/2011/04/26/Telehealth_evaluation.pdf; American Telemedicine Association and others, "State Medicaid Best Practice."

¹³⁶ Brian W. Ward, Jeannine S. Schiller, and Richard A. Goodman, "Multiple Chronic Conditions Among US Adults: A 2012 Update," *Preventing Chronic Disease* 11 (April 17, 2014), doi:10.5888/pcd11.130389.

¹³⁷ Maryland Department of Health & Mental Hygiene, "Maryland Vital Statistics Annual Report," 2014, http://dhmh.maryland.gov/vsa/Documents/14annual_revised.pdf.

¹³⁸ Center for Connected Health Policy, "State Telehealth Policies and Reimbursement Schedules: A Comprehensive Scan of the 50 States and District of Columbia."

- Is capable of using the provided equipment and transmitting the necessary data or has an able and willing person to assist them.

Coverage of remote patient monitoring would not be indefinite. The Department intends that once a patient is stabilized for an appropriate amount of time that patient would transition into other types of care and no longer need remote patient monitoring services. The vast majority of individuals with these conditions are served under our HealthChoice managed care program. The Department plans on working with the HealthChoice managed care organizations to implement starting January 2018.

Coverage Expansion: New Distant Sites and Covered Services

Under the Department's existing regulations, reimbursement for behavioral health services is limited to the fee schedule for clinical behavioral health services governed by COMAR 10.09.59.09. Expanding coverage to include services offered by community-based substance use disorder (SUD) programs represents an important opportunity to ensure recipients with an SUD diagnosis are able to access care easily. Specifically, the Department proposes permitting Opioid Treatment Providers (OTPs, provider type 32) and BHA-certified programs (provider type 50) to serve as distant site providers.

The expansion of telehealth services to these provider types would have implications for the Department's methadone rebundling proposal. Specifically, under the rebundling proposal, reimbursement for counseling services will be provided separately from the weekly bundled rates for Methadone Maintenance and Buprenorphine Maintenance.¹³⁹ In addition, the Department will reimburse OTPs for certain outpatient counseling codes. OTPs may refer patients with a clinical necessity for more intensive treatment to a provider type 50. Under the proposed change, participants will no longer be required to be seen in person each week of treatment and instead will be required to have one face-to-face visit each month. This provision would continue to apply and telehealth services could not be used to replace the required monthly face-to-face visit.

Reimbursement Modifications

Of the 49 Medicaid Programs that currently reimburse for telehealth services, nearly forty percent (nineteen in total), do not reimburse originating or distant sites for an additional facility or transmission fee. Technological advances are reducing barriers to access while reducing the cost of providing services to patients. Enhanced access at a reduced cost is having an impact on how many payers, including Medicaid, reimburse for services. This trend is also evident in Maryland's commercial market. For example, the state's largest commercial payer, CareFirst, does not reimburse providers for a facility or transmission fee. Given these considerations, the Department will continue to monitor this trend and determine whether future changes are warranted.

Next Steps and Other Considerations

The Department remains committed to developing its Telehealth Program in a way that ensures access to services and quality of care continue to improve across the state. The Department further recognizes that availability of telehealth services serves as an important entry point for recipients who might

¹³⁹ For additional information on the Department's methadone rebundling proposal, see <http://dhmh.maryland.gov/bhd/Pages/integrationefforts.aspx>.

otherwise face challenges accessing services. These are some of the many reasons the Department has expanded the Medicaid Telehealth Program significantly since 2012. The most recent program expansion in 2015 to include statewide coverage for both somatic and behavioral health services has gone a long way to ensuring participants have access to this critical modality of care.

In the coming months, the Department will continue to move forward with the planning process to implement its recommendations, (1) expanding coverage to include a new modality, remote patient monitoring and (2) expanding coverage to include new permitted distance sites and billable services to improve access to substance use disorder services and other types of care. The Department will continue to work on refining the design of the remote patient monitoring program with a planned implementation date in January 2018. The Department is also in the process of drafting regulations to expand coverage to include new permitted distance sites and billable services. The Department anticipates these regulations would take effect once the Administrative, Executive and Legislative Review (AELR) hold on new regulations is lifted, and will take effect in spring 2017.

