

# The 2022 FGI Guidelines for the Design and Construction of Hospitals & OP Facilities

**David B. Uhaze, RA**

**Chairman** – FGI Health Guidelines Revision Committee

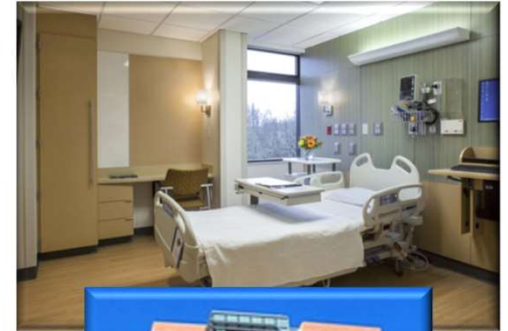
**Principal** - Health Facilities Design Consulting

**Retired AHJ** - State of New Jersey



## Fall Conference

September 10, 2021



# Introduction

- **What are the Guidelines**
- **The Facility Guidelines Institute**
- **FGI Process**
- **The 2014 Colloquiums**
- **The 2022 FGI Guidelines**
- **Beyond Fundamentals**
- **Emergency Conditions Guidelines**

# The “Guidelines”

- The original **General Standards** appeared in the *Federal Register* on February 14, 1947, as part of implementing regulations for the 1946 Hill-Burton Act.
- In 1974 the document was retitled **Minimum Requirements of Construction and Equipment for Hospital and Medical Facilities** to emphasize that the requirements were minimum, not ideal standards.
- In 1984 the Department of Health and Human Services asked the American Institute of Architects to publish and distribute the **Guidelines**
- The **Facility Guidelines Institute** (FGI) was formed in 1998
- The 2022 edition is the latest in the 75 year history of the **Guidelines** and the 9<sup>th</sup> edition to be revised through a multidisciplinary consensus process supported by public input and review.



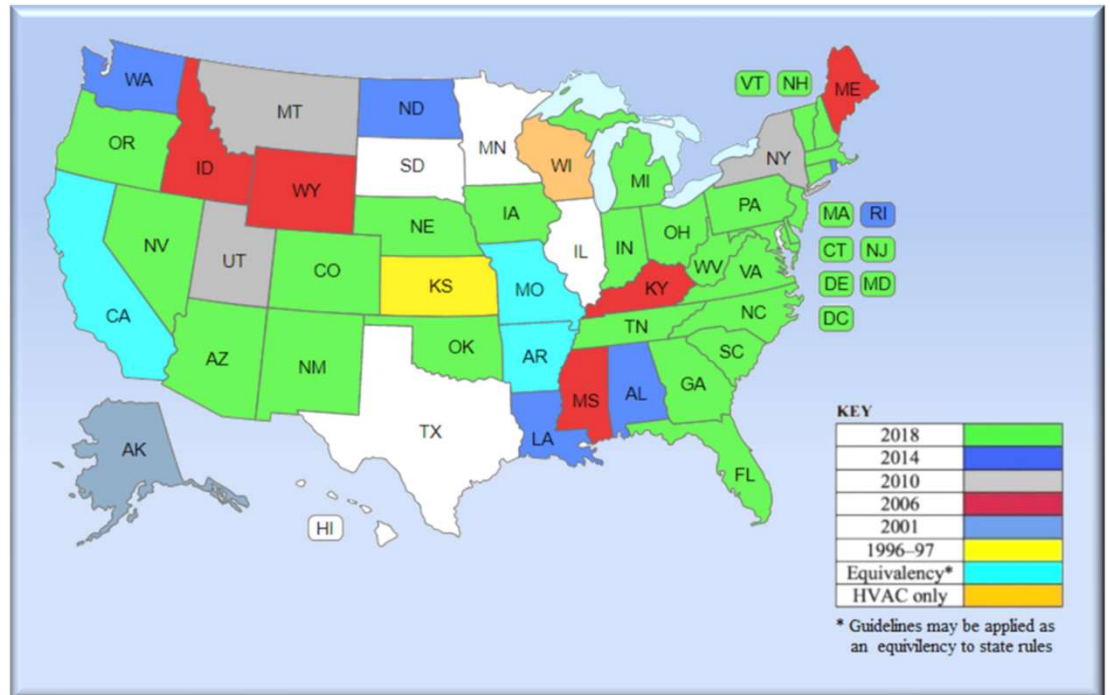
# Guidelines for Design & Construction of Health Care Facilities

- The **Guidelines** are a consensus-based **minimum** standard that promote a level of building performance that will not detrimentally affect the health and safety of patients and staff when buildings are operated as designed.
- The **Guidelines** outline minimum program space, risk assessment, infection prevention, architectural details, and surface and furnishing needs for all clinical and support areas of hospitals, long term care, rehabilitation and ambulatory care facilities.
- The **Guidelines** also address minimum engineering design criteria for plumbing, electrical, and heating, ventilation and air-conditioning systems.
- When possible, the **Guidelines** standards are performance oriented to meet desired results. Prescriptive measures, when given, have been carefully considered relative to generally recognized standards.



# The “Guidelines” is a Standard

- 42 states adopt some edition of the Guidelines
- 27 states currently use the 2018 edition, with at least 5 other states working on adoption
- 6 states (Colorado, Idaho, Kansas, Maine, Mississippi, New York) that adopted earlier editions of the *Guidelines* permit use of a more recent edition than that adopted.
- 5 states do not use the *Guidelines* officially but do use the documents for reference.



# The “Guidelines” is a Standard

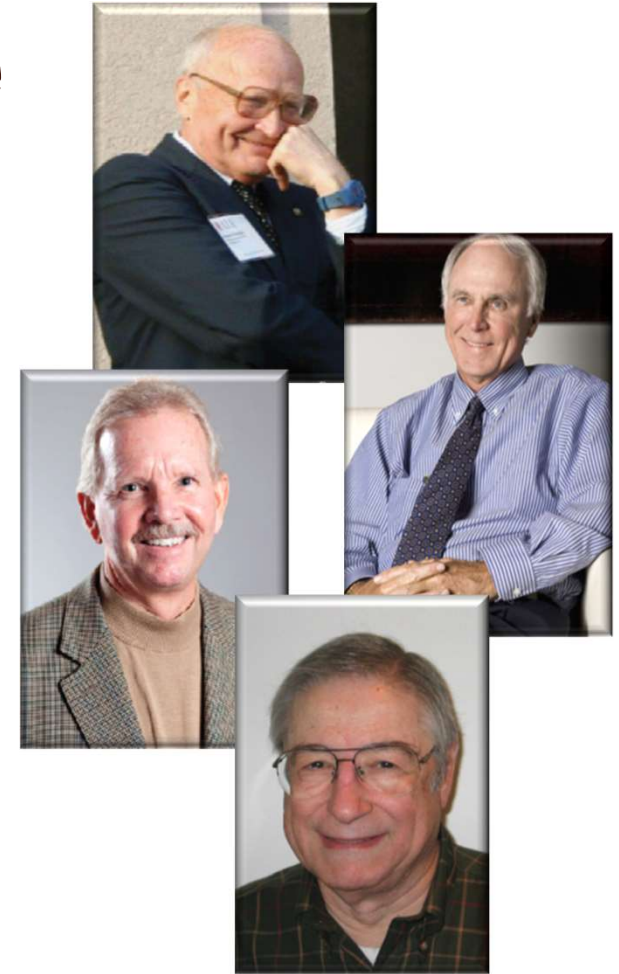


- The Joint Commission requires organizations to assess building design and construction requirements based on local, state, and federal regulations and codes.
- When these entities are silent on a particular design criterion, The Joint Commission recognizes the **2018 Facility Guidelines Institute (FGI) Guidelines for Design and Construction of Hospitals** for new construction and renovation.
- They allow the FGI requirements at the time of construction to be used, so the edition of the FGI applicable at the time of construction would be used for any existing construction.
- If the current requirements are stricter than the building codes at the time of construction, The Joint Commission would expect the organization to perform a gap analysis to validate that adequate patient and staff safety, and process integrity can be maintained.



# The Facility Guidelines Institute

- The **Facility Guidelines Institute** (FGI), is a not-for-profit corporation, founded in 1998 to provide continuity in the facility guidelines revision process,
- The primary mission of the **FGI** is to produce guidelines and publications, advised by research, to advance quality health care.
- **FGI** serves as the contracting agent for the work performed by the **Health Guidelines Revision Committee** and is the publisher of the document.



# The Health Guidelines Revision Committee

- The **HGRC** is a select, multi-disciplinary, consensus body of more than 100 professional volunteer representatives from across the nation.
- The **HGRC** includes:
  - State authorities and Federal agency representatives
  - Non-governmental professional society members
  - Facility owners and Administrators
  - Architects and Engineers
  - Clinical practitioners
- **HGRC** members spend countless hours each cycle in subcommittees and focused task groups reviewing proposals for change, revising existing language and authoring new up-dated standards.





