

AIA GUIDELINES 2006

OVERVIEW OF REVISIONS

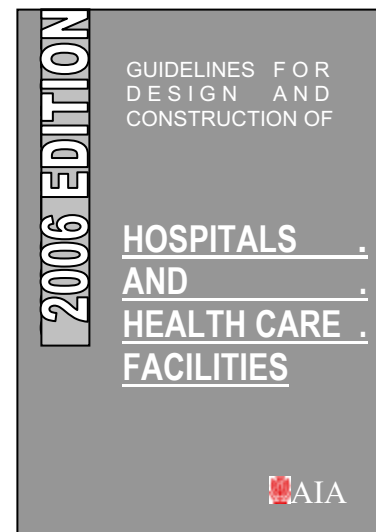
Introduction:

The Guidelines have been in use for 58 years since appearing in the Federal Register in 1947. Since 1984, it has been published by the American Institute of Architects under the direction of the Health Care Finance Administration, now known as the Centers for Medicare and Medicaid Services (CMS). In 1998 the Facilities Guidelines Institute (FGI) was formed in cooperation with the AIA Academy of Architecture for Health in order to ensure that the Guidelines will continue to be revised and published.

This edition of the Guidelines is the second edition to be published under the FGI.

This edition of the Guidelines has several major changes in both content and in format.

- The document is being re-organized and number **formatted similar to NFPA 101**.
- There will be **4 major sections: General** (formerly chapters 1, 2, 3, 4, 5 & 6), **Hospitals** (formerly chapters 7, 10 & 11), **Ambulatory Care** (formerly chapters 9 & 12) & **Other Health Care Venues** (formerly chapters 8, 13, 14 & 15) as well as a glossary and index.
- Three facility sub-sections have been expanded to full standards: **Adult Day Care, Assisted Living & Hospice Care**.
- Updated and expanded language has been added to Infection Control Risk Assessment (ICRA) in Chapter 5.
- Language has been standardized where appropriate for Inpatient & Outpatient services.
- Sweeping editorial changes coordinate the content of all sections.



Revisions by Chapter :

CHAPTER 1 - GENERAL

► Appendix

This section is intended as an aid to understanding the intent of the requirements found in the main body of the document. It has been kept within the main document in order to encourage its use and to make using it easier. In most cases, appendix sections corresponding to main document sections can be found on the same page.

Please note that the word “shall” does not appear in the appendix and that items in the appendix are not mandatory but are essential in understanding the intent of the standards.

► Glossary

Several new definitions have been added for clarity and for planning purposes. The major new definitions are:

Bed Size – For planning purposes, unless an actual size is given, 40”wide x 96” long shall be used.

Clear Floor Area – This is usable space and does not include anterooms, alcoves, vestibules, toilet rooms, closets, or space encumbered by wardrobes, lockers, fixed base or wall cabinetry, counters, etc.

Invasive Procedure – Any procedure that penetrates the body’s protective surfaces (skin, mucous membranes, cornea, etc.). This does not include IV’s, catheters, gastro endoscopes, dialysis and similar procedures.

Minimum Clearance – The shortest distance from an object (bed, exam table, recovery stretcher, etc.) to a fixed points (wall, cabinetry, sink, etc.).

Monolithic Ceiling – A ceiling free of fissures, cracks & crevices. A lay-in ceiling is not monolithic. All penetrations of monolithic ceilings must be sealed or gasketed.

► Environment of Care

Previously this chapter had a single paragraph dealing with general considerations for energy conservation. All new language has been added to deal with the larger context of enhanced patient environments, employee effectiveness, and resource stewardship.

The goal of the Environment of Care chapter is to identify overall components and specific key elements that directly affect the health care delivery system. These components and key elements influence patient outcomes and satisfaction, dignity, privacy, confidentiality, safety, medical errors, stress, and impact health care facility operations.

The following has been added:

Functional Program

A functional program must be submitted for each project, that describes the purpose of the project, the projected demand or utilization, staffing patterns, departmental relationships, space requirements, environment of care components, key elements, and other basic information related to fulfillment of the institution's objectives.

- The program shall address the size and function of each space and any other design feature.
- It shall include the projected occupant load, numbers and type of staff, patients, residents, visitors and vendors.
- In treatment areas, describe the types and projected numbers of procedures.
- It shall describe the circulation patterns for staff, patients or residents, the public and also the circulation patterns for equipment and clean and soiled materials.
- It shall address equipment requirements and describe building service equipment and fixed and moveable equipment.
- Where circulation patterns are a function of asepsis control requirements, it shall note these features.
- The program shall use the same names for spaces and departments as used in the Guidelines. If acronyms are used, they shall be clearly defined.
- The names and spaces indicated in the functional program shall be consistent with the submitted floor plans.
- The functional program shall address potential future expansion that may be needed to accommodate increased demand.

Former Chapter 2 also provides a listing of items in the physical environment that must be considered when designing a healthcare facility.

- **Light and views.** Use and availability of natural light, illumination, and views shall be considered in the design of the physical environment.
- **Clarity of access** (wayfinding). Clarity of access shall be addressed in the overall planning of the facility, individual departments, and clinical areas.
- **Control of environment.** Patient/resident/staff ability to control their environment.
- **Privacy/confidentiality.** Patient/resident level of privacy/confidentiality shall be addressed.
- **Safety/security.** Patient/resident/staff/visitor safety and security shall be addressed.
- **Finishes.** The effect on patients/residents/staff/visitors of materials, colors, textures, and patterns shall be considered. Maintenance, performance and safety shall be considered when selecting these items.

- **Cultural responsiveness.** The culture of patients/residents/staff/visitors shall be considered in the overall planning of the facility.
- **Water features.** Where provided, open water features shall be equipped to safely treat and manage water quality to protect occupants from infectious or irritating aerosols.

Sustainable Design

Sustainable design, construction, and maintenance practices to improve building performance shall be considered in the design and renovation of health care facilities.

The basic components of sustainable design are:

Site selection and development. Design should minimize negative environmental impacts.

Waste minimization. Design should minimize waste in construction and operation.

Water quality and conservation. Design should encourage conservation in all phases of facility development or renovation.

Energy conservation. Design should encourage energy conservation in all phases of facility development or renovation. Design and selection of mechanical and electrical systems, as well as efficient utilization of space and climatic characteristics, should significantly reduce overall energy demand and consumption.

Indoor air quality. The impact of building design and construction on indoor air quality shall be addressed. Design should minimize impact from both exterior and interior air-contamination sources.

Impact of selected building materials. Design should address the environmental impacts associated with the life cycle of building materials.

Safety and Security

Attention should be given to balancing readily accessible and visible external access points to the facility with the ability to control and secure all access points in the event of an emergency. Factors such as adequate exterior lighting in parking lots and entry points to the facility, and appropriate reception/security services are essential to ensuring a safe environment.

► Site

This chapter has had minor changes as follows:

Mercury Elimination

For new construction, health care facilities shall not use mercury-containing equipment, including thermostats, switching devices, and other building system sources. For renovation, health care facilities shall develop a plan to phase out mercury-containing sources and upgrade current mercury containing lamps to low or no mercury lamp technology.

► Planning, Design & Construction

Traditionally, this chapter has dealt with provisions to be taken by the facility and contractors to minimize the hazards to patients, staff and visitors during construction projects. This had previously been done as recommendations. The 2001 edition made an Infection Control Risk Assessment (ICRA) mandatory for all projects undertaken at all facilities (Hospitals, Nursing Facilities, Outpatient Facilities, Etc.) covered by the Guidelines.

Former Chapter 5 has been re-written to emphasize that facility construction, whether for freestanding buildings or expansion and/or renovation of existing buildings, can create conditions that are harmful to patients and staff. For that reason, planning, design, and construction activities for health care facilities shall include, in addition to space and operational needs, consideration of provisions for infection control, life safety, and protection of patients during construction.

The section on ICRA's (Infection Control Risk Assessment) has been expanded with the following language:

ICRA's

The ICRA shall address, but not be limited to, the following:

- Number, location, and type of airborne infection isolation and protective environment rooms.
- Location(s) of special ventilation and filtration such as emergency department waiting and intake areas.
- Air handling and ventilation needs in surgical services, airborne infection isolation and protective environment rooms, laboratories, local exhaust systems for hazardous agents, and other special areas.
- Water systems to limit *Legionella* sp. and waterborne opportunistic pathogens.
- Finishes and surfaces.
- The impact of disrupting essential services to patients and employees.
- Determination of the specific hazards and protection levels for each.
- Location of patients by susceptibility to infection and definition of risks to each.
- Impact of potential outages or emergencies and protection of patients during planned or unplanned outages, movement of debris, traffic flow, cleanup, and testing and certification.
- Assessment of external as well as internal construction activities.
- Location of known hazards.

Infection control risk mitigation recommendations. (ICRMR)

- The owner shall ensure that construction-related requirements of the ICRMR, as well as ICRA-generated design requirements, are incorporated into the project requirements.
- The owner shall inspect the initial installation and provide continuous monitoring of the effectiveness of the infection control measures during the entire course of the project. This monitoring may be conducted by in-house infection control and safety staff or by independent outside consultants. In either instance, provisions for monitoring shall include written procedures for emergency suspension of work and protective measures indicating the responsibilities and limitations of each party (owner, designer, constructor, and monitor).
- The ICRMR shall be prepared by the ICRA panel and shall address, but not be limited to, the following:
 - Patient placement and relocation.
 - Standards for barriers and other protective measures required to protect adjacent areas and susceptible patients from airborne contaminants.
 - Temporary provisions or phasing for construction or modification of heating, ventilating, air conditioning, and water supply systems.
 - Protection from demolition
 - Measures to be taken to train hospital staff, visitors, and construction personnel.
 - Maintaining airflow into the construction zone from occupied spaces by means of a dedicated ventilation/exhaust system for the construction area.
 - Review locations of exhaust relative to existing fresh air intakes and filters, as well as the disconnection and sealing of existing air ducts, as required. If the building system or a portion thereof is used to achieve this requirement, the system must be thoroughly cleaned prior to occupancy of the newly constructed area.

CHAPTER 2 - HOSPITALS

► General Hospital

New sections have been added to this chapter (Intermediate Care, In-Hospital Skilled Nursing, Free-standing Emergency Service) and some sections (Psychiatric Nursing Units, Newborn Intensive Care) have been heavily revised or have had language added.

Language for service areas such as, Medication Stations, handwashing stations, Clean & Soiled Rooms, etc. have been standardized throughout the section.

Nursing Unit (Medical and Surgical)

Patient Rooms

Each patient room shall meet the following standards:

- **In new construction, the maximum number of beds per room shall be one** unless the functional program demonstrates the therapeutic necessity of a two-bed arrangement. Approval of a two-bed arrangement shall be obtained from the licensing authority.
- If the functional program indicates the need for temporary / emergency increases in bed capacity, some single patient rooms shall be designed to accommodate two patients to meet the temporary / emergency demand with the approval of the licensing authority.
- Where renovation work is undertaken and the present capacity is more than one patient, maximum room capacity shall be no more than the present capacity, with a maximum of four patients.