Finally, the Department also remains dedicated to exploring opportunities to further enhance and expand its Telehealth Program in the future. In collaboration with other departments and agencies, including the Health Services Cost Review Commission and the MHCC, the Department will continue to monitor developments in this area. The Department will also continue to monitor telehealth policies in other states' Medicaid programs as well as research studies that examine the effectiveness, both in outcomes and cost, of telehealth services.

Appendix 1: Medicaid Telehealth Coverage by State*

State	Modalities	Services	Non-Physician Providers	Reimbursement	Geographic Restrictions
Alabama	Remote patient monitoring (for diabetes and congestive heart failure patients only) Live video	Consults Office or other outpatient visits Individual psychotherapy Psychiatric diagnostic services Neurobehavioral status exam	Yes: physician’s assistant, nurse practitioner	No additional fees	Originating must be in Alabama Distant sites may be located in or outside of the state of Alabama as long as the provider has an Alabama medical license and is enrolled as an Alabama Medicaid provider. For rehabilitative services the originating site must be: Physician’s office Hospital Critical access hospital Rural health clinic Federally Qualified Health Center (FQHC) Community mental health center Public Health department

Alaska	Live video Store and forward Remote patient monitoring	Initial or one follow-up visit Consultation made to confirm diagnosis A diagnostic , therapeutic or interpretive service Psychiatric or substance abuse assessments Individual psychotherapy or pharmacological management services	Not specified	No reimbursement for equipment and systems No additional fees	
Arizona	Live video Store and forward	Medically necessary services Behavioral Health, including diagnostic consultation, evaluation, individual and family counseling, case management, medication management Pain management Inpatient consultation Medical nutrition therapy Pharmacy management Office, outpatient and surgery follow up Dentistry for enrollees under age 21	Yes: registered nurse (RN), licensed practical nurse, clinical nurse specialist, registered nurse midwife, registered nurse practitioner, physician assistant, physical/ occupational/speech/ respiratory therapist, licensed clinical social worker, licensed marriage/family therapist, licensed professional counselor, and trained telepresenter familiar with recipient's medical condition	Normal FFS payment rates No additional fees	Originating site: Indian health service clinic Tribally-governed facility Urban clinic for American Indians Physician or other provider office Hospital FQHC

Arkansas	Live video	Consults Fetal echography and echocardiology Inpatient hospital visits FQHC encounters Behavioral healthcare for Rehabilitative Services for Persons with Mental Illness (RSPMI) program enrollees	Does not prohibit a health benefit plan from reimbursing other healthcare professionals	Originating site facility fee is not prohibited but not mandated	Originating site: Inpatient or non-emergency hospital Physician office or clinic Ambulatory surgical center FQHC Emergency department Patient's home is an allowed originating site if patient is receiving treatment in connection for end-stage renal disease
California	Live video Store and forward (for dermatology, dentistry, and ophthalmology)	Selected evaluation and management (E&M) services for patient visit and consultation Selected psychiatric diagnostic interview examination and selected psychiatric therapeutic services Teledentistry Interpretation and report of X-rays and electrocardiograms performed after telehealth transmission	Yes: any licensed health care provider or marriage/family therapist, intern or trainee	Normal FFS payment rates Reimbursement for originating site facility fee and distant site transmission fee	Type of setting is not limited Patient's home is an allowed originating site

Colorado	Live video Remote patient monitoring	Office visits for preventive and routine medical care Psychotherapy Obstetrical ultrasounds	Yes: nurse practitioners, physician's assistant, psychologists	Reimbursement for originating site facility fee and distant site transmission fee; Reimbursement for installation and patient education on remote patient monitoring equipment	Patient's home may not serve as an originating site
Connecticut	Live video Store and forward	Specialist consults	Yes: physical therapists, chiropractors, naturopaths, podiatrists, occupational therapists, optometrists, advanced practice RNs, physician assistants, psychologists, marital/family therapists, clinical or master social workers, alcohol and drug counselors, professional counselors, and certified dietician nutritionists	No additional fees	Originating site: FQHC

