

# Chapter 18

## Standards and Guidelines Development in the American Telemedicine Association

**Elizabeth A. Krupinski**  
*University of Arizona, USA*

**Nina Antoniotti**  
*Marshfield Clinic Telehealth Network, USA*

**Anne Burdick**  
*University of Miami Miller School of Medicine, USA*

### ABSTRACT

*The American Telemedicine Association (ATA) was established in 1993 to promote access to medical care for consumers and health professionals via telecommunications technology. The ATA Standards and Guidelines Committee has been charged by the Board of Directors with identifying, overseeing, and assisting work groups to develop individual standards and guidelines for specific technical, clinical and administrative areas. This chapter will review the mission of the ATA Standards and Guidelines Committee, the process by which standards and guidelines documents are produced, and report on its progress to date in providing the telehealth community with standards and guidelines for the practicing medicine at a distance.*

### INTRODUCTION

The American Telemedicine Association was established in 1993 as a non-profit organization to bring together a variety of groups from medicine, academia, technology and telecommunications companies, e-health, m-health, medical societies, government and others to overcome barriers to

the advancement of telemedicine. The Association works to achieve this goal through a variety of mission-related activities. One of its main activities is to educate government and the public about telemedicine in order to validate its role as an essential component in the delivery of modern medical care. The ATA also serves as a resource for information and services related to telemedicine. Its 2009 Annual Meeting in Las Vegas, NV had an attendance of over 2700 people – a 12% increase

DOI: 10.4018/978-1-61692-843-8.ch018

over the previous year, attesting to its role as a leader in telemedical information and resources. The ATA website ([www.americantelemed.org](http://www.americantelemed.org)) is a leading source for telemedicine news. In its effort to foster networks and collaboration, the ATA sponsors 14 Special Interest and Discussion Groups and has two Regional Chapters (Latin America & Caribbean and Pacific Islands). Each of the groups meets regularly and discusses critical issues related to their interest focus (e.g., Business & Finance, Teledermatology). The ATA also promotes research and education by sponsoring the Annual Meeting with its associated scientific program and exhibition showcase, and periodically forming task forces to develop vision papers on a specific telemedicine topic (Krupinski et al., 2006). Finally, the ATA is creating the basis for assuring uniform quality in the delivery of remote healthcare services, particularly via the Standards and Guidelines Committee efforts.

## **BACKGROUND**

There have been efforts towards establishing standards and guidelines for telemedicine practice prior to the formal establishment of the ATA Standards and Guidelines Committee. For example, radiology has a number of technical and practice guidelines in place for digital image acquisition, storage, transfer and display via Picture Archiving and Communications Systems (PACS) and tele-radiology (Seibert, et al., 2004; Van Moore, et al., 2005; Siegel, et al., 2006; Williams et al., 2007; Krupinski et al., 2007); and the Society of American Gastrointestinal and Endoscopic Surgeons has guidelines for the Surgical Practice of Telemedicine (SAGES, 2004). The first set of guidelines from the ATA actually pre-dated the formation of the Standards and Guidelines Committee, and was created for Telepathology in 1999 (ATA, 1999).

In 2004 Richard Bakalar, MD and the ATA Ocular Telehealth Special Interest Group devel-

oped and published the first truly formal set of ATA practice guidelines. The guidelines specifically addressed diabetic retinopathy telehealth clinical and administrative issues and provided guidelines for designing and implementing a diabetic retinopathy ocular telehealth care program (ATA, 2004). This document established the general framework for future efforts in terms of addressing technical, administrative and clinical aspects associated with a particular clinical specialty using telemedicine as a means to deliver patient care. A very important precedence was established in the creation of these guidelines. Early in the development process the decision was made to contact the National Institute of Standards and Technology (NIST) for help and guidance regarding the accepted means by which standards and guidelines are produced and approved. Since then, NIST and the ATA have collaborated extensively in the guideline development process.

The formal effort to create a standing committee and establish a process for developing standards and guidelines within the ATA was initiated by Hon Pak, MD when he was Vice President of the Association in 2005-2006. As a practicing tele-dermatologist, he recognized the need for quality and consistency in the practice of teledermatology, so the first practice guidelines developed by the Standards and Guidelines Committee were the Practice Guidelines for Teledermatology (Krupinski, et al., 2007). This document followed the general format established in the diabetic retinopathy guidelines and addressed technical, administrative and clinical aspects of teledermatology.

Under guidance from NIST, the teledermatology guidelines were the first to incorporate the idea that practice recommendations could have different levels of importance and that the guidelines are required whenever *feasible and practical* as determined by the referring clinician practicing under local conditions. Thus, there are Guidelines that “shall” be implemented in order to meet a basic minimum level of opera-

7 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/standards-guidelines-development-american-telemedicine/46534](http://www.igi-global.com/chapter/standards-guidelines-development-american-telemedicine/46534)

## Related Content

---

### The Benefits and Challenges of Using Mobile-Based Tools in Self-Management and Care

Rupananda Misra (2016). *Reshaping Medical Practice and Care with Health Information Systems* (pp. 1-13).

[www.irma-international.org/chapter/the-benefits-and-challenges-of-using-mobile-based-tools-in-self-management-and-care/146002](http://www.irma-international.org/chapter/the-benefits-and-challenges-of-using-mobile-based-tools-in-self-management-and-care/146002)

### Security Improvements for Better and Safer Cross-Border ePrescription and Patient Summary Services

Dimitrios G. Katehakis, George Pangalos and Andriana Prentza (2017). *International Journal of Reliable and Quality E-Healthcare* (pp. 18-28).

[www.irma-international.org/article/security-improvements-for-better-and-safer-cross-border-eprescription-and-patient-summary-services/164996](http://www.irma-international.org/article/security-improvements-for-better-and-safer-cross-border-eprescription-and-patient-summary-services/164996)

### Maturity in Health Organization Information Systems: Metrics and Privacy Perspectives

Alberto Carneiro (2016). *International Journal of Privacy and Health Information Management* (pp. 1-18).

[www.irma-international.org/article/maturity-in-health-organization-information-systems/152573](http://www.irma-international.org/article/maturity-in-health-organization-information-systems/152573)

### A Multidisciplinary Remote Healthcare Delivery System to Increase Health Care Access, Pathology Screening, and Treatment in Developing Countries: The Case of Benin

Thierry Oscar Edoh, Pravin Amrut Pawar, Bernd Brügge and Gunnar Teege (2018). *Health Care Delivery and Clinical Science: Concepts, Methodologies, Tools, and Applications* (pp. 269-302).

[www.irma-international.org/chapter/a-multidisciplinary-remote-healthcare-delivery-system-to-increase-health-care-access-pathology-screening-and-treatment-in-developing-countries/192676](http://www.irma-international.org/chapter/a-multidisciplinary-remote-healthcare-delivery-system-to-increase-health-care-access-pathology-screening-and-treatment-in-developing-countries/192676)

### Conversational Learning in Medical Education: Clinical Problem Solving Around Chronic Persistent Headache

Tamoghna Biswas, Amy Price, Shivika Chandra, Adrija Datta and Rakesh Biswas (2012). *International Journal of User-Driven Healthcare* (pp. 12-23).

[www.irma-international.org/article/conversational-learning-medical-education/68394](http://www.irma-international.org/article/conversational-learning-medical-education/68394)