

# 2014 Guidelines

## *The Cure for the Common Code*



AIA

Academy of Architecture for Health

# ***AIA AAH - Liaisons to Health Guidelines Revision Committee - HGRC***

❖ Rebecca J. Lewis, AIA, ACHA, CID  
[rlewis@dgsu.com](mailto:rlewis@dgsu.com) 218 - 727- 2626

❖ Scott Miller, AIA, FACHA  
[smiller@moodynolan.com](mailto:smiller@moodynolan.com) 614 - 461- 4664

▪ Charles Griffin - AAH Board Liaison

# ***Presentation***

- Intro/Background
- FGI Process
- Straw Poll Parameters
- Tier 1 – 25 slides
- Tier 2 – 25 slides
- Tier 3 – 34 Slides

***For 84 proposed changes now  
being considered by FGI***

# ***Further Review***

- ❖ Go to FGI website to submit your individual comments
- ❖ Power point presentation available
- ❖ 'Voting' spreadsheet available
- ❖ *We are ready to travel or have add'l 'go-to' meetings*



# What are the 'Guidelines'...???

- ❖ Adopted as 'state standard' in 39 states
- ❖ Recommended as 'reference' in the 10 remaining states

Provides minimum 'standards' for:

- **Hospitals:** Primary Care, Critical Access, Rehabilitation, Psychiatric
- **Outpatient facilities:** Primary Care Centers, Freestanding Outpatient Diag./Treatment Centers, Urgent Care Centers, Cancer Treatment, Outpatient Surgical, Office Surgery, Gastro/Endo, Renal Dialysis, Outpatient Psych., Outpatient Rehabilitation
- Minimum site planning, functional program, room sizes/clearances, patient handling, infection prevention, architectural details, and surface and furnishings
- Minimum engineering design criteria for plumbing, electrical, and heating, ventilation, air-conditioning (HVAC), IT, special systems & elevators.

***the 'Guidelines'...***

***Accountable,  
Credible &  
Enforceable.....***



**AIA**

Academy of Architecture for Health

# Guidelines for Design and Construction of Health Care Facilities

## Our Mission:

Promote the process of producing consensus-based guidelines and publications, advised by research, to advance quality health care.

[Home](#)[About](#)[HGRC](#)[Guidelines](#)[Revisions](#)[Interpretations](#)[Resources](#)[FAQs](#)[Contact](#)[Search](#)

## The Guidelines



### The 2010 Edition

Click the button below to access information about purchasing the 2010 edition and links to the 2010 errata sheet and addenda to ANSI/ASHRAE/ASHE 170.

[read more](#)

## Revision Process



Read about the 2014 FGI *Guidelines* draft and public comment period. Architects, engineers, clinicians, and other interested parties are invited to submit comments until November 22, 2012.

[read more](#)

## HGRC Login

e-mail

password

[Sign-In](#)[ReSend](#)

## DRAFT OF 2014 FGI GUIDELINES OPEN FOR PUBLIC COMMENT

The draft manuscript for the 2014 edition of the FGI *Guidelines for Design and Construction of Health Care Facilities* has been posted for public comment:

For more details about the draft and the comment period, visit the [Revisions](#) page of this website.

To see a list of major proposed changes to the 2010 edition, read the [press release](#) announcing the comment period.

To download the 2014 draft and register to submit your comments on the proposed changes, visit the Facility Guidelines Institute [comment site](#).



AIA

Academy of Architecture for Health

# ***FGI Proposal Process***

- ❖ **Proposals were submitted by Public & 'Rep's' of Organizations (AAH, AORN, AHJ's...)**
- ❖ **Already vetted/reviewed at least 5-6 times**
- ❖ **HGRC members (+/- 130) - Architects, Engineers, Facility Mgrs., HC Researchers, Owners, Contractors, Med. Staff, AHJ's.....**
- ❖ **Substantiated by: research, current best practice, operations, code changes.....**
- ❖ **Appendix is for 'supporting information' only**
- ❖ **The main text is written to be 'code'**



# AAH 'Straw Poll' Process

- ❖ 84 issues to review
- ❖ AAH 'straw poll' to be submitted as a Group
- ❖ Seeking 'Concept Approval'
- ❖ Not semantics, word-smithing or debate
- ❖ This is a 'quick straw/gut check' poll on the proposals....  
(not weighing the evidence...)
- ❖ We will be moving fast.....



AIA

Academy of Architecture for Health

# AAH 'Straw Poll' Process

- ❖ When giving your 'gut check'....
- ❖ Either vote **'yes' or 'no'** on the recommendation for each issue
- ❖ If you have **'no opinion'**, don't vote....
- ❖ If you wish to **'dig deeper'** – submit your individual comment on the FGI Website....

# ***Question 1-25***

## ***Survey Results***



**AIA**

Academy of Architecture for Health

# 1

## 2.1 & 3.1 - 6.1.1.1

### VEHICULAR DROP-OFF & PEDESTRIAN ENTRANCE

---

~~This shall be at grade level, sheltered from inclement weather, and accessible to the disabled.~~

**A minimum of one well-marked, illuminated drop-off or entrance shall be reachable from grade level.**

**Appendix: Covered/canopied entrances should be provided as required by the functional program.**

- ❖ Covered Entry is 'operational' issue...
- ❖ Same text for OP Facilities Common.

---

Recommendation:

**ACCEPT**



#### Survey – 113 total

Yes	59%
No	26%
Split	15%



AIA

Academy of Architecture

## 2 2.1-7.2.4.2 & 3.1-7.2.4.2 CASEWORK, MILLWORK, AND BUILT-INS

A work space, work area, work counter, or work surface, wherever required in Part 2, shall have a min. of **4 sf of contiguous clear surface** for **each person** programmed to work in the space at the same time.

❖ Enforceability – functional program issue

❖ Also in 3.1 OP Facilities

Recommendation:

**REJECT**



Survey – 140 total

Yes	99%
No	1%
Split	%



AIA

Academy of Architecture

### 3 2.1 - 7.2.2.14 & 3.1 - 7.2.2.14 DECORATIVE WATER FEATURES

---

Installation of indoor, unsealed (open) water features  
shall **not** be permitted.

❖ Eliminates potential  
Legionnaires & other infection  
control issues....

❖ Also in 3.1 OP Facilities

---

Recommendation:

**ACCEPT**



**Survey – 97 total**

Yes	54%
No	33%
Split	13%



AIA

Academy of Architecture

## 4 2.1-2.6.7 & 3.1 – 3.6.7 Nourishment Area or Room

---

### Sink **Hand-washing station**

~~A hand washing station shall be located in the nourishment room or adjacent to the nourishment area.~~

❖ Only 1 'sink' to be required in the room – you can wash hands and dishes in same sink...

❖ Also in 3.1 Outpatient Facilities as well

---

Recommendation:

**ACCEPT**



**Survey – 126 total**

Yes	97%
No	3%
Split	%



AIA

Academy of Architecture

# 5

## 2.1 - 8.4.3.2 & 3.1 – 8.4.3.2 HAND-WASHING STATION SINKS

---

Design of sinks shall not permit storage beneath the sink basin  
**(in casework) and in areas below the sink open to the floor.**

- ❖ Occurs in Op Facilities as well....
- ❖ Proposed by Infection Control Comm. of HGRC
- ❖ Clean storage...??? Trash cans...???



---

Recommendation:

**REJECT – SEND BACK FOR CLARIFICATION**

**Survey – 126 total**

Yes	88%
No	12%
Split	%



AIA

Academy of Architecture



# 6

## 2.2 - 3.3.2.1 & 3.7 - 3.6.2.2 OR'S (HOSPITAL & OP SURGERY)

### Documentation area.

A counter, table area or desk, or storage for a movable table shall be provided.

the primary

If the documentation area is built-in feature, it shall allow for visualization of the patient.

- ❖ AAH Change is to add word 'primary' built-in feature
- ❖ Used by circulating nurse & Anesth. during surgery
- ❖ Planning/layout issue...
- ❖ Patient Safety Issue...
- ❖ Same as OP Surgery...

