Psychiatric Hospitals - Behavioral Healthcare
FGI 2014-2018 Changes

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1 OBJECTIVE

Explain the major revisions to understand the magnitude of the revisions that have been made to improve patient and staff health and safety.

2 OBJECTIVE

Understand how important the facilities safety risk assessment is when addressing the changes in today's designs.

3 OBJECTIVE

Discuss the 2018 edition of the FGI documents will have impacts today that will require discussions with the AHJ's as the designs work to meet the needs of today's psychiatric programs.

4 OBJECTIVE

Discuss why these changes may need to be reviewed with the 2022 revisions under development. Comment on the beyond func documents to work with the 2018 revisions.

The views and opinions expressed in this presentation are that of the speaker and may not be the official position of FGI or the Health Guidelines Revision Committee

FGI

About This Presentation…

- It will be a review of the behavioral health sections of the 2018 FGI Guidelines in both the Hospital and Outpatient Editions
- There are changes that you will want to know about and there are new design requirements being written into the 2022 edition of the FGI Guidelines
- This process is a must to stay abreast for revisions to this design code requirement

FGI Guidelines History

- Every four years FGI completes a revision cycle to the Guidelines
- The Health Guideline Revision Committee consists of members including care providers, designers and regulators
- The team meets in multiple ways to review, and when agreed, to refine fundamental requirements for the next edition
  - Conference calls
  - Web platforms
  - Person to Person??

2014 Revisions Group

I did not participate in the 2014 revisions group leading to the 2018 Guidelines but currently co-chair the 2022 revision document group for behavioral health.

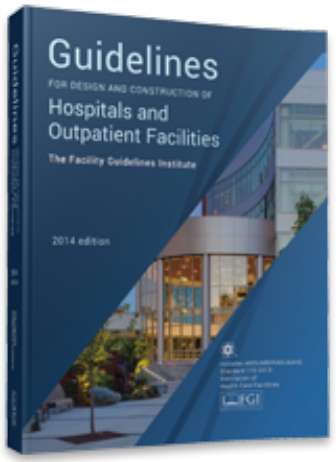
The pandemic has altered the way we received, discussed and prepared drafts for revision consideration currently under review.

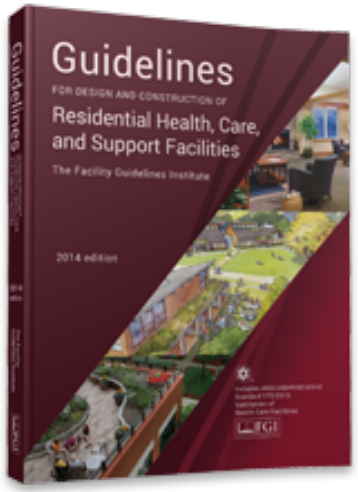
The Most Significant Change to the 2018 Edition

These important design standards are now presented as three independent documents:

- Guidelines for Design and Construction of Hospitals
- Guidelines for Design and Construction of Outpatient Facilities
- Guidelines for Design and Construction of Residential Health Care, and Support Facilities

Two Are Now Three





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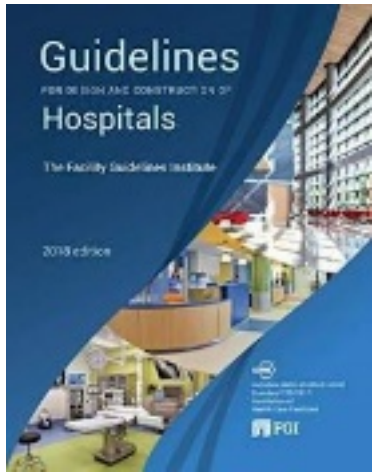

2018

FGI Organization

The Main Body of this Document is Composed of Three Parts

Part I

Contains chapters that address considerations applicable to all hospitals, except as modified in specific facility chapters in Part 2.

Part 2

Addresses facilities where inpatient care is provided, with chapters devoted to common elements, general hospitals, critical access hospitals, psychiatric hospitals, rehabilitation hospitals, and children's hospitals. Chapters on freestanding emergency departments and mobile/transportable medical units are also included.

Part 3

Contains the full text of the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 170-2017: Ventilation of Health Care Facilities. This standard (including all addenda issued by ASHRAE) has been incorporated directly into the Guidelines as minimum requirements for ventilation systems.

