



Computer/Electronic
Accommodations
Program



Support. Equip. Empower.
Assessing and Accommodating
Vision and Hearing Injuries

Webinar Series Overview

- Session 1: CAP and the DoDI 6025.22
 - Mandates of DoDI
 - Overview of CAP services
- Session 2: Assistive Technologies and Needs Assessments
 - Needs Assessments
 - Overview of Assistive Technology (AT)
 - CAP support to MTFs
- Subsequent Sessions
 - Focus on needs assessments and AT per disability area
 - Case studies of needs and solutions



Support Through Training and Needs Assessments

Equip with Assistive Technology Solutions

Empower Through Employment



Needs Assessments

Key Steps in the Process

- The Individual
- The Injury
- The Job
- Identify the Accommodations



Visual and Hearing Impairments

The Individual

- Current Status
 - Recovery/rehab
 - Temporary duty assignment while receiving medical treatment
 - Already continuing on active duty (COAD)
- Future Plans
 - COAD
 - COAD with new MOS
 - MEB/PED
 - Separating and continuing education
 - Separating and working in private sector



Visual and Hearing Impairments

The Individual

- Information Technology (IT) use
 - Personal use only (email, web surfing, games)
 - Professional use only (related to MOS)
 - Personal and professional use
 - Applications used
- Assistive Technology (AT) use
 - Previous user
 - Type/duration/training
 - Non-user
 - Exposure to AT in MTF setting



Visual and Hearing Impairments

The Injury/Disability

- Blind/Low Vision
 - Legally blind
 - Difficulty seeing characters on screen or printed page
 - Floaters or 'blind spots'
 - Partial field loss
 - Blurry vision
 - Eye fatigue
 - Migraines due to photosensitivity
 - Ocular trauma or nerve damage



Visual and Hearing Impairments

The Injury/Disability

- Deaf/Hard of Hearing
 - Complete loss of hearing
 - High/Low/Mid-range frequency loss
 - Tinnitus
 - Trauma to outer or middle ear
 - Trauma cochlea or auditory nerve



Visual and Hearing Impairments

The Job/Task

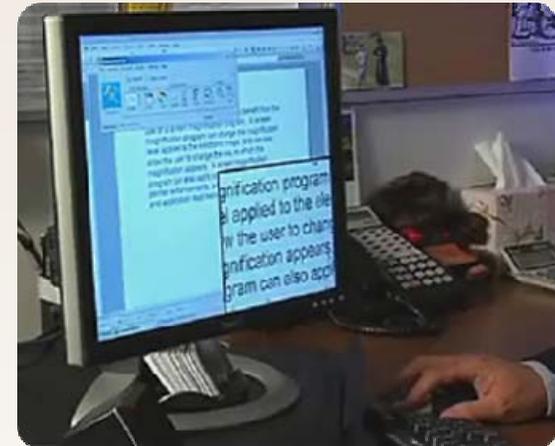
- COAD
 - Electronic/telecom-based functions
 - Specific applications used
 - Specific tasks performed
 - Noise level of work environment
- Separating
 - Continuing education
 - E-learning, 'brick & mortar', or both
 - Support services from educational facility
 - Work awaiting in private sector
 - Working in federal sector



Vision Impairments

Potential Solutions

- Voice Output
 - Screen readers and training
 - Scanner-readers
- Braille Devices
 - Terminals
 - Embossers
- Portable Notetakers
- Print Enlargers
 - Closed Circuit TVs (CCTVs)
 - Screen magnification software



Hearing Impairments

Potential Solutions

- Assistive listening and amplification devices
- Video communication devices for video relay service
- Amplified and voice carry over telephones
- Telephone ring signaler
- Teletypewriters (TTYs), PC-based TTY modems, networked TTYs
- Closed captioning equipment for in-house videotapes



Visual Impairments

Case Study 1:

- Diagnosis
 - Exposure to multiple concussive blasts
- Limitations
 - Blurry vision
 - Headaches from eye strain and photosensitivity
- Status
 - Separating and continuing education
 - Both online and 'brick & mortar' classes
- Solutions
 - Screen magnification with voice output
 - Desktop CCTV
 - Portable CCTV for in-class use



Visual Impairments

Case Study 1:

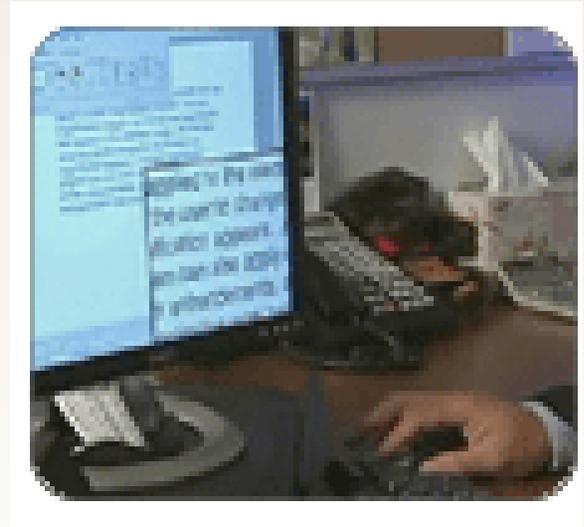
- Screen magnification software
 - Increases size of electronic images
 - Color customization
 - Document and application readers
- Desktop CCTV
 - Magnification/color options for hard-copy
 - For stationary use
- Portable CCTV
 - Hard-copy enhancement
 - Portable for multiple environments



Vision AT

Focus on Screen Magnification Software

- User can increase or decrease magnification level of electronic image
- User can adjust the way in which the magnification appears
- User can change foreground/background colors
- User can adjust size, shape and color of pointers and cursors
- Software can 'read aloud' documents and applications
- Demo Available at:
<http://cap.tricare.mil/WSM/NewsEvents/training.aspx>



Visual Impairments

Case Study 2:

- Diagnosis/Limitations
 - RPG attack
 - Limited ROM in upper extremity
 - Unable to raise arm above shoulder level
 - Diminished capability for lateral movement of arm
 - Complete vision loss
- Status
 - Separating from active duty
 - Saw no capability for work or education



Visual Impairments

Case Study 2:

- Solutions
 - Voice recognition software
 - All input to the computer
 - Array microphone
 - Eliminated need for assistance with headset
 - Screen reader
 - Complete audio output of all information from computer
 - Bridging software
 - Allows voice input and voice output to work together
 - Certified training



iSay...