Recommendation:

**ACCEPT W/AAH CHANGE**



Survey – 140 total

Yes	70%
No	25%
Split	5%



AIA

Academy of Architecture

# 7

## 2.2 - 3.3 & 3.7 - 3.3.1.2 OPERATING ROOMS

---

### Operating Room Classifications

~~Class A~~  
~~Class B~~  
~~Class C~~

- ❖ OR 'Classifications' to be deleted
- ❖ Occurs in both Hospital & OP Surgery
- ❖ Min. standards already exist for  
OR's & Procedure rms in Guidelines

---

Recommendation:

**Accept**

### Survey – 114 total

Yes	100%
No	%
Split	%



AIA

Academy of Architecture

# 8

## 2.2 - 3.3.2.2 & 3.7 - 3.3.2.2 OR'S FOR SURGICAL PROCEDURES

that require add'l personnel and/or large equipment  
(e.g., **some** orthopedic and neurological procedures)

Min clear floor area of 600 sf & min clear dimension of 20 ft

### Proposed language

**OR's with surgical procedures that require add'l personnel and/or large equipment (e.g., cardio, ortho, and neuro procedures) shall be sized as outlined in the functional program.**

**Move 'info' to Appendix: A2.2-3.3.2.2**

**Some complex procedures (orthopedic - hip replacements and neurosurgical operations) may require rooms as large (or larger) than the 600 sf min clear floor area & dimension listed for the Image Guided Surgery above.**

**❖ What does 'some' mean??? it is un-e**

**Recommendation:**

**ACCEPT W/AAH CHANGES**

### Survey – 137 total

Yes	100%
No	%
Split	%



AIA

Academy of Architecture

# 9

## 2.2 - 3.3.6.14 & 3.7 - 3.6.14 SATELLITE STERILE PROCESSING

- Sharing between two or more OR's shall be permitted
- Consists of a decontamination and a clean work area
- Designed to provide a one-way traffic flow of 'dirty' to 'clean' materials/instruments.
- 2 doorways into OR(s) or semi-restricted area (corridor or 'clean core')

### Appendix:

One - way traffic flow of 'dirty' to 'clean' materials/instruments is similar to the cleaning/sterilization flow/process in Central Services or Respiratory Therapy.

- ❖ Supported by AORN & Infection Control - HGRC
- ❖ Significant conceptual change to OR design
- ❖ Provide the same process in OP Surgery

Recommendation:

**REJECT & ACCEPT WITH AAH C**

### Survey – 144 total

Yes	61%
No	27%
Split	12%



AIA

Academy of Architecture

# 10

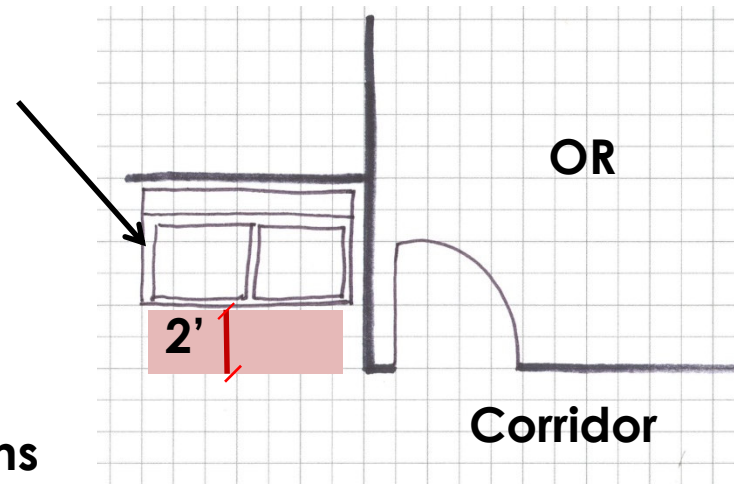
## 2.2 - 3.3.6.5 & 3.7..... SURGICAL HAND SCRUB FACILITIES

---

scrub sinks - located out of main traffic areas

if in an alcove, the alcove no less than 2 ft deeper than sink.

Scrub  
Sink



❖ This proposal is in multiple locations  
throughout Guidelines –  
OP Surgery, Endo, OP Endo, Cath Lab...

---

Recommendation:

**ACCEPT**

### Survey – 109 total

Yes	75%
No	14%
Split	11%



AIA

Academy of Architecture

# 11

## 2.2 - 3.3.3.2

### PRE-OPERATIVE PATIENT CARE AREA

Shall be under the direct visual control of the nursing staff

#### 2.2 - 3.3.3.6 Support areas for pre & post-operative patient care

If built-in NS provided, it shall allow for visualization of patient

#### 3.7-3.4.1.1 Pre-operative Patient Care Area

Under the direct visual control of the nursing staff.

#### 3.7-3.4.2.1 Phase I post-anesthesia recovery room(s).

Staff shall have direct sightlines to patients.

❖ What part is visible – patient head/foot, cubicle 'edge'...???

❖ Are cameras acceptable...???



Recommendation:

**REJECT & SEND BACK FOR CLARIFICATION**

### Survey – 138 total

Yes	100%
No	0%
Split	0%



AIA

Academy of Architecture

# 12

## 2.2 - 3.3.3.2 & 3.7..... PRE-OPERATIVE PATIENT CARE AREA

Hand-washing station - **located no more than 15 ft from each patient care station.**

- ❖ 15' from where??? Edge of stretcher??? Foot of stretcher??? cubicle curtain??? Head of patient.....???
- ❖ This proposal is in multiple locations throughout Guidelines



Recommendation:

**Reject - use '1 per 4 beds - un**

**Survey – 142 total**

Yes	96%
No	4%
Split	0%



AIA

Academy of Architecture

# 13

## 2.2 - 3.3.3.3 & 3.7 - 3.4.2.1 PHASE I - PACU

---

min. of 1.5 post-anesthesia patient care stations

per OR or major fraction thereof...

❖ New min. standard from American Society of Anesth....

❖ Uses same requirements for both Hospital & OR Surgery

---

Recommendation:

**Accept**

**Survey – 128 total**

Yes	100%
No	0%
Split	0%



AIA

Academy of Architecture



# 14

## 2.2 - 2.11.11.2 / 3.3.7.2 / 3.3.7.1 & 3.7 - 3.7.2.2 STAFF CHANGING AREAS

---

### Existing text to be deleted

~~laid out to encourage one-way traffic and  
eliminate cross-traffic between clean and contaminated  
personnel.~~

### Proposed text

**provided immediately accessible to the cesarean delivery  
(Surgical Suite) suite.**

❖ Eliminates 'one - way traffic' concept

❖ Uses same language in Surgery & OP

---

Recommendation:

**ACCEPT**

### Survey – 105 total

Yes	65%
No	29%
Split	6%



AIA

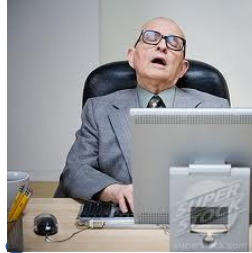
Academy of Architecture

# 15

## 2.1-2.7.4 STAFF REST AREAS

**A designated nap room to facilitate rest for staff - in nursing units and patient care areas that have 24 hour/7 day-a-week missions.**

- ❖ Every patient unit, Emergency, Imaging – would each have their own ‘nap’ room...
- ❖ Operational issue - not a building problem



Recommendation:

**Reject**

**Survey – 142 total**

Yes	97%
No	3%
Split	0%



**AIA**

Academy of Architecture

# 16

2.1- 5.2.2.1 & 2.1- 5.2.3.2

## SOILED AND CLEAN LINEN HANDLING AREAS

---

Linen processing - located in separate building on the hospital campus, a service entrance protected from inclement weather shall be provided for loading and unloading of linen

as required by the functional program.

- ❖ 'functional program' added by AAH
- ❖ Operational issue – not enforceable
- ❖ Not req'd for mat'ls dock...

---

Recommendation:

**Accept w/ AAH Changes...**



### Survey – 96 total

Yes	99%
No	1%
Split	0%



AIA

Academy of Architecture

# 17

## 2.2 - 2.6.2.6 CRITICAL CARE UNIT - TOILET RM OR SOILED UTILITY RM

---

The toilet or soiled utility room – shall be equipped with bedpan washer or a flushing clinical sink with a bedpan-washing/rinsing device.

