

CDC 4V051/S

Ophthalmic Journeyman

Volume 1. Introduction to the Ophthalmic Clinic



**Air Force Career Development Academy
The Air University
Air Education and Training Command**

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VOLUME 1 of CDC 4V051/S provides general information you need as an ophthalmic journeyman. The volume covers the Air Force Medical Service (AFMS), the ophthalmic career path, eye protection, medical professional responsibilities, health records, referral management, patient accounting, Aeromedical Services Information Management System (ASIMS), clinic administration, property custodian, and the Sterile Processing Department (SPD). Everything you wanted to know about the ophthalmic clinic but were afraid to ask.

Keep in mind different clinics may have different operating procedures than those outlined in this course. The 4V CDC is designed to give you a general foundation on which to build your technical and professional learning.

Volume 2 contains information on ocular anatomy and physiology, ocular terminology, eye conditions and disorders, as well as ocular injuries and emergencies. It also has a complete section on ophthalmic pharmacology. Information here is more in depth than your 3-level school learning.

As you progress in your career, you are expected to become more knowledgeable in your day-to-day duties in addition to gaining a deeper understanding of your responsibilities as a technician and AF professional. Using the information here along with other avenues of continued education will enhance your professional and technical experiences. Thus, making your career more rewarding.

Volume 3 covers basic and ophthalmic optics, spectacle availability and limitations, and spectacle ordering procedures. While the scope of the material is limited to military requirements, everything easily translates to the civilian world. You should be able to pick up civilian journals and have a basic understanding of what is happening outside the military environment. If you are able to bring information from both the military and civilian worlds together, you will give your patients the best care available.

Volume 4 is the final volume and it goes through how you assist the health care provider (doctor). It discusses aseptic technique, case history and screening tests, specialty testing, the contact lens and non-aircrew ophthalmic programs, as well as aerospace (aircrew) ophthalmic programs.

If you have any questions about the material, ask your doctor or supervisor for clarification. They are there to help and guide you. Use all the resources you have available for learning. Take responsibility for your learning; be an active learner. This will enhance your career and make it more rewarding than just sitting back and hoping the information and experiences come your way.

A glossary of abbreviations and acronyms used in this volume is included at the end of the volume. Code numbers on figures are for preparing agency identification only.

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This volume is valued at 12 hours and 4 points.

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NOTE:

In this volume, the subject matter is divided into self-contained units. A unit menu begins each unit, identifying the lesson headings and numbers. After reading the unit menu page and unit introduction, study the section, answer the self-test questions, and compare your answers with those given at the end of the unit. Then do the unit review exercises.

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Unit 1. The Ophthalmic Medical Career Field

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THE EFFECTIVE CREATION date of the Air Force Medical Service (AFMS) is 1 July 1949. At that time, Air Force (AF) General Order No. 35 established a medical service with the following officer personnel components: Medical Corps, Dental Corps, Veterinary Corps, Medical Service Corps (MSC), Air Force Nurse Corps, and Women's Medical Specialist Corps. Each officer corps also received a contingent of enlisted medics. In later years, the Air Force Women's Medical Specialist Corps evolved into the Biomedical Sciences Corps (BSC). Optometry is part of the BSC. Ophthalmology falls under the MSC. The enlisted corps for these two components makes up our current Air Force specialty code (AFSC) 4V0X1/S. Optometry, 4V0X1, and Ophthalmology, 4V0X1S, are often referred to together as Ophthalmic personnel. Ophthalmic personnel provide care not only during wartime, but during peacetime they continue to care for military personnel, their dependents, and eligible beneficiaries. Today, military-trained journeymen and craftsmen provide ophthalmic care under the supervision of an optometrist or ophthalmologist. In this first unit of instruction, you'll learn about your role in the career field. This will include learning a little more about the AFMS, the Medical Group, various aspects of the ophthalmic career path, and eye safety. Overall, you will have a better idea of what the ophthalmic career field is all about and how to prepare yourself effectively for further advancement.

1–1. The Air Force Medical Service

Since the ophthalmic career field is a subdivision of the Air Force Medical Service, it's important to understand the mission, organization, and function of the AFMS. Once you see how the AFMS functions, you'll better understand how your specialty fits into the overall structure.

001. Air Force Medical Service overview

The AFMS mission is to enable medically fit forces, provide expeditionary medics, and improve the health of all we serve to meet our Nation's needs. During contingencies, this healthcare system must rapidly expand, mobilize, and deploy to provide medical support to Air Force operations worldwide.

Organization structure

The Air Force Surgeon General, who is the medical staff advisor to the Secretary of the Air Force and Air Force Chief of Staff, heads the AFMS. Corps chiefs of Dental, Nursing, BSC, and MSC advise the Surgeon General. The BSC is made up of many different specialties; some of these are physician assistants, medical laboratory, pharmacy, diet therapy, physical therapy, and of course, optometry. As stated earlier, ophthalmology falls under the MSC. An associate chief who advises the chief, BSC or MSC, on current data for their particular specialty, heads each medical specialty within the BSC or MSC.

AFMS flight path

The AFMS flight path provides a framework for the organization and leadership of our military treatment facilities (MTF). It further develops the objective medical group (OMG) principles that were implemented in 1993. As times changed and the Air Force became expeditionary minded, it became clear medical personnel, too, needed to be prepared to respond expeditiously. Below we will discuss how this influenced the thought behind and application of the AFMS flight path.

Principles and philosophies

A major focus of the AFMS flight path is preparing tomorrow's leaders. The focus, therefore, is on cultivating the functional expertise and experience of upcoming leaders within the MTF. The AFMS flight path ensures each medical corps has a clear developmental path based on Air Expeditionary Force (AEF) requirements for leaders to follow. Following this path, individuals have the opportunity to gain the right leadership mix and expertise necessary to compete for senior positions. These qualities ensure leaders are able to provide health care and leadership regardless of their location – whether it be at home or a deployed setting.

Implementation

To cultivate the development of consistent, well-rounded leaders, it is important to have a consistent, well-developed organizational structure. For that reason, the AFMS flight path establishes a streamlined, consistent MTF organizational structure. There are five MTF models in the AFMS flight path: Medical Wing, medical center/hospital, clinic with squadrons, limited-scope military treatment facilities, and Medical Squadron with flights.

It was also important that the AFMS flight path eliminate corps competition and provide leadership and team balance in the MTFs. Career milestones should be clear for functional/clinical, academic/educational, and leadership competence. Different corps (BSC, MSC, Nursing, and Dental) will have slightly different flight paths and, as such, have a slightly different timing sequence for advancement in their corps. The AFMS flight path includes a provision for general officer billets for all corps, thereby eliminating the perceived competition for senior leadership positions. Designating Group and Squadron command positions to specific corps based on requirements further helps eliminate competition. Command opportunity is dependent on officers meeting these senior leader requirements. Some of the other guidelines the AFMS flight plan implemented include the following:

- Group command is limited to one 3-year tour (with certain exceptions).
- Squadron command is typically limited to one 2-year tour (with certain exceptions).
- The corps designates Deputy Group commander and Squadron commander positions.
- All Medical groups will have a 9G100 group superintendent, normally limited to one 3-year tour (there is no maximum tour length, but anything longer than 3 years should be developmental in nature).
- Commanders should minimize the number of organizational layers within the group so there are no more than 4 to 5 layers between the front line Airman and the Group commander.

AFMS enlisted pathway

Although one of the main focuses of the AFMS flight path is the development and command of officers within the MTF, it also outlines a developmental pathway for the enlisted corps. As figure 1-1 demonstrates, enlisted members also have general benchmarks as they make their way through the ranks.

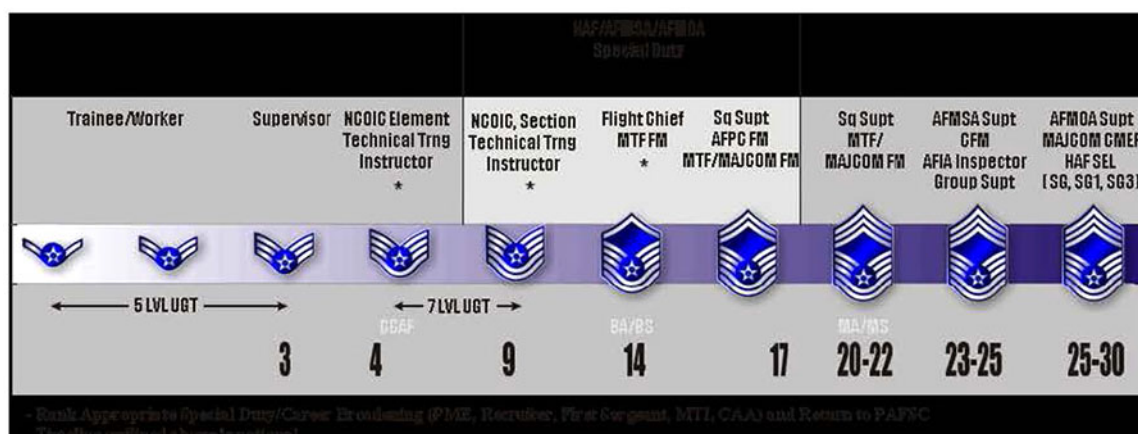


Figure 1-1. AFMS enlisted pathway.

Airman ranks (E-1 - E-4)

Upon graduation from technical training, enlisted members remain in a trainee status. An Airman is at a 3-skill level upon graduation from technical school. At their first duty station, Airmen are working towards obtaining their 5-skill level through upgrade training (UGT). Members of the Airman ranks (E-1 through E-4) are adjusting to the Air Force way of military life, understanding and conforming to Air Force standards, and becoming proficient at work and honing job skills. After the 3-year mark, a senior Airman (SrA) may start to take on more of a supervisory role, though they are not able to serve as reporting officials until completion of Professional Military Education (PME) at Airman Leadership School (ALS). It is essential that Airmen develop supervisory and leadership skills so they conduct themselves in accordance with established standards, provide a positive influence, and set a good example for their subordinates and peers. Members in these ranks may perform Honor Guard detail as part of a special duty team. The special duties available to the Airman ranks are not as numerous as the noncommissioned officer (NCO) or senior noncommissioned officer (SNCO) ranks.

Noncommissioned officer ranks (E-5 and E-6)

The ranks of E-5 and E-6 can be referred to as the NCO ranks. NCOs are expected to exemplify personal integrity, loyalty, leadership, dedication, and devotion to duty including upholding Air Force policies, traditions, and standards. Typically, members in these ranks hold a 5- or 7-skill level. NCOs are developing as technicians and supervisors. Staff Sergeants (SSgt) and Technical Sergeants (TSgt) may fill Element or Section noncommissioned officer in charge (NCOIC) positions. Some of the special duties members in these ranks may perform include: technical training instructor (TTI), military training leader (MTL), military training instructor (MTI), Airman and Family Readiness Center (A&FRC) NCOIC, Honor Guard, recruiter, and PME instructor, as well as a variety of additional positions.

Senior noncommissioned officer ranks (E-7 – E-9)

Members in the ranks of E-7 and above are referred to as SNCOs. AF SNCOs are expected to set the highest standards of personal integrity, loyalty, leadership, dedication, and devotion to duty including upholding Air Force policies, traditions, and standards. Typically, members in these ranks hold a 7- or 9-skill level. These ranks carry significantly increased responsibilities and require a broad technical and managerial perspective. Depending on their particular grade, members in these ranks may fill flight chief, squadron superintendent, group superintendent, and MTF functional manager positions. Again, depending on their particular grade, some of the special duties members in these ranks may perform include: major command (MAJCOM) functional manager, PME commandant, first sergeant, career assistance advisor (CAA), AF career field manager (AFCFM), command chief master sergeant (CCM), as well as a variety of additional positions.

002. Medical Group structure

Medical units are organized as wings, groups, or squadrons, depending on the scope of the medical mission and the size of the organization. The vast majority are medical groups (MDG). The MDG reports directly to the wing commander. Within the medical unit, the MDG commander has the overall responsibility for all activities and medical resources of the unit. The MDG commander delegates authority to carry out specific functions within the medical facility. The size and authorized/assigned personnel of the facility dictate if other services or functions are included. The organization consists of the group and subordinate units or squadrons. The flow starts with the group, under a group is a squadron, and subordinate to the squadron is a flight. These units set up a chain of command through which all control and accountability flow. In doing this, it provides an unbroken chain of command, from the newest Airman to the group commander, since all personnel have to be assigned to a unit at all times.

Medical Wing

At the present time, there are only two medical wings in the USAF: the 79th Medical Wing (MDW) at Andrews AFB, and the 59th MDW at Lackland AFB. The MDW commander works directly for MAJCOM headquarters.

Medical group organization

Three organizational structures are approved for Air Force-wide implementation. An MTF will be organized into the most efficient structure to deliver health care and support to beneficiaries, and keep it at a command level commensurate with other base organizations of similar size, scope, and responsibility. In any of the three possible organizational structures, a clearly defined chain of command exists for all personnel and the role of each squadron or flight. If the unit commander feels it will improve operations and support to the wing mission, he or she can assign personnel for all Air Force specialties (AFS) and professional affiliations to any medical squadron. Remember, these are just examples; the organization at your facility may differ from those listed below.

Organizational structures

The three organizational structures approved for Air Force-wide implementation are:

1. MDG with four subordinate squadrons (fig. 1-2).
2. MDG with two subordinate squadrons (fig. 1-3).
3. Medical squadrons with four functional flights (fig. 1-4).

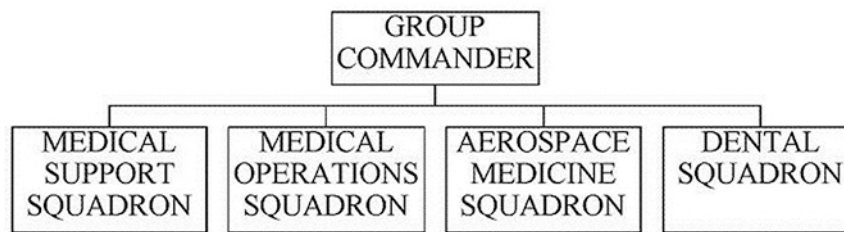


Figure 1-2. MDG with four squadrons.

NOTE: MDGs with over 600 authorizations may have a Surgical Operations squadron, if required due to mission requirements. MDGs with over 1,000 authorizations may also have a Diagnostics and Therapeutics squadron, if required.

MEDICAL GROUP (With Two Squadrons)

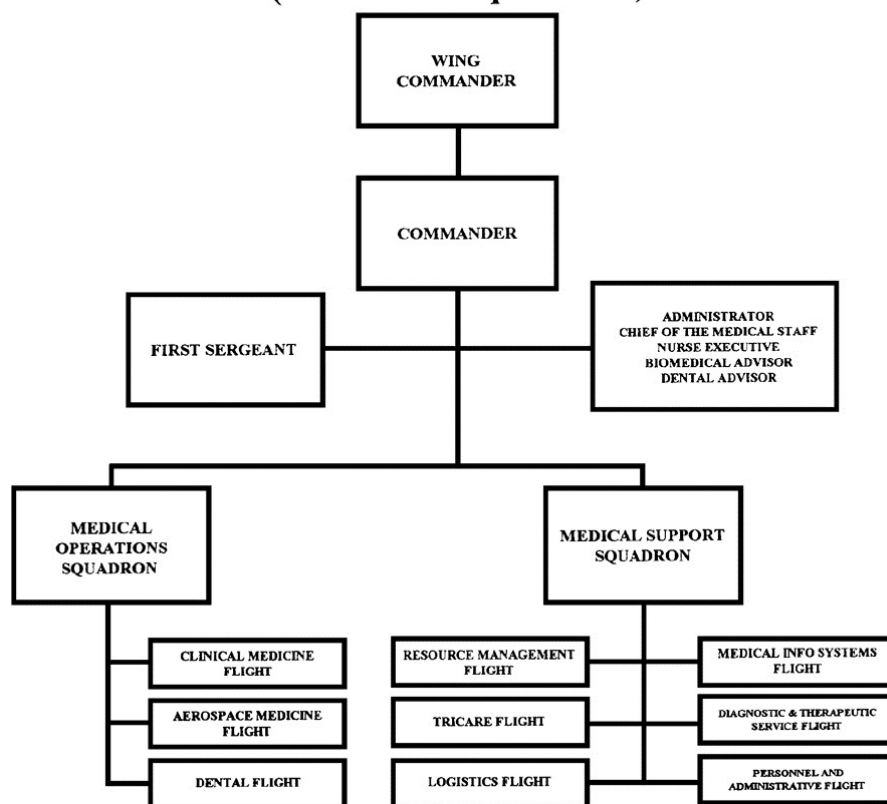


Figure 1-3. MDG with two squadrons.

MEDICAL SQUADRON

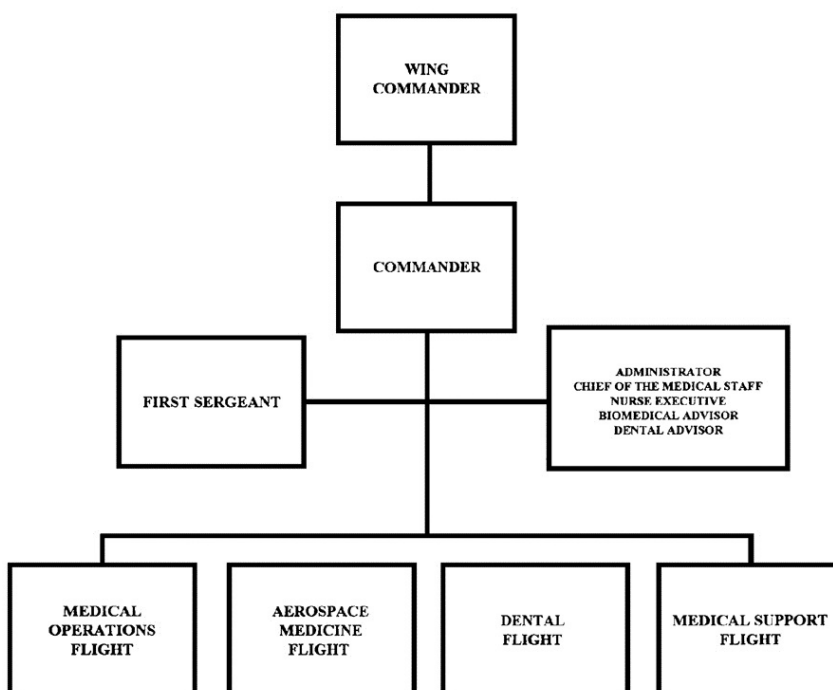


Figure 1-4. Medical squadron with four functional flights.

NOTE: If the medical unit isn't large enough to be formed as a group, it will be formed as a squadron and the squadrons will become flights. This would occur if the MTF has less than 100,000 visits per year, but is still designated as a group to maintain consistency with the other organizations on the base. Stated another way, the MTF doesn't need four squadrons due to the relatively smaller patient flow, but does need to be classified as a group to avoid being at a disadvantage compared with other base organizations formed and designated as groups.

Medical Group command staff

A medical command work center consists of the medical group commander, first sergeant, group superintendent, administrative/secretarial support, and performs the command functions. Optional components of the work center may include a deputy group commander.

Medical Group commander

The MDG commander has the overall responsibility for all activities of the medical group and is accountable for accomplishing all aspects of the medical group mission. The commander will establish, as a governing body, an executive committee. The committee, at a minimum, will consist of the commander, deputy commander, group superintendent, each of the functional advisors, and if not already represented on the committee, the squadron commanders.

Medical Group superintendent

The MDG commander selects the best qualified, eligible medical CMSgt (regardless of AFSC) as the MDG superintendent 9G100, to provide expertise on enlisted matters and serve as the senior enlisted corps member. The group superintendent serves as the principal enlisted advisor to the commander. The group superintendent also provides leadership and management in organizing, equipping, and training assigned personnel to most effectively accomplish the organization's mission.

First sergeant

The first sergeant advises and assists the MDG commander and the squadron commanders in managing unit activities as well as promoting the welfare, morale, and health of enlisted personnel, maintaining discipline and standards regarding a quality force, and supervising the care and upkeep of unit dormitories. The first sergeant is the vital link between the enlisted force and commanders regarding quality of life, discipline, and morale issues. The first sergeant ensures equity of disciplinary actions and the welfare of the enlisted force throughout the group. The first sergeant reports to the Medical Group commander.

Squadron commander staff

The squadron staff is responsible for the operational and administrative control of the squadron. These responsibilities encompass everything from customer service to the enforcement of the Uniform Code of Military Justice (UCMJ). This work center usually consists of the squadron commander, administrative, and secretarial support. However, depending on size and mission, the staff may also include a first sergeant and squadron superintendent.

Squadron commanders

A squadron commander position is integral to the organizational structure. This position improves service-line operational command and control. A squadron commander is responsible for the operational and administrative control of the squadron.

Squadron superintendent

Squadron commanders should appoint a squadron superintendent to assist in the daily operations of the squadron. These individuals are not technically authorized, but are taken from within the MTF's existing program. Selection criteria and training considered by squadron commanders should include, rank (master sergeant minimum), experience, and training (appropriate professional military education and Community College of the Air Force [CCAF] degree).

Medical squadrons

Medical squadrons are assigned to groups with functionally similar operations. The four primary medical squadrons are Medical Operations, Medical Support, Aerospace Medicine, and Dental.

Medical Operations squadron

The Medical Operations squadron (MDOS) provides or arranges the full scope of preventive and clinical health care services for the defined population. It plans, organizes, operates, evaluates, and continually improves a comprehensive system of health care, to include the development of processes to provide seamless and accessible beneficiary-focused, diagnostic, preventive, and treatment related services. This squadron also provides patient education and continuity of care for health maintenance, as well as for the acute and chronic management of disease and injuries. Additionally, the squadron collaborates with the chief medical officer (SGH) to develop and establish programs that continuously analyze and/or improve system performance, patient satisfaction, and clinical outcomes while enhancing the efficiency and effectiveness of all key processes.

The flights shown in the following table are options available. Compositions of units ultimately depend on the mission and clinical capability of the MTF. Final alignment is a local decision and is approved by the MDG commander.

Medical Operations Squadron	
Flight	Responsibilities
Medical Services	Provides comprehensive, but predominantly nonsurgical care to patients. May include functions from the following flights: Family Health, Internal Medicine, Emergency Services, Acute Care, Pediatrics, Mental Health, Dermatology, Neurology, Cardiology, Oncology, Gastroenterology and Immunizations. (NOTE: Allergy/Immunizations can be assigned to any MDOS flight depending on the specialty of the physician providing oversight.)
Primary Care	Provides for the delivery of basic and/or comprehensive primary care services to eligible beneficiaries of all ages. Clinical services include: management of acute and chronic health problems, disease prevention, screening, counseling, patient education, health risk assessments, as well as facilitating the continuity and coordination of clinical care. Depending on the mission and clinical capability of the facility, elements may include Patient Centered Medical Home, Family Medicine, Internal Medicine, Pediatrics, Mental Health, Physical and Occupational Therapy, Obstetrics and Gynecology (OB/GYN), Acute Care Clinic, and/or Ambulance Services. However, a primary care flight must include family health clinic plus one other specialty. A flight of family physicians and extenders is a Family Health flight.
Emergency Services	Provides medical care to patients with emergent and urgent problems and provides emergency medical response.
Family Health	Provides comprehensive examination, diagnosis and treatment of inpatients and outpatients. Clinical services include the monitoring and maintenance of patients' state of health, counseling and guidance, health education, rehabilitation and disease prevention. May include a patient-centered medical home element.
Genetics	Provides care and counseling to patients with, and/or at risk for genetically-based conditions. Advises and assists health care providers with the identification and management of patients or families with, or at risk for the same. Functions may include clinical and laboratory services.
Medically-related Services	Where required, provides medical services to children who are eligible to receive special education in the Department of Defense Dependent Schools (DODDS) overseas under the individuals with Disabilities Education Act. Functions may include audiology, speech-language pathology services, occupational therapy, physical therapy, social work services, community health nurse services, child psychology services, child psychiatry services and developmental pediatric services.

Medical Operations Squadron	
Flight	Responsibilities
Mental Health	The Mental Health flight has at least three elements: Family Advocacy (FA), Alcohol and Drug Abuse Prevention and Treatment (ADAPT), and Mental Health. The Mental Health element provides specialized individual, marital, and family counseling. The ADAPT element includes substance abuse prevention and treatment and drug demand reduction services. The FA element provides preventive and treatment related services aimed at eliminating the maltreatment of family members, children, spouses, or significant others.
Educational and Developmental Intervention Services (EDIS)	Helps children with special needs achieve their developmental and educational potential by providing quality family-centered support services in the home, school, and community. Provides evaluations and educational services for children (ages 0-21) with special needs in support of the Individuals with Disabilities Education Act. Used at designated locations. At smaller installations, may fall under the Mental Health flight.
OB/GYN	Provides routine and specialized obstetrical and gynecological services in both the ambulatory and inpatient setting.
Pediatrics	Provides comprehensive and predominantly nonsurgical care to children and young adults under eighteen (18) years of age.
Physical and Occupational Therapy	Provides for the evaluation and management of acute and chronic conditions with the goal of alleviating pain and restoring functions. Depending on the mission and clinical capability of the facility, functions may include: occupational therapy, physical therapy, orthotics, and rehabilitation medicine. If occupational therapy is not available in the MTF, this flight becomes the Physical Therapy flight.
Surgical Services	A Surgical Services flight will only be aligned under a Medical Operations squadron in facilities offering services that do not have a dedicated Surgical Operations squadron. This flight provides comprehensive specialized, surgical care to patients. Depending on mission and clinical capability of the facility, elements may include: General Surgery, Orthopedics, Physical and Occupational Therapy, Brace Otolaryngology, Ophthalmology, Urology, Neurosurgery, Cardio-thoracic Surgery, Vascular Surgery, Podiatry, and surgical subspecialties.
Maternal and Child Care	Provides routine and specialized OB services in the inpatient setting. Depending on mission and clinical capability, elements may include: Labor and Delivery, Postpartum, Neonatal Intensive Care Unit, and Nursery. This flight combines the functions of the OB/GYN Services and Pediatrics flights.
Clinical Medicine	The flight option is used primarily in medical groups that choose to combine all clinical functions into one (1) flight. Elements may include: Family Health, Internal Medicine, Pediatrics, OB/GYN Services, Mental Health, and Physical and Occupational Therapy.

Medical Support squadron

The Medical Support squadron (MDSS) provides medical logistics, medical information services, personnel and administration, TRICARE operations and patient administration (TOPA), readiness, pharmacy, clinical laboratory, nutritional medicine, diagnostics and therapeutics, histopathology, and diagnostic imaging (without an assigned radiologist) in support of the medical group.

Flights shown in the following table shows the flight options available to the Medical Support squadron. As before, the MDG commander approves the alignment of all flights under the MDSS.

Medical Support Squadron	
Flight	Responsibilities
Clinical Laboratory	Collects, analyzes and prepares reports on biologic specimens. Manages the blood transfusion process.

Medical Support Squadron	
Flight	Responsibilities
Diagnostic Imaging	Accomplishes records, interprets, and stores radiographic scans, fluoroscopy, and ultrasounds. May perform angiograms, guided biopsies, myelograms, and other procedures.
Histopathology	Provides analysis of biologic specimens from major and minor surgical procedures. Performs frozen section interpretation and autopsies.
Medical Information Services	Plans, implements, and manages information tools to meet the medical mission.
Medical Logistics	Provides materiel, facilities, equipment, maintenance and services, and manages war reserve reserve materiel and transportation for the medical mission. Responsible for management of Defense of Air Force Working Capital Funds assets and programs for the medical mission.
Nutritional Medicine	Provides dietetic services for patients and staff, including food production and service activities, clinical nutrition management services, nutrition education, subsistence management and cost accounting.
Personnel and Administration	Provides and arranges for the personnel and administrative needs for the medical group.
Pharmacy Flight	Receives and fills prescriptions. Monitors patients for drug interactions and incompatibilities. Provides patient and provider education and performs drug use evaluations.
Readiness	Leads operational readiness training and exercise planning for all medical personnel. Ensures medical functions are organized, trained and equipped to respond to peacetime and operational contingency in coordination with the medical group's healthcare administrator.
Resource Management	Plans, programs, allocates and accounts for manpower and funds. Performs billing and collecting, data analysis, workload accounting and other related functions.
TRICARE Operations and Patient Administration (TOPA)	Plans, develops, and implements the local TRICARE health plan to include beneficiary and provider services, analysis, and utilization management, and interacts with the regional TRICARE contractor. Oversees medical record management, admissions/dispositions, medical evaluation boards and other patient administrative activities.
Diagnostics and Therapeutic Services	Combines selected functions to provide diagnostic, preventive, therapeutic, education, and food services for patients, providers, and other customers. May include functions from the following flights: Clinical Laboratory, Histopathology, Nutritional Medicine, Pharmacy, and Diagnostic Imaging.

Aerospace Medicine squadron

Flight surgeons and aerospace medicine support personnel are assigned to the Aerospace Medicine squadron (AMDS), which is tasked to support the operational Air Force by enhancing the health of its people, protecting the environment, and anticipating medical contingencies. This squadron often promotes fitness and wellness, enhances operational performance and medical readiness; provides primary care to flyers and, if possible, their families, as well as oversees the industrial hygiene and occupational medicine programs. In essence, AMDS personnel provide a comprehensive preventive medicine program.

The following table shows the flight options available to the AMDS. As with the other squadrons, the MDG commander approves the alignment of all flights under this squadron as well.

