



Best Practices for Healthcare Lighting

Patient Rooms



CHAD

National Sales Manager



CHRIS

President



AMANDA

Marketing Director

