

Major Additions and Revisions

On picking up the 2006 edition, users of previous editions of the Guidelines will notice a change in the cover design. The colorful new cover is a harbinger of much more that is new.

First, the book is three-hole punched so those who prefer to have a document that lies flat can have the glue binding cut off and place the pages in a binder. In addition, for the first time, a searchable electronic CD version of the book is included for use on laptops and other personal computers.

Inside the book, users will find the document has been completely reorganized to make it easier to access the information they need. Previously, the contents comprised a list of facility types in more or less the order the topics were added to the book. In this edition, the content has been arranged in four parts that group similar facilities together. Part 1 provides information applicable to all facility types. Part 2 contains all of the chapters on hospitals, and Part 3 the chapters on a variety of ambulatory care facility types. Part 4 comprises “other” health care facility types and in this edition includes nursing, hospice, assisted living, and adult day health care facilities. Within each chapter, the content is also presented differently than in the 2001 edition. The text has been broken into smaller paragraphs with more subheads and placed in basically the same order in every chapter. A second color has been introduced for headings to help users follow the text.

The reorganization of the Guidelines is accompanied by a new numbering system that reflects the division of the content into parts. The first part of each paragraph reference is the chapter number, which appears at the top of the page. This is followed by a hyphen and the paragraph number. For instance, the reference to typical patient rooms in a hospital medical/surgical unit is 2.1-3.1.1. For users who are accustomed to the previous numbering system, a matrix at the back of the book lists the paragraph numbers in the 2001 edition and their corresponding numbers in the 2006 edition. So the document will be easy to peruse, full-length references appear only in cross-references, the matrix, and the index. However, references to the content of the 2006 Guidelines in other documents must be complete, showing the chapter and the paragraph number.

This major reorganization effort was instigated by a study of the Guidelines document commissioned by the Facility Guidelines Institute (FGI) in 2003. The Clemson University School of Architecture was contracted to review the Guidelines thoroughly under the direction of David J. Allison, AIA, associate professor and coordinator of the Graduate Program in Architecture + Health, and Barbara Heifferon, associate professor of professional communication and rhetoric. After consulting with a task force of the Health Guidelines Revision Committee Subcommittee on Research and Development, led by J. Armand Burgun, FAIA, a group of graduate students made suggestions about ways to improve the usability, clarity, and consistency of the Guidelines document. The resulting report presented 13 general recommendations. The Steering Committee of the Health Guidelines Revision Committee (HGRC) chose to institute eight of these in the 2006 edition.

In addition to the reorganization and renumbering of the Guidelines text, which was a monumental editorial effort, the 2006 edition provides an updated version of the content, including both completely new material and revisions to the text of the 2001 edition. As explained in the preface, the HGRC is the body responsible for considering proposals to change the 2001 document presented by the public, as well as for generating proposals based on their multidisciplinary discussions. After the draft 2006 edition was posted for public comment, the HGRC reviewed the comments and finalized the text.

The major additions and revisions that resulted from the 2006 edition revision cycle are outlined below. As in past editions, significant changes are marked throughout the book with a vertical line beside the text.

Part 1: General

Chapter 1.1 provides a useful introduction and adds information about how to use the Guidelines and request interpretations of its requirements. Like the former Chapter 1, which it replaces, it explains how the Guidelines are applied to renovation projects and outlines provisions for disasters and federal requirements for protecting patient privacy.

MAJOR ADDITIONS AND REVISIONS

The Environment of Care chapter (formerly Chapter 2, now Chapter 1.2) has been significantly expanded. The goal of the chapter is to identify the overall components and specific elements that directly affect the experience of participants in the health care delivery system. The functional program, as the key document used to identify a provider's goals and objectives for the environment of care and to describe specific strategies for achieving them during design and construction, receives expanded coverage in this chapter.

The contents of former Chapters 5 and 6 have been consolidated into the new Chapter 1.5, which covers planning, design, construction, and postconstruction considerations. Language relating to the infection control risk assessment (ICRA) has been reworked and expanded, and a revised section on infection control risk mitigation recommendations has been included. Information about the design process, finishes and surfaces, construction phasing, critical ventilation requirements during construction, commissioning, and record drawings and manuals have been introduced and combined to address the entire planning, design, and construction (PDC) process.

Chapter 1.6 is a new chapter intended to capture requirements that are common to all or nearly all health care facility types. Chapters on individual facility types will refer back to this chapter and identify any instances in which the common requirements do not apply to a particular facility type. Other chapters contain references to material in Chapter 1.6 that applies to them. This approach makes it easier to update technical information, which can be changed in only one location rather than in multiple chapters. This chapter will receive significant attention during the 2010 revision cycle, and the Steering Committee expects the public and the HGRC members to make substantial proposals to expand its content.