Aerospace Medicine squadron	
Flight	Responsibilities
Aerospace and Operational Medicine	Provides primary care to flying and special operational duty personnel and their families, including all Space and Missile Operations Duty personnel and their families. Provides primary care and application of USAF medical Personnel Reliability Program (PRP) standards for all personnel assigned to PRP positions at bases that do not have a PRP flight in the Aerospace Medicine Squadron. Provides flying and occupational preventive health physicals. Determines fitness for flight and special operational duties.
Aerospace and Operational Physiology	Supports local and regional DOD operational commanders by providing appropriate aerospace physiology and human performance training. Works as an integrated team with aerospace medicine, safety, and line personnel in addressing human factors risk mitigation across the wing. Provides consultant services for flying and ground safety activities and physiological/human factor investigations and analysis of military aircraft mishaps. Provides qualified personnel to participate in high altitude airdrop missions (HAAMS), as required. Provides worldwide high altitude reconnaissance mission support. In squadrons with hypobaric (altitude) chambers, provides overall management to include operations, training, and oversight.
Audiology	Provides clinical diagnostic and aerospace medicine flight operational support. Evaluates and treats hearing and balance disorders. Manages the Hearing Conservation Program (HCP) and hearing loss prevention programs including education, training, and shop visits.
Bioenvironmental Engineering	Provides operational health risk assessment expertise to enhance commander decision-making and health service support capabilities by identifying, evaluating, and recommending controls for chemical, biological, radiological, nuclear, and physical occupational and environmental health threats.
Health Promotion	Provides programs that encourage healthy lifestyles (e.g., tobacco product non-use, exercise and fitness, nutrition, stress management, cardio-vascular disease prevention and substance abuse education. Manages health and wellness centers.
Hyperbaric Medicine	Provides initial clinical care for decompression sickness, and carbon monoxide poisoning. Additionally provides coordinated care in chronic clinical cases (e.g., gas gangrene and non-healing wounds). When dedicated hyperbaric personnel are not assigned, Aerospace and Operational Medicine Flight and Aerospace Physiology personnel provide initial response capability and serve as consultants to the Medical group.
Occupational Medicine	Delivers comprehensive preventive care to the military and civilian work force. Provides initial management of occupational injuries and illnesses. Directs medical monitoring efforts for the work force. Instructs clinical specialists and other allied health professionals on the recognition of occupational illnesses and injuries.
Optometry	Examines, diagnoses, treats, and manages diseases and disorders of the visual system as well as diagnosis-related systemic conditions with special emphasis on providing primary eye care and refractive services to flying and nonflying military personnel. Manages the spectacle/gas mask inserts, contact lens, and warfighter/aviation corneal refractive surgery programs.
Personnel Reliability Program	Responsible for application of USAF medical Personnel Reliability Program standards for all military personnel assigned to PRP positions at bases with more than 400 personnel assigned to PRP.
Public Health	Recommends and implements programs to prevent disease, disability, morbidity, and death through effective use of population-based public health programs. Conducts epidemiological surveillance and analysis of communicable, environmental, and occupational morbidity and mortality to establish and prioritize strategies for prevention and intervention.

NOTE: In the fiscal year (FY) 89 Defense Appropriations Act, Congress directed that optometry services fall under aerospace medicine. This organizationally separated optometry from the Department of Ophthalmology.

Dental squadron

Dental squadron (DS) personnel implement and maintain comprehensive programs for the prevention and treatment of dental disease, ensuring maximum personnel readiness and optimal oral health. The Dental squadron also sustains maximum readiness utilizing the Air Force Dental Readiness Assurance Program (AFDRAP) and delivery of comprehensive dental services and programs. Finally, the Dental squadron provides a dental health care delivery system that integrates quality, cost effectiveness, and access and may also include the administration of a private sector care referral program.

The flights depicted in the following table show the flight options available to the DS. Again, as before, the MDG commander approves the alignment of all flights under the DS.

Dental Squadron	
Flight	Responsibilities
Clinical Dentistry	Provides diagnostic and preventive services and delivers comprehensive dental treatment.
Dental Support	Supports the squadron in matters relating to personnel management, records, reports, publications, correspondence, training, resource management, logistics, and general management of patient data.
Dental Laboratory	Fabricates dental prosthesis and other appliances to support local treatment. Refers workload to the area dental laboratory, as required.
Dental Residency	Provides education, training, and administrative support for selected dental officers.
Area Dental Laboratory	Supports AF and other federal dental and medical services by fabricating and repairing dental prostheses, orthodontic appliances, and related materials.

Medical flights

A flight is either numbered or functional. A numbered flight is the lowest organized structure (level) in the Air Force. Its administrative characteristics are like those of a squadron. A functional flight is a part of a squadron and composed of elements performing specific missions. The establishment of functional flights is aligned by product or service-lines. For example, all obstetrical, newborn, and pediatric services form the core of the maternal/child care flight. The establishment of flights and the appointment of flight commanders or flight chiefs will be determined based on the mission, size and complexity of the squadron.

Flight commanders or flight chiefs

Squadron commanders appoint flight commanders or flight chiefs based on the scope of responsibilities. They will be the best-qualified individual. A flight commander or flight chief's scope of responsibility includes: interacting with other flights to improve overall organizational performance, supporting squadron commanders in managing and providing quality patient care, and related services, and working with flight NCOICs to ensure a cohesive team focused on patient care and services.

Flight NCOIC

Flight NCOICs assist a flight commander in much the same way the squadron superintendent assists the squadron commander. The flight NCOIC is usually the highest-ranking member of a particular flight.

Medical elements

Elements are the smallest, cohesive collection of personnel in the performance of a specific role or mission. For example, the optometry clinic can be an element of the flight medicine flight, which is

part of the aerospace medicine squadron. Alignment of elements under a particular squadron is a local option with the approval made by the MDG commander.

These lessons were just a brief look at the AFMS flight path and MDG structure. An individual's development as they serve in the AFMS may vary from person to person, just as the MDG's size and structure may differ from MTF to MTF. Both you as an individual and the MDG as an organization share the common goal of caring for our beneficiaries. In your next section, you'll learn some history about the ophthalmic portion of your career field and the specifics allowing you to deliver healthcare to all eligible beneficiaries.

Self-Test Questions

After you complete these questions, you may check your answers at the end of the unit.

001. Air Force Medical Service overview

1. What is a major focus of the AFMS flight path?
2. What is a typical tour length for a Group commander?
3. When is a SrA able to serve as a reporting official?
4. What are the ranks that make up the SNCO tier?

002. Medical Group structure

1. Whom would the Wing commander contact if he or she had a question about the activities and medical resources of the medical unit?
2. Why is it important for a MTF to be designated as a group even if it technically isn't large enough to be formed as a group?
3. Which medical AFSC can serve as the MDG superintendent?
4. What is the job of the first sergeant?
5. What is the *minimum rank* requirement for a squadron superintendent?

6. Which flight member should take the lead if your flight needed to interact with another flight to improve overall organizational performance?
7. On the organizational chart, where is ophthalmology typically found?
8. Which flight is responsible for plans and programs, and allocates manpower and funds?
9. Under which squadron is optometry typically found on the organizational chart?

1-2. Ophthalmic Career Path

Before we delve into the ophthalmic career path, it will be beneficial to know how our Air Force specialty came to be. We, therefore, will cover a little of the history, purpose, and capabilities of your new career field. Once you understand how your specialty came to be, it will be easier to then transition into understanding the overall ophthalmic career path.

Prior to World War I, there were no provisions for providing troops with glasses. Usually, the individual received his or her prescription from a military doctor and purchased spectacles through the Post Exchange (PX) in the form of an “essential equipment agreement.” In September 1917, the military services standardized lenses and frames for use by military personnel; however, glasses were still purchased through the PX. It wasn’t until the spring of 1918 that the first base optical unit and eight auxiliary units were established and deployed to France. Short-sightedly, the optical program was abandoned at the conclusion of World War I.

At the beginning of World War II, the military provided glasses to troops only when required by visual defects caused in the line of duty. There was no program in place to provide a massive buildup. In the summer of 1941, the Surgeon General received the authority to provide glasses for military personnel. At first, glasses for troops in the European theater were obtained through contracts in London. However, in January 1943, a US military base optical shop was established in England. By November 1944, a portion of this base shop was moved to Paris as the nucleus of another base shop. In total, there were about 50 optical labs established; only one was destroyed by enemy action during the war.

In the beginning, the military was only utilizing opticians located overseas. However, by the early 1940s the need for military opticians was so great that an optical course was established at the US Army Medical Field Service School, Fort Sam Houston, Texas. At about the same time, the 555th Optical Repair Detachment was established at Brooke Army Medical Center, also in Texas.

The optometry and ophthalmology clinics support the defense of the nation by maintaining the visual health and efficiency of all military members (both active and retired) and other eligible personnel. The ophthalmic clinic’s capabilities are dependent on the resources available in the medical facility, but generally the clinics are responsible for the prevention, detection, treatment, or referral (in the case of an optometry clinic) of eye problems. Preventive measures are accomplished through visual analysis by the health care provider as a component of the vision conservation program.

Detection of visual anomalies, while still in their early stages, are usually accomplished by vision screenings conducted in local schools or offered in the clinic as part of an eye examination. Treatment

of vision problems are performed with appropriate ophthalmic devices, orthoptics (visual training), or by referral to another clinic for medical, surgical, or psychiatric treatment.

At any given time, patient workload and staffing problems might prevent your clinic from reaching its full capability. Nevertheless, with the proper management of personnel and resources, your clinic should be able to provide most services. Keep in mind, there is a lot of education and training that goes into developing personnel to ensure that your clinic is equipped to provide a full range of amenities. The next lesson explains how you will progress through the ophthalmic career path so you can contribute to your clinic and contribute to reaching the above level of services.

003. Duties of AFSC 4V0X1/S

The ophthalmic AFSC—4V0X1—was authorized as a career field subdivision on 1 January 1971. It's a relatively small AFSC with good opportunities for advancement and close friendships with others in the same career field. In your specialty, as in other specialties, there are codes identifying your general career field and specific jobs within that field. Each digit within the specialty code has a distinct meaning. As you'll learn, there are certain requirements for advancement in rank and skill level. Of course, advancement in rank and skill level also means an increase in responsibilities. You'll also discover your training can open the way to valuable educational opportunities as an Air Force member, and these will additionally serve you well when you return to civilian life.

AFSC 4V0X1

Your AFSC, 4V0X1, distinguishes your job from a large list of other AFSs. The specialty code you now hold is 4V031, which identifies you as being “semiskilled” as an apprentice. This coding system identifies knowledge, skill, and grade level. Figure 1–5 below gives an explanation of the digits making up the specialty code.

Digit	Identifies	
First 4V0X1	Functional grouping—Medical.	
Second 4V0X1	Career field family—Ophthalmic (think “V” for vision).	
Third 4V0X1	Career field subdivision. Officers are identified with a letter while enlisted AFSCs carry a number in this column; 4V0 signifies enlisted personnel in the ophthalmic career field.	
Fourth 4V0X1	Skill level of the AFS. This skill level may be shown as 1, 3, 5, 7, or 9.	
	Skill-Level	Identification
	1	Airman at the helper level (in technical school).
	3	Semiskilled or an apprentice (graduated technical school).
	5	Journeymen (experience and career development course (CDC)).
	7	Advanced or craftsman level (experience and CDC).
	9	Superintendent level, 4V090 (lots of experience!).
Fifth 4V0X1	The fifth digit identifies enlisted specialties and specific expertise.	

Figure 1–5. AFS 4V0X1 code designations.

Chief enlisted manager code

An individual with a chief enlisted manager (CEM) code has an AFSC of 4V000. CEM codes are awarded only to chief master sergeants (CMSgt) or CMSgt selectees. As CEMs, they are subject to working in a variety of similar jobs and functional areas where their general managerial and supervisory abilities can be most effectively used and challenged. Often, the highest-ranking CEM is

selected for the position of Air Force career field manager (AFCFM) in each specialty. The AFCFM consults with and advises the associate chief on enlisted issues, concerns, and the state of the career field overall.

Becoming an ophthalmic technician

The only way to enter the ophthalmic career field is through satisfactory completion of the J3ABR4V031, *Ophthalmic Apprentice Course*. After you've completed this resident course, the remainder of your training is accomplished through on-the-job training (OJT), which you'll study in the next section.

Duties and responsibilities

Take a look at the duties and responsibilities you have as an ophthalmic journeyman. Air Force Manual (AFMAN) 36-2108, *Enlisted Classification*, provides the exact wording for the various 4V0X1 skill levels. The 4V031 apprentice and 4V051 journeyman have the same job description and some overlapping duties. The difference lies primarily in the depth of knowledge, level of job proficiency, and scope of responsibility. A fully qualified 4V051 journeyman has a broader knowledge of duties and responsibilities, much of which is based on experience. By the time you're awarded your 7-level and are qualified as a craftsman, you should be able to supervise and direct the functions of a typical ophthalmic clinic at an MTF. Figure 1-6 below shows ophthalmic training and career progression throughout the various skill levels.

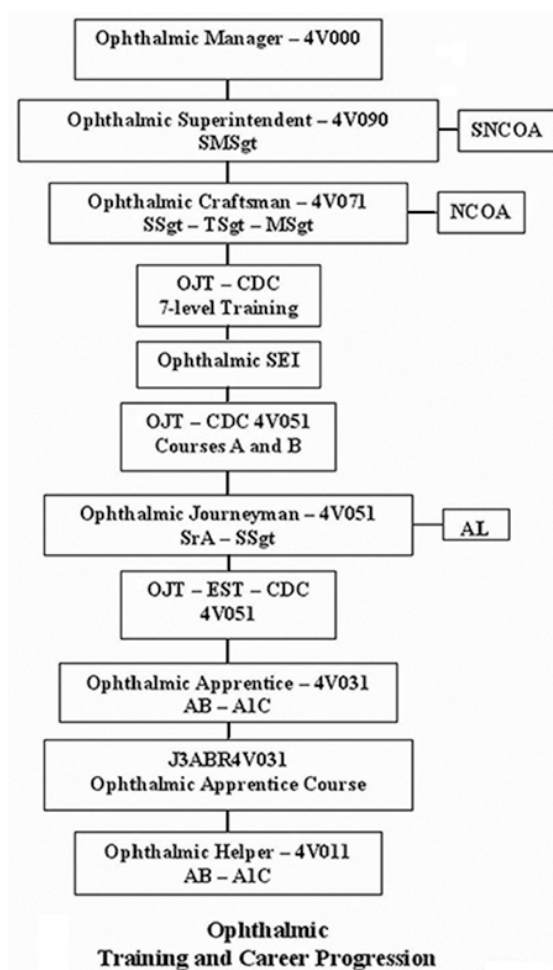


Figure 1-6. Ophthalmic training and career progression.

Duties and responsibilities of AFSC 4V051

After completing the initial skills training at the resident course at Fort Sam Houston, Texas and earning your 3-skill level (ophthalmic apprentice), your next step is the journeyman level. To attain your 5-skill level, you must meet the following requirements:

1. Complete mandatory career development courses (CDC).
2. Complete mandatory core tasks identified in the specialty training standard (STS).
3. Complete all duty position tasks specified in the STS.
4. Complete a minimum of 12 months in UGT (9 months for retrainees).
5. Must be recommended by your supervisor, have the approval of your commander, and meet all other requirements as outlined in Air Force Instruction (AFI) 36-2101, *Classifying Military Personnel (Officers and Enlisted)*.

As a fully qualified journeyman, you'll administer ophthalmic patient care, using various procedures and equipment, including:

- Assisting the health care provider (HCP) in the examination and treatment of patients by performing visual tests and procedures including visual acuity (VA), cover test, pupillary testing, color vision, depth perception, visual fields, tonometry, eye patching, keratometry, fundus photography, and a variety of other visual tests.
- Ordering, dispensing, fitting, and repairing military spectacles such as flight frames, gas mask inserts, ballistic eyewear, aircrew laser eye protection, and night vision goggles.
- Instructing patients on contact lens procedures and aircrew on the obligations of the Aircrew Contact Lens Program (ACLP).
- Instructing members on the various requirements of the Corneal Refractive Surgery (CRS) Program.
- Assisting personnel with the Vision Conservation Program.
- Recording patient case history.
- Instilling approved ophthalmic drugs as directed by a doctor.

Although patient care is your most important responsibility, administrative duties cannot be overlooked. Administrative functions support patient care and can include:

- Initiating and maintaining records of eye clinic patients, patient accounting, and activity reports.
- Ordering supplies or equipment, developing operating instructions (OI) or checklists, or assisting with the Quality Assurance (QA)/Risk Management (RM) Program.
- Maintaining a safe, sanitary clinic environment and ensuring the safe operation and maintenance of all ophthalmic equipment.

Duties and responsibilities of AFSC 4V071

After earning your 5-skill level (ophthalmic journeyman), your next step is the supervisory or craftsman level. To attain your 7-skill level, you must meet the following requirements:

1. Be at least a SSgt.
2. Complete mandatory CDCs, if applicable.
3. Complete mandatory core tasks identified in the STS.
4. Complete all duty position tasks specified in the STS.
5. Complete 12 months of UGT (6 months for retrainees).
6. Obtain and maintain ophthalmic certifications from a nationally accredited body (i.e., the American Optometric Association [AOA] or Joint Commission on Allied Health Personnel in Ophthalmology [JCAHPO]).

- a. If obtaining your certification through the AOA, the minimum certification level required for upgrade to 7-level is the Certified Paraoptometric Technician (CPOT).
 - b. If obtaining your certification through the JCAHPO, the minimum certification level required for upgrade to 7-level is the Certified Ophthalmic Assistant (COA).
6. Must be recommended by your supervisor, have the approval of your commander, and meet all other requirements as outline in AFI 36-2101.

In the ophthalmic field, there's very little difference between the journeyman's and craftsman's job description relative to patient care. Like the differences between 3-level apprentice and 5-level journeymen, 7-level craftsmen differ from 5-level journeymen in their depth of knowledge, level of job proficiency, and scope of responsibilities. Since patient care duties essentially remain the same between 5- and 7-level personnel, you'll only study the areas of the craftsman's job description differing from those of the journeyman's. The greatest differences between the journeyman and craftsman center on administrative responsibilities. While the journeyman's administrative duties center on patient care documentation, clinic environment, and equipment maintenance, the craftsman's responsibilities cover a far greater scope, such as:

- Coordinates, monitors, and evaluates ophthalmic services and activities against established standards of patient care, policies and regulations.
- Evaluates technical and administrative activities to determine methods of improving efficiency.
- Analyzes requirements for personnel, equipment, supplies, and other resources.
- Makes resource recommendations.
- Ensures compliance with inspection and safety procedures.
- Requisitions and supervises the issue, storage, and security of ophthalmic materiel.

A critical part of the craftsman's materiel responsibility is inspection, maintenance, and safeguarding procedures. As you can see, the craftsman has quite a few additional administrative duties and responsibilities.

Duties and responsibilities when assigned to an ophthalmology clinic

Besides the previously mentioned duties and responsibilities for AFSC 4V051 and 4V071, ophthalmology personnel have the following responsibilities:

- Prepare patients for treatment.
- Schedule surgery.
- Complete consent forms.
- Set up for patient pre-op testing.
- Perform as surgical assistants during ophthalmic surgery.
- Prepare injectable ophthalmic anesthetics and antibiotics.
- Perform suture removal.
- Obtain eye cultures.
- Perform fluorescein angiography (fundus photography).
- Assist the doctor as needed.

Duties and responsibilities of AFSC 4V090

After earning your 7-skill level (ophthalmic craftsman), your next step is the superintendent level. To attain your 9-skill level, you must meet the following requirements:

1. Must be a SMSgt.
2. Complete any other requirements specified in AFI 36-2101.

3. Complete the Senior Noncommissioned Officer Academy (SNCOA).
4. Must be recommended by your supervisor.

Just as the craftsman is concerned with ophthalmic service activities, the superintendent is concerned with the interrelationship of optometry and ophthalmology in helping to fulfill the primary mission of the MTF. At the 9-skill level, a superintendent *isn't* classified as optometry or ophthalmology because he or she is at a management level where the two career fields merge.

The ophthalmic superintendent is tasked with the following:

- Managing personnel, materiel, finances (budgets), equipment, administration, and other related activities.
- Developing and improving the working environment to make it more cost effective, efficient, and productive in rendering quality patient care.
- Coordinating optometry/ophthalmology technical and administrative activities to achieve quality health care programs.
- Supervising training development for continuing health education.
- Evaluating the adequacy of formal and clinical training programs, and recommending changes.

Ophthalmic personnel in the grade of CMSgt are identified by the CEM code 4V000, Ophthalmic Manager. The superintendent level means your specialty is now management first, with optometry or ophthalmology placing a distant second.

In the preceding paragraphs, you briefly studied the skill level progression through the ophthalmic career field. Keep in mind, the skill level job descriptions presented categorize the general duties and responsibilities for most individuals awarded a certain skill level. In some instances, the journeyman, craftsman, superintendent, or manager may have many more areas of responsibility than those listed.

004. Career path progression for AFSC 4V0X1/S

In 1992, the Chief of Staff of the USAF directed all AFSs to develop a Career Field Education and Training Plan (CFETP). The CFETP is designed to provide management with the framework and guidance necessary for planning, developing, managing, and conducting career training programs. This plan provides a training guide for the career field to identify mandatory and optional skill-level training individuals must receive during their career progression. The CFETP also identifies the specific training and education individuals will receive during each phase of their career. In this way, the plan enables ophthalmic personnel to keep pace with future technological advances within the career field.

Ophthalmic CFETP

All career fields have a mandatory basic 3-skill level course. As mentioned earlier, there's only one way to enter the ophthalmic career field—through satisfactory completion of the J3ABR4V031 course. After this, skill level advancement and promotion in the 4V0X1 career field is accomplished through successful completion of all required formal and qualification training. Before upgrade to any level, your supervisor must verify you possess the needed job proficiency.

The introduction section of the CFETP briefly describes its use. The CFETP is a comprehensive core training document identifying life-cycle education and training requirements, training support resources, and minimum core task requirements.

The ophthalmic CFETP provides 4V personnel with a clear career path to succeed and consistency in unit level training.

The CFETP consists of two parts:

1. Part I provides information necessary for the overall management of training in the career field. It contains administrative details, a description of the specialty, the purpose and use of the CFETP, suggested career field progression, training decisions, skill level requirements, and resource constraints.
2. Part II provides the STS, support materials, and training course index. MAJCOMs may attach Air Force job qualification standards (AF JQS) to this plan. Supervisors and trainers at the unit level use Part II to identify, plan, and conduct unit-level training commensurate with the overall goals of the plan.

Both parts of the plan are used by supervisors to plan, manage, and control training within the career field. By using guidance provided in the CFETP, supervisors can ensure individuals in the ophthalmic specialty receive effective and efficient training at the appropriate point in their career. This plan enables us to train today's workforce for tomorrow's jobs.

Professional military education

Professional military education is a vital part of your development as a military member. As you progress in rank, you'll become eligible to attend different levels of PME. Some levels can be completed by correspondence, others by in-residence. Just as you progress in your technical competence and knowledge, you'll be expected to progress in your general military knowledge and skill as well. Figure 1-7 below outlines a general timeline for PME throughout one's enlisted career path.

Enlisted Career Path				
Education and Training Requirements	GRADE REQUIREMENTS			
	Rank	Average Promotion	Earliest Promotion	HYT
Airman Leadership School (ALS) - Must be a SrA with 48 months' time in service or be a SSgt-select - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only)	Trainer - Qualified and certified to perform task to be trained - Must attend AF Training Course - Recommended by supervisor - Appointed by Commander			
NCOA - Must be a TSgt or TSgt-select - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only)	TSgt	9 years	5 years	20 Years
	MSgt	14 years	8 years	24 Years
SNCOA - Must be a MSgt or SMSgt-select - Resident graduation is a prerequisite for SMSgt sew-on (Active Duty Only)	SMSgt	17 years	11 years	26 Years

Figure 1-7. Enlisted career path.

NOTE: Keep in mind some of the training you receive in PME can be applied towards an associate's degree through the Community College of the Air Force. If you haven't yet looked into pursuing your CCAF degree, it would benefit you to do so. Whether you make the Air Force a career or return to civilian life, your training will pave the way to valuable educational and job opportunities. For more

information on how to pursue this and other educational opportunities, talk to your supervisor and visit your base education office.

Previously, we described the codes identifying your general career field and the specific jobs which fall within that field. Recall each digit within the specialty code has a distinct meaning. As you'll learn, the CFETP highlights certain requirements which are necessary for advancement in both rank and skill level. Of course, advancement in rank and skill level also means an increase in the scope and depth of responsibility.

Enlisted specialty training

The Air Force uses a dual-channel concept to provide enlisted specialty training (EST). As the name implies, there are two distinct parts of the dual-channel concept—formal training and qualification training. Both are very important in your development as an ophthalmic technician.

Formal training

This training consists of in-residence training, such as your 3-level tech school and CDCs. Formal training focuses primarily on task and subject knowledge. Task knowledge is the knowledge needed to perform a particular task safely, accurately, and effectively. It includes the theories or principles common to a particular task, and even the detailed step-by-step parts of a task, if needed. In formal training (like your 3-level tech school) you may already have done some task performance training, but this was more for familiarization purposes to aid in your overall task and subject knowledge. Specific training on the performance of skills is accomplished through qualification training.

Qualification training

Qualification (job proficiency) training increases hands-on skills while you're performing the duties and tasks on the job. It's the application of the knowledge you learned from formal training (technical school/CDCs). You're qualifying to do your job by performing it under the guidance of an experienced trainer—a person who is already proficient in the knowledge and skills needed for the job. You've read it, heard it, seen it, and now are doing it. This is how you become a skilled and qualified technician.

The STS is really Part II of the CFETP. It serves as a contract between Air Education and Training Command (AETC) and the career field to show which of the overall training requirements for an AFSC is taught in formal schools, career development courses, and exportable courses. During your qualification training, your supervisor will use the STS as a job qualification standard. The JQS is nothing more than an STS annotated with what you need to know at your particular duty station. The services available to beneficiaries can vary clinic to clinic, so the tasks required at your duty station can vary from other duty stations. Your JQS depends on the tasks required for your particular clinic. Your training is loaded into an electronic record known as the AF Training Record (AFTR). Your STS is loaded into AFTR. The core tasks and the tasks required for your duty position are assigned as the tasks required for your UGT. These tasks make up your JQS. If you haven't seen AFTR yet, ask your supervisor to show it to you. You will have a hand in signing off the tasks in this electronic system as you complete training. It's your supervisor's responsibility to develop and ensure effective use of your JQS. This standard is used to develop a trainee's job proficiency. Since the STS/JQS may not contain every task you perform, your supervisor may supplement it with other training documents. These supplements also become part of your JQS. The JQS and supplements are used to guide your qualification training, whether you're working toward your 5- or 7-skill level qualification. All of these training documents should be maintained in AFTR so your qualification training can be monitored and your progress can be tracked.

Practical application of EST

There are three people who are very important to your EST—your trainer, task certifier, and supervisor. Each of these individuals must meet certain requirements.

Trainer qualifications and responsibilities

Your trainer must be appointed by the commander, already be certified on the tasks to be trained, and be trained on how to train others by attending the Air Force Training Course.

The trainer and supervisor may be the same individual. If necessary, the supervisor may assign someone else to provide the training. Trainers are selected based on their experience and ability to provide instruction to trainees.

The following lists trainer qualifications and responsibilities:

- Attend the Air Force Training Course.
- Maintain required task qualifications.
- Record task qualification according to prescribed instructions when a trainee performs a task to required standards.
- Plan, conduct, and document training.
- Develop evaluation tools. Evaluation responsibilities may be assigned to an equally qualified third party.
- Prepare and use teaching outlines or task breakdowns, as necessary.
- Brief the trainee and supervisor on the training evaluation results.

NOTE: To ensure effective and efficient execution of training programs, the trainer and trainee should be placed on the same work crew or shift unless the mission dictates otherwise.

Task certifier qualifications and responsibilities

Certifiers will provide third-party certification and evaluation on tasks identified by the AFCFM (if applicable). The responsibility of the certifier is to conduct additional evaluations and certify qualification on those designated tasks.

Certifiers must:

- Be at least a SSgt (E-5) with a 5-skill level or civilian equivalent.
- Attend the Air Force Training Course.
- Be capable of evaluating the task being certified.
- Evaluate training and certify qualifications.
- Use established training evaluation tools and methods to determine the trainee's ability and training program effectiveness.
- Develop evaluation tools.
- Brief the trainee, supervisor, and trainer on the training evaluation results. Identify the trainee's strengths and any areas requiring improvement.
- Request assistance from the supervisor and unit training manager (UTM), when necessary.
- Be someone other than the trainer.

Supervisor qualifications and responsibilities

The third key person is your supervisor, who may also be your trainer or certifier, but NOT both. For example, a supervisor cannot certify training he or she provided; however, your supervisor can certify tasks trained by someone else. This assumes the supervisor has attended the previously mentioned Air Force Training Course. This is done to keep the system of upgrade training effective. One person trains and another certifies that the training has gotten you to the skill level required. Your supervisor must ultimately verify you possess the necessary job proficiency before you are upgraded to the next skill level.

Throughout the EST program, you'll be placed in an operational or clinical setting and asked to perform specific tasks. Usually, your trainer or supervisor starts you on the simpler tasks, and as you gain confidence and skill, you progress to the harder tasks. The training should be dynamic (you DO IT); never static (you only HEAR IT). As you broaden your career knowledge and increase your job proficiency, your supervisor should assign other, more difficult tasks, until you master all the required elements of your job. In this way, you will learn your skills in a "real world" environment under the tutelage of those who have already "been there and done that."

