CHAPTER 248: VETERANS HEALTH ADMINISTRATION: MEDICAL MEDIA SERVICE

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1 PURPOSE AND SCOPE

This document outlines Space Planning Criteria for Chapter 248: Medical Media Service. It applies to all medical facilities at the Department of Veterans Affairs (VA).

Medical Media Services (MMS) provides media service and creates products in support of direct patient care, continuing education, training, patient health education, research and public relations. MMS ensures the medical center needs are met in the areas of Photography, Illustration, Electronic Graphic Design and Publishing, Video/Sound Recording, CCTV and LAN, Video Distribution, and Copy Center Reproduction and Finishing.

This document includes the following requirements for operations to address all possible options available through Medical Media Services in the VA Health Care System: 1) Core Criteria Medical Media Service (MMS), 2) Expanded Core Criteria Medical Media Service (ECMM), 3) Medical Media VISN Support Site (MMVSS), 4) VAMC without Medical Media Services.

2 DEFINITIONS

- A. <u>Audiovisual (AV) Services:</u> These services are provided to record patient medical procedures, educational events and interviews. Additional uses include, but are not limited to, documentation, education, review, and analysis. Post-production is provided to organize, enhance and/or improve the finished product.
- B. <u>Central Copy Center Service</u>: Provides some high volume, high speed copying, printing and some finishing services for the Medical Center. With this level of service some reproduction/printing and finishing work would be contracted out to off-site vendors.
- C. <u>Concept of Operations</u>: A user-developed guide to the functional operation of the VA healthcare facility. It defines the function of the facility and the scope of medical services to be provided in the new or remodeled space.
- D. <u>Core Program (MMS) Requirements</u>: The Minimum program requirements for Department of Veteran's Affairs health care facilities without an active university affiliation. See Medical Media Services below.
- E. <u>Departmental Net to Gross (DNTG) Conversion Factor</u>: A parameter, determined by the VA for each space planning criteria chapter, used to convert the programmed Net Square Foot (NSF) area to the Department Gross Square Foot (DGSF) area. The **DNTG** Departmental Conversion Factor for **Medical Media Service** is **1.30**.
- F. <u>Expanded Central Copy Center Service:</u> A copy/reproduction service that provides all high volume, high speed copying, printing and all finishing services for the Medical Center.
- G. <u>Expanded Core Program (MMEC) Requirements</u>: Additional program requirements that will normally be instituted at university affiliated medical centers. The range and size of the educational programs provided, and the extent of available VISN support and/or sharing of facilities with affiliated medical schools will influence the additional programs provided. Expanded core requirements include the same functions as Core

- program (MMS) with larger space allowances to accommodate increased production volumes, and flexibility in response to more complex media requirements of the academic environment. Expanded Core Requirements must be justified at a nonaffiliated medical center with appropriate personnel and program need.
- H. <u>Full-Time Equivalent (FTE)</u>: A staffing parameter equal to the amount of time assigned to one full time employee. It may be composed of several part-time employees whose total time commitment equals that of a full-time employee. One FTE equals a 40 hours per week.
- I. <u>Functional Area</u>: The grouping of rooms and spaces based on their function within a service. Typical Functional Areas are Reception Areas, Patient Areas, Support Areas, Staff and Administrative Areas, and Residency Program.
- J. <u>Illustration Services</u>: Illustration products include medical or scientific drawings that are required for a wide variety of publication and presentation applications. Products include free-hand art of anatomical, pathological, surgical, and clinical subjects in support of scientific exhibits, electronic presentations and journal publications. Other products may include complex renderings of medical equipment, building structures, cartoons and schematic drawings.
- K. <u>Input Data Statements:</u> A set of questions designed to elicit information about the healthcare project in order to create a Program for Design (PFD) based on the criteria parameters set forth in this document. Input Data Statements could be Mission related, based in the project's Concept of Operations; and Workload or Staffing related, based on projections and data provided by the VHA or the VISN about the estimated model of operation for the facility. This information is processed through mathematical and logical operations in VA-SEPS.
- L. <u>Medical Media VISN Support Site (MMVSS)</u>: A Medical Media Service that provides media services and support to other medical centers within the same VISN.
- M. Medical Media Services (MMS): A program that, at minimum, provides photography services and depending on number of FTEs, individual medical center needs, and available VISN support, may also provide illustration, electronic graphic design and publishing, video/sound recording, and CCTV, LAN and video distribution services and or video teleconferencing service.
- N. <u>Photography Service</u>: Still photography includes the production of black and white or color prints, negatives, transparencies and a variety of digital files. Subjects may include, but are not limited to, patient, clinical, surgical and autopsy procedures, equipment, radiographs, illustrations, charts and graphs.
- O. <u>Program for Design (PFD)</u>: A space program based on criteria set forth in this document and specific information about Concept of Operations, workload projections and staffing levels authorized.
- P. <u>SEPS (VA-SEPS):</u> Acronym for Space and Equipment Planning System, a digital tool developed by the Department of Defense (DoD) and the Department of Veterans Affairs to generate a Program for Design (PFD) and an Equipment List for a VA healthcare project based on specific information entered in response to Input Data Questions. VA-SEPS incorporates the propositions set forth in all VA Space Planning

