

# **Future of Health:**

### Advancing the Appropriate Use of Telehealth Within Medical Specialties



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### Introduction

Telehealth has expanded access to care across a diverse array of services. The adoption and use of telehealth varies across different medical specialties and is redefining how physicians deliver care. The American Medical Association (AMA) has invested resources to advance the adoption and use of digital health—including telehealth—in medical care. The AMA's Telehealth Implementation Playbook<sup>1</sup> - \_ \_ documents an efficient path to implementing this digital health solution, including key steps, best practices and resources to accelerate and achieve telehealth adoption. The AMA STEPS Forward<sup>®</sup> Innovation Academy<sup>2</sup> comprises a series of interactive educational content to provide information related to the telehealth landscape, clinical best practices, impact on outcomes, scalability and sustainability, and opportunities for telehealth growth and integration with other services in support of digitally enabled care.

In 2021, the AMA developed the Return on Health Framework<sup>3</sup> to delineate the value of digital health care and understand how virtual medical care, including telehealth, can improve health outcomes and generate positive results for patients, clinicians, payers and society. The framework seeks to define how virtual care programs generate value, demonstrate how the framework can be effectively utilized to evaluate the impact of virtual care, and identify specific opportunities for those engaged in health care delivery to realize the full benefits of digitally enabled care moving forward.

As a first step in implementing the framework, the AMA sought to better understand how telehealth is being operationalized across different medical specialties. From April through July 2022, the AMA conducted interviews with representatives from eight medical specialties to better understand: (1) how digital health is being used within each specialty, (2) activities underway to advance the appropriate use of digital health, (3) considerations that affect digital health utilization, and (4) research studies and data collected to evaluate and measure impact. Interview participants included practicing physicians as well as staff representatives from the specialty organizations. A complete list of interviewees is included in the acknowledgment section. The seven medical specialties are identified in Table 1.

This paper provides insights detailing how telehealth is being used across medical specialties and activities undertaken by specialty societies to optimize the value of virtual care.

AMA

Playbook

# Telehealth Use Across Medical Specialties

Each specialty identified two or more "use cases" or clinical conditions or services that could be effectively treated or delivered through virtual care. All interview participants acknowledged the role of digital health modalities, including live and asynchronous (store and forward) technologies, to support optimal outcomes. Most specialties use a combination of audio, video, asynchronous information transfer (e.g., secure messaging, digital transfer of images or videos), and remote patient monitoring (e.g., transmission of biometric information). Multiple specialty groups noted that the modality for delivering digital care depends on various factors including, but not limited to, the clinical condition, patient presentation, acuity of care, resource availability (e.g., broadband, device), patient and provider comfort with the technology, and which modality (or combination of modalities) will generate the best outcomes. Several individuals referenced the importance of audio care, especially in cases where no other virtual care is available. For specialty consults while the patient is present with the referring clinician, audio may be preferred so that the in-person physician can continue eye contact with the patient while the specialty clinician is on a speaker phone. Several of the individuals who participated in the interviews cited peer-reviewed studies demonstrating the effectiveness of audio-only care in improving patient outcomes, especially if the alternative is no care.

Table 1 outlines the use cases identified as the most common services delivered using digital health within each specialty and the modalities that could be used—alone or in combination—to deliver care effectively. Clinicians noted that the services provided using digital health are likely to vary within subspecialties.

Specialty	Use Case	Live video	Live audio	Asynchronous	Remote Patient Monitoring
Cardiology	Congestive Heart Failure	√	√	$\checkmark$	$\checkmark$
	Valve Disease	√	$\checkmark$		$\checkmark$
	Benign Palpitations	√	$\checkmark$	$\checkmark$	
	Atrial Fibrillation	$\checkmark$			$\checkmark$
Emergency Medicine	Home-based emergency care	~	$\checkmark$		$\checkmark$
	Triage	$\checkmark$	$\checkmark$		$\checkmark$
	Virtual urgent care	$\checkmark$	$\checkmark$		$\checkmark$
Family Medicine	Behavioral Health	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Chronic Disease Management	~	$\checkmark$	$\checkmark$	$\checkmark$
	Simple Review of Dermatitis	~	~	$\checkmark$	
	Annual wellness	√	$\checkmark$	$\checkmark$	$\checkmark$
	Vaccine Education	√	$\checkmark$		
	Acute care triage	$\checkmark$	$\checkmark$		$\checkmark$
	Hospital discharge	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$