Here's a note to remember. The CDC you're taking may not always include the most recent changes in the Air Force policies affecting your duties. This means your CDC can't be used as a final authority in doing your daily job. Additionally, local procedures, standard operating procedures, or OIs could differ slightly from the CDC. The CDC is a *general guide* to help you learn, but not the final source for all ophthalmic knowledge. Use the most current Air Force publications and policy letters as the final authority in doing your daily tasks. Study your CDC to meet the formal training requirements of your EST and to prepare you for promotion testing.

Evaluation methods

Throughout your training in the ophthalmic apprentice course (3-level tech school), you were evaluated on your subject knowledge, task knowledge, and skill proficiency to an apprentice level. The results of these evaluations indicated how well you were progressing in training, your retention of material, and any problem areas. Now that you've graduated, you'll be evaluated again. This time, however, the evaluation will take place in your work environment.

Purpose of evaluation

Evaluations of training programs are conducted in a field or work environment. This setting is best because the graduate is actually performing the job for which previous training was conducted. It tells the evaluators just how well the graduate performs in the real world.

Field evaluations

The primary purpose for field evaluations is to improve training programs. Field evaluations are a great tool to assess the quality of formal resident courses, nonresident courses, CDCs, and computer-directed training systems. With all training programs, a predetermined standard is used to evaluate if the student has met the standard by the time training is complete. Your journeyman training is no different. The formal training provided by the 5-level CDC has standards to meet based on the tasks, and the level of proficiency of those tasks, that make up the STS. Your OJT training also has to meet certain standards based on the STS.

With these standards established, the field evaluation is conducted. First, the evaluation determines if you're performing your assigned tasks at the level of proficiency specified in the STS. Second, it determines the extent or frequency that you're using your newly acquired skills. Third, it determines how much knowledge you retained following graduation, and assists in identifying if there's a need to revise the training. Lastly, the assessment determines if further evaluation is needed for any identified problem areas. As you can see, these field evaluations are a very important component in the development of effective training courses.

Types of field evaluation

There are two basic types of field evaluations—field visits and the correspondence method.

Field visit method

In this method, a team of evaluators visits your work area between the fourth and sixth month following your graduation. During the visit, the evaluator talks with you, your supervisor, and anyone else having knowledge of your performance. They also observe your ability to perform the trained task(s). Again, they use the STS as the reference for evaluation.

Correspondence method

The second and most frequently used type of field evaluation is the correspondence method, which is used for nearly all types of training. This method can use two types of correspondence—field evaluation questionnaires (FEQ) and/or the graduate assessment surveys (GAS).

One way of evaluating resident (formal) training, like your 3-level technical school, are the FEQs sent to your supervisor. Your supervisor will receive the questionnaire around the 4-6 month mark from when you graduated from technical school. The data is used to evaluate your qualifications in terms of knowledge level and skill proficiency based on the STS.

A second way of evaluating training is from the GAS. You or your supervisor can use this form to document the quality of resident training, recruit training, field training, CDCs, and so forth. It's used to provide feedback to AETC and other organizations conducting AF education and training courses.

NOTE: Any improvements made in the training system ultimately depends on how accurately and honestly you respond to the different evaluation methods. Please take your time when completing or answering any evaluation.

005. Educational opportunities for AFSC 4V0X1/S

When you evaluate the benefits of an Air Force career, the educational opportunities are among the most valuable. Technical schools, PME, CDCs, in-service training, colleges, and many more opportunities are available to you. Take advantage of them!

Base education office

The base education office is the center for educational opportunities. The people there are the most qualified to guide you in your educational goals and planning. There are many College Level Examination Program (CLEP) and Defense Activity for Nontraditional Education Support (DANTES) tests available for you to earn college credits. If you pass the test(s), credit is granted. Many hours of an associate or bachelor's degree program can be satisfied through these tests. Additionally, the Air Force offers you a wide range of Air Force Career Development Academy (AFCDA) courses that are both specialty and nonspecialty related. The education office also has listings of courses and degree programs available to satisfy degree requirements available on site, on-line, and in your local community. The staff there is trained to discuss your educational aspirations and can assist in developing the best plan for you to achieve your goals. There is also an Air Force Virtual Education Center Website you may find useful, <https://afvec.langley.af.mil/afvec/Home.aspx> (a link to this site can be found on the main Air Force Portal page). Take advantage of their services.

CCAF academic programs

CCAF provides the opportunity to obtain an associate degree in applied sciences after a student successfully completes a degree program designed for an AF specialty. The CCAF is made up of military training as well as off-duty education. Off-duty education is a personal choice, but highly encouraged and can give you a greater understanding of your job. While you'll earn many credits through your military training, off-duty education will be required to actually complete your degree.

Degree requirements

Upon completion of basic military training (BMT) and assignment to an AFS field, active duty, Air National Guard (ANG), and Air Force Reserve (AFRES) enlisted members are automatically enrolled in the CCAF degree program designed for their career field. A student must hold the journeyman 5-level in the appropriate AFSC at the time of program completion and also complete all degree requirements before separating, retiring, or becoming a commissioned officer. The following table shows the requirements for an associate in applied science (AAS) degree as an ophthalmic technician (as of the writing of this CDC).

AAS DEGREE REQUIREMENTS		
Subject	Requirements	Semester Hours
Technical Education	<ul style="list-style-type: none"> Must complete the Air Force ophthalmic apprentice course in residence. Remaining semester hours may be applied from technical core or elective areas. Requests to substitute subjects/courses must be approved in advance by the CCAF services branch. Check with CCAF counselors/advisors who will give advice regarding specific degree requirements. 	24
Leadership, Management, and Military Studies (LMMS)	<ul style="list-style-type: none"> Preferred method of completing LMMS is through attendance at an ALS, NCO Academy, and/or AF Senior NCO Academy. Civilian courses that emphasize fundamentals of managing human or material resources may also be applicable. 	6
Physical Education	<ul style="list-style-type: none"> Satisfied by completion of BMT. 	4
General Education	<ul style="list-style-type: none"> Satisfied by application of courses accepted in transfer or by testing credit. Courses required to satisfy the general education requirement are as follows (3 credits each): Oral Communication, Written Communication, Mathematics, Social Science, and Humanities 	15
Program Elective	<ul style="list-style-type: none"> Requirement is satisfied with applicable technical education, LMMS, or general education subjects/ courses, including natural science courses meeting general education application criteria. Nine semester hours of CCAF degree-applicable technical credit otherwise not applicable to the program may be applied. 	15
	Total Requirement	64
NOTE: The Accreditation Council on Optometric Education (ACOE) accredits the Ophthalmic Apprentice course. Apprentice course graduates are eligible to take the Certified Paraoptometric Technician examination. Those who desire certification should contact the American Optometric Association, Commission on Paraoptometric Certification (CPC), 243 North Lindbergh Blvd., St. Louis MO 63141, 1-800-365-2219, http://www.aoa.org/ .		

Related civilian career fields

There are several civilian jobs related to your specialty. The most closely related job is an ophthalmic assistant to a civilian practitioner. In addition to the knowledge and skills you gain in the Air Force, in a civilian setting you need to know more about bookkeeping, data processing, and frame fashions. Many schools offer courses to prepare you to work as a civilian paraoptometric assistant. Another civilian job related to yours is an optician. In addition to the skills previously mentioned, as an optician you must also learn lens surfacing and edging. To get more information about opticianry, you can contact the American Board of Opticianry, or your local dispensing optician or optical laboratory.

Finally, if you're interested in making a career in the eye care field, you may decide to become either an optometrist or ophthalmologist. Request the most up-to-date information on these professions from the American Optometric Association (for optometry), the American Medical Association (for ophthalmology), or your local practitioner.

Accreditation by civilian organizations

Many schools and colleges are offering 1- or 2-year paraoptometric technical programs. You may want to continue your education by attending some of these courses. If you decide to do so, you'll be happy to know your military training has given you credits that may transfer and can be applied at several civilian institutions. It is your responsibility to check with the particular college you are interested in to see if it will accept your credits.

Here's a brief look at three organizations associated with accrediting the AF ophthalmic technician programs:

1. The Accreditation Council on Optometric Education has accredited the J3ABR4V031 course at Joint Base Ft. Sam Houston in San Antonio, Texas.
2. The Southern Association of Colleges and Schools Commission on Colleges accredits the ophthalmic technician program for the CCAF.
3. The Commission on Occupational Education Institutions (COEI) has accredited the Medical Education and Training Campus (METC).

National certification

You are not required to have your national certification until you upgrade to 7-level. However, because you get such thorough training and are eligible to take the CPOT examination upon graduation from the apprentice course, many ophthalmic technicians choose to get nationally certified through the AOA earlier rather than later. The AOA Paraoptometric Section has quite a few different examinations available, but the CPOT is the minimum certification level required for your eventual upgrade requirements. You can find more information by visiting:

<http://www.aoa.org/paraoptometrics/certification>.

For ophthalmic personnel interested in obtaining an ophthalmology certification, JCAHPO has quite a few different examinations available, but their COA is the minimum certification level required for your eventual upgrade requirements. You can find more information by visiting:

<http://www.jcahpo.org/certification/>.

There are specific reasons national certification and continuing education are so important.

1. You've proven your knowledge at an established national level of expertise, legitimizing your training and understanding of the ophthalmic field. This not only boosts your confidence, but also impresses your managers, peers, and subordinates.
2. Coupled with your experience, it helps create a formidable resume when you apply for a civilian job after you retire or separate.
3. As far as your military career is concerned, being nationally certified allows your supervisor more opportunities to nominate you for awards and higher performance rating marks.
4. It is required for you to obtain your 7-level.
5. Supports the AF Core Value of "excellence in all we do": To strive for personal excellence, military professionals must seek out and complete professional military education, stay in physical and mental shape, and continue to refresh their general educational backgrounds.

These types of credentials speak volumes about the people who have gone the extra mile.

There's no downside to national certification. Because it's required for your 7-level, the Air Force will even cover the cost of testing. It's common for your MTF to have you pay for the testing out of your own pocket, and after you provide documentation that you've successfully passed the test, reimburse you. See AFI 41-104, *Professional Board and National Certification Examinations*, for more guidance. If requested in advance, you can often test at your local education office, thus saving travel costs and sitting fees. There are three certification agencies relevant to your career path. They are the AOA, the American Board of Opticianry (ABO), and the JCAHPO. The following are some certification tests you may be eligible to take and whom to contact:

- Certified Paraoptometric (CPO)—contact the AOA.
- Certified Paraoptometric Assistant (CPOA)—contact the AOA.
- Certified Paraoptometric Technician (CPOT)*—contact the AOA.
- American Board of Opticianry Certified (ABOC)—contact the ABO.
- Certified Ophthalmic Assistant (COA)*—contact the JCAHPO.
- Certified Ophthalmic Technician (COT)—contact the JCAHPO.
- Certified Ophthalmic Medical Technologist (COMT)—contact the JCAHPO.
- Certified Ophthalmic Surgical Assistant (COSA)—contact the JCAHPO.

***NOTE:** Though there are numerous tests available, AOA’s CPOT and JCAHPO’s COA are the minimum certification you must obtain for your 7-level.

Once you have your certification, it’s maintained by attaining continuing education (CE) credits. Depending on your particular certification, you need to obtain a designated amount of CE credits to renew your certification. There are a variety of options to accomplish this; the most common is by attending courses and/or conferences or through on-line sources. Through the AF Portal, you can access the AFMS Knowledge Exchange Optometry/Ophthalmic Technician Website. At this site, under the “Continuing Education” link, you can find a list of continuing education resources. At the time of this writing, the link can be found at:

<https://kx2.afms.mil/kj/kx6/OptometryOphthalmicTechnicians/Pages/continuing-education.aspx>.

Self-Test Questions

After you complete these questions, you may check your answers at the end of the unit.

003. Duties of AFSC 4V0X1/S

1. What can you expect as you advance in rank and skill level?
2. What does the third digit indicate in AFSC 4V0X1?
3. How does a person get into the ophthalmic career field?
4. If you wanted to look up job duties and responsibilities, which publication would you use?
5. What’s the main difference between the 3-skill level and 5-skill level of the 4V0X1 AFSC?
6. What’s the main difference between the 5-skill level and 7-skill level of the 4V0X1 AFSC?

7. Whose responsibility is it to prepare patients for ophthalmology treatment?
8. Would a 9-skill level ophthalmic superintendent be identified as optometry or ophthalmology?

004. Career path progression for AFSC 4V0X1/S

1. What Air Force training document identifies life-cycle education and training requirements, training support resources, and core task requirements?
2. Where would you find the STS that supervisors and trainers use to conduct unit level training?
3. Name the two distinct parts of the dual-channel concept of EST.
4. What type of knowledge is needed to perform a particular task safely, accurately, and effectively?
5. Your 3-level tech school is considered what type of training?
6. Why should you ask your supervisor to show you your AFTR?
7. What course must someone attend to become a trainer and/or certifier?
8. Why is your supervisor not allowed to act as both your trainer and certifier?
9. What's the primary purpose of field evaluations?

005. Educational opportunities for AFSC 4V0X1/S

1. Where would you go if you wanted more information on educational opportunities?
2. When is an Air Force member enrolled automatically in the CCAF?
3. Can an Airman pick any CCAF degree they'd like to pursue, regardless of their AFSC? Why?
4. Will you need to take a class to fulfill the physical education requirement for your CCAF?
5. You're enjoying your ophthalmic career and are thinking about becoming an optometrist. You spoke with your doctor but would like more information. Where can you find additional information?
6. Besides it being a requirement for your 7-level upgrade, why else should you obtain your national certification?
7. Which civilian organization would certify an ophthalmic technician as a CPOT upon successful completion of the exam?
8. Which civilian organization would certify an ophthalmology technician as a COA upon successful completion of the exam?

1-3. Eye Protection

An estimated 2,000 eye injuries occur daily in the American workplace. Approximately 90 percent of all eye injuries are preventable simply by wearing the proper eye protection. Safety is vitally important to the Air Force. Injuries and deaths caused by accidents cost the Air Force millions of dollars each year in lost time and medical expenses. When these accidents occur, the Air Force loses one of its most valuable resources—its people. Many workers are unaware of the potential hazards in

their workplace, and workers have a right to a safe environment. Ensuring member safety includes adequate training for all workers who require eye and face protection. When employees are trained to work safely, they should be able to anticipate and avoid injury from job-related hazards.

006. Eye safety in the workplace

In developed nations, ocular trauma is the third leading cause of blindness. Approximately 1 in 277 or a little less than one million individuals in the United States sustain some type of accidental eye injury annually. More than half of these injuries occur to males under 25 years of age. Roughly 40,000 of them will suffer some degree of visual impairment, and an estimated 1,500 will lose their sight permanently.

Ocular injuries are not without significant financial consequences. Nationwide, ocular injuries account for an estimated cost of approximately \$300 million in medical bills, compensation, and lost production time per year. From this, you can see why the Department of Defense (DOD) is very concerned and takes an active role in the vision conservation program.

In an effort to improve the occupational safety and health of all employees, former President Richard M. Nixon signed into law Public Law 91-596, known as the *Occupational Safety and Health Act (OSHAct) of 1970*. The general duty clause of the OSHAct emphasizes that each employer "... shall furnish to each of his employees a place of employment which is free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." The law took effect in 1971 and resulted in the military provision of eye protection for all employees working in eye-hazardous areas.

In addition, employees are required to comply with the standards, rules, and regulations of the OSHAct and are responsible for their actions and conduct. These provisions apply to safety in general, as well as eye safety.

Vision conservation and readiness program

Occupational vision efforts within the military evolved over time. The Vision Conservation and Readiness Program that exists today consists of three program elements:

1. Occupational vision.
2. Eye safety.
3. Environmental vision.

Ocular injuries in the military workplace or on the battlefield may not only be hazardous, but could also have fatal consequences. There is a DOD initiative to implement a vision conservation program for all federal employees that is consistent, and meets the regulatory guidelines of the Occupational Safety and Health Administration (OSHA). OSHA has primary responsibility for:

1. Developing mandatory job safety and health standards.
2. Enforcing the OSHAct through inspections of the workplace.
3. Maintaining a record-keeping system to monitor job-related injuries and illnesses.
4. Implementing programs to reduce workplace hazards.
5. Researching occupational safety and health issues.

OSHA requires employers provide protective eyewear that meets American National Standards Institute (ANSI) standards at no cost to the employee. Employees, management, and even visitors must wear approved eye protection when they enter or work in an eye-hazardous area. OSHA rules also require employers provide safety training, including eye-safety training. However, OSHA doesn't require employers to pay for their employees' vision examinations. Some federal agencies, including DOD, provide screening and surveillance for their employees who work in eye hazardous areas. This is to ensure employees can see well enough to perform their jobs, which in turn improves worker productivity and reduces the risk of costly eye injuries. The employee is responsible for obtaining an eye examination when vision or ocular health problems are detected during a screening.

AF vision conservation and readiness

The Army Public Health Center provides input on DOD as well as individual service policy related to Vision Conservation and Readiness. Some of the Air Force specific documents include:

1. Air Force Joint Instruction (AFJI) 44-117, *Ophthalmic Services*.
2. AFI 48-101, *Aerospace Medicine Program*.
3. AFI 48-123, *Medical Examinations and Standards*.
4. AFI 48-145, *Occupational and Environmental Health Program*.
5. AFI 90-801, *Environment, Safety, and Occupational Health Councils*.

Since the Vision Conservation and Readiness Program is constantly changing, check with your local base Safety Office and Bioenvironmental Engineering at your MTF for up-to-date information. Your role and responsibility in the program can vary from base to base. More information can be found at the Army Public Health Center Website. At the time of this writing, the address is:

<https://phc.amedd.army.mil/topics/workplacehealth/vcr/Pages/default.aspx>.

The Vision Conservation and Readiness Program exists to optimize visual performance, promote ocular health, and reduce the rate of ocular injuries through education and training to ensure the nation has a visually ready force.

Duty to warn

Duty to warn falls into the safety program with close ties to ethics and informed consent. Duty to warn is your legal responsibility to inform the patient about all options available to avoid eye injuries. Let's look at an example that will hopefully clear things up.

A patient comes into the office, has an eye exam, and orders glasses. After a few weeks, the patient picks up the glasses and later heads out to a softball game. While playing, the patient is hit with a ball, causing the lens of the spectacles to break. Part of the lens damages the eye. The patient is back to see you and receives emergency treatment at the clinic. Does the patient have the right to sue for damages caused by the lens breaking and damaging the eye?

Unless you had informed the patient about the different lens materials available, there is a good possibility the patient would win in a lawsuit. Courts have consistently ruled that by not warning a patient about lens material options, claims for damage are justified. In the example used, polycarbonate lens material would have been the most appropriate choice for the patient. While it is true our military labs require justification for polycarbonate lenses and you would not be able to order a pair for softball use, the patient should still be informed of the benefits of the lens material so he/she can make an informed decision. Without this information, the patient is not given the opportunity to select the lens material best suited for his/her needs. If the properly warned patient then declines to obtain polycarbonate lens, their claim for damages would not be justified.

This is only an example, but the concept of duty to warn can also be applied to most aspects of the clinic, such as the use of safety frames vs. regular frames. Whether you are referring to lenses, frames, or eye drops, you must inform your patients of all available options to protect their vision.

Laser eye exams

Lasers are becoming more common every day. To help minimize the negative effects of lasers on personnel, the Air Force has a very active Vision Conservation Program with laser eye exams being one part of this program.

Medical surveillance

Medical surveillance is required for personnel working with Class 3B and 4 lasers and laser systems. Per DOD 6055.05M, *Occupational Medical Examinations and Surveillance Manual*, paragraph C4.16.1.1, "Laser workers are those individuals who routinely work in a laser environment and, therefore, have a higher risk of accidental exposure. Those working with Class 3B or 4 lasers are at

greatest risk of injury due to such exposures. Laser workers include those who regularly perform laser research, development, testing, and evaluation; individuals who work with or near medical lasers found in operating rooms; and workers who perform routine laser maintenance. Laser workers have a moderate to high risk potential for laser injury.”

Laser workers require a pre-placement and termination screening. These evaluations are performed *before a worker's initial assignment to laser duties*, and as soon as practical upon actual termination of duties involving lasers (such as permanent change of station (PCS) or assignment, retirement, or separation). Periodic examinations are not required. The tests required are an ocular and visual case history, best corrected distance visual acuity, color vision, and Amsler Grid. These tests should be performed monocularly. If any abnormalities are found, a more extensive examination should be performed.

Laser incident/exposure reporting

Laser incident/exposure reporting procedures can be found in the *USAF School of Aerospace Medicine (USAFSAM) Laser Injury Guidebook*. Ocular exposure/suspected exposure to a laser requires immediate involvement of the local flight surgeon. The flight surgeon then determines the appropriate course of action. At deployed locations, the examination most likely is performed by the deployed flight surgeon. However, when an exposure occurs at home, the flight surgeon most likely coordinates with the ophthalmic clinic and defers the vision testing to the eye specialists. As such, you and your ophthalmic team typically perform the screening. The tests include an operational and medical history, external examination to include the skin around the eye, best corrected distance and near visual acuity, Amsler Grid, pupil examination, stereopsis, color vision, slit lamp evaluation, and retinal examination (a dilated evaluation if conditions justify one). If available, optical coherence tomography (OCT) imaging should be accomplished. If any abnormalities are found, a more extensive examination should be performed.

The Tri-Service Laser Injury Hotline can be contacted at any time for treatment guidance. The Hotline must be contacted as soon as possible to report any incident of known or suspected laser overexposure. The Hotline is available “24/7” at 1-800-473-3549/DSN 798-3764. If applicable, field level notification should be made to the Deployed Medical Commander and the Air Expeditionary Wing Commander as well. Details regarding the incident that should be included in the report can be found in the *USAFSAM Laser Injury Guidebook*.

007. Personal protective equipment

The type of personal protective equipment (PPE) used must be carefully selected to ensure it will adequately perform the job for which it was designed. For example, when working with acids, the use of goggles will protect the eyes from damage but will not provide protection for the face. A face shield is more appropriate for this potential exposure hazard. PPE should not be used as a substitute for engineering and/or administrative controls. It is important for workers to understand that no single protective item can protect against all hazards. As stated above, all PPE should be used in conjunction with engineering and/or administrative protective methods in an attempt to limit hazardous effects.

Types, capabilities, and limitations of PPE

AFI 91-203, *Air Force Consolidated Occupational Safety Instruction*, requires PPE be used whenever there are hazards that can do bodily harm through absorption, inhalation, or physical contact. This equipment includes respiratory and protective devices, special clothing, and protective devices for the eyes, face, head, torso, and extremities. When PPE is required, the identified hazard must be matched to the proper PPE device.

PPE includes a variety of devices and garments to protect workers from illness and injuries. PPE is commonly described according to the area of the body it protects including the following:

- Eye and face protections (e.g., goggles, face shields, protective glasses, welding shields, and laser safety goggles).

- Head protection (e.g., hard hats and helmets).
- Foot and leg protection (e.g., leggings, toe guards, foot and shin guards, and safety toe shoes).
- Hand and arm protection (e.g., leather gloves, chemical and liquid resistant gloves such as butyl rubber, latex, neoprene and nitrile rubber gloves).
- Body (or torso) protection (e.g., aprons, jackets, coveralls, and encapsulation suits).
- Hearing protection (e.g., earplugs and earmuffs).
- Respiratory protection (e.g., face shields, airline respirators, and air purifying, particulate-filter respirators).

Eye and face protection

Protective eye and face devices must comply with ANSI Z87.1, *Occupational and Educational Eye and Face Protection Devices*. Appropriate eye or face protection must be provided, as directed by applicable technical data, or as prescribed by an appropriate risk assessment. Selection is based upon the type and degree of hazard present. Eye protection is required to protect against small particles of falling debris whenever a task is above eye level, and in situations where the employee must look up into the area being worked on. According to AFI 91-203, *AF Consolidated Occupational Safety Instruction*, eye and face protection must meet the following minimum requirements:

- Provide adequate protection against the particular hazards for which they are designed.
- Be reasonably comfortable when worn under designated conditions.
- Fit snugly without interfering with movement or vision or wearer.
- Be durable.
- Be capable of being disinfected (unless disposable items are used).
- Be easily cleaned.
- Be kept clean and in good repair.

Employees who wear prescription lenses will be given eye protection that incorporates the prescription in its design, or they will wear eye protection that can be worn over the prescription lenses. The protective equipment must not interfere with the employee's vision or proper positioning of the protective equipment. If an employee who must wear corrective lenses use spectacle inserts with a full-face piece respirator, the spectacle inserts for the respirator will be purchased by the government using a prescription provided by the user. These employees will often call or stop by the ophthalmic clinic to inquire how they can obtain respirator inserts, so it is important to know this information and correctly educate personnel on how to properly acquire what they need. It is also important to convey to employees that some vapors and gases can permeate contact lenses and possibly get trapped in the lens; gas may even collect between the lens and eye itself. Additional eye and face protection requirements can be found in 29 Code of Federal Regulations (CFR) 1910.133, *Eye and Face Protection*, and include:

- The employer shall ensure each affected employee uses eye protection that provides side protection when there is a hazard from flying objects. Detachable side protectors (e.g. clip-on or slide-on side shields) meeting the protection requirements are acceptable.
- Eye and face PPE shall be distinctly marked to facilitate identification of the manufacturer.
- The employer shall ensure each affected employee uses equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation. (**NOTE:** 29 CFR 1910.133 provides a listing of appropriate shade numbers for various operations.)

The supervisor and worker should contact the local Bioenvironmental Engineering shop to evaluate the potential hazards associated with the assigned task, and make an appropriate decision on the adequate level of PPE to mitigate those hazards.

Self-Test Questions

After you complete these questions, you may check your answers at the end of the unit.

006. Eye safety in the workplace

1. What military provision came about because of Public Law 91-596, known as the OSHA Act of 1970?
2. When a high-ranking distinguished visitor tours an eye hazardous area, is he or she required to wear eye protection? Why?
3. An employee who requires vision correction needs his/her employer to provide prescription eye protection but the employee does not have a current glasses prescription. Who will have to pay for the employee to obtain an eye examination – the employee or the employer? Why?
4. Whom should you contact for the most up-to-date Vision Conservation and Readiness Program information?
5. Which laser workers require medical surveillance? Why?
6. For those laser workers who require medical surveillance, when are they required to be seen?
7. What should happen if there is an ocular exposure/suspected exposure to a laser?

007. Personal protective equipment

1. When is PPE required to be used?
2. Who pays for the insert if an employee who wears corrective lenses requires a full-face piece respirator to do his/her job?
3. Is it safe for employees to wear contact lenses if there is the potential they may be exposed to vapors or gas? Why?

4. Whom should you contact if you and your supervisor need help identifying which PPE to use for a particular hazardous task?

Answers to Self-Test Questions

001

1. Preparing tomorrow's leaders.
2. One 3-year tour (with certain exceptions).
3. Upon completion of Professional Military Education (PME) at Airman Leadership School (ALS).
4. The ranks of E-7 and above.

002

1. The MDG commander.
2. To avoid being at a disadvantage compared with other base organizations formed and designated as groups.
3. Any medical AFSC.
4. To advise and assist the MDG commander and the squadron commanders in managing unit activities as well as promoting the welfare, morale, and health of enlisted personnel, maintaining discipline and standards regarding a quality force, and supervising the care and upkeep of unit dormitories.
5. MSgt.
6. Flight commander or flight chief.
7. Medical Operations Squadron under the surgical services flight.
8. Resource Management Flight.
9. Aerospace Medicine Squadron.

003

1. An increase in responsibilities.
2. Career field subdivision; specifically, ophthalmic career field.
3. Satisfactory completion of the J3ABR4V031, Ophthalmic Apprentice Course.
4. AFMAN 36-2108, *Enlisted Classification*.
5. The depth of knowledge, level of job proficiency, and scope of responsibility.
6. Administrative responsibilities.
7. Ophthalmology personnel.
8. Neither; a superintendent *isn't* classified as optometry or ophthalmology because he/she is at a management level where the two career fields merge.

004

1. CFETP.
2. In part II of the CFETP.
3. Formal training and qualification training.
4. Task knowledge.
5. Formal training.
6. You will have a hand in signing off the tasks as you complete training.
7. The Air Force Training Course.
8. To keep the upgrade training effective.
9. To improve training programs.

005

1. Base education office.
2. Upon completion of basic military training and assignment to an AFS.
3. No; a student must hold the journeyman 5-level in the appropriate AFSC at the time of program completion.
4. No; that requirement is satisfied by completion of BMT.
5. The American Optometric Association.
6.
 - (1) It proves your knowledge at an established national level of expertise, legitimizing your training and understanding of the ophthalmic field. This not only boosts your confidence, but impresses your managers, peers, and subordinates.
 - (2) Coupled with your experience, it helps create a formidable resume when you apply for a civilian job after you retire or separate.
 - (3) As far as your military career is concerned, being nationally certified allows your supervisor more opportunities to nominate you for awards and higher performance rating marks.
 - (4) Supports the AF Core Value of "excellence in all we do".
7. AOA (American Optometric Association).
8. JCAHPO (Joint Commission on Allied Health Personnel in Ophthalmology).