Nursing Unit Service Areas

- Waterless alcohol-based hand sanitation stations may be used in patient rooms in renovation projects where existing conditions prohibit an additional handwashing station.
- Each nursing unit shall have access to a lounge, for visitors and family, which is programmatically sized appropriate for the number of beds and/or nursing units served. This lounge shall be conveniently located to the nursing unit(s) served, provide comfortable seating, and be designed to minimize the impact of noise and activity on patient rooms and staff functions.

Intermediate Care Units

This is a new sub-section covering areas, sometimes referred to as stepdown units, that are routinely utilized in acute care hospitals for patients who require frequent monitoring of vital signs and/or nursing intervention that exceeds the level needed in a regular medical/surgical unit but is less than that provided in a critical care unit.

- Intermediate care units can be progressive care units or specialty units such as cardiac, surgical (i.e., thoracic, vascular, etc.), neurosurgical/neurological monitoring, or chronic ventilator respiratory care units.
- These standards shall apply to adult beds designated to provide intermediate care, but not pediatric or neonatal intermediate care.
- In hospitals that provide intermediate care, beds shall be designated for this purpose.
- These beds may constitute a separate unit or be a designated part of another unit.
- There shall be a separate physical area devoted to nursing management for the care of the intermediate patient.

- Maximum room capacity shall be four patients.
- Each patient shall have access to a toilet room without having to enter the general corridor. One toilet room shall serve no more than two beds and no more than two patient rooms.
- There shall be direct or remote visual observation between the administrative center or nurse station, staffed charting stations and all patient beds in the unit.
- Ventilation, oxygen, vacuum, medical air, electrical and plumbing requirements have been added to per sections (7.35.E2 and 7.35.G4) and Tables (7.2 and 7.5).

Critical Care

- Bed clearances for all adult and pediatric units shall be a minimum of 5 feet at the foot of the bed to the wall, [4] 5 feet on the transfer side, 4 feet on the non-transfer side, and 8 feet between beds.
- Documentation and information review spaces shall be provided within the unit to accommodate the recording of patient information.
- The documentation space shall be located within or adjacent to the patient bed space. It shall include countertop that will provide for a large flow sheet typical of critical care units and a computer monitor and keyboard. There shall be one documentation space with seating for each patient bed.
- There shall be a specifically designated area within the unit for information review located to facilitate concentration.

Pediatric Critical Care

- The space provided for parental accommodations as defined by the functional program shall not limit or encroach upon the minimum clearance requirements for staff and medical equipment around the patient's bed station.

Newborn Intensive Care Units

- Noise control. Infant bed areas and the spaces opening onto them shall be designed to produce minimal background noise and to contain and absorb much of the transient noise that arises within the NICU. (The combination of continuous background sound and transient sound in any patient care area shall not exceed an hourly L_{eq} of 50 dB and an hourly L_{10} of 55 dB, both A-weighted slow response. The L_{max} (transient sounds) shall not exceed 70 dB, A-weighted slow response).
- No direct ambient lighting shall be permitted in the infant care space, and any direct ambient lighting used outside the infant care area shall be located or framed so as to avoid any infant's direct line of sight to the fixture. This does not exclude the use of direct procedure lighting.
- Lighting fixtures shall be easy to clean.
- At least one source of daylight shall be visible from newborn care areas.
- External windows in infant care rooms shall be glazed with insulating glass to minimize heat gain or loss, and shall be situated at least 2 feet away from any part

of a baby's bed to minimize radiant heat loss from the baby. All external windows shall be equipped with easily cleaned shading devices that are neutral color or opaque to minimize color distortion from transmitted light.

- There shall be an aisle adjacent to each infant care space with a minimum width of 4 feet in multiple -bed rooms.
- When single-patient rooms or fixed cubicle partitions are utilized in the design, there shall be an adjacent aisle of not less than 8 feet in clear and unobstructed width to permit the passage of equipment and personnel.
- In multiple-bed rooms, there shall be a minimum of 8 feet between infant care beds.
- Each patient care space shall be designed to allow privacy for the infant and family.

Psychiatric Units

- The facility shall provide a therapeutic environment appropriate for the planned treatment programs.
- Security appropriate for the planned treatment programs shall be provided.
- In no case shall adult and pediatric clients be mixed. This does not exclude sharing of nursing stations or support areas, as long as the separation and safety of the units can be maintained.
- General requirements for the unit will be referenced from (Chapter 11) with certain specific exceptions.

In-Hospital Skilled Nursing Units

This is a new sub-section

- The basic requirements contained in Section (7.2.A) apply and shall be supplemented with additional requirements for dining, recreation, grooming, rehabilitation, handrails & storage.
- The location shall provide convenient access to the Physical and Rehabilitation Medicine Departments.
- The unit shall be located to exclude unrelated traffic going through the unit to access other areas of the hospital.
- Wherever possible, the unit shall be located to provide access to outdoor spaces that can be utilized for therapeutic purposes.

Surgical Suites

- When outpatient surgery is provided in the surgical suite of the hospital facility, it shall comply with the requirements for outpatient surgery in Section (7.10). When outpatient surgery and PACU is provided in a separate unit of the hospital facility or in a separate facility, it shall comply with the requirements for outpatient surgery in the Ambulatory Surgical Facility section.

- If individual rooms are provided in Stage 2 Recovery, a minimum clear floor area of 100 square feet shall be provided in each room, and a handwashing station shall be provided in each room.
- Where private holding room(s) or cubicle(s) are provided for outpatients, a separate change area is not required.

Obstetrical Facilities

- In new construction, LDR rooms shall have a minimum clear floor area of [250] **300** square feet of clear floor area.

Emergency Service

- Each examination room shall have a minimum **clear** floor area of 120 square feet, **exclusive of fixed casework**. Where renovation work is undertaken, each room shall have a minimum **clear** area of 100 square feet, **exclusive of fixed or wall-mounted cabinets and built-in shelves**.
- A minimum of **one patient toilet room per eight treatment rooms** or fraction thereof shall be provided.
- In new construction, a decontamination room shall be provided with an outside entry door as far as practical from the closest other entrance. The internal door of this room shall open into a corridor of the emergency department, swing into the room, and be lockable against ingress from the corridor. The room shall provide a minimum 80 square feet clear floor area. The room shall have all smooth, nonporous, scrubable, non-adsorptive, non-perforated surfaces. Fixtures shall be acid resistant. The floor of the decontamination room shall be self-coving to a height of 6 inches. The room shall be equipped with two hand-held showerheads with temperature controls and a dedicated holding tank with floor drain. Portable or hard-piped oxygen shall be provided. Portable suction shall also be available. This paragraph does not preclude decontamination capability at other locations or entrances immediately adjacent to the emergency department.

Imaging Suite

- Separate toilets with handwashing stations shall be provided with direct access from each fluoroscopic room so that a patient can leave the toilet without having to reenter the fluoroscopic room. Rooms used only occasionally for fluoroscopic procedures shall be permitted to use nearby patient toilets if they are located for immediate access.
- For super-conducting MRI, cryogen venting and emergency exhaust must be provided in accordance with the original equipment manufacturer's specifications.

Freestanding Emergency Service

This is a new sub-section.

- This is an extension of an existing hospital emergency department that is physically separate from the main hospital emergency department and that is intended to

provide comprehensive emergency service. A service that does not provide 24-hours-a-day, seven days-a-week operation or that is not capable of providing basic services as defined for hospital emergency departments shall not be classified as a freestanding emergency service.

- Physically separate from the main hospital means not located on the same campus.
- The freestanding emergency service shall have the following capabilities and/or functions within the facility:
 - Diagnostic imaging to include radiography and fluoroscopy.
 - Laboratory to include those functions described in Section 7.15.
 - Observation beds, at least one of which shall have full cardiac monitoring.
 - Provision for serving patient and staff meals. This may be a kitchen or a satellite serving facility.
 - Pharmacy.
 - Support services and functions, to include housekeeping, laundry, general stores, maintenance and plant operations, and security.

Laboratory Suite

- Handwashing stations shall be located within 25 feet of each workstation and within each room with a workstation.

Renal Dialysis Unit (Acute and Chronic)

- Individual patient treatment areas shall contain at least 80 square feet. **The 80 square feet shall be exclusive of general circulation space within the ward.**
- If a stat laboratory for blood and urinalysis is provided, the stat laboratory shall contain a handwashing station, work counters, storage spaces, an under-counter refrigerator for specimens, and a cup sink. An area for the phlebotomists' use shall be provided adjacent to this laboratory. A pass through for specimens shall be provided between the patient toilet room and this laboratory.

Morgue

- Body-holding refrigerators shall be equipped with temperature-monitoring and alarm signals.

Administration and Public Areas

- All public waiting areas serving more than 15 people shall include toilet room(s) equipped with handwashing stations. These toilet rooms shall be located near the waiting areas and may serve more than one such area.

Receiving Area

- Adequate receiving areas shall be provided to accommodate delivery trucks and other vehicles.

- Dock areas shall be segregated from other occupied building areas and located so that noise and odors from operation will not adversely affect building occupants.
- The receiving area shall be convenient to service elevators and other internal corridor systems.
- Receiving areas shall be segregated from waste staging and other outgoing materials handling functions.
- Adequate space shall be provided to enable breakdown, sorting, and staging of incoming materials and supplies. Balers and other devices shall be located to capture packaging for recycling or return to manufacturer/ deliverer.
- In facilities with centralized warehousing, adequate space shall be provided at receiving points to permit the staging of reusable transport containers for supplies moving from central warehouses to individual receiving sites.

General Standards

Waste Management

Waste collection and storage locations shall be determined by the facility as a component of the functional program. The functional program shall stipulate the categories and volumes of waste for disposal and the methods of handling and disposal of waste. The functional program shall outline the space requirements, including centralized waste collection and storage spaces. Size of spaces shall be determined based upon volume of projected waste and length of anticipated storage.

- Red bag waste shall be staged in enclosed and secured areas.
- Bio-hazardous and environmentally hazardous materials, including mercury, nuclear reagent waste, and other regulated waste types, shall be segregated and secured.
- If provided, regulated medical waste or infectious waste storage spaces shall have a floor drain, cleanable floor and wall surfaces, lighting, and exhaust ventilation, and should be safe from weather, animals and unauthorized entry. Refrigeration requirements for such storage facilities shall comply with state and/or local regulations.

Waste treatment and disposal technologies

- On-site hospital incinerators shall comply with federal, state, and local regulatory and environmental requirements. The design and construction of incinerators and trash chutes shall comply with NFPA 82.
- Types of non-incineration waste treatment technology(ies) shall be allowed as per environmental, economic , and regulatory considerations.
- In determining the location for a non-incineration technology, safe transfer routes, distances from waste sources, temporary storage requirements, as well as space requirements for treatment equipment shall be considered.
- The location of the technology shall not cause traffic problems as waste is brought in and out. Odor, noise, and the visual impact of medical waste operations on patients, visitors, public access and security shall be considered.