### Table 1: Common Uses of Digital Health Across Medical Specialties

Specialty	Use Case	Live video	Live audio	Asynchronous	Remote Patient Monitoring
Hematology	Classic (Benign) Hematology	~	~	$\checkmark$	$\checkmark$
	Sickle Cell Disease	√	$\checkmark$	$\checkmark$	$\checkmark$
	Chemotherapy Follow-up	~	~	$\checkmark$	
General Internal Medicine	Triage for acuity	$\checkmark$	$\checkmark$		$\checkmark$
	Chronic disease management	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Behavioral Health	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Neurology	Movement disorders	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Epilepsy	$\checkmark$	$\checkmark$	$\checkmark$	
	Headache medicine	$\checkmark$	$\checkmark$	$\checkmark$	
	Neuromuscular disease	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Vascular neurology (e.g., stroke)	~	$\checkmark$	$\checkmark$	$\checkmark$
	Cognitive disorders	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Obstetrics/	Prenatal/antenatal care	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Gynecology	Pre- and post-op procedures	V	$\checkmark$		
	Reproductive health (STIs, birth control, abortion)	V	V	$\checkmark$	
Oncology	Care planning for new patients	~	~		
	Chemotherapy follow-up	~	~		
	Symptom management	$\checkmark$	$\checkmark$	$\checkmark$	
	Pre-op planning	$\checkmark$	$\checkmark$		
Pediatrics	Specialty consultation	√	√		√
	Medically complex care (wrap-around services)	√	V	$\checkmark$	$\checkmark$
	Developmental pediatrics	~	~	$\checkmark$	
	Mental health	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Pediatrics	Emergency Department consultation (crisis triage)	~			
	e-Consults with providers/schools	$\checkmark$	$\checkmark$		
	Follow-up care (including medication management)	~	√	$\checkmark$	$\checkmark$



Multiple specialties referenced common services that could be effectively provided using telehealth. One specialist commented on the importance of the "patient care journey," noting that telehealth is a tool to support this process. The most frequently cited examples were behavioral health and management of non-acute, stable conditions such as regular check-ins, medication management, or follow-up care. Interviewees also noted that pre- and post-operative visits could often be safely conducted virtually, as evidenced during the pandemic when clinicians sought to minimize patient exposure to communicable diseases except when necessary. Health screening and triage were also referenced as effective uses of telehealth, which could reduce the patient's time in an in-person health setting. In some circumstances, this involved gathering current health status, medications, presenting condition and medical history using online secure patient portals or remote patient monitoring technology to capture relevant biometric information such as blood pressure or heart rate. In other cases, members of the medical team interacted with the patient virtually to determine whether an in-person visit was needed and whether the patient required immediate care or could be seen within the next couple of days. Many specialists noted that telehealth is also being designed to support high-risk and acute care, including tele-ICU, tele-stroke and hospital-at-home.

Specialty groups indicated that while some services could be effectively delivered remotely, digital care can only partially replace the need for in-person visits. As such, most clinicians indicated the importance of a hybrid approach whereby the physician could identify when it was appropriate to use telehealth and other digital technologies and when in-person care was needed. Interview participants emphasized the importance of using clinical judgment to make these determinations based on patient characteristics (e.g., age, health status), circumstances (e.g., transportation, work schedule), and clinical

need (e.g., acuity of the patient's condition). Multiple interviewees noted that telehealth is a tool clinicians can use to address the "Five Rights" approach for treating patients: the right care at the right time in the right place to the right person using the right approach. One specialist noted the importance of distinguishing between acute and chronic care, remarking that most chronic conditions can be managed through a hybrid in-person and virtual care model. In contrast, telehealth for care unrelated to chronic disease management depends upon the specific medical condition, acuity, patient characteristics, medical status and other circumstances (such as proximity to a medical facility). Other clinicians stated that new cases required at least one in-person visit, allowing the physician to determine whether ongoing care via telehealth is safe and can be effectively used to provide high-quality care. While some specialties indicated that they require an in-person visit for all new patients, other specialties indicated that telehealth could be used as a first consultation to answer questions, review diagnostics, and provide patient support before the patient is seen in person. This is particularly useful when the waitlist to see a specialist in person is long. Several clinicians noted the importance of integrating telehealth and in-person care for managing patients with complex care needs, using digital health to provide "wrap-around" services to ensure more holistic care.