006

1. Eye protection for all employees working in eye hazardous areas.
2. Yes; employees, management, and even visitors must wear approved eye protection when they enter or work in an eye-hazardous area.
3. The employee; OSHA doesn't require employers to pay for their employees' vision examinations.
4. Check with your local base Safety Office and Bioenvironmental Engineering at your MTF.
5. Personnel working with Class 3B and 4 lasers and laser systems; those working with Class 3B or 4 lasers are at greatest risk of injury due to such exposures.
6. Before a worker's initial assignment to laser duties and as soon as practical upon actual termination of duties involving lasers (such as permanent change of station or assignment, retirement, or separation).
7. Ocular exposure/suspected exposure to a laser requires immediate involvement of the local flight surgeon. The tests include an operational and medical history, external examination to include the skin around the eye, best corrected distance and near visual acuity, Amsler Grid, pupil examination, stereopsis, color vision, slit lamp evaluation, and retinal examination (a dilated evaluation if conditions justify one). If available, OCT imaging should be accomplished. If any abnormalities are found, a more extensive examination should be performed.

007

1. Whenever there are hazards that can do bodily harm through absorption, inhalation, or physical contact.
2. The government.
3. No; some vapors and gases can permeate contact lenses and possibly get trapped in the lens or may even collect between the lens and eye itself.
4. The local Bioenvironmental Engineering shop.

Do the unit review exercises before going to the next unit.

Unit Review Exercises

Note to Student: Consider all choices carefully, select the *best* answer to each question, and *circle* the corresponding letter. When you have completed all unit review exercises, transfer your answers to the Field Scoring Answer Sheet.

Do not return your answer sheet to Air Force Career Development Academy (AFCDA).

1. (001) Unless there are certain exceptions, a Squadron Command is typically limited to one
 - a. 2-year tour.
 - b. 3-year tour.
 - c. 4-year tour.
 - d. 5-year tour.
2. (001) A senior Airman (SrA) is *not* able to serve as a reporting official until completion of
 - a. the Air Force Training Course.
 - b. Airman Leadership School (ALS).
 - c. a Community College of the Air Force (CCAF) degree.
 - d. the Air Force Virtual Education Center (AFVEC) Supervisor Training Course.
3. (002) Within the medical unit, who has the overall responsibility for all activities and medical resources of the unit?
 - a. Medical Group (MDG) commander.
 - b. Resource Management Flight commander.
 - c. Medical Support Squadron (MDSS) commander.
 - d. Medical Operations Squadron (MDOS) commander.
4. (002) Why is it important for the medical treatment facility (MTF) to be classified as a group even if it technically isn't large enough for that designation?
 - a. To keep the terminology familiar to outlying subordinate units.
 - b. To ensure the MTF commander is competitive in board promotions.
 - c. To ensure the designation aligns with the number of patients seen annually.
 - d. To avoid being at a disadvantage compared with other base organizations designated as groups.
5. (003) Who carries a chief enlisted manager (CEM) code and normally consults with and advises the associate chief on enlisted issues, concerns, and career field matters?
 - a. Chief Master Sergeant of the Air Force (CMSAF).
 - b. Chief, Enlisted Medical Service Manager (CEM).
 - c. Air Force Career Field Manager (AFCFM).
 - d. Base, senior enlisted advisor (SEA).
6. (003) If you are *not* a retrainee, what is the *minimum* time you must be in upgrade training (UGT) before you can attain your 5-skill level?
 - a. 9 months.
 - b. 12 months.
 - c. 15 months.
 - d. 18 months.

7. (003) The *greatest* difference between the journeyman and craftsman centers around
 - a. budget/equipment management.
 - b. administrative responsibilities.
 - c. ancillary additional duties.
 - d. patient care duties.
8. (004) Before you can upgrade to the next skill level, your supervisor must verify you
 - a. are eligible to reenlist.
 - b. are on the promotion eligibility list.
 - c. possess the needed job proficiency.
 - d. have no pending nonjudicial punishment (NJP) action.
9. (004) Qualification training increases
 - a. task knowledge.
 - b. hands-on skills.
 - c. subject knowledge.
 - d. administrative skills.
10. (004) For upgrade training (UGT), if your supervisor is your trainer, he or she *cannot* also be your
 - a. rater.
 - b. mentor.
 - c. certifier.
 - d. wingman.
11. (004) What should you consider to be the *final authority* for doing your daily tasks?
 - a. 3-skill level study guides.
 - b. Career development courses (CDC).
 - c. Air Force publications and policy letters.
 - d. *The Ophthalmic Assistant* by Stein and Slatt.
12. (005) The most qualified people to guide you in your educational goals can be found at the
 - a. Military Personnel Flight (MPF) promotions and testing section.
 - b. Air Force Career Development Institute (AFCDA).
 - c. American Optometric Association (AOA).
 - d. Base education office.
13. (005) An Airman is automatically enrolled with the Community College of the Air Force (CCAF) upon completion of
 - a. the course examination for their Air Force specialty code (AFSC).
 - b. the 3-level course for their Air Force specialty code (AFSC).
 - c. upgrade training to the 5-skill level.
 - d. basic military training (BMT).
14. (005) The most up-to-date information about the profession of optometry can be obtained from the
 - a. Community College of the Air Force (CCAF).
 - b. American Optometric Association (AOA).
 - c. American Medical Association (AMA).
 - d. Base Education Services.
15. (006) The third leading cause of blindness in developed nations is
 - a. glaucoma.
 - b. keratoconus.
 - c. ocular trauma.
 - d. retinitis pigmentosa.

16. (006) Which are examples of laser personnel?
 - a. Research only.
 - b. Operating room personnel only.
 - c. Research and maintenance personnel.
 - d. Operating room and optical lab personnel.
17. (006) Ocular exposure/suspected exposure to a laser requires immediate involvement of the
 - a. local flight surgeon.
 - b. Aerospace Medicine commander.
 - c. Medical Group (MDG) commander.
 - d. bioenvironmental engineering shop.
18. (007) Personal protective equipment (PPE) is required to be used whenever there are hazards that can do bodily harm through
 - a. absorption, accumulation, and isolation.
 - b. absorption, inhalation, and physical contact.
 - c. accumulation, concentration, and inhalation.
 - d. concentration, ingestion, and physical contact.
19. (007) Examples of eye protection given to employees performing hazardous tasks can include all the following *except*
 - a. eye protection that incorporates the prescription in its design.
 - b. contact lenses to prevent absorption of vapors and gases.
 - c. spectacle inserts for under a full-face piece respirator.
 - d. goggles that can be worn over prescription lenses.

Please read the unit menu for unit 2 and continue ➔

Unit 2. Eye Clinic Administration

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ETHICS IS A CODE OF CONDUCT that describes actions as being either right or wrong. The “Golden Rule” is frequently used as a basic ethical standard. To “treat others as you would have them treat you” has always been wise advice to follow. Ethics, however, is a bit more complicated than that. For instance, what do you do when your responsibility to the patient conflicts with your personal beliefs? Because of the complex nature of medical care, medical professionals developed a code of ethics to guide their behavior.

2–1. Responsibilities of a Medical Professional

Think about your job duties for a moment. Sick and injured people who are unable to take care of themselves are forced to rely on you. These patients know little or nothing about your job. They base their opinion of the quality of care they receive on their interactions while in the clinic and how they feel once they leave, not necessarily on your specific duty performance. Frequently, patients have no idea they are receiving poor care until something goes wrong or they experience something unexpected. Good patient care results from good medical ethics. If your ethical standards are high, the quality of care you provide will also be high. If your standards are low, you become careless, take shortcuts, and generally provide substandard care. In this section, we’ll discuss the historical development of ethics and familiarize you with terms related to ethics.

008. Medical ethics

The concept of ethics dates back to primitive times when humans adapted certain behaviors that allowed them to live in harmony with their fellow man. These behaviors were accepted by the group as “right” or “moral.” The group ostracized the people who failed to follow these codes of conduct. As the groups grew larger, the codes of conduct became more complex. It was from these

original codes of behavior that civilization developed our practices, beliefs, and theories that make up our present-day ethical standards.

Ethical conduct

The medical professions went through the same basic developmental process. The members of the professions adopted practices that were acceptable to themselves and their patients. These practices and beliefs evolved into the standards that the medical profession follows today. These standards are constantly changing. As medical technology and knowledge increases, practices and beliefs that are presently acceptable become unacceptable. The care of terminally ill patients is one example of the changes in medical ethics; in the 1970s, the accepted practice was to save lives at all costs. Today it is accepted practice to terminate life support measures when there is no hope of returning the patient to a meaningful existence.

Hippocratic Oath

Some of the ethical standards developed by the early members of the medical profession are still with us today. The medical profession first used the Hippocratic Oath in the 4th century BC. Many parts of this oath are as applicable now as they were then. One concept that came from the oath was that the physician should be accountable for his or her work. Another was that the physician should have a good moral character. A third concept that is of great significance to us is keeping the patient's problems and treatments confidential.

Florence Nightingale

Florence Nightingale was another individual who had significant influence on the development of medical ethics. She believed that nurses should devote themselves to their profession and never knowingly harm a patient. She also believed in keeping the patient's care confidential and doing everything possible to elevate the standards of the nursing profession. You can find these concepts in codes of conduct used by nurses and other medical professionals.

009. Defining ethical conduct

Along with changes in medical ethics came a change in the language used to describe ethical behavior. Since present codes of conduct are written in this language, you must become familiar with certain terms to understand the meaning of the codes.

Moral character

Moral character refers to the personality or character traits that an individual possesses. It is usually defined in terms of desirable traits. Some traits considered desirable in medical professions are temperance, courage, wisdom, fortitude, faith, hope, charity, industriousness, honesty, and compassion. If you were ever a Boy Scout or Girl Scout, you should see the similarity between these traits and those mentioned in the pledges and oaths of these two organizations. Before you scoff at this list of desirable traits, ask yourself if there are any traits listed here that you wouldn't want someone working on you to have. If you have difficulty thinking of yourself in terms of all of these adjectives, boil them down to simple terms. As long as your conduct is above reproach, you have the attributes listed.

Moral obligation

Moral obligation is a feeling or urge that compels you to behave in a certain way. Moral obligation is a result of moral character. To illustrate this, consider the act of performing a vision screening. This test is one that you will do repeatedly several times each day. Without the trait of honesty, you might decide not to clean the occluder to speed up the testing process and get the patient back to the doctor sooner. This, unfortunately, could also spread the germs from a previous patient suffering from conjunctivitis. Generally, if you have a good moral character, your sense of moral obligation is also good and the resultant behavior will be ethically acceptable to your peers. There are a number of

different moral obligations or duties that refer to specific ethical behavior. The following paragraphs discuss these obligations.

Fidelity

Fidelity is the act of keeping a promise. This promise may be clearly defined or implied. Regardless of its nature, it should be upheld. Patient confidentiality is an implied promise that represents fidelity.

No maleficence

This means to refrain from harming yourself or others. Many of the tasks you perform routinely are capable of harming the patient. One of your primary duties is to avoid bringing harm to yourself, your patients, and your coworkers.

Beneficence

Beneficence is the act of bringing about good, or to act in the best interest of (as an advocate for) someone else. This should be easy for you, now that you're part of a clinical team. The medical profession is dedicated to acting in the patient's best interest through medical treatment of their disease or injury.

Reparation

Reparation is the act of compensating or making amends for a wrong that has been previously committed. The wrong could have been an injustice, loss, or actual physical injury done to someone. The reparation varies with the degree of wrong that has been done. The reparation could range from a simple "I'm sorry" to legal restitution. An example of restitution applied to the medical profession occurs when a patient is awarded damages in a medical malpractice lawsuit.

Justice

Justice is the obligation to distribute benefits or burdens among persons or groups. In a medical context, this can refer to the distribution of medication or treatments among patients. Theoretically, all patients should receive care equally; realistically, this is seldom possible. Medical resources are too limited to provide for everyone's needs. In addition, some patients may not be able to pay for the care they need. This inability to satisfy the medical needs of all creates a conflict with another moral obligation we previously discussed, beneficence. Conflicts like this between different ethical standards are unavoidable, and there is no easy solution to resolve these conflicts when they do occur.

Justice can usually be broken down into three types:

1. Distributive.
2. Compensatory.
3. Procedural.

Distributive justice

Distributive justice concerns the treatment of individuals with a set amount of resources. Each patient walking through your clinic door has an equal right to the best possible treatment. However, with limited resources (equipment, personnel, time), it's impossible to provide all that's medically possible for each patient. The challenge of distributive justice is decision-making: which patient receives what treatment, how often, and how many patients can be treated?

Compensatory justice

Compensatory justice, on the other hand, implies some patients should receive better treatment because they've been wronged. Often, this feeling of justice comes from the patient. For example, the patient who has been injured in the hospital expects to receive special treatment even though it may be at the expense of other patients' convenience. The injured patient feels he or she should be compensated for his or her pain or inconvenience. Good judgment is the key.

The military health service possesses unique conflicts because of its rank structure. Should the quality of treatment rendered be based on the member's rank? No, everyone deserves to be treated equally. Treat patients to the best of your ability with the resources available. If you treat everyone as a four star general, you should have no problems.

Procedural justice

The last element of justice is procedural. In this type of justice, impartiality is the key concept. Fairness is entertained on a first-come, first-served basis. For example, is it fair to still see a routine patient who is 15 minutes late for an appointment if it makes everyone else who arrived on time wait? You should not harm the many for the benefit of one.

Different interpretations of justice can cause conflict within yourself and among staff members. As you can see, the concept of ethical behavior requires a delicate balance of judgment, maturity, and acceptance of your moral obligations. Frustrations will arise, but when you behave and perform your duties with high standards of conduct, you'll be fulfilling your moral and ethical obligations. With any obligation or duty, someone must be held responsible for the action.

Moral responsibility

It's not enough to act ethically; you must also be willing to accept full responsibility for your actions. Acceptance of responsibility implies that you had a choice and that you voluntarily performed the duty. Also implied is that you had the necessary skills, knowledge, and authority to perform the duty in question. If you don't have them, then you can't be held responsible for the duty. Ethical responsibility hinges on two factors. First, you have the ability to perform the task, and second, you freely choose to perform the task. Moral responsibility is one of the traits that keep you from exceeding your scope of practice.

Moral policy

The concepts of moral character, behavior, duties, and responsibilities are at best confusing and contradictory. There are no absolutes when confronted with ethical conflicts. Each case must be weighed and judged on its own merits. Just as civil laws are subject to interpretation, so are moral laws and ethical practices. There are, however, moral policies that outline general areas of agreement regarding action or interpretation of moral situations. The need for moral policy arises when a group of people with different moral beliefs becomes involved in a moral conflict. The difficulty in formulating moral policy occurs when agreement between the fundamental moral beliefs of all parties involved cannot be resolved.

Moral policies can be made at the federal level, within individual healthcare facilities, or at the department level in a medical facility. If you look at the policies and procedures books or operating instructions in your duty section, you will probably find overtones of moral policy. The decision not to perform abortions (except in certain emergencies) in Air Force medical facilities is one example of a moral policy. Instructions such as "do not resuscitate" orders on terminally ill patients are based on moral policies. In many cases, moral policy is formulated to relieve individuals of the responsibility of making difficult ethical decisions; the policy of the hospital is followed rather than the belief of the individual.

There are many types of ethical obligations. You will discover that it is as difficult to fulfill all these obligations as it is to satisfy all members of a particular group. Ethical behavior requires a delicate balance of judgment, maturity, acceptance, and understanding. Frustrations are frequent, but as long as you behave and perform your duties with high standards of conduct and to the best of your abilities, you fulfill your ethical obligations.

Self-Test Questions

After you complete these questions, you may check your answers at the end of the unit.

008. Medical ethics

1. What changes can cause the acceptable practice and beliefs of a medical professional to become unacceptable?
2. Of the three listed concepts of the Hippocratic Oath, which is stated to be of *great* significance?

009. Defining ethical conduct

1. What's the relationship between a good moral character and moral obligations?
2. What is meant by beneficence?
3. Briefly explain what decisions must be made with distributive justice and why these decisions need to be made.
4. When are moral policies needed?

2-2. Health Records

The primary purpose of the medical record is to document the course of patient's illness and treatment during a particular period and during any subsequent periods as an inpatient or an outpatient. It serves as a basis for the planning and evaluation of individual patient care. It also provides a communication link between the physician and other professionals contributing to the patient's care. The medical record also meets legal requirements imposed on hospitals and physicians, and provides clinical data of interest to researchers and higher authorities.

When we refer to the Outpatient Medical Record, it is important to note that this designated record set consists of not only the paper record but all applicable outpatient electronic medical record data that provides a permanent record of a patient's medical care as well. The Armed Forces Health Longitudinal Technology Application (AHLTA), the DOD's approved Electronic Health Record (EHR), maintains and documents the majority of outpatient electronic medical record information. Until we transition to a solely electronic health record, the AFMS will continue to use a "hybrid" record consisting primarily of the EHR, and including traditional paper-based records and forms to meet unique operational mission requirements. As AHLTA is operational at all active duty military MTFs, the combination of the EHR and the paper record constitute a complete health record for a beneficiary. Both the EHR and the paper record must be available for inspection, review, copying and disposition when required.

010. Patient medical records

All outpatient records must contain enough information to identify the patient, support the diagnosis given by the health care providers (practitioners), justify the treatment, and accurately document the results of care rendered. The visits a patient makes to your facility are documented on a variety of different forms that become part of this record. The text that follows takes you through the process of AF Form 2100A selection and the forms that become part of the outpatient health record.

Air Force Form 2100A

The AF Form 2100A is a four-part folder, and is the only AF Form in use as an outpatient health record “jacket.” The 2100A series folders are created for enlisted active duty personnel at Lackland AFB, Texas. In fact, you may remember creating your own during basic training. These same folders are used for family members and other nonmilitary patients, and are usually prepared during their first visit to an Air Force MTF. For retirees, these same folders are used, and should be prepared during their first visit to the MTF following their retirement.

Color selection

Creation of folders, arrangement of content and record filing methodology is consistent throughout Air Force MTFs. There are 10 different colors of outpatient health records. The different colors aid in identifying records – making it easier to file and charge-out records. The sponsor’s social security number (SSN) determines the AF Form 2100A series record used for the sponsor and their dependents. Selection of the AF Form 2100A series folder is according to the second to last digit of the sponsor’s SSN. For example, if the SSN is 539–60–5427, the second to last digit is a “2.” This corresponds to a yellow AF Form 2100A. The following table lists the range of SSN digits used to select a folder, the form number, and the color of the folder.

If the second to last SSN digit is:	Use AF Form	Color
00–09	2100A	Orange
10–19	2110A	Green
20–29	2120A	Yellow
30–39	2130A	Gray
40–49	2140A	Tan
50–59	2150A	Blue
60–69	2160A	White
70–79	2170A	Brown
80–89	2180A	Pink
90–99	2190A	Red

Over time, you will become acquainted with the folder color system and how to identify the proper folder based on the SSN.

Arrangement of the AF Form 2100A series folder

The filing arrangement in the AF Form 2100A series is divided into four parts (sections). Section 1 is located on the left side of the folder immediately inside the front cover. Sections 2 and 3 are located on the middle flap of the folder, and section 4 is located inside the back cover.

AF Form 2100A Series Folder	
Section	Description
1	<ul style="list-style-type: none"> Department of Defense (DD) Form 2766, Adult Preventive and Chronic Care Flowsheet, on top. A variety of inpatient forms underneath the DD Form 2766.
2	<p>Primarily, this section contains the documentation related to outpatient care with the exception of laboratory, X-ray, and electrocardiogram (ECG) reports. Health care providers use this part to document a patient's visit to an outpatient clinic. The forms are filed in the following order, from the top down:</p> <ul style="list-style-type: none"> AF Form 745, Sensitive Duties Program Record Identifier, on top (if the patient is on the Personnel Reliability Program/Presidential Support Program, it is obvious when you open the record). Standard Form (SF) 600, Health Record – Chronological Record of Medical Care, on top (unless an AF Form 745 is needed). SF 513, Medical Record – Consultation Sheet.
3	<ul style="list-style-type: none"> AF Form 422, Physical Profile Serial Report. AF Form 1722, Optometric Examination Record. DD Form 741, Eye Consultation. DD Form 771, Eyewear Prescription. DD Form 2005, Privacy Act Statement – Health Care Records (filed at very bottom of this section). SF 88, Medical Record – Report of Medical Examination. Visual field (VF) examination results/printouts/forms. Refractive surgery exams and follow-up forms. Miscellaneous forms.
4	<ul style="list-style-type: none"> Laboratory reports (on top of radiology reports). SF 519B, Radiologic Consultation Request/Report (filed under lab reports).

It seems the easiest way to remember what goes in which section is to memorize which forms go into sections 1, 2, and 4. Then, you'll know all the other forms must go in section 3. This may seem a bit strange, but it works!

Scanning into AHLTA

A scanned document, file, or image may be uploaded or imbedded into an AHLTA patient encounter note, provided the document or image

- is directly related to the current patient encounter,
- will not delay the coding of the patient encounter note, and
- can be uploaded into the patient encounter note before the provider electronically signs the encounter.

By signing the encounter, the provider is acknowledging that the scanned/uploaded image or document was acceptable for its intended purpose. If the document cannot be imbedded into the note before the provider electronically signs, or if an image is captured, or scanned and uploaded in support of a previous episode of care, the document or image should be “appended” to the desired note. This action generates an automatic notification to the provider/user that created the original encounter note. The notification mechanism lets the original creator know that someone has “appended” his or her original patient encounter note.

Appending a previously closed encounter with an uploaded image does not change the original encounter information. The user adding the additional image or document must also electronically

sign appended patient encounter notes. Appending a note is a permanent action and cannot be reversed. Appended documentation is not searchable. Without prior knowledge that a specific encounter note has been appended with an image, subsequent users may have significant difficulty finding the appended image or they may not even know of its existence. Until future document filing policies allow, if a document is required to be filed in the paper outpatient medical record, the paper version must still be filed, regardless if the form has been scanned and uploaded into AHLTA. If a particular type of paper document is regularly reviewed and signed (by hand) by a provider before filing into the outpatient medical record, the same document must still be signed (by hand), no matter if the document is scanned and uploaded into AHLTA.

Specialty care and urgent primary care results, emergency room notes, discharge summary reports, laboratory results, and radiology reports generated by providers and health care organizations external to the MTF must be scanned and imported into AHLTA using standard filing requirements.

011. Uses of the health record

The health record isn't just a place to store documents or information. A variety of people utilizes the record for a variety of things. This is true no matter the form of the record – paper or electronic.

- *Planning*—The health record forms a basis for planning patient care. By knowing the results of previous exams and treatments given, the doctor can better plan a course of care to avoid redundancy and avoid prescribing medications that shouldn't go together. This should help in providing the best treatment possible.
- *Documentation*—Records hold the documentation of exams, test results, issue of medical devices (e.g., glasses, contacts) and successes/failures of treatment. Good documentation is important for medical and legal reasons.
- *Communication*—Health records are a form of communication from one doctor to the next. When there is confusion about what was said or done, it's amazing how a quick look in a well-documented health record clears up most questions.
- *Data*—A well-organized and documented health record provides an invaluable source of information for continuing education and research concerns.
- *Protection*—The health record serves to protect the medical and legal interests of the patient, health care staff, and Air Force. It's important the information is legible, dated, follows the proper Subjective Objective Assessment Plan (SOAP) format, and is thorough. All actions and treatment are critical. Please do not blow off the importance of properly annotating the health record.

As you can see, the health record serves many purposes. It's much more than just describing how well a patient adapted to his or her first pair of bifocals, or how an NCO needs his or her spectacles to get a driver's license. Since records carry a lot of importance, let's look at some of the responsibilities various people have regarding them.

Ownership of outpatient records

Health records are the property of the United States government. The information contained in the record belongs to the patient. In accordance with the Privacy Act of 1974 and Health Insurance Portability and Accountability Act (HIPAA) of 1996, the patient has the right to the information in the record. However, the maintenance of the record at the MTF is a legal requirement and there is an increasing requirement that these records be available to the many accrediting and auditing agencies who review records. The lack of medical records and medical record documentation may adversely affect accreditation from The Joint Commission (TJC), a healthcare accrediting organization. In any case, record availability is paramount to facilitate the most appropriate health care for patients.

Commander responsibilities

The commander must be knowledgeable in the control of health records, release of information from the health records, and requirements for documentation at the provider level. The hospital commander is the custodian for outpatient and inpatient health records. However, you will not see him or her pulling and handing out records at the records window very often.

Director of Patient Administration responsibilities

The director of Patient Administration serves as the staff officer who acts for the commander on matters relating to the management of health records. He or she ensures the doctors are informed of documentation, maintenance, and release of information procedures outlined in Air Force directives.

Health records committee responsibilities

A health records committee is established at each hospital and clinic to appraise the quality of care rendered as documented in the health records at each MTF. The committee also checks to make sure health records, whether paper or electronic, are prepared and kept in accordance with AF directives.

Doctors' responsibilities

Doctors must document in the health records an accurate, legible, and complete description of all services rendered to patients. As stated previously, the use of the SOAP format ensures all pertinent medical information is included.

Technician responsibilities

In performing your job, you do many tests and gather a lot of information from patients. One of the most important aspects of your job is annotating health records. It's a vital part of patients' overall treatment and administration. Whenever your clinic treats a patient, you must document the visit. If you have already completed your part of the visit write-up, remind the provider to complete his or her portion. Not only does a record show your clinic's assessment and treatment of the patient's problem, but also it allows your clinic to claim them as a visit for patient accounting purposes. If AHLTA is not functioning or a patient's medical record isn't available, annotate the exam on an SF 600 (or whatever form your clinic uses) so there's a record of the visit. You must be sure you make a record of the visit and ensure you enter the visit correctly.

Self-Test Questions

After you complete these questions, you may check your answers at the end of the unit.

010. Patient medical records

1. What must all outpatient records contain?
2. Why are there 10 different colors of outpatient records?
3. Which digit of the sponsor's SSN determines which AF Form 2100A will be used?
4. In which section of the health record would you file a visual field?

5. In which section of the health record would you file a patient's exam form you received from a refractive surgery center?
6. What documentation from sources external to the MTF must be scanned and imported into AHLTA?

011. Uses of the health record

1. What does knowing the results of previous exams and treatments given allow a doctor to do better?
2. If a patient wants a copy of something in his medical record, does he have a right to that information? Why?
3. Who is the custodian for outpatient and inpatient health records?
4. What must doctors document in the health records?
5. AHLTA is down so you are unable to electronically document information from a patient's visit. How should you proceed with documenting the exam?

2-3. Referral Management

Taking care of our enrolled population in the best manner possible will enable the AFMS to meet the Surgeon General's (SG) charge for efficient, effective, customer-centered health care. This means being able to provide the right care, at the right time, at the right place, by the right provider, and at the right cost, while at the same time being able to train and sustain our medical capabilities. Referral management (RM), a process for managing and tracking patient referrals, is just one of the key processes in this endeavor.

As stated by the AF SG, we have a contractual commitment to those who enroll with us in TRICARE Prime (a health care program of the DOD Military Health System [MHS]). Beyond the commitment to getting the best possible health care to these people, we have agreed to provide or arrange care within a 1-7-28 day policy: urgent care within 1 day, routine care in 7 days, and referral/preventive appointments in 28 days. This defines the standards for timely care. Our practices need to be both efficient and effective, not only to create a healthy, fit, and resilient population, but also to train and sustain our medical capabilities. We are one team, taking care of the mission. We are also one family, taking care of each other. You deserve, and our Air Force deserves, no less.

RM is vital because it provides a patient-centered approach by ensuring the patient receives the best possible, timely, and cost effective specialty care while at the same time optimizing the MTF's clinical specialty capabilities. By optimizing its clinical specialty capabilities, the MTF is not only ensuring a patient-focused approach to its services but also guaranteeing that its personnel maintain critical expeditionary medical skills.

012. Benefits of referral management

Establishing some form of RM allows each MTF to operate better under the TRICARE Managed Care Support Contracts (MCSC). Under TRICARE revised financing, the AF SG will be at risk for millions of dollars in private sector care costs.

Likewise, all MDG commanders are financially accountable for all care delivered to their enrollees, both within and outside of their facility. To flourish under TRICARE and revised financing rules of engagement, each MTF must fully develop and utilize its staff and resources to treat patients within the MTF when possible. The MTF should only send patients out to the private sector for treatment if it absolutely does not have the capabilities to render the appropriate care or if in the best interest of the patient.

TRICARE "at risk" financing requires each MTF commander to be responsible for taking care of their enrolled patients and to be financially accountable for this care regardless of whether the care is rendered in house or out in the private sector. The MCSC will pay claims for network (off base) care for MTF enrolled patients. On a monthly basis, MTF operating funds are used to reimburse the MCSC. Therefore, the financial incentive for the MTF is to retain as much specialty care within the MTF as capability and capacity will allow.

Each MTF will need to carefully analyze its enrollment capacity, and primary and specialty care capabilities to perform well under TRICARE and its "at risk" financing rules of engagement. The more these functions stay in-house, the better off financially the MTF will be. MTFs must find better ways to collaborate with their MCSC. To do this, Referral Management Center (RMC) activities include:

- Rapidly completing the MTF's *right of first refusal* (RFR).
- Screening of all MTF and network specialty care referrals.
- Sustaining up-to-date service availability listings (SAL).
- Establishing MTF/MCSC memorandums of understanding (MOU) that optimize MTF capabilities.
- Implementing RM standard business rules and responsibilities that allow for the constant tracking of referral results, the continuous collaborating with other local MTFs, and the appropriate use of information management systems.

These activities allow the MTF to flourish under TRICARE in order to provide the right care, with the right provider, at the right time, at the right place, at the right cost.