# The Multidisciplinary HGRC

20% - Architects

18% - Medical professionals

16% - State AHJs

13% - Engineers

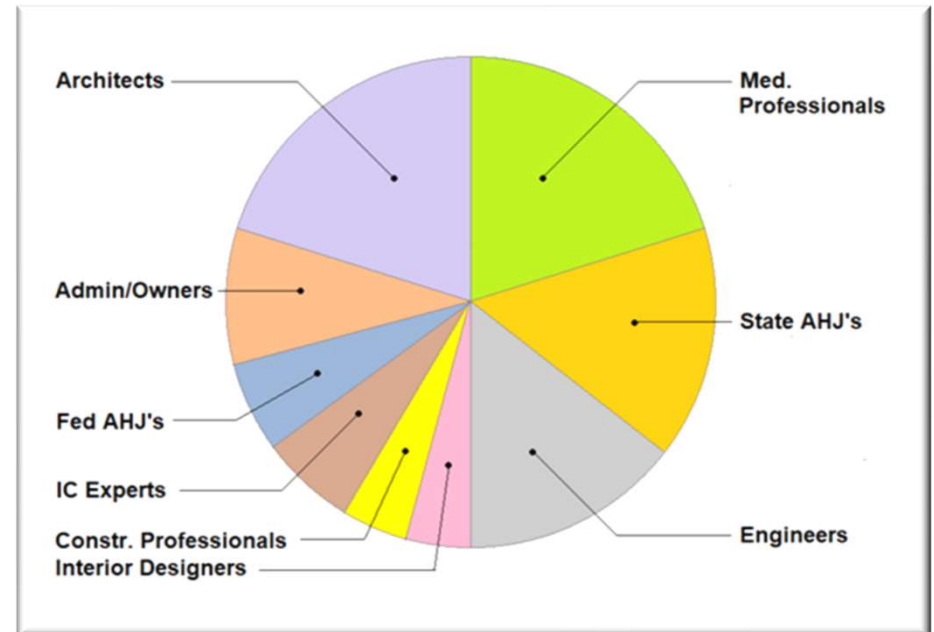
10% - HC administrators/HC org. reps

8% - Federal AHJs (IHS, CMS, HUD, VA)

7% - Infection control experts + NIH/CDC

4% - Construction professionals

4% - Interior designers



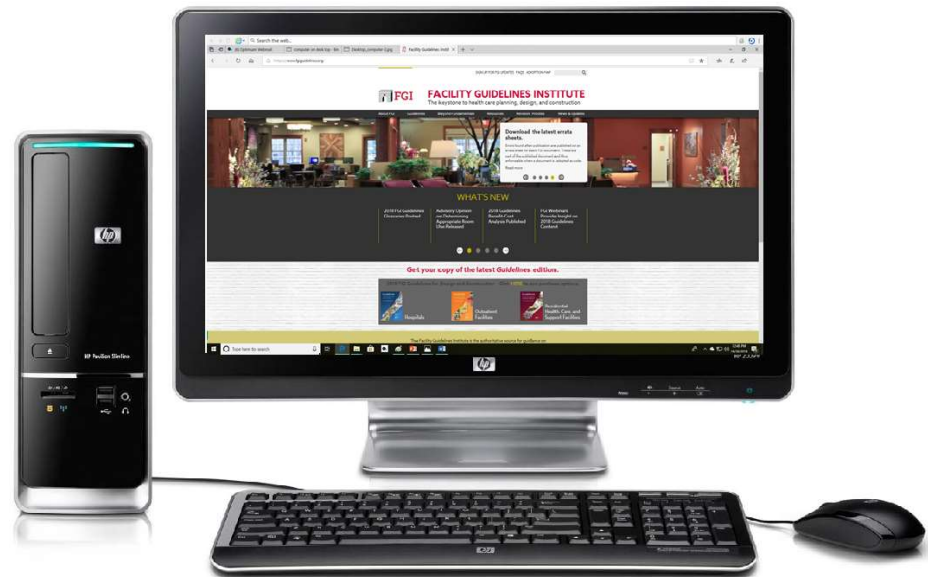
# The FGI Revisions Process

- Three - year revision cycle to match other National Codes
- Two open proposal periods for public comment
- Vetting of proposals via online conferencing by the HGRC after each public comment period
- Three All-hands meetings for voting
- Guidelines are published after voting by the full HGRC

2022 GUIDELINES SCHEDULE			
<b>2018</b>			
Jan.	<ul style="list-style-type: none"> <li>Provide Benefit Cost data to SCC committee</li> <li>Mail appointment letters to Steering Committee</li> <li>Draft letters of reappointment, invitation, and release</li> <li>Finalize Beyond Fundamentals schedule for 2018</li> </ul>	PB/HL CE DE/PB/HC	
Jan. 5	<ul style="list-style-type: none"> <li>Send out RFP for new proposal/comment system</li> </ul>	PB/HL	
Jan. 31	<ul style="list-style-type: none"> <li>Select and notify vendor to provide new proposal/comment system</li> </ul>	DE/PB/HL	
Feb.	<ul style="list-style-type: none"> <li>FGI Board meeting (set strategic planning agenda)</li> <li>Mail letters of reappointment and release to 2018 HGRC</li> <li>Send 2022 HGRC candidate list to SC</li> <li>Select new conferencing system</li> <li>Finalize social media strategy</li> <li>Begin reviewing HGRC candid</li> </ul>	FGI Board/DE/CE CE Editorial team DE/HL/VC Personnel Committee	
Feb. 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		VC
Feb.-Mar.	<ul style="list-style-type: none"> <li>Review and revise HGRC Open</li> <li>Review and revise FGI style g</li> <li>Review and edit Benefits Cov</li> </ul>		Editorial team
Mar. 23-28	<ul style="list-style-type: none"> <li>PSC Summit (Nashville)</li> </ul>		FGI Board/Exec. SC/CE
Apr. 1	<ul style="list-style-type: none"> <li>Launch new proposal/comm</li> </ul>		??
Apr. 1-30	<ul style="list-style-type: none"> <li>Enter 2018 text into proposa</li> </ul>		??
Apr. 16	<ul style="list-style-type: none"> <li>Publish Benefits Cost analysis</li> </ul>		SC/FGI staff
Apr.	<ul style="list-style-type: none"> <li>In-person staff meeting in co</li> <li>FGI Board/Steering Comm</li> <li>Review Board's strat</li> <li>Confirm 2022 HGRC</li> <li>Recommend docum</li> </ul>		Editorial team
Apr. 21-24	<ul style="list-style-type: none"> <li>Environments for Aging (Sav</li> </ul>		FGI board/Exec. SC/CE
May	<ul style="list-style-type: none"> <li>Mail letters of invitation to re</li> <li>Public proposal period begin</li> </ul>		
May 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		
Jun. 21-23	<ul style="list-style-type: none"> <li>AIA Convention (New York C</li> </ul>		
July	<ul style="list-style-type: none"> <li>Draft BF schedule for 2019</li> <li>Steering Committee meeting</li> <li>Finalize 2022 HGRC</li> <li>Recommend topic/tu</li> </ul>		
July 15-18	<ul style="list-style-type: none"> <li>ASHRAE Annual (July 15-18, Sea</li> </ul>		
<b>2019</b>			
Aug.	<ul style="list-style-type: none"> <li>Send out RFP contracts for 2019</li> </ul>		VC
Aug. 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		Editorial team
Sept.	<ul style="list-style-type: none"> <li>FGI Board/HGRC Executive SC meetings</li> </ul>		FGI Board/Exec. SC/CE
Oct. 8-10	<ul style="list-style-type: none"> <li>Healthcare Facilities Symposium (Austin, Tex.)</li> </ul>		??
Oct. 28-31	<ul style="list-style-type: none"> <li>LeadershipAge (Philadelphia)</li> </ul>		??
Oct.	<ul style="list-style-type: none"> <li>Steering Committee meeting (Web-based)</li> <li>Finalize topic/task groups and chairs</li> </ul>		SC/FGI staff
Nov. 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		Editorial team
Dec.	<ul style="list-style-type: none"> <li>FGI Board/HGRC Executive SC meeting</li> </ul>		FGI board/Exec. SC/CE
<b>2020</b>			
Jan.	<ul style="list-style-type: none"> <li>Steering Committee meeting (in-person)</li> </ul>		SC/FGI staff
Feb. 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		Editorial team
Feb. 27-Mar 1	<ul style="list-style-type: none"> <li>HGRC meeting #1</li> </ul>		HGRC
Mar.-June 30	<ul style="list-style-type: none"> <li>Document/topic/task groups meet online to de related to Steering Committee goals</li> </ul>		
May 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		
June	<ul style="list-style-type: none"> <li>Steering Committee meeting (Web-based)</li> </ul>		
June 30	<ul style="list-style-type: none"> <li>Public proposal period ends</li> </ul>		
June-July	<ul style="list-style-type: none"> <li>Draft BF schedule for 2020</li> </ul>		
July	<ul style="list-style-type: none"> <li>Editors review proposals and prepare files for v</li> </ul>		
Aug.	<ul style="list-style-type: none"> <li>Send out RFP contracts for 2020</li> </ul>		
Aug. 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		
Aug.-Dec.	<ul style="list-style-type: none"> <li>Document and topic groups review/vote on pr task groups to write any proposals needed in re</li> </ul>		
Sept.	<ul style="list-style-type: none"> <li>Steering Committee meeting (Web-based)</li> </ul>		
Oct.	<ul style="list-style-type: none"> <li>Topic groups report to document groups re: resu</li> </ul>		
Nov. 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		
<b>2021</b>			
Jan.	<ul style="list-style-type: none"> <li>Steering Committee meeting</li> </ul>		SC/FGI staff
Jan.-May	<ul style="list-style-type: none"> <li>Develop final manuscripts</li> </ul>		Editorial team
Feb.	<ul style="list-style-type: none"> <li>Document groups prepare presentations to HGRC</li> </ul>		DG chairs
Feb. 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		Editorial team
Mar. 3-5	<ul style="list-style-type: none"> <li>HGRC meeting #3</li> </ul>		HGRC
May 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		Editorial team
June-Nov.	<ul style="list-style-type: none"> <li>Production of 3 books</li> </ul>		Editorial team
Aug.	<ul style="list-style-type: none"> <li>Steering Committee meeting (Web-based)</li> </ul>		SC/FGI Staff
Aug. 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		Editorial team
Oct. 1	<ul style="list-style-type: none"> <li>3 final manuscripts sent to HGRC for vote</li> </ul>		Editorial team
Nov. 1	<ul style="list-style-type: none"> <li>3 final manuscripts voting deadline</li> </ul>		HGRC
Nov. 15	<ul style="list-style-type: none"> <li>Publish FGI Bulletin</li> </ul>		Editorial team
Dec. 1	<ul style="list-style-type: none"> <li>2022 Guidelines published</li> </ul>		