## Clinical Guidelines and Appropriate Use of Telehealth

The participating specialty societies identified three approaches they have undertaken or are considering to advance the safe and effective use of telehealth and, ultimately, assess its value: (1) clinical guidelines, (2) consensus statements, and (3) workgroups. While some specialty societies have already developed specialty-specific standards or guidelines for the use of telehealth, others are still contemplating how to measure and evaluate care delivered virtually to ensure optimal outcomes.

### **Clinical Guidelines**

Several medical specialties, including obstetrics and gynecology,<sup>4</sup> dermatology,<sup>5</sup> oncology, <sup>6</sup> emergency medicine,<sup>7</sup> and psychiatry,<sup>8</sup> have established practice guidelines related to the use of telehealth within their clinical specialty. In many cases, these were developed before the pandemic. Other medical specialty societies reported that they were not planning to develop new guidelines specific to telehealth but are revisiting their current guidelines to articulate which programs and services are appropriate for telehealth and how to standardize the delivery of these services using digital technology. In contrast, one specialist noted the need for guidance on telehealth guidelines before the pandemic, others recognized the need for clinical guidelines due to the pandemic. Among those specialties that released clinical guidelines for the use of telehealth, most looked to existing research and consulted with physician members who had extensive experience using telehealth.

### **Consensus Statements**

Given the limited research to date, the specialty groups that have not yet developed telehealth clinical guidelines articulated the importance of establishing consensus-based statements until there is sufficient published peer-reviewed research to determine best practices in telehealth. The interviews revealed different strategies to accomplish this objective. Some specialties are convening national experts to develop consensus statements. For example, the American Academy of Pediatrics (AAP) established a national, multicentered collaborative research network to establish an evidence base for pediatric telehealth. The Supporting Pediatric Research on Outcomes and Utilization of Telehealth (SPROUT),<sup>9</sup> a community of pediatric clinicians within the AAP focused on the use of telehealth, has developed a consensus-based framework and is planning to employ the Delphi method to reach consensus on the use of telehealth in pediatric care. As a clinician in another specialty noted, it is important to convene physicians and secure buy-in for telehealth before developing a consensus statement. The American Academy of Neurology (AAN) developed a telehealth position statement in 2021<sup>10</sup> and is considering developing a framework for the use of telehealth in neurology based on the frameworks employed by the National Quality Forum's Measures Framework<sup>11</sup> and the AMA's Digital Health Return on Value Framework<sup>12</sup> while the Society of General Internal Medicine is working on a position statement for telehealth which will address health equity, reflect on audio vs video technology, discuss shared experiences, and provide recommendations for appropriate use of digital health.



#### Workgroups

Many specialty societies have established workgroups focused on telehealth. One of the key objectives of these groups is to review the evidence, identify research gaps and disseminate information to inform the future delivery of specialty care using telehealth. For example, the American College of Obstetrics and Gynecology (ACOG) convened the Redesigning Prenatal Care Initiative,<sup>13</sup> a workgroup of maternal care experts revisiting prenatal care guidelines and contemplating the role of a hybrid care model that integrates in-person and digital care. Some specialty societies have established committees focused on sharing insights with members. The American Society of Hematology (ASH) established a committee on practice<sup>14</sup> to disseminate information and advocate for key policies such as continued support for payment for audio-only telehealth. Other specialty societies established specific telehealth sections within their websites to share research findings, peer-reviewed publications, and disseminate information. The AAN's Telehealth subcommittee<sup>15</sup> manages a website that provides information on existing guidelines, regulatory changes, and case studies. The website also hosts webinars focused on telehealth use in neurology. The American Psychiatry Association (APA) established a committee on telepsychiatry in 2015,<sup>16</sup> and the workgroup develops member resources such as educational material, research findings, and the policy implications of telepsychiatry. Some societies have convened members to generate educational content such as toolkits, like the APA's Telepsychiatry Toolkit. Other groups have convened members to develop workbooks to support the effective use of telehealth. Workbooks produced by the American College of Cardiology (ACC) feature specialized content, including care at home and remote patient monitoring.<sup>17</sup>

# **Key Challenges**

Participants in the interviews outlined key barriers that affect telehealth adoption and effective utilization. Policy issues were the most frequently cited obstacle, with one specialist indicating that the industry's biggest challenge is the "patchwork of policies." Payment issues comprise the largest obstacle, but other policy issues, such as legal concerns, state policies and patient privacy, will need to be considered as the adoption and use of telehealth expands.