An Appendix is Associated with the Main Body of the Guidelines Text

An asterisk (*) preceding a section or paragraph number indicates that explanatory or educational material can be found in an appendix item located at the bottom of the page. Appendix items are identified by the letter “A” preceding the section or paragraph number in the main text to which they relate.

Appendix material, shown in shaded boxes at the bottom of the page, is advisory only.

Hospital Guideline Changes

Changes were made to clarify requirements and to allow flexibility in some designs to support development of facilities that will be functional over the long term.

Major additions and changes are described on the following slides.

Specific Requirements for Psychiatric Hospitals

Functional Program

- Previous Edition: Architectural space requirements were placed at the end of the functional program requirements section
- Current Edition: Revisions to the functional program were incorporated to clarify its intent and scope and the space program was removed to its own section as development of the space program is a **separate process** from functional programming.

*1.2-2.1.1 Functional Program Purpose

The primary purpose of the functional program shall be to communicate the owner's intent for the project to the designers of record as a basis of design at the initiation of the project.

*1.2-2.1.1 Functional Program Purpose

a. All projects, large and small, require a functional program to guide the design. The length and complexity of the functional program will vary greatly depending on project scope. The functional program for a small, simple project might consist of a simple sketch or a description of a few sentences.
b. The functional program can be used as a supplement to the construction documents; it is not intended to be approved by the authority having jurisdiction (AHJ).

*1.2-4 Safety Risk Assessment (SRA)
A1.2-4 SRA

The safety risk assessment is a multidisciplinary, documented assessment process used to proactively identify hazards and risks and mitigate underlying conditions of the built environment that may contribute to adverse safety events. These adverse events include infections, falls, medication errors, immobility-related outcomes, security breaches, and musculoskeletal or other injuries. The SRA process includes evaluation of the population at risk and the nature and scope of the project; it also takes into account the models of care, operational plans, sustainable design elements, and performance improvement initiatives of the health care organization. The SRA proposes built environment solutions to mitigate identified risks and hazards.

Behavioral Health Environments are Sensitive to Increased Noise Resulting From the Selection of Safe Durable Finishes.

The 2018 Guidelines made changes to the acoustic design criteria. They revised the language regarding exterior noise classification and expanded the exterior shell composite sound transmission ratings to provide both OITCc and STCc levels as well as appendix guidance to help users of the document determine under what conditions each measurement requirement should be applied. In addition, the APRC rounded out requirements for vibration control and isolation, including a new requirement to consider exterior sources of ground vibration (e.g., road and rail traffic) when selecting a site and during design of a facility

* 1.2-4.1.4 SRA Team

The governing body of the health care organization shall appoint an interdisciplinary team to conduct the safety risk assessment.

Sustainable Design

Significant changes were made to the sustainable design section, though much of the material appears in the appendix and is therefore advisory only.

Design Considerations for Patients of Size

The term “bariatric” has been replaced in this edition of the Guidelines, except when in reference to patients undergoing bariatric surgery.

Sexual Assault Forensic Examination (SAFE) Room

- Although provision of a sexual assault forensic examination room is not a requirement for hospitals, the Guidelines now detail design requirements should a health care organization choose to provide one
- Provisions for the space include lockable storage areas for forensic collection kits and lab supplies, a private toilet and shower, and a consultation room for family, support services, and law enforcement

Accommodations for Telemedicine Services

- The use of telemedicine is rapidly expanding 2014 edition, telemedicine services were addressed in one paragraph in the critical access hospital chapter
- The 2018 edition provides minimal requirements and considerable appendix guidance on considerations for designing clinical telemedicine spaces. In an effort to keep the requirements flexible for the many different types of telemedicine services offered, the requirement is only for spaces where clinical telemedicine services are provided

COVID -19 Impacts

The methods for patient treatments, responding to the COVID -19 impacts on care are a source of numerous webinars. Due to timing have not been included in the 2018 edition and may not be addressed to a great extent in the 2022 revisions.

