Purpose

- Describe current practices and future plans for expanding TeleAudiology initiatives to effectively connect patients and services.
- Outline key steps, implementation issues, and preliminary outcome data related to VA TeleAudiology services.
- Stimulate dialogue about the evolution of service delivery models to improve access to quality hearing health care.
- Discuss audiology telehealth integration and possibilities for private sector and health care organizations.

Disclaimer:
The opinions expressed herein are solely those of the author and do not necessarily reflect the views or official policies of the United States Government or the Department of Veterans Affairs.

Presenter Disclosure Statements

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Disclosure:
Dr. Gladden has no financial or nonfinancial relationships to disclose.

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Global Innovation and Connected Healthcare

Changing Nature of Consumer Engagement for Healthcare Connectivity: Virtual Care and Services

- Utilize Information and Technology to foster greater consumer engagement.
- Give the consumer access to technology tools to:
  - Expand access to care (eliminate face to face patient/provider visits as the predominant access point)
  - Inform decision making
  - Promote self-management and patient education
  - Enhance patient dialog to foster provider/patient interaction
  - Manage chronic conditions
  - Improve follow up care
  - Improve patient outcomes and satisfaction
  - Reduce costs of care

“Connected Health”

- Healthcare is moving to a virtual care delivery system.
- Movement of care goes beyond the hospital and clinics into the day-to-day lives of patients.
- The goal is to achieve “connected health,” which puts patients at the center of holistic care, beyond a symptom or disease focus.
- Creates and connects relationships between/among providers and between patients and their providers.
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Mobile Health (mHealth)

HEALTH

- Smart phones and apps are rapidly changing how patients access the resources and information that are available to them.
- This changing, virtual environment provides another technology to enhance care and services.

The World in 2011 — ICT Facts and Figures

Almost
6 billion mobile-cellular subscriptions

- With 5.9 billion mobile-cellular subscriptions, global penetration reaches 87%, and 79% in the developing world.
- Mobile-broadband subscriptions have grown 45% annually over the last four years and today there are twice as many mobile-broadband as fixed-broadband subscriptions.

Mobile Health Starting to Come of Age

Mobile Devices and U.S. Health Care Providers

Mobile Phone use by U.S. Physicians

- 40% own cell phone
- 35% own smartphone
- 78% use apps

Percentage of Cell Phone Owners Who Used Their Devices to Look Up Health Information*

<table>
<thead>
<tr>
<th>Year</th>
<th>2010</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>57%</td>
<td>85%</td>
</tr>
</tbody>
</table>

Note: *Estimate
Source: International Telecommunication Union (ITU) World Telecommunication/Information and Communication Technology (ICT) Database
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Mobile Health Starting to Come of Age (cont.)

Patient-Facing Mobile Health – An Engagement Model of Health Care Delivery, Not A Treatment Model

The “Connected” Audiology Patient
The Connected Audiology Patient: Believing is the First Step in Doing

- “We can help patients live the lives they want.”
- “We can design a personalized hearing care plan to help patients achieve their stated goals.”
- “We can find/create tools and technologies that are most effective and integrate those in the most efficient, accessible, and familiar way.”

The Connected Patient: Audiology

- One of the core principles for the Affordable Care Act: Transform the Health Care Delivery System.
  - Encompasses a variety of telehealth and connected health service delivery models designed to reduce health care costs and improve the quality of care provided.
  - Federal government has several different telehealth missions, notably paying for services under health benefits plans, providing telemedicine services directly, regulating devices, services and related applications, and funding telemedicine projects and innovations.

The Connected Patient: Audiology (continued)

- Institute of Medicine (IOM) designated “patient-centeredness” as one of six goals for a 21st century health care system.
- Central to the telehealth and connected health is a patient-centered approach that embodies:
  - Patient Engagement
  - Patient Satisfaction
  - Patient Experience
  - Shared decision making
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The Connected Patient: Audiology

- Vision for the ‘connected patient’ will evolve over time.
- Opportunities to draw various mediums into continuum of care through a single entry point.
- Cloud-based reservoir of resources:
  - Videoconferencing capabilities
  - Smartphone and tablet based apps
    - Education and self-management
    - Direct patient care hearing aid programming, datalogging, troubleshooting
  - Messaging via secure portal
  - Patient education and self-management
  - Data repository, aural rehabilitation programs, and outcome monitoring
  - Scheduling and clinic availability
  - Licensed and protected access for every appropriate patient will become the common pathway for most resources or means to follow-up and monitor hearing health care

Mobile technologies: There’s an App(lication) for that.

