

SpaceMed Guide Addendum

Key Changes to the FGI Guidelines for 2018

Introduction

The third edition of the SpaceMed Guide was aligned with the 2014 edition of the *Guidelines for Design and Construction of Hospitals and Outpatient Facilities* published by the Facilities Guidelines Institute — referred to as the FGI Guidelines. Through a consensus process that includes public input, the FGI Guidelines documents are updated every four years. A thorough review of the recently-published 2018 FGI Guidelines documents reveals that there are minimal changes that impact the required spaces, minimum room sizes, and nomenclature in the current edition of the SpaceMed Guide. As a result, we have issued this Addendum, which highlights any inconsistencies, in lieu of publishing another edition of the SpaceMed Guide at this time.

There are minimal changes to the 2018 FGI Guidelines that impact the required spaces and minimum room sizes in the current edition of the SpaceMed Guide.

General Changes to the FGI Guidelines

Separate documents to provide more flexibility in planning outpatient facilities. To support the continuing transition to delivering healthcare in the lowest-cost setting, FGI has separated the requirements for hospitals from those for outpatient facilities — resulting in two separate documents: *Guidelines for Design and Construction of Hospitals* and *Guidelines for Design and Construction of Outpatient Facilities*. The *Guidelines for Design and Construction of Residential Health, Care, and Support Facilities* remains a separate document as in 2014. The primary goal of developing the new outpatient guidelines document was to provide sufficient flexibility for planning the wide variety of outpatient facilities being designed today and to identify common elements that apply to all facility types — including urgent care centers, birth centers, and outpatient surgery, imaging, infusion, renal dialysis, endoscopy, rehabilitation, dental, and psychiatric facilities.

Key changes relate to the reorganization of the FGI Guidelines documents to address different outpatient facility types and guidance on planning flexible clinical service rooms and pre- and post-procedure spaces.

Fundamentals and beyond. For 2018, the standards were split into “fundamental requirements” with the minimum standards needed for the design of a safe, effective, and efficient environment of care — and which can be adopted as code by authorities having jurisdiction — and “beyond fundamentals” to reflect emerging trends that exceed basic requirements. This digital resource library was conceived as a way to address the current thinking related to best practices, design recommendations, evidence-based research, and new applications of technology. It also includes draft fundamental requirements to be considered for inclusion in subsequent revisions to the FGI Guidelines.

More spaces listed as common elements. The FGI Guidelines documents continue to expand the number of spaces listed as “common elements” consistent with the approach used in the SpaceMed Guide.

Focus on minimum clearances. In lieu of specifying minimum room sizes for patient care, FGI 2018 focuses on minimum clearances rather than minimum room sizes — particularly related to imaging rooms — so that these rooms can more readily adapt to new technologies and changes in equipment over time.

Considerations for patients of size. The term “bariatric” has been replaced with “patients of size” to include patients who do not meet the clinical definition of obese but still require expanded clearances and/or greater capacity lifts.

Key Changes to the FGI Guidelines for 2018

Continued

New Classification System for Imaging Rooms

FGI 2018 has a new classification system for imaging rooms so that the room design and layout can more easily adapt to new technologies and equipment:

- **Class 1** (unrestricted area) for services that use a natural orifice entry and do not pierce or penetrate natural protective membranes — such as most diagnostic radiography, fluoroscopy, mammography, CT, MRI, nuclear medicine, and ultrasound procedures.
- **Class 2** (semi-restricted area) for diagnostic and therapeutic procedures such as coronary, neurological, neurological, or peripheral angiography and electrophysiology procedures.
- **Class 3** (restricted area) for invasive procedures and any Class 2 procedure during which the patient will require physiological monitoring and is anticipated to require life support.

Class 2 and 3 rooms should have a physically separate control room and the sizes of all types of imaging rooms depend on minimum clearances around the equipment to be used in the room and the manufacturer's recommendations.

Clarification of Procedure and Operating Rooms

The planning of spaces for diagnostic, surgical, and interventional procedures is clarified based on the level of invasiveness (and potential for infection), type of sedation used, number of staff in the room, and minimum clearances for the equipment to be used. This in turn dictates the room size, finishes, and other infrastructure requirements for procedure rooms and operating rooms (ORs).

Operating room sizes. The minimum clear floor area for hospital ORs is still 400 NSF (37.2 NSM) which increases to 600 NSF (55.7 NSM) for image-guided surgery using portable imaging equipment or for surgical procedures that require additional personnel and/or large equipment. However, for outpatient facilities, the clear floor area for an OR has been reduced to 255 NSF (23.7 NSM) if no general anesthesia is administered or 270 NSF (25.1 NSM) with general anesthesia. Where additional staff and equipment are required, an OR in an outpatient facility should have a minimum of 400 NSF (37.2 NSM) as with a hospital OR.