- Criteria chapters. VA-SEPS has been designed to aid healthcare planners in creating a space plan based on a standardized set of criteria parameters.
- Q. Workload: Workload is the anticipated number of procedures or suite stops that is processed through a department/service area. The total workload applied to departmental operational assumptions will determine overall room requirements by modality.

3 OPERATING RATIONALE AND BASIS OF CRITERIA

- A. Workload Projections or planned services / modalities for a specific VA medical center, hospital or satellite outpatient clinic project are provided by the VA Central Office (VACO) / VISN CARES Capacity Projection Model. The workload projections are generated by methodology based upon the expected veteran population in the respective market/service area. Healthcare planners working on VA medical center, hospital or satellite outpatient clinic projects will utilize and apply the workload criteria set forth herein for identified services and modalities to determine room requirements for each facility.
- B. Space planning criteria have been developed on the basis of an understanding of the activities involved in the functional areas of the Medical Media Services and its relationship with other services of a medical facility. These criteria are predicated on established and/or anticipated best practice standards, as adapted to provide environments supporting the highest quality heath care for Veterans.
- C. These criteria are subject to modification relative to development in the equipment, medical practice, vendor requirements, and subsequent planning and design. The selection of the size and type of Medical Media Services equipment is determined by the anticipated medical needs of the facility and the local medical center leadership.
- D. Requirements for operations related to Core Criteria, and Expanded Core Criteria for Medical Media Service, Medical Media VISN Support Site, and VAMC without Medical Media Services are included to address all possible options available through Medical Media Services in the VA Health Care System.

4 PROGRAM DATA REQUIRED (Input Data Questions)

A. Input Data Statements:

- 1. Is Medical Media Service authorized? (M)
 - a Is a Medical Media Services (MMS) Program authorized? (M)
 - b Is a Medical Media Expanded Core (MMEC) Program authorized? (M)
 - c Is Gross Pathology Specimen photography authorized? (M)
 - d Is Video Notebooking / Editing / Titling authorized? (M)
 - e Is CCTV/Satellite authorized? (M)
 - f Is computer video distribution authorized? (M)
 - g Is a Visual Information Specialist FTE position authorized? (M)
 - h Is an Expanded Central Copy Center Service authorized? (M)
 - i Is Illustration Services authorized? (M)
 - i Is Medical Media VISN Support Site (MMVSS) authorized? (M)
 - (1) How many MMVSS Secretary / Clerk FTE positions are authorized? (S)
 - k Is a Central Copy Center authorized? (M)
 - (1) Is an Expanded Central Copy Center authorized? (M)

- How many MMS or MMEC Secretary / Clerk FTE positions are authorized?
 (S)
- m How many Illustrator FTE positions are authorized? (S)
- n How many Visual Information Specialist FTE positions are authorized? (S)
- o How many AV Specialist FTE positions are authorized? (S)
- p How many Copy Center Technician FTE positions are authorized? (S)
- 2. Is a Copy Center authorized? (M) (in case Medical Media Services is not authorized)
 - a Is an Audiovisual Equipment Storage authorized? (M)

5 SPACE CRITERIA: CORE (MMS) AND EXPANDED CORE (MMEC) PROGRAM

- A. Reception and Administration Areas:

 - 2. Reception and Waiting (RECP1)120 NSF (11.2 NSM) Provide one if a MMS or MMEC Program is authorized in Concept of Operations.

This area accommodates client reception and waiting, work order entry and processing, distribution and completed work orders, and medical media loan pool equipment inventory, training and distribution.