### **Physician Payment**

Almost unanimously, specialty societies confirmed that physician payment is the key issue driving the adoption and use of digital health. As one specialist stated: "No margin, no mission." Without adequate payment, clinicians are unable to achieve their mission of delivering high-quality care that is convenient, accessible and equitable. While physicians might recognize the benefit of delivering some services via telehealth and believe that it can provide outcomes comparable to in-person care, they are unlikely to continue to deliver care using digital technology if it is not adequately reimbursed. Several specialists commented that the use of telehealth depends on its value proposition; while payment is a limiting factor for fee-for-service delivery models, value-based and capitated models encourage the effective use of telehealth by allowing clinicians to determine the best way to deliver care. A specialist confirmed her belief that payers value in-person over virtual care and video over audio-only virtual care. As such, until there is sufficient data to demonstrate value, payers are likely to continue incentivizing in-person care and disincentivizing the use of audio-only technology, which will likely continue exacerbating health disparities.

In determining fee-for-service payment, policymakers distinguish between the costs for the physician's time and the cost for the infrastructure, including physical space and medical equipment (also known as the facility fee). The individuals participating in the interviews agreed that there should be payment parity for the physician's time, given that their experience and time have the same value regardless of where the patient (or clinician) is located at the time of care. However, the facility costs are likely to vary across services, such as medical triage or case management, which can be performed from different locations without compromising the quality of care. In contrast, other services require access to medical equipment that cannot be accessed from any location. The individuals participating in the interviews emphasized the need for more specificity around the services provided to determine appropriate payment. In some instances, costs may be higher for a telehealth visit, given the costs of care coordination, care team and patient training on using the technology, and other expenses related to incorporating new technology. In contrast, most ambulatory clinics have fixed costs and incur the same facility costs irrespective of whether the visit is virtual or in-person. A subset of specialties may be able to deliver all services virtually, eliminating expenses associated with rent and medical equipment. As such, carefully reviewing clinician time and relevant expenses is essential to determine payment rates.

#### **Key Challenges**



#### **Broadband and Technology Access**

While access to health care services has always been an area of concern, expanding telehealth has introduced new challenges that can potentially exacerbate health disparities. The most noted access barrier to virtual care is the availability of broadband. To address this barrier, the federal government has funded national programs to expand broadband access, increase internet accessibility and affordability, and offer discounts on phones and data plans for qualifying low-income consumers.<sup>18, 19, 20</sup> Despite these investments, there are still numerous households and those without stable housing who do not have access to a device or Wi-Fi and, therefore, cannot access health care using digital technology. During the pandemic, waivers that authorized payment for audio-only virtual visits mitigated the lack of broadband access. However, since the end of the public health emergency in May 2023, CMS has made some of these waivers permanent and extended others through 2024. It is still unknown whether or not they will become permanent. Those patients without sufficient cellular data or residing in an area with limited broadband access will be required to travel to service sites with the necessary technology infrastructure to receive care. For many, getting transportation to these sites may also be prohibitive.

Another challenge exists in ensuring patients have access to the technology needed for telehealth encounters. Access barriers remain despite federal funding to support the purchase of mobile phones, tablets or other devices to support telehealth. Patients may not know how to use the equipment or have other limitations that affect utilization (e.g., disabilities, language barriers). Remote patient monitoring (RPM) has been effective at reducing hospitalizations among individuals with chronic conditions.<sup>21</sup> However, not all households can afford these devices. During the pandemic, ACOG worked with health plans to send RPM screening devices, including scales, blood pressure cuffs and fetal monitoring devices, to pregnant women to reduce their in-person visits. These devices and follow-up telephone calls proved useful to help manage prenatal care and reduce exposure to COVID-19. However, programs designed to provide access to free RPM equipment that required patients to pick up the devices saw lower levels of adoption. RPM devices can only be used in households with broadband access to transmit the data to the clinician.

#### **Privacy and Security**

Telehealth introduces new challenges concerning patient privacy and data security. Digital health produces new data points: videos, messages, images, and regular transmission of biometrics through RPM. This information must be appropriately integrated into the patient's medical record so that it is both actionable and protected like other patient health information safeguarded under Federal privacy laws.

Patient privacy within their living environment is also an issue. A patient may only sometimes have access to a private room with a door that allows the individual to engage in the virtual visit without others overhearing the conversation. Even when the person can find a private space to participate in the telehealth visit, other members of the household may be outside the room and overhear some of the conversation. This is especially concerning for victims of domestic violence or patients with behavioral health needs.