Communication Rooms

- Technology Distribution Room (TDR) space requirements have been revised to provide a minimum three-foot clearance on all sides of equipment racks
- In the 2014 edition, the requirement was to provide a minimum of 12 feet by 14 feet for the TDR

Ventilation: Beginning with the 2010 Guidelines Edition

- ANSI/ASHRAE/ASHE Standard 170
  - Ventilation of Health Care Facilities has been incorporated into the Guidelines to provide ventilation requirements for health care facilities
- The 2017 edition of ASHRAE 170, with all addenda approved through November 2017, has been incorporated as Part 3 of this edition of the FGI Guidelines

SECURITY:* 2.5-1.5.2.1

- The design shall provide the level of security needed for the specific type of service or program provided as well as for the age level, acuity, and risk of the patients served (e.g., geriatric, acute psychiatric, or forensic for adult, child, and adolescent care)
- See Section 1.2-4.6 (Behavioral and Mental Health Risk Assessment)

* 2.5-1.5.2.2 Perimeter Security

- Where provided, perimeter security shall meet the following requirements:
  - A2.5-1.5.2.2 The owner or designer should consult with the authorities having jurisdiction regarding the acceptability of the intended perimeter security system.
    1. A perimeter security system shall be designed to:
       a. Contain patients within the patient care unit or treatment areas outside the unit until clinical staff and/or hospital security can escort them to an adjacent compartment or an exit stair.
       b. Prevent elopement and contraband smuggling
       c. Include provisions for monitoring and controlling visitor access and egress.

2.5-2.1.3 Accommodations for Care of Patients of Size

- Where accommodations for care of patients of size are provided, they shall meet the requirements in Section 2.1-2.3 (Accommodations for Care of Patients of Size)
- NOTE not an appendix item

2.5-2.2 General Psychiatric Patient Care Unit

- Unit shall have access control at all entrances to general psychiatric units

*2.5-2.2.1.2

The primary access point to a locked unit shall be through a sally port when the need for elopement prevention is indicated by the behavioral and mental health section of the safety risk assessment (see Section 1.2-4.6).`

2.5-2.2.3.5 Lighting

1. Luminaires shall have tamper-proof lenses.
2. Luminaires shall not be accessible to patients.
3. Poles supporting luminaires shall not be capable of being climbed.

Items 1 & 2 are new for 2018

2.5-2.2.4.3 Seclusion Room

- See Section 2.1-2.4.3 (Seclusion Room) for requirements.
- No revisions in section 2.5 were made, however, secure holding is covered in other sections of the Guidelines.

2.5-2.2.8.9 Nourishment Area

- Use of one or a combination of the following shall be permitted to support food service in the unit:
  - **Added (b) which now requires secured storage**

A2.5-2.2.8.13 (3)

Where storage space for wheelchairs must be located outside the psychiatric patient care unit, **provisions should be made for access as needed for disabled patients and patients of size.**

*2.5-2.2.10.4 Patient Storage Facilities

(2) Combination of this storage area with the clean workroom or clean supply room in Section 2.5-2.2.8.11 (Clean workroom or clean supply room) shall be permitted.

A2.5-2.2.10.4

Including a distribution window to allow for distribution and collection of hygiene and other items without opening and closing the storage room door may improve security.

*2.5-2.2.10.5 Visitor Storage Facilities

- A space for locked storage of visitor belongings shall be provided
- A2.5-2.2.10.5 This storage is needed so those visiting a locked unit cannot smuggle contraband items or items patients could use to pose harm to themselves or others in the unit

2.5-2.3.2.2

Space requirements for beds or cribs was deleted from the 2018 Edition

* 2.5-2.2.3 Outdoor Areas reference A2.5-2.2.3

- Outdoor areas are not required; however, if patient care programs require them to be provided, they should be arranged to prevent confused patients from wandering outside of designated patient areas.
- Plants selected for use should be types that will not grow large enough to facilitate elopement or concealment.

2.5-2.4.10.2 Bathing Facilities

- At least one accessible bathtub in a locked room shall be provided in each dementia patient care unit.

2.5-3.1.1

- Where examination rooms are provided, they shall comply with Section 2.1-3.2.2 (Single-Patient Examination Room), except as noted in this section

2.5-3.1 Examination Room - A2.5-3.1.1

- Where the presence of two staff members is required in psychiatric examination room(s), space for a chair for a second staff person should be provided.