013. Referral management process

As discussed in the previous health records section, clinics are using AHLTA, an electronic health record, to maintain and document patient's medical care. AHLTA has multiple functions, one of which allows providers to enter referrals for specialty care. Though there is an additional electronic system, the Composite Health Care System (CHCS), that allows referral entry as well, primarily referrals are ordered using AHLTA. When a patient needs specialized care, they will be referred either to a specialist in the MTF or to a network specialist in the local community. In either case, the patient's provider will generate the referral and send it to the RMC for processing.

In-house referrals

If the MTF has the specialty care available within the facility, the referral is reviewed by the specialty clinic to determine whether they can provide the specific medical care requested.

- If the specialty clinic *can* provide the care requested, the RMC or specialty clinic contacts the patient to schedule the appointment.
- If the specialty clinic *cannot* provide the care requested, the referral is directed to the RMC for coordination with a network provider.

Network specialty referrals

Patients must have authorization before scheduling appointments at network medical facilities.

After the provider puts in the referral, patients can obtain authorization in the following ways:

- Obtain the authorization letter in the mail in 7-10 business days.
- Print the authorization letter (in 3-4 business days) from www.mytricare.com.
- The RMC can print the letter or give the patient the information over the phone.
- The authorization letter will provide the following information:
 - The number of authorized visits.
 - The specialty physician or physician group's name and contact information.
 - Approved timeframe for treatment.

When patients receive the authorization letter, they can then schedule their appointment with the physician or physician group listed.

NOTE: If patients schedule appointments and visit a specialist *without prior authorization*, they will *incur the cost* for the visit and any services rendered.

Emergency room and urgent care visits

Emergency room (ER) care never requires a referral.

- TRICARE defines an emergency as a serious medical condition that the average person considers a threat to life, limb, sight, or safety.

NOTE: Most dental emergencies are not a covered medical benefit under TRICARE.

- After being seen in the ER, patients are typically instructed to follow-up with their primary care provider within 24 hours.

Urgent care referral rules depend on your plan. TRICARE defines urgent care as care you need for a non-emergency illness or injury. You would typically need urgent care to treat a condition that doesn't threaten life, limb, or eyesight. You would need to seek attention for a condition before it becomes a serious risk to your health, such as a high fever or sprained ankle.

Active duty TRICARE Prime members can only see their primary care manager (PCM), but for other TRICARE Prime enrollees there are options. From 23 May 2016 – 23 May 2019, TRICARE will be evaluating an Urgent Care Pilot Program. For beneficiaries enrolled in TRICARE Prime, TRICARE Prime Remote, or TRICARE Young Adult-Prime, this program allows two urgent care visits each fiscal year where:

- Eligible members don't need a referral or authorization from their PCM.
- Eligible members can visit any TRICARE-authorized provider with a primary care specialty.

This means these members can get urgent care twice per fiscal year from a provider other than their own PCM, without a referral from that PCM. Members need to be aware that network copayments will apply, if applicable. Members should notify their PCM about the urgent care visit within 24 hours of the visit. In addition, any recommendations for follow-up care should be with the PCM; otherwise, the follow-up care will count against the two-visit limit.

Active duty TRICARE Prime enrollees and/or eligible beneficiaries who have exceeded their two-visit limit will require a referral for urgent care.

- Though local policy may vary, typically patients needing urgent care should call the clinic's appointment line whether it is during duty hours, after duty hours, weekends, holidays, or Wing down days.
- During non-duty hours, most appointment lines include instructions on how to reach the on-call provider regarding urgent care. If warranted, the on-call provider will generate the urgent care referral.
- Even when out of the local area, patients should obtain referrals before seeking urgent care.

Self-Test Questions

- After you complete these questions, you may check your answers at the end of the unit.

012. Benefits of referral management

1. Who is held financially accountable for all care delivered to their enrollees, both within and outside of their facility?
2. Is there any financial incentive for a MTF to send its specialty care out in the private sector? Why?
3. If your doctor refers a patient off base to see a network provider, which work center activity includes the screening of all network specialty care referrals?

013. Referral management process

1. Though there are two systems in which you can enter referrals, which system is *primarily* used for this process?
2. A patient's primary care doctor put in a specialty care referral to your clinic requesting a service your clinic does not perform. Since your clinic cannot provide the care requested, whom should you direct the referral to?
3. If a patient lives closer to a network provider and wants to be seen at that clinic instead of the MTF, can the patient call and schedule an appointment with the network provider without involving the MTF? Why?
4. A military member calls while rushing her daughter to the ER after the daughter received a significant hit to the eye during baseball practice. She fears for her daughter's sight but is also worried about being charged for an ER visit. Does she need authorization prior to taking her daughter to the ER? Why?

2-4. Patient Accounting

Accounting for the patients you see and help is essential for your work to be recognized. People outside your clinic do not really know how much you do or how well you perform, unless you communicate this information to them.

014. Patient visits

The patient visit is the eye clinic's performance factor. The primary function of the performance factor is to determine the amount of work accomplished by a work center. Each patient examined, evaluated, consulted, treated, attended, advised, or otherwise provided a distinct service counts as a visit. The key to reporting visits is documentation. If it's not documented, then it's as if the procedure was never done.

Here are a few guidelines to follow:

- There must be a signed and dated entry in the patient's health record to constitute a visit. Since AHLTA is typically used, this is done by electronic signature and a digital date-stamp.
- One visit is counted regardless of the number of tests performed or the number of doctors or technicians involved in examining the patient during the visit.
- Consecutive visits to specialty clinics, such as multiple intraocular pressure checks throughout the day (diurnal readings) at the eye clinic, don't require a signed and dated entry for each visit unless there's a change in the prescribed treatment, or a significant physical finding. However, it would be best for your manning situation if you did document and count every visit by a patient. It also makes good medical and legal sense to do so.
- Maintain an audit trail; daily entry on a patient log satisfies this requirement. When patients present to your clinic for an appointment, walk or check them in using either CHCS or AHLTA.
- The patient who is screened by the technician and examined by a doctor is counted one time.
- Medical advice or consultation done by the doctor over the telephone is a legitimate visit (patient count) if proper documentation is completed.

You must keep the following patient counts for your doctor:

1. *One count* consists of the number of refractions done as part of a complete visual examination. This includes cycloplegic refractions. The accuracy of this count is extremely important because it's the primary basis of your clinic manning.
2. The *second count* consists of all other patient visits your doctor performs; these can include contact lens checks, laser eye exams, and telephone consultations. All of these additional visits must be accounted for, usually by electronically adding them in AHLTA to your doctor's daily patient log. To get full manning for your clinic, the doctor should refract every patient seen, whenever possible. If you have an auto-refractor, this becomes very fast and easy to do.

015. Patient accountability reports

Each section or work center in the hospital must keep track of its workload. Each section, in cooperation with the Resource Management Office (RMO), must classify and record patient and workload data. The group practice manager (GPM) on behalf of the RMO assimilates the data collected into patient accountability reports. Your role is to provide the RMO the most current, accurate, and verifiable data possible. These reports are used to provide medical and demographic (size, growth, density of population, etc.) data on each USAF MTF. It's the basis for medical resource planning and allocation at all levels of the USAF Medical Service. The data you collect in your work section is incorporated with other work centers' data by the RMO, transmitted monthly to your MAJCOM, and, subsequently, to Headquarters USAF. (Part of the data is even shared with other

uniformed services and DOD departments). The various command levels use your patient data to assist them in the following activities:

- Making budget and financial plans.
- Projecting manpower and staffing needs.
- Procuring facilities and equipment.
- Analyzing operational capabilities.
- Managing patients during peacetime and wartime.

As you can see, the information you collect has far-reaching effects on decision making at all levels. This is what determines your budget and manning authorizations; therefore, the data must be current, accurate, and verifiable.

Methods of data collection

Usually, the method of data collection is the responsibility of the individual work center. That is, each work center develops its methods and forms for recording patient and workload data. CHCS and AHLTA have automated most of this; consequently, the paperwork is rapidly decreasing. The key element to remember is all information collected is subject to an audit. RMO personnel must be able to see how you collected the information and verify its accuracy. Remember, your daily patient count is used to collect data for the report of patients. The following guidelines will help in your collection efforts.

When you receive an electronic or hardcopy referral (SF Form 513) from another clinic, make sure the following information is correct:

- Patient's name.
- Sponsor's SSN (member's SSN if active duty or retired).
- Status (active duty, retired, dependent, etc.).
- Branch of service.

The listed information is the first step in ensuring accuracy in your reporting procedures. Verify this information in AHLTA and on all forms and types of patient treatment requests.

The audit trail—verifying the patient count

Each MTF has an audit system for workload collection and patient reporting. Using sampling techniques, RMO personnel periodically verify the entries on your patient logs/AHLTA daily schedule by matching the entries to documentation in the health record. For example, let's say SSgt Smith came by complaining that her new spectacle prescription doesn't seem quite right. You asked all the appropriate questions and determined she should see the doctor again. The doctor overheard, had a few minutes free, so offered to take SSgt Smith straight back for a re-refraction. Before sending the patient back, you made sure you got all her pertinent patient identification information entered into AHLTA so you can count this as a visit. RMO personnel decide to do an audit on your clinic's patient counts and randomly chose SSgt Smith's name for part of the sample. They look in either AHLTA or her paper medical record to see whether the visit was documented. The record is a critical part of the audit trail to see if you are really seeing who you say you are.

The key factor in audit trail verification is proper documentation in the health record. Proper documentation consists of a signed, dated entry (again, this is done electronically if in AHLTA) specifically stating what your clinic did for the patient. RMO indicates proper documentation on the health record should follow the SOAP format, which stands for:

- Subjective—patient's description of the problem, to include their case history.
- Objective—testing results of the patient or their glasses.
- Assessment—diagnosis of the patient's problem.

- **Plan**—action to be or that was taken, and when the patient should return to the clinic.

Normally, RMO personnel will sample one day's patient visits per month from each clinic or ancillary service reporting patient counts. If a clinic has no audit verification errors in three consecutive months, the verification process is conducted once every three months. If errors are found, the process goes back to once a month. If your clinic has an audit verification error rate of 10 percent or more, the verification will be done on a weekly basis until it drops below 10 percent for two consecutive weeks. Significant deviations between daily visit counts and RMO findings are reported to the MTF administrator and Chief, Hospital/Clinic Services. This isn't a good thing for you, your doctors, or your clinic. You can avoid problems by ensuring good documentation.

As you can see, the effort you expend ensuring accuracy is well spent; it saves you and other people a lot of time trying to find the errors. Your clinic resources (e.g., people, equipment, facilities, etc.) depend on accurate patient accountability reports.

Self-Test Questions

- After you complete these questions, you may check your answers at the end of the unit.

014. Patient visits

1. What can count as a clinic visit?
2. One of your doctors spent quite a lot of time educating a new, hesitant bifocal wearer who just happened to stop by after picking up a prescription at the pharmacy. The doctor even took the patient back to the exam room to verify the patient's vision and confirm the previous glasses prescription. The doctor did not record any information on an exam form or in AHLTA. Can you report the doctor's work as a visit? Why?
3. What effect (if any) does the number of tests performed or the number of doctors or technicians involved in examining one patient have on the patient count?

015. Patient accountability reports

1. To fulfill your role in patient accountability reports, what must you provide the RMO?
2. What activity does RMO, MAJCOM, and Headquarters USAF perform that makes it important for them to know how many patients you see versus how much staff you have?
3. What constitutes proper documentation of a patient visit?
4. If RMO verifies your patient count three months in a row and finds no errors, how frequently will verification occur thereafter?

2-5. Aeromedical Services Information Management System

The Aeromedical Services Information Management System (ASIMS) is a database that allows commanders to evaluate how mobility/mission ready (from a medical standpoint) their personnel are at any given time. ASIMS is a software program used Air Force wide. It's an automated way of recording, verifying and storing vital information about individual medical readiness metrics, health exams, preventive services, occupational health exams, grounding management, physical profiles, and deployments. It provides an automated way of managing and reporting the medical readiness status of members and units at any installation. It, by no means, is an installation medical group/clinic program. The medical group/clinic collects and provides the data to all commanders, providing them a snapshot of their unit, squadron, or group's readiness status.

As a mission-focused, combat-proven, decisive-fighting force, Air Force members must be able to respond to our nation's call, anywhere, anytime. ASIMS stores the information commanders use to assess their unit's readiness.

You can check the following requirements and indicators for each active duty Air Force member in the data files for your base (fig. 2-1):

- Immunizations (shots).
- Dental.
- Laboratory (HIV).
- Profiles (pregnancy, illness, injury).
- Preventive Health Assessment.
- Medical Equipment (gas mask inserts).

ASIMS

Individual Status Form

AD	Air Force		19 AEROSPACE MEDICINE SQ
M		years	

SSAN:	DAFSC:	PCM:
Duty Phone:	ASC:	PCE:
Duty EMAIL:	DAS:	MTF:

Add Person Exemption

Immunization Groups

MEHP
MEHP Influenza
MEHP PPD (1 Time)

Immunizations

Immunization	Series	Date	Next Due
Hep A	0		
Hep B	3		
HPV	0		
Influenza	4	12 Oct 2017	
MMR	0	7 Jan 1997	
Polio	1		
PPD	1		
Td	1		
Varicella	0	26 Apr 1997	

Notes

Date	Note	BaseCode
Add New Note		

Medical Readiness

Overall Status:		Current			
PHA	Dental	Labs	Profile	Med Equipment	Other (Not IMR)

Figure 2-1. ASIMS individual status form.

016. Updating medical equipment (gas mask inserts)

As you see listed above, ASIMS tracks a multitude of medical requirements, including a gas mask insert (GMI) requirement. In ASIMS, GMIs are referred to as medical equipment. Visual acuities (VA) taken during examinations are documented in ASIMS and drive the medical equipment requirement. The types of examinations could include VAs taken during optometry exams, first term airman center (FTAC) medical in-processing, annual preventive health assessments (PHA), and various other exams. ASIMS highlights requirements that members are coming due for as *yellow*; items that members are overdue for show as *red*. If ASIMS shows that personnel have a GMI requirement but don't have one issued, the GMI requirement will show as yellow (*meaning caution, patient needs something*). This status lasts for one month before turning red (*meaning warning, patient is overdue*). Once a person's status goes red, it will affect your base's overall individual medical readiness (IMR) rates. This information is reported to squadron and group commanders so he or she can evaluate how mobility ready members are.

Members needing gas mask inserts

According to AFI 44-117, *Ophthalmic Services*, a GMI is required if:

- Unaided visual acuity in each eye is worse than 20/20 for military vehicle operators, flight personnel, and enlisted personnel with Profile I occupational requirements.
- Unaided binocular visual acuity is worse than 20/40 for all other personnel.
- Bifocal correction is required to perform assigned duties satisfactorily.
- Medical or employment requirements necessitate wearing spectacle inserts although the binocular visual acuity is not worse than 20/40.

NOTE: In this case, the prescribing doctor will approve the order and include a statement of the condition requiring the inserts.

When uncorrected VAs that meet the above criteria are entered into ASIMS, it drives the GMI requirement. The member's status turns *yellow* the day the VAs are entered and *red* 30 days after that if an insert isn't already identified in ASIMS as issued. If other clinics within the MTF are the ones performing and documenting the results of vision tests, such as the PHA section, make sure the medical personnel running those programs know to refer active duty patients to your clinic. If those patients don't have a current spectacle prescription, you need to get them scheduled for an exam as soon as possible. There is also a report in ASIMS that lists all members requiring but not having a GMI. It is very important to monitor this report and contact the members listed so an insert can be ordered if one is needed. Sometimes it's just an administrative issue; a previous bases' order wasn't updated in the database correctly. In that case, after speaking with the member and verifying he or she has a current insert, you can update ASIMS to reflect this information. Other times, however, the member needs to be scheduled for an appointment so he or she can get an updated prescription from which to place a GMI order. When spectacles and inserts are ordered and then scanned in upon receipt from the fabrication lab, the glasses ordering database, Spectacle Request Transmission System (SRTS), shares this information with the ASIMS database. Therefore, it is *very important* that spectacles and inserts be scanned in when they are received, as this date becomes the issue date in ASIMS and makes the patient status go *green*. Green is good.

ASIMS is a fluid, moving program requiring your constant attention to ensure you and your patients are deployment-ready at all times. ASIMS is critical to the success of our mission because it serves as real time information for commanders about personnel and their deployment readiness.

Clearing the GMI requirement after refractive surgery

For photorefractive keratectomy (PRK) or laser-assisted in situ keratomileusis (LASIK) post-operative patients with improved, stable vision that no longer needs a GMI, you need to update the visual acuity in ASIMS to remove the previous GMI requirement. This entails adding a new distant

visual acuity (DVA) entry under a new date (fig. 2-2). If you just edit a previous visual acuity entry, the GMI requirement will not clear.

ASIMS							
Distant Visual Acuity							
	Uncorrected			Corrected			
	Last Exam	Right (OD)	Left (OS)	Both (OU)	Right (OD)	Left (OS)	Both (OU)
Edit	17 Oct 2013	20/400	20/400	20/400	20/20	20/20	20/20
					Add		
Refractive Surgery							
No Refractive Surgery					Edit		
Return to Edit PHA Form							

Figure 2-2. ASIMS distant visual acuity.

017. Updating mobility/mission readiness

In ASIMS, a variety of forms communicates information to nonmedical authorities in nonmedical language on the specific occupational duty limitations of military members. This allows commanders to make informed decisions concerning management of their personnel.

Air Force Form 469, Duty Limiting Condition Report

AF Form 469 is used to describe physical limitations and recommend duty restrictions to the commander when there is a potential risk to an Airman's health, safety and well-being, the safety of the mission, or the ability of the Airman to accomplish the mission effectively. The profile system exists to facilitate the personnel, training, or command actions described in the following table:

Common uses of the AF Form 469
Notification of a member's worldwide duty status.
Notification of a member's profile change.
Communicates information to the member's unit commander or supervisor that he or she has an injury or illness that limits job performance.
Communicates information to the member's unit commander or supervisor that he or she has an injury or illness that limits job performance or mobility status.
Physical restrictions/fitness exemptions.

In the ophthalmic clinic, your review/use of the AF Form 469 is generally in relation to corneal refractive surgery (CRS) patients. The AF Form 469 describes physical limitations, functional impairments, or specific restrictions. Upon completion of surgery, staff at the laser surgery center initiate the AF Form 469. When patients return to their referring provider for post-operative care, you review ASIMS to ensure the AF Form 469 reflects their surgery information. If, for some reason, there was an oversight at the surgery center and the profile was not created, your provider (or you on your provider's behalf) can then enter an AF Form 469 in ASIMS (in conjunction with the member's PCM). At a minimum, the AF Form 469 must include demographic data, diagnosis, physical limitations and/or restrictions and then specify the resulting duty restrictions, mobility restrictions, and/or fitness restrictions. The provider has to electronically sign the form. Post-operative patients are not worldwide qualified while on steroid eye drops, so it is very important that the AF Form 469 reflect their current mobility status to commanders.

Of course, CRS is not the only medical reason a member may have a mobility or duty limitation code (DLC) entered into ASIMS. ASIMS can track up to three DLCs simultaneously, though only one active AF Form 469 can exist at a time. You or your provider can add a new diagnosis to an existing AF Form 469 to update the mobility or duty restriction and desired release date of the new limitations.

DD Form 2992, Medical Recommendation for Flying or Special Operational Duty,

In the ophthalmic clinic, your review/use of the DD Form 2992 is generally in relation to a member's flying status. The DD Form 2992 is the DOD equivalent to AF Form 1042, which was the previously used form. The DD Form 2992 describes whether an aviation or aviation related special duty (AASD) member is qualified to do flight duties based on medical assessment. After CRS, the DD Form 2992 needs to reflect that the member is placed in a duties not involving flying (DNIF), duties not including controlling (DNIC), duties not including jumping (DNIJ), or duties not to include alert (DNIA) status, whichever is appropriate for the member. If the patient's DD Form 2992 in ASIMS does not indicate one of these statuses, you need to notify the Flight Medicine Clinic so their staff can update the information. The member will remain in a DNIF/C/J/A status until their vision meets very specific post-CRS requirements. There is a minimum DNIF/C/J/A of one month following LASIK. There is no minimum period for PRK, however, 2-3 months is generally required to allow for enough corneal healing. Post-CRS requirements are located on the CRS Website at:

<https://kx2.afms.mil/kj/kx1/AFRefractiveSurgery/Pages/home.aspx>.

018. Updating the Corneal Refractive Surgery and Aircrew Contact Lens Programs

ASIMS provides an automated way of recording, verifying and storing vital information for ophthalmic specific programs. This includes the CRS Program and ACLP.

Corneal Refractive Surgery Program

We have already discussed the importance of updating a member's distant visual acuity once his or her vision becomes stable after CRS. This isn't the only CRS-related entry you'll need to make in ASIMS. There are a few additional items in ASIMS you'll need to update.

Surgery date entry for all CRS post-operative patients

For all CRS patients, to include AASD and warfighters (personnel that are not AASD), ASIMS must be updated with the date and type of procedure performed. This ensures the information is available to any other medical personnel reviewing someone's medical information. Figure 2-3 shows the screen where this information is entered in ASIMS.

ASIMS	
Refractory Surgery	
<input type="text"/>	
Has this person had refractory surgery?	Yes ▼
Date of Surgery:	28 ▼ May ▼ 2015 ▼
Type of Surgery:	LASIK PRK
<input type="button" value="Cancel"/>	<input type="button" value="Update"/>

Figure 2-3. ASIMS refractive surgery.

CRS post-operative follow-up entry for aviation/aviation special duty personnel

For AASD patients who have had CRS, ASIMS has a tracking log which you will need to update post-operative follow-ups. Figures 2-4 and 2-5 are examples of these screens in ASIMS. These follow-ups are mandatory appointments that all AASD must accomplish. The information from these appointments are eventually gathered and submitted to request the member's flight waiver. The tracking log in ASIMS allows a report to be generated from which you can tell which members have made their mandatory appointments and which have not. You can then use this report to contact the members in need of an appointment. If you have difficulty contacting members or getting them to schedule appointments, flight medicine is a good resource to assist you.

Figure 2-4. ASIMS AASD CRS management.

Figure 2-5. ASIMS AASD CRS follow-up entry.

Aircrew Contact Lens Program

Another tracking log available in ASIMS is the ACLP. We will discuss the details of the program in a later section, but for now, you should be aware that the administrative part of the program is accomplished in ASIMS. Similar to the CRS follow-up tracker, ASIMS has a section dedicated to the ACLP. After approval from a flight surgeon and an ACLP examination from the optometrist, you use ASIMS to indicate the member is enrolled in the program (fig. 2-6). From that point on, the member must make mandatory follow-up appointments that you then document in ASIMS (fig. 2-7). You also enter and keep a running record of the patient's contact lens prescription information (fig. 2-8). Again, much like the CRS follow-up tracker, you can run reports from ASIMS that will show which members have made their mandatory appointments and which have not.

INFOCON 3 UNCLASSIFIED FPCON Bravo

https://asims.afms.mil/GroundingMgmt/People_GM_ContactLens.asp Grounding Management

ASIMS - Grounding Management

GROUNDING MANAGEMENT

Rank: Sex: DOB: DAS: DAFSC: ASC: Edit

Flying Clearance/DNIF Medication Ground Testing **Aircrew Contact Lens** AASD RS Management

☒ Contact Lens Program

	Date	Visit Type	Notes
Edit	05/03/2016	1 Week	
Edit	04/18/2016	Initial	

Add Prescription Incidents

Figure 2-6. ASIMS ACLP management.

INFOCON 3 UNCLASSIFIED FPCON Bravo

https://asims.afms.mil/GroundingMgmt/LensVisit.aspx?RecordID=-1 Contact Lens Visit

ASIMS - Grounding Management

Contact Lens Visit

Rank: Sex: DOB: DAS: DAFSC: ASC:

Visit Date: 05/17/2016 select

Visit Type: Initial
1 Week
1 Month
1st Annual
Annual
Follow-up

Notes:

Edited Date: Edited By:

Cancel Delete Update

Figure 2-7. ASIMS ACLP follow-up entry.

INFOCON 3 UNCLASSIFIED FPCON Bravo

https://asims.afms.mil/GroundingMgmt/LensRxEdit.aspx?RxID=56434 Contact Lens Prescription

ASIMS - Grounding Management

Contact Lens Prescription

Rank: Sex: DAS: DAFSC: ASC:

Date: 05/17/2016

RIGHT					
R.B.C.	Dia	Sphere	Cyl	Axis	Perph Curves

LEFT					
L.B.C.	Dia	Sphere	Cyl	Axis	Perph Curves

Date: Edited By:

Delete Update

Acuvue Advance
Acuvue Advance for Astig
Acuvue Advance for Astig
Acuvue Advance Plus
Acuvue Oasys
Acuvue Oasys for Astig
Acuvue Oasys for Astig
Acuvue Toric
Acuvue Toric UV
Acuvue Toric w/ UV block
Air Optix Aqua
Air Optix for Astigmatism
Air Optix Night and Day
Avaira Toric
Avaira UV
Biofinity DW/EW
Biofinity Toric DW/EW
Biomedics 55
Biomedics 55 Premier UV
Biomedics 55 UV EW
Biomedics Toric
Biomedics Toric EW
CSI-EW
CSI-FW
Durasoft 3
Durasoft 3 UV
Focus 1-2 week
Focus Night and Day
Focus Toric
Focus Toric Visiint

Figure 2-8. ASIMS ACLP contact lens prescription entry.

Also found in the ACLP section of ASIMS is the *USAF Aircrew Contact Lens Incident Report* form. You can see this screen in figure 2–9. You use this form to annotate when a patient on the ACLP has an adverse incident related to his or her contact lens wear. All aircrew contact lens related incidents and complications must be reported to the Flight Medicine Clinic and USAFSAM. The form in ASIMS is how we relay that information.

CRS and ACLP are programs we share with flight medicine. As stated before, should you need assistance contacting members or getting them to show for appointments, enlist the assistance of the Flight Medicine staff. Completing these appointments are mandatory requirements. Especially for the ACLP, if you have members failing to meet these requirements, flight medicine is a huge asset. They have the ability to disenroll overdue personnel from the program. Often, just the threat of this is enough to remind someone of the importance of making his/her appointment.

The SCL Incident Report form must be completed on aircrew within 72 hours with any of the following:

- ☐ Any SCL-related event that resulted in DNIF status.
- ☒ SCL wear is temporarily or permanently discontinued due to SCL-related ocular pathology.
- ☐ The brand of SCL is changed due to SCL-related ocular pathology

Mark Applicable Event(s)

Aircrew Information

Incident Date: **10122017**

Crew Position: **Pilot**

Aircraft: **C-17**

MAJCOM: **AMC**

Causative Ocular Pathology Information

☐ SCL intolerance

☐ Epithelial microcysts

☐ Significant Edema

☐ Dry eyes

☐ Other (name)

☒ SCL overwear/abrasion

☒ During operational duty

☐ Not during operational duty

☒ Corneal Neovascularization

☐ Giant papillary conjunctivitis

☐ Infectious conjunctivitis

☒ Corneal ulcer/infiltrate

OD corneal location

☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5

OS corneal location

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

☐ Other (please name/describe)

Other Information

SCL Type: **Acuvue Toric**

Daily Cleaner: **Clear Care**

Cleaning Procedures: **Enzyme Disinfectin**

Number of DNIF days: **5**

Final best corrected visual acuity: SCL: OD **UNK** OS **UNK** Spectacles: OD **UNK** OS **UNK**

☐ Returned to flight status (check if yes)

If NO, why not: **Remain DNIF until resolution of corneal ulcer**

☐ Resumed SCL wear (check if yes)

If NO, why not: **No contact lens wear until resolution of corneal ulcer**

Attending Flight Surgeon

Name: **Dr. J. Smith**

Base: **Your Base**

Phone: **123-4567**

Buttons: Cancel, Delete, Print, Update

Figure 2–9. ASIMS ACLP contact lens incident report form.

Self-Test Questions

- After you complete these questions, you may check your answers at the end of the unit.

016. Updating medical equipment (gas mask inserts)

1. What term does ASIMS use to refer to gas mask inserts?

2. ASIMS has a member's medical equipment requirement highlighted in red. What does this mean?
3. What visual acuity would require flight personnel to need a GMI?
4. What visual acuity would require nonflight/nonspecial duty personnel to need a GMI?

017. Updating mobility/mission readiness

1. You will need to refer to the AF Form 469 most often for which type of patients?
2. What does the AF Form 469 need to indicate while a member is on steroid eye drops after CRS?
3. A pilot just returned from having LASIK. Her DD Form 2992 needs to indicate a *minimum* DNIF time of how long?

018. Updating the Corneal Refractive Surgery and Aircrew Contact Lens Programs

1. What can the reports in both the CRS and ACLP programs in ASIMS assist you in tracking?
2. Your clinic is treating a member on the ACLP who is suffering from a contact lens related corneal abrasion. What is the name of the form you need to complete and where can you find it?
3. Whom can you reach out to for assistance if you are having difficulty getting an ACLP member to make his mandatory follow-up appointment?

2-6. Clinic Administration

How successful do you think you'd be if you had no guidance or direction on how to do your job? Where do you start? What supplies and equipment do you need? What are you authorized? Magnify this question to all the jobs in the Air Force and the results could be summed up in one word—chaos. What we've described will not happen because the Air Force has publications. They are experience-based documents providing direction and guidance for the efficient operation of Air Force units.