- Exhaust vents, if any, from the treatment technology shall be located a minimum of 25 feet from inlets to HVAC systems.
- If the technology involves heat dissipation, sufficient cooling and ventilation shall be provided.

Mechanical Standards

- All return ventilation shall be via ducted systems in patient care areas
- Reserve capacity for facility space heating is not required in geographic areas where a design dry-bulb temperature of 25°F (-4°C) or more represents not less than 99 percent of the total hours in any one heating month as noted in ASHRAE's *Handbook of Fundamentals*, under the "Table for Climatic Conditions for the United States."
- If system modifications affect greater than 10 percent of the system capacity, designers shall utilize pre-renovation water/air flow rate measurements to verify that sufficient capacity is available and that renovations have not adversely affected flow rates in non-renovated areas.
- Relief air is exempt from the 25 foot separation requirement. Relief air is defined as air that otherwise could be returned (re-circulated) to an air handling unit from the occupied space, but is being discharged to the outdoors to maintain building pressure, such as during outside air economizer operation.
- In new construction and major renovation work, air supply for operating and delivery rooms shall be from non-aspirating diffusers with a face velocity in the range of 25 to 35 fpm (0.13 to 0.18 m/s), located at the ceiling above the center of the work area.
- Return air in OR's shall be permitted high on the walls, in addition to the low returns.
- During unoccupied hours, operating room air change rates may be reduced, provided that the positive room pressure is maintained as required in Table 7.2.
- Operating room ventilation systems shall operate at all times, except during maintenance and conditions requiring shutdown by the building's fire alarm system.
- When anesthesia scavenging systems are required by Section 7.34.D6, air supply shall be at or near the ceiling. Return or exhaust air inlets shall be near the floor level.
- Humidifiers shall be connected to airflow proving switches that prevent humidification unless the required volume of airflow is present or high-limit humidistats are provided.

Protective Environment Rooms

- The protective environment room airflow shall be designed to provide directed airflow from the cleanest patient care area to less clean areas.
- Protective environment rooms shall be protected with HEPA filters at 99.97 percent efficiency for a 0.3 µm sized particle in the supply airstream.
- Re-circulation HEPA filters can be used to increase the equivalent room air exchanges.

- Constant volume airflow is required for ventilation of the protected environment.
- If the facility determines that airborne infection isolation is necessary for protective environment patients, an anteroom shall be provided.
- Rooms with reversible airflow provisions for the purpose of switching between protective environment and airborne infection isolation functions are not permitted.

Infectious Disease Isolation Room

- Supplemental re-circulating devices may be used in the patient room, to increase the equivalent room air exchanges; however, such re-circulating devices do not provide the outside air requirements.
- Air may be re-circulated within individual isolation rooms if HEPA filters are used.
- Rooms with reversible airflow provisions for the purpose of switching between protective environment and airborne infection isolation functions are not permitted.

Plumbing Standards

- Hot-water distribution systems serving patient care areas shall be under constant recirculation to provide continuous hot water at each hot water outlet.
- Non-re-circulated fixture branch piping shall not exceed 25 feet in length.
- Dead-end piping (risers with no flow, branches with no fixture) shall not be installed. In renovation projects, dead-end piping shall be removed.
- Empty risers, mains, and branches installed for future use shall be permitted.
- Copper tubing shall be provided for supply connections to ice machines.
- The vacuum discharge shall be located at least 25 feet from all outside air intakes, doors, and operable windows.

Electrical Standards

- Field labeling of equipment and materials will be permitted only when provided by a nationally recognized testing laboratory that has been certified by the Occupational Safety and Health Administration (OSHA) for that referenced standard.
- Intermediate care rooms shall have at least four duplex outlets per bed. The outlets shall be arranged to provide two duplex outlets on each side of the head of the bed.
- LDRP rooms shall have receptacles as required for patient rooms; in addition, the bassinet shall have receptacles as required for nursery bassinets.

Electronic Surveillance Systems

- Electronic surveillance systems include but are not limited to patient elopement systems, door access/control systems, audio/video monitoring systems, patient location systems, and infant abduction prevention systems.
- Electronic surveillance systems are not required, but if provided for the safety of the patients, any devices in patient areas need to be mounted such that they are unobtrusive and in a tamper-resistant enclosure.

- Electronic surveillance system monitoring devices need to be located in a location such that they are not readily observable by the general public or patients.
- Electronic surveillance systems, if installed, shall be supplied power from the emergency electrical system in the event of a disruption of normal electrical power.

(Chapter 7 Tables)

(Table 7.2)

- Requirements added for Intermediate Care, Lazer Eye Room & X-Ray Room (surgical/critical care and catherization) .
- In variable volume systems, the minimum outside air setting on the air-handling unit shall be calculated using the ASHRAE 62 method.
- The minimum total air change requirements for Table 7.2 shall be based on the supply air quantity in positive pressure rooms, and the exhaust air quantity in negative pressure rooms.

(Table 7.3)

- Filter efficiencies are now expressed in MERV's (minimum efficiency rating value). MERVs are based on ASHRAE 52.2.

(Table 7.5)

- Requirements added Intermediate Care and for MRI's .

► Small Inpatient Primary Care Hospitals

This is a new Guidelines section.

A small inpatient primary care hospital is a facility that serves a **rural** area and is **50 beds or fewer in size**. The small inpatient primary care hospital shall have transfer and services agreements with secondary or tertiary hospitals.

- The sizes of the selected services and their clear floor areas will depend on program requirements and organization of services as required by the community needs. Some functions may be combined or shared providing the layout does not compromise safety standards and medical nursing practices.
- The nursing units shall be designed to accommodate multiple patient modalities, with adequate support spaces to support the modalities in the program.
- The type of surgical procedures that are to occur in these facilities shall be limited to those that can be performed and supported under an ambulatory surgical setting.

► Rehabilitation Hospitals

The changes made to this chapter involve coordinating language throughout the chapter with language in chapters 7 & 11.

► **Psychiatric Hospitals**

Environment of Care

Special design considerations for injury and suicide prevention shall be given to the following elements:

- Door closer devices, if required on the patient room door, shall be mounted on the public side of the door rather than the patient side of the door. Ideally, the door closer should be within view of a nurse or staff workstation.
- Door hinges shall be designed to minimize points for hanging for the patient.
- Door lever handles shall point downward when in the latched position.
- All hardware shall have tamper-resistant fasteners.
- Clothing rods or hooks, if present, shall be designed to minimize the opportunity for residents to cause injury.
- Furniture shall be constructed such that it can withstand physical abuse.
- Drawer pulls shall be of the recessed type to eliminate the possibility of becoming a tie-off point.
- Door swings for bathrooms or shower areas shall swing out to allow for staff emergency access.
- The ceiling shall be of the tamper-resistive type or of sufficient height to prevent patient access. Ceiling systems of a non-secured (non-clipped down) lay-in ceiling tile design are not permitted.
- Any plumbing, piping, ductwork, or other potentially hazardous elements shall be concealed above a ceiling.
- Air distribution devices, lighting fixtures, sprinkler heads, and other appurtenances shall be of the tamper-resistant type.

Shower, bath & toilet fixtures, hardware, and accessories

- ADA- or ANSI-compliant grab bars are required in 10 percent of the patient private/semi-private toilet rooms. The remaining rooms are not required to have grab bars.
- Grab bars in patient toilet rooms for fully ambulatory patients shall be removable.
- Towel bars are not permitted.
- Shower curtain rods are not permitted.
- Showerheads shall be of the flush mounted design to minimize hanging appendages.
- Lever door handles are not permitted in patient toilet rooms for fully ambulatory patients.

Windows, including interior and exterior glazing.

- All glazing, borrow lights, and glass mirrors shall be fabricated with laminated safety glass or shall be protected by polycarbonate, laminate, or safety screens.

Light fixtures, electrical outlets, electrical appliances, nurse call systems, and staff emergency assistance systems.

- Electrical receptacles in patient rooms shall not allow for unauthorized use or shall be protected with a ground fault circuit interrupter

Ceilings, ventilation grilles, and access panels in patient bedrooms and bathrooms.

- Where acoustical ceilings are permitted, they shall be of sufficient height or be secured to prevent patient access.
- Ceiling access panels and light fixtures shall be secured or shall be of sufficient height to prevent patient access.
- Ventilation grilles shall be secured and have small perforations to eliminate their use as a tie-off point, or shall be of sufficient height to prevent patient access.

Fire extinguisher cabinets and fire alarm pull stations.

- They shall be located in staff areas or otherwise secured if in patient-accessible locations.

Seclusion Treatment Rooms

- Rooms shall have an area of at least 60 square feet with a minimum dimensional wall length of 7 feet and a maximum wall length of 11 feet.
- Where restraint beds are required by the functional program, 80 square feet shall be required.
- Electrical switches and receptacles are prohibited within the seclusion room.
- The entrance door to the seclusion room shall swing out. Doors shall be 3 feet 8 inches wide and shall permit staff observation of the patient through a vision panel, while also maintaining provisions for patient privacy.
- Minimum ceiling height shall be 9 feet.
- Seclusion treatment rooms shall be accessed by an anteroom or vestibule that also provides direct access to a toilet room. The doors to the anteroom and the toilet room shall be a minimum of 3 feet 8 inches wide.

Child Psychiatric Unit

- The total area for social activities and dining space shall be a minimum of 50 square feet per patient.
- If a separate dining space is provided, it shall be a minimum of 15 square feet per patient.
- The combined area for social activities shall be 35 square feet per patient.

CHAPTER 3 – AMBULATORY FACILITIES

► Outpatient Facilities

New sections have been added to this chapter (Psychiatric Outpatient Center, Renal Dialysis (Acute and Chronic) Center) and the remaining sections have been revised or have had language added.

Language for service areas such as, Medication Stations, handwashing stations, Clean & Soiled Rooms, etc. have been standardized throughout the section.

Common Elements for Outpatient Facilities

- Toilet(s) for public use shall be accessible from the waiting area without passing through patient care or staff work areas or suites.

Clinical Facilities

- Special-purpose examination rooms such as those for eye, ear, nose, and throat examinations, shall have a **minimum floor area of 80 net square feet**. This square footage shall exclude vestibules, toilets, closets, **and fixed casework**. Room arrangement shall permit a minimum clearance of 2 feet, 8 inches at each side and at the foot of the examination table, bed, or chair. A handwashing station and a counter or shelf space for writing shall be provided.
- Treatment room(s). Rooms for minor surgical and cast procedures shall have a minimum floor area of 120 square feet. This square footage excluding vestibule, toilet, and closets, **and fixed casework**. The minimum room dimension shall be 10 feet. Room arrangement shall permit a minimum clearance of 3 feet at each side and at the foot of the bed. A handwashing station and a counter or shelf for writing shall be provided.
- The need for and number of required protective environment rooms shall be determined by an infection control risk assessment. When required, the protective environment room(s) shall comply with the general requirements of Section 7.2.D, except that a toilet, bathtub, or shower shall not be required.
- Toilet(s) for patient use shall be provided separate from public use toilet(s) and located to permit access from patient care areas without passing through publicly accessible areas.
- Toilet rooms with handwashing stations shall be accessible to procedure room(s), if procedures provided may result in the need for immediate access to patient toilet facilities.