Delaware	Live video			Originating site facility fee	Originating site: Hospital FQHC Public health clinic Program for All-Inclusive Care for the Elderly (PACE) centers
District of Columbia	Live video	Evaluation and management Consultation Behavioral healthcare services including, but not limited to, psychiatric evaluation and treatment, psychotherapies, and counseling Rehabilitation services including speech therapy		Normal FFS payment rate Specific reimbursement guidelines for participating FQHCs No additional fees	Originating and distant site: Hospital FQHC Nursing facility Clinic Physician group/office Nurse practitioner group/office DC Public Schools and DC Public Charter Schools Core Service Agency Distant site may be out-of-state if provider is enrolled as a DC Medicaid provider is appropriately-licensed in their jurisdiction, in addition to the patient's jurisdiction

Florida	Live video	Evaluation, diagnosis, or treatment recommendation for dental health, behavioral health or physical health.	Yes: physicians, dentists, psychiatric nurses, RNs, advanced registered nurse practitioners, physician assistants, clinical social workers, mental health counselors, marriage/ family therapists, Masters-level certified addictions professionals, psychologists	No additional fees Normal FFS payment rate	Hospital outpatient setting Inpatient Setting Physician office Both originating and distant site must be located in Florida Therapeutic and community behavioral health services must be delivered from a Medicaid enrolled facility
Georgia	Live video	Office visit Pharmacologic management Behavioral health services including limited psychiatric services, individual psychotherapy and Assertive Community Treatment, Limited radiological services A limited number of other physician fee schedule services	Yes: physician assistants, clinical psychologists, nurse practitioners, clinical nurse specialists	Normal FFS payment rate Originating site facility fee	Providers must be located within 50 miles of the GA border Originating site: Provider office Hospital Critical access hospital Rural health clinic Skilled nursing facility FQHC Community mental health center School based clinic GA public health clinic Distant site: Provider office Hospital Critical access hospital

					Rural health clinic FQHC Skilled nursing facility Community mental health center GA public health clinic
Hawaii	Live video Store and forward Remote monitoring (Both effective Jan 1, 2017)	Complete parity with all services and benefits covered under Medicaid	Yes: mental health providers, oral health providers, advanced practice registered nurses, licensed psychologists	Normal FFS payment rate No additional fee	Originating site: No limitations, including patient's home Distant site: Licensed out-of-state providers may provide telemedicine services in consult with a supervising State licensed provider; out-of-state radiologists may provide services in Hawaii DoD-employed medical officers and psychologists are exempt from licensing requirements
Idaho	Live video	Primary care Specialty Psychotherapy with evaluation and management Psychotherapy diagnostic review	Yes: licensed therapists, licensed occupational therapist, licensed physical therapist, advanced	No additional fee	Originating site: No limitations, including patient's home

		Pharmacological management Therapeutic consultation and crisis intervention Speech therapy, occupational therapy and physical therapy provided that an in-person evaluation is completed first Crisis intervention consults School based Community Rehabilitation Services	practice registered nurses and physician's assistant		Distant site: No geographic limitations but provider must be licensed in the State
Illinois	Live video Store and forward (dermatology) Remote patient monitoring (home uterine monitoring)		Yes: physician assistant, podiatrist, advanced practice nurse, qualified mental health professional, occupational therapist	Originating site facility fee (originating sites who receive reimbursement for patients' room and board are not eligible for facility fee)	Originating site: Physician office Podiatrist office Local health department Community mental health center Outpatient hospital Rural health clinic Encounter rate clinic FQHC Provider must be licensed by the state of Illinois
Indiana	Live video Remote patient monitoring (as a part of other home health services)	Medically-necessary services under the following categories: Consultation Office visit Psychotherapy Psychiatric diagnostic interview End stage renal disease services		Originating site: Normal FFS payment rate, only if distant site deems provider's presence medically-	Originating and distant site must be at least 20 miles apart Following sites exempt: FQHC Rural health clinic

		Pharmacologic management		necessary Originating site facility fee Distant site: Normal FFS payment rate	Community mental health center Critical access hospital
Iowa	Live video	Behavioral Health Services (contracted out) Parity with Medicaid eligible services provided in person		No additional fee	
Kansas	Live video Remote patient monitoring (one or more qualifying chronic diseases)	Office visit Individual psychotherapy Pharmacological management	Yes: RNs or Licensed Practical Nurses	Originating site facility fee	
Kentucky	Live video Store and forward (radiology only)	Consultation Mental health evaluation and management Individual and group psychotherapy Pharmacologic management psychiatric/psychological/mental health diagnostic interview examinations Individual medical nutrition services	Yes: outside community mental health center: psychiatrists, licensed clinical social workers, psychologists, licensed professional clinical counselors, licensed marriage/family therapists, advanced registered nurse practitioners, speech language pathologists, occupational therapists,	No additional fees	Type of setting not limited