Publications save time, effort, and resources. There's no reason someone should stumble along making up procedures that may or may not work when others have already tried, perfected, and implemented procedures that do work.

There are many types of Air Force publications. Some tell you what your uniform should look like. Others tell Finance the pay procedures and how much to pay you. In fact, there are publications covering just about any situation. Through written publications, the Air Force communicates important policies, guidelines, and instructions that must be followed.

As part of your job, you'll need to know how to locate required publications. To detail specific clinic policies and procedures, you'll deal with some ophthalmic clinic publications. They are more commonly called operating instruction or OIs. As with any job, it's necessary to have forms for documentation and management of the clinic. Therefore, you will need to know some of the forms common in the ophthalmic clinic and how to maintain them. Since publications directly affect your duties in the clinic and the military, you'll first study the process of locating Air Force publications.

019. Official and commercial publications

To utilize a publication, you must first be able to find it. Imagine going into a library and trying to find a mystery novel, but you don't know where to look and there's no librarian. You could begin at the first bookshelf and begin scanning titles one by one. Perhaps you'll be lucky enough to find your book quickly; if unlucky, however, it could take forever. In contrast to what we've described, finding a specific instruction, regulation, technical order (TO), or publication is easy if you know how. In this lesson, you'll learn the logical and easy way to get the information you want.

Official publications

The Air Force Departmental Publishing Office (AFDPO) is the official source for Air Force administrative publications and forms. The office is responsible for all Air Force electronic publishing and maintains the AF e-publishing website, which provides access to these publications. To find the title of an AF instruction, manual, or pamphlet, look on the AF e-publishing site (<http://www.e-publishing.af.mil>). The site is easy to use and allows you to search by title or keyword.

Locating official publications

Once at the e-publishing site, let's say you're looking for information to develop an educational aide titled *Nutrition for the Active Patient*. You could search a few different ways:

- At the main screen look for the Search box. Here you can type in a keyword, such as *nutrition*, and the site will create a list of all documents with your keyword in the title. You can also search by publication number or title, or perform an advanced search in which you can search for a combination of words or phrases.
 - If you are not sure what the title is, in the Search box you can type in a portion of the title, such as 44-117. Every AF publication with such numbers will come up, whether it is an AFI, AFMAN, or AF pamphlet (AFPAM). If you type in just 117, you will broaden your search even more.
 - The same principle applies if you want to do a general search for all AFMANs. If you enter the prefix "AFMAN" into the Search box, it will call up every Air Force manual.
- Under the Publications, AF Departmental, tab you can search for the publication series most applicable to your educational aide. Publications under series 41, *Health Services*, or series 44, *Medical*, might be good places to look for information on nutrition.
- You can search for MAJCOM specific documents by looking under the Publications, Major Commands tab. There you can select a specific command. Once you do so, again you will see a list of publication series and can select the most applicable to your search.

Once you find the documents having related information, you can save a copy or read them on-line.

Departmental and field publications

AF publications are divided into two general classes—departmental and field. Knowing the difference is important if you’re going to find what you want.

Departmental publications are issued by or for Headquarters USAF. An example of a departmental publication would be AFMAN 36-2643, *Air Force Mentoring Program*.

Field publications originate at MAJCOM level or below. They’re used only within the issuing activity. AETC bases would only use an AETC publication. An example of a field publication is AETC Instruction (AETCI) 36-2604, *Flying Training Instructor Programs*.

Duplication of information

The relationship between departmental and field publications is easy to understand—the field publication shouldn’t duplicate information contained in a departmental publication. For example, if AETC, as a MAJCOM, wants to clarify or add to AFI 36-2905 (a departmental publication), AETC would issue a supplement to AFI 36-2905 with the minimum amount of duplication of the material in the AFI.

Supplements are always issued at a command level lower than the level that published the original publication. In other words, Headquarters Air Force would not issue a supplement to an AETC publication.

Locating civilian publications

When you need a civilian publication, such as a study reference, medical dictionary, or periodical, do one of the following:

1. If your hospital has a medical library, submit a letter of request to the librarian. This is usually someone on the commander support staff. Although the exact format for requesting a publication may vary according to local policy, generally the librarian needs the following information:
 - a) Stock number (if applicable).
 - b) Description to include title, author(s), edition, and publisher.
 - c) Unit cost.
 - d) Quantity required.
 - e) Justification (in narrative form—short paragraphs).
2. Civilian publications can also be ordered through medical materiel (supply). This is usually faster than ordering through a hospital library. Check your local policy for exact procedures.

020. Operating instructions and clinic policy

Everything you’ll do in the AF will be governed by a publication, form, or general directive. Although many ophthalmic clinic procedures are similar throughout the AF, each clinic has its own special way of accomplishing these tasks. It would be inefficient for a new person to learn each clinic’s unique approach by trial and error. Access to clinic publications and forms through an organized, efficient filing system helps to ease the transition for new personnel. This information communicates the clinic’s procedures, tells what the clinic does, and explains the clinic’s policies.

Maintaining operating instructions

Chances are, for a given subject, a departmental publication will be supplemented by the MAJCOM, augmented by the wing, clarified by your squadron, and referenced by your clinic OIs. This is how each individual ophthalmic clinic communicates policy and guidance from the bosses to the workers. Although verbal communication is easier and faster, most people also like to see communications affecting them in “black and white.” Additionally, having things clearly stated prevents miscommunication within the section. After arriving at a new clinic, your effectiveness will be

reduced until you learn their specific clinic policies. One way to minimize this initial dip in effectiveness is to read over a clinic's OIs upon arrival.

Reviewing instructions and guidelines

You may want to keep hard copies of instructions that apply to your section readily available. You should occasionally review these instructions. The first occasion to review these documents is when you are newly assigned to a duty section. At that time, you must thoroughly study each instruction that applies to your duties and responsibilities. This will be time-consuming, but will pay great dividends in the future. OIs tell the reader what the clinic does, describes policies, and tells how some procedures are done. You will often find a need to reference an instruction to solve a problem or answer a question. This is why you will want to keep the publications most often referenced handy in your duty section. The review process under these circumstances will be a short one. You should be able to scan the document and quickly locate the desired paragraph that will answer your question. The ability to do this will depend on how familiar you became with the instruction previously. Remember, take the time to read the document thoroughly when first assigned to the section. Another occasion when you will need to review these instructions will be prior to inspections and during each self-inspection. This is very important to ensure you are properly carrying out the instructions as they are written. Sometimes what a clinic is doing is not properly portrayed within an instruction and needs to be corrected.

Developing operating instructions

Virtually every aspect of your job, how the clinic runs, how your career progresses, and even how you are paid is dictated by a publication. This is why it is so important that instructions be accurate and logically organized, written clearly, adequately illustrated, and free of irrelevant and duplicate information. These goals apply equally to locally generated OIs as well as AFIs.

When developing policies, you must provide clear, accurate guidance that others can understand and follow. According to AFH 33-337, *The Tongue and Quill*, the seven steps to effective communication include: (1) analyze purpose and audience, (2) research your topic, (3) support your ideas, (4) organize and outline, (5) draft, (6) edit, and (7) fight for feedback and get approval. Make sure you are including these concepts to communicate best with your audience.

Specific to AF writing, AFI 33-360, *Publications and Forms Management*, provides guidance and procedures on creating, managing, and disseminating directive and nondirective publications throughout the AF. It lists a six-step process as you prepare and submit a publication through the chain of command and staff for approval and publishing: (1) draft and collaborate, (2) staffing, (3) formal coordination, (4) certification, (5) approval, and (6) publishing. Chapter 6 of AFI 33-360 gives further detailed information for developing publications.

Operating instruction guidelines

You may be tasked to write an OI for your clinic. OIs should be written only to the extent they are used. Writing OIs to fill a binder is not only wasted paper, but also wasted time. You should only create/maintain as many OIs as needed to provide proper guidance for your unique clinic environment. You need to conduct any research necessary to verify that all resources are current. Write in a direct, active voice with simple, grammatically correct, concise sentences. Then edit the OI for accuracy, currency, integrity, and expected compliance. Also, check for proper spelling, punctuation, capitalization, and proper use of references, abbreviations, acronyms, and terms. Use the guidelines in the following table to develop the OI. However, check with your supervisor to see if your local organization has specific guidance on the format of their instructions. The format of the document is a primary concern.

Formatting Guidelines	
Font	12-point Times New Roman font.
Paragraph	Double space, full-measure format, NOT dual-column format. Keep paragraphs 7–9 sentences; divide into subparagraphs or main paragraphs, if needed.
Margins	Use 1-inch left, right, top, and bottom margins.
Title Page Heading	Refer to heading of AFI 47–101 for correct format of title page heading.
Publication Number	Assign OI number based on series number from AFI 33–360, volume 1. The control number after hyphen begins with Arabic 1 and continues sequentially with each OI.
Effective Date	Assign effective date on heading as of the issuance date the approval authority assigns.
Purpose Statement	Write a 2–4 sentence purpose statement outlining the reason for the OI and who must comply.
Originating Policy Directive and Title	Include in the purpose statement the originating policy directive and title, the parent instruction (e.g., AFD 47–1, <i>Dental Services</i>).
OSHA Standard Requirement	For material relating to an OSHA standard, include “This instruction is consistent with Air Force Occupational Safety and Health (AFOSH) standard or Department of Labor OSHA standard (or standards) (number).”
Titles	Develop titles for main paragraphs, no more than 10 words.
References	List “References” in a single paragraph, if more than 10, then create an attachment.
Terms Explained	Create “Terms Explained” paragraph to spell out acronyms and abbreviations. Refer to forms/publications by number and long title the first time used.
Paragraph Numbering	Number main paragraphs consecutively using Arabic numerals, for example, 1, 2, and so forth. Subparagraphs use Arabic numerals in sequence, separated by periods, progressing from the main paragraph number.
Supersession Line	Give the publication number and date of superseded publication.
Office of Primary Responsibility (OPR)	Include writer’s office, duty section, rank, and name.
Signature Block	<ul style="list-style-type: none"> • Include signature block of approval authority on last page of publication, before attachments. • Position first line 5 lines below last line of OI. • Position 4.5 inches from the left edge of the page or three spaces to the right of page center. • Include name, rank, grade, and service in uppercase on first line. Use uppercase and lowercase on second line for duty title.

Revising and discontinuing OIs

Make sure your OIs are current and valid. Your clinic should only have as many OIs as necessary to provide proper guidance to do your job. If doing a rewrite, the previous final draft is a good starting point. Look for pre-existing OIs in your clinic’s official file plan or ask your publication manager. If you have an OI written years ago, it may be time to evaluate it for continued use. If the OI affects only your clinic, it’s easy to evaluate. Review the OI and determine whether the OI meets your needs, requires revision, or should be discontinued.

Revisions needed

A prime example of an OI needing revision is an OI on spectacles ordering—suppose it was written so long ago it does not refer to the SRTS. It needs revision. The primary emphasis would now be SRTS ordering procedures with just a mention on manual spectacles ordering as a backup.

Coordinating revisions

It may also be appropriate to coordinate revisions and discontinued OIs. This is the reverse of preparing OIs. Take a copy of the old OI and route it through the affected sections. Include any proposed changes if you are revising or just the current OI if discontinuing. The important thing is to keep any section involved informed. If you make changes in policy regarding how your clinic will handle flight medicine referrals, have the flight medicine clinic give input. If you are still in the informal stages of revising your OI, you can circulate a copy of it and direct the sections to initial the first page. Once you need to formally route the OI, initiate a staff summary sheet to circulate through all concerned sections.

If you have been tasked with developing an OI, you have been deemed the expert in the various functions, tasks, and skills on the subject. The purpose of an OI is to assign responsibility, direct actions, and prescribe procedures within local organizational elements. Take the time to ensure your OI serves its purpose. Samples of ophthalmic clinic OIs can be found on the AFMS Optometry/Ophthalmic Technician Website, currently located at:
<https://kx2.afms.mil/kj/kx6/OptometryOphthalmicTechnicians/Pages/home.aspx>.

Clinic policy

Much like clinic OIs, clinic policies are similar throughout the AF. However, they will vary slightly depending on each clinic's capabilities. Determining policy is an important function of AF leadership. Policy provides both a focus for AF action and a guide for the behavior of the organization and its members. A policy is a governing set of principles that guide a practice. It helps to ensure compliance, promotes operational efficiency, and enhances the mission while reducing risk. Policies provide a basis for consistent decision-making and resource allocation; it acts as a method to guide present and future decisions. It mandates actions or constraints and contains specific procedures to follow.

In the ophthalmic clinic, following clinic policy ensures fairness. If you follow established policy, you will offer consistent care, at all times, to all patients. The policies of your clinic may differ from other clinics based on your clinic's specific mission, capabilities, and resources. Your clinic policies will quite simply be what your clinic is able to offer and how you are able to offer it.

Some policy ideas

Some services can vary from clinic to clinic. Establishing policies for these items would help to clarify which services your particular clinic can provide. The following table discusses some of the services that vary from clinic to clinic.

Area	Explanation
Operating Hours	Specify, since clinic hours vary from base to base.
Manning	How many people are needed for specific tasks? How many are needed to man the front desk at high-traffic times of the day?
Services Performed	What services are available in your particular ophthalmic clinic? Will they be scheduled or available on a walk-in basis? (e.g., driver's license exams and flight line color vision testing.)
Appointments	How are appointments made at your clinic – at the front desk or through a central appointment line?

Occupational Safety Program (safety glasses)	Will your clinic establish a safety glasses program or will you refer members elsewhere?
Spectacle Ordering and Dispensing	Will you call patients to pick up glasses or mail them out?
Contact Lenses	Is your clinic able to do new fittings for all patients? Just flyers?
Referrals	What are you able to see in clinic and what will you refer out?
Patient Check-in procedures	If a patient checks in late, will you see him/her right away, make the patient wait, or reschedule?

Policy is the strategic link between the overall mission and day-to-day operation. It allows staff members to clearly understand their roles and responsibilities within predefined limits. Basically, policies allow supervisors to guide operations without constant management intervention. Don't be afraid to look at your clinic's policies, or lack thereof. If clinic personnel are doing their own thing and patients are getting inconsistent care, you may want to stress to leadership the benefits listed below that are associated with having established policies:

- Staff members are provided with information that allows them freedom to carry out their job and make decisions within defined boundaries.
- Clinic personnel understand the constraints of their job without using a 'trial and error' approach, since key items are stressed in well-written policies.
- Policies enable the clinic staff to understand individual and team responsibilities clearly, thus saving time and resources. Everyone is working off the same page; members can get the "official" word on how they should go about their tasks quickly and easily.
- Clearly written policies allow supervisors to exercise control by exception rather than 'micro-manage' their staff.
- It sends a "We Care!" message, that your leaders want you to be successful at your job.

021. Maintaining files

Air Force records serve a crucial role in supporting the mission by ensuring information is available to support effective decision-making and to protect the legal rights of the AF, our employees, and the public. Records document official business, serve as the memory of an organization, provide a record of past events, and are the basis for future actions.

AF units at all levels have a requirement to document their organization's functions, policies, procedures, and activities. This documentation serves as the official record of the AF. The keys to an effective records management program are the integrity of the filing system and effectively trained personnel. The filing system ensures a standard method for filing, storing, retrieving, and ultimately disposing of records according to established schedules.

There are a network of personnel responsible for overseeing records management. At the base level, you'll most likely run across the base records manager (BRM), functional area record manager (FARM), chief of office of record (COR), and record custodian (RC). In your ophthalmic clinic, there will be a COR responsible for the records under his or her custody. There will also be a RC whose job it is to maintain, service, and dispose of these records. AFI 33-322, *Records Management Program*, defines a record as:

- Non-personal papers, photographs, messages, letters, forms, and reports.
- Books (such as additional duty books), continuity binders, logbooks (not reference material such as dictionaries or computer manuals).
- Maps and photographs.
- Email messages, computer calendars and other computer files that meet the definitions above and below (letters, images, etc.).

- Anything documenting activities by federal employees (in or out of uniform) serving in an official capacity, created and maintained in hard copy or electronic form.
- Any piece of information used to do your job – regardless of its form or characteristics.

Record custodian responsibilities

At some point, you may be appointed as the ophthalmic clinic RC. If so, your duties will fall into two major areas: (1) maintaining files, and (2) reviewing and evaluating special files. As RC, you will have to do the following:

1. Accomplish initial training upon appointment and maintain proficiency by completing applicable annual training thereafter.
2. Develop and maintain the office file plan within the AF Record Information Management System (AFRIMS), and establish electronic and paper records in accordance with AFI 33-364, *Records Disposition-Procedures and Responsibilities* and AFMAN 33-363, *Management of Records*.
3. Maintain a copy of the AFRIMS file plan and COR approval letter.
4. Be proficient on the equipment used for storing and retrieving records.
5. Know and implement the records maintenance, use, and disposition policies and procedures for the records being maintained.
6. Consult with the COR and/or FARM regarding any problems.
7. Conduct non-Freedom of Information Act (FOIA) records management data calls and record searches.
8. Respond to questions on records requirements and the Record Disposition Schedule (RDS).
9. Transfer active electronic records to inactive files area at the end of fiscal year (FY) and calendar year (CY).
10. Dispose of electronic records according to disposition instructions.
11. Provide an office orientation to newly assigned personnel (to include new CORs).

User responsibilities

Although the RC is responsible for maintaining the files, it is everyone's responsibility to know what a record is. This ensures the RC receives all pertinent information that should be included in the file plan. All ophthalmic staff members, to include military, civilian, and contract personnel, are responsible to create and declare records that sufficiently document the clinic's function, organization, administration, policies and procedures. In addition, all members must comply with a FARM or RC request to search, using provided search terms, all paper, non-electronic, and electronic media within his/her assigned workspace. This includes government provided desktop/laptop computers and personal government e-mail accounts and files. All personnel must inform the COR or RC of any actual or potential unlawful or inadvertent removal, change, or destruction of AF records. The COR or RC is an office's initial point of contact for any questions on file management and for help distinguishing between non-record, record, and personal materials.

Electronic records management

Much like our medical records making the transition from a paper record to an electronic one, you will find that your ophthalmic clinic is making the transition from a paper filing system to an electronic one. You may still need to use the occasional paper form; it is definitely vital to have hard copies of pertinent forms on-hand as a backup plan in case the network or electronic system goes down. However, more and more MTF's are depending on electronic records management (ERM). The goal of ERM is to provide standards for preserving, protecting, and disposing of official records. Having a clinic's files secured electronically ensures the records are available and protected should

something happen to the facility itself, such as a fire or natural disaster. Some of the *advantages* of ERM include:

- Faster retrieval of information, thus improves workforce output.
- Re-enforces user level responsibility for proper maintenance of government information.
- Eliminates the need to send paper products to the staging areas and record centers.
- Reduces copying and printing costs.
- Provides improved customer service.

AFRIMS is the current ERM system utilized by the AF. Commanders, directors, supervisors, CORs, and RCs are responsible for training AF users to ensure sustainability of ERM processes. This is to ensure records are not maintained in non-approved ERM systems such as email systems, pst files, or backup systems, as these are primarily for restore purposes only and are subject to deletion and/or rewrite. Every user creating and maintaining unit records is responsible for maintaining electronic records. RCs must ensure users have the appropriate training and understanding of these responsibilities.

Self-Test Questions

- After you complete these questions, you may check your answers at the end of the unit.

019. Official and commercial publications

1. What Website you would go to find the title of an AF instruction, manual, or pamphlet?
2. You don't know the number or title of the publication you need but do know a few keywords for the publication you'd like to find. What type of search should you perform at the main screen of the e-publishing site?
3. Field publications originate at what level?
4. What information do you need to provide to the librarian to order a civilian publication?

020. Operating instructions and clinic policy

1. List the seven steps from *The Tongue and Quill* that you should incorporate in your OIs to best communicate with your audience.
2. What font should you use when writing OIs?
3. If doing a rewrite of an OI, what is a good starting point?

4. What does following clinic policy ensure?
5. Policy is the strategic link between what two things?
6. Will supervisors have to micro-manage their staff if a clinic has clearly written policies? Why?

021. Maintaining files

1. List the types of records that a record custodian must maintain, service, and dispose.
2. What is the name of the system that the record custodian will use to maintain all electronic records?
3. To best assist the record custodian in maintaining files, who is responsible for knowing what a record is?
4. List the advantages of electronic records management.

Answers to Self-Test Questions

008

1. Increase in medical technology and knowledge.
2. Keeping the patient's problems and treatments confidential.

009

1. If the moral character is good, then the moral obligations and resultant behavior will be good.
2. The act of bringing about good, or to act in the best interest of (as an advocate for) someone else.
3. Which patient will receive what treatment, how often, and how many patients can be treated. These decisions need to be made because of limited resources.
4. When a group of people with differing moral beliefs are involved in moral conflict.

010

1. Enough information to identify the patient, support the diagnosis given by the health care providers (practitioners), justify the treatment, and accurately document the results of care rendered.
2. The different colors aid in identifying records – making it easier to file and charge-out records.
3. Second to last digit of the sponsor's SSN.
4. Section 3.
5. Section 3.

6. Specialty care and urgent primary care results, emergency room notes, discharge summary reports, laboratory results, and radiology reports generated by providers and health care organizations external to the MTF.

011

1. A doctor can better plan a course of care to avoid redundancy and avoid prescribing medications that shouldn't go together.
2. Yes; in accordance with the Privacy Act of 1974 and HIPAA of 1996, the patient has the right to the information in the record.
3. The hospital commander.
4. An accurate, legible, and complete description of all services rendered to patients.
5. Annotate the patient's exam on an SF 600 (or whatever form your clinic uses) to record the visit.

012

1. The MDG commander.
2. No; the financial incentive for the MTF is to retain as much specialty care within the MTF as capability and capacity will allow.
3. RMC.

013

1. AHLTA.
2. The RMC for coordination with a network provider.
3. No; if patients schedule appointments and visit a specialist WITHOUT prior authorization, they WILL incur the cost for the visit and any services rendered.
4. No; ER care never requires a referral. TRICARE defines an emergency as a serious medical condition that the average person considers a threat to life, limb, sight, or safety.

014

1. Each patient examined, evaluated, consulted, treated, attended, advised, or otherwise provided a distinct service counts as a visit.
2. No; if it's not documented, then it's as if the procedure was never done.
3. None; it's still counted as one visit.

015

1. The most current, accurate, and verifiable data possible.
2. Projecting manpower and staffing needs.
3. A signed, dated (health record) entry that specifically states what you (your clinic) did for the patient. According to resource management, the documentation should follow the **SOAP** format to include: **S**ubjective—patient's description of the problem, to include their case history; **O**bjective—testing results of the patient or their glasses; **A**ssessment—diagnosis of the patient's problem; **P**lan—action that will be or was taken (also include information on when the patient should return to the clinic).
4. Once every 3 months.

016

1. Medical equipment.
2. The member is overdue for that item.
3. Unaided visual acuity in each eye is worse than 20/20.
4. Unaided binocular visual acuity is worse than 20/40.

017

1. CRS patients.
2. Post-operative patients are not worldwide qualified while on steroid eye drops so it is very important that the AF Form 469 reflect their current mobility status to commanders.

3. There is a minimum DNIF of one month following LASIK.

018

1. Which members have and have not made their mandatory appointments.
2. *USAF Aircrew Contact Lens Incident Report*; found in the ACLP section of ASIMS.
3. Flight medicine staff.

019

1. <http://www.e-publishing.af.mil>.
2. Perform an advanced search to search for a combination of words or phrases.
3. MAJCOM or below.
4. Stock number (if applicable); description to include title, author(s), edition, and publisher; unit cost; quantity required; justification (in narrative form – short paragraph).

020

1. (1) Analyze purpose and audience.
(2) Research your topic.
(3) Support your ideas.
(4) Organize and outline.
(5) Draft.
(6) Edit.
(7) Fight for feedback and get approval.
2. 12-point Times New Roman.
3. The previous final draft.
4. Fairness.
5. Overall mission and day-to-day operation.
6. No; clearly written policies allow supervisors/managers to exercise control by exception rather than ‘micro-manage’ their staff.

021

1. (1) Non-personal papers, photographs, messages, letters, forms, and reports.
(2) Books (such as additional duty books), continuity binders, logbooks (not reference material such as dictionaries or computer manuals).
(3) Maps and photographs.
(4) Email messages, computer calendars and other computer files that meet the definitions above and below (letters, images, etc.).
(5) Anything documenting activities by federal employees (in or out of uniform) serving in an official capacity, created and maintained in hard copy or electronic form.
(6) Any piece of information used to do your job – regardless of its form or characteristics.
2. AF Record Information Management System (AFRIMS).
3. Everyone.
4. (1) Faster retrieval of information, thus improves workforce output.
(2) Re-enforces user level responsibility for proper maintenance of government information.
(3) Eliminates the need to send paper products to the staging areas and record centers.
(4) Reduces copying and printing costs.
(5) Provides improved customer service.

Do the unit review exercises before going to the next unit.

Unit Review Exercises

Note to Student: Consider all choices carefully, select the *best* answer to each question, and *circle* the corresponding letter.

Do not return your answer sheet to AFCDA.

20. (008) Which changes can cause the acceptable practice and beliefs of a medical professional to become unacceptable?
 - a. Increase in patient demand for change.
 - b. Decrease in patient demand for change.
 - c. Increase in medical technology and knowledge.
 - d. Decrease in medical technology and knowledge.
21. (008) Of the three listed concepts of the Hippocratic Oath, which is stated to be of *great* significance?
 - a. Keeping the patient's problems and treatments confidential.
 - b. The physician should be accountable for his or her work.
 - c. The physician should have a good moral character.
 - d. Save lives at all costs.
22. (009) Three types of justice are distributive, compensatory, and
 - a. moral.
 - b. judicial.
 - c. reparatory.
 - d. procedural.
23. (009) You are asked to perform an applanation tonometry on a patient. You have very little training and do not feel qualified to perform this test. By *not* performing this test, you are fulfilling which responsibility?
 - a. Filial.
 - b. Legal.
 - c. Moral.
 - d. Enlisted.
24. (010) How many sections, or parts, does an Air Force Form 2100A, Health Record have?
 - a. Two.
 - b. Four.
 - c. Six.
 - d. Eight.
25. (010) In which section of the health record is a refractive surgery exam form filed?
 - a. One.
 - b. Three.
 - c. Five.
 - d. Seven.
26. (011) The health record is used for planning, documentation, communication, data, and
 - a. protection.
 - b. calculation.
 - c. dispensation.
 - d. compensation.

27. (011) Who is the custodian for inpatient and outpatient health records?
- Hospital commander.
 - Director, Patient Administration.
 - Primary health care provider (HCP).
 - Officer in charge (OIC) of Records Management.
28. (012) Which section in the medical treatment facility (MTF) is responsible for screening all MTF and network specialty referrals?
- Managed Care Support Contract (MCSC) Center.
 - Service Availability Listing (SAL) Office.
 - Referral Management Center (RMC).
 - Resource Management Office (RMO).
29. (013) The authorization letter for specialty care at a network medical facility will include the number of authorized visits, the specialty physician's name, contact information and
- the day and time of the appointment.
 - the approved timeframe for treatment.
 - the estimated amount of the co-payment.
 - a list of active medications to present at the appointment.
30. (014) What is considered to be the *key* to reporting visits?
- Documentation.
 - Timeliness.
 - Eligibility.
 - Accuracy.
31. (014) Can medical advice given or consultation done by a doctor over the telephone be considered a legitimate visit (patient count)?
- No; the patient must physically be present to count the visit.
 - No; because doctors cannot refract over the telephone.
 - Yes; but only if proper documentation is completed.
 - Yes; but only if it relates to a previous visit.
32. (015) What is the basis for medical resources planning and allocation at all levels of the USAF medical service?
- Unit manning documents (UMD).
 - Patient accountability reports.
 - Personnel utilization data.
 - TRICARE coverage.
33. (015) How often should audit verification be done if the clinic has an error rate *over* 10 percent?
- Daily.
 - Weekly.
 - Monthly.
 - Quarterly.
34. (016) In the Aeromedical Services Information Management System (ASIMS), gas mask inserts (GMI) are referred to as
- safety glasses.
 - eye equipment.
 - safety protection.
 - medical equipment.

35. (016) A gas mask insert (GMI) is required for flight personnel when unaided
- binocular visual acuity is worse than 20/40.
 - binocular visual acuity is worse than 20/50.
 - visual acuity in each eye is worse than 20/20.
 - visual acuity in each eye is worse than 20/40.
36. (017) Air Force Form 469, Duty Limiting Condition Report, is used to
- annotate the results of medical tests such as blood type, DNA, flyer ground testing, and flight waiver information.
 - notify commanders if an Airman's hospitalization was required due to an illness or if the illness is frequent or chronic in nature.
 - describe whether an aviation or aviation related special duty (AASD) member is qualified to do flight duties based on medical assessment.
 - recommend duty restrictions to the commander when there is a potential risk to an Airman's health, safety and well-being, the safety of the mission, or the ability of the Airman to accomplish the mission effectively.
37. (018) You can use Aeromedical Services Information Management System (ASIMS) to run Corneal Refractive Surgery (CRS) and Aircrew Contact Lens Program (ACLP) reports that show which members have
- submitted requests for unit funding to cover program costs.
 - had adverse incidents from surgery and contact lens wear.
 - made their mandatory appointments and which have not.
 - requested enrollment in the CRS and ACLP programs.
38. (018) All aircrew contact lens related incidents and complications must be reported to
- flight medicine and the medical treatment facility (MTF) safety officer.
 - flight medicine and the USAF School of Aerospace Medicine (USAFSAM).
 - USAFSAM and the Surgeon General (SG) consultant for optometry.
 - flight medicine and the MTF infection control officer.
39. (019) Air Force publications fall into which class(es)?
- Supplemental and departmental.
 - Departmental and field.
 - Field and supplemental.
 - Departmental only.
40. (019) Field publications originate at the
- Office of the Secretary of the Air Force (SAF).
 - Headquarters United States Air Force (USAF).
 - Air Combat Command (ACC) Headquarters.
 - Major command (MAJCOM)-level or below.
41. (019) If a major command (MAJCOM), such as Air Education and Training Command (AETC), would like to clarify or add to an Air Force publication, it would issue
- a supplement.
 - an official change.
 - a field publication using the same classification.
 - a departmental publication using the same classification.