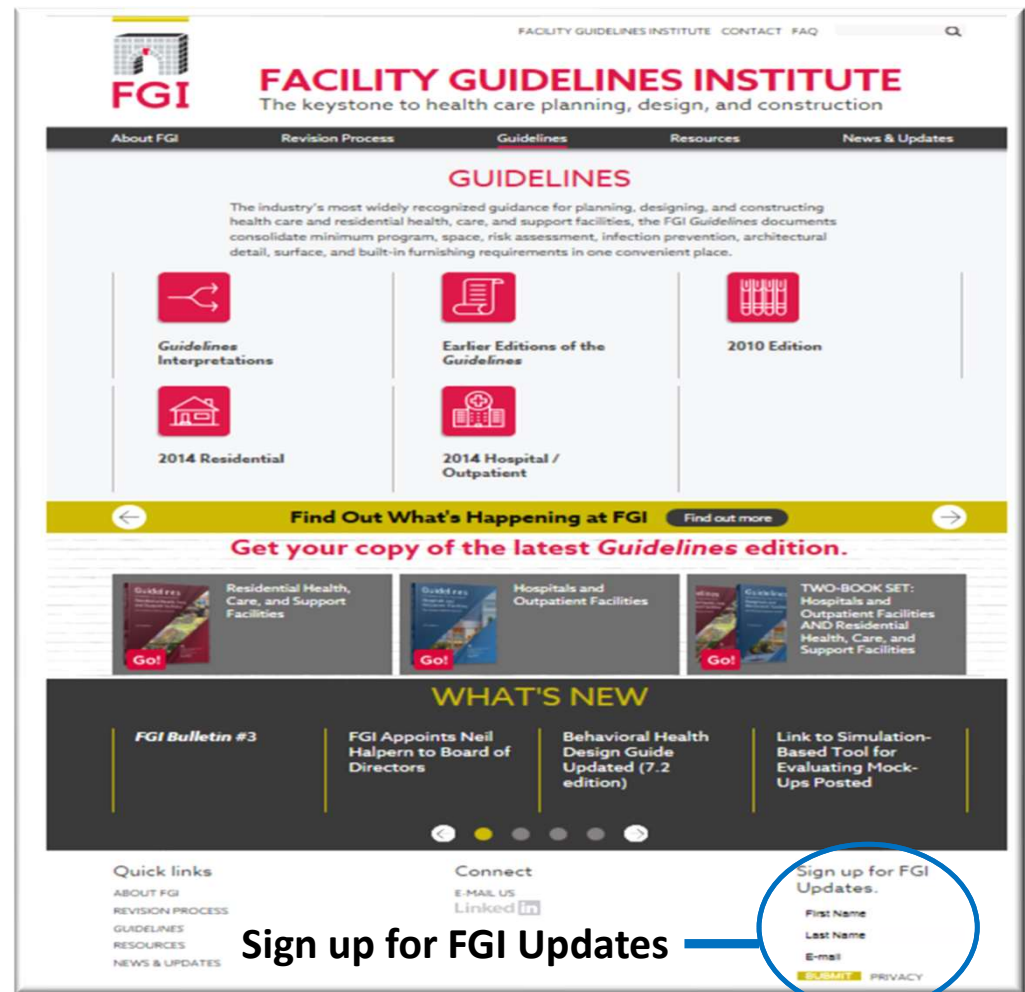
# The FGI Website:

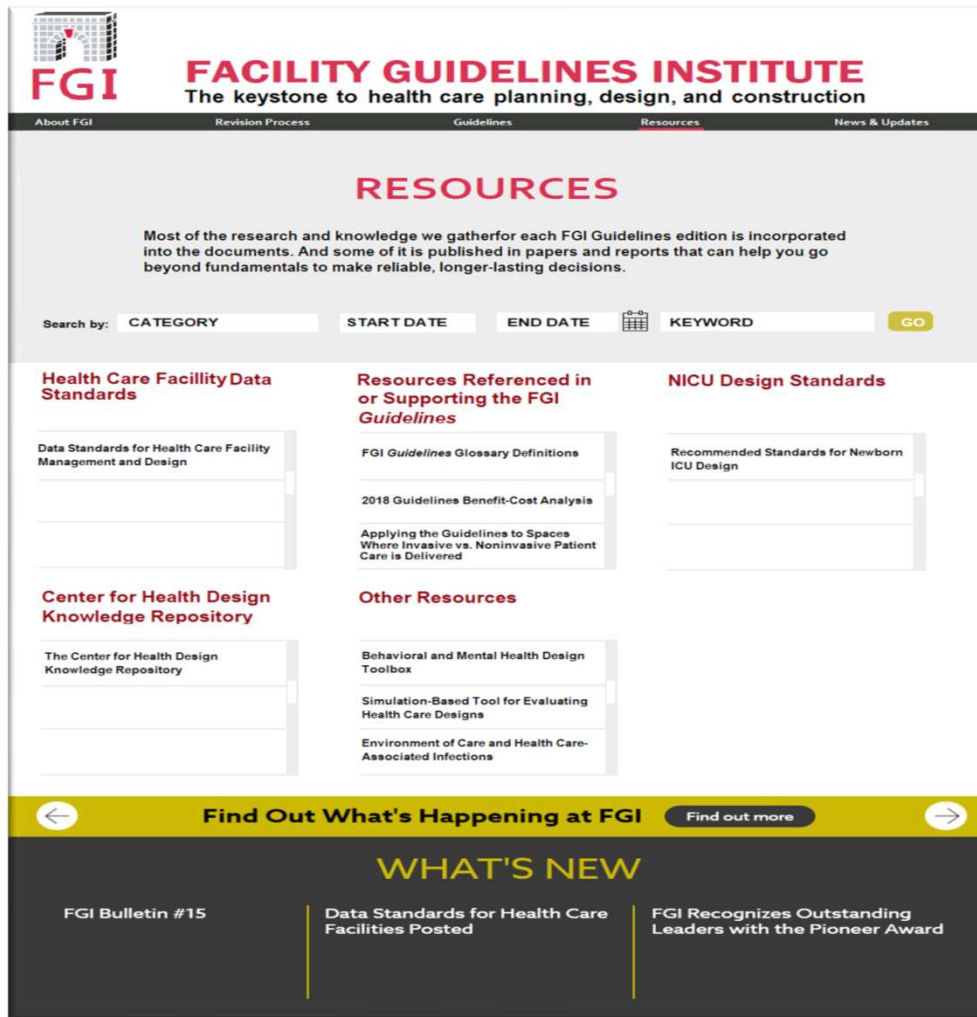
**A way to keep current  
with FGI and  
Guidelines activities**



# The FGI Website:

- Access to :
  - Interpretations
  - Previous Editions
  - FGI Supported Research
  - FGI White Papers
  - Educational Links
  - News & Updates
- Order info at the bottom of each page





## FGI Resources

- Access to :
  - FGI Associated Resources
  - Guidelines Updates
  - Beyond Fundamentals
  - FGI Supported Research
  - FGI White Papers
  - Educational Links
  - Additional Resources



# FGI Resources

- **Safety Risk Assessment Toolkit**

Developed a tool for integrating patient and staff safety into the design process.