Technology has made it easier to access a hearing test:

- Online hearing tests

Most major manufacturers

Not for profit organizations
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Technology has made it easier to acquire hearing assistive technology:

- Alternative distribution systems

Technology requires us to carefully evaluate its role in the future:

- Controversial but inevitable
  Especially with increased availability of personal sound amplification systems (PSAPs).

- What role do audiologists play?
  The field will need to figure this out.

- Conduct systematic studies research to examine outcomes.
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Other ways technology has made it easier to acquire hearing assistive technology:

A smart phone can be turned into a ‘hearing aid’

Experimental from University of Essex (free)

Costs $4.99!

Can record and replay conversation

Developed at Northwestern U and U Minnesota

Technology and tinnitus management

- Apps for tinnitus management
- Telephone tinnitus management

Technology permits home-based auditory training

START NOW
get your brain going!

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Technology has spawned online hearing-related counseling programs, support groups, etc.

Mobile technologies: There’s an App(lication) for that: VA Concussion Coach Overview

Concussion Coach is a mobile phone application for Veterans and Service members who experience symptoms that may be related to brain injury.

The goals of this App are to:
• Educate users about concussion, related symptoms,
• Allow users to assess and measure symptoms
• Provide resources for managing symptoms
• Present planning tools to build resilience
• Provide access to crisis resources, personal support contacts, or professional healthcare

Concussion coach is not intended to replace needed care with a trained provider. It can be used as a stand-alone education and symptom management tool, or to augment face-to-face care with a healthcare professional.


Definitions of Telehealth in VA

Home Telehealth (HT) Monitors patients and manages diseases through video into the home and use of mobile device for acute and chronic management and health promotion/disease prevention.

Clinical Video Telehealth (CVT) Real-time videoconferencing between VA medical centers and CBOCs that replicates face-to-face consultations between patient and provider or provider to provider. Uses include specialty consultations and delivery of mental health services.

Store and Forward Telehealth (SFT) Acquisition, storage, and forwarding of clinical images to experts for review.

TeleRadiology Remote analysis of radiology and nuclear medicine images.

Secure Messaging Enables timely and secure non-blast communication with patients via mobile phone.

Mobile Health Smart phone applications for self-management of health conditions 24/7. Examples: PTSD coaching.
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Telehealth and Telemedicine: Defining the Terms

- The World Health Organization (WHO, 2010) and the American Telemedicine Association (ATA, 2013) have adopted telemedicine and telehealth as interchangeable concepts.

- **WHO definition:** The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of diseases and injuries, research and evaluation and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities.

Telehealth: TeleAudiology

- Many fields of health care have added the prefix tele in front of the specific health care practice; TeleAudiology then, becomes the remote delivery of audiology and hearing care services.

- TeleAudiology places our professional services within the framework of telehealth as part of the health care delivery system. This is not a new type of care, it is another way to deliver care, adds remote delivery as another option to face to face care.

Hospital System to Health System

In 1996, VA began the creation of Veterans Integrated Service Networks (VISNs) to transform VA Health Care from a “Hospital System” to a “Health System.” VHA currently has 21 VISNs.

- 151 Medical Centers
- 985 Outpatient Clinics
- 820 Community Based
- 151 Hospital-Based
- 8 Mobile
- 6 Independent
- 300 Vet Centers*
- 70 Mobile Vet Centers*
- 103 Domiciliary Residential Rehabilitation Programs
- 135 Community Living Centers
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VA Telehealth Program

- 37% enrolled Veterans live in rural areas and 2% live in highly rural areas (22.6M total = 8.6M).
- 47% rural and 95% highly rural Veterans have travel times >2 hr. to a VA clinic.
- Over 1.6M Veterans with auditory disabilities

Examples of VA Virtual Care Services

Telehealth is part of a spectrum of VA virtual care services that includes:

- **Secure Messaging**: Veterans and their healthcare teams are able to exchange non-urgent confidential information in a secure electronic medium. Secure Messaging (SM) application operates through the My HealtheVet (MHV) personal health record.

- **E-Consult**: Provider requests a specialist to address a clinical problem or to answer a clinical question for a specific patient. Utilizing information provided in the consult request and/or review of the patient’s electronic medical record, the consultant provides a documented response that addresses the request without a face-to-face visit.