Procedure room sizes. Minimum room sizes and clearances have been revised for procedure rooms to reflect the space required for the anesthesia team and equipment. Two categories of procedure rooms are identified:

- 130 NSF (12.1 NSM) with no anesthesia administration
- 160 NSF (14.9 NSM) with anesthesia administration

Endoscopy room size reduced. The minimum room size for endoscopies has been reduced from 200 NSF (18.6 NSM) to 180 NSF (16.7 NSM).

Restricted area. For surgery and special procedure suites, a designated "restricted" area was added in FGI 2018 in addition to the "semi-restricted" and "unrestricted" areas specified in FGI 2014.

SpaceMed Guide Reference:

SECTION 3:
Imaging and Other Diagnostic Procedures

SECTION 5:
Oncology Services
(Radiation Oncology)

SECTION 6:
Cardiovascular Services
(Interventional Cardiology)

SpaceMed Guide Reference:

SECTION 2:
Surgery and Special Procedures

SECTION 3:
Imaging and Other Diagnostic Procedures

SECTION 6:
Cardiovascular Services
(Interventional Cardiology)

Key Changes to the FGI Guidelines for 2018

Continued

Pre- and Post-Procedure Patient Care Spaces

The guidelines for pre- and post-procedure patient care areas have been revised to allow greater flexibility in how these areas are configured. The spaces have also been standardized and incorporated into the common elements section in both documents. The new requirements for pre- and post-procedure patient care areas in hospitals and outpatient facilities are described below.

Separate areas. As with FGI 2014, the minimum number of patient care spaces are defined for each area:

- Pre-procedure area — one patient care space per OR, procedure, or imaging room.
- Phase I post-anesthetic care unit (PACU) — one patient care space per OR or Class 3 imaging room.
- Phase II recovery area — one patient care space per OR, procedure, or Class 2 or Class 3 imaging room.

Combined area. New to FGI 2018, when these areas are combined, a minimum of two patient care stations are required for each hospital OR, procedure room, and Class 2 or Class 3 imaging room to reflect the flexibility and increased efficiency when all three areas are combined. For outpatient facilities, a minimum of one patient care space for each outpatient OR, procedure room, and Class 2 or Class 3 imaging room is specified.

Class 1 imaging support. In addition to the above requirements, for outpatient imaging facilities, a minimum of one patient care space should be provided for every three Class 1 imaging rooms where patients receive point-of-care lab work or injection preparation with non-radio-pharmaceutical contrast agents.

Other Changes to the Numbers and Sizes of Spaces

Other changes to the FGI Guidelines that impact the required spaces and minimum room sizes in the current edition of the SpaceMed Guide include:

Waiting area seats for outpatient facilities. New to FGI 2018, specific seating ratios for various types of outpatient facilities are provided in an appendix. The number of spaces to be provided for wheelchairs and patients of size is also specified.

Dental operatory. The minimum clear floor area for a dental operatory is now 80 NSF (7.4 NSM) regardless of whether it is a single-patient room or a patient station in an open treatment area.

Sterile processing room. While FGI 2014 allowed a single room for sterile processing, FGI 2018 now specifies the minimum requirement for sterile processing to be a two-room suite to maintain a dirty-to-clean workflow. A one-room sterile processing facility is now permitted only where small countertop sterilizers are used.

Technology distribution room. A three-foot minimum clearance on all sides of equipment racks is now required in lieu of specifying a minimum room size of 12 feet by 14 feet as in FGI 2014.

SpaceMed Guide Reference:

SECTION 2:
Surgery and Special Procedures

SECTION 3:
Imaging and Other Diagnostic Procedures

SECTION 5:
Oncology Services
(Radiation Oncology)

SECTION 6:
Cardiovascular Services
(Interventional Cardiology)

SpaceMed Guide Reference:

SECTION 10:
Ambulatory Care

SECTION 2:
Surgery and Special Procedures

SECTION 15:
Building Support Services
(Technology/Communications Equipment)



Key Changes to the FGI Guidelines for 2018

Continued

Additional Design Considerations

Although specific numbers and sizes of these rooms are not mandated, additional design considerations are included in FGI 2018 for the following spaces:

Sexual assault forensic examination (SAFE) room. Although not required for hospital emergency services, detailed design requirements are included in FGI 2018 should a healthcare organization choose to provide a SAFE room.

Accommodation for telemedicine services. To address the expansion of telemedicine services in the U.S., FGI 2018 provides more extensive guidance for designing clinical telemedicine spaces including provisions for privacy, lighting, surfaces, and acoustics.

Mobile/transportable medical units. The chapter on designing mobile/transportable medical units was revised in FGI 2018 to support the guiding principle that the physical design requirements for specific medical services should be the same regardless of where those services are provided.

Expanded design guidelines. Although the SpaceMed Guide focuses on predesign planning — identifying the types, numbers, and sizes of spaces required — the FGI Guidelines provides indispensable guidance for the designer on risk assessment, infection prevention, architectural detail, surface, and built-in furnishing requirements. In particular, FGI 2018 provides revised sections on acoustical design, sustainable design, and ventilation requirements.

For architectural designers, the 2018 FGI Guidelines provides revised sections on acoustical design, sustainable design, and ventilation requirements.