- **Behavioral Health Design Guide**

This document is intended to address the built environment of the general adult inpatient behavioral health care unit..

- **Cost Estimate Report**

**EVERY** 2018 proposal for change was reviewed by the HGRC for clinical and operational benefit, first cost, and life cycle cost.

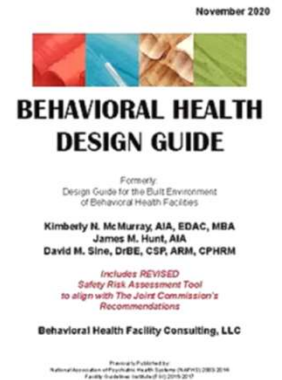
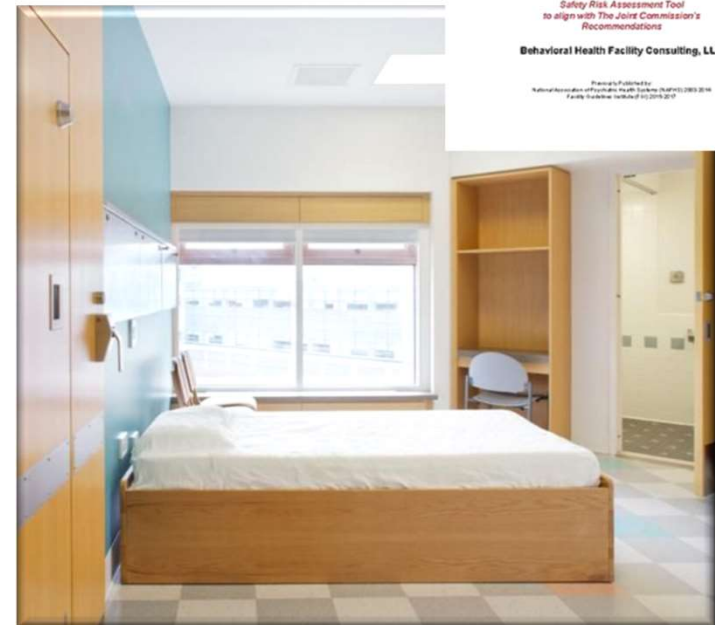
# The Safety Risk Assessment Tool Kit

- Funded by the Agency for Healthcare Research and Quality (AHRQ) and developed by the Facility Guidelines Institute (FGI) and the Center for Health Design (CHD)
- Developed a tool for integrating patient and staff safety into the design process
- Questionnaire format
- Interdisciplinary teams from across the U.S.
- Initial presentation at the ASHE PDC March 2015 preconference program



# Behavioral Health Design Guide

- This document augments regulatory requirements and details practical means of protecting patients and staff. It is intended to represent leading current practices
- Based on in the field experiences of operators, designers, consultants, and surveyors.
- Encourages designs that appear comfortable, attractive, relaxing and as residential in character as possible.
- Addresses all levels of concern for patient and staff safety in the behavioral health built environment



# Cost Estimate Report

## 2014 Edition First Cost Impact Review

HGRC Cost/Benefit Committee in conjunction with ASHE

Review of Hospital/Outpatient document to identify the **first cost** impact of implementing the 2014 edition (*approx. 2% increase in first cost with no credits for cost reductions*)



## 2018 Edition Benefit-Cost Impact Review

**EVERY** 2018 proposal for change was reviewed by the HGRC for clinical and operational benefit. The Benefit/Cost Committee also reviewing for benefit, first cost, and life cycle cost of major changes. (*.1% for Hospital, .4% Ambulatory*)

## 2022 Edition Benefit-Cost Impact Review

**EVERY** 2022 proposal for change will be reviewed by the HGRC for clinical and operational benefit. This report will be issued with the new edition

# Cost Estimate Report – 2018 vs. 2014 Guidelines

## Cost Impacts of Applying the 2018 Guidelines

	Basic Cost Impacts	Additional Optional Cost Impacts
<b>To hospital and emergency facilities</b>		
100-bed general hospital	.1%	.2%
Critical access hospital	.7%	.2%
Freestanding emergency facility	3.6%	.05%
<b>To outpatient facilities</b>		
Multi-specialty ambulatory care facility	.4%	1.3% <sup>2</sup>
Ambulatory surgery center	–3.3%	3%
Endoscopy facility	–5%	3%



# Electronic Version

## ■ Access to :

- New 2022 Edition
- Current 2018 Edition
- Previous Editions – back to 2001
- Search Content Feature
- Links to other referenced standards
- Additional Resources

The screenshot shows the MADCAD website interface. At the top, there's a search bar and navigation links. The main content area is titled 'FGI Guidelines' and features a blue banner with filters for '2022' and '2019-2018' editions, and licensing options: 'Site License', 'Single User', and 'Paperbacks'. Below the banner, a yellow bar states 'Found 31 books in publishers FGI 2001-2014 x FGI 2018 x with Site License subscription'. A table lists the books with columns for Format, Year, Publisher, Type, Title, and Annual Price. The table includes entries for 'FGI Guidelines for Design and Construction of Hospitals' and 'FGI Guidelines for Design and Construction of Outpatient Facilities'. On the right side, there are sections for 'GROUPS' and 'US LOCAL CODES' with various state and territory codes listed.

# The 2014 Colloquiums

At the end of the 2014 Cycle, the FGI Board undertook two Colloquiums focused on the future of Healthcare and the Guidelines.



**These colloquiums brought together a diverse group of health care futurists who were tasked with:**

- 1) Envisioning the range of care environments and trends that may emerge by 2026, and**
- 2) Help lay out a roadmap of steps needed to stay relevant over that time period.**

# The 2014 Colloquiums

## Colloquium Recommendations:

- Split the standard into 2 parts
  - ***Fundamental Requirements*** – Minimum/Baseline standards
  - ***Beyond Fundamentals*** – Emerging Practices
- Focus on primary care/outpatient facilities revisions as the trend in health care delivery is continuing to move in that direction.

# Fundamentals vs Beyond Fundamentals

## Fundamentals

- Primary purpose: To provide the *minimum* or baseline requirements necessary to design and build safe, efficient, and effective care environments.
- Written to facilitate adoption and enforcement by state and federal agencies

## Beyond Fundamentals

- Exceed or supplement baseline requirements
- Generally not intended for adoption or enforcement, although may include draft baseline requirements
- Format: White paper, webinar, case study, checklist, video, diagrams

# What is Fundamental?

## Defining Minimum

### minimum

[min-uh-muh-m]

noun, plural minimums, minima

1. the **fundamental** or primary principle or core on which something is based
2. the most **fundamental** or primary quality or quantity that is acceptable
3. the least amount required to be attained



# An Ever-Evolving Objective

## Minimum is Difficult to Define

- Risk of being too minimal (creates opportunity for harm)
- *Benefit vs risk* must be considered for new minimums
- The minimum benchmarks change over time
- Cost is a reality in determining *Minimum Standards*



# The FGI Minimum

A change is ***below*** a minimum standard if it does any of the following:

1. Compromises patient, staff or visitor safety.
2. Increases the risk in any of the seven elements of the SRA.
3. Increases readmission rates.
4. Compromises privacy requirements.
5. Decrease the operational efficiency of the clinical space.

# Overview of FGI 2022 Proposed Changes

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Changing to Keep  
Pace with Clinical  
Practices

# Hospital Guidelines Major Items

- Sustainability / Energy Conservation
- Palliative care
- Lighting
- Burn Trauma Care
- Hospice Patient care
- Behavioral Health
- Emergency Departments
- ER Low Acuity Treatment
- Neonatal Care
- Behavioral & Mental Health Hospitals



# ANSI / ASHRAE

Energy efficiency. Mechanical and electrical systems shall be selected and sized to support reduced energy demand and consumption.

- ANSI/ASHRAE/IES 90.1 as adopted by the U.S. Department of Energy, shall be used in the absence of a locally or state adopted energy code.

## Also Recommends

- ANSI/ASHRAE/ASHE Standard 189.3: Standard for Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities
- ANSI/ASHRAE/USGBC/IES Standard 189.1: Standard for Design of High-Performance, Green Buildings







# Palliative Care

## Design Considerations for Palliative Care Settings

Palliative care is an approach to clinical care that focuses on symptom management and accommodations for and support of quality of life for the patient, their family and friends, and their caregivers.

- Currently, there are more than 1,400 hospital **palliative care** programs in the U.S.
- About 80% of large U.S. hospitals with more than 300 beds have a **palliative care program**

# Lighting Considerations

Additional information regarding proper lighting levels has been added to the Guidelines via 2 publications, developed by IES that apply to healthcare settings:

- ANSI/IES RP28: Lighting and the Visual Environment for Seniors and the Low Vision Population to address the special lighting needs of older adultcare populations.
- ANSI/IES RP-29: Lighting for Hospitals and Health Care Facilities addresses recommended practices for lighting for the general population in health care facilities and special lighting for medical procedures.



