The 2018 Guidelines: Changes to Keep Pace with Clinical Practice

October 3, 2018
And your presenters are...

Heather B. Livingston
Managing Editor and Director of Operations
Facility Guidelines Institute

Dana E. Swenson, PE, MBA
Facility Guidelines Institute, Board Member
The views and opinions expressed in this presentation are the opinion of the speaker and may not be the official position of FGI or the Health Guidelines Revision Committee.
Today’s objectives are...

- Provide a basic understanding of the revision process
- Summarize some of the major changes in the 2018 Guidelines
Who are we? This is not us...
This is closer, but still not quite right...

Hear me! All pay heed!
The Lord Jehovah has given unto you these 15...

Oy, 10!
10 commandments for all to obey!
2018 Health Guidelines Revision Committee

HGRC: a multidisciplinary committee

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
A multi-disciplinary committee of more than 100 volunteers
Consensus-based process for *Guidelines* development using:

- Collective **multi-disciplinary** experience
- Professional stakeholder consensus including many AHJs (*no manufacturers vote on proposals*)
- Public review process
- Clinical and evidence-based research
- Continual improvement process
- Every new edition of the FGI Guidelines is different and an “evolution” from previous editions.

*Multiple editions of the Guidelines are currently in use.*
New Guidelines adoption map

KEY

<table>
<thead>
<tr>
<th>Year</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>Green</td>
</tr>
<tr>
<td>2014</td>
<td>Blue</td>
</tr>
<tr>
<td>2010</td>
<td>Gray</td>
</tr>
<tr>
<td>2006</td>
<td>Red</td>
</tr>
<tr>
<td>2001</td>
<td>Purple</td>
</tr>
<tr>
<td>1996–97</td>
<td>Yellow</td>
</tr>
</tbody>
</table>

Equivalency*
HVAC only

*Guidelines may be applied as an equivalency to state rules.

SIGN UP FOR FGI UPDATES  FAQs  ADOPTION MAP
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
Fundamental is difficult to define

- Risk of being too minimal creates opportunity for harm.
- Consider risk/benefit for new minimums
- The minimum benchmark changes over time.
- Cost is a reality in determining baseline standards.
Multidisciplinary participation

Not controlled by special interest or for-profit manufacturing

Non-representational participation — every member expected to vote their conscience, not their organizational party line

Rigorous consensus process

Emphasis on evidence — importance of expert opinion

Provide baseline requirements — appendix references for information on applying the requirements

Matching design to function

“Predicting” the future — staying flexible, contemporary
 Benefit-cost analysis

Every 2018 proposal for change was reviewed by the HGRC for clinical and operational benefit. The BCC also reviewed for benefit, first cost, and life cycle cost of major changes.

For the 2018 Guidelines, there was very little increase in construction costs.

### Cost Impacts of Applying the 2018 Guidelines

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Basic Cost Impacts</th>
<th>Additional Optional Cost Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>To hospital and emergency facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100-bed hospital</td>
<td>.1%</td>
<td>.2%</td>
</tr>
<tr>
<td>Critical access hospital</td>
<td>.7%</td>
<td>.2%</td>
</tr>
<tr>
<td>Freestanding emergency facility</td>
<td>3.6%</td>
<td>.05%</td>
</tr>
<tr>
<td>To outpatient facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-specialty ambulatory care facility</td>
<td>.4%</td>
<td>1.3%²</td>
</tr>
<tr>
<td>Ambulatory surgery center</td>
<td>−3.3%</td>
<td>3%</td>
</tr>
<tr>
<td>Endoscopy facility</td>
<td>−5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

1. The numbers shown are percentages of construction cost of the facility programs reviewed.
2. This figure does not include the cost impact of adding a USP 797 and/or USP 800 pharmacy to the program. Refer to the outpatient overview for more information regarding this.
Planning the 2018 *Guidelines*

New Structure

1. Split the standard into two parts:
   - **Fundamental Requirements (AKA, the *Guidelines*)** — Fundamental/baseline standards that can be adopted as code by AHJs.
   - **Beyond Fundamentals** — Emerging and/or best practices that exceed basic requirements

2. Focus on primary care/outpatient facilities as the trend in health care delivery is continuing to move in that direction.
2018 structure

2014 Guidelines

Parse out what becomes the fundamentals
Parse out what is “beyond fundamentals”

There may be some content that belongs in both.