A hand-washing station shall **NOT** be required in the toilet or soiled utility room.

❖ Not an **'issue'** with Infection Control people on HGRC

❖ **No 'hand-wash sink' in room with bed**

Recommendation:

**REJECT**

Survey – 141 total

Yes	100%
No	0%
Split	0%



AIA

Academy of Architecture

# 18

## 2.2 - 3.1.3.3 EMERGENCY - RECEPTION, AND TRIAGE AREAS,

The waiting area shall be visible to clinical staff from the reception or triage areas to permit observation of patients waiting for treatment.

- ❖ What does 'visible & observation' mean...???
- ❖ Planning/layout solution issue...
- ❖ Does 'observation' include 'cameras'...???

Recommendation:

**REJECT & SEND BACK FOR C**



**Survey – 144 total**

Yes	93%
No	0%
Split	7%



AIA

Academy of Architecture

# 19

## 2.2 - 3.1.6.2 SECURITY CONTROL STATION.

---

Where required by the functional program , a security station system shall be located near the ED entrances and triage/reception area

to permit observation of the public waiting area and main

ED entrances, including pedestrian and ambulance entrances,

for control of access to the treatment area.

- ❖ *Note - that 'system' is to be deleted*
- ❖ *What does 'observation' mean...???*
- ❖ *Planning/layout solution issue...*
- ❖ *Does 'observation include 'cameras' ???*



---

Recommendation:

**REJECT & SEND BACK FOR C**

**Survey – 133 total**

Yes	100%
No	0%
Split	0%



AIA

Academy of Architecture

## 20 2.1-2.2.6.4 SPECIAL DESIGN ELEMENTS

---

**Grab bars shall be provided on both sides of the toilet.  
(In all patient toilets.....)**



- ❖ Easier for patients to get up from toilet –
- ❖ But, more restrictive than ADA – **Guidelines is min. standard**

---

Recommendation:

**REJECT**

**Survey – 141 total**

Yes	95%
No	5%
Split	0%



AIA

Academy of Architecture

The diagnostic and treatment locations, service areas, and public and administrative areas –

fall under the business occupancy provisions of the applicable life safety and building codes -

if separated from the inpatient portion of the facility by two-hour construction.

- ❖ Business occupancy can be non-sprinklered and un-rated construction
- ❖ Not accepted by CMS

---

Recommendation:

**REJECT...SHOULD BE BUILT**

### Survey – 139 total

Yes	100%
No	0%
Split	0%



AIA

Academy of Architecture



## 22 3.1 - 8.7.2.3 ELEVATORS - DIMENSIONS

Where outpatients are expected to be transported between different levels on stretchers – (such as facilities with OR's & recovery rooms on different floors), elevator cars shall have a min. inside floor dimension of not less than 5 ft.

Proposed size....

❖ Option A: 5' – 8" x 9' - 0" (2010 Guidelines (Inpatient))

❖ Option B: 5' – 8" x 8' - 5" (5,000lb. elevator)

❖ Option C: 5' – 8" x 7' - 9" (4,500lb. elevator)

❖ Option D: 5' – 8" x 7' - 3" (4,000lb. elevator)

(Transport stretcher is approx. 7' – 1" to 7' – 3" long)

Recommendation:

**YOU 'MAKE' THE CALL...**



### Survey – 116 total

Option A	56
Option B	29
Option C	29
Option D	3



AIA

Academy of Architecture

# 23

3.1- 3.2.2

## GENERAL PURPOSE EXAMINATION/OBSERVATION RM

---

Area.

Each exam/observation room - min. clear floor area of 80 sf.

Clearances.

Room arrangement shall permit a min. clear dim. of **2' – 8"** at each side & foot of the exam table, recliner, or chair.

❖ **Option A: 2' – 8"**  
**clearance halfway down the length of exam table**

❖ **Option B: 2' – 8"**  
**clearance down the entire length of exam table**

---

Recommendation:

**YOU MAKE THE 'CALL'....**

**Survey – 141 total**

**Option A                  136**

**Option B                  6**



**AIA**

Academy of Architecture

# 24

## 3.7 - 6.1.1 OP SURGERY ENTRANCE

---

~~A covered entrance shall be provided for pickup of patients after surgery.~~

~~The entrance covering shall not be required to cover the driveway or street areas but only the patient entrance of the building.~~

**A minimum of one well-marked, illuminated drop-off or entrance shall be reachable from grade level.**

❖ *AAH Proposed Change - Make the same as Hospital....*

❖ *These entries meet current 'Guidelines'...*

---

Recommendation:

**ACCEPT**



### Survey – 121 total

Yes	91%
No	9%
Split	0%



AIA

Academy of Architecture

# 25

## 3.7 - 3.3.2.1 GENERAL OPERATING ROOMS

**In new construction & renovation,  
min clear floor area of 360 sf,  
min clear dimension of ~~18~~ 16 ft**

- ❖ Is this 'OR' of 360sf OK...???
- ❖ AAH proposed change - 18' to 16'
- ❖ Current 'Class C' - 400 sf & min. clear dimension of 18 ft and is also the current minimum for renovated Hospital OR's...

Recommendation:

- 1) ACCEPT 'OR' SF
- 2) ACCEPT W/AAH CLEAR DIMENSION

### Survey – 104 total

Yes	53%
No	27%
Split	19%

### Survey – 142 total

Yes	58%
No	42%
Split	0%



AIA


Academy of Architecture

# Sample Poll Question



AIA

Academy of Architecture for Health

<b><u>Guideline Poll - Illustrative Example</u></b>		Individuals		
<b>0 0.0 Illustrative Example</b>		Check		
<b>Cheese Cake</b>		YES or NO		
<del>Cheese Cake be provided in all areas</del>		-----		
<b>0.0 (remove in its entirety)</b>		Groups		
<b>Appendix: (make no reference to cheese cake)</b>		Check		
v Cheese Cake is an 'operational' issue		Majority		
v Cheese Cake not a 'building' issue		(60% +)		
Our Recommendation: _____		opinion		
		YES or NO		
		-----		
		Groups		
		If no Majority		
		(60% +)		
		opinion		
		Check SPLIT		
		YES	NO	SPLIT
<b>REJECT THE PROPOSED CHANGE - do you agree?</b>				



***Let the Games Begin...***



**AIA**

Academy of Architecture for Health

# ***The 'Middle 25'*** **Issues/Questions**



**AIA**

Academy of Architecture for Health



# ***Chapter 2.1***

## ***Hospitals***



## 26 2.1-2.2.6.2 PATIENT TOILET ROOM

---

The patient toilet room shall serve no more than

~~two~~ one patient rooms and no more than two ~~four~~ beds

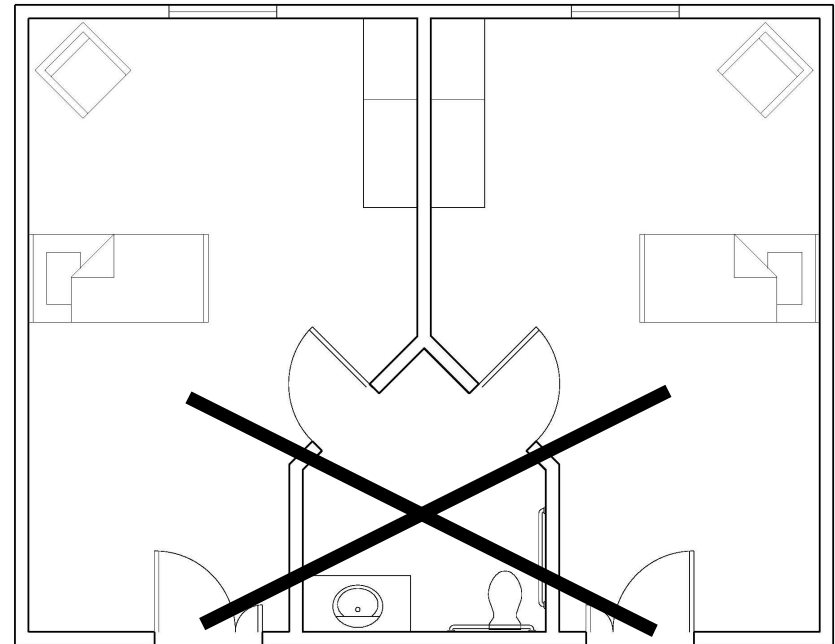
❖ Infection control & patient safety issue.....

