ATA TELEHEALTH & VIRTUAL CARE TAXONOMY

BACKGROUND

This taxonomy provides a standardized set of definitions for telehealth, virtual care, and technology-enabled health services. Telehealth effectively connects individuals and their healthcare providers when in-person care is not necessary or not possible, enabling patients to receive care, consult with clinicians, obtain diagnoses, manage conditions, arrange prescriptions, and access health information remotely.

Over more than three decades of use, telehealth has been consistently shown to be a safe and high-quality care modality, a convenient option for patients and clinicians, and a secure environment for the collection and transmission of personal health information. Together, these attributes extend where and how care is delivered, strengthening the healthcare system overall.

Telehealth and virtual care can expand access for rural communities, underserved and vulnerable populations, older adults, and individuals who face barriers to in-person care—supporting timely, effective, and appropriate care when and where it is needed. Telehealth also improves system efficiency, helps reduce costs, and enables healthcare providers and health systems to serve more people more effectively.

This taxonomy is intended to support consistent understanding across ATA resources, policy discussions, research, reimbursement analysis, and implementation efforts. It distinguishes between care settings, modalities, care models, enabling technologies, and governance considerations, recognizing that these concepts are often used interchangeably but serve distinct functions. The definitions reflect current usage across the healthcare ecosystem and are not intended to be prescriptive or determinative of clinical appropriateness, regulatory compliance, or reimbursement eligibility.

I. CARE SETTINGS & ENCOUNTER TYPES

In-Person Encounter
A clinical interaction in which the clinician and patient are physically present in the same location.

Telehealth
The delivery of health care services to a patient by a clinician from a distance

Face-to-Face Encounter (Virtual)
A real-time clinical interaction between a clinician and patient using simultaneous audio and video technology.

II. TELEMEDICINE MODALITIES (HOW CARE IS DELIVERED)

A. Synchronous

Synchronous Telemedicine
The delivery of clinical services in real time through interactive communication between clinician and patient. This modality includes a clinical intervention occurring during the encounter.

Audio-Only Telemedicine
Clinical care delivered via telephone without video. This modality plays an important role for patients with limited access to broadband, devices, or digital literacy.

Audio-Visual Telemedicine
Clinical care delivered via video-based platforms, enabling visual assessment and more interactive communication between clinician and patient.

B. Asynchronous

Asynchronous Telemedicine (Store-and-Forward)
The delivery of care in which clinical information (e.g., medical history, images, diagnostic data) is collected and transmitted for later review by a clinician, followed by diagnosis, treatment recommendations, or care planning. This modality includes a clinical intervention.

Chat-Based or Message Based Interactions
Asynchronous communication via secure online platforms or mobile applications that allow patients to transmit health information, images, or other data to a clinician for later review and response.

E-Visits
Patient submits a medical concern, and the provider securely provides medical advice or care.

E-Consults
Consultative, provider to provider communications within a shared electronic health record or web-based platform, intended to improve access to specialty care for patients and providers, without a face-to-face specialist visit.

In-boxology (Asynchronous Team-Based Care)
A team-based virtual care model that uses asynchronous digital communication to triage, manage, and resolve patient inquiries, clinical tasks, and care needs through shared workflows rather than ongoing continuity with a specific clinician.

C. Remote Physiologic Monitoring (RPM) & Remote Therapeutic Monitoring (RTM)

The collection, transmission, evaluation, and communication of individual health data from a patient outside of a traditional clinical setting—such as the home—to a healthcare provider or care team using connected devices, sensors, mobile applications, or wearable technologies.
RTM focuses on monitoring therapy adherence, patient-reported outcomes, and therapeutic response,

III. CARE MODELS (HOW CARE IS ORGANIZED)

Virtual First
A care delivery strategy in which a virtual telemedicine visit is offered as the initial point of entry into the health system, without requiring an initial in-person visit.

Virtual Only
A care model in which continuity of care is provided exclusively through synchronous or asynchronous telemedicine encounters, with no in-person component.

Hybrid Care
A care model that integrates both in-person and telemedicine encounters, allowing modality selection based on clinical context, patient preference, or clinician judgment.

IV. TECHNOLOGY-ENABLED CLINICAL INTERVENTIONS

Digital Therapeutics (DTx)
Evidence-based software products intended to prevent, manage, or treat a disease, disorder, condition, or injury by delivering a medical intervention with a demonstrated positive therapeutic impact on patient health.

Technology-Enabled Modalities
Virtual care solutions that support or augment care delivery, including clinician-to-clinician consultation, patient education, data transmission and interpretation, algorithm-enabled diagnostic support, and digital therapeutics used alone or alongside conventional therapies.

Peripheral Devices
Patient-facing technologies used to augment clinical assessment or care delivery in telemedicine, including physiologic monitoring tools, digital stethoscopes, otoscopes, ophthalmoscopes, cameras, and mobile or connected devices.

V. ARTIFICIAL INTELLIGENCE & DATA-DRIVEN TECHNOLOGIES

Artificial Intelligence (AI)
Technologies that enable computer systems to perform tasks that typically require human intelligence, such as reasoning, pattern recognition, decision-making, and problem-solving.

Machine Learning (ML)
A subset of AI in which systems learn from data and improve performance over time without being explicitly programmed for each task.

Natural Language Processing (NLP)
An AI capability that enables machines to understand, interpret, and generate human language, commonly used in chatbots, transcription, translation, and sentiment analysis.

Generative AI
AI technologies capable of creating new content—such as text, images, audio, or synthetic data—based on patterns learned from existing data.

Adaptive AI
AI systems that modify their behavior or outputs in response to new data or changing conditions, improving performance over time with minimal human intervention.

Ambient AI
AI technologies designed to integrate seamlessly into clinical workflows and human interactions, enabling conversational, non-disruptive support for tasks such as documentation, recommendations, and real-time decision assistance.

VI. DATA EXCHANGE, INFRASTRUCTURE & INTEROPERABILITY

Health Information Exchange (HIE)
The electronic sharing of patient health information across healthcare organizations to support timely access to data, improve care coordination, and enhance quality, safety, and efficiency.

Trusted Exchange Framework and Common Agreement (TEFCA)
A federal initiative established under the 21st Century Cures Act to create a standardized, secure, and interoperable framework for nationwide health information exchange, enabling a "network of networks" for data sharing across health information networks.

VII. PATIENT ACCESS & EXPERIENCE

Digital Front Door
A strategy that uses digital tools—such as mobile applications, patient portals, chatbots, and online scheduling—to guide patients to appropriate care options, including telemedicine, from their initial point of contact with the health system.

Telepresenter
A trained individual, often a nurse or medical assistant, who supports telemedicine encounters by assisting with technology setup, patient facilitation, and limited clinical tasks.

VIII. LEGAL, ETHICAL & REGULATORY CONSIDERATIONS

Consent for Telehealth
The legal and ethical requirement to inform patients about the nature, limitations, and risks of telemedicine services and to obtain their agreement prior to initiating care.

Regulatory Oversight
The collection of federal, state, and organizational policies and regulations that govern telehealth and virtual care, including licensure, privacy, security, reimbursement, and quality requirements**.**