► Primary Care Outpatient Center

No Major Changes Made.

► Small Primary (Neighborhood) Outpatient Facility

No Major Changes Made.

► Ambulatory Surgical Facility

General

- The design shall include space for medical and nursing assessment, nursing care, preoperative testing, and physical examination.
- When sterilization is provided off site, a room for the adequate handling (receiving and distribution) and on-site storage of sterile supplies shall be provided.
- A soiled workroom room (or soiled holding room that is part of a system for the collection and disposal of soiled material) **is for the exclusive use of the surgical suite. It shall be located in the semi-restricted area.**
- The soiled workroom shall contain a flushing-rim clinical sink or equivalent flushing rim fixture, a handwashing station, a work counter, and space for waste receptacles and soiled linen receptacles. Rooms used only for temporary holding of soiled material may omit the flushing-rim clinical sink and work counters. However, if the flushing-rim clinical sink is omitted, other provisions for disposal of liquid waste shall be provided.
- The soiled workroom shall not have direct connection with operating rooms.
- Soiled and clean workrooms or holding rooms shall be separated. A self-closing door or pass-through opening for decontaminated instruments is permitted between soiled and clean workrooms.
- Clean/sterile supply storage for packs, etc., shall include provisions for ventilation, humidity, and temperature control. **The clean and sterile supply room shall have a minimum floor area of 100 net square feet or 50 net square feet per operating room, whichever is greater.**
- The surgical suite shall be divided into three designated areas—unrestricted, semi-restricted, and restricted—that are defined by the physical activities performed in each area.
 - **Unrestricted area.** The unrestricted area includes a central control point established to monitor the entrance of patients, personnel, and materials. Street clothes are permitted in this area, and traffic is not limited.
 - **Semi-restricted area.** The semi-restricted area includes the peripheral support areas of the surgical suite. It and has storage areas for clean and sterile supplies, work areas for storage and processing of instruments, and corridors leading to the restricted areas of the surgical suite. Traffic in this area is limited to authorized personnel and patients. Personnel are required to wear surgical attire and cover all head and facial hair.
 - **Restricted area.** The restricted area includes operating and procedure rooms, the clean core, and scrub sink areas. Surgical attire and hair coverings are required. Masks are required where open sterile supplies or scrubbed persons may be located.

Clinical Facilities

- Class A operating rooms (minor surgical procedure rooms) shall have a minimum clear floor area of [120] **150** square feet and a minimum clear dimension of 12 feet. **This square footage and minimum dimensions shall exclude vestibules and fixed casework.** There shall be a minimum clear distance of 3 feet, **6 inches** at each side, the head, and the foot of the operating table.
- Class B operating rooms shall have a minimum clear floor area of 250 square feet with a minimum clear dimension of 15 feet. **This square footage and minimum dimension shall exclude vestibules and fixed casework.** There shall be a minimum clearance of 3 feet, 6 inches at each side, the head, and the foot of the operating table.
- Class C operating rooms shall have a minimum clear area of 400 square feet and a minimum dimension of 18 feet. **This square footage and minimum dimension shall exclude vestibules and fixed casework.** There shall be a minimum clearance of 4 feet at each side, the head, and the foot of the operating table.

Recovery

- Post-anesthesia recovery rooms shall be accessible directly from the semi-restricted area. A nurse utility/control station shall be provided with visualization of patients in acute recovery positions (not required in Phase 2 step-down recovery area). Clearances noted around gurneys are between the normal use position of the gurney and any adjacent fixed surface, or between adjacent gurneys.
- A minimum of one recovery station per operating room shall be provided.
- Each post-anesthetic care unit (PACU) shall provide a minimum clear floor area of 80 square feet for each patient station with a space for additional equipment described in the functional program, and for clearance of at least 5 feet between patient stretchers and 4 feet between patient stretchers and adjacent walls (at the stretcher's sides and foot).
- Handwashing stations with hands-free or wrist blade operable controls shall be available with at least one for every four stretchers or portion thereof, uniformly distributed to provide equal access from each patient position.
- The recovery areas shall include provisions for staff handwashing station, medication preparation and dispensing, supply storage, soiled linen and waste holding, charting and dictation, and dedicated space as needed to keep equipment (warming cabinet, ice machine, crash cart, etc.) out of required circulation clearances.
- The provision allowing up to one-half of the minimum required total recovery stations to be provided in the step-down recovery area has been deleted.
- A Phase II or secondary recovery room shall be provided. The room shall contain handwashing station(s), storage space for supplies and equipment, clinical workspace, space for family members, and nourishment facilities. **In addition, the design shall provide a minimum of 50 square feet for each patient in a lounge**

chair with space for additional equipment described in the functional program and for clearance of 4 feet between the sides of the lounge chairs and the foot of the lounge chairs. Provisions for patient privacy such as cubicle curtains shall be made.

- A patient toilet room shall be provided in the Phase II recovery area for the exclusive use of patients. In facilities with two or fewer operating rooms with change area located adjacent to the recovery area, the toilet in the outpatient surgery change area shall be permitted to be used to meet this requirement.

Service Areas

- The soiled workroom shall be located within the semi-restricted area.
- Anesthesia equipment and supply cleaning, testing, and storing shall be located within the semi-restricted area.
- Equipment storage room(s) for the surgical suite. The combined area of equipment and supply storage room(s) shall have a minimum floor area of 50 square feet for each operating room(s) up to two and an additional 25 square feet per additional operating room. It shall be located within the semi-restricted area.
- A high-speed sterilizer or other sterilizing equipment, for immediate or emergency use, shall be located in the restricted area, and shall include a separate area for cleaning and decontamination of instruments prior to sterilization.
- At least one staff shower shall be provided conveniently accessible to the surgical suite and recovery areas.

► Freestanding Urgent Care (Emergency) Facility

- This section applies to facilities that provide urgent care to the public, but are not part of licensed hospitals or are not freestanding emergency services or that do not provide care on a 24-hours-per day, seven-days-per-week basis. Freestanding urgent care facilities are distinguished from emergency departments that are part of a licensed hospital.
- The facility shall post signs that clearly indicate the type and level of care offered and the hours of operation (if not 24 hours per day, seven days per week).
- The facility shall post directional signs and information showing the nearest emergency department that is part of a licensed hospital.

Clinical Facilities

- Where the emergency trauma/cardiac room is set up for multi-patient use, each patient area shall have a minimum clear area of **250 net square feet excluding vestibule, toilet, closet, and fixed casework**. Room arrangement shall permit a minimum clearance of 3 feet, 6 inches at each side, head, and foot of the bed.
- At least two examination rooms **shall have a clear floor area of 120 square feet excluding vestibule, toilet, closet, and fixed casework** (treatment room may also be utilized for examination). **Room arrangement shall permit a minimum clearance of 3 feet, 6 inches at each side, head, and foot of the bed.**

► **Freestanding Birthing Center**

Birthing rooms

Birthing rooms shall be adequate in size to accommodate one patient, her family, and attending staff. For new construction, a minimum clear floor area of 160 square feet shall be provided with a minimum dimension of 11 feet, **excluding vestibule, toilet, closet, and fixed casework. Room arrangement shall permit a minimum clearance of 3 feet at each side, head, and foot of the bed.** For renovation, a minimum floor area of 120 square feet excluding vestibule, toilet, and closets with a minimum dimension of 10 feet shall be provided.

► **Freestanding Outpatient Diagnostic and Treatment Facility**

No major changes

► **Gastrointestinal Endoscopy Facility**

This section has been expanded and re-written.

General

- The endoscopy suite shall be designed to facilitate movement of patients and personnel into, through, and out of defined areas within the procedure suite. Signs shall be provided at all entrances to restricted areas and shall clearly indicate the proper attire required.
- Endoscopy is performed without anticipation of overnight patient care. The functional program shall describe in detail staffing, patient types, hours of operation, function and space relationships, transfer provisions, and availability of offsite services.
- If the endoscopy suite is part of an acute-care hospital or other medical facility, service may be shared to minimize duplication as appropriate. Where endoscopy services are provided within the same area or suite as surgical services, additional space shall be provided as needed. If inpatient and outpatient procedures are performed in the same room(s), the functional program shall describe in detail scheduling and techniques used to separate inpatients and outpatients.
- Visual and acoustical privacy should be provided by design and include the registration, preparation, examination, treatment, and recovery areas.

Parking

- Four spaces for each room routinely used for endoscopy procedures plus one space for each staff member shall be provided. Additional parking spaces convenient to the entrance for pickup of patients after recovery shall be provided.

Storage and Holding Areas

- Adequate space shall be provided for the storage and holding of clean and soiled materials. Such areas shall be separated from unrelated activities and controlled to prohibit public contact.

- The Soiled holding/workroom shall be physically separated from all other areas of the department. The soiled workroom shall contain work surface(s), sink(s), flush-type device(s), and holding areas for trash, linen, and other contaminated waste.
- The Clean/sterile supplies room shall provide storage for packs, etc. It shall include provisions for ventilation, humidity, and temperature control.

Clinical Facilities

- If patients will be admitted without recent and thorough examination, at least one room shall be provided for examination and testing of patients prior to their procedures, ensuring both visual and acoustical privacy. This may be an examination room or treatment room as described in the **Common Elements for Outpatient Facilities** Section.

Procedure Suite

- Each procedure room shall have a minimum clear floor area of 200 square feet excluding **vestibule, toilet, closet**, fixed cabinets, and built-in shelves. **Room arrangement shall permit a minimum clearance of 3 feet, 6 inches at each side, head, and foot of the stretcher/table.**
- A separate dedicated handwashing station with hands-free controls shall be available in the suite.
- Direct access may be provided to a patient toilet room.

Patient Holding/Prep/Recovery Area

- Patient positions shall provide a minimum clear floor area of 80 square feet for each patient station with a space for additional equipment described in the functional program, and for clearance of at least 5 feet between patient stretchers and 4 feet between patient stretchers and adjacent walls (at the stretcher's sides and foot). Provisions for patient privacy such as cubical curtains shall be provided.
- Provisions shall be made for storage and preparation of medications administered to patients. A refrigerator for pharmaceuticals and double-locked storage for controlled substances shall be provided. Convenient access to handwashing stations shall be provided.