❖ Eliminates the 'shared' patient toilet between 2 patient rooms

---

Recommendation:

**ACCEPT**



## 27 2.1-3.2.2.1 SINGLE - PATIENT EXAMINATION ROOM

---

minimum clear floor area of 120 sf  
**with a min. room dimension of 10 ft.**

~~(a) A minimum clear dimension of 5 feet shall be provided  
between the sides of adjacent patient beds.~~

**(b) min. clear dim. of 4 ft - between the sides of patient beds  
and adj. walls or partitions.**

❖ (a) AAH deletion – not req'd in single patient rm...

❖ (b) Adds min. room dimension and clearances...

---

Recommendation:

**(A) ACCEPT W/ AAH CHANGE....**

**(B) ACCEPT**



AIA

Academy of Architecture for Health

## 28 2.1-3.2.3 MULTIPLE - PATIENT EXAMINATION ROOM

---

shall have separate patient cubicles with a minimum clear floor area of 80 sf per cubicle.

**(a) min. clear dim. of 5 ft - between sides of adj. patient beds.**

**(b) min. clear dim. of 4 ft - between the sides of patient beds and adj. walls or partitions.**

❖ Adds min. clearances

---

Recommendation:

**ACCEPT**



AIA

Academy of Architecture for Health

# 29

2.1- 4.3.6

## SUPPORT AREAS FOR FOOD AND NUTRITION FACILITIES

---

- ❖ **100% re-write of the entire section**
- ❖ *Written by 'workgroup' of Food Service Consultants – from 3 different firms*
- ❖ *Oversight by AAH Standing Committee*
- ❖ *Section hasn't been touched in over a decade*
- ❖ **See website for actual language....**

Recommendation:

**ACCEPT**



# 30

2.1- 6.3.5

## MEDICAL RECORDS AREA

---

(1) Space & shall be provided as required by the functional program.

(2) Storage area(s) shall be provided as required by the functional program for forms/documents, electronic media, or electronic storage devices used to create medical records.

- ❖ Same throughout entire Guidelines
  - ❖ Functional program to be 'driver' of spatial needs
  - ❖ Technology is changing rapidly – space needs should be operationally driven
- 

Recommendation:

**ACCEPT**



AIA

Academy of Architecture for Health

# 31

## 2.1-2.6.12.2

### ENVIRONMENTAL SERVICES ROOM

---

Each environmental services room shall be provided with the following:

- (1) A service sink or floor receptor
- (2) Provisions for storage of supplies and housekeeping equipment
- (3) A hand sanitation station –

**if required by the functional program**

❖ **Proposed ‘functional program’ text by AAH**

❖ **Operational issue – Not Guidelines...**

Recommendation:

**ACCEPT W/ AAH CHANGE**



## 32 2.1-7.2.2.8 HAND-WASHING STATIONS

---

Hand sanitation dispensers shall be provided in addition to hand-washing stations **if required by the functional program**



- ❖ Add'l proposed text by AAH
- ❖ Operational issue – Not a Guidelines issue...
- ❖ This in multiple locations throughout Guidelines

---

Recommendation:

**ACCEPT W/ AAH CHANGES**





# 33

## 2.1 - 7.2.3.2 FLOORING

---

The floors of soiled workrooms, environmental services rooms with mop sinks, public bathrooms, and other areas subject to frequent wet cleaning shall be:

monolithic and the flooring material carried up the walls to provide an integral coved wall base

❖ Would require monolithic floor & integral coved bases in all Toilets, Jan Closets...

❖ Operational issue vs. building problem...

---

Recommendation:

**MOVE TO APPENDIX**



## 34 2.1 - 8.4.2.5 HOT WATER SYSTEMS.

---

~~(2) Hot water distribution systems serving patient/resident care areas shall be under constant recirculation to provide continuous hot water at each hot water outlet. Non-recirculated fixture branch piping shall not exceed 25 ft in length.~~

~~\*(4) Provisions shall be included in the domestic hot water system to limit the amount of *Legionella* bacteria and opportunistic waterborne pathogens.~~

- ❖ AAH change – don't delete this text
- ❖ Same text was 'kept' in OP Facilities – Common Elements

---

Recommendation:

**REJECT THE DELETION... KEEP IN THE GUIDELINES**



AIA

Academy of Architecture for Health

# 35

## 2.1-7.2.2.10 & 3.1-7.2.2.10 HANDRAILS

---

**Handrails be installed on both sides of the patient use corridor.**

- ❖ In both Hospital & OP Facilities
- ❖ Current text - handrails to be located as per the functional program
- ❖ Added for increased patient ambulation & safety



---

Recommendation:

- 1) ACCEPT FOR HOSPITALS
- 2) REJECT FOR OP FACILITIES



AIA

Academy of Architecture for Health

***And now...  
A  
Musical Interlude  
or  
Deep Dive***



# 29

## 2.1- 4.3 FOOD AND NUTRITION FACILITIES

---

- ❖ **100% re-write of the entire section**
- ❖ *Written by ‘workgroup’ of Food Service Consultants – from 3 different firms*
- ❖ *Oversight by AAH Standing Committee*
- ❖ *Section hasn’t been touched in over a decade*
- ❖ **See website for actual language....**

Recommendation:  
**ACCEPT**



## 2.1- 4.3

### FOOD AND NUTRITION FACILITIES

---

#### Limitations

FDA - U.S. Food and Drug Administration

USDA - U.S. Department of Agriculture

**UL - Underwriters Laboratories Inc.**

**NSF - National Sanitation Foundation International**

#### Day lighting/Windows

#### Appendix

- ❖ Natural Day lighting should be considered for preparation and serving areas where temperatures can be maintained to reduce lighting requirements and enhance staff productivity.
- 



## 2.1- 4.3

### FOOD AND NUTRITION FACILITIES

---

#### Receiving

similar

#### Appendix

- ❖ The 4' wide receiving door is sized to fit a pallet/transport nominally 40" wide.
  - ❖ In facilities over 250 beds space should be allowed for a receiving desk or office at the receiving dock.
  - ❖ The functional program for the receiving dock should include but is not limited to, dock levelers, dock depth of 10'-12', automatic doors, vestibules (depending on climatic conditions), multiple truck bays, ramps from grade, height of dock, balers.
- 



## 2.1- 4.3

### FOOD AND NUTRITION FACILITIES

---

#### Dry Storage

- ❖ Provide **minimum 36" aisles** between storage units

#### Appendix

- ❖ Aisles with pallet/transport traffic to be a **min. of 42" wide**
  - ❖ Room temperature should be maintained below 72 degree temperature and 55 percent relative humidity for reduction in food spoilage.
  - ❖ Majority of shelving in space should be 21-24" wide
  - ❖ Children's Hospitals or Hospitals with over 25 Pediatric/NICU beds should have a separate storage area for formula and mother's milk on the patient unit near the patient beds.
-



## 2.1- 4.3

### **FOOD AND NUTRITION FACILITIES**

---

#### **Emergency Storage**

- ❖ Provide emergency or disaster food and water storage as per the functional program.
- ❖ Provide emergency utility support for refrigerated storage and food preparation and serving as per the functional program.

#### **Refrigerated Storage**

a lot of new info....

#### **Appendix**

a lot of new info....

---

## 2.1- 4.3

### **FOOD AND NUTRITION FACILITIES**

---

#### **Food Preparation Areas**

- ❖ Provide hand-washing stations **within 20' of** each food preparation or serving area.

#### **Appendix**

- ❖ The recommended height of the bottom edge of exhaust hood should be a minimum of 6'-9" AFF based on capture and containment requirements for exhaust and grease
  - ❖ The critical clearance face between the exhaust canopy and all **HVAC system diffusers should be 10'** to minimize air flow cross circulation
-

## 2.1- 4.3

### **FOOD AND NUTRITION FACILITIES**

---

#### **Assembly and distribution.**

#### **Appendix:**

- ❖ The functional program should describe the patient meal service process and distribution. This may include a conventional patient tray line, room service, pantry service, or other methodology for serving patient meals.