Examples of VA Virtual Care Services -continued

- **VA HealthDialog Program**: For Veterans who do not have smart phones, a short message service (SMS) text messaging capability is being established to exchange with patients SMS text messages for disease management and patient communications. Examples might be appointment reminders, health checks, follow up care instructions and patient education information and self management information.

- **VA Electronic Health Record**: Infrastructure and framework for information exchange and team based care among providers in local and remote sites. Goal for the nation is a virtual lifetime electronic health record (VLER).
Clinical Video Telehealth

- Traditionally, Veterans seeking health care traveled to the VA hospital or medical center.
- VA has also established hundreds of community-based outpatient clinics to bring VA care closer to home for Veterans.
- Community-based clinics may not have all of the specialty services and staff found at the medical center.

Store and Forward Telehealth

- Acquire and store clinical information (e.g. data, image, sound, video) that is then forwarded to (or retrieved by) another site for clinical evaluation.
- Tele-Dermatology: Digital picture sent to a dermatologist. A report with recommendations for treatment sent back to the Primary Care physician. VA is using tele-dermatology to improve access to skin care for veteran patients who live in remote and other areas to save having to travel to a dermatology clinic.
- Tele-Retinal Imaging: Retinal imaging is available without dilation. Eye care specialist reviews the image and sends back to the Primary Care physician. Not suitable for people who already have complications of diabetes.
- Tele-Radiology: Radiology images sent over telecommunications lines to be read by a radiologist at another site. VA, like many other organizations, is now routinely using tele-radiology in many hospitals in the routine delivery of care.

Home Telehealth

- Management of diabetes, chronic heart failure, chronic obstructive pulmonary disease (COPD), depression or PTSD.
- Conditions make it difficult for Veterans to remain living independently.
- Symptoms and vital signs (pulse, weight, temperature etc) can be checked frequently through home telehealth.
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Current TeleAudiology Practice Examples

- Otoscopy (Patricoski et al, 2003; Kokesh et al, 2008)
- Pure-tone hearing screening (Lancaster et al, 2008)
- Telephone hearing screening using digits in noise (Smits et al, 2004; Williams and McArdle, 2012)
- Audiometry (Givens et al, 2003; Givens and Elangoan, 2003; Choi et al, 2007)
- Otoacoustic emissions in normal hearing subjects (Krumm et al, 2007)

Current TeleAudiology Practice Examples

- Auditory brainstem response (ABR) in normal hearing subjects (Towers et al, 2005)
- Automated ABR and otoacoustic emissions screening in newborns (Krumm et al, 2008)
- Hearing aid programming (Ferrari and Bernardez-Braga, 2009; Takahashi and Gladden, 2012)
- Intraoperative monitoring (Shapiro et al, 2008)
- Cochlear implant programming (Ramos et al, 2009)
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Alaska Federal Healthcare Access Network (AFHCAN)

- Established in 1998
- Provides services to 180 Alaska Native community village clinics, 25 subregional clinics, 4 multiphysician health centers, 6 regional hospitals, and the ANMC in Anchorage.

Audiology/ENT practice:
- Video otoscopy
- Audiometry
- Tympanometry
- Hearing aid clearance
- Follow-up to surgery (e.g. tubes)

Estimated travel savings in $$$ from telehealth for ALL Patients

Travel dollars saved

<table>
<thead>
<tr>
<th>Year</th>
<th>Speciality Care</th>
<th>Primary Care</th>
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<td>2005</td>
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<tr>
<td>2006</td>
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<td>2007</td>
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<td>2008</td>
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<td>2009</td>
<td>7,000,000</td>
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</tr>
<tr>
<td>2010</td>
<td>8,000,000</td>
<td>8,000,000</td>
</tr>
<tr>
<td>2011</td>
<td>9,000,000</td>
<td>9,000,000</td>
</tr>
</tbody>
</table>

Telehealth has decreased wait times dramatically

<table>
<thead>
<tr>
<th>% Appointments wait time ≥ 5 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-teled 1991-2001 n=1216</td>
</tr>
<tr>
<td>With teled 2002-2006 n=276</td>
</tr>
<tr>
<td>With teled 2005-2007 n=210</td>
</tr>
</tbody>
</table>

With permission Kokesh (2013), Data courtesy of Phil Hofstetter
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Provider satisfaction (36,383 responses)