Procedural Service Areas

- Fluid waste disposal facilities shall be convenient to the procedure rooms and recovery positions.
- A clinical sink or equivalent equipment in a soiled workroom shall meet this requirement in the procedure area, and a toilet equipped with bedpan-cleaning device or a separate clinical sink shall meet this requirement in the recovery area.
- Provisions for cleaning, testing, and storing anesthesia equipment and supplies shall be provided.
- Medical gas supply and storage with space for reserve nitrous oxide and oxygen cylinders shall be provided, if such gas(es) are used in the facility.
- Equipment storage room(s) for equipment and supplies used in the procedure suite shall be provided.

- Staff clothing change areas shall be provided for staff working within the procedure suite. The areas shall contain lockers, toilets, handwashing stations, and space for changing clothes.
- At least one shower shall be provided conveniently accessible to the procedure suite and patient holding/prep/recovery areas.
- Separate patient clothing change areas shall be provided for patients to change from street clothing into hospital gowns and to prepare for procedures. This area shall include lockers, toilet(s), clothing change or gowning area(s), and space for administering medications. Provisions shall be made for securing patients' personal effects.
- Stretcher storage area(s) shall be convenient for use and out of the direct line of traffic.
- Lounge and toilet facilities for surgical staff shall be provided in facilities having three or more procedure rooms.
- A housekeeping room containing a floor receptor or service sink and storage space for housekeeping supplies and equipment shall be provided.
- Space for temporary storage of wheelchairs shall be provided.
- Provisions for convenient access to and use of emergency resuscitation equipment and supplies (crash cart(s) and/or anesthesia carts) at both the procedure and recovery areas.

► Cough-Inducing and Aerosol-Generating Procedures

No major changes

► Psychiatric Outpatient Center

This is a new Guidelines section.

The psychiatric outpatient center provides community outpatient psychiatric services. The number and type of diagnostic, clinical, and administrative areas shall be sufficient to support the services and estimated patient load. All standards set forth in the **Common Elements for Outpatient Facilities** section shall be met for psychiatric outpatient centers, with the additions and modifications described herein. In no way are these standards to be interpreted to inhibit placing small neighborhood psychiatric outpatient centers into existing commercial and residential facilities; that is, units with four or fewer employees.

General

- Office(s), separate and enclosed, with provisions for privacy shall be provided.
- Clerical space or rooms for typing and clerical work separated from public areas to ensure confidentiality shall be provided.
- Records room(s) with filing and storage for the safe and secure storage of patient records with provisions for ready retrieval shall be provided.

- Office supply storage (closets or cabinets) within or convenient to administrative services shall be provided.
- A staff toilet and lounge in addition to and separate from public and patient facilities shall be provided.
- Multiuse room(s) for conferences, meetings, and health education shall be provided. One room may be primarily for staff use but also available for public access as needed. If the program so indicates, these functions may take place in group room(s).

Public Areas

- A reception and information counter or desk shall be located to provide visual control of the entrance to the psychiatric outpatient unit and shall be immediately apparent from that entrance.
- The waiting area for patients and escorts shall be under staff control. The seating shall contain not less than two spaces for each consultation room and not less than 1.5 spaces for the combined projected capacity at one time of the group rooms. Where the psychiatric outpatient unit has a formal pediatrics service, a separate, controlled area for pediatric patients shall be provided. The waiting area shall accommodate wheelchairs.
- Toilet(s) for public use shall be immediately accessible to the waiting area. In smaller units, the toilet may be unisex.
- Drinking fountains shall be available for waiting patients. In shared facilities, drinking fountains may be outside the outpatient area if convenient for use.
- A control counter (may be part of the reception, information, and waiting room control) shall be provided. It shall have access to patient files and records for scheduling of services.

Clinical Services

- The following are service areas that shall be strongly considered in any psychiatric outpatient center:
 - Consultation room(s).
 - Small group room(s).
 - Large group room(s). These may also be used for activities.
 - Observation room(s).
 - Nurses' station(s).
 - Drug distribution center.
 - Kitchenette(s). These may be located near the large group room(s).
 - Clean storage.
 - Soiled holding.
 - Wheelchair storage space.

Details and Finishes

- There shall be observation of all public areas including corridors; this can be accomplished by electronic surveillance if it is not obtrusive. Niches and hidden areas in corridors shall be prohibited.
- If the functional program determines suicide or staff safety risks are present, ceilings, walls, floors, windows, etc., shall be tamper-resistant in patient treatment areas. In addition, any rods, doors, grab bars, handrails, etc., shall be constructed so they do not allow attempts at suicide and cannot be used as weapons.

► Renal Dialysis (Acute and Chronic) Center

This is a new Guidelines section.

Treatment Area

- The treatment area may be an open area but shall be separate from administrative and waiting areas.
- The nurses' station(s) shall be located within the dialysis treatment area and designed to provide visual observation of all patient stations.
- Individual patient treatment areas shall contain at least 80 square feet. There shall be at least a 4-foot space between beds and/or lounge chairs.
- Handwashing stations shall be convenient to the nurses' station and patient treatment areas. There shall be at least one handwashing station serving no more than four stations. These shall be uniformly distributed to provide equal access from each patient station.
- The open unit shall be designed to provide privacy for each patient.
- The number of and need for required airborne infection isolation rooms shall be determined by an ICRA. Where required, the airborne infection isolation room(s) shall comply with the requirements of Section (7.2.C).
- Hemodialysis units that dialyze patients with known bloodborne pathogens shall have at least one separate room to use for those patients.
- There shall be a medication dispensing station for the dialysis center. A work counter and handwashing stations shall be included in this area. Provisions shall be made for the controlled storage, preparation, distribution, and refrigeration of medications.
- If home training is provided in the unit, a private treatment area of at least 120 square feet shall be provided for patients who are being trained to use dialysis equipment at home. This room shall contain counter, handwashing stations, and a separate drain for fluid disposal.
- An examination room with handwashing stations and writing surface shall be provided. This room shall be at least 100 square feet.
- A clean workroom shall be provided. If the room is used for preparing patient care items, it shall contain a work counter, a handwashing station, and storage facilities for clean and sterile supplies. If the room is used only for storage and holding as

part of a system for distribution of clean and sterile materials, the work counter and handwashing station may be omitted.

- Soiled and clean workrooms or holding rooms shall be separated and have no direct connection.
- A soiled workroom shall be provided and contain a flushing-rim sink, handwashing station, work counter, storage cabinets, waste receptacles, and a soiled linen receptacle.
- If dialyzers are reused, a reprocessing room shall be provided and sized to perform the functions required. It shall include one-way flow of materials from soiled to clean with provisions for refrigeration, (temporary storage or dialyzer) decontamination/cleaning areas, sinks, processors, computer processors and label printers, packaging area, and dialyzer storage cabinets. Engineering controls are required to provide negative pressure relative to adjoining spaces and 100 percent% exhaust to outside.
- If a nourishment station for the dialysis service is provided, it shall contain a sink, a work counter, a refrigerator, storage cabinets, and equipment for serving nourishments as required.
- An environmental services closet shall be provided adjacent to and for the exclusive use of the unit. The closet shall contain a floor receptor or service sink and storage space for housekeeping supplies and equipment.
- If required by the functional program, an equipment repair and breakdown room shall be equipped with a handwashing station, deep service sink, work counter, and storage cabinet.
- Supply areas or supply carts shall be provided.
- Storage space shall be available for wheelchairs and stretchers, if stretchers are provided, out of direct line of traffic.
- If blankets or other linen is used, a clean linen storage area shall be provided. This may be within the clean workroom, a separate closet, or an approved distribution system. If a closed cart system is used, storage may be in an alcove. It must be out of the path of normal traffic and under staff control.
- Each facility using a central batch delivery system shall provide, either on the premises or through written arrangements, individual delivery systems for the treatment of any patient requiring special dialysis solutions. The mixing area room shall also include a sink, storage space, and holding tanks.
- The water treatment equipment shall be located in an enclosed room.
- A patient toilet with handwashing stations shall be provided, equipped with an emergency call station.
- All dialysis system piping shall be readily accessible for inspection and maintenance.

Ancillary Facilities

- Appropriate area(s) shall be available for staff changing and lounge. The area shall contain lockers, shower, toilet, and handwashing stations.

- Storage for patients' belongings shall be provided.
- A waiting room, toilet room with handwashing stations, drinking fountain or other provision for drinking water, a public telephone, and seating accommodations for waiting periods shall be available or accessible to the dialysis unit.
- Office and clinical workspace shall be available for administrative services.

► Office Surgical Facility

This is a new Guidelines section.

An office surgical facility is an outpatient facility that has physician office(s) within it and space(s) for the performance of invasive procedures. Facilities that may have more than three patients rendered incapable of self-preservation without assistance from others shall meet requirements of the Ambulatory Surgical Facility section.

Sterilizing Facilities

- A system for sterilizing equipment and supplies shall be provided. When sterilization is provided off site, adequate handling (receiving and distribution) and on-site storage of sterile supplies must be accommodated and shall meet the minimum requirements for on-site facilities.
- If on-site processing facilities are provided, they shall include the following:
 - Soiled workroom. This room shall be physically separated from all other areas of the facility. Workspace shall be provided to handle the cleaning and the gross cleaning, debridement, and disinfections of all medical/surgical instruments and equipment. The soiled workroom shall contain work surfaces(s), sink(s), and washer/sterilizer decontaminators, flush-type devices(s), or other decontamination equipment as appropriate to the functional program.
 - Clean/assembly workroom. This workroom shall have a handwashing station and shall contain appropriate and sufficient workspace and equipment for terminal sterilizing of medical and surgical equipment and supplies. Clean and soiled work areas shall be physically separated. The clean assembly room shall have adequate space for the designated number of work areas.
 - Clean/sterile supply storage. Storage for packs, etc., this room shall include provisions for ventilation, humidity, and temperature control.
 - Provision shall be made for cleaning and sanitizing of carts and vehicles used for transporting supplies.
 - Space shall be provided for handling and storage of soiled materials and equipment separate from areas designated for storage of clean and sterile materials and equipment.
 - Appropriate receptacles for bio-hazardous waste shall be provided, and these shall be placed in the designated soiled storage area.

Clinical Facilities

- Operating room sizes shall meet requirements as described in the Ambulatory Surgical Facility section.
- Post-operative recovery may be conducted in the operating room or in a specifically designated space. An operating room may be used for no more than one patient at a time.
- If Post-operative recovery is located in a specifically designated space, the following shall be provided:
 - The recovery station shall be located in direct visual contact with a nurse station.
 - Cubicle curtains or other provisions for privacy during post-operative care shall be provided.

Support facilities.