#### **Patient/Resident Service**

a lot of new info....

**2.1- 4.3**

## **FOOD AND NUTRITION FACILITIES**

---

**Warewashing**

similar

**Soiled Tray and Cart Return**

a lot of new info....

**Appendix**

a lot of new info....

**Pot and Pan Wash**

a lot of new info....

---



**AIA**

Academy of Architecture for Health

## 2.1- 4.3

### FOOD AND NUTRITION FACILITIES

---

#### Cart Sanitizing

- ❖ A designated area shall be identified with a grated or sloped floor with floor drain and a source of water and sanitizing agents.

#### Appendix

- ❖ A high pressure water and chemical hose/spray system should be provided to facilitate cleaning.
  - ❖ A cart drying area, with floor drain should be provided where carts can air-dry prior to their next use.
-

**2.1- 4.3**

## **FOOD AND NUTRITION FACILITIES**

---

**Environmental services rooms**

a lot of new info....

### **Waste Handling**

Provide trash storage in preparation, serving and sanitation areas where covered trash containers can be held prior to removal to dock waste handling facilities.

---



**AIA**

Academy of Architecture for Health

## 2.1- 4.3

### FOOD AND NUTRITION FACILITIES

---

#### Employee Facilities

similar

#### Offices

similar

#### Dining Area

similar

---



AIA

Academy of Architecture for Health

## 2.1- 4.3

### FOOD AND NUTRITION FACILITIES

---

#### Vending

#### Appendix

- ❖ The placement of vending equipment should be considered near staff facilities, area of high traffic and public waiting areas.
  - ❖ Vending equipment should be coordinated with interior finish design concepts through the use of custom or false fronts or enclosures that conceal commercial messages.
  - ❖ Trash collection devices should be integrated as part of any vending equipment complex.
  - ❖ Housekeeping facilities should be located near vending as they are high use areas.
  - ❖ The vending room may contain, but is not limited to, seating area, microwaves, and trash holding containers
-



# 29

## 2.1- 4.3 FOOD AND NUTRITION FACILITIES

---

- ❖ 100% re-write of the entire section
- ❖ *Written by 'workgroup' of Food Service Consultants – from 3 different firms*
- ❖ *Oversight by AAH Standing Committee*
- ❖ *Section hasn't been touched in over a decade*
- ❖ See website for actual language....

Recommendation:  
**ACCEPT**



# ***Chapter 2.2***

## ***Specific Requirements - Hospitals***

# 36

## 2.2 - 3.2 OBSERVATION UNIT

---

**100% re-write of the entire section**

***New text incorporates:***

- ***support space (nour, office, clean/soil rms, exam rm, office....)***
- ***patient care space sized the same as private patient rm.***
- ***With same clearances around bed as typ. patient rm or recovery bay.....***

❖ **See website for actual language....**

❖ **Original language wasn't 'complete'...**

---

Recommendation:

**ACCEPT**



**AIA**

Academy of Architecture for Health

# 37

## 2.2 - 3.13 HYPERBARIC SUITE

---

**Hyperbaric facilities designated for clinical hyperbaric oxygen therapy, including hospital-affiliated and freestanding facilities.**

**100% new section**

**New text incorporates:**

- ❖ **Min. sizes, clearances & types of chambers**
- ❖ **Support spaces**
- ❖ **Patient care spaces**
- ❖ **Facility/environment requirements**

---

**Recommendation:**

**ACCEPT**



**AIA**

Academy of Architecture for Health

# ***Nursing Units***



# 38

2.2 - 2.2.4.5

## COMBINATION AIRBORNE INFECTION ISOLATION/PROTECTIVE ENVIRONMENT (AII/PE) ROOM

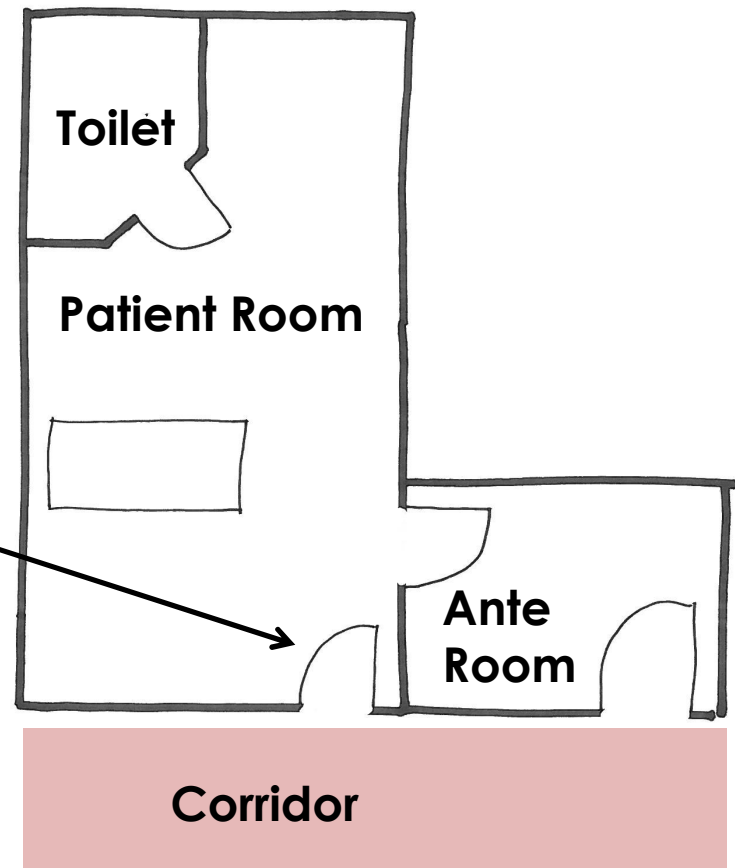
A door from the AII/PE room directly to the corridor shall be permitted with door seals & sweeps

Proposed door  
With /seals & sweeps

❖ Access to room can also from corridor - not only Ante Room

Recommendation:

**ACCEPT**



AIA

Academy of Architecture for Health

# 39

## 2.2 - 2.10.2 NICU ROOMS AND AREAS

---

**bed areas – min. clear dim of 4 ft between the sides of infant care beds and any wall or other fixed obstruction.**

❖ Adds min. dimension...

---

Recommendation:

**ACCEPT**



# ***Emergency***





## 40 2.2 - 3.1.3.5 EMERGENCY - COMMUNICATIONS CENTER

---

If required by the functional program, communication connections to the regional emergency medical service (EMS) shall be provided and meet the following requirements:

The communications center shall be **directly accessible** ~~convenient~~ to the nurse station **and shall be permitted to be part of the nurse station and documentation area.**

❖ New text allows radios to be part of NS

---

Recommendation:

**ACCEPT**



# ***Surgery***



# 41

## 2.2 - 3.3.2.3 HYBRID OPERATING ROOM

---

Hybrid operating rooms - comply with the requirements in Section 2.2 - 3.3.2 (OR's) and in this section.

Totally new section.....

- *Clear dimensions*
- *Space requirements*
- *Delivery routes*
- *Structure*
- *Support areas (control, equipment, computer....)*
- *MEP systems*

❖ See website for actual language....

Recommendation:

**ACCEPT**



## 42 2.2 - 3.3.3.2 & 3.7..... PRE - OPERATIVE HOLDING

---

**cubicle curtains** - a min. clear floor area of **50 sf**

**permanent partitions** - (full or partial height or width) a min. clear floor area of **80 sf**

**single-patient rooms** - a min. clear floor area of **100 sf**

### **Clearances**

(i) **walls/partitions** - min. clear dimension of **4 ft** between the sides of lounge chairs/stretchers, and **3 ft** between walls or partitions and the sides and/or foot of lounge chairs/stretchers.