### **Medical Legal and Licensure**

Several specialists noted concerns regarding medical-legal policies that could hinder medical specialists' adoption and use of digital health. Without clear clinical guidelines, clinicians are concerned about the legal risks of using telehealth and the implications should an adverse event occur. ACOG acknowledged the growing political pressure around prescribing medication to induce an abortion, given variations in state laws. Without a clear policy from the federal government, this clinical service continues to straddle a gray line between state and federal laws. Other specialties noted concerns about how digital health information, such as biometric information and other regularly collected data, will be used and analyzed going forward. Physicians cannot constantly monitor this information, increasing the need for guidance on an acceptable response time when values may indicate a problem. This area is also impacted by the uncertainty post-pandemic. One specialist noted the regulatory issues that dictate where the patient and clinician must be located during a virtual encounter. Visits conducted from the patient's home were not reimbursable under Medicare before the pandemic. Specialists also noted concerns about varying state laws and licensure requirements that may inhibit their use of telehealth, especially when treating patients across state lines.

#### **Clinician Education and Preferences**

Specialists noted the importance of clinician education in increasing acceptance of telehealth to deliver care. One specialty group noted that many physicians believe in-person interactions are more effective in establishing the patient-physician connection. Another clinician pointed out that some of their colleagues do not feel comfortable using telehealth technology and only schedule in-office appointments. A specialist noted that clinicians require training on using telehealth technology and recommended credentialing for all clinicians providing care via telehealth. Finally, patients may not be familiar with using telehealth, which puts physicians in the position of teaching the patient how to use the technology, detracting from the physician's time to provide clinical care directly. This individual recommended education on telehealth for all stakeholders: clinicians, patients, health systems, and payers. One resource that could help to address this need is the AMA Telehealth Clinical Education Playbook, which provides a framework for educating physicians and physician learners on the use of telehealth to deliver high-quality patient care.<sup>22</sup>

#### Workflow

During the interviews, several specialty societies noted that telehealth has introduced workflow-related challenges. One specialist pointed out the importance of having some clinicians dedicated to telehealth so that a practitioner is not trying to juggle in-person and virtual care. However, other clinicians indicated that their practices seamlessly transition from virtual to in-person visits throughout the day. Clinicians pointed out the need for models to check the patient in and out. Designated team members handle the logistics, including ensuring that the patient knows how to use the equipment and, following the appointment, verify that the patient understands the clinician's directions. Specialists also pointed out the need to use team-based care approaches for asynchronous telehealth care, which involves delegating responsibilities to different members of the team according to their roles and capabilities. Remote patient monitoring also creates the need for data management as information is constantly transmitted from wearable devices, and patients may send information such as weight, blood pressure and hemoglobin A1c at different times throughout the day. Developing a workflow to manage the information and appropriately triage patients based on the data is essential to ensure safe and effective care. However, this also requires managing patient expectations; many patients now expect to receive lab results or responses to secure messages at all hours of the day, not just during regular business hours.

## Next Steps

The interviews with medical specialties underscored the importance of telehealth across the medical field. While physicians continue to embrace digital health to support care delivery, they acknowledge that there is an immediate need for more research, guidance, and coordination to facilitate the optimal use of telehealth.



#### Research

Physicians are seeking recommendations not only on best practices to determine which services are appropriate for telehealth but also on how to use telehealth and other digital modalities to improve patient care across the care continuum. Federal funding is needed to support research in advancing the implementation of science, diagnosis, management and treatment of disease through telehealth, and evaluate effectiveness using comprehensive frameworks such as the AMA's Return on Health. Funding is also needed to support research on the role of telehealth in precision medicine, population health, self-management, and health behavior change. One clinician suggested developing artificial intelligence algorithms to help identify the sickest patients to prioritize in-person visits and determine which patients are less acute and may be safely treated through telehealth. One interviewee pointed out, however, that some information needed to inform this research is not readily available.



#### Guidance

Promising practices and guidelines, even if consensus-based, are key to ensuring the safe and effective use of telehealth. Clinicians and representatives from medical specialty societies also emphasized the need for guidance on payment policy, rules and regulations, and billing processes, which contribute to confusion and inefficiencies in care delivery.



#### Collaboration

Numerous medical specialties confirmed their desire to work together to advance the appropriate use of digital health. Clinicians recommended cross-specialty coordination to advocate for telehealth payment policy, develop consistent categorization for telehealth services, and identify minimal criteria for the virtual delivery of specialty care. Coordination across specialties will advance measurement, promote consensus building, and support better care coordination and alignment of clinical guidelines to facilitate patient care.

Advancing these activities will help ensure the industry achieves an optimal digitally enabled care approach that benefits patients, physicians and care teams.



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