The following shall be immediately accessible to the operating room(s):

- Space for crash cart, including outlets for battery charging.
- Hands-free scrub station(s) outside of but near the entrance to each operating room. One scrub station may service two operating rooms if needed. Scrub station(s) shall be arranged to minimize incidental splatter on nearby personnel or supply carts. The scrub station may be used for the handwashing station requirements of immediately adjacent area(s).
- Drug distribution station. Provisions shall be made for storage and preparation of medications administered to patients. A refrigerator for pharmaceuticals and double locked storage for controlled substances shall be provided. Convenient access to handwashing stations shall be provided.
- Soiled handling/storage area, including provision for disposal of fluid waste.
- Clean storage area, including space for preparing instruments and supplies for surgery.
- Medical gas supply storage.
- A staff clothing change area

Details and Finishes

- Items such as drinking fountains, telephone booths, vending machines, etc., shall not restrict corridor traffic or reduce the corridor width below the required minimum. Out-of-traffic storage space for portable equipment shall be provided.
- The minimum nominal door width for patient use shall be 3 feet except that doors requiring gurney/stretchers access shall have a nominal width of 44 inches.
- Toilet room doors for patient use shall open outward or be equipped with hardware that permits access from the outside in emergencies.
- Wall bases in operating rooms and areas that are frequently subject to wet cleaning shall be monolithic and coved directly up from the floor, tightly sealed to the wall, and constructed without voids.

- Seam welds in sheet flooring shall utilize manufacturer's weld product recommendations. Vinyl composition tile (VCT) or similar products shall not be permitted in these areas.
- Floor and wall areas penetrated by pipes, ducts, and conduits shall be tightly sealed to minimize entry of rodents and insects.
- Wall finishes in operating room(s) shall be scrubable, able to withstand harsh chemical cleaning, and monolithic.
- Ceiling finishes in operating rooms shall conform to the requirements as described in the Ambulatory Surgical Facility section.

► **Special Systems**

- All return air ventilation systems inpatient care areas of outpatient surgery facilities shall be ducted.
- Boiler accessories, including feed pumps, heat-circulating pumps, condensate return pumps, fuel oil pumps, and waste heat boilers, shall be connected and installed to provide both normal and standby service.
- For renovation projects, prior to the start of construction and preferably during design, airflow and static pressure measurements shall be taken at the connection points of new ductwork to existing systems. This information shall be used by the designer to determine if existing systems have sufficient capacity for intended new purposes, and so any required modifications to the existing system can be included in the design.
- Exhaust systems may be combined to enhance the efficiency of recovery devices required for energy conservation. Local exhaust systems shall be used whenever possible in place of dilution ventilation to reduce exposure to hazardous gases, vapors, fumes, or mists.
- Airborne infection isolation rooms shall not be served by exhaust systems incorporating a heat wheel.
- Exhaust outlets from areas that may be contaminated shall be above roof level, arranged to minimize recirculation of exhaust air into the building, and directed away from personnel service areas.
- Fresh air intakes shall be located at least 25 feet from exhaust outlets of ventilating systems, combustion equipment stacks, medical-surgical vacuum systems, plumbing vents, or areas that may collect vehicular exhaust or other noxious fumes. (Prevailing winds and/or proximity to other structures may require greater clearances.) Plumbing and vacuum vents that terminate at a level above the top of the air intake may be located as close as 10 feet.
- The bottom of outdoor air intakes serving central systems shall be as high as practical, but at least 6 feet above ground level, or, if installed above the roof, 3 feet above roof level. The requirement for a 25-foot separation also pertains to the distance between the intake and the exhaust and/or gas vent off of packaged rooftop units.

- Fume hoods, and their associated equipment in the air stream, intended for use with perchloric acid and other strong oxidants, shall be constructed of stainless steel or other material consistent with special exposures, and be provided with a water wash and drain system to permit periodic flushing of duct and hood. Electrical equipment intended for installation within such ducts shall be designed and constructed to resist penetration by water. Lubricants and seals shall not contain organic materials. When perchloric acid or other strong oxidants are only transferred from one container to another, standard laboratory fume hoods and the associated equipment may be used in lieu of stainless steel construction.

Lighting

- Operating and delivery rooms shall have general lighting in addition to special lighting units provided at surgical and obstetrical tables. General lighting and special lighting shall be on separate circuits.
- Operating rooms shall have general lighting in addition to special lighting units provided at surgical tables. General lighting and special lighting shall be on separate circuits.
- Light intensity of required emergency lighting shall comply with the IES recommendations.
- Egress and exit lighting shall comply with NFPA 101.

► MOBILE, TRANSPORTABLE, AND RELOCATABLE UNITS

Unit Types

- Mobile unit: Any pre-manufactured structure, trailer, or self-propelled unit, equipped with a chassis on wheels and intended to provide shared medical services to the community on a temporary basis. These units are typically 8 feet wide by 48 feet long (or less), some may be equipped with expanding walls, and are designed to be moved on a daily basis.
- Transportable unit: Any pre-manufactured structure or trailer, equipped with a chassis on wheels, intended to provide shared medical services to the community on an extended temporary basis. The units are typically 12 feet wide by 60 feet long (or less) and are designed to move periodically, depending on need.
- Re-locatable unit: Any structure, not on wheels, built to be relocated at any time and provide medical services. These structures vary in size.

Standards

- Adequate protection shall be provided for utility hook-ups, cables, and wires by having them concealed in conduits, burying them underground, or installing them overhead.
- Provide patient protection from the elements during transport to and from the mobile unit. Snow shall be kept clear of pathways to and from the mobile unit. Effective means of abating ice shall be used when conditions exist. Protecting the patient from dust and wind also must be considered.

CHAPTER 4 – OTHER HEALTHCARE VENUES

► Nursing Facilities

Resident Rooms

- Maximum room occupancy in new construction and renovations shall be two residents. Where renovation work is undertaken and the present capacity is more than two residents, maximum room capacity shall be no more than the present capacity with a maximum of four residents.
- In multiple-bed rooms, clearance shall allow for the movement of beds and equipment without disturbing residents. **Clear access to one side of the bed shall be provided along 75 percent of its length. In multiple bed rooms, clearance shall allow for the movement of beds and equipment without disturbing other residents. Mechanical and fixed equipment shall not obstruct access to any required element. These guidelines shall allow arrangement of furniture that may reduce these access provisions, without impairing access provisions for other occupants.**
- Each resident shall be provided a separate wardrobe, locker, or closet.
- Resident rooms designated for ventilator dependency shall have provisions for the administration of oxygen and suction.

Resident Support Areas

- Provisions shall be made convenient to each nursing unit to allow residents to make and receive telephone calls in private, unless otherwise indicated by the functional program.
- A receiving, holding, and sorting room shall be provided for control and distribution of soiled linen.
- Discharge from soiled linen chutes shall be received in a separate room.

Physical and Occupational Therapy for Outpatients

- Toilet facilities dedicated for outpatient use shall be provided.
- A waiting area for outpatients and public shall be provided in addition to and separate from required resident support and activity areas. Public toilets shall be provided convenient to these waiting areas.

Elevators

- Cars of hospital-type elevators shall have inside dimensions that accommodate a resident bed with attendants. The clear inside dimension of such cars shall be at least **5 feet 4 inches** wide by [7] **8 feet** [6] **5 inches** deep. Car doors shall have a clear opening of not less than 3 feet 8 inches. Other elevators required for passenger service shall be constructed to accommodate wheelchairs.

Heating, Ventilation, and Air Conditioning Systems

- Although natural window ventilation may be utilized when weather and outside air quality permit, use of mechanical ventilation shall be provided for all rooms and interior areas in the facility.
- If system modifications affect greater than 10 percent of the system capacity, designers shall utilize pre-renovation water/air flow rate measurements to verify that sufficient capacity is available and that renovations have not adversely affected flow rates in non-renovation areas after renovation.
- Non-central air-handling systems (i.e., individual room units that are used for heating and cooling purposes, such as fan-coil units, heat pump units, etc.) shall be equipped with permanent (cleanable) or replaceable filters rated at a minimum efficiency of MERV 1 (50 percent arrestance). These units may be used as re-circulating units only. All outdoor air requirements shall be met by a separate central air-handling system with the proper filtration.
- Exhaust hoods handling grease-laden vapors in food preparation centers shall comply with NFPA 96. All hoods over cooking ranges shall be equipped with grease filters, fire-extinguishing systems, and heat-actuated fan controls. Cleanout openings shall be provided every 20 feet and at changes in direction in the horizontal exhaust duct systems serving these hoods. (Horizontal runs of ducts serving range hoods should be kept to a minimum.)
- Non-re-circulated fixture branch piping shall not exceed 25 feet in length.
- Dead-end piping (risers with no flow, branches with no fixture) shall not be installed. In renovation projects, dead-end piping shall be removed. Empty risers, mains, and branches installed for future use shall be permitted.

Lighting

- Lighting shall be engineered to the specific application. (Table 8.4) shall be used as a guide to minimum required ambient and task lighting levels in all rooms, spaces and exterior walkways, unless the functional program justifies alternative lighting levels.
- Approaches to buildings and parking lots, and all occupied spaces within buildings, shall have fixtures for lighting. Consideration shall be given to both the quantity and quality of lighting, including even and consistent lighting levels, glare control, the special lighting needs of the elderly, area-specific lighting solutions, the use of daylighting in all resident rooms and resident use areas, the life cycle costs of lighting, and other lighting design practices as defined and described in ANSI/IESNA RP-28-01.
- Resident rooms and toilet rooms shall have general lighting, task lighting, and night lighting.
- At least one task light shall be provided for each resident. Task light controls shall be readily accessible to residents.
- At least one low-level night light fixture in each room shall be located close to the floor and controlled at the room entrance.

- Corridors and common areas used by residents shall have even light distribution to avoid glare, shadows and scalloped lighting effects.
- Highly reflective floors shall be avoided. Highly polished flooring or floors with glossy sheen shall not be used.

(Chapter 8 Tables)

(Table 8.1)

- At Activity rooms the total air changes has been changed from 4 to 6 per hour.
- A line for Personal services (barber/beauty) has been added. It will require 2 outdoor air changes per hour and 20 total air changes per hour.

(Table 8.2)

- Filter efficiencies are now expressed in MERV's (minimum efficiency rating value). MERVs are based on ASHRAE 52.2.