- 3. Workstation, Secretary / Clerk (SEC01)......80 NSF (7.4 NSM)

 Provide one per Secretary / Clerk FTE position authorized if a MMS or MMEC

 Program is authorized in Concept of Operations.
- 4. MMS / MMEC Client Review Room (CRA01)......150 NSF (13.9 NSM) Provide one if a MMS or MMEC Program is authorized in Concept of Operations.
- B. Production Areas: Photography Service:
 - 1. Digital Photo, Editing and Printing Area (MIPF1)......300 NSF (27.9 NSM) Minimum NSF if a MMS Program is authorized in Concept of Operations; provide an additional 100 NSF if MMEC Program is authorized in Concept of Operations.

Typical equipment used include computer workstations, printers, scanners, slide mounters, photo mounters, paper cutters, light tables, film sorters, and dryers.

2. Darkroom, Black and White / Color
Processing / Printing (MIDR1)......150 NSF (13.9 NSM)
Provide one if a MMS or MMEC Program is authorized in Concept of Operations.

While photography will be captured and processed in a digital environment, an area should be established to provide space for film development under emergency conditions, such as power outage. Area accommodates one processing station for loading films, mixing chemicals, manual developing of negatives and processing transparencies. Typical equipment includes area for sinks, trays, chemical storage, film drying cabinet, work counters and storage units.

Additional area for a dedicated copy camera computer workstation. Accommodates copy work from original text and illustrations. Typical equipment includes a digital copy camera, scanner, photographic platforms, and secure photographic storage cabinetry.

4. Photomicrography / Photomacrography Room (MICL1).......100 NSF (9.3 NSM) Provide one if a MMS or MMEC Program is authorized in Concept of Operations.

Accommodates equipment (microscopes, cameras, light sources, video recording, etc, needed to photograph magnified images, as well as seating space for client / photographer consult during a photographing.

This area includes ceiling track lighting systems, floor-standing lighting hardware and accessories, backdrops, table top set-up for still life, and storage cabinetry. Video Notebooking / Editing / Titling will take place in the Video Editing / CCTV Control Room Distribution Suite.

This space should be accessible only from within the Still Photography and Video Recording Studio.

- C. Production Areas: Illustration Service:

The space provided accommodates manual and computer aided methods for the creation and production of medical artwork. Typical equipment includes computer workstation, drawing table, airbrush exhaust filter system and general storage

This space accommodates large work surfaces and support equipment such as lettering machines, mounting presses, mat cutters, flat files, graphic enlarger/reducer, spray booth, paste-up / cutting table and large working surfaces.

3. Electronic Graphic Design and Publishing (MIST1).......100 NSF (9.3 NSM)

Provide one if a MMS or MMEC Program is authorized in Concept of Operations.

Provide an additional 100 NSF per each Visual Information Specialist FTE position greater than one.

This space accommodates the creation, layout and design for medical text. An image processor with color and black and white output devices and scanner peripherals will be used to generate the text.

- D. Production Areas: Audiovisual Service:

 - 2. MATV / CCTV Distribution Headend (XXYYZ)150 NSF (14.0 NSM)

 Provide one if a MMS or MMES Expanded Core Program is in Concept of Operations.

Accommodates antennae array for MATV/CCTV facility distribution. Area provides adequate space for various items that include, but are not limited to; modulators, receivers, signal processors, amplifiers and monitors.

- E. Production Areas: Central Copy Center Service:

Provides space for high volume, high speed copying, printing and some finishing services for the Medical Center.

Provides space and a climate controlled environment to store a variety of paper and supplies needed to provide copying, printing and finishing services.

F. Support Areas:

- 2. **Storage, MMEC (SRE01)......350 NSF (32.5 NSM)**Provide one if a MMEC Program is authorized in Concept of Operations.

Equipment set-up / testing as well as minor preventive maintenance such as bulb replacement, cord/connection repair, and cleaning optics are preformed in this area. This room may also be used for training demos when and if the reception area is not available.

4. Video-Teleconferencing Room (XXYYZ)240 NSF (22.3 NSM) Provide one per MMS or MMEC program authorized in Concept of Operations.

Accommodates conference room area for 16 people, video, sound, computer and document camera interface for video-teleconferencing system. Area should accommodate network connection for V-Tel type system.