Part 2: Hospitals

Part 2 contains the chapters on general hospitals, psychiatric hospitals, and rehabilitation facilities from the 2001 edition of the Guidelines, along with a completely new chapter on small inpatient primary care hospitals. This new chapter was added to address smaller facilities that are more commonly constructed in rural areas or inner city communities to serve smaller populations.

Perhaps the most widely anticipated change in the text in the General Hospitals chapter (now Chapter 2.1) is the change in room capacity in medical/surgical (including postpartum) units. The 2006 edition specifies that the single-bed room is the minimum standard in new construction. Approval of a two-bed arrangement is still permitted if a facility's functional program demonstrates it is necessary. In addition, when an organization undertakes a major renovation, the patient room bed compliment is permitted to remain the same.

The text of the General Hospitals chapter includes the following completely new and significantly revised material:

- New section on intermediate care units
- Bed clearances in critical care units and neonatal intensive care units (NICUs)
- Bedside documentation areas in critical care units
- Expanded lighting requirements for NICUs
- Revised text for in-hospital psychiatric nursing units
- New section on in-hospital skilled nursing units
- Appendix language on surge capacity in emergency departments
- Revised language on decontamination areas in emergency departments
- New section on observation units in emergency departments
- New section on freestanding emergency facilities
- Addition of electrophysiology labs in cardiac catheterization labs
- Requirements for patient toilets in diagnostic x-ray facilities
- Appendix language regarding magnetic shielding for MRI facilities

- New language on waste management and processing
- New language specifying the use of ducted systems for all return ventilation in patient care areas
- New language on ventilation for airborne infection isolation rooms (AIIRs) and protective environment rooms
- New description of electronic surveillance systems

Part 3: Ambulatory Care Facilities

Chapter 9 of the 2001 edition, Outpatient Facilities, has been divided into 11 chapters for the 2006 edition. Chapter 3.1 offers guidelines for outpatient facilities in general, with some notations about facility types to which parts of the chapter do not apply. The sections on specific facility types that previously appeared in Chapter 9 have all been made into individual chapters. In addition, the former Chapter 12, Mobile, Transportable, and Relocatable Units, is located in Part 3.

Significant content changes to chapters in this part of the book are mentioned here. First, the section on “Freestanding Emergency Service” has been moved to the General Hospitals chapter, and a new classification, “Freestanding Urgent Care Facilities,” appears in Part 3. This arrangement reserves the term “emergency department” for use in the chapter covering hospitals and makes the requirements for the two types of emergency departments similar. Urgent care facilities are distinguished as those facilities providing basic care for non-emergency conditions on a less-than-24-hour-per-day schedule.

The second major content change is in the chapter containing guidelines for outpatient surgical facilities. This chapter has been greatly expanded and improved to create guidelines that require outpatient surgery facilities to provide the same environmental design functions, controls, and finish materials as those found in the surgery departments of inpatient facilities. These changes will help mandate a similar standard of care for all perioperative patients, no matter where a procedure is performed.

A new chapter has been created for office surgical facilities. As more and more procedures are performed on an outpatient basis, concern about unregulated set-

tings has increased. Minimum standards are set for this classification, recognizing that the patients served are ambulatory but that they often need a similar environment of care to ensure positive outcomes.

Minimum dimensions have been defined for clean and sterile supply rooms, operating rooms, post-anesthesia care areas, and storage rooms.

Other new chapters added in this part of the book cover these facility types:

- Gastrointestinal endoscopy facilities
- Renal dialysis centers
- Psychiatric outpatient centers

Part 4: Other Health Care Facilities

Part 4 includes chapters on nursing facilities, hospice facilities, assisted living facilities, and adult day health care facilities.

Chapter 4.1 (formerly Chapter 8), Nursing Facilities, was not extensively revised, but some significant changes were made:

- Clarification of maximum room occupancy in renovation projects as two (unless the room already accommodates up to four residents)
- A new requirement that rooms for ventilator-dependent residents provide for the administration of oxygen and suction
- Use of noncentral air-handling systems (e.g., through-the-wall fan coil units) for recirculation only
- Provision of a central ventilation system capable of providing the minimum outdoor air requirements for each individual space in all new facilities
- New minimum requirements for ambient and task lighting levels consistent with standards developed for senior living by the Illuminating Engineering Society of North America

Requirements for the remaining facility types in Part 4 were nonexistent in previous editions, with chapter

placeholders consisting only of brief descriptions of the program and/or appendix language. However, because hospice, assisted living, and adult day health care facilities have become increasingly relevant in today's health care environment, the HGRC focused its efforts on developing reasonable minimum standards to assist in the design of these facilities.