# Burn Trauma Critical Care Unit

- An operating room that meets the requirements for a standard OR shall be readily accessible to the BTCCU.
- The temperature in operating rooms used for burn patients shall be able to be increased to 95°F, as burn patients are unable to regulate their body temperature and are susceptible to hypothermia.
- The patient room shall be designed as a protective environment room.
- The Burn Trauma patient rooms shall have radiant heating panels located over the bed.
- Radiant heat panels shall be individually controlled in each patient room.
- Each Burn Trauma patient room shall have direct access to an enclosed toilet room





# Hospice Patient Care Unit

- Minimum clear floor area of 153 sf with a min wall width at the head of the bed of 10 ft
- Family support zone with a minimum clear floor area of at least 33 sf
- Movable seating with a minimum of one seat for a family member or visitor and one seat for the individual receiving care
- At least one chair for long-term sitting
- Space for family member overnight stay
- Patient Toilet Room) shall be provided.

# Hospice Patient Care Unit

- Designed and located to prohibit nonrelated traffic through the unit
- Access and service arrangements shall be such that staff, care providers, and visitors can access other services without traveling through the hospice area
- Each hospice care room shall have an outside window
- Bathing facilities shall be provided
- Considerations for creating a homelike atmosphere, including furniture arrangement and orientation to the patient bed and room windows, should reflect the needs of the patient population



# Emergency Department

## Sections revised

- Guidance on pediatric treatment areas
- Accommodations for patients of size
- New appendix language for treatment areas for Geriatric patients
- New section on Low Acuity treatment stations
- Revised Behavioral Health requirements
- Revised requirements for Decontamination Rooms



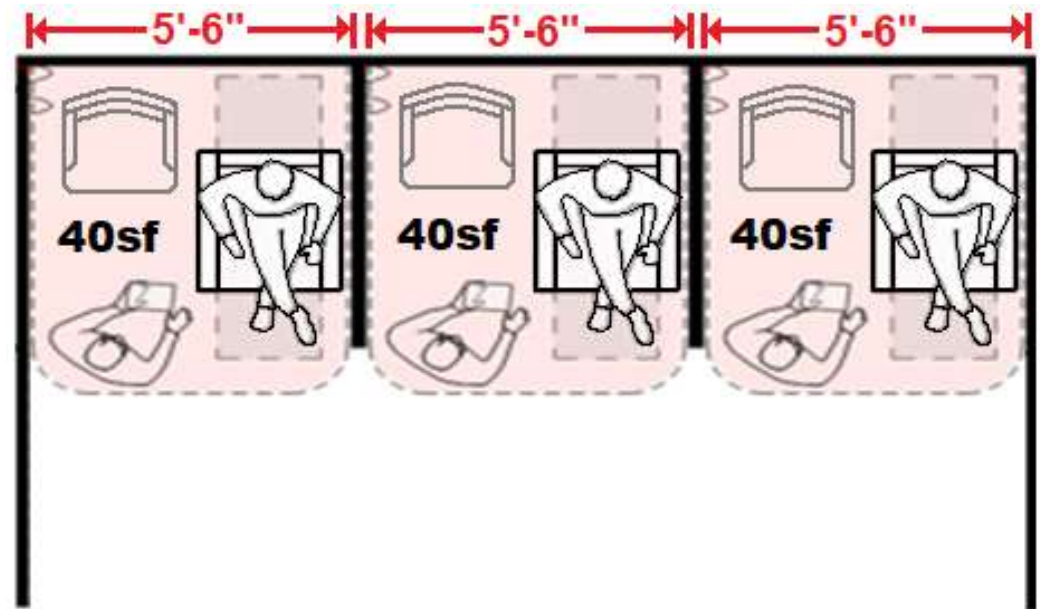


# ER Low Acuity Treatment Area

- Low-acuity patient treatment stations are intended to complement single- and multiple-patient treatment rooms and fast-track areas.
- The size and ratio of low acuity treatment bays or cubicles provided in an emergency department should depend on the expected patient acuity mix and planned use of the facility.
- Low-acuity patient treatment stations shall not be permitted to replace other emergency department treatment room types in their entirety.

# ER Low Acuity Treatment Area

- Each patient care station shall have a minimum clear floor area of 40 square feet with a minimum clear dimension of 5 feet 6 inches
- Each bay or cubicle shall accommodate a minimum clearance of 3 feet at the side(s), head, or foot of the patient chair that corresponds with the care provider's expected work position(s).



# ER Low Acuity Treatment Area

As a permitted treatment area, the low-acuity treatment station would carry minimum requirements to support the standard of care, including those for:

- Hand-washing stations (one per four treatment stations)
- Patient toilet rooms (one per six treatment stations)
- Privacy (in the form of curtains, screens, or partitions)
- Examination light (portable or fixed)
- Accommodations for documentation (written or electronic)
- Space for a visitor's chair
- Electrical receptacles (four outlets ea. chair/ recliner)
- Nurse call devices for each patient station required
- Medical gas station outlets (allowed but not required)

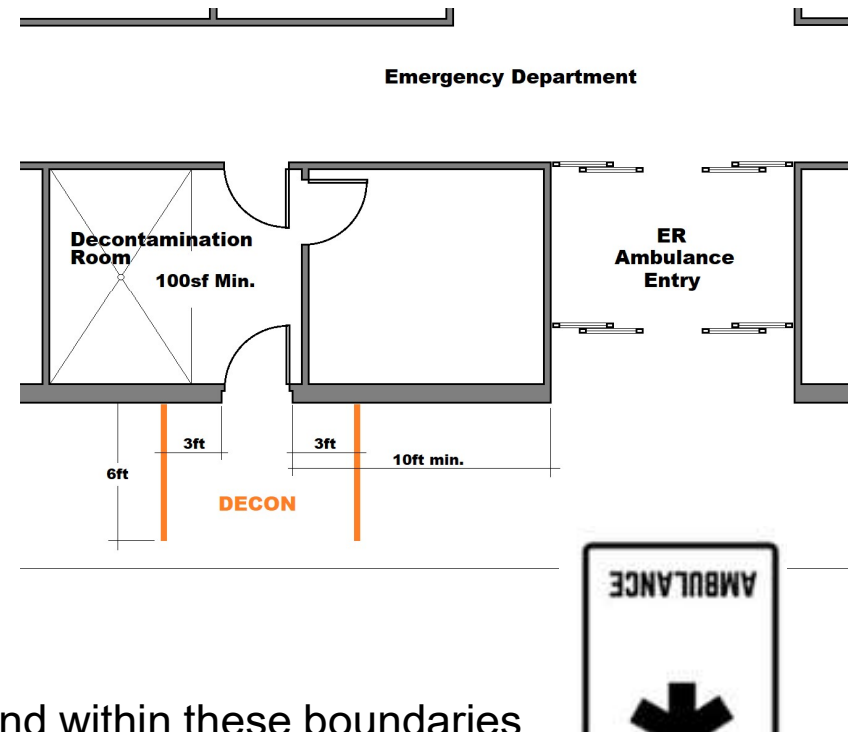


# ER Behavioral Health Area

- Secure holding rooms shall have a min. clear floor area of 60 sf with a min. wall length of 7 ft and a max. wall length of 11 ft
- A minimum ceiling height of 9 ft) shall be provided
- All door hardware, sinks, finishes, light fixtures, sprinklers, and outlets shall be tamper- and ligature-resistant
- Rooms shall be designed to limit the patient's ability to convert architectural features or equipment into weapons
- Ligature-resistant design criteria shall be considered for all spaces
- Where provided, behavioral and mental health treatment rooms shall meet the single-patient treatment room requirements for ER treatment rooms

# Decontamination Areas (Interior)

- Outside entry door located 10 feet min. in any direction from the closest other entrance.
- A separate, independent, secured external entrance adjacent to the ambulance entrance.
- lighted and protected from the environment in the same way as the ambulance entrance.
- Contrasting boundary line on the ground 3 ft from each side of the door that extend 6 ft out from the exterior wall
- The word “DECON” shall be marked on the ground within these boundaries



# Decontamination Areas (Exterior)

- Located no less than 30 feet from entrances, operable windows, and outdoor air intakes.
- At least two temperature-controlled shower heads, separated by at least 6 feet, with a separate spigot for attachment of a hose
- Provision for containment of the contaminant/infectious agent
- Water runoff capability to prevent contaminated water from entering community drainage systems
- Lighting appropriate for patient care and staff safety

