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Standard Guide for Medical Transcription Workstations[1]

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1. Scope

1.1 This guide identifies ways to improve the medical transcription workstation, including, but not limited to, the work environment, which encompasses ergonomics and security issues, equipment, references, and tools.

1.2 This guide will assist healthcare managers, vendors, medical transcription service owners, and individual medical transcriptionists to make informed decisions related to the design of an efficient medical transcription work environment compliant with federal regulatory agencies.

1.3 This guide does not address the medical transcription process or training.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

E1130 Test Method for Objective Measurement of Speech Privacy in Open Plan Spaces Using Articulation Index

E1869 Guide for Confidentiality, Privacy, Access, and Data Security Principles for Health Information Including Electronic Health Records

E1902 Specification for Management of the Confidentiality and Security of Dictation, Transcription, and Transcribed Health Records

E1988 Guide for Training of Persons who have Access to Health Information[3]

E2117 Guide for Identification and Establishment of a Quality Assurance Program for Medical Transcription

2.2 *Ergonomic Resources:*

Office Ergonomics Training: www.office-ergo.com[4]

National Institutes of Health—Division of Occupational Health and Safety: http://dohs.ors.od.nih.gov/ergo_computers.html[5]
http://dohs.ors.od.nih.gov/ergonomics_home.html[5]

Department of Health and Human Services—Centers for Disease Control and Prevention: www.cdc.gov/od/ohs/ergonomics/compergo.html[6]

Backrelief.com: www.backrelief.com/prevention/work_erg.html[7]

HealthyComputing.com: www.healthycomputing.com[8]

Occupational Safety and Health Administration: www.osha.gov[9]

Cornell University Ergonomics: http://ergo.human.cornell.edu/CUVDTchecklist.html[10]

2.3 *HIPAA Resources:*

Public Law 104-191 Health Insurance Portability and Accountability Act of 1996 (HIPAA)

American Association for Medical Transcription, HIPAA for MTs, July 2005

Guide to HIPAA Privacy Rule, Lippincott Williams & Wilkins, 2006

3. Terminology

3.1 *Definitions:*

3.1.1 *color temperature*—a scale used to express the content of the color of a light source.

3.1.2 *desk*—a furniture form and class of table for writing or keyboarding. This may include a computer cart, PC stand or other types of furniture products that support keyboarding.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] Withdrawn. The last approved version of this historical standard is referenced on www.astm.org.

[4] Office Ergonomics Training, Ankrum Associates, 949 Lake Street, 3-G, Oak Park, IL 60301.

[5] National Institutes of Health, Division of Occupational Health and Safety, Building 13, Room 3KO4, 13 South Drive, MSC 5760, Bethesda, MD 20892-0003.

[6] Department of Health and Human Services, Centers for Disease Control and Prevention, Public Inquiries/MASO, Mailstop E11, 1600 Clifton Road, Atlanta, GA 30333.

[7] Backrelief.com, Wyeth Consumer Healthcare Inc., 5975 Whittle Road, Mississauga, Ontario, L4Z 3M6.

[8] HealthyComputing.com, Inc., 9245 Regents Road, Suite 324, LaJolla, CA 92037.

[9] Available from Occupational Safety and Health Administration (OSHA), 200 Constitution Ave., NW, Washington, DC 20210, http://www.osha.gov.

[10] Cornell University Ergonomics, Professor Alan Hedge, PhD, FErgS, AFBPsS, Dept of Design & Environmental Analysis, College of Human Ecology, Cornell University, MVR Hall, Forest Home Drive, Ithaca, NY 14853-4401.

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3.1.3 *ergonomics*—the engineering science concerned with the physical and psychological relationship between machines and the people who use them.

3.1.4 *light intensity*—the amount of light given off by a light source.

3.1.5 *seat pan*—the seat surface of the chair that supports the majority of the user's weight.

3.1.6 *task lighting*—task lighting increases light levels over the work and immediate surroundings.

3.1.7 *workspace*—the area where work is generally performed.

3.1.8 *workstation*—an area outfitted with equipment and furnishings. This may include, but is not limited to, desk, chair, printer stand, computer, monitor, bookcases, equipment, storage, etc.

3.1.9 *work surface*—the space available on a desk.