The hospice facility requirements in Chapter 4.2 recognize a programmatic similarity between nursing and hospice facilities. Using the minimum nursing facility requirements as a basis, design requirements were developed to reflect a keen understanding of the unique nature of residential hospice programs and the need to accommodate special relationships between the hospice resident, family members, and caregivers. Although the text is based on nursing facility requirements, there is no expectation that residential hospice facilities will look like nursing homes; the performance focus of the new hospice requirements allows for a smaller, resident-focused environment that can accommodate numerous programmatic philosophies, with less emphasis on the institutional perspective assumed for most nursing facilities.

The assisted living facility requirements in Chapter 4.3 resulted from an intense collaborative effort between HGRC members, including several state authorities, and representatives from a number of national associations representing both the assisted living industry and consumers. The requirements represent a general consensus that recognizes the residential and consumer focus of assisted living, while setting basic standards for the functionality and safety of assisted living facilities.

The growing interest in adult day health care facilities reflects the increasing importance of this care modality as the continuum of care for the elderly expands to accommodate the movement toward increased alternatives to nursing home care. Although adult day health care programs can vary greatly in scope, the requirements in Chapter 4.4 are directed toward significant programs that are state licensed and must cater to an increasingly frail elderly population. The requirements are performance-based wherever possible and can appropriately accommodate programs of various size and scope of services.

Glossary

The glossary, which first appeared in the 2001 edition, has been expanded. Definitions of commonly used terms that appear throughout the Guidelines have been added to facilitate understanding, clarify issues; and help maintain consistency in the document.

Coming Up: More Research and White Papers

As a not-for-profit, 501(c)(3) corporation, the Facility Guidelines Institute is dedicated to, and reinvests its share of the net proceeds derived from sales of Guidelines documents in, research and development projects that inform and help produce improved editions of the Guidelines. Two such major research efforts instigated, organized, and funded by FGI informed significant changes in Guidelines 2006— (1) a study by the Clemson University School of Architecture that led to total reorganization and reformatting of the document, and (2) a study by Simon Frazer University that led to adoption of the single-bed room as the minimum standard for new medical/surgical and postpartum inpatient units. Additional research is already under way, and more studies are anticipated to inform the development of Guidelines 2010 about numerous subjects that play a vital role in health facility design and construction, including the following:

- Implementation of the remaining Clemson recommendations
- Outcome measures and life-cycle costs related to single-bed rooms
- Windows, daylighting, and views
- Space requirements for dining and recreation
- Impact of proper humidity control on residents of long-term care facilities
- Universal definition of new construction versus renovation
- Impact of therapeutic patient care environments
- Evidenced-based design criteria
- Surge capacity and disaster preparedness

In addition, during the public review and comment period for the first draft the 2006 edition, a number of new proposals were received on subjects of critical interest to many health facility providers, designers, and regulators that could not be processed so late in the revision cycle. Subjects of immediate concern that were introduced too late to develop draft consensus recommendations for public review and comment included these:

- Bariatric design
- Design for safe use of patient lifts and transport devices
- Acoustics and speech privacy
- Inpatient and outpatient oncology facilities
- Interventional radiology

Recognizing that both the public and the HGRC need a minimum of four years to use, digest, critique, and develop true consensus recommendations for modifications to each new edition of the Guidelines, and that the industry probably cannot afford to wait another four years to receive useful guidance on some of these emergent issues, FGI has organized task groups that are working on the development of draft white papers or monographs on several of them. The results of these efforts will be reviewed at the first full meeting of the HGRC for the 2010 revision cycle. After due consideration and modification at that meeting, FGI plans to issue draft documents for public consideration about as many of these subjects as possible.

Such research monographs and white papers will be published for information purposes only. However, individual state authorities having jurisdiction may adopt or refer to them before these draft recommendations have moved through the complete consensus development process (involving public review and comment, followed by committee review and modification). Since these papers may be published at least two years ahead of the next edition of the Guidelines, they may also serve other beneficial purposes, including the following:

- Stimulation of early action, research, development, and dissemination of information for consideration and discussion
- Provision of admittedly preliminary drafts on subjects about which very little else may then be available
- Receipt of feedback that can better inform the Guidelines to be developed and published for jurisdictional adoption and use in 2010

To prepare for the issuance of such research monographs and white papers, and to give purchasers of Guidelines 2006 a place to access them when they are published, FGI has developed a Guidelines Web site. It is the authors' and publisher's mutual intent to offer such papers free of charge to all users of Guidelines 2006 by making them available for download from the FGI and AIA Web sites, as well as the Web sites of other interested organizations, with a feedback mechanism to be developed and advertised when the papers become available.