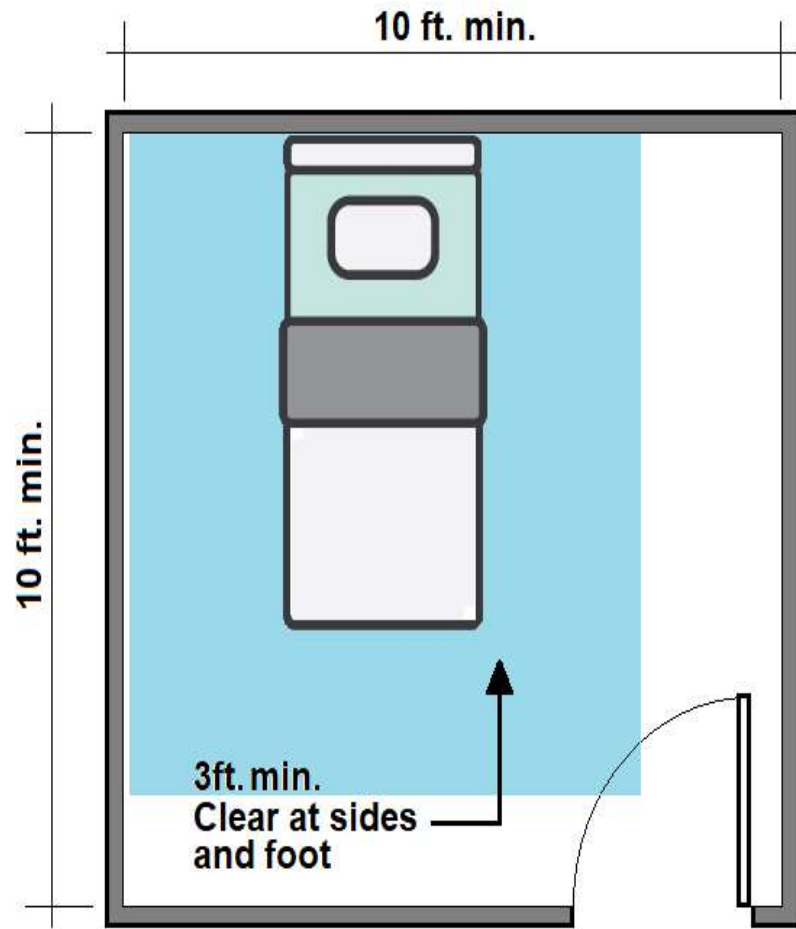


# Behavioral Health Crisis Unit

- A dedicated emergency services unit to respond to behavioral health patients presenting in a state of crisis
- The unit shall be in or readily accessible to the emergency department.
- Where the behavioral health crisis unit is in or readily accessible to the emergency department, shared ancillary and clinical services shall be permitted when these shared services are located and configured to accommodate programmatic requirements for safety, security, and other clinical considerations

# Behavioral Health Crisis Unit

- Means for visual observation of unit corridors and patient care areas shall be provided.
  - Electronic surveillance shall be permitted but shall not be the only means of visual observation.
- An examination/treatment room shall be provided for medical assessment or triage of patients in the unit.
- The number of observation rooms in the behavioral health crisis unit shall be determined by the health care organization during the planning phase. The maximum number of beds per room shall be one.

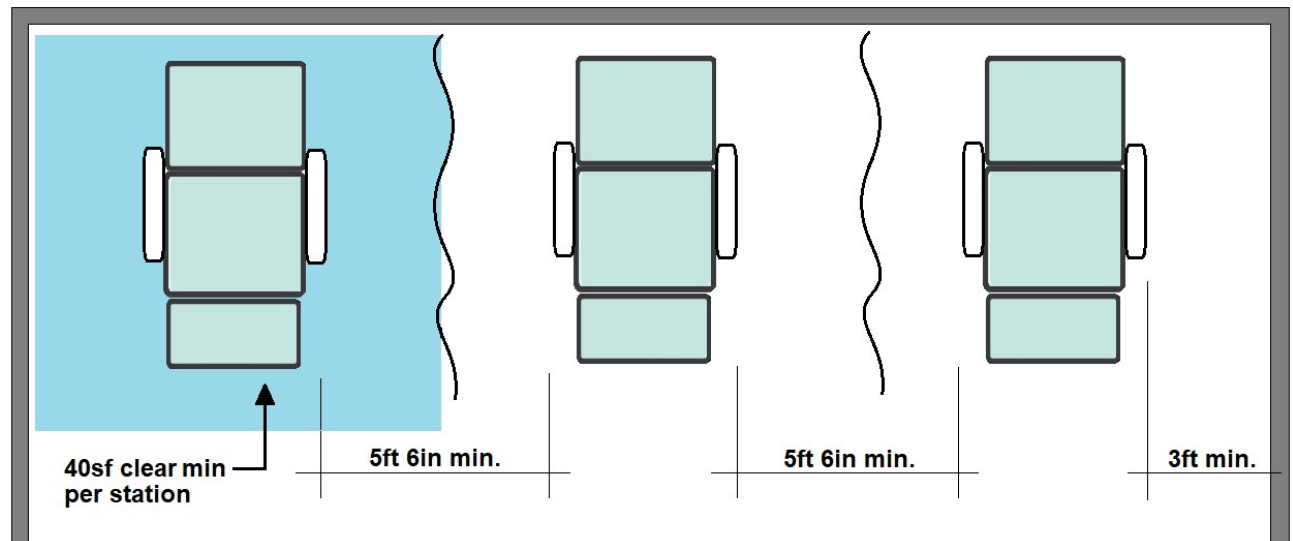


# Behavioral Health Crisis Unit

- A single observation room shall have a minimum clear floor area of 100 sf with a minimum clear dimension of 10 feet
- Room size shall permit a room arrangement with a minimum clearance of 3 ft on each side and at the foot of the bed/ recliner
- At least one toilet room shall be provided for each six single-patient observation rooms and for each major fraction thereof.

# Behavioral Health Crisis Unit

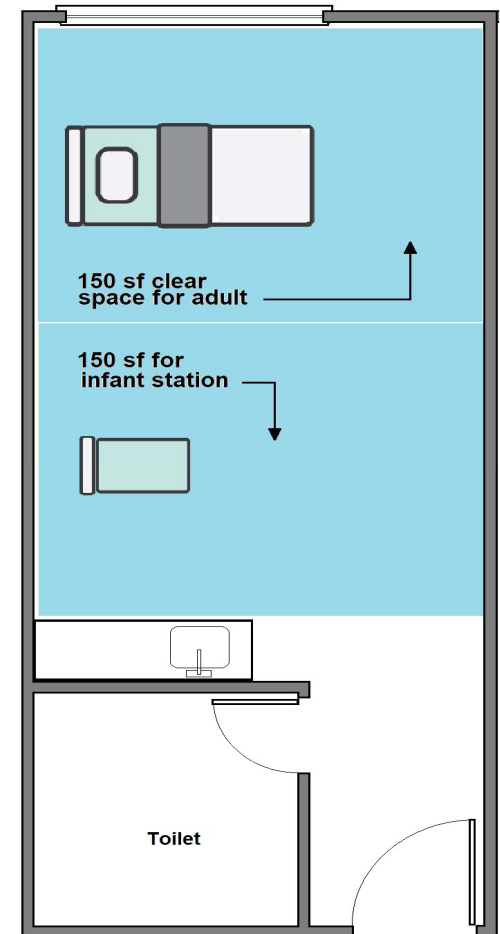
- A multiple-patient observation area shall have a minimum clear floor area of 40 square feet per station
- Additional space may be required for equipment and furnishings.



- A minimum clearance of 3 feet shall be provided between walls or partitions and the sides of recliners
- 5 feet 6 inches shall be provided between recliners.

# Neonatal Couplet room

- This room accommodates a hospitalized mother and a NICU patient to be cared for in the same room.
- 300 sf min. clear area, including 150 square feet for the infant care station and 150 square feet for the mother's bed.
- Clearances for the adult bed shall meet the requirements for Care of Individuals of Size
- Clearances for the infant care station shall meet the requirements in Section 2.2-2.8.2.2



# Neonatal Couplet room

- Each room accommodating an adult shall meet the requirements in the following sections:
  - Section 2.1-2.2.3 (Windows)
  - Section 2.1-2.2.4 (Patient Privacy)
  - Section 2.1-2.2.5 (Hand-Washing Station in the Patient Room)
  - Section 2.1-2.2.6 (Patient Toilet Room)
  - Section 2.1-2.2.8 (Patient Storage)
- Support areas for the neonatal couplet care room shall be permitted to be shared with the NICU and the obstetrical unit.