Feedback 2001-2010

- Telemedicine helps me communicate with a doctor
- Telemedicine still improves the quality of care for this patient
- Telemedicine improved patient satisfaction
- I am satisfied with how the equipment worked
- The telemedicine system played a role in educating this patient

With permission Kokesh (2013)

VA TeleRehabilitation Programs

- Audiology
- Blind Rehab
- Physical Medicine and Rehabilitation
  - Polytrauma and Traumatic Brain Injury
  - Amputation
  - Assistive Technology
  - Occupational Therapy
  - Physical Therapy
  - Kinesiotherapy
- Speech Therapy

TeleRehabilitation Workload FY 14-Q3
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Potential Telehealth Applications - Audiology

- Remote assessment of hearing
- Remote troubleshooting/programming of hearing aids and cochlear implants
- Home-based aftercare
- Facilitated home-based rehabilitation
- Remote assessment of balance disorders
- Dedicated Web-browser or internally-hosted TeleAudiology infrastructure to remotely control equipment
- Store and forward applications: master clinicians, imaging, interpretation

TeleAudiology Pilot Program

National TeleAudiology Pilot
- 10 Original Pilot Sites; 61 Expansion Sites
  - Phase I: Remote Programming of Hearing aids; CVT
  - Phase II: Remote Audiology; CVT

VA Center for Innovation
4 Pilot Projects
- Nashville: Automated Audiology (CVT and SFT)
- Cleveland: Smartphone application for remote programming of hearing aids (CVTHM)
- Greater Los Angeles: Remote Audiology (CVT)
- Seattle: Remote programming of cochlear implants (CVT)

Encounters

- Joint effort with Telehealth Services, Office of Rehabilitation Services, and the Audiology and Speech Pathology National Program Office; Pilot planning began in FY 09.
- Community Based Outpatient Clinic (CBOC) hearing aid programming using remote control software with hearing aid fitting software at 10 pilot sites (rural locations).
- All sites provided with telehealth equipment, specialized audiology equipment, technician staff, and software.
- Pilot sites evaluated feasibility of remote programming, and moved the project from proof of concept to a viable clinical tool for national implementation.
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**Goals of the Pilot Project**

- Develop and validate of telepractice clinical protocols using telehealth technology.
- Explore technology issues, training for support personnel, credentialing, and clinic set ups.
- Evaluate the reliability, efficacy and effectiveness, patient/family and clinician satisfaction, quality of care, cost, and cost effectiveness of telehealth applications.
- Establish minimal technical and equipment specifications for clinical procedures.
- Develop and distribute a practical guide for audiology telehealth.
- Build the knowledge, clinical practice and technology infrastructure to expand Telehealth.

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**TeleAudiology**

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**IOI-HA Outcomes-TeleAudiology**

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VA Telehealth Patient Satisfaction Survey
TeleAudiology-FY 14 Q2

<table>
<thead>
<tr>
<th>Strong agree=5</th>
<th>Agree=4</th>
<th>Neutral=3</th>
<th>Disagree=2</th>
<th>Strongly Disagree=1</th>
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<tbody>
<tr>
<td>SUMMARY OF QUESTIONS (N=197)</td>
<td>MEAN</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt comfortable with the equipment used.</td>
<td>4.82</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was able to see the clinician clearly.</td>
<td>4.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was able to hear the clinician clearly.</td>
<td>4.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There was enough technical assistance for my meeting with the clinician.</td>
<td>4.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My relation with the clinician was the same during this session as it was in person.</td>
<td>4.77</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The location of the telehealth clinic is convenient for me.</td>
<td>4.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My needs were met during the session.</td>
<td>4.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I received good care during the session.</td>
<td>4.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The telehealth clinic provided the care I expected.</td>
<td>4.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, I am satisfied with the telehealth session.</td>
<td>4.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would rather use telehealth to receive this service than travel long distance to see my provider.</td>
<td>4.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would recommend this type of session to other Veterans.</td>
<td>4.93</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TeleAudiology: FY 14 Expansion

Extension of Phase I of National TeleAudiology Pilot:
- Remote Programming of Hearing Aids
- Expansion Plan: 19 VISNs and 61 new CBOC locations
- Implementation: July 2013-current

Phase II Remote Audiometry:
- Six (6) of ten (10) original pilot sites to demonstrate feasibility.
- Feasibility requires systematic and evidence-based approach with clinical and telehealth SME, research, and administrative involvement.
- Further information and data need to guide wider integration (SLM, bone conduction, and noise attenuating headphones).