A2.5-3.4.1.1 Equipment

- Equipment used in this treatment modality may be portable and can be used in a variety of medical facilities, provided the minimum requirements in this section are met.(2)
- Where a psychiatric unit is part of a general hospital (Section 2.2-2.12—Psychiatric Patient Care Unit), all requirements in this section shall be permitted to be accommodated in a room that complies with requirements in one of the following:
  a. Section 2.5-3.4.2.2 (ECT Treatment Room)
  b. Section 2.2-3.3.2 (Procedure Room)
  c. Section 2.2-3.3.3 (Operating Room)

2.5-3.4.1.2 Size, Location, and Layout

The size, location, and configuration of the ECT treatment, recovery, and support areas shall reflect the type of patients to be treated, whether this is an inpatient or outpatient service, and the projected volume of patients.

2.5-3.4.3.1 General

- Where ECT services have low-volume throughput, use of the ECT treatment room for pre-treatment patient care and post-treatment recovery shall be permitted. (1) Where pre- and post-treatment patient care area(s) are provided, they shall meet the requirements in Section 2.1-3.4 (Pre- and Post-Procedure Patient Care) as amended in this section.

2.5-3.4.3.3 Recovery Area

- Where a recovery area is provided, the number of patient care stations shall be determined by the following:
  1. Number of ECT treatments performed
  2. Types of anesthesia used
  3. Average recovery periods
  4. Anticipated staffing levels

2.5-3.4.4 – 2.5-3.4.6

2.5-3.4.4 – 2.5-3.4.6 Reserved became 2.5-3.4.8.13 Emergency equipment storage

2.5-3.4.8.13 Emergency Equipment Storage

1. Space shall be provided in the treatment area for storage of emergency equipment (e.g., a CPR cart)
2. This emergency equipment storage space shall be permitted to serve more than one ECT treatment room

Procedure Room

- A room designated for the performance of patient care
- Requires high-level disinfection or sterile instruments and some environmental controls
- Not required to be performed with the environmental controls of an operating room

Treatment Room

- A standard patient room in an emergency department (ED) or urgent care center that may be used for a variety of functions
- Patient examination and various treatments or procedures, including wound packing, suture placement, or casting.

Note: This room may contain specialized equipment as identified in the functional program.

2.5-3.4.7.1 HVAC System

See Part 3 (ANSI/ASHRAE/ASHE 170: Ventilation of Health Care Facilities) for ventilation requirements for the ECT treatment room

2.5-3.4.7.2 Electrical Systems

Emergency electrical service that meets the requirements in Section 2.5-8.3.3.1 (Essential electrical system) shall be provided in:

2.5-3.4.8.13 Emergency Equipment Storage

1. Space shall be provided in the treatment area for storage of emergency equipment (e.g., a CPR cart)
2. This emergency equipment storage space shall be permitted to serve more than one ECT treatment room

2.5-3.4.10 Patient Support Areas

- Where waiting areas and patient toilet rooms are provided, their number and size shall be determined by the following:
  - 2.5-3.4.10.1 Number of ECT treatments performed
  - 2.5-3.4.10.2 Average recovery periods
  - 2.5-3.4.10.3 Anticipated staffing levels

2.5-4 Patient Support Facilities

- Laboratory
- Pharmacy
- Food
- Nutrition

2.5-5 General Support Facilities

- Sterile Processing
- Linen Services
- Materials Management
- Waste Management.

*2.5-7.2.1.2

Special design consideration shall be given to injury and suicide prevention as indicated in the behavioral and mental health portion of the safety risk assessment (Section 1.2-4.6)>.

2.5-7.2.2.3 Doors and Door Hardware (3)

- Door swings
  - Doors to private patient toilet rooms or bathing facilities shall:
    - Swing out
    - Be double-acting with an emergency strike
    - Or have other barricade-resistant provisions to allow for staff emergency access

A2.5-7.2.2.3 (4)(b) Door Closers

- Ideally, where a door closer is provided, it should be within view of a nurse station or staff workstation

* 2.5-7.2.2.5 Windows (1)

Windows located in patient care areas or areas used by patients, **including the exterior pane of windows accessible by patients, from outdoor courtyards,** shall be designed to limit opportunities for patients to seriously harm themselves by breaking the windows and using pieces of the broken glazing material to inflict harm to themselves or others.