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42. (019) To obtain a civilian publication for your ophthalmic clinic, you would submit a request to the hospital librarian along with information that generally consists of the stock number (if applicable), description (to include title, author(s), edition, and publisher), unit cost, quantity required, and a
- justification.
 - statement of content.
 - Air Force Form 3126, General Purpose.
 - Department of Defense (DD) Form 1348-6, Single Line Item Requisition System Document.
43. (020) Which font should you use when writing/revising a clinic operating instruction (OI)?
- Arial 10-point.
 - Arial 12-point.
 - Times New Roman 10-point.
 - Times New Roman 12-point.
44. (020) Concerning operating instructions (OI), each clinic should maintain
- a minimum of five hospital OIs.
 - a maximum of five ophthalmic OIs.
 - as many OIs as needed for proper guidance.
 - hospital instructions only; clinic specific OIs are not necessary.
45. (020) What is the best way to *formally* coordinate an operating instruction (OI)?
- Notify the commander and await action.
 - Schedule a meeting of all sections concerned.
 - Initiate a staff summary sheet to circulate through all concerned sections.
 - Circulate a copy of the operating instruction and have the sections initial the first page.
46. (020) Clinic policy allows staff members to clearly understand
- how to submit a manning assistance request to the Resource Management Office (RMO).
 - how to perform an audit of a health record for patient accountability reporting.
 - their roles and responsibilities within predefined limits.
 - their doctor's preference for a patient's pre-screening.
47. (021) In records management, a filing system for records ensures a standard method of filing, storing, retrieving, and
- disposing of records at the end of each fiscal year (FY).
 - disposing of records according to established schedules.
 - transmittal of records according to established schedules.
 - transmittal of records at the end of each FY.
48. (021) Of the personnel responsible for overseeing records management, at the base level you will most likely run across the base records manager (BRM), functional area record manager (FARM), chief of office of record (COR) and
- record manager (RM).
 - record custodian (RC).
 - manager of records (MR).
 - custodian of records (CR).
49. (021) For records management, who should know what a record is?
- Military and contract staff members only.
 - Record custodian (RC) only.
 - Military staff members only.
 - Everyone.

Student Notes

Unit 3. Medical Material Management

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WITH THE DUTY OF MAINTAINING medical material equipment comes responsibility and accountability. The property custodian of a clinic is responsible for different material categories such as ordering supplies and equipment, turn-ins, transfers, and liability of equipment.

3-1. Property Custodian

According to military guidance, management of public property includes the proper allocation, control, care, use, and safeguarding of public property under control of the Air Force. This applies to each individual, whether he or she signed for the property or not. If it is being used by you or under your supervision at the moment, it is your responsibility. Such responsibility includes financial liability. It goes back to the old saying “you break it, you buy it.”

Commanders at all echelons are charged with ensuring only qualified personnel are selected and assigned as accountable officers, which includes property custodians. In addition, commanders are responsible for ensuring:

- Adequate space is provided for proper storage of medical supplies and equipment.
- Prescribed records are maintained.
- Supply discipline is understood and followed.

Obviously, with all the other areas for which commanders are accountable, they aren’t going to be able to meet all of these responsibilities alone. Therefore, the commander will delegate the responsibility to someone else, thus creating the property custodian position. This individual may very well be you. If you’re entrusted with the care of government property, don’t take the responsibility lightly. You are accounting for the material in your section as your commander’s representative. Remember, commanders are still ultimately responsible for the material under their command. You’re assisting the commander when serving as a property custodian.

022. Property custodian duties

If supply issues you an item, accountability is transferred to you along with that item. However, you do not become the owner of the item once it is issued to you. Instead, the Air Force retains ownership, and you assume responsibility for the care and protection of the item.

Custodial responsibilities

The hospital commander appoints an ophthalmic clinic property custodian based on the recommendation of the eye clinic’s flight/element commander or officer in charge (OIC). The appointment letter is a typed delegation of authority. Two copies are made; one copy is forwarded to the Medical Equipment Management Office (MEMO), and the original is maintained in the property custodian binder.

Once appointed by the commander, property custodians are authorized to request and receive medical material for their particular account (or clinic). The new appointee has assumed the commander’s responsibilities for managing material for the clinic’s account. The property custodian will receive training from the MTF logistics section on local ordering procedures as well as accountability for the

care, custody, and safekeeping of property under his or her supervision. The property custodian must promptly report any losses, or other irregularities relating to material, to his or her supervisor. Then, the property custodian should notify medical logistics personnel, who will assist in determining what needs to be done to solve the discrepancy. If there are any questions, refer to AFI 23-111,

Management of Government Property in Possession of the Air Force.

Alternate property custodian

Usually a property custodian has another person in the clinic acting as his or her alternate. This person receives the same training as the primary property custodian. In addition, he or she is designated as the alternate on the appointment letter signed by the hospital commander. This way, if the primary is on leave, goes temporary duty (TDY), or is sick or injured, the alternate can assume responsibility for managing the equipment and supplies in his or her absence.

023. Maintaining supplies and equipment

There will be times when a property custodian must turn his or her account over to someone else. This would occur when the property custodian is being relieved from duty, transferred, separated from service, or will be absent from the account in excess of 45 days. In these circumstances, MEMO personnel need to be notified so they can take action to have the property transferred to an authorized successor.

Review and maintain equipment and supply document

If you assume custodial responsibility for the eye clinic, MEMO personnel provide a copy of the custody receipt/locator listing (CRL) showing all property charged out to the eye clinic account. You take responsibility for the account and all the material in it when you sign the CRL. Before signing the CRL, you and the current property custodian must perform a physical inventory. In other words, both of you verify that every piece of equipment is present and accounted for *before the account is transferred* (fig. 3-1). If an item isn't present, there should be record of its location documented on an AF Form 1297, *Temporary Issue Receipt*.

As the new custodian, review all AF Form 1297s on file, then go to the individuals who signed out the equipment and verify they still have it in their possession. Again, the item must be physically seen. Don't take anyone at his or her word—make sure you lay eyes on the item! Once an item has been located, annotate on the AF Form 1297 the date and name of the person contacted. This shows when the item was last verified. If an item isn't found and it isn't signed out on an AF Form 1297, it's likely the item is missing and an investigation needs to be conducted to determine the responsible party.

Assuming the inventory is going fine, note any damaged equipment. If an item is broken or inoperable, the current custodian should have made a report to Medical Equipment Repair (MER). MER personnel should have assigned a repair number to the item. Check with the MER folks on any damaged equipment to be sure it has already been reported.

The inventory is complete once you have *physically* seen all items, verified the location of missing items, and ensured broken or inoperable equipment has been identified to MER. Take this inventory seriously. If an item is missing or damaged and you didn't verify it was previously reported properly, YOU are now the one responsible and may have to pay for it—not the old custodian.

NOTE: Do not sign the CRL if you cannot account for an item or are in doubt about anything!

Even if the current custodian is your best friend and reassures you everything is there, something may have been stolen just yesterday and your friend is unaware. You are about to become accountable for thousands of dollars' worth of equipment. It just makes sense to protect yourself.

CUSTODY RECEIPT/LOCATOR LIST CUSTODY ACCOUNT 81558G OPTOMETRY CRS										PCN
DET CRG	RC/CC	STOCK NUMBER	LOCATION	INDEX NR	SERIAL NR	ITEM IDENTIFICATION	F I UI	UNIT PRICE	QTY	IN
A	81558G	6540013759031	2D309	05468	AFVT 000353	STEREOSCOPE VIS TEST 115V	M EA	1894.17	1	VF Rm
A	81558G	65401300322	OPTO CRS	05843	23235	MARCO KERATOMETER I 3003	M EA	1520.25	1	VF Rm
A	81558G	65401300322	OPTO CRS	05844	23207	MARCO KERATOMETER I 3003	M EA	1520.25	1	VF Rm
A	81558G	65401300322	OPTO CRS	05845	23208	MARCO KERATOMETER I 3003	M EA	1520.25	1	VF Rm
A	81558G	654013790002	2D307	02919	16954	ZYL FRAME WARMER	M EA	110.00	1	lane 2
A	81558G	654013790002	2D307	02920	16130	ZYL FRAME WARMER	M EA	110.00	1	lane 2
A	81558G	65401379001EE	2D304	03977	606-1574	AUTOMATIC PERIMETER	M EA	9150.00	1	VF Rm
A	81558G	65401379003EE	2D309	04671	34559	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	65401379003EE	2D309	04672	34560	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	65401379003EE	2D309	04673	34571	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	65401379003EE	2D309	04674	34572	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	65401379003EE	2D307	04675	34597	LENSOMETER	M EA	887.50	1	lane 2
A	81558G	65401379003EE	2D308	04676	34598	LENSOMETER	M EA	887.50	1	lane 1
A	81558G	65401379003EE	2D309	04677	34601	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	65401379003EE	2D309	04678	34602	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	65401379003EE	2D309	04679	34607	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	65401379003EE	2D309	04680	34608	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	65401379003EE	2D309	04681	34651	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	65401379003EE	2D309	04682	34652	LENSOMETER	M EA	887.50	1	VF Rm
A	81558G	654013790041	2D307	03802	929	HOT AIR FRAME WARMER	M EA	150.00	1	lane 1
A	81558G	654013790041	2D308	03803	1082	HOT AIR FRAME WARMER	M EA	150.00	1	lane 3
A	81558G	65401379004EE	2D305	05300	1116/0-2645	BINCULAR, INDIRECT	M EA	1711.00	1	lane 4
A	81558G	65401379004EE	2D305	04937	N/A	CHARGER, DESK	M EA	207.65	1	lane 4
A	81558G	654014004101	OPTOM	05770	35633	MARCO 101 LENSOMETER 4004	M EA	1099.00	1	VF Rm
A	81558G	654014004101	OPTOM	05771	35634	MARCO 101 LENSOMETER 4004	M EA	1099.00	1	lane 4
A	81558G	654014004101	OPTOM	05772	35681	MARCO 101 LENSOMETER 4004	M EA	1099.00	1	VF Rm
A	81558G	654014004101	OPTOM	05773	35597	MARCO 101 LENSOMETER 4004	M EA	1099.00	1	VF Rm
A	81558G	654014004101	OPTOM	05774	35598	MARCO 101 LENSOMETER 4004	M EA	1099.00	1	VF Rm
A	81558G	65401500004	2D309	04553	330-7378	LENS ANALYZER	M EA	6426.00	1	VF Rm
A	81558G	65401790138	2D303	04235	10302-B	RADIOSCOPE, MONOCULAR	M EA	990.00	1	VF Rm
A	81558G	65401910005	2D305	04163	700653	PHOTO SLIT LAMP	M EA	16837.00	1	lane 4
A	81558G	65401910005A	2D306	02061	R501069	SLIT LAMP	M EA	5500.00	1	lane 3
A	81558G	65401916289	2D309	02062	520789	LENSOMETER, PROJECTION	M EA	1570.00	1	VF Rm
A	81558G	65401918300	2D309	02063	14-4276	ANALYZER, LENS HDL 310	M EA	6650.00	1	VF Rm
A	81558G	65401663000	OPTO	06015	740-1177	FIELD ANALYZER, HUMPHREY	M EA	21350.00	1	VF Rm
A	81558G	65401663000	OPTO	06016	740-1178	FIELD ANALYZER, HUMPHREY	M EA	21350.00	1	VF Rm
A	81558G	65401MCP600		06169	Automated	PROJECTOR, CHART, OPTOMETRY	M EA	2197.75	1	lane 1
A	81558G	65401MCP600		06170	Automated	PROJECTOR, CHART, OPTOMETRY	M EA	2197.75	1	lane 2
A	81558G	65401RE12430	2D308	05445	14643-4	TONOMETER, NON-CONTACT	M EA	6845.00	1	lane 3
A	81558G	65401RE12430	OPTOM	05446	14635-4	TONOMETER, NON-CONTACT	M EA	6845.00	1	lane 1
A	81558G	65401TL0480003				TRIAL LENS SET	M SE	1079.00	1	VF Rm
A	81558G	6730004704003	2D304	03640	706351	OVERHEAD PROJECTOR	D EA	793.67	1	VF Rm
A	81558G	6730007773374	2D301	02045	62453	PROJECTOR CAROUSEL	M EA	560.00	1	Classroom

Figure 3-1. Example of a CRL.

When you sign and date the CRL, you assume responsibility for all items (in the quantities indicated) on the list. As the custodian, the equipment becomes your administrative and financial responsibility. The original copy of the signed CRL is returned to MEMO. You retain a signed copy as a record of the equipment now under your care. As items are issued to or turned in from the account, a signed AF Form 601, Equipment Action Request, or a custodian action list (CAL) is maintained showing the items' status until the item is correctly listed or removed from the CRL. Once the item shows up or is removed (as appropriate) from the CRL, the AF Form 601 or the CAL may be discarded.

As a property custodian, conduct a periodic inventory to make sure all the equipment is still present. This must be done annually, but may occur more frequently, either by your choice or by a mandate from the commander.

Supplies

The following table identifies the types of supplies and examples.

Category	Description	Example
Medical	An item with a medical use.	Alcohol pads, penlights, medications, blood pressure cuffs.
Nonmedical	Could be used by virtually anyone, regardless of job.	Pencils, pens, light bulbs, lamps, 35mm projector.
Consumable	An item is used up and discarded as it loses its "identity."	Alcohol pad, a light bulb, tissues, Q-tips.
Durable*	Something can be used several times and still maintain its "identity."	Occluders, pseudo-isochromatic plates (PIP test), spectacle frame warmers, an Amsler grid test, etc.

Category	Description	Example
<p>*NOTE: This category is significant, as you might find such a supply item on the CRL (equipment list). Some high dollar, durable supply items require occasional maintenance and may be identified by MEMO personnel as a <i>maintenance significant supply item</i> for accountability purposes. Therefore, you may see your frame warmer reflected as a supply item on your CRL. It's a durable electronic item requiring periodic maintenance, and MEMO just wants to keep tabs on it.</p>		

Ordering supplies can be a weekly, and sometimes even a daily occurrence. Inasmuch, there are a couple of ways to obtain supplies. One way is to place an order electronically through Defense Medical Logistics Supply System (DMLSS). Another way is with the DD Form 1348-6, DOD Single Line Item Requisition System Document, used to order stock listed supply items in an emergency (used as a backup to DMLSS). The DD Form 1348-6 requires a national stock number (NSN) or an item number. If there are any questions, refer to AFI 41-209, *Medical Logistics Support*.

If you order an item *often*, you can have it added to your customer catalog (in DMLSS) or medical shopping guide, which is nothing more than a list based on the things you order most frequently. If an item is on your medical shopping guide or customer catalog, you simply indicate how many of them you want and turn it in to your supply section or order it electronically. If it is a nonmedical supply item, your logistics section will have another shopping guide or customer catalog made up for use by all sections in the hospital to order *nonmedical supply items*. It's appropriately called a *nonmedical shopping guide* or *local vendor listing*. This is where you'd find pens, pencils, tape, staplers, and so forth.

Each section in the hospital is authorized a *maximum* of a two week level of consumable supplies, and only enough durable supplies to support operations. Of course there are always exceptions. For example, specialized clinics may be authorized to stock extra quantities of unique or infrequently procured items (things not commonly stocked by logistics). An example might be contact lens supplies. Who else in the hospital is going to be using enzymatic tablets or Opti-Free®? Since there won't be a stock of these items just sitting around in logistics' warehouse waiting for your clinic to ask for them, these unique items may be kept in greater than normal quantity so you will have enough on hand to hold your clinic over until the items can be procured through normal supply channels. The only restriction is the quantity of these items maintained in the using activity (your clinic) should be kept to the minimum amount required to ensure efficient operation.

Equipment

Equipment is durable and expensive. By MEMO's definition, equipment is any item having a life expectancy of five years or more, maintains its identity when in use, and costs \$2,500 or more.

Equipment is further divided into the following three categories:

1. Expense.
2. Investment.
3. Maintenance significant supply item.

Expense equipment

Expense equipment is a piece of equipment that:

- Has a life expectancy of at least five years.
- Costs less than \$100,000 (\$99,999.99 or less).
- Maintains its identity during use (does not fall apart or get used up).

Approval to purchase expense equipment is made by the hospital commander. The hospital staff needs to prioritize its equipment needs at an equipment review authorization activity (ERAA) meeting, and then the commander reviews and either approves or disapproves the request. Your equipment's ranking on the priority list is largely dependent upon the justification and your overall level of involvement in the process. These priorities are established at the ERAA meeting. Your clinic

must be ready to fight to get your equipment listed as a high priority for purchase. There's nothing wrong with enlisting the help of the senior person in your section at the ERAA meeting. When an item is approved and funded, you'll get the item. At other times, an item is approved but unfunded, meaning you may get it if there's money available later. If no money becomes available later, you'll have to retry during the next fiscal year. The FY in the military runs from 01 October to 30 September for each annual cycle. Be familiar with the fiscal year and plan your requests for equipment accordingly.

Investment equipment

To be considered investment equipment, it:

- Has a life expectancy of at least five years.
- Is an item with a unit cost of \$100,000 or more.
- Maintains its identity during use (does not fall apart or get used up).

Approval to purchase investment equipment must go through the same local approval channels as expense equipment. In other words, it must go through the ERAA meeting and receive approval and be prioritized. Then, the hospital commander reviews and concurs or not with the ERAA findings. If the commander concurs, the request is routed through the MAJCOM and Air Force Medical Logistics Office (AFMLO) for final approval and funding. Just as the ERAA board and hospital commander made a priority list, so do these entities. Your request competes with all of the other requests submitted from other bases within your command, so be prepared for a long ride and try to project as far in advance as possible. However, if the hospital commander or anyone higher up along the way does not concur, it's unfortunately the same as a "veto" of your request. Better luck next time.

Maintenance significant supply item

Medical and nonmedical equipment items that cost less than \$2,500, are not consumed in use, and require occasional maintenance are referred to as maintenance significant supply items. Maintenance significant supply items are maintained on accountable inventory records (such as the CRLL) along with expense and investment equipment. As mentioned before, these would be items such as your frame warmer. Frame warmers cost considerably less than \$2,500, but are not consumed during use and require occasional maintenance.

Preparing the request for equipment

MEMO personnel handle the actual ordering of equipment for the hospital. You will put together and submit to MEMO all the documents required to request the equipment your clinic needs. MEMO will instruct you on these requirements, and you will prepare your equipment request following their locally developed procedures.

NOTE: It's important you realize the approval process for investment equipment can take several months, and it can take several more months following approval to obtain the funding from your MAJCOM. Plan your equipment needs well in advance and be patient.

Typically, cost comparisons are required by MEMO as part of the various equipment request documents. Occasionally, however, you will find you are trying to obtain a piece of specialized equipment that only has one manufacturer. When this is the case, you'll have to submit a letter justifying a "sole source" procurement. Sole source justification is required by the Base Contracting Office (BCO) to avoid the appearance of favoritism since other companies won't be given the opportunity to bid for the contract.

Through the AF Portal you can access the AFMS Knowledge Exchange Optometry/Ophthalmic Technician Website. At this site, under the "Ophthalmic Equipment Information & Justification" link, you can find documents for ophthalmic equipment previously researched and ordered by other ophthalmic technicians. If you check here before beginning your equipment research process, you

may be able to save yourself a lot of work. At the time of this writing, the link can be found at: <https://kx2.afms.mil/kj/kx6/OptometryOphthalmicTechnicians/Pages/home.aspx>.

Turning-in supplies and equipment

To turn-in either supplies or equipment, be sure to coordinate with the Medical Logistics personnel. They need to ensure they have adequate storage space available; additionally, someone from MER needs to be available to inspect the equipment for serviceability. Supplies will be turned-in using DD Form 1348-6; equipment will use AF Form 601. For equipment, you'll need to annotate the justification for why the equipment is no longer needed (e.g., mission change, reduction in patient load, unserviceable, etc.). Make sure you hold on to your copy of either form until you receive an updated issue/turn-in listing. This will ensure the item is removed from your account and you may actually receive a credit for the turned-in item.

Whether you are the property custodian or not, we are all responsible for the care and proper use of supplies and equipment in our clinic. We all need to do our part to conserve government resources and funds. Think of it this way, some of the money to pay for supplies and equipment comes from your tax dollars. With that said, make sure you spend the money allocated to your clinic wisely.

Self-Test Questions

After you complete these questions, you may check your answers at the end of the unit.

022. Property custodian duties

1. Who appoints the ophthalmic clinic property custodian?
2. When is a property custodian authorized to request and receive medical material for their particular account?
3. When the property custodian finds equipment or supplies missing, or damage to equipment, whom should he or she notify?

023. Maintaining supplies and equipment

1. What must occur if the property custodian is absent from the account for 46 days or more?
2. What list or form shows all property charged out to the eye clinic account?
3. If an item is listed but not present during the inventory, what form should be used to indicate its record of location?
4. What are the categories of supply items?

5. What is the authorized *maximum* level of consumable supplies for each section of a hospital?
6. Who can approve the purchase of expense equipment for your section?
7. Pending commander concurrence, where is a request for hospital equipment prioritized and tentatively approved?
8. You are attempting to get a specialized piece of equipment. You can find only one manufacturer of the item requested. What additional documentation will be needed to support your equipment request?
9. Who inspects equipment being turned-in to determine its serviceability?
10. The property custodian gets a signed copy of his or her turn-in request when supply items are turned in. Why is it important the property custodian keep this form until he/she receives the issue/turn-in listing?

3-2. Sterile Processing Department

As an ophthalmic technician, one of your ancillary areas of responsibility may be coordinating processes with the Sterile Processing Department (SPD). This area of the hospital plays a pivotal role in the infection control process. The department we refer to in this course as SPD is known by many names. Depending on the facility, it is known as Central Services, Central Supply, Central Materiel, Central Sterile Supply (CSS), or Central Sterile Supply Service (CSSS). Some facilities may refer to it as Internal Sterilization and Processing, and still others may call it Central Processing and Distribution. Regardless of the name, most of the activities performed by the SPD are related to the decontamination, cleaning, sterilizing, and processing of instruments and other nondisposable items. However, these are not the only functions performed in most SPD departments. To get the true picture, you must be familiar with the general organization and function of SPD.

024. Purpose

The general purpose of SPD is customer service. Its customers include every patient care unit within the entire facility—wards, clinics, operating rooms (OR), recovery, intensive care units, nurseries, labor and delivery, and so forth. Sterile comes from its main function of sterilizing patient care items. Processing comes from its role as a source for processing supplies and equipment to and from patient care units (this role varies from small to large MTFs, depending on local needs and policies). Thus, the section's name tells you what it is and what it does—a sterilizing and processing service for the entire facility.

Stated formally, the primary purpose of SPD is to contribute to improved patient care by providing sterile and nonsterile supplies and equipment efficiently and economically across the medical facility.

Organization

In most cases, SPD falls under Surgical Services in the Medical Operations flight. Exactly where it falls in the chain of surgery varies; it may be placed under the surgical suite or on the same organizational level as the surgical suite.

In some small facilities (e.g., Medical squadrons), there is no surgical department. In this case, SPD usually falls under the Medical Support flight. Regardless of where SPD falls in the chain of the organization, the mission, and purpose remains constant.

Functions

The functions of a SPD evolve from their objectives. Some of the functions of a SPD include:

- Procure, maintain, process, and dispense supplies required for patient care, diagnosis, and treatment.
- Use acceptable methods and techniques for processing materials.
- Develop and maintain controls to provide supplies economically, effectively, and efficiently.
- Take part in supply research, providing information to nursing and medical personnel.
- Provide representation on committees such as infection control, quality improvement/risk management, and staff development.

Services provided

The scope of any SPD is determined by the factors on which it bases the objectives of its services.

Determining the scope

The factors involved in determining the scope of a specific SPD are:

1. Size.
2. Number of beds.
3. Clinic patient load.
4. Geographical location.
5. Number of research areas.
6. Specialties of medical officers.
7. Type of services provided by the facility.
8. Number of procedures in the emergency room, OR, and obstetrical suites.
9. Funds available to invest in space, supplies, equipment, and personnel.

Types of services

SPD personnel offer various services to meet local needs. Some of the most common services offered include:

- Maintaining an adequate stock of sterile and nonsterile supplies. SPD personnel also provide sterile and nonsterile supplies for patient care required by all elements of the MTF and associated satellite activities.
- Providing a distribution and collection service. Distribution of sterile items and collection of contaminated items is a service provided to the nursing units and other using areas. Each of these areas must maintain a level of supply items commensurate with what is required to conduct day-to-day operations.
- Developing, maintaining and updating a list of sterile and nonsterile supplies. The personnel in each SPD publish a list of all the items they provide. These are sub-classified into appropriate groups.

- Maintaining a current list of the contents of sets. This list should indicate which items and sets are disposable. The contents of each set sterilized by SPD personnel should be listed on the outside of the wrapper or package.
- Providing a continuous service on a 24-hour basis. Around-the-clock coverage is necessary to complete the SPD mission. However, few MTFs have the staff to maintain personnel in SPD 24 hours a day. Usually, an “on-call” system is adequate to support the emergency issuance of supplies during evenings, nights, weekends, and holidays.

It's important for SPD personnel to work with the using activities in planning their supply needs. A properly organized SPD greatly facilitates the MTF's ability to deliver patient care.

025. Storage, handling, and inventory control

This lesson covers the proper methods for the storage and handling of sterile supplies and instruments, to include procedures for checking outdates and rotating stock. We will also discuss the factors affecting the shelf life of sterile items.

After sterilization, patient care items are usually stored temporarily until they are selected for patient care use. Wrapped, sterile items are constantly being picked up and handled. Consequently, great care must be taken to protect them from being contaminated or damaged. Commonly used wrapping materials do not provide total protection against accidental contamination; therefore, strict environmental control of sterile storage areas must be maintained. All personnel who process, store, and distribute sterile items must know and follow the proper procedures for handling them. To ensure all sterile items are readily available when needed, they are stored in a neat, orderly fashion. To ensure all items maintained in storage remain sterile, the stock is rotated and periodically checked for outdates.

Improper handling and storage, resulting in package contents contamination, can breach the protective barrier around sterile items, provided by packaging materials. If placed on a wet surface, handled with damp or wet hands, or stored in a high-humidity area, moisture can “wick” into a package, carrying microorganisms from nonsterile surfaces into the sterilized package. If a package is dropped on the floor, dust or dirt may be forced through the packaging. If too loosely wrapped or placed in too big a package, the item may not fit on the storage shelf properly, and the package may become torn, scraped, punctured, or otherwise damaged. Proper handling of sterile items prevents these methods of contamination.

Storing sterile and nonsterile items

The basic principle behind the storage of sterile items is simple; once an item is sterilized, it should be stored in a manner designed to keep it sterile. Sterile storage is a temporary condition; it is a holding area for sterilized items until they are used.

Traffic is restricted in sterile storage areas to limit access. This helps reduce the number of potentially contaminating incidents and excessive air movement transporting airborne contaminants from other areas.

Ideally, sterile items are stored in designated sterile storage rooms or areas. However, space limitations, types and amount of supplies, and other factors will dictate the exact configuration of your storage areas. If sterile and nonsterile supplies must be stored in the same area, keep them strictly separated. Do not store them touching or next to one another, or even on the same shelf. If sterile supplies are stored with nonsterile supplies, the storage area should meet the environmental requirements for storage of the sterile items. Sterile items should be stored above nonsterile items and any liquids.

Environmental factors

Sterile storage areas should be clean, and free of dust, dirt, and vermin. They should be cleaned routinely to maintain an untainted environment.

The sterile storage area should have a positive-pressure ventilation system similar to the type used in an OR. This type of ventilation system helps reduce the level of airborne microorganisms and dust in the storage room. A minimum of 10 exchanges per hour is recommended for sterile storage areas. To prevent excessive air movement, do not use fans in sterile storage areas.

Care must be taken to ensure sterile storage cabinets and shelves are kept moisture-free to prevent strike-through contamination of sterile packages. Temperature and humidity are controlled to prevent extremes. Keep the temperature between 64 degrees Fahrenheit (° F) and 75° F (18° Celsius [C] 25° C), and the humidity between 35 percent and 70 percent. The right combination of temperature and humidity is important because an environment that is too warm and too moist accelerates bacterial growth; one that is too cold is uncomfortable for workers. Extremes of temperature and humidity can compromise package integrity and therefore render the item within unserviceable.

Disposable items are typically delivered in bulk shipping containers or boxes. Remove the sterile items from these containers outside the storage area, and transport them to the storage area on or in a clean supply cart. Never bring boxes and shipping cartons into sterile storerooms because they harbor dust, microorganisms, molds, fungi, and insects. Never use a shipping carton (commonly called an “outside box”) as a sterile supply dispenser. Ensure the transport carts you use for sterile supplies are periodically cleaned and decontaminated with an approved detergent-germicide.