National CVT Training Center
Training and Education

- Telehealth clinical technicians (TCTs) are utilized to serve as on-site “hands” of the visit; key partners in service delivery.
- Prior TCT experience with audiologic procedures and practices is often limited; sometimes absent.
- TCTs-Clinical background varies, necessitating multiple, flexible training options.
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National CVT Training Center
Training and Education

TeleAudiology Clinical Specialist Supplement
• Updated document in national review, January 2014.
• Available in the Telehealth Services Documents Library.
• Included in the Telerehabilitation Operations Manual.
• Offers practical guidance for remote programming of hearing aids (e.g. SLA, competencies, clinic setup, emergency planning).
• Additional considerations for remote audiometry and refining content and appendices.

TeleAudiology: Challenges
• Provider acceptance
  — Technology phobias
  — Overcoming the “hands-on approach”
• Patient acceptance
• Credentialing and privileging
• Space/technology availability
• Accurate and appropriate coding for workload
• Collateral duties – No dedicated staff
• Information architecture (networks, firewalls)

Perceived Barriers
• Cost
• Lack of professional standards
• Lack of data on efficacy cost-effectiveness
• Reimbursement policies
• Concern about malpractice liability
• Concern about patient confidentiality
• Licensure laws that affect interstate practice
• Inefficient (ties up provider and technician)
Perceived Barriers

• Some providers feel telepractice would be detrimental to the quality of service with a preference for face-to-face contact.
• Some providers feel telehealth is inappropriate for the type of services practitioners delivered (small children, patients needing hands-on care).
• Some providers noted lack of time for telehealth.

Regulatory Status of Telehealth

• Medicare beneficiaries are eligible for telehealth services only when certain "originating sites" are located in a rural health professional shortage area or in a county that is not included in a Metropolitan Statistical Area. Entities participating in a Federal telemedicine demonstration project qualify as an eligible originating site regardless of geographic location.
• Interactive audio and video telecommunication system must be used that permit real-time communication between the practitioner at the distant site and the beneficiary at the originating site. Asynchronous "store and forward" technology is permitted only in Federal telehealth demonstration programs conducted in Alaska or Hawaii.
• Limited to consultations, outpatient office visits, psychotherapy, pharmacologic management, psychiatric interview, individual health and behavioral assessment, neurobehavioral status exams, end-stage renal disease services, nutrition therapy, and inpatient telehealth consultations and follow-ups.

VA Innovation Initiatives

• VAi2 is a flagship program designed to tap the talent and expertise of individuals both inside and outside government to contribute new ideas that produce visionary solutions to advance VHA ability to meet the challenges of becoming a 21st-century organization.
• Audiology innovation projects are underway. They include evaluation of:
  • Automated Audiometry—Audiology, Inc. Automated audiometry via clinical video, store and forward, and home telehealth (VHA Tennessee Valley HCS).
  • Remote Audiometry—RemotEAR, by Otovation. Remote audiometry using a novel clinical video telehealth hub (Greater Los Angeles VA HCS).
  • Smartphone Application for Home Programming of Hearing Aids—Phonak. The feasibility of programming hearing aids using novel mobile distant hearing aid fitting software on the veteran’s smart phone (Cleveland VA Medical Center).
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Automated Audiometry—Audiology, Inc

• Multiphase Pilot including three Telehealth modalities: CVT, SFT, and HT.
• FY 14 testing includes SFT and HT.
• Interim Recognition obtained for Non-Standardized VHA Store-and-Forward Telehealth (SFT) Programs
• The Nashville team is not only testing the technology, but creating the clinical pathways and providing leadership for others in the field.
• Additional innovative ideas include integration with EMR/medical imaging platforms, speech testing, and testing of various quality measures.

Remote Audiometry—RemotEAR, by Otovation

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Remote Audiometry—RemotEAR, by Otovation

- Setup for pilot testing completed.
- Dedicated web-browser to more effectively address functional needs of audiologists.
- Security and privacy enhancements allowing for compliance with HIPAA and other regulatory standards.
- Various Commercial off-the-shelf (COTS) products may provide the functional capabilities to remotely control equipment but lack various features particularly important for teleproviders.
- Further evaluation of minimal technical requirements for remote audiology and other teleaudiology services. Standards do not currently exist for PC based applications, only for videoconferencing capability and some peripheral cameras.