* 2.5-7.2.2.5 Windows (2)

To prevent opportunities for suicide, self-harm, and escape, the entire window system and the anchorage for windows and window assemblies, including frames, glazing, and hinges and locking devices for operable windows, shall meet the following requirements:

* 2.5-7.2.2.5 Windows (a)

Designed to resist impact loads of 2,000 foot-pounds applied from the inside

* 2.5-7.2.2.5 Windows (b)

Tested in accordance with AAMA 501.8: Standard Test Method for Determination of Resistance to Human Impact of Window Systems Intended for Use in Psychiatric Applications

2.5-7.2.2.7 Fire Sprinklers and Other Protrusions (2)

In patient toilet rooms and bathing facilities, light fixtures, fire sprinklers, electrical receptacles, and other appurtenances shall be of a tamper- and ligature-resistant type.

2.5-7.2.3.3 Ceilings (1)

- Monolithic ceilings shall be provided in:
- Seclusion rooms
- Patient bedrooms
- Patient toilet rooms
- Patient bathing facilities

2.5-7.2.3.3 Ceilings (3)

Ceiling access doors shall be without gaps and secured with a keyed lock and/or tamper-resistant fasteners

(Note no changes to (2) in 2018)

2.5-7.2.4.2.

Where provided, robe or towel hooks shall be designed for ligature resistance. **Clothing rods shall not be permitted.**

2.5-7.2.4.3 Window Treatments

- In patient bedrooms and other patient care areas:
  - Shall be designed without **accessible anchor points or cords**

2.5-8.3.3.1 Essential Electrical System (1)

- At minimum, psychiatric hospitals or sections thereof shall have essential electrical systems as required in the following standards:

2.5-8.3.4 Lighting 2.5-8.3.4.1 General

Luminaires shall be tamper-resistant and engineered for the specific application, as determined by the behavioral and mental health portion of the safety risk assessment (Section 1.2-4.6).

2.5-8.5 Communications Systems

Communications systems shall meet the requirements in Section 2.1-8.5 (Communications Systems) as amended.

2.5-8.5.1 Call Systems

See Table 2.1-2 (Locations for Nurse Call Devices in Hospitals) for locations where call systems are required in psychiatric hospitals.

Table 2.1-2 Locations for Nurse Call Devices in Hospitals*

I know this is too small to read on your computer but you can at least see the format.

KEY: ● Required ☐ Optional

Section	Location	Patient Station	Bath Station	Staff Assistance Station	Emergency Call Station	Nurse Master Station	Duty Station	Notes
NURSING UNITS								
2.1-2.2.6	Patient toilet room		●					2
2.2-2.2.2	Medical/surgical unit patient bed	●		●	●			1, 2, 3, 4
2.2-2.6.2	Critical care unit patient bed	●		●	●			1, 2, 4, 5
2.2-2.8.2	NICU							
2.2-2.9.3	LDR/LDRP room	●		●	●			1, 2, 3, 4
2.2-2.10.3.1	Newborn nursery			●	●			
2.2-2.10.3.2	Continuing care nursery							
2.5-2.2.2	Psychiatric patient bedroom	●		●				2
2.5-2.4.2	Alzheimer's and other dementia unit patient bedroom	●						
SUPPORT AREAS								
2.1-2.8.2	Nurse/control station					●		
2.1-2.8.5	Multipurpose room						☐	
2.1-2.8.8	Medication safety zone						●	
2.1-2.8.9	Nourishment area or room						☐	
2.1-2.8.11.2	Clean workroom						●	
2.1-2.8.11.3	Clean supply room						☐	
2.1-2.8.12.2	Soiled workroom						●	
2.1-2.8.12.3	Soiled holding room						☐	
2.1-2.8.13.1	Clean linen storage							
2.1-2.8.13.2	Equipment storage room							
2.1-2.9.1	Staff lounge						☐	
DIAGNOSTIC & TREATMENT AREAS								
2.1-2.4.3	Seclusion room			●	●			
2.1-3.2	Examination room	☐		●	●			
Table 2.2-2	Class 1 imaging room							
2.1-3.4.3	Pre-procedure patient care room or area	●		●	●	☐		1, 2
2.1-3.4.4	Phase I post-anesthetic (PACU) patient care station	☐		●	●	☐		2, 4
2.1-3.4.5	Phase II recovery patient care station	●		●	●	☐		1, 2
2.2-2.9.11	Cesarean delivery room			●	●			2
2.2-3.1.3.6	Emergency treatment room, triage area	●		●				1, 2, 4
2.2-3.2.2	Observation unit patient care station	☐		●	●			
2.2-3.3.2	Procedure room (including endoscopy)			●	●	☐		2, 4
Table 2.2-2	Class 2 imaging room							
2.2-3.3.3	Operating room			●	●			2
Table 2.2-2	Class 3 imaging room							
2.2-3.4.10	Imaging waiting and changing area, including toilet room	☐						2
2.5-3.4.2.2	Electroconvulsive therapy (ECT) treatment room			●	●			2
2.5-3.4.3.2	ECT pre-procedure patient care station							
2.5-3.4.3.3	ECT recovery patient care station							