(Table 8.3)

No changes

(Table 8.4)

This is a new table titled “ Minimum Maintained Average Illuminance”

“ Minimum Maintained Average Illuminance”

	<u>Ambient Light In</u>		<u>Task Light In</u>	
	<u>Lux</u>	<u>Footcandles</u>	<u>Lux</u>	<u>Footcandles</u>
<u>Exterior Entrance (Night)</u>	<u>100</u>	<u>10</u>		
<u>Interior Entry (Day)</u>	<u>1000*</u>	<u>100*</u>		
<u>Interior Entry (Night)</u>	<u>100</u>	<u>10</u>		
<u>Exit Stairways and Landings</u>	<u>300</u>	<u>30</u>		
<u>Elevator Interiors</u>	<u>300</u>	<u>30</u>		
<u>Parking Garage Entrance</u>	<u>500</u>	<u>50</u>		
<u>Exterior Walkways</u>	<u>50</u>	<u>5</u>		
<u>Administration (Active)</u>	<u>300</u>	<u>30</u>	<u>500</u>	<u>50</u>
<u>Active Areas (Day Only)</u>	<u>300</u>	<u>30</u>	<u>500</u>	<u>50</u>
<u>Visitor Waiting (Day)</u>	<u>300</u>	<u>30</u>		
<u>Visitor Waiting (Night)</u>	<u>100</u>	<u>10</u>		
<u>Resident Room</u>				
<u>Entrance</u>	<u>300</u>	<u>30</u>		
<u>Living Room</u>	<u>300</u>	<u>30</u>	<u>750</u>	<u>75</u>
<u>Bedroom</u>	<u>300</u>	<u>30</u>	<u>750</u>	<u>75</u>
<u>Wardrobe/Closet</u>	<u>300</u>	<u>30</u>		
<u>Bathroom</u>	<u>300</u>	<u>30</u>		
<u>Make-up/Shaving Area</u>	<u>300</u>	<u>30</u>	<u>600</u>	<u>60</u>
<u>Shower/Bathing Rooms</u>	<u>300</u>	<u>30</u>		
<u>Kitchen Area</u>	<u>300</u>	<u>30</u>	<u>500</u>	<u>50</u>
<u>Barber/Beautician (Day)</u>	<u>500</u>	<u>50</u>		
<u>Chapel or Quiet Area (Active)</u>	<u>300</u>	<u>30</u>		
<u>Hallways (Active Hours)</u>	<u>300</u>	<u>30</u>		
<u>Hallways (Sleeping Hours)</u>	<u>100</u>	<u>10</u>		
<u>Dining (ActiveHours)</u>	<u>500</u>	<u>50</u>		

<u>Medicine Preparation</u>	<u>300</u>	<u>30</u>	<u>1000</u>	<u>100</u>
<u>Nurses Station (Day)</u>	<u>300</u>	<u>30</u>	<u>500</u>	<u>50</u>
<u>Nurses Station (Night)</u>	<u>100</u>	<u>10</u>	<u>500</u>	<u>50</u>
<u>Physical Therapy Area (Active Hours)</u>	<u>300</u>	<u>30</u>	<u>500</u>	<u>50</u>
<u>Occupational Therapy (Active Hours)</u>	<u>300</u>	<u>30</u>	<u>500</u>	<u>50</u>
<u>Examination Room (Dedicated)</u>	<u>300</u>	<u>30</u>	<u>1000</u>	<u>100</u>
<u>Janitor's Closet</u>	<u>300</u>	<u>30</u>		
<u>Laundry(ActiveHours)</u>	<u>300</u>	<u>30</u>	<u>500</u>	<u>50</u>
<u>Clean/Soiled Utility</u>	<u>300</u>	<u>30</u>		
<u>Commercial Kitchen</u>	<u>500</u>	<u>50</u>	<u>1000</u>	<u>100</u>
<u>Food Storage (Non-Refrigerated)</u>	<u>300</u>	<u>30</u>		
<u>Staff Toilet Area</u>	<u>200</u>	<u>20</u>	<u>600</u>	<u>60</u>

*Utilization of daylight is encouraged in entryways to provide a transition between outside and interior illumination levels.

Note: Ambient light levels are minimum averages measured at 76 cm (30 in.) above the floor in a horizontal plane. Task light levels are absolute minimums taken on the visual task. For make-up/shaving, the measurement is to be taken on the face in a vertical position.

Note: It should be understood that the values listed are minimums. The optimum solution for task lighting is to give users control over the intensity and positioning of the light source to meet their individual needs.

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► Hospice Facility

Hospice care is a medically directed, interdisciplinary program of palliative services for terminally ill individuals and their family members or significant others. Hospice care supports terminally ill persons through the dying process with dignity and in comfort. Hospice is a medically directed, interdisciplinary program emphasizing pain management, symptom control and palliative services provided by a team of professionals that may include nursing staff, social workers, dietitians, volunteers and clergy, as well as physicians who may visit on a scheduled basis or in response to an emergency. No surgical techniques are used.

In-patient hospices are part of a continuum of palliative care. This chapter addresses inpatient freestanding hospices. At the discretion of the authority having jurisdiction (AHJ), the design concepts presented herein may be applied to hospice programs located in other health care facilities.

Unit Size

- In the absence of local requirements, consideration shall be given to restricting the size of the care unit to 25 beds.

Patient Rooms

- Maximum room occupancy shall be one patient unless justified by the functional program and approved by the licensing authority. In no case shall bedrooms exceed two patients
- Room size shall be based on program of care, distinctive in-room furniture, and clothing storage. If consistent with the program, accommodation for dining shall be provided in the resident room.

- Seating for visitors, with provision for at least one sleeping accommodation in patient rooms, shall be provided.
- Access shall be provided to both sides of the resident bed.

Airborne Infection Isolation Room(s).

- The need for and number of required airborne infection isolation room(s) shall be determined by an infection control risk assessment. Where required, the airborne infection isolation room(s) shall comply with the general requirements of the Hospital section.

Service Areas

- Service areas shall be provided according to (Sec. 8.2.C) as required by the program.

Patient Support Areas

- Where locally allowed, residential “home-like” kitchen and dining facilities shall be permitted to accommodate patients and their visitors.

Therapy

- If these services are required by the program to maximize current levels of function, they shall be provided according to (Sec. 8.5.)

Personal Services (Barber/Beauty) Areas

- If the functional program requires these services, see (Sec.8.6.)

Outdoor Spaces

- Outdoor areas shall be available for residents.

Dietary Facilities

- The following facilities shall be provided:
- Food Preparation Facilities. If food preparation is provided on site, the facility shall dedicate space and equipment for the preparation of meals. Food service physical environment and equipment shall comply with the locally adopted food and sanitary regulations.
- Provision shall be made for transport of hot and cold foods, as required by the program.
- Separate dining areas shall be provided for staff and patients. The design and location of dining facilities shall encourage patient use.
- Ice-Making Facilities. Ice-making facilities shall be self-dispensing if available for use by patients and/or visitors. Ice-making facilities under the control of the dietary staff and not available for use by patients and/or visitors may be bin type or self-dispensing. These may be located in the food preparation area or in a separate room, and shall be easily cleanable and convenient to the dietary function.

► Assisted Living

General Considerations

This chapter acknowledges that the many resident-driven variations of assisted living facilities that can be found represent the programmatic needs and preferences of the individuals who choose to live there. Therefore, the requirements and recommendations contained herein are intended to represent the base-level standards that will ensure the safety, accessibility, and residential aspects of all assisted living facilities.

Applicability

This chapter identifies the minimum requirements for assisted living facilities and recognizes various configurations of assisted living facilities, which must comply with applicable state and local requirements. Acknowledging that occupancy and building construction requirements will vary among jurisdictions, it is the intent of this chapter to establish minimal standards for safety and accessibility for a residential care environment, regardless of facility scope and scale. The common goal of this chapter and individual local and state requirements is to facilitate accountability as well as protection of the consumer.

Ancillary Services

When a facility shares or purchases services, appropriate modifications or deletions in space and parking requirements may be required.

Environment of Care

Assisted living facilities shall be designed and constructed to provide a supportive residential environment, conducive to the day-to-day activities of typical family life consistent with applicable cultural, emotional, and spiritual needs of individuals who need limited assistance. This supportive environment shall promote independence, privacy and dignity, balance autonomy with safety, and provide choice for all residents in a manner that encourages family and community involvement.

The architectural environment shall eliminate as many barriers as possible to effective access and use of the space, services, equipment and utilities appropriate for daily living.

Parking

Each assisted living facility shall have parking space to satisfy the needs of the residents, families, staff, and visitors. In the absence of local requirements or a formal parking study, a minimum of one space for every four resident units (or beds) shall be provided.

Functional Program

The owner of each project shall provide a functional program, to the authority having jurisdiction, which defines the scope and scale of the facility, and addresses all applicable provisions of this chapter.

Services

Assisted living facilities are unique in that services provided are in large part driven by the service needs and lifestyle preferences of the residents being served. The architectural environment shall support the services and levels of care provided within

the facility. Services such as home health, hospice, dietary, storage, pharmacy, linen, and laundry may be contractually provided or shared insofar as practical with other licensed or unlicensed entities.

Provisions for Disasters

See Chapter 1 of this document for other issues to consider.

Codes and Standards

A code-compliant, safe, and accessible environment shall be provided. Other design and construction standards may apply when a facility seeks accreditation, certification, licensure, or other credentials. When institutional codes are required, the facility shall maintain the residential environment desired by residents.

Accessibility codes.

The facility shall comply with applicable federal, state, and local requirements.

Size and Configuration

- The functional program shall determine facility spatial requirements.
- Areas for the care and treatment of users not residing in the facility shall not interfere with or infringe upon the space of residents living in the facility.

Resident Accommodations

- The facility shall provide adequately sized bedrooms or apartments (dwelling units) that allow for sleeping, afford privacy, provide access to furniture and belongings, and accommodate the care and treatment provided to the resident.
- Resident room size (area and dimensions) shall permit resident(s) to move with the assistance of a walker or wheelchair about the room, allowing access to at least one side of a bed, window, closet or wardrobe, chair, dresser, and night stand.
- Room size and configuration shall permit resident(s) options for bed location(s) and shall comply with spatial requirements of the authority having jurisdiction.
- Bedrooms shall be limited to single or double occupancy.
- Where cooking is permitted in resident rooms, additional floor area shall be provided for cooking and dining. The cooking area shall be equipped with a dedicated sink, and cooking and refrigeration appliances.
- Bedrooms shall not be used as a passageway, corridor, or access to other bedrooms.
- Resident bedrooms shall have a window that provides natural light with a maximum sill height of 36 inches above the finished floor.
- Each resident shall be provided separate and adequate enclosed storage volume within the resident room.
- Each resident shall have access to a toilet room. A minimum of one toilet room shall be provided for every four residents not otherwise served by toilet rooms adjoining resident rooms. The toilet room shall contain a water closet, lavatory, and a horizontal surface for the personal effects of each resident.

- Bathing facilities shall be provided on each floor where resident sleeping areas are located.
- One bathtub or shower shall be provided for every eight residents (or fraction thereof) not otherwise served by bathing facilities in resident rooms.
- Bathing fixtures shall be located in individual rooms or enclosures, with space for private use of the bathing fixture, for drying and dressing, with convenient access to a grooming location containing a lavatory, mirror, and counter or shelf. A toilet shall be provided within or directly accessible to each resident bathing facility without requiring entry into the general corridor.