			<p>physical therapists, licensed dietitians or certified nutritionists, RNs or dieticians,</p> <p>Community mental health center: psychiatrists, licensed psychologists, licensed marriage/family therapists, licensed professional clinical counselors, psychiatric medical residents, psychiatric registered nurses, licensed clinical social workers, advanced registered nurse practitioners</p>		
Louisiana	<p>Live video Remote patient Monitoring Audio only (certain circumstances)</p>	Not specified	<p>Yes: physician assistant, dentists, nutritionists, dieticians, RNs, advanced practice registered nurses, licensed practical nurses, certified nurse assistants, offshore health service providers, ambulance services, licensed midwives, pharmacists, speech-language</p>	Only distant site provider reimbursed	<p>Distant site providers need to maintain a State license or telemedicine license, but do not need to be physically located in state</p> <p>No limit on type of originating site</p>

			<p>pathologists, audiologists, optometrists, podiatrists, chiropractors, physical therapists, occupational therapists, certified or licensed athletic trainers, psychologists, medical psychologists, social workers, licensed professional counselors, licensed perfusionists, licensed respiratory therapists, licensed radiologic technologists, or licensed clinical laboratory scientists</p>		
Maine	<p>Live video, Audio only (certain circumstances), Remote patient monitoring (covered under Home and Community Benefits for the Elderly and for Adults with Disabilities)</p>	<p>Medically-appropriate services not covered: Equipment Personal care aide services Pharmacy services for prescribed drugs Assistive technology services Non-emergency medical transportation services Ambulance services Services that require direct physical contact Medically-inappropriate services</p>	<p>Yes: RNs, PAs and other allied health professionals</p>	<p>Originating site facility fee</p> <p>Normal FFS payment rate</p>	<p>No limit on type of originating site</p>

<p>Maryland</p>	<p>Live video</p>	<p>Medically necessary behavioral health and somatic services</p>	<p>Permitted originating sites include: college or university student health or counseling offices; community-based substance use disorder providers; elementary, middle, high schools or technical schools with a supported nursing, counseling or medical office; a deaf or hard-of-hearing participant's home or any other secure location as approved by the participant and the provider; local health departments; FQHCs; hospitals, including the emergency department; nursing facilities; offices of physicians, psychiatric nurse practitioners, nurse practitioners and nurse midwives; opioid treatment programs; outpatient mental health clinic; renal dialysis centers; and</p>	<p>Originating site transmission fee</p>	<p>No restrictions—statewide coverage</p>
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			<p>residential crisis services sites.</p> <p>Permitted distant site providers include: nurse midwives, nurse practitioners, psychiatric nurse practitioners, physicians, and providers fluent in American Sign Language who provide telehealth services to a deaf or hard of hearing participant</p>		
Massachusetts	Remote patient monitoring	Short-term home health monitoring			
Michigan	Live video	<p>Inpatient consults</p> <p>Office or other outpatient consults and services</p> <p>Psychiatric diagnostic procedures</p> <p>Subsequent hospital care</p> <p>Training services, diabetes, End stage renal disease related services</p> <p>Individual behavior change intervention</p> <p>Behavioral health and/or substance abuse treatment services</p> <p>Education service</p>	<p>Yes: board-certified behavior and assistant behavior analysts, licensed and limited licensed psychologists, qualified behavioral health professionals</p>	Originating site facility fee	<p>Originating site: County mental health clinic or publically-funded mental health facility</p> <p>FQHC</p> <p>Hospital</p> <p>Physician or other provider office, including medical clinic</p> <p>Renal dialysis facility</p> <p>Rural health clinic</p> <p>Tribal health center</p>