(ii) **cubicle curtains** - a min. clear dimension of **5 ft** between the sides of patient beds/stretchers

❖ **In numerous locations throughout Guidelines**

❖ **Gives consistent floor areas and clear dimensions**

---

Recommendation:

**ACCEPT**



AIA

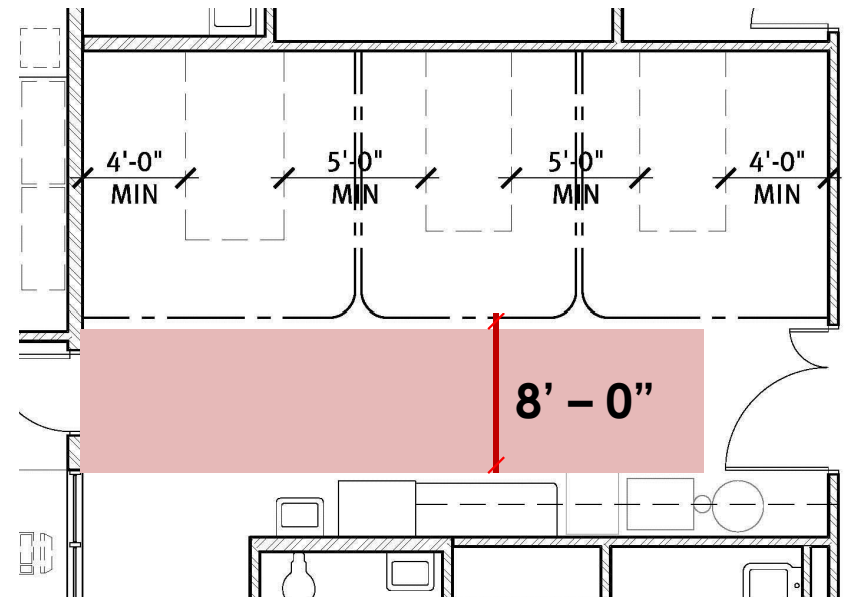
Academy of Architecture for Health

# 43

## 2.2 - 3.3.3.2 PRE - OPERATIVE AREA

---

**Aisle with a min. clearance of 8 ft between patient stations or other fixed objects.**



❖ **Proposed Text - Hospital requirement to have 8' aisle**

---

Recommendation:

**ACCEPT**



AIA

Academy of Architecture for Health

## 44 2.2-3.3.6.1 & 3.7 - 3.6.1 NURSE/CONTROL STATION

---

A nurse/control station - in the unrestricted or semi-restricted area with direct visual observation of **all** traffic into the suite.



**AAH Change - Delete this text**

❖ **AAH Change – Both Hospital & OP Surgery the same**  
**All other entries shall be restricted and controlled by an access control system.**

❖ **AAH change to 'delete' the word 'all'... & Add new text**

---

Recommendation:

- 1) **ACCEPT DELETION of 'ALL'**
- 2) **ACCEPT NEW AAH 'ENTRIES' TEXT**



## 2.2 - 3.3.6.9 CLEAN WORKROOM

---

(3) The clean workroom shall not be used for food preparation.  
**(existing language – we couldn't help ourselves.....)**



---

Recommendation:

**YOU HAVE GOT TO BE KIDDING....**



AIA

Academy of Architecture for Health

# 45

## 2.2 - 3.3.6.15 ANESTHESIA STORAGE

---

### Existing Text

~~An anesthesia workroom for cleaning, testing, and storing anesthesia equipment shall be provided.~~

### Proposed Text

**Space for storing and testing clean anesthesia equipment shall be provided as a portion of an equipment and supply storage room or in a separate anesthesia storeroom.**

- ❖ Eliminates the 'anesth work rm' –
- ❖ makes it a functional program or operational decision

---

Recommendation:

**ACCEPT**





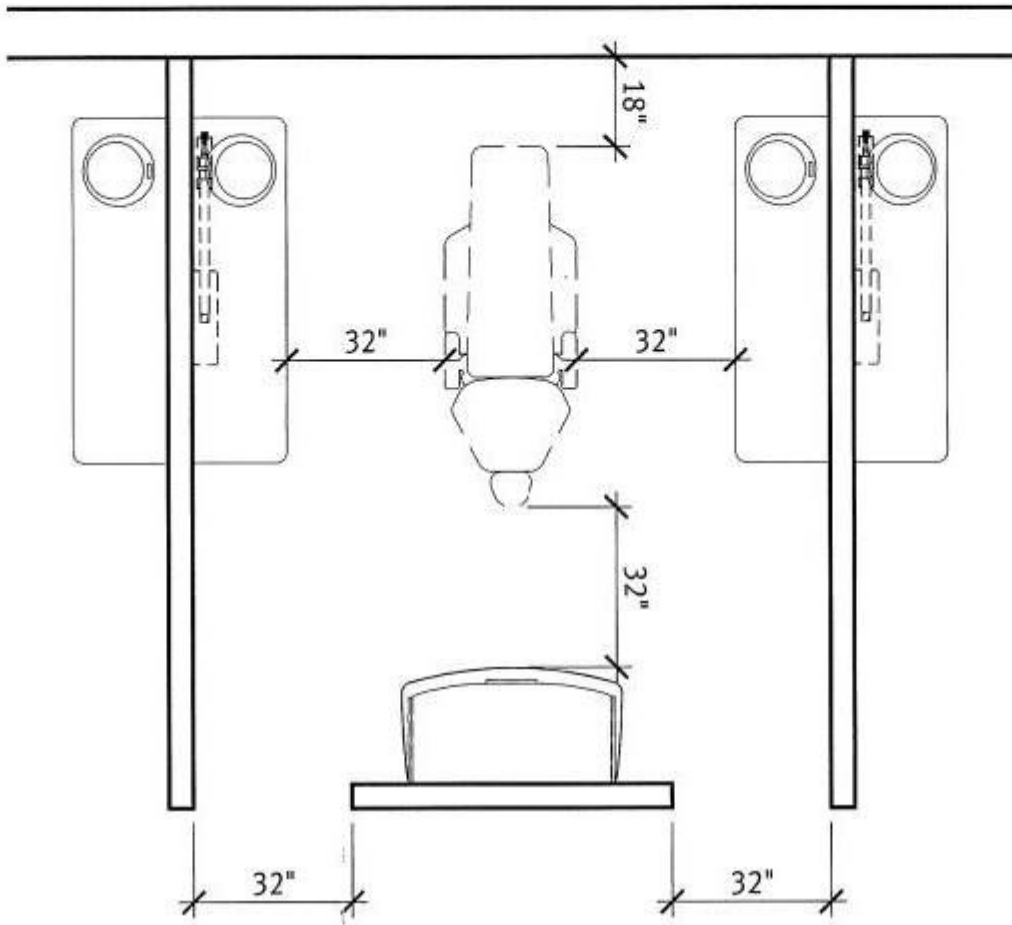
***Another  
Musical Interlude  
or  
Deep Dive***



# Specific Requirements for Dental Facilities

Includes: family and  
pediatric dentistry

## Dental Clinic Space Requirements



## Hand-washing facilities

---

**Private operatory – single sink**



**Open operatory – 1 sink between 2 chairs**



AIA

Academy of Architecture for Health

## Observation and Pediatric Dentistry

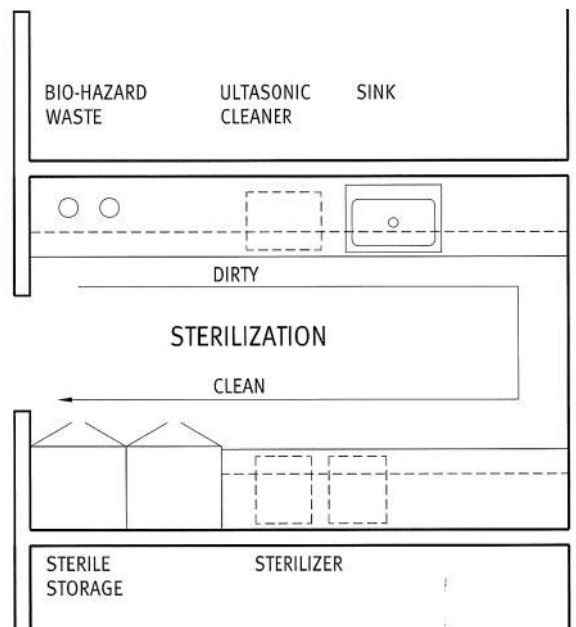
---

- ❖ Parent seat locations = space
- ❖ Observation window in any “recovery” room.