6 SPACE CRITERIA MEDICAL MEDIA VISN SUPPORT SITE (MMVSS)

- A. MMVSS Reception and Administration Areas:

 - 2. MMVSS Workstation, Secretary / Clerk (SEC01)......80 NSF (7.4 NSM) Provide one per Secretary / Clerk FTE position authorized.

 - 4. MMVSS Client Review Room (CRA01)200 NSF (18.6 NSM) Provide one per MMVSS.
- B. MMVSS Production Areas: Photography Service:
 - 1. MMVSS Digital Photo, Editing, and Printing Area (XXYYZ)400 NSF (37.2 NSM) Provide one per MMVSS.

- 2. MMVSS Darkroom, Black and White / Color Processing / Printing (MIDR1)190 NSF (17.7 NSM) Provide one per MMVSS.
- 3. MMVSS Camera Copy Room (MIST1)130 NSF (12.1 NSM) Minimum NSF; provide an additional 60 NSF if Gross Pathology specimen photography is authorized in Concept of Operations for Medical Media.
- 4. MMVSS Photomicrography / Photomacrography Room (MICL1)100 NSF (9.3 NSM) Provide one per MMVSS.
- 5. MMVSS Still Photography Studio (MIST1).....500 NSF (46.5 NSM) *Provide one per MMVSS*.
- 6. MMVSS Toilet / Changing Room (TLTU1)......50 NSF (4.7 NSM) Provide one per MMVSS.
- C. MMVSS Production Areas: Illustration Service:
 - 1. MMVSS Workroom, Illustrator (MIST1)......195 NSF (18.1 NSM) Minimum NSF; provide an additional 150 NSF per each MMVSS Illustrator FTE position authorized greater than one.
 - 2. MMVSS Illustration Preparation Room (MIST1)360 NSF (33.4 NSM) Minimum NSF; provide an additional 60 NSF per each MMVSS Illustrator FTE position authorized between one and three; or, provide an additional 210 NSF if total number of MMVSS Illustrator FTE positions authorized is four; or, provide an additional 70 NSF per each MMVSS Illustrator FTE position greater than four.
 - 3. MMVSS Electronic Graphic Design and Publishing (MIST1)100 NSF (9.3 NSM)

 Minimum NSF; provide an additional 100 NSF per each MMVSS Visual

 Information Specialist FTE position authorized greater than one.

Room must accommodate space for workstation, scanner(s) and printers(s).

- D. MMVSS Production Areas: Audiovisual Service:
 - 1. MMVSS Video Recording Studio (XXYYZ)......1,000 NSF (93.0 NSM) Provide one per MMVSS.

This room must accommodate studio, live, taped video and motion picture recording. Productions include the use of three or more cameras. The number of actors hired for productions may range from 1 to 60 people.

2. MMVSS Studio Control Room (XXYYZ)600 NSF (55.7 NSM) Provide one per MMVSS.

Accommodates video and sound production tasks. This includes video editing, duplicating, etc., in a variety of video formats. Educational programs are transmitted from this area, using automatic programming distribution hardware.

3. MMVSS Video Editing Room (XXYYZ)......200 NSF (18.6 NSM) Provide one per MMVSS.

Accommodates video, sound, motion picture, and satellite production tasks. This includes video editing, for a variety of video formats that include, but are not limited to analogue (tape) and digital (disk) capture and storage. Accommodates video, sound and off-line editing tasks. This includes editing, mixing, and slide tape programming and production.

4. MMVSS Audio Recording and Narration Sound Room (XXYYZ)50 NSF (4.7 NSM) Provide one per MMVSS.

Must be located adjacent to Studio Control Room.

5. MMVSS MATV / CCTV Distribution Headend (XXYYZ) 150 NSF (14.0 NSM) Provide one per MMVSS.

Accommodates antennae array for MATV/CCTV facility distribution. Area provides adequate space for various items that include, but are not limited to; modulators, receivers, signal processors, amplifiers and monitors.

- E. MMVSS Production Areas: Central Copy Center Service:
 - MMVSS Central Copy Center / Reproduction Room (XXYYZ)800 NSF (74.4 NSM)
 Minimum NSF; provide an additional 100 NSF per each MMVSS Copy Center
 Technician FTE position authorized greater than one; provide an additional 1,200
 NSF if an Expanded Central Copy Center Service is authorized in Concept of
 Operations.
- F. MMVSS Support Areas:

Accommodates conference room area for video, sound, computer, and document camera interface for video-teleconferencing system. Area should accommodate network connection for V-Tel type system.