# Behavioral & Mental Health Hospitals

## Environmental Safety and Prevention of Harm

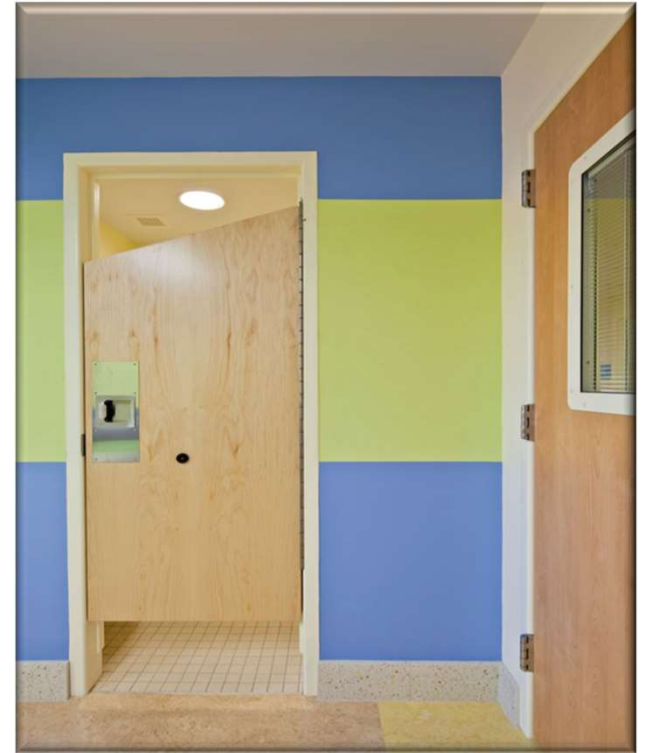
- New appendix material emphasizing patient safety and self risk minimalization
- Emphasis on security and elopement prevention
- Perimeter locking
- Patient observation



# Behavioral & Mental Health Hospitals

## Patient Care Units

- Directly accessible toilet room (changed from access to a toilet room)
- The door to the toilet room shall not create a positive latching condition that will support a ligature condition.
- Where indicated by the safety risk assessment, replacing the toilet room door with other means of providing visual privacy shall be permitted.
- Where a shower is provided, it shall designed to be free of shower curtains



# Behavioral & Mental Health Hospitals

## Geriatric Patient Care Unit

- Where a geriatric behavioral and mental health unit is provided, patient care areas shall be separate and distinct from adult or child patient care areas.
- Each patient shall have a toilet room directly accessible from the patient room
- At least one accessible bathtub in a locked room shall be provided in each geriatric patient care unit.
- Door openings to patient bedrooms shall have a minimum clear width of 48 inches



# Behavioral & Mental Health Hospitals

## Transcranial Magnetic Stimulation Room

- The TMS room shall have a minimum clear floor area of 80 square feet
- Accommodations for documentation shall be provided
- A hand-washing station shall be provided in the TMS room
- Depending on the type of stimulator equipment provided in the TMS room, radiofrequency (RF) shielding may be necessary to control interference.
- Consideration should be given to providing light dimming controls in the TMS room to promote patient relaxation.



# Additional Hospital Guidelines Revisions

- Updated appendices for the behavioral and mental health risk portion of the safety risk assessment
- Provision of an anteroom for an airborne infection isolation room predicated on an infection control risk assessment (ICRA); with design considerations for anterooms added to the appendix
- Clarifications on clean and sterile storage in operating suites in the Hospital and Outpatient documents

# Additional Hospital Guidelines Revisions

- New guidance on ED design to improve flexibility, accessibility, and safety
- New information to encourage small and specialty hospitals, where appropriate, to use the critical access hospital chapter
- New guidance to increase flexibility of room use in critical access hospitals – Universal rooms



# Outpatient Guidelines Revisions

- Freestanding ED requirements now appear in Outpatient Guidelines only
- Removal of clear floor area requirements for several patient care stations, with clearances determining their size
- New appendix table with examples of how Chapter 2.2, Specific Requirements for General and Specialty Medical Facilities, can be applied to specialty care facilities

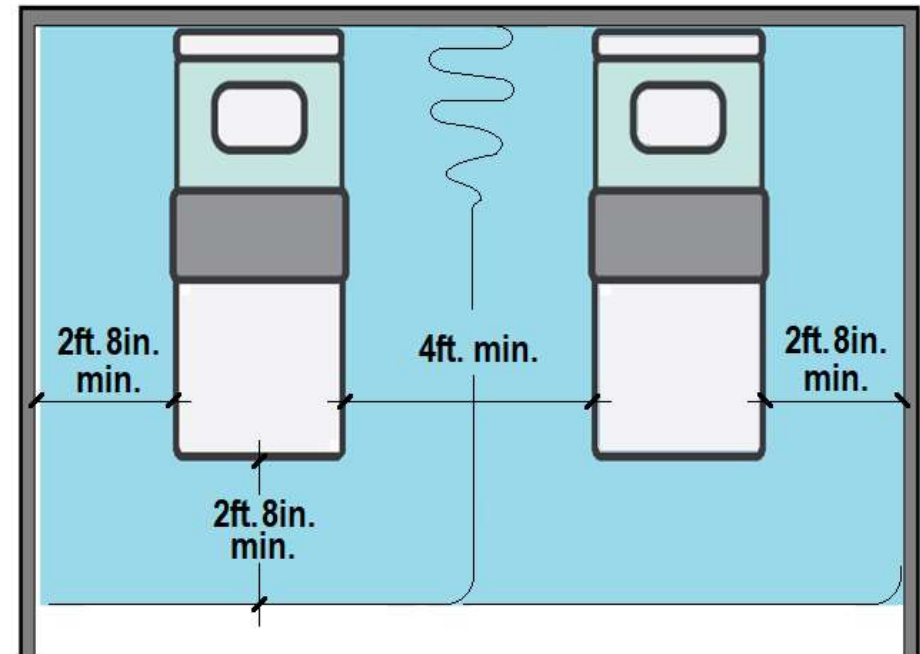
# Outpatient Guidelines Revisions

- Minimum size for birthing rooms reduced from 200 to 120 square feet
- Multiple-patient exam room added to the urgent care center chapter
- Added Language for Sexual Assault Forensic Exam Room
- All new chapter added for extended stay centers affiliated with outpatient surgery and freestanding emergency facilities

# Multiple Patient Exam Room

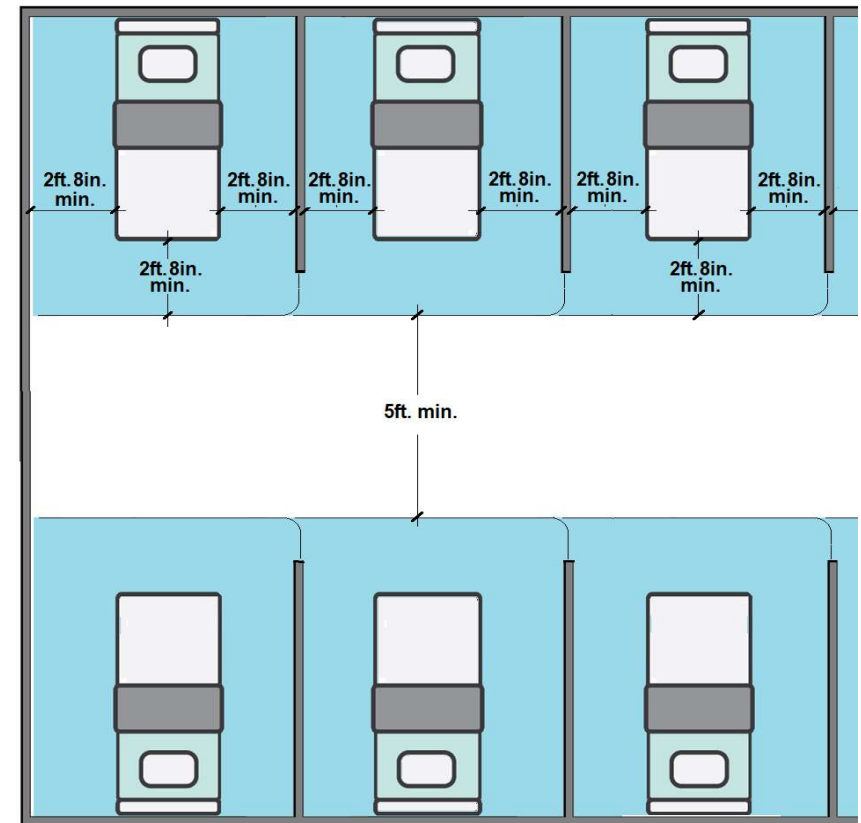
Where an exam room with multiple-patient care stations is provided, it shall meet the following requirements:

- Clearances shall be measured from the extended lounge chair/gurney position.
- Where bays are used, 4 feet shall be provided between the sides of gurneys/lounge chairs
- 2 feet 8 inches between the sides of gurneys/lounge chairs and adjacent walls or partitions
- 2 feet 8 inches between the foot of gurneys/lounge chairs and the cubicle curtain