Visual Impairments

Case Study 3:

- Diagnosis
 - RPG attack, loss of eyes
- Status
 - Continuing active duty
 - Pursuing MBA
 - Transitioning as instructor at West Point
- Solutions
 - Screen-reader software
 - Scanner/reader
 - Portable electronic reader
 - Electronic color identifier



Visual Impairments

Case Study 3:

- Screen-reader software
 - Verbalization of all info from computer
- Scanner/reader
 - Scans hard-copy information
- Portable electronic reader
 - Voice output of electronic information
 - Usable across environments
- Color identifier
 - Access to charts and graphs



Hearing Impairments

Case Study 1:

- Diagnosis
 - 40+ dB loss across all frequencies
- Limitations
 - Difficulty hearing on phone, meetings
- Status
 - COAD
 - Taking additional courses
- Solutions
 - FM system
 - Telephone amplifier
 - Digital voice recorder



Hearing Impairments

Case Study 1:

- FM System
 - Transmitter/receiver
 - Customizable level of amplification
 - Single or multiple speakers
- In-line amplifier
 - Amplification adjustable per range
 - Amplification adjustable per call
 - Portable
- Digital voice recorder
 - Record class lectures
 - Playback later with increase amplification



Hearing AT

Focus on Assistive Listening Devices (ALDs)

- Different ALDs depending on
 - Frequency(s) of loss
 - Environment: classroom, conference room, office, public area?
 - Directional receiver or two-piece transmitter/receiver
 - Does the SM use hearing aids (DME)?
- Demo Available at:
<http://cap.tricare.mil/WSM/NewsEvents/training.aspx>



Hearing Impairments

Case Study 2:

- Diagnosis
 - Mild hearing loss across all frequencies
- Limitations
 - Difficulty hearing on telephone
- Status
 - COAD
 - Land-line and cell phone use
 - Needs to be reached by troops
- Solutions
 - In-line amplifier
 - Cell-phone amplifier



Hearing Impairments

Case Study 2:

- In-line amplifier
 - Amplification adjustable per range
 - Amplification adjustable per call
 - Usable on land-line phones
- Cell-phone amplifier
 - Adjustable amplification
 - Monaural or binaural
 - Cell-phone brand specific



Hearing Impairments

Case Study 3:

- Diagnosis
 - Complete vision loss in one eye
 - Constant bi-lateral tinnitus
- Limitations
 - Tinnitus makes concentration difficult
- Status
 - COAD
 - Change of MOS to front-desk processing
- Solutions
 - Directional amplifier



Hearing Impairments

Case Study 3:

- Case manager focused on vision loss
- SM self-compensated for vision loss
- SM much more affected by tinnitus
- Directional amplifier
 - One piece, no separate transmitter
 - Appropriate for 'quiet' environment
 - Appropriate for multiple communication partners
- Ability to hear increased
- Ability to concentrate increased



CAP Technology Evaluation Center (CAPTEC)

- Assist individuals and supervisors in choosing appropriate accommodations
- Wide variety of assistive technology
 - VTC capability
 - Tours
- Located in the Pentagon (2D1049)
 - 703-693-5160 (Voice)
 - 703-693-6189(TTY)



www.tricare.mil/cap/wsm

CAP Computer/Electronic Accommodations Program

Search CAP

my solutions Sara: 0

DoD Instruction Accommodation Solutions Resources News, Events & Training

Support. Equip. Empower.

In support of DoDI 6025.22 establishing policy for assistive technology programs in the Military Health System, CAP works closely with wounded Service members across the nation to ensure they receive appropriate AT for their needs. Learn how CAP supports WSM.

1 2 3 4 5

Welcome to CAP!

How may we help you?

Ready to place a request for an accommodation? [Start here.](#)
Need to [browse assistive technology](#), or help to determine the appropriate accommodation to meet your needs? We can help!

Need Assistance?

Contact us from 8am-5pm Eastern Time by phone at 703.681.8813, 703.681.3978 TTY, or anytime by email at wsm@tma.osd.mil

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Testimonials

MAJ Ava Craig | Sara Meisinger | CPT Ivan Castro

WSM Spotlight & Upcoming Events

WSM Spotlight

▶ The next Hiring Heroes Career Fair will be held at Walter Reed Army Medical Center on June 9, 2010 [View the dates for the upcoming career fairs](#)

Upcoming Events

▶ [Hiring Heroes Career Fair](#) | April 20, 2010

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CAP DoDI Resources



- Full Text of DoDI 6025.22
www.tricare.mil/cap/documents/CAP_WSM_DoDI.pdf



- CAP DoDI Handbook
www.tricare.mil/cap/documents/CAP_WSM_Handbook.pdf



- Designation of CAP Representative
www.tricare.mil/cap/documents/CAP_WSM_MOU.pdf



Contact CAP

- CAP WSM Team
wsm@tma.osd.mil
- WSM Website
www.tricare.mil/cap/wsm
- CAP Office
cap@tma.osd.mil
703-681-8813
- VTC assessments available through the CAP Technology Center (CAPTEC) at the Pentagon
703-693-5160