3. MMVSS Video-Teleconferencing Room (XXYYZ)240 NSF (22.3 NSM) Provide one per MMVSS.

Accommodates conference room area for 16 people, video, sound, computer and document camera interface for video-teleconferencing system. Area should accommodate network connection for V-Tel type system.

7 SPACE CRITERIA – VAMC without MEDICAL MEDIA SERVICE

A. VAMC without Medical Media Service

1. Storage, Audiovisual Equipment (SRE01)......200 NSF (18.6 NSM)

Provide one if VAMC does not have a MMS Program authorized in Concept of Operations.

This area should be included in Education or Library Service.

This room provides high volume, high speed copying, printing and some finishing services for the medical center.

8 PLANNING AND DESIGN CONSIDERATIONS

- A. Departmental net-to-gross factor (DNTG) for Medical Media is **1.30**. This number when multiplied by the programmed net square foot (NSF) area determines the departmental gross square feet.
- B. Medical Media Services may be located either in the main clinical building or in a building that is directly adjacent to the main clinical building. If MMS is located in a separate building the following considerations must be met: The building must be directly adjacent to the main clinical building and connected by an enclosed causeway that has regulated heating / air conditioning. Access by patients must be easy and simple with no disruption to other services. MMS staff must have access to all surgical suites within a 15 minute walking period.
- C. The Photo Studio must be easily accessible from the elevators serving the nursing units. Soundproofing is required to support audiovisual recording activities, thus isolating this area from noise which may be produced from adjacent services and air handling systems.
- D. All Audiovisual Recording, Narration, Control and Editing Rooms as well as the Client Review Room require soundproofing, thus isolating this area from noise which may be produced from adjacent services and air handling systems.
- E. Medical Media must be isolated from structural vibrations such as elevators and building mechanical systems which cause distortion in all photographic, illustration, and audiovisual recording reproduction.
- F. Medical Media must be free from outside radiation interference such as radio frequency and magnetic interference which can erase or cause image and sound distortion during the production.

- G. Photography and illustration areas require 100% fresh air and 100% air exhaust.
- H. The Photo / Audiovisual Recording Studio requires a minimum ceiling height of 12'-0" for ceiling track lighting systems and floor standing lighting hardware and accessories. The location selected must provide reasonable access by patients with direct, double door access from a medical center corridor for patients on litters or beds as well as large pieces of equipment or props used in productions. A minimum room length of 30'-0" must be planned to accommodate videotaping. Additional electrical power is required to accommodate studio lighting for video recording.
- Audiovisual Control and Editing Rooms require either raised flooring or a service chase to cover the multitude of electrical cords of varying sizes and lengths used to connect hardware. Climate control should be considered for CCTV Control Rooms. Area should be kept free of moisture and temperature should be kept cool.
- J. Emergency power should be provided for MATV / CCTV Headend for signal distribution during an emergency.

9 FUNCTIONAL RELATIONSHIPS

Relationship of Medical Media Service to services listed below:

TABLE 1: FUNCTIONAL RELATIONSHIP MATRIX

SERVICES	RELATIONSHIP	REASON
Education Service	2	A,B,G,I
Library Service	2	A,B,G
Ambulatory Care	3	G,H
Ear, Nose and Throat Clinic	3	G,H
Eye Clinic	3	G,H
Laboratory Service	3	A,G
MS&N Patient Care Units	3	G,H
Medical Research & Development	3	G
Surgical Service	3	G,I
Engineering Service	X	D
Magnetic Resonance Imaging	X	K
Nuclear Medicine Service	X	K
Radiology Service	X	K

Legend:

Relationship

- 1. Adjacent
- 2. Close / Same Floor
- 3. Close / Different Floor Acceptable
- 4. Limited Traffic
- X. Separation Desirable

Reasons:

(Use as many as appropriate)

- A. Common use of resources
- B. Accessibility of supplies
- C. Urgency of contact
- D. Noise or vibration
- E. Presence of odors or fumes
- F. Contamination hazard
- G. Sequence of work
- H. Patient's convenience
- I. Frequent contact
- J. Need for security
- K. Others (Radiation Interference)
- L. Closeness inappropriate

10 FUNCTIONAL DIAGRAM