Storage methods

Closed or covered cabinets are the preferred method for storage of sterile items in AF facilities, but open shelves are also acceptable. Regardless of the storage system used, store sterile supplies at least 18 inches below the ceiling, 8 inches above the floor, and 2 inches away from outside walls. The shelves should be constructed of nonporous materials to aid in cleaning (do not use wooden shelves). Never store supplies near or under sinks or pipes. If you do, you are inviting water contamination of your sterile supplies. Dust covers and covered storage bins help maintain the sterility of items, particularly supplies stored on open shelves.

Although closed shelves or cabinets offer greater protection against sterile item contamination, there are a couple of rules you will need to follow to ensure their purpose is not defeated. Primarily, keep the doors and drawers closed! If the doors or drawers are left open, it is no longer a closed cabinet. Another rule is to always open cabinet doors slowly. This is important because opening the door too quickly can cause rapid air movement near the door opening, drawing dust, dirt, and airborne contaminants into the cabinet. Opening the doors slowly also reduces the likelihood of a sterile item falling out of the cabinet and onto the floor.

Arrangement

Avoid overstocking shelves. Cramming packages together or stacking them too high, distorts and damages wrappers as well as package contents. Good supply management and inventory control prevents the unnecessary accumulation of supplies on your shelves. Ideally, maintain only enough sterile supplies (disposable and reusable) to satisfy weekly needs, plus a small reserve for emergencies. Store your larger, heavier items on lower shelves and smaller, lighter items on upper shelves. This is done primarily as a safety precaution to prevent someone from being injured by a heavy, falling object. It also saves “wear and tear” on back, arm, and shoulder muscles.

Periodically clean all storage areas, shelves, cabinets, and bins with a detergent-germicide. This is usually done on a weekly basis in conjunction with “checking outdates.” Remember to thoroughly dry all storage surfaces before placing sterile supplies in or on them.

Proper handling of sterile items

The basic rule to follow when handling sterile items is to handle them as little as possible between the time of sterilization and their use. The sterilized items should remain on the sterilizer cart until they are cool. They should not be handled or even touched while cooling. Even when steam-sterilized items are cool to the touch, condensation may occur if you place them on a cool storage shelf. If the

items must be handled before they are cooled (i.e., sterilizer-to-aerator transfer), they should be handled as little as possible; wear clean, dry, gloves when doing so.

Always check the integrity of a sterile package:

- Immediately after sterilization.
- When putting the item in storage.
- When removing the item from storage.
- Just before use.

Torn, soiled, wet, or distorted packages are considered contaminated; do not use them. If a sterile item falls or drops on the floor, it is contaminated because the force of the impact can drive dirt and microbes into the package. Discard contaminated disposable items and reprocess reusable ones. If the contaminated package contains linen items, launder them before they are wrapped and sterilized again to prevent fabric superheating.

If a plastic dust cover is used to extend the shelf life of a sterilized item, allow the item to cool to room temperature to prevent moisture condensation from forming inside the sealed dust cover. Since the dust cover is not sterile, condensation can result in strike-through contamination. Place the dust cover on the sterilized item as soon as possible after sterilization (and cooling). The dust cover must allow the sterilization control label to be read, and must have a label indicating the plastic wrap is a dust cover. Most facilities use a label that reads “Outer wrap not sterile, only inner contents are sterile” or a similar statement.

If you perform sterile supply inventories, avoid picking up and moving packages. If they are properly stored, you should be able to see and count them with minimal physical contact with the packages. Do not “squeeze” sterile packages to remove excess air after they are sterilized; the air should have been removed before the cycle. Squeezing excess air out of the package may result in unsterile air being drawn into the package. If transporting supplies from one place to another, try to use a covered cart or basket, especially if traveling through unrestricted areas. Avoid hand-carrying items whenever possible; use a pillowcase or plastic bag for small items and a cart for large items. If you must hand-carry a sterile item, hold it in your hands. Never carry items cradled in your arms or tucked under your arms; the excessive contact with perspiration-prone skin may result in strike-through contamination.

Inventory control

To ensure the stock records balance against actual stock on hand, physical inventories are taken. This inventory is used to discover shortages, overages, and misidentified property. This inventory also enables you to determine if items have been accounted for accurately and provides an excellent opportunity to dispose of obsolete or excessive material.

Every time you pick up items from SPD you need to inventory the items. If you do not conduct an inventory, how can you ever tell if an item is missing? Maybe those forceps you must replace are actually ending up in the ear, nose, and throat clinic instead of your area.

To manage and control the number of sterile supplies maintained in your storage areas, you must understand and follow standardized policies and procedures for checking outdates, rotating supplies, and determining shelf life.

Checking for outdates

Checking outdates is simply checking the expiration dates (if used) or sterilizer control number, as well as package integrity to ensure all items in sterile storage still meet the criteria for sterility. At least once a week, check all sterile supplies to ensure none are outdated. Also, check for expiration and sterile integrity each time you pull an item from storage and immediately before the item is opened for patient care use. Depending upon type, discard or reprocess any items found to be outdated as defined by the manufacturer’s recommendations, and local policies.

If a particular item is frequently discovered to be outdated, the packaging method, stock level, or stock rotation may warrant adjustment. The item in question may not even require sterile storage. The constant reprocessing of outdated items is a waste of supplies and manpower, and should be continually monitored to prevent the expenditure of unnecessary effort. Over-ordering disposable items having a sterility expiration date is also a waste of supplies and money if you end up throwing them out before they have an opportunity to be used.

This brings us to the next point—don't forget to check commercially prepared, sterile supplies for outdates. Although most prepackaged sterile supplies are considered "sterile unless package is opened or damaged," some items do expire, particularly those associated with drugs (e.g., anesthesia block trays), culture media (e.g., in culture tubes), or other chemical agents (e.g., the chemicals contained in some blood collection tubes).

Rotating supplies

The problem of excessive outdates is virtually eliminated by proper stock rotation. The principle is simple—first in, first out (FIFO). This means items placed in storage first, should be used first. Local policy dictates exactly how to rotate your in-house and commercially sterilized items; ensure you become familiar with these policies.

Do not place newly sterilized items on the shelf in front of "older" items. This causes the items toward the rear of the shelf to outdate before they are used, and is a wasteful practice that is totally preventable. Not only does it waste supplies, but also your valuable time by forcing you to discard or reprocess items unnecessarily.

Shelf life

Shelf life is the length of time a sterile item is assumed to remain sterile while in storage. Shelf life is event-related and depends on numerous factors. Those factors can include the type of packaging used, the number of times a package is handled and number of people handling it, and the storage method used.

The specific shelf life policy used in your facility is usually determined by the OR (if applicable to your MTF) and the SPD, working closely with the infection control committee. The policy must be written, and should be based on experience, knowledge of current national standards, research data, input from infection control personnel, and hospital-specific needs and storage conditions.

There are several factors affecting shelf life that supervisors must take into consideration when establishing shelf-life policies.

Packaging materials used

The primary purpose of the wrapping material or other packaging method used is to maintain sterility until the package is opened. How well a particular package does so affects the shelf life of a sterilized item. As stated earlier, commercially packaged items are usually considered sterile indefinitely, unless they are opened or the package integrity is otherwise compromised. Most manufacturers use packaging, such as impervious plastic or plastic-coated wrappers, that resist punctures, tears, and moisture strike-through. These packages often have additional layers of material surrounding the items, providing extra insurance against accidental contamination.

Supplies you process and sterilize are dependent upon their packaging materials to maintain sterility. Some of the characteristics of packaging materials and their effect on shelf life include:

- How permeable or porous the package is.
- How long (under various conditions) the packaging retains its barrier capability.
- The length of time the manufacturer states the items packaged in their product may be considered as sterile.

Cloth and paper wrappers are more porous than plastic and unwoven wrappers. Items wrapped in cloth or paper may be assumed to be contaminated more easily, thus having a shorter shelf life. Items wrapped in nonwoven wrappers or sealed in plastic dust covers are more resistant to microbial penetration, so they are assumed to have a longer shelf life. Some packaging materials may break down and lose their protective capability over time. If a package tends to break down, shelf life is only good as long as the package retains its original capability. Manufacturers subject their packaging materials to numerous tests under different conditions to assess the effectiveness of their products. If a manufacturer states the packaging maintains sterility for 30 days, the shelf life cannot exceed 30 days. If the manufacturer states the packaging can maintain sterility indefinitely, the shelf life may be indefinite or “until package is opened or damaged.”

In addition to the type of packaging materials, sealing methods influence package integrity. Tape is commonly used to seal wrapped items; however, tape may fail under certain environmental conditions. Heat-sealing of plastic/paper peel packs is an excellent method of ensuring package integrity and extending shelf life, especially if there are multiple sealing lines on the package.

Package handling

Handling also affects shelf life. The more times an item is handled, or the greater the number of people handling it, the greater the risk of contamination of the contents (and the shorter the shelf life). Handling of sterile items may force unsterile air into a package or it may result in strike-through contamination from moisture on the hands, enabling airborne contaminants to enter the package and compromise its sterility. Packs wrapped in impervious materials (e.g., plastic) are less affected by repeated handling. Small items, particularly peel-packaged ones, commonly stored in bins or baskets may be at high risk for contamination by personnel sorting through the packages. The repeated shuffling of these small packages may eventually lead to seal failure or punctures in the wrapper caused by protruding contents or rough handling of the items. Generally, the more times an item will be potentially handled, or the more people potentially handling it, the higher the risk of contamination is assumed, and the shorter the item’s shelf life.

Another package-handling factor affecting shelf life is the training of the people who actually handle the items—the customers. Are they aware of and do they follow the proper procedures for handling and storing supplies? Do they maintain high standards of personal hygiene? Do they frequently wash their hands during the day, especially after removing gloves, touching a patient, handling contaminated items, or eating a meal? If the answer is “no” to one or more of these questions, then the shelf life of sterile goods in their department is questionable.

Storage environment

The storage environment influences shelf life. This includes the storage method used, ventilation system, humidity and temperature range, and how much (and what type) of “traffic” is in the room. In addition to these items, if vermin are present, the risk of contamination is high. Insects are small enough to crawl under the wrapper flaps and enter the sterile inner areas of a package. Keep this in mind when factoring in how the storage environment can affect an item’s shelf life.

Quality control indicators

All items sterilized locally should meet the following criteria before being placed in sterile storage:

1. Label each item with the identity of the contents, and a load control or other traceability label. The load control number usually consists of the sterilizer number, Julian date, and load number. For example, a load control number might read 01-042-03. The “01” is sterilizer number 1; the “042” is the Julian date, or numerical day of the year (the 042 date is 11 February); and the “03” stands for the third sterilization load (run in sterilizer number 1) of the day. This is only an example of a load control number; the number used in your hospital may be different, but it must be a unique number for each sterilization load so the contents of the load can be easily traced.

2. The sterilizer load's mechanical recording device records are monitored and retained to verify sterilizer conditions (e.g., time, temperature, and pressure).
3. An internal chemical indicator must be placed inside every package sterilized. An external chemical indicator must be on the outside of each item.
4. Biological monitoring must be accomplished according to current national standards.
5. Daily air removal testing (Bowie-Dick) must be accomplished on all pre-vacuum steam sterilizers.
6. The integrity of each package must be inspected before it is placed in storage and again before use.

Determining shelf life

Although the specific shelf life policy used in your treatment facility is determined by local policy as described previously, there are two basic methods used in AF facilities. The oldest, traditional method is time-related; items are considered sterile for a specific period. The other method is event-related; items are considered sterile indefinitely unless an event occurs to compromise the sterile integrity.

Time-related shelf life

The time-related method of shelf life involves labeling each item sterilized with a specific expiration date. When the expiration date is reached, the item is considered unsterile, even if the package integrity is intact. Labeling packages with an exact expiration date helps to ensure they are rotated properly, and no item sits on the shelf for an overly long period of time. When the time-related method is used, the quantity of sterile items in storage should be kept to the minimum required to reduce the likelihood of unnecessary reprocessing of outdates.

The expiration date should be stamped, marked, or otherwise indicated on all items before the sterilization process. Many facilities use a self-adherent label (fig. 3-2) with the expiration date and sterilization control number stamped on it. A label is placed on each sterilized item. Sterile supplies that have reached their expiration date are completely disassembled, reprocessed, and sterilized. When linen is part of the tray contents, it must be freshly laundered.

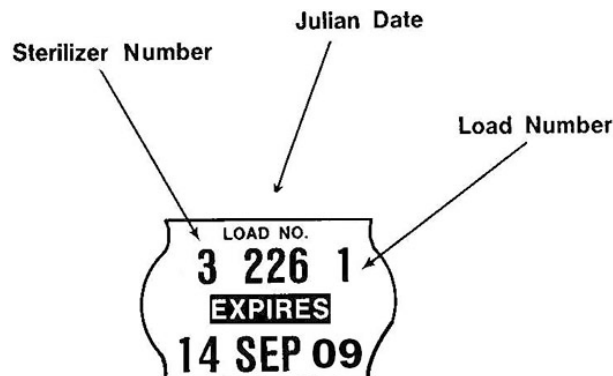


Figure 3-2. Sterilization control label for time-related shelf life.

The recommended expiration dates for locally sterilized items are shown in the following table:

Recommended Expiration Dates for Locally Sterilized Items Using Time-related Shelf-life Method	
Item/Items	Expiration Dates
Items wrapped in cloth or disposable wrappers	Considered sterile for 30 days.
Items in peel-pack pouches	Considered sterile for six months.

Recommended Expiration Dates for Locally Sterilized Items Using Time-related Shelf-life Method	
Item/Items	Expiration Dates
Wrapped items placed in a plastic dust cover within a few hours after sterilization	Considered sterile for six months, unless the plastic cover or package is damaged.
Items in rigid containers	Sterile for as long as the manufacturer recommends (generally 6 months) as long as the filters remain in place, sealing valves/gaskets remain sealed, and container securing devices/safety seals are intact.
Locally prepared and sterilized normal saline and distilled water	Sterile for 30 days or until the vacuum seal is broken.

Event-related shelf life

The event-related method of shelf life assumes an item remains sterile until an event occurs compromising its sterility. Like the time-related method, each item is also labeled with a sterilization control number; the difference is no expiration date is used. Figure 3-3 shows an example of a sterilization control label for event-related shelf life.

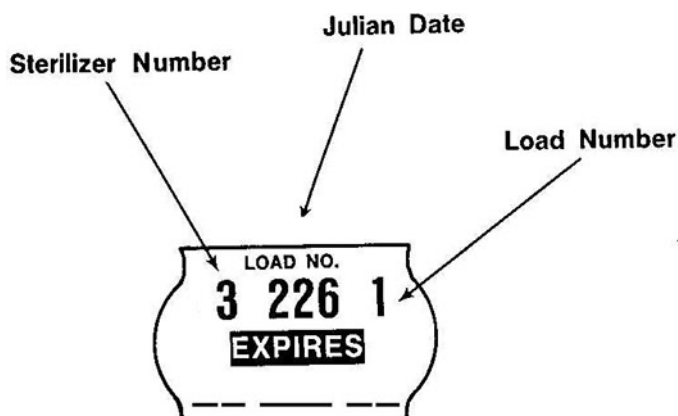


Figure 3-3. Sterilization control label for event-related shelf life.

Guidelines for facilities electing to use the event-related method are:

1. Biological monitoring is accomplished for *all* sterilization loads. Daily or weekly testing is not considered adequate.
2. Every item considered sterile indefinitely must have an exterior label indicating the “contents are sterile unless the package is opened or damaged” or similar statement concerning the integrity of the package.
3. Designation of indefinite shelf life does not apply to items wrapped in cloth or disposable wrappers unless they are placed in dust covers within a few hours after sterilization. Wrapped packages without dust covers must be given one-month expiration dates. When these items are routinely returned for reprocessing without having been used, consider using dust covers.
4. Items in peel-packs are considered sterile indefinitely.
5. Items wrapped in cloth or disposable wrappers, and then placed in plastic dust covers within a few hours after sterilization, are considered sterile indefinitely. These items should have exterior labels clearly delineating “dust cover” or “protective overwrap” to prevent the dust cover from being mistaken for a sterile wrapper. Local policy must specifically designate how long these items are considered sterile after the dust cover is removed or is damaged; this time must not exceed 30 days.

6. Items in rigid containers are sterile for as long as the manufacturer recommends; if no recommendation is given, indefinite shelf life may be assumed as long as the filters remain in place, sealing valves/gaskets remain sealed, and container securing devices/safety seals are intact.
7. No items in compromised packages (damaged, torn, dirty, dusty, damp, or stained) are considered sterile. They must be returned for reprocessing.
8. Stock rotation must be practiced in all areas of the medical facility to ensure items sterilized first are used first (remember FIFO).
9. Facility-wide education and training must be provided on the labeling system used, proper handling and visual inspection of packages, stock rotation procedures, and use of items in dust covers. Written policies must be established and distributed to users on how shelf life is determined and how it is subsequently labeled on the products.

Self-Test Questions

After you complete these questions, you may check your answers at the end of the unit.

024. Purpose

1. What is the primary purpose of SPD?
2. List some of the common services provided by SPD personnel.

025. Storage, handling, and inventory control

1. Identify three ways sterile package contents can become contaminated.
2. Why are sterile supplies stored in a limited-access, enclosed area?
3. How does a positive-pressure ventilation system help to maintain a sterile storage area?
4. Why is it important to control the temperature and humidity of your sterile storage area so items are not exposed to extremes?
5. What is the reason shipping cartons are never allowed in a sterile storage area?
6. How far away from ceilings, floors, and outer walls should sterile supplies be stored?
7. What type of material aids in cleaning and, therefore, should be used for storage shelves?

8. Usually, how often are sterile supply storage areas cleaned?
9. What basic rule do you follow when handling sterile supply items?
10. When do you check the integrity of a sterile package?
11. What do you do with a sterile item that falls on the floor? Why?
12. When is a dust cover placed on a steam-sterilized item? Why?
13. How often do you check for outdates on sterile supplies?
14. What actions can be taken to help correct the problem of excessive outdates?
15. What acronym indicates which sterile item you should use first from storage? What does the acronym stand for?
16. If you are looking for an item that is usually considered sterile for an indefinite period of time, should you choose an item that has been commercially packaged or locally packaged? Why?
17. What are three packaging characteristics you should take into consideration when determining shelf life?
18. If you repeatedly handle sterile supplies, how might that affect the shelf life? Why?
19. What type of packaging should you use if your items require a material that is less affected by repeated handling?

Answers to Self-Test Questions

022

1. The hospital commander.
2. Once appointed by the commander.
3. His or her supervisor and medical logistics personnel.

023

1. The account must be transferred to someone else.
2. CRLI.
3. AF Form 1297.
4. Medical or nonmedical, consumable or durable.
5. 2-week supply.
6. The hospital commander.
7. At the ERAA meeting.
8. A sole source justification letter.
9. MER personnel.
10. To ensure the item is removed from your account and you may actually receive a credit for the turned-in item.

024

1. To contribute to improved patient care by providing sterile and nonsterile supplies and equipment efficiently and economically across the medical facility.
2. (1) Maintaining an adequate stock of sterile and nonsterile supplies.
(2) Providing a distribution and collection service.
(3) Developing, maintaining, and updating a list of sterile and nonsterile supplies.
(4) Maintaining a current list of the contents of sets.
(5) Providing a continuous service on a 24-hour basis.

025

1. (1) Moisture wicking.
(2) Dirt or dust forced through package pores.
(3) Package damage.
2. To minimize traffic through the area, and help reduce the number of potentially contaminating incidents and excessive air movement that transports airborne contaminants from other areas.
3. It helps to reduce the level of airborne microorganisms and dust in the storage room.
4. Extremes of temperature and humidity can compromise package integrity and render the item unserviceable.
5. They harbor dust, microorganisms, molds, fungi, and insects.
6. 18" below the ceiling, 8" above the floor, and 2" from outside walls.
7. Nonporous materials.
8. Weekly.
9. Handle them as little as possible between sterilization and use.
10. Immediately after sterilization, when putting the item in storage, when removing the item from storage, and just before use.
11. It is discarded if disposable and reprocessed if reusable; the item is considered contaminated by dirt and microbes forced into the package by the impact of the fall.
12. After the item has cooled to room temperature; to prevent moisture condensation inside the sealed dust cover because, since the dust cover is not sterile, condensation results in strike-through contamination.
13. At least weekly.

14. The packaging method, stock level, or stock rotation may warrant adjustment; the item(s) in question may not even require sterile storage.
15. FIFO; First in, first out (the items placed in storage first should be used first).
16. Commercially; commercially packaged items are usually considered sterile indefinitely, unless they are opened or the package integrity is otherwise compromised.
17. (1) How permeable or porous the package is.
(2) How long (under various conditions) the packaging retains its barrier capability.
(3) The length of time the manufacturer states the items packaged in their product can be considered sterile.
18. The more times an item is handled, or the greater the number of people handling it, the greater the risk of contamination of the contents; handling of sterile items may force unsterile air into a package, or it may result in “strike-through” from moisture on the hands, enabling airborne contaminants to enter the package and compromise sterility.
19. Packages wrapped in impervious materials (e.g., plastic).

Unit Review Exercises

Note to Student: Consider all choices carefully, select the *best* answer to each question, and *circle* the corresponding letter. When you have completed all unit review exercises, transfer your answers to the Field Scoring Answer Sheet.

Do not return your answer sheet to AFCDA.

50. (022) At which level does safeguarding public property under control of the Air Force apply?
- a. Commander.
 - b. Supervisor.
 - c. Individual.
 - d. Custodian.
51. (023) *Prior* to taking over an equipment account, the new equipment custodian must
- a. receive a briefing on responsibilities.
 - b. conduct a physical inventory of equipment.
 - c. document his/her experience for commander review.
 - d. review the files to establish when equipment was procured.
52. (023) The categories of supply items include medical, nonmedical, consumable, and
- a. durable.
 - b. recyclable.
 - c. disposable.
 - d. dependable.
53. (023) Who would be the approving authority to purchase a new \$65,000 retinal camera?
- a. Medical Group (MDG) commander.
 - b. Medical Support Squadron (MDSS) commander.
 - c. Resource Management Office (RMO) purchasing officer.
 - d. Medical Logistics Medical Equipment Repair (MER) officer.
54. (023) An item is considered investment equipment if it costs
- a. \$2,500 or more.
 - b. \$10,000 or more.
 - c. \$100,000 or more.
 - d. \$250,000 or more.
55. (023) You have decided that a piece of equipment is no longer required for your clinic. You are completing an Air Force Form 601 to turn in the item. Which statement would *not* be an acceptable justification for turn-in?
- a. "Item is no longer needed."
 - b. "Item is no longer serviceable."
 - c. "Item is not required due to change in mission."
 - d. "Item is not used due to reduction of patient load."
56. (024) A function of the sterile processing department (SPD) is to
- a. purchase instruments for user accounts.
 - b. inventory your stock for adequate supplies.
 - c. distribute and collect items from nursing units only.
 - d. use acceptable methods and techniques for processing materials.

57. (024) A service the sterile processing department (SPD) provides is to
- a. publish a list of items you provide.
 - b. ensure around-the-clock coverage.
 - c. inventory your stock for adequate supplies.
 - d. distribute and collect items from nursing units only.
58. (025) What is the *minimum* distance in inches from the ceiling that you need to store sterile items?
- a. 2.
 - b. 8.
 - c. 18.
 - d. 22.
59. (025) Which basic rule do you follow when handling sterile packaged items?
- a. Hand-carry supplies close to your body, cradled in your arms.
 - b. Wear sterile gloves anytime you are handling wrapped sterile supplies.
 - c. Handle supplies as little as possible between the time of sterilization and use.
 - d. Never let sterile supplies be handled by the same person twice following sterilization.
60. (025) In reference to supply rotation, what does the phrase “first in, first out” mean?
- a. Items put in storage first are used first.
 - b. Newly sterilized items are put on the shelf in front of older items.
 - c. Supplies are rotated so items with no expiration date are used first.
 - d. Items that have reached or gone past their expiration date are the first ones used.

Student Notes

Glossary

Abbreviations and Acronyms

A&FRC	Airman and Family Readiness Center
AAS	Associate in Applied Science
AASD	aviation or aviation-related special duty
ABO	American Board of Opticianry
ABOC	American Board of Opticianry Certified
ACLP	Aircrew Contact Lens Program
ACOE	Accreditation Council on Optometric Education
AEF	Air Expeditionary Force
AETC	Air Education and Training Command
AETCI	Air Education and Training Command instruction
AF	Air Force
AFCDA	Air Force Career Development Academy
AFCFM	Air Force career field manager
AFDPO	Air Force Department Publishing Office
AFDRAP	Air Force Dental Readiness Assurance Program
AFI	Air Force instruction
AFJI	Air Force joint instruction
AF JQS	Air Force job qualification standard
AFMAN	Air Force manual
AFMLO	Air Force Medical Logistics Office
AFMS	Air Force Medical Service
AFOSH	Air Force Occupational Safety and Health
AFPAM	Air Force pamphlet
AFPD	Air Force policy directive
AFRES	Air Force Reserve
AFRIMS	Air Force Record Information Management System
AFS	Air Force specialty
AFSC	Air Force specialty code
AFTR	Air Force training record
AHLTA	Armed Forces Health Longitudinal Technology Application
ALS	Airman Leadership School
AMDS	Aerospace Medicine squadron

ANG	Air National Guard
ANSI	American National Institute Standards
AOA	American Optometric Association
ASIMS	Aeromedical Services Information Management System
BCO	base contracting office
BMT	basic military training
BRM	base records manager
BSC	Biomedical Sciences Corps
C	Celsius
CAA	career assistance advisor
CAL	custodian action list
CCAF	Community College of the Air Force
CCM	Command Chief Master Sergeant
CDC	career development course
CE	continuing education
CEM	chief enlisted manager
CFETP	Career Field Education and Training Plan
CFR	Code of Federal Regulations
CHCS	Composite Health Care System
CLEP	College Level Examination Program
CMSgt	chief master sergeant
COA	Certified Ophthalmic Assistant
COEI	Commission on Occupational Education Institutions
COMT	Certified Ophthalmic Medical Technologist
COR	chief of office of record
COSA	Certified Ophthalmic Surgical Assistant
COT	certified ophthalmic technician
CPC	Commission on Paraoptometric Certification
CPO	certified paraoptometric
CPOA	certified paraoptometric assistant
CPOT	certified paraoptometric technician
CRLL	custody receipt/locator listing
CRS	corneal refractive surgery
CSS	Central Sterile Supply
CSSS	Central Sterile Supply Service
CY	calendar year

DANTES	Defense Activity for Nontraditional Education Support
DD	Department of Defense
DLC	duty limitation code
DMLSS	Defense Medical Logistics Supply System
DNIA	duties not to include alert
DNIC	duties not including controlling
DNIF	duties not involving flying
DNIJ	duties not including jumping
DOD	Department of Defense
DS	Dental squadron
DVA	distant visual acuity
EHR	electronic health record
ER	emergency room
ERAA	equipment review authorization activity
ERM	electronic records management
EST	enlisted specialty training
F	Fahrenheit
FARM	functional area record manager
FEQ	field evaluation questionnaire
FIFO	first in, first out
FOIA	Freedom of Information Act
FTAC	first term airman center
FY	fiscal year
GAS	graduate assessment survey
GMI	gas mask insert
GPM	group practice manager
HCP	health care provider
HIPAA	Health Insurance Portability and Accountability Act
IMR	individual medical readiness
JCAHPO	Joint Commission on Allied Health Personnel in Ophthalmology
JQS	job qualification standard
LASIK	laser-assisted in situ keratomileusis
LMMS	leadership, management, and military studies
MAJCOM	major command
MCSC	managed care support contracts
MDG	Medical group

MDOS	Medical Operations squadron
MDSS	Medical Support squadron
MDW	Medical wing
MEMO	Medical Equipment Management Office
MER	medical equipment repair
METC	medical education and training campus
MHS	military health system
MOU	memorandum of understanding
MSC	Medical Service Corps
MTF	medical or military treatment facility
MTI	military training instructor
MTL	military training leader
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
NSN	national stock number
OCT	optical coherence tomography
OI	operating instruction
OIC	officer in charge
OJT	on-the-job training
OMG	objective medical group
OPR	office of primary responsibility
OR	operating room
OSHA	Occupational Safety and Health Administration
OSHAct	Occupational Safety and Health Act
PCM	primary care manager
PCS	permanent change-of-station
PHA	preventive health assessment
PME	professional military education
PPE	personal protective equipment
PRK	photorefractive keratectomy
PX	Post Exchange
QA	quality assurance
RC	record custodian
RDS	records disposition schedule
RFR	right of first refusal
RM	risk management or referral management

RMC	referral management center
RMO	resource management office
SAL	service availability listings
SF	standard form
SG	surgeon general
SGH	chief medical officer
SMSgt	senior master sergeant
SNCO	senior noncommissioned officer
SNCOA	Senior Noncommissioned Officer Academy
SOAP	Subjective Objective Assessment Plan
SPD	Sterile Processing Department
SrA	senior Airman
SRTS	Spectacle Request Transmission System
SSgt	staff sergeant
SSN	social security number
STS	specialty training standard
TDY	temporary duty
TJC	The Joint Commission
TO	technical order
TOPA	TRICARE operations and patient administration
TSgt	technical sergeant
TTI	technical training instructor
UCMJ	Uniform Code of Military Justice
UGT	upgrade training
USAFSAM	USAF School of Aerospace Medicine
UTM	unit training manager
VA	visual acuity
VF	visual field

Student Notes

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