		Nursing facility subsequent care			<p>Skilled nursing facility</p> <p>Speech language</p> <p>Audiology services can be within the school, patient's home, or any other established site deemed appropriate by the provider</p> <p>Behavioral health</p> <p>Distant site:</p> <p>Clinic</p> <p>Patient's home</p> <p>Any other established site deemed appropriate by the provider</p>
Minnesota	<p>Live video</p> <p>Store and forward</p> <p>Remote patient monitoring (under Elderly Waiver and Alternative Care programs)</p>	<p>Including but not limited to:</p> <p>Consultations</p> <p>Telehealth consults: emergency department or initial inpatient care</p> <p>Subsequent hospital care services with the limitation of one telemedicine visit every 30 days per eligible provider</p> <p>Subsequent nursing facility care services with the limitation of one telemedicine visit every 30 days</p> <p>End-stage renal disease services</p> <p>Individual and group medical nutrition therapy</p> <p>Individual and group diabetes</p>	<p>Yes: nurse practitioner, physician assistants, nurse midwives, clinical nurse specialists, registered dietitian or nutrition professionals, clinical psychologists, clinical social workers, dentists, dental hygienist, dental therapists, advanced dental therapists, pharmacists, certified genetic counselor, podiatrists, speech therapists, physical therapist, occupational</p>	<p>FFS normal payment rates</p>	<p>Originating site:</p> <p>Office of physician or practitioner</p> <p>Hospital (inpatient or outpatient)</p> <p>Critical access hospital</p> <p>Rural health clinic</p> <p>FQHC</p> <p>Hospital-based or CAH-based renal dialysis center (including satellites)</p> <p>Skilled nursing facility</p> <p>End-stage renal disease (ESRD) facilities</p> <p>Community mental</p>

		<p>self-management training with a minimum of one hour of in-person instruction to be furnished in the initial year training period to ensure effective injection training</p> <p>Smoking cessation</p> <p>Alcohol and substance abuse (other than tobacco) structured assessment and intervention services</p>	therapists, audiologists		<p>health center</p> <p>Dental clinic</p> <p>Residential facilities, such as a group home and assisted living</p> <p>School</p> <p>Patient's home allowed, but provider must be present</p>
Mississippi	<p>Live video</p> <p>Store and forward</p> <p>Remote patient monitoring</p>	Medically necessary health services	<p>Yes: physician assistants, nurse practitioners, psychologists, licensed clinical social workers, licensed professional counselors</p>	Originating site facility fee	<p>Originating site:</p> <p>Provider office</p> <p>Outpatient hospital (including critical access hospital)</p> <p>Rural health clinic</p> <p>FQHC</p> <p>Community and private mental health center</p> <p>Therapeutic group homes</p> <p>Indian health service clinic</p> <p>School-based clinic</p>
Missouri	Live video	<p>Consultation made to confirm a diagnosis</p> <p>Evaluation and management services</p> <p>A diagnosis, therapeutic, or interpretive service</p>	<p>Yes: advanced registered nurse practitioners, dentist, oral surgeons, psychologists, pharmacists, speech</p>	Originating site facility fee	<p>Originating site:</p> <p>Provider office</p> <p>Hospital</p> <p>Critical access hospital</p> <p>Rural health clinic</p> <p>FQHC</p>

		<p>Individual psychiatric or substance abuse assessment</p> <p>diagnostic interview</p> <p>examinations</p> <p>Individual psychotherapy</p> <p>Pharmacologic management</p>	<p>therapists,</p> <p>occupational therapists, physical therapists</p>		<p>Missouri State habilitation center or regional office</p> <p>Community mental health center</p> <p>Missouri State mental health facility</p> <p>Missouri State facility</p> <p>Residential treatment facility</p> <p>Comprehensive Substance use treatment and rehabilitation center</p> <p>Nursing home</p> <p>Dialysis center</p>
Montana	Live video		<p>Yes: advanced registered nurse practitioners, podiatrists, pharmacists, optometrists, genetic counselors, physician's assistants, licensed social workers, licensed professional counselors, psychologists, speech therapists, occupational therapists, physical therapists, nutritionists, diabetes counselor</p>	No additional fees	