BEYOND FUNDAMENTALS

FUNDAMENTALS

HCSP

RES

OP
The low-acuity patient treatment station
The low-acuity patient treatment station

Possible configurations of pod treatment spaces
The low-acuity patient treatment station

Dimensional variations: what’s the right choice?
What was the outcome?

New FGI whitepaper in Beyond Fundamentals provides guidance and draft language for inclusion in 2022 edition.
Hot topics and major updates

• Emergency preparedness
• Telemedicine services
• Accommodations for care of patients of Size

• Pre- and post-procedure patient care areas; flexibility to combine areas and correct ratios when doing so
• Procedure and operating room sizes that reflect space requirements for anesthesia team and equipment
Hot topics and major updates

• Guidance for when exam/treatment, procedure, and operating rooms are needed:
  ➢ Clearances and spatial relationships
  ➢ Locations for procedure types

• Classification system for imaging rooms
• Sterile processing department
Emergency preparedness

The design **must provide space for resources** needed to respond in an emergency.

- Design supports:
  - Sheltering in place
  - Continuance of service

New appendix provides guidance on creating an emergency preparedness assessment, infrastructure assessment, and resiliency plan to absorb and recover from adverse events.
Telemedicine services

- Requires telemedicine space when clinical telemedicine services are provided
- May be a bay, cubicle, or room, permitted to be used for other purposes: e.g., patient room, physician’s office, conference room
- Addresses privacy, acoustics, lighting, site identification (for reimbursement and orientation)
- Appendix recommendations on:
  - Room features
  - Placement of cameras and microphones
Telemedicine services
Determining “patient of size”:
- Patient’s weight
- Distribution of the patient’s weight throughout the body
- Patient’s height

Hospital: Language for treating bariatric patients in defined Bariatric Nursing Unit was replaced and accommodations for patients of size added as a Common Element to address the need to serve these patients throughout a health care facility.

Outpatient and Residential: Accommodations for care of patients of size also added, but dependent on whether facilities choose to treat patients of size
Patients of size–Hill-Rom simulation

Minimum clearances required for bed to wheelchair transfer using floor-based full body sling

Minimum clearances required for bed to chair transfer using ceiling lift
Pre- and post-procedure patient care areas

- Direct access to the semi-restricted area without crossing unrestricted public corridors
- **Ability to combine** all patient care stations (pre-, Phase I, Phase II) in one area
- Must meet the most restrictive requirements
- Where combined into one area, at least two patient care stations per procedure, operating, Class 2, or Class 3 imaging room
Stations can be bays, cubicles, or single-patient rooms.

Clearances

- **Bays** (5 feet between gurneys, 3 feet between sides and adjacent walls, and 2 feet from foot of bed to the cubicle curtain)
- **Cubicles** (3 feet between sides and adjacent walls, 2 feet from foot of bed to the cubicle curtain)
- Where bays/cubicles face each other, need **8-foot aisle**
- Room (3 feet between sides and foot to the wall)
“Invasive procedure” definition

A procedure that is performed in an aseptic surgical field and penetrates the protective surfaces of a patient’s body. May fall into one or more of the following categories:

- Requires entry into or opening a sterile body cavity
- Involves insertion of an indwelling foreign body
- Includes excision and grafting of burns that cover more than 20 percent of total body area
- Does not begin as an open procedure but has a risk, as determined by the physician, of requiring conversion to an open procedure
Why does it matter?