Table 2.1-2 Locations for Nurse Call Devices in Hospitals*

*It is recognized that staff other than nurses may respond to these devices, but the term “nurse call” is used here as an industry-accepted term.

Table 2.1-2 Locations for Nurse Call Devices in Hospitals*

Notes

1. One device shall be permitted to accommodate patient station, emergency call, and staff assistance station functionality
2. A visible signal shall be activated in the corridor at the patient's door, at the nurse/control station, and at all duty stations. In multi-corridor nursing units, additional visible signals shall be installed at corridor intersections
3. Two-way voice communication shall be provided with the nurse/control station
4. One device shall be permitted to accommodate both staff assistance and emergency station functionality
5. A patient station shall not be required in the NICU

2.5-8.7.2.5 Elevator Controls (2)

Elevator call buttons and car buttons shall be key-controlled where required by the behavioral and mental health section of the safety risk assessment (see Section 1.2-4.6)>.

Table 1.2-1: Safety Risk Assessment (SRA) Components

ASSESSMENT	FACILITY TYPE/ AREA	PROJECT SCOPE	GUIDELINES REFERENCE
Infection control risk (ICRA)	All	1. New construction 2. All renovations	1.2-4.2
Patient handling and movement (PHAMA	Areas where patient handling, transport, transfer, and movement occur	1. New construction 2. Major renovation and renovations changing functional use of space 3. Minor and minimal renovations where patient handling occurs	1.2-4.3
Fall prevention	Any area to which a patient or family member has access	1. New construction 2. Major renovation and renovations changing functional use of space 3. Minor and minimal renovations where patient falls may occur	1.2-4.4
Medication safety	Medication safety zones	1. New construction 2. Major renovation and renovations changing functional use of space 3. Minor and minimal renovations where medication preparation, processing, and distribution occurs	1.2-4.5
Behavioral and mental health risk	Any area where behavioral health patient care is provided	1. New construction 2. Major renovation and renovations changing functional use of space to include care of behavioral health patients 3. Minor and minimal renovations where behavioral health patient treatment occurs	1.2-4.6
Patient immobility	Inpatient locations	1. New construction 2. Major renovation and renovations changing functional use of space to inpatient use 3. Minor and minimal renovations where inpatient care occurs	1.2-4.7
Security risk	All	1. New construction 2. All renovations	1.2-4.8

2022 HGRC Schedule

- 2022 Health Guidelines Revision Committee Schedule started in January 2018 and continues to January 31, 2022 with the publication of the 2022 Guidelines.
- Public comment period closed September 30th, 2020
- HGRC meeting #3
- Develop final manuscripts April 19th through August 13, 2021
- HGRC meeting #3 April 12 -16, 2021
- Production of 3 books (layout, indexing, proofreading) September - November 2021

SUMMARY

1 OBJECTIVE

Explain the major revisions to understand the magnitude of the revisions that have been made to improve patient and staff health and safety.

SUMMARY

Understand how important the facilities safety risk assessment is when addressing the changes in today's designs.

SUMMARY

Discuss the 2018 edition of the FGI documents will have impacts today that will require discussions with the AHJ's as the designs work to meet the needs of today's psychiatric programs.

More on 2018

- As the market shifts delivery of care responding to the impacts of COVID 19 the more you should look at the 2022 revision drafts and beyond fundamentals.

Q & A

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Thank you for your attention!