Nebraska	Live video Store and forward Remote patient monitoring	Medically necessary and appropriate services	Yes: advanced registered nurse practitioners, nurse midwives, dentists, speech therapists, occupational therapists, physical therapists, optometrists	Originating site transmission fee for inpatient facilities Normal FFS payment schedule	Children cannot receive non-behavioral health services if comparable service is located within 30 miles of residence
Nevada	Live video Store and forward	Medically necessary and appropriate services including group therapy	Yes: licensed clinical psychologists, licensed clinical social workers, mental health counselors, psychological assistants	Originating site: facility fee (with exception of store and forward transmissions)	Originating site must be a qualified Medicaid provider including: Office of provider Critical access hospital Rural health clinic FQHC Hospital ESRD Facility Skilled Nursing Facility Community Mental Health Centers (CMHC) Indian Health Services/Tribal Organization/Urban Indian Organization School-Based Health Centers Schools Family Planning Clinics Public Health Clinics Comprehensive

					<p>Outpatient Rehabilitation Facilities Community Health Clinics (State Health Division) Special Children’s Clinics HIV Clinics Therapy offices Chiropractic offices</p> <p>Distant site provider must be Medicaid-enrolled provider</p>
New Hampshire	Live video	Specialty medical services only	Yes: nurse practitioners, clinical nurse specialists, nurse midwives, clinical psychologists, clinical social workers, registered dietitians or specified nutrition professionals	<p>No additional fees</p> <p>FFS normal payment</p>	Patients must be located in a rural health professional shortage area or in a county not in a Metropolitan Statistical Area
New Jersey	Live video	Psychiatry		No additional fees	<p>Originating site: Mental health clinic Outpatient hospital</p>
New Mexico	Live video Store and forward	Medically necessary services		Originating site facility fee	No limit on originating site

New York	Live video Remote patient monitoring Store and forward (only as it relates to home telehealth programs)	Medically necessary services	Yes: physician assistants, psychologists, social workers, licensed clinical social workers, nurse practitioners, dentists, RNs (when nurse is receiving patient-specific information or medical data at a distant site by means of remote patient monitoring), certified diabetes educators, certified asthma educators	FFS normal payment Distant site transmission fee under certain circumstances	Originating sites: Hospital Hospice Office of Mental Health-licensed Facility for the Mentally Disabled Physician office FQHC Diagnostic and treatment centers School-based health centers Practitioner offices Dental facilities
North Carolina	Live video	Medically necessary services Psychiatry	Yes: nurse practitioners, nurse midwives, physician assistants; for psychiatry: advanced practice psychiatric nurse practitioners, advanced practice psychiatric clinical nurse specialists, licensed psychologists, licensed clinical social workers, community diagnostic assessment agencies	Originating site provider facility fee	Patient cannot be in a jail, detention center, or prison The distant site of the service(s) must be of a sufficient distance from the originating site to provide service(s) to a beneficiary

North Dakota	Live video	New and established office and other outpatient services Psychiatric diagnostic evaluation Individual psychotherapy Pharmacologic management Speech therapy (individual) Initial inpatient telehealth consultation		Long-distance charges required for out-of-network sites Distant practitioner only receives reimbursement Originating site facility fee	Distant site must be sufficient distance from the originating site to provide services to patients who do not have readily available access to such specialized services allowed/reimbursed by ND Medicaid via telemedicine
Ohio	Live video	Office or other outpatient services Inpatient consultations Psychiatry services, including psychotherapy	Yes: licensed psychologists	Originating site facility fee (provider cannot be an inpatient hospital or nursing facility)	Originating site: Medical provider office FQHC Rural health clinic Primary care clinic rural health center, or primary care clinic Outpatient hospital Inpatient hospital Nursing facility Distant and originating site must be at least 5 miles apart
Oklahoma	Live video				

Oregon	Live video E-mail, telephone, and fax may be used when videoconferencing availability is limited	Medically-necessary services, including behavioral health services	Yes: physical therapists	No additional fees	No limit on originating site
Pennsylvania	Live video	Psychiatry services, including psychological evaluations and psychotherapy	Yes: certified registered nurse practitioners, certified nurse midwives, licensed psychologists	Originating site facility fee	Only hospitals may serve as originating and distant sites
Rhode Island	None				
South Carolina	Live video Remote patient monitoring (limited to long term care management)	Office or outpatient visit Inpatient consultation Individual psychotherapy Pharmacologic management Psychiatric diagnostic interview examination and testing Neurobehavioral status examination Electrocardiogram interpretation and report echocardiography	Yes: nurse practitioners, physician assistants	Originating site facility fee	Distant sites must be located in SC Medical Service Area, which is the state of SC and areas in NC and GA within 25 miles of the SC border
South Dakota	Live video Remote patient monitoring	Patient office consultation Inpatient hospital consultation Pharmacologic management Office or other outpatient visit	Remote patient monitoring: nurse	FFS normal payment Originating site	Originating site may not be located in the same community as the distant site