Service Areas

- Staff work area(s) shall be provided in accordance with the functional program.
- Lockable storage shall be provided for resident records.
- Direct visualization of resident rooms or corridors from staff work areas is not required.
- Toilet room(s) for staff and public use shall be provided, and shall contain water closets with a handwashing station. Toilet rooms may be unisex, and shared by public and residents.
- Lockable closets, drawers, or compartments shall be provided for safekeeping of staff personal effects such as handbags.
- A staff lounge area shall be provided when required by the functional program.
- When required by the functional program, provision shall be made for 24-hour distribution of medications. A medicine preparation room, a self-contained medicine dispensing unit, or other system may be used for this purpose. The medicine preparation room, if used, shall provide for security. It shall contain a work counter, sink, refrigerator, and locked storage for controlled drugs. A self-contained medicine dispensing unit, if used, may be located at the staff work area, in the clean workroom, in an alcove, or in other space convenient for staff control.

Resident Support Areas

- Space for dining, separate from social areas, shall be provided.
- In a facility with more than 16 residents, dining and social areas shall not be confined to a single room.
- Natural light shall be provided at resident dining areas.
- Dining areas shall provide 20 square feet per occupant using the space at one time.
- Toilet room(s) shall be provided convenient to dining and social areas.
- The facility shall provide storage space for equipment and supplies required for the care of residents.
- Activity areas shall accommodate both group and individual activities.
- A minimum of 20 square feet per facility resident shall be provided for activity areas for socialization, passive and active recreation, and social activities.

- Outdoor areas shall be provided for residents, visitors, and staff. Outdoor spaces may include gardens on grade or on roof decks, or solaria, porches, and balconies.
- Toilet room(s) shall be provided convenient to activity areas.

Alzheimer's and Other Dementia Units

This is a secure, distinct living environment designed for the particular needs and behaviors of residents with dementia. Dementia units within assisted living facilities shall, in addition to the assisted living requirements, comply with the following:

- A dementia unit operated as a portion of an assisted living facility must provide self-contained leisure and dining room space, unless it can be demonstrated to the satisfaction of the authority having jurisdiction that use of shared common areas is appropriate to the needs of all residents.
- For operational efficiency, support services and spaces may be located within adjacent programs.
- Dementia units shall provide an appropriate controlled-egress system on all required exit doors or those leading to other areas of the facility, unless prior approval of an alternative method for the prevention of resident elopement from the unit has been obtained from the authority having jurisdiction.
- All operable windows shall be equipped with mechanisms to limit exterior window openings, to prevent elopement and prevent accidental falls.
- Alternative toilet and bathing fixture ratios shall be allowed in accordance with the functional program.

Dietary Facilities

- The food preparation and service area shall be provided with sufficient and suitable space and equipment to maintain efficient and sanitary operation of all required functions, in compliance with the applicable state and local sanitary codes.

Administration and Public Areas

- Areas shall be provided suitable for posting required notices, documents, and other written materials in public locations visible to and accessible to residents, staff, and visitors.
- Private space shall be provided for residents to meet with others.

Linen Services

- Space shall be provided for laundry services, as defined by the functional program.
- If contractual services are used, the facility shall provide an area for soiled linen awaiting pickup and a separate area for storage and distribution of clean linen.
- If on-site services are provided, the facility shall have areas dedicated to laundry and separate from food preparation areas. The facility laundry area for facility-processed bulk laundry shall be divided into separate soiled (sort and washer area) and clean (drying, folding and mending area) rooms. Separate soaking and handwashing sinks and housekeeping room shall be conveniently located to laundry areas.

- If shared personal laundry areas are provided, the areas shall be equipped with a washer and dryer for use by residents and a conveniently located handwashing station.

Housekeeping

- Space shall be provided for storage of housekeeping supplies and equipment. A designated service sink shall be provided.

Engineering Service and Equipment Areas

- Assisted living facilities shall provide the necessary area to effectively house building systems and maintenance functions in accordance with the functional program.

General Standards for Details and Finishes

- Assisted living facilities shall incorporate features and finishes that optimize sensory function and facilitate mobility, including ambulation and self-propulsion, including the incorporation of features that optimize independent way-finding. Potential hazards to residents, including sharp corners, slippery floors, loose carpets, and exposed hot surfaces, shall be avoided.

Vertical Transportation and Elevators

- Multistory assisted living facilities shall be provided with independent access to all resident use floors.

Waste Storage and Processing Service

- Accommodations shall be made for the collection and disposal of waste produced within the facility. Space shall be provided for enclosed waste storage that is separate from food preparation, personal hygiene, and other clean functions.

Heating, Ventilation, and Air Conditioning Systems

- Assisted living facilities shall have an HVAC system(s) to prevent the concentrations of contaminants and temperatures that impair health or cause discomfort to residents and employees. Airflow shall move from generally from clean to soiled locations.
- The facility shall have a permanently installed heating system capable of maintaining an interior temperature of 72 degrees Fahrenheit (22 degrees Celsius) under heating design temperatures.
- The facility shall be configured and equipped with a cooling system capable of maintaining an interior temperature of 75 degrees Fahrenheit (24 degrees Celsius) under cooling design temperatures.

Electrical Standards

- Lighting shall be engineered to the specific application. Unless alternative lighting levels are justified by the approved functional program, (Table 8.4) shall be used as a guide to minimum required ambient and task lighting levels in all rooms, spaces and exterior walkways.
- Approaches to buildings and parking lots, and all occupied spaces within buildings, shall have fixtures for lighting. Consideration shall be given to both the quantity and

quality of lighting, including contrast in lighting levels, glare control, the special lighting needs of the elderly, area-specific lighting solutions, the use of daylighting, the life cycle costs of lighting, and other lighting design practices as defined and described in ANSI/IESNA RP-28-01.

- Resident rooms and toilet rooms shall have provisions for general lighting and task lighting. All light controls in resident areas shall be quiet-operating.
- Resident unit corridors shall have general illumination with provisions for reducing light levels at night. Corridors and common areas used by residents shall have even light distribution to avoid glare, shadows and scalloped lighting effects. Highly polished or glossy sheen on reflective floors shall be avoided.

Emergency Electrical Service

- Emergency power shall be provided if the functional program permits life support equipment.

► Adult Day Health Care Facilities

Adult day health care (ADHC) services are group programs designed to meet the needs of functionally and/or cognitively impaired adults. Adult day health care facilities provide a caring, non-institutional setting for individuals who, for their own safety and well being, can no longer be left at home alone.

Adult day health care facilities offer protected settings and include a mixture of health and support services. Many offer specialized services such as programs for individuals with Alzheimer's disease, developmental disabilities, traumatic brain injury, mental illness, HIV/AIDS, and vision and hearing impairments. Adult day health care facilities are an integral component of the continuum of care for the elderly and disabled.

Design Considerations

- When possible, the ADHC facility shall be located on the street level or shall be equipped with ramps or elevators to allow easy access for persons with disabilities.
- Each adult day health care center, when it is located in a facility housing other services, shall have its own identifiable space. When permitted by the functional program, support spaces may be shared.
- The facility shall have sufficient space, furnishings and equipment to accommodate the range of program activities and services for the number of participants as required by the functional program.
- Participants are defined as the number of people exclusive of staff occupying the space at the same time. This shall include designated area(s) to be utilized when the privacy of the participants requires it.

Activity Space.

- Only spaces commonly used by participants are to be included as net usable activity space. Reception areas, storage areas, offices, restrooms, corridors, and service areas shall not be included. When a kitchen is used for activities other than meals, fifty (50%) percent of the floor area shall be counted as activity space.

- Minimum square footage requirements shall be based upon the services offered by the facility as follows:
 - **Multifunctional Adult Day Health Care Facilities**
 A structured comprehensive, non-residential program that provides for a variety of health, social and support services in a protective setting. This type of facility is large enough to accommodate changing service needs.

 At least one hundred (100) square feet for each of the first five participants; and sixty (60) square feet of program activity space for each participant thereafter.
 - **Specialty Adult Day Health Care Facilities**
 A structured comprehensive, nonresidential program that not only provides for a variety of health, social and support services, but offers specialty services for a target population. These types of facilities have unique needs that impact upon usable activity space.

 At least thirty (30) square feet for each participant, but no facility shall have less than 300 square feet of usable activity space.
 - **For social/recreational areas in an ADHC**
 An additional twenty (20) feet shall be provided per participant to accommodate the programmed activities.
 - **For mental health/Alzheimer's ADHCs**
 An additional forty (40) square feet of space shall be provided per participant.
 - **For physical rehabilitation therapy ADHCs**
 An additional fifty (50) square feet of space per participant shall be provided for activity space needed for equipment and treatment
 - **For developmental disability ADHCs**
 An additional seventy (70) square feet of space shall be provided per participant to ensure the therapeutic milieu is maintained.

Service Areas

- All communal activity areas shall have convenient access to a handwashing station.
- The ADHC shall have a medical/health treatment room or Nurses' Station. This area shall contain first aid materials, medical supplies and equipment and provide for secure medication storage. Secure medication storage shall include space that separates oral medications from topical agents, a refrigerator for medications storage, double locking for narcotics and adequate space to store medications brought in by participants. This storage can be a room, locked cabinetry or a locked medication cart. It shall also contain a handwashing station.
- There shall be a rest area and/or a designated area to permit privacy and to isolate participants who become ill, disruptive or may require rest. It shall be located in an area that can be clearly monitored and near a toilet room. It may be part of the medical/health treatment room or Nurses' Station. It shall be considered part of the usable activity space.

- There shall be a space available for participants and family/care givers to have private meeting with staff.
- There shall be storage space for program and operating supplies.
- A telephone(s) shall be available for participant(s) in an area that affords privacy during use.
- Drinking water shall be easily accessible to the participants.
- A housekeeping closet shall be provided that will contain a service sink and provide for the locked safe storage of housekeeping items.
- Outdoor recreation and/or relaxation area for participants, if provided, shall be accessible to indoor areas. Outdoor areas shall have a fence or landscaping to create a boundary that prevents participant elopement.

Toilet and Shower Facilities

- Participant toilet rooms shall be located no more than forty (40) feet away from the activity area.
- The facility shall have at least one (1) toilet and one (1) lavatory for each ten (10) participants.
- The facility shall provide as many a variety of toilet room types (e.g., independent, fully accessible, one-person assist, or two-person assist) as required by the functional program. All facilities shall include at least one toilet room that can accommodate a two-person assist.
- If the functional program indicates the need for bathing services, an assisted bathing facility shall be provided.
- Hot water at shower, bathing and hand washing facilities shall not exceed 110 F.

General Standards

- Emergency call stations shall be provided in any toilet rooms, and bathing facilities used by participants.
- Ventilation by natural and mechanical means shall be provided. Air conditioning and heating equipment shall be adequate and capable of maintaining the temperature in each room used by participants between 72° F and 78° F.
- All stairways and ramps shall have non-slip surfaces and handrails. Floor surfaces, including carpets, accessed by ADHC participants shall be slip-resistant. Highly polished flooring or floors with a glossy sheen shall not be used.
- Area rugs shall not be used.
- Hallways shall have handrails located on at least one side.
- Lighting shall be engineered to the specific application. (Table 8.4) shall be used as a guide to minimum required ambient and task lighting levels in all rooms, spaces and exterior walkways.