## Additional treatment spaces

- ❖ Pediatric – consult room should have a sink.
- ❖ Lab, Imaging and Sterilization as well as clean storage and soiled holding are required.
- ❖ A private consultation room.
- ❖ HVAC requirements as per ASHRE 170



# ***Imaging***



AIA

Academy of Architecture for Health

# 46

## 2.2-3.4.4.2

### MRI SCANNER ROOM SPACE REQUIREMENTS

---

#### Clearances

min. clear dim. of 3 ft on all sides of the gantry or table -

for main. access and clearance around the table

sufficient to facilitate patient transfer.

❖ Adds minimum clearances around gantry/table

---

Recommendation:

**ACCEPT**



AIA

Academy of Architecture for Health



# ***Chapter 3.7***

## ***Outpatient Surgical Facilities***



# 47

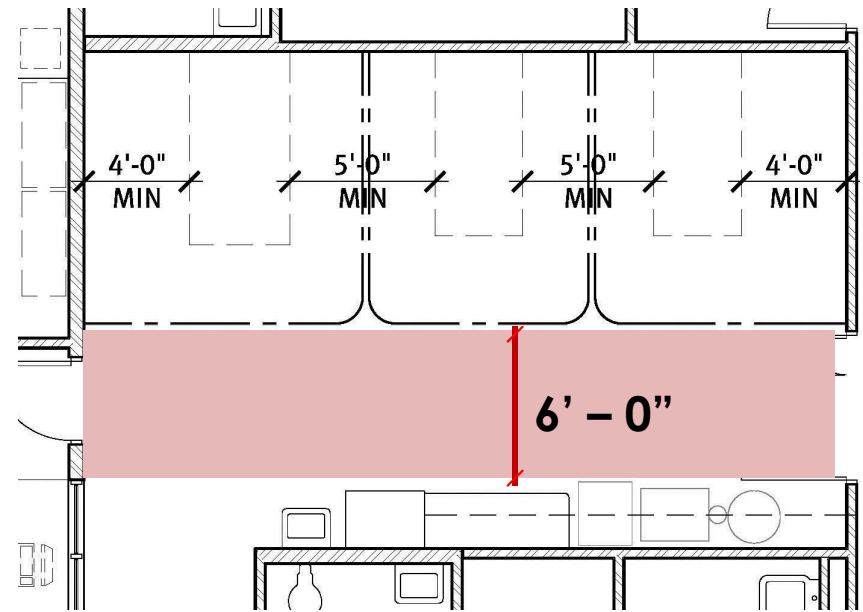
## 3.7 - 3.4.1.2 PRE - OPERATIVE AREA

**Aisle with a min. clearance of 6 ft between patient stations or other fixed objects.**

▲  
**AAH proposal for OP Surgery...**

❖ This is an AAH proposal for OP Surgery

❖ Aisle at foot of patient station – patients typically walk or wheelchair to the OR....



Recommendation:

**ACCEPT AAH PROPOSAL**



AIA

Academy of Architecture for Health

# 48

3.7 - 3.4.2.2

## PHASE II RECOVERY AREA

---

**A patient toilet - direct access to the Phase II recovery unit for the exclusive use of patients.**

**Add'l toilets – 1 per 8 patient stations**

❖ Same as 'existing' Hospital – PACU - Phase II requirements....  
for continuity on language/care...

---

Recommendation:

**ACCEPT**



AIA

Academy of Architecture for Health

# 49

## 3.7 - 3.6.9.2 CLEAN SUPPLY ROOM

---

**The clean supply room shall not be used for food preparation.**



---

Recommendation:

**ACCEPT – BUT, YOU HAVE GOT TO BE KIDDING...**



AIA

Academy of Architecture for Health

## 50 3.7 - 3.6.11 EQUIPMENT AND SUPPLY STORAGE

---

min. floor area of 50 70 sf per OR(s) up to two rooms

an additional 25 50 sf per add'l OR, whichever is greater.



❖ Surgery suites are using corridors for overflow storage...

---

Recommendation:

**ACCEPT**



# ***‘The Bottom 34’ Issues/Questions***



# ***Musical Interlude or Deep Dive***



**AIA**

Academy of Architecture for Health



**Chapter 1.2**  
***Planning, Design, Construction, and Commissioning***

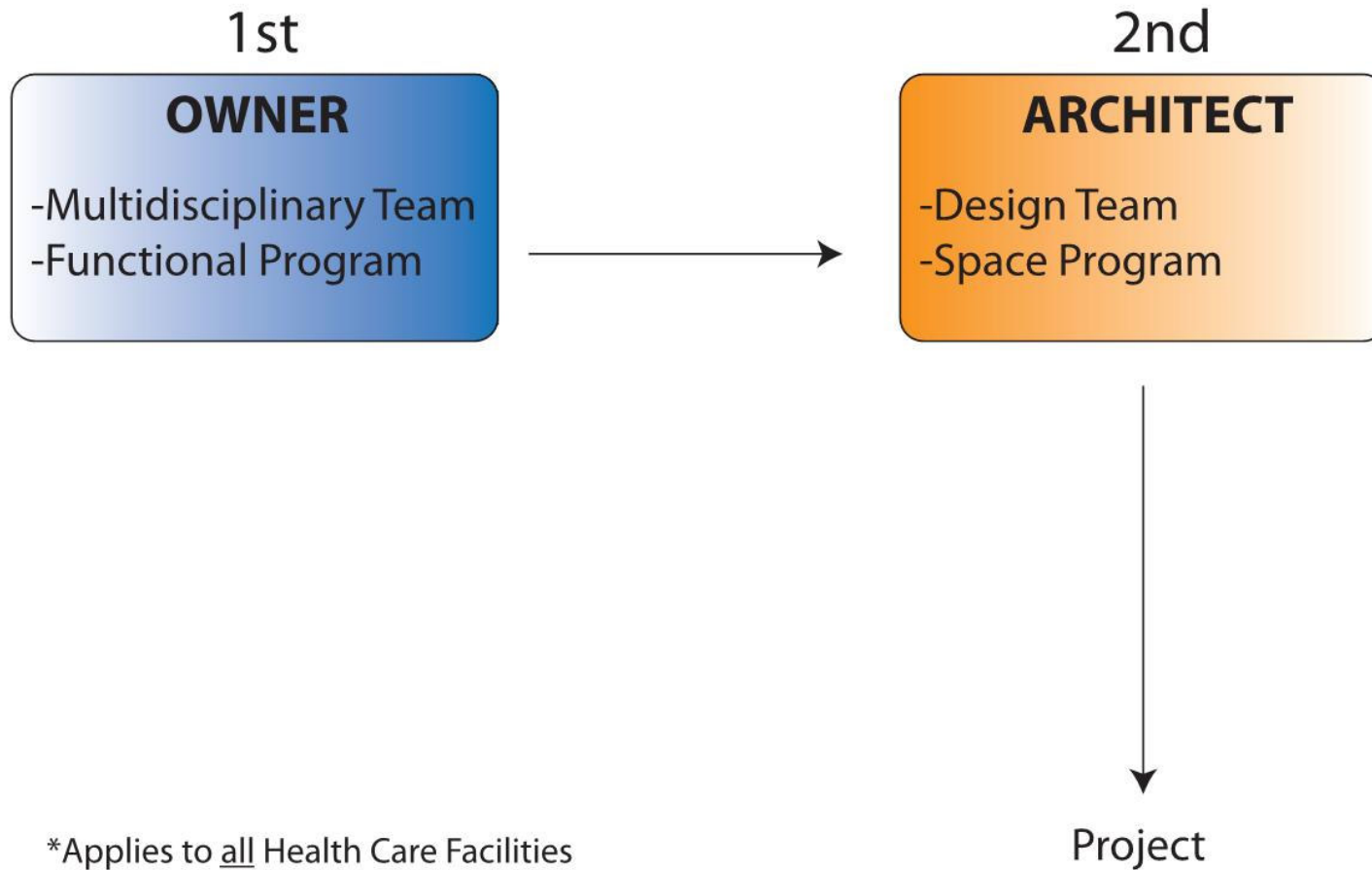


**AIA**

Academy of Architecture for Health



## FUNCTIONAL PROGRAM



AIA

Academy of Architecture for Health

# FUNCTIONAL PROGRAM

## 1. Purpose of the Project:

- Required services
- Environment of care
- Delivery care model
- Facility uses
- Systems design
- Layout/Operational planning
- Physical environment
  - light/views
  - wayfinding
  - control
  - privacy
  - safety/security
  - finishes
  - cultural responsiveness
  - water features