# Multiple Patient Exam Room

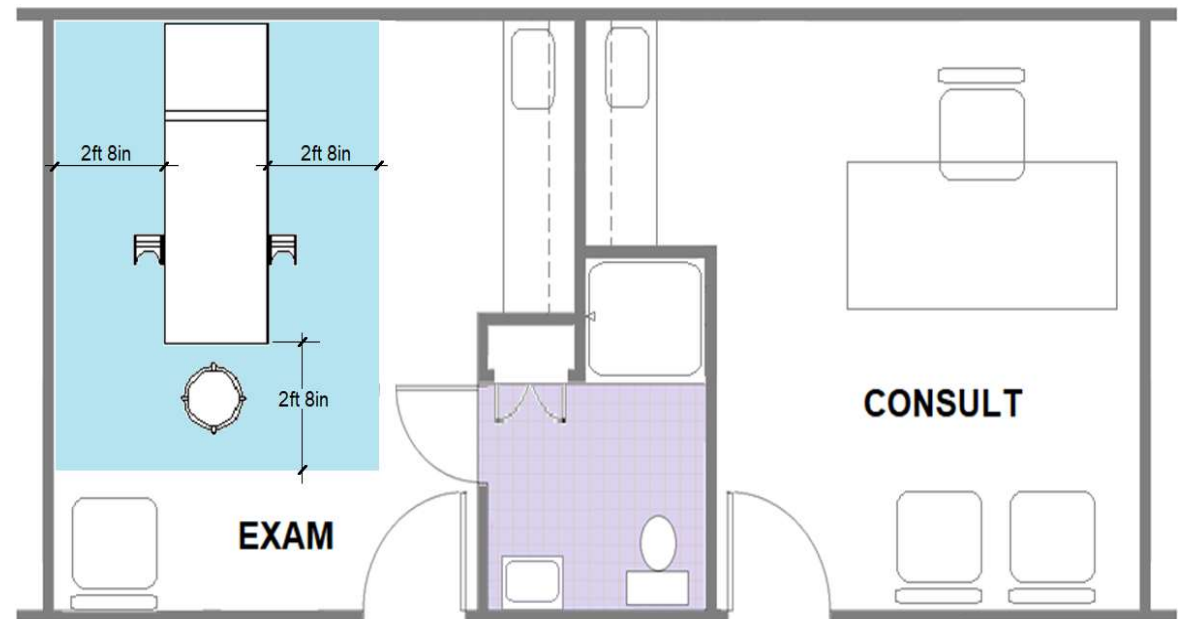
- Where cubicles are used, a minimum clearance of 2 feet 8 inches shall be provided between the sides and of gurneys/lounge chairs and adjacent walls, partitions, or cubicle curtains.
- Where bays or cubicles face each other, an aisle with a min clearance of 5 ft independent of the foot clearance between patient care stations or other fixed objects shall be provided.



# Sexual Assault Forensic Exam Room

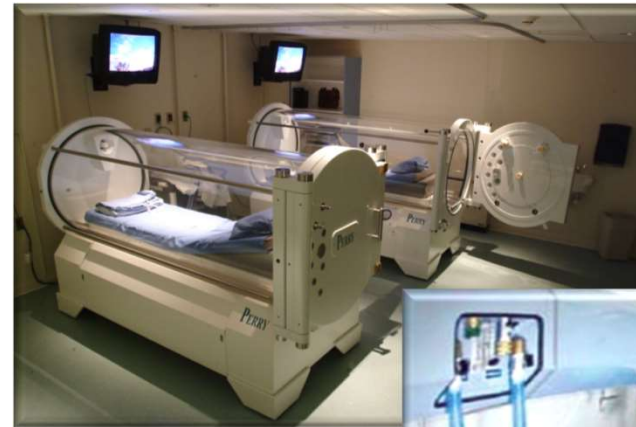
If provided, must meet the requirements of a single patient exam room. SAFE room contains:

- 80sf. min. clear floor area
- Pelvic examination bed/table
- Lockable storage area for forensic collection kits
- Private toilet and shower
- Readily accessible Consultation room



# Hyperbaric Oxygen Therapy Facilities

- The hyperbaric treatment area shall meet the requirements of the “Hyperbaric Facilities” chapter in NFPA 99: Health Care Facilities Code.
- Requirements for :
  - Multi-place (Class A chamber) facilities
  - Mono-place (Class B chamber) facilities
- The support areas in Section 2.6-3.8 (Support Areas for the Infusion Center) shall be provided for the hyperbaric facility





# Beyond Fundamental

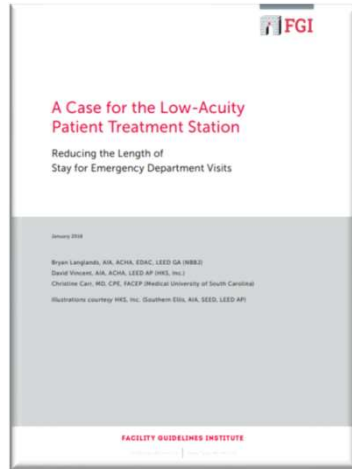
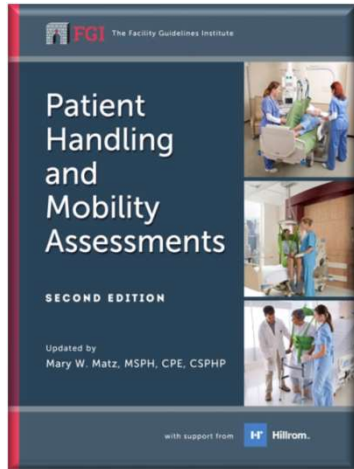


# Beyond Fundamentals

- Conceived as a way to stay current with trends that will impact health care facility design
- A digital library featuring new and unique content that reaches beyond the minimum requirements to reflect the latest health care design thinking
- Best practices, design recommendations, evidence-based research, and new applications of technology.

# Beyond Fundamentals

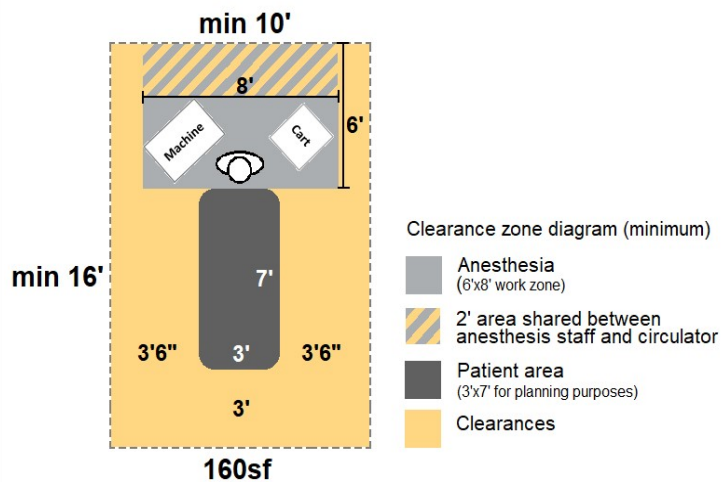
- Provides access to a growing collection of health care design resources, including white papers and reports, checklists, design recommendations in response to emerging trends in practice, and access to the experiences of industry change-makers
- The Beyond Fundamentals content will be updated and supplemented continually, unlike the FGI *Guidelines for Design and Construction* documents, which are static documents published every four years.



# Beyond Fundamentals

- Patient Handling and Mobility Assessments
- A Case for the Low-Acuity Patient Treatment Station: Reducing the Length of Stay for Emergency Department Visits
- FGI Study of Clearances Needed to Provide Safe Care for Patients of Size
- Behavioral Health Design Guide
- Testing Sustainable Flooring: A Johns Hopkins Health Systems Report
- Hybrid Operating Room Design Basics

## Sample Space Diagram\*

Procedure Room - with anesthesiologist  
160 SF/room

\*Diagrams above are sample layouts that are reflective of minimum requirements in the Guidelines and they may not meet the functional requirements for all projects.

## REFERENCE GUIDE

DOCUMENT	CHAPTER	SECTION
● General Hospital	2.2 Specific Requirements for General Hospitals	2.2-3.3.2 Procedure Room - w/
● Outpatient	2.1 Common Elements for Outpatient Facilities	2.1-3.2.2.2(b) Procedure Room
● Residential Healthcare		

## REFERENCE GUIDE

## DOCUMENT

- General Hospital
- Outpatient
- Residential Healthcare

## CHAPTER

- 2.2 Specific Requirements for General Hospitals
- 2.1 Common Elements for Outpatient Facilities

## SECTION

- 2.2-3.3.2 Procedure Room - with anesthesiologist.
- 2.1-3.2.2.2(b) Procedure Room - with anesthesiologist.

# Beyond Fundamentals

- Illustrated Guide to the FGI Guidelines
- Diagrams for:
  - Room configurations
  - Clearances
  - Equipment locations
- Provides:
  - Document, Chapter & Section references

# Guidelines for Emergency Conditions

- FGI received numerous requests for guidance on setting up temporary facilities and adapting existing facilities in response to the COVID-19 pandemic
- FGI assembled a special committee to formulate design guidance for facilities during emergency situations caused by not only the COVID-19 emergency but weather, other pandemics, wildfires, and other emergency situations
- The committee was hand picked by FGI reaching out to individuals from around the country who had extensive experience in emergency response





# Guidelines for Emergency Conditions

- The committee has created a white paper which includes draft Guidelines requirements and lessons learned from past local and national emergencies such as COVID-19
- The white paper was made available for public review and comment from April 1 to June 30, 2021 was revised per those comments and is now in the FGI resource library.
- Many of the recommendations in this white paper will be used as the basis for changes to the next edition of the Guidelines

# David B. Uhaze, RA

## Health Facilities Design Consulting

Providing consultation and guidance with regard to Building Codes & FGI Guidelines requirements for health care facilities

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