3.2 *Acronyms:*

3.2.1 *AAMT*—American Association for Medical Transcription

3.2.2 *AHIMA*—American Health Information Management Association

3.2.3 *BOS*—AAMT book of style

3.2.4 *HIPAA*—Health Insurance Portability and Accountability Act

3.2.5 *MT*—medical transcriptionist

3.2.6 *MTSO*—Medical Transcription Service Organization

3.2.7 *NIH*—National Institutes of Health

3.2.8 *OSHA*—Occupational Safety and Health Administration

3.2.9 *PHI*—protected health information as defined by HIPAA in its Privacy and Security Rule regulations

4. Significance and Use

4.1 This guide provides recommended guidelines for the essential elements to be included in the design and implementation of an efficient, secure, risk-free work environment for medical transcription and health information documentation.

4.1.1 Improve and increase production.

4.1.2 Reduce healthcare costs by minimizing injury/illness.

4.1.3 Increase retention and professional longevity.

4.1.4 Ensure regulatory compliance with state and local government requirements as well as federal privacy and security regulations.

5. Workstation Environment

5.1 *Location*—Place workstation in a secure and quiet environment with limited access, free from interruptions from nonwork-related activities. This should not be in any public area, such as waiting rooms within physician offices or family rooms within a home environment. The work area should be large enough to allow full range of motion involved in performing required tasks, and provide room for the equipment and materials that make up the workstation.

5.1.1 Organize the desktop so that frequently used objects are close to the user to avoid excessive extended reaching.

5.1.1.1 Avoid overcrowding computer work areas.

5.1.1.2 Control climate to proper temperature, humidity, ventilation, and absence of drafts.

5.1.1.3 Allow adequate space to accommodate ventilation and electrical/connectivity access.

5.1.1.4 Secure cables, cords, and phone lines.

5.1.2 The office location should be in a secured area that will limit access to PHI by others. (See Specification E1902.)

5.1.2.1 Either an office with a door that can be locked.

5.1.2.2 Or an area that is accessed only by the MT with the computer facing away from view by passers by.

5.1.2.3 Locate monitors and desktops away from windows and traffic areas to ensure the security of PHI.

5.1.2.4 Safeguards should be in place to prevent voice files from being overheard by unauthorized individuals. (See Test Method E1130.)

5.2 *Lighting*—Lighting can enhance or detract from the quality of work and overall productivity. Illumination by hyperbolic florescent lighting is preferable. Proper lighting, without glare and shadows, can reduce eye fatigue and headaches.

5.2.1 Avoid intense or uneven lighting as high illumination may "wash out" images on the display screen, so illumination levels should be fairly low. Options for reducing illumination include the use of appropriate lighting fixtures, installation of variable lighting, or turning off overhead lights. (See CDC.)

5.2.2 Adjust lighting to avoid direct glare on the computer monitor. Soften the back light on the computer screen to avoid excessive brightness and eye fatigue. Adjust drapes and blinds to reduce glare. Position desk lamp if used so that it illuminates source documents without causing either glare on the computer screen or direct illumination to eyes.

5.2.3 All light bulbs should have the same color temperature. Use indirect or shielded lighting where possible to avoid uneven lighting.

5.2.4 Use task lighting as needed.

5.3 *Flooring*—Unobstructed, stable, and static-free flooring or mats are recommended.

5.3.1 Keep wires, cords, and cables out of the traffic area and secured in a fashion so that they cannot be easily dislodged.

5.3.2 Flexible cords should be connected to devices and fittings so that strain relief is provided in order to prevent pull.

5.4 *Color*—Color can play a key role in mood, enhancing or detracting from concentration.

5.4.1 Keep the color of the workstation area a neutral, glare-resistant matte finish. Softer, lighter colors should be used to better reflect indirect lighting and reduce dark shadows and contrast.

6. Workstation

6.1 *Desk*—The desk is a key component of the workspace. It supports equipment, references, and can enable efficiencies of tasks. A properly designed and adjusted desk provides an ergonomically-correct work environment. (See HealthyComputing.com and Guide E2117.)

6.1.1 Dependent upon the user, the desk height should be between 20 to 28 in. high.

6.1.2 Provide stable, height-adjustable keyboard/mouse tray system beneath the work surface.

6.1.3 Use a matte finish on the work surface to minimize glare and reflections.

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