## Also:

- projected operations
- circulation
- department relationships
- patient/staff/visitor needs
- communication operation



## DESIGN TEAM

1. Space needs
2. Short and long term planning
3. FF&E, circulation patterns



AIA

Academy of Architecture for Health

## ADDITIONAL INFORMATION

1. ICRA
2. Patient safety risk assessment
3. Patient handling and movement
4. Acoustics
5. Sustainable Design
6. Wayfinding
7. Bariatric needs
8. Disaster Planning



## How Section 1.2 - P.D. & C. was viewed by AAH Standing Committee

1. It is a legal & public document
2. Does it put your client at 'legal' risk by requiring these items to be documented/published...???
3. Does every project require a Functional Program, PaSCRA.... regardless of the size....???
4. At what point is the Functional Program, PaSCRA....a document for the designer only and not for public dissemination...???
5. To be provided by the owner....
6. How is it enforceable...???
7. Does it expose your owners business plan to their competition...???

# 51

## 1.2 - 2.1.1

### FUNCTIONAL PROGRAM REQUIREMENT

---

The owner or legal entity responsible for the outcome of the proposed health care facility design and construction project shall be responsible for providing a functional program to the project's architect/engineer and the authority having jurisdiction (AHJ).

- ❖ Every project - 'regardless of size' - requires a functional program

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health



# 52

1.2 - 2.2.1

## EXEC. SUMMARY - PURPOSE OF THE PROJECT

---

The narrative shall explain the circumstances that necessitate the project and how the proposed modifications will address, change, or improve these circumstances.

- ❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health

# 53

1.2 - 2.3.1

## FUNCTIONAL PROGRAM CONTENT - PURPOSE OF THE PROJECT

---

The physical, environmental, or operational factors, or combination thereof, driving the need for the project and how the completed project will address these issues shall be described.

- ❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health



# 54

1.2 - 2.3.3

## INDIRECT SUPPORT FUNCTIONS

---

The increased (or decreased) demands, throughput, workloads, staffing requirements, etc. imposed on support functions affected by the project shall be described.

- ❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health

# 55

## 1.2 - 2.3.4 OPERATIONAL REQUIREMENTS

---

The operational requirements, which include but are not limited to the following, shall be described:

1.2-2.3.4.1 Projected operational use and demand loading for affected departments and/or project components

1.2-2.3.4.2 Relevant operational circulation patterns, including staff, family/visitor, and materials movement

1.2-2.3.4.3 Departmental operational relationships and required adjacencies

❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**



# 56

## 1.2 - 2.3.5 ENVIRONMENT OF CARE REQUIREMENTS

---

**Describe the functional requirements and relationships between the environment of care and the physical environment.**

- **Delivery of care model concepts**
- **Patients, visitors, physicians, and staff accommodation and flow.**
- **Systems design criteria.**
- **Physical environment.**
  - Light and views
  - Way-finding
  - Control of environment
  - Privacy and confidentiality
  - Security
  - Arch details, surfaces, furnishings characteristics and criteria
  - Cultural
  - Views of and access to nature

Recommendation:

**MOVE TO APPENDIX**

# 57

## 1.2 - 2.3.6 TECHNOLOGY REQUIREMENTS

---

*Technology systems for the project shall be identified*

*to serve as a basis for project coordination and budgeting.*

❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health

# 58

1.2 - 2.3.8

## SHORT- AND LONG-TERM PLANNING CONSIDERATIONS

---

A statement addressing accommodations for the following as appropriate for the project shall be included:

- Future growth
  - Impact on existing adjacent facilities
  - Impact on existing operations and departments
  - Flexibility
- ❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health

# 59

1.2 – 3

## PATIENT AND CAREGIVER SAFETY RISK ASSESSMENT (PACSRA)

---

**Multidisciplinary assessment process to proactively:**

- Identify and mitigate the conditions of the environment that can lead to adverse patient and caregiver safety events (infections, falls, errors, and immobility injuries....)
  - Identifies - patient and caregiver population at risk, the nature and scope of the project, functional program, models of care, operational plans, and performance improvement initiatives
  - Determines the potential risk associated with a hazard and identifies proposed solutions to mitigate the potential adverse event.
- ❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**

**Multidisciplinary, documented assessment process:**

- Direct/assist the design team in incorporating appropriate patient handling and movement equipment into the health care environment.
  - Equipment is to increase or maintain patient mobility, independent functioning, and strength
  - And provide a safe environment for staff and patients during performance of high-risk patient handling tasks.
- 
- ❖ Un-enforceable language – who determines appropriate...???
  - ❖ Definition of ‘Safe environment’...??? ‘High-risk’...???

---

Recommendation:

**MOVE TO APPENDIX**

# 61

1.2 - 3.5

## Medication Safety Risk Assessment (MRA)

---

**Multidisciplinary assessment conducted by the PaCSRA**

- Identify and plan design elements to improve medication safety.
  - Identify medication safety zones and design features to mitigate risk based on the nature and scope of the project and the functional program.
- ❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health



# 62

1.2 - 3.4

## PATIENT FALL PREVENTION RISK ASSESSMENT (PFPRA)

---

**Multidisciplinary, assessment conducted by the PaCSRA:**

- Identify and plan design elements to prevent falls and mitigate associated injuries.
  - Identifies the patient population at risk
  - Identifies the design features to mitigate fall and injury risk based on the nature and scope of the project and the functional program.
- ❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health

# 63

1.2 - 3.8

## SECURITY RISK ASSESSMENT (SRA)

---

Addresses the unique characteristics of the facility

- Specific needs related to the protection of vulnerable patient populations,
- the security of sensitive areas,
- the application of security and safety systems,
- the infrastructure required to support these needs.
  
- Addresses external and internal security needs
  
- Security needs related to emergency management and response.
  
- ❖ Does your client want to put this information in writing for the public/competition to read...??? Or their lawyer...???

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health

# 64

1.2 - 6.1

## COMMISSIONING REQUIREMENTS

---

**new or modifications to existing physical environment elements**

**critical to patient care and safety or facility energy utilization,**

**at minimum the following systems shall be commissioned:**

- HVAC, Automatic temperature control,
- Domestic hot water
- Fire alarm and fire protection systems (integration with other systems)
- Essential electrical power systems

❖ Who enforces 'critical to patient care'...???

❖ Every project - regardless of size - requires commissioning...

---

Recommendation:

**MOVE TO APPENDIX**



AIA

Academy of Architecture for Health

1.2 - 2.1.1	Functional Program Requirement
1.2 - 2.2.1	Exec Summary - Purpose of the Project
1.2 - 2.3.1	Detailed Program - Purpose of the Project
1.2 - 2.3.3	Indirect Support Functions
1.2 - 2.3.4	Operational Requirements
1.2 - 2.3.5	Environment of Care Requirements
1.2 - 2.3.6	Technology Requirements
1.2 - 2.3.8	Short- and Long-Term Planning Considerations

❖ *All these sections put your owner ‘**at risk**’ in a public/legal document that can be ‘disseminated’ in **their** marketplace*

---

Recommendation:

**ALL SHOULD BE ‘MOVED TO APPENDIX’**

# ***Questions & Answers & Follow-up***



**AIA**

Academy of Architecture for Health

# ***Further Review***

- ❖ Go to FGI website to submit your individual comments
- ❖ Power point presentation available
- ❖ 'Voting' spreadsheet available
- ❖ *We are ready to travel or have add' / 'go-to' meetings*



***Many, many, many  
sincere & heartfelt  
Thank You's to all  
who have helped,  
participated and are  
now 're-engaging'  
with the Guidelines***