Remote Programming of Cochlear Implants—Cochlear Americas

- Semi-automated programming software and remote desktop technology.
- Videoconferencing capabilities allow for audiovisual capabilities between provider, patient, and support assistant.
- Patient actively participates in programming session; Audiologist serves in a ‘supervisory’ mode while preserving insight and control of the programming methodology.
- Monitor programming sessions for various locations from a central location.
- FDA approval as investigational device. Testing to begin in February 2014.
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Smartphone App for Home Programming of Hearing Aids—Phonak

- FY 13 spent developing and refining application.
- Clinical testing began in 4th quarter.
- Ability to remotely connect with secure VA networked PC to patient using Android Smartphone and wireless interface.
- Basic troubleshooting, programming adjustments, and datalogging.
- Feasibility testing and trials have been positive.
- Text messaging OK for younger Veterans, audiovisual capabilities particularly important, particularly for older or less tech savvy Veterans—embedding video.

Keys for Effective Service Delivery

- Support and buy-in from clinical staff and leadership: Top-down and bottom-up initiatives and communication.
- Commitment to education and training and long-term sustainment of high quality care and staff competence.
- “Owning the service” and remaining actively engaged, especially during times of resistance and challenges.
**Keys for Effective Service Delivery**

- Strong, ongoing partnership between industry and clinical, technical, and administrative staff.
- Incorporation of enterprise-type solutions that have been tested and shown to enhance access and quality of care.
- Early identification of infrastructure needs/issues and ability to modify solutions appropriately.

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**Keys to Connected Healthcare Delivery**

- Development of protocols and standards for clinical practice, technologies, staff training, and evaluation of care.
- Allowing for modification/flexibility in work processes, particularly at early stages of implementation.
- Standardization, interoperability, and connectivity as critical components of initial success and long-term sustainability.

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**Keys to Connected Healthcare Delivery**

- Ongoing education and training is required to maintain expertise and familiarity with changes in technology and potential clinical applications.
- Careful evaluation of service delivery, consistent with well established practice recommendations and guidelines, is critical to care effectiveness.

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Patient willingness to use TeleAudiology
(n=224, age: mean = 67.1 yr., SD = 15.3yr)

Clinician willingness to use TeleAudiology
(n = 202, age mean = 67.1 yr., SD = 15.3)

Provider Roles/Responsibilities

• Select assessments and interventions that are appropriate to the patient and his/her health status and the technology being used.

• Train and use support personnel appropriately when delivering services.

• Maintaining appropriate documentation, including informed consent for use of telehealth and documentation of the telehealth encounter.
Provider Roles/Responsibilities

- Mobile devices and various apps are rapidly changing how patients access the resources and information that are available to them.
- Understanding and applying appropriate models of technology used to deliver services.
- Understanding the appropriate specifications and operations of technology used in delivery of services.
- Selecting patients who are appropriate for assessment and intervention services via telehealth or other virtual care modality.

Provider Roles/Responsibilities

- Understand and comply with existing rules and regulations regarding telepractice, including security and privacy protections, reimbursement for services, and required licensure, liability and malpractice avoidance.
- Use available evaluation tools and methods to assess both process and stated outcomes of teleaudiology care and overall effectiveness.

VA TeleAudiology Outreach

- The VA Audiology and Speech Pathology National Program Office, Rehabilitation and Prosthetic Services, and Telehealth Services have a strong commitment for outreach with academia, military, private sector, and professional organizations.
  - American Telemedicine Association: Telerehabilitation SIG; Core Competency Subcommittee
  - American Telemedicine Association Institutional Council
  - American Speech-Language Hearing Association, SIG 18: Telepractice
  - American Academy of Audiology: TeleAudiology White Paper
  - Department of Defense: Hearing Center of Excellence
  - Department of Defense: Walter Reed National Military Medical Center
  - Indian Health Services
Tele-audiology: Expanding Access to Hearing Care and Enhancing Patient Connectivity Web Seminar
Recorded August 13, 2014

Thanks for Listening

With malice toward none, with charity for all, with firmness in the right as God gives us to see the right, let us strive on to finish the work we are in, to bind up the nation's wounds, to care for him who shall have borne the battle and for his widow and his orphan, to do all which may achieve and cherish a just and lasting peace among ourselves and with all nations.

Abraham Lincoln, Second Inaugural Address, March 4, 1865

Q&A

To ask a question, please type your question into the chat box in the lower left corner of the screen and click on the “Send” button located right below the box.