Invasive – Operating room

Patient care that may require sterile instruments but does not require OR environmental controls – Procedure room

Non-invasive – Exam room Treatment room
Hospital: Still 400 SF (or 600 SF for special procedures)

Outpatient: Two options for flexibility

- 255 SF unless general anesthesia administered
- 270 SF when general anesthesia may be used
OP operating room with anesthesia equipment

3' X 7' gurney for planning purposes
3' at sides & 3' at foot & head – sterile field
6' x 8' anesthesia work zone at head
3' at sides & 2' at foot – circ. & equipment

15’ minimum width, 270 SF clear floor area
For procedures that do not meet the glossary definition of “invasive procedure”:

- Can be performed outside the restricted space of the surgery department or facility
- May require use of sterile instruments or supplies
- Requires some environmental controls but not OR-level environmental controls

(Procedures performed in former Class A OR occur in procedure rooms.)
Procedure room is a semi-restricted area that is accessed from either semi-restricted or unrestricted corridor.

**Space requirements:**
- Clear floor area: reduced to 130 square feet
- Clearances: 3 feet 6 inches on sides of table and 3 feet at head and foot of table

**Exceptions** where general anesthesia administered:
- Clear floor area: 160 square feet
- Clearances: 6 feet at head
Endoscopy procedure rooms shall meet the requirements for procedure rooms...except as follows:

- Minimum clear floor area of 180 sq. ft. (reduced from 200)
- Clearance of 5 feet at each side
- Clearance of 3 feet 6 inches at head and foot

Endoscope processing room is a semi-restricted area

- Both decontamination and clean work areas with one-way traffic flow
- Entrance and exit permitted to be from the procedure room
Endoscope processing room design

Designed to provide a one-way traffic of contaminated materials/instruments to cleaned materials/instruments to the sterilizer or mechanical processor.

Minimum clearance of 3 feet (91.44 cm) provided between the decontamination area and the clean work area.
Classification of imaging room types

Class 1 imaging room
- Diagnostic in nature (CT, MRI, fluoroscopy)
- Services that utilize natural orifice entry
- Accessed from an unrestricted area
- Basic environmental controls (ventilation, surfaces)

Class 2 imaging room
Procedures:
- Diagnostic and therapeutic
- Electrophysiology
- Endoscopic
- Accessed from an unrestricted or semi-restricted area
- Some environmental controls for procedures such as cardiac cath
Classification of imaging room types

Class 3 imaging room and hybrid OR

• Invasive procedures
• Any Class 2 procedure the physician identifies with a risk of needing conversion to an open procedure
• Accessed from a semi-restricted area
• Environmental controls of an operating room
Facilities outside a sterile processing department shall comply with all requirements for **two-room** sterile processing areas **unless** the equipment is limited to a table-top or similar sized sterilizer, in which case a single room is acceptable.
Overview of other notable changes

➢ Single-bed CCU rooms
➢ Sexual assault forensic exam room
➢ Geriatric treatment room in ED
➢ Technology distribution room size
➢ Mobile/transportable medical units
Each patient care station shall be a single-patient room.

In renovation, cubicles would be permitted.
If provided, must meet the requirements of a single-patient exam room. Sexual assault forensic examination room contains:

- Pelvic examination bed/table
- Lockable storage area for forensic collection kits
- Private toilet and shower
- Readily accessible consultation room
Focus on reducing risk of patient falls

Provides brief guidance on:

- Surfaces & furnishings
- Flooring and furniture
All TDRs shall provide a minimum 3-foot clearance on all sides of the equipment rack(s).
Mobile/transportable medical units

- Only applies to units being used on a temporary basis
- Does not apply to units placed into service as a result of:
  - Civil or local emergencies
  - Catastrophes
- Does not apply to modular/relocatable units
Mobile/transportable medical units

Designations for medical units

Class 1
- Exam/Treatment room
- Class 1 imaging room

Class 2
- Procedure room
- Class 2 imaging room

Class 3
- Operating room
- Class 3 imaging room
Overview of other notable changes

- Two approaches to applying requirements to facility projects
- Attention to flexibility for small projects
- Acknowledgment some facilities may be part of larger buildings owned by others
- Adjustments to building system requirements
- Consistent waiting room requirements for outpatient facilities
Hospital and outpatient ventilation requirements

This section is a reprint of the 2017 ASHRAE Standard 170. FGI and ASHRAE have a partnership to work on the content together and to publish Standard 170 as a part of the Guidelines.
The following facility types only have to meet space requirements listed in ASHRAE 170, other spaces do not:

- Imaging facilities with Class 2 and 3 imaging rooms
- Infusion facilities
- Dialysis facilities
The following facility types do not have to comply with ASHRAE 170 but should follow local mechanical codes:

- General and specialty medical services
- Urgent care
- Imaging facilities with Class 1 imaging rooms
- Outpatient psychiatric facilities
- Outpatient rehabilitation facilities
- Dental facilities
- Birth centers
Residential Health, Care, and Support Facilities

- 2018 edition
- Published by the Facility Guidelines Institute
- Softcover books and electronic access via license available at https://fgi.madcad.com
- Overview and more information: www.fgiguide lines.org
Adoption of FGI Residential *Guidelines* by facility type and state

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>State Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adult day care facility</strong></td>
<td>Arizona, Delaware, New Hampshire, New York, Vermont*</td>
</tr>
<tr>
<td><strong>Assisted living facility</strong></td>
<td>Arizona, Colorado, Delaware, Florida, Louisiana, New Hampshire, Tennessee, Utah, Vermont*, West Virginia**</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>North Dakota (&quot;basic care&quot; facility)</td>
</tr>
</tbody>
</table>

*Regulations say “current” or “latest” edition   **Recommended only

**Note:** No asterisk or color indicates a previous version still being used, although some states permit use of newer editions even if they haven’t been adopted (see map on the FGI website for details).
Residential Guidelines

Person-Centered Care
Residential health facilities

Nursing home models of care

- Traditional
- Cluster/neighborhood
- Small house/household

Wharton Care Center, Pleasant Hill, Tennessee
Residential health facilities

Hospice models of care

- Adult day care
- Small ambulatory residential
- Small non-ambulatory residential
- Freestanding
- Hospital-based
- Nursing home-based
- Independent/Asstd. Living-based

Rainbow Hospice, Chicago, Illinois
Assisted-living models

- Small
- Medium
- Large

Atria Senior Living: Atria on the Hudson
Independent-living models

- Small-scaled freestanding house
- Cottage
- Attached house
- Apartment

Mabuhay Court: David Baker + Partners, San Jose, California: Image: Cesar Rubio
Residential care & support facilities

Long-term substance abuse treatment facilities

- 24/7 care
- Non-clinical or acute care settings
- Typical stays are 18 to 24 months
- Single and shared resident rooms
Individuals with intellectual and/or developmental disabilities

- Small setting - 4 or fewer residents
- Medium setting - 16 or fewer residents
- Large setting - “household” model that serves 17 or more residents
Moving forward...

...The 2022 Guidelines

• Hospitals
• Outpatient Facilities
• Residential Health, Care, and Support Facilities
  • Beyond Fundamentals

The 2022 HGRC is nearly complete; we will be looking for topic group members later this fall.
FGI’s new webinar series is available on demand

2018 Guidelines Update: Changes to Keep Pace with Clinical Practices

Use of the Guidelines for Design and Construction: An Architect’s Owner’s and AHJ’s Perspective

Appropriate Room Use-Part 1: Exam, Procedure Operating Room

Appropriate Room Use-Part 2: Imaging Room Classifications

Flexible Application of the Outpatient Guidelines

Accommodations for Care of Patients of Size

Pod People: Low-Acuity Patient Treatment Stations in the ED

Breaking Bad: Improving Resident-Centered Regulations

Sterile Processing Department: Design and HVAC Considerations

The Functional Program and Safety Risk Assessment: How to Create and Apply
FGI proposal period will open soon

Login
Sign In to your account

- Username / E-mail
- Password

Login
Forgot password?

Sign up
You must register to create an account that will allow you to access the FGI comment site. Please choose a login name and password that you will find easy to remember.

Register Now!
Thank you for your time.

Dana Swenson  
Dana.Swenson@umassmemorial.org

Heather Livingston  
heather@fgiguidelines.org

To stay informed, sign up for the FGI Bulletin at www.fgiguidelines.org or follow us on LinkedIn.
Questions??