		Diabetes outpatient self-management education services		facility fee	
Tennessee	Live video	Crisis-related services		No additional fees	
Texas	Live video Remote patient monitoring (diabetes, hypertension, or other chronic condition and high risk patient)	Client assessment by a health professional Diagnosis, consultation, or treatment by a physician	Yes: certified nutrition specialists, nurse practitioners, physician assistants, certified nurse midwives, licensed professional counselors, licensed marriage/family therapists, licensed clinical social workers, psychologists, licensed psychological associates, provincially-licensed psychologists, licensed dieticians	Originating site facility fee	An established medical site Mental health facility State-supported living center
Utah	Live video Remote patient monitoring (pilot project for diabetes patients in rural areas)	Medically-necessary services	Yes: nurse practitioners	No additional fees	No restrictions on patient or provider setting
Vermont	Live video Remote patient monitoring (patients who have had congestive	Medically-necessary primary care services limited to primary care specialties: internal medicine, pediatrics, family medicine, obstetrics and gynecology	Yes: registered nurse nurse practitioners, clinical nurse specialists, licensed practice nurses under	Originating site facility fee allowed but not required	

	heart failure)		RN supervision, physician assistants		
Virginia	Live video Store and forward (diabetic retinopathy screening, radiology and dermatology only)	Evaluation and management Psychiatric care Speech therapy Radiology Specialty medical procedures	Yes: nurse practitioners, nurse midwives, psychiatrists, psychiatric clinical nurse specialists, psychiatric nurse practitioners, marriage/ family therapists, school psychologists, substance abuse practitioners, clinical nurse specialists, clinical psychologists, clinical social workers, local education agency (billing speech therapy)	Originating site facility fee	Originating sites: Provider office Local education agency FQHC Rural health clinic Hospital Nursing facility Health department clinic Renal unit Community service board Residential treatment center
Washington	Live video Remote patient monitoring (unstable condition and at risk for hospitalization) Store and forward (for associated office visit between client and referring healthcare provider only)	Medically-necessary services Genetic counseling Applied behavior analysis for clients age 20 and under		FFS normal payment model Originating site facility fee (except for inpatient hospital)	Originating site: Clinic Community mental health/ chemical dependency setting Dental office Rural health clinic FQHC Home or any location determined to be appropriate by the individual rendering service Hospital (inpatient

					and outpatient) Neurodevelopment center Physician or other health professional's office School Skilled nursing facility
West Virginia	Live video		Yes: physician assistants, advanced practice registered nurse/nurse practitioners, certified nurse midwives, clinical nurse specialists, licensed psychologists, licensed independent clinical social workers	Originating site facility fee	Originating sites: Provider office Private psychological practice Hospital RHC FQHC Community mental health center Skilled nursing facility Hospital based or CAH based renal dialysis center (including satellites) Rural health clinics and FQHCs not authorized to serve as distant site
Wisconsin	Live video	Office or other outpatient services; Consults Outpatient mental health services Health and behavior	Yes: physician assistants, nurse practitioners, nurse midwives, psychiatrists, PhD psychologists	FFS normal payment model Originating site facility fee	No specified restrictions on originating/patient site location

		assessment/intervention End stage renal disease-related services Outpatient substance abuse services			
Wyoming	Live video	Medically-necessary services	Yes: advanced practice nurses with specialty in psychiatry/mental health, mental health professionals, speech therapists, psychologists and neuropsychologists, physician’s assistants Medical professionals are not required to be present at the originating site unless medically-indicated	Originating site facility fee	Originating site: Hospital Provider office Community mental health or substance abuse treatment center Rural health clinic FQHC Skilled nursing facility Indian health services clinic Development center Hospital-based or Critical Access Hospital-based renal dialysis centers Developmental Center

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*Originally created July 2016, updates made in October 2016 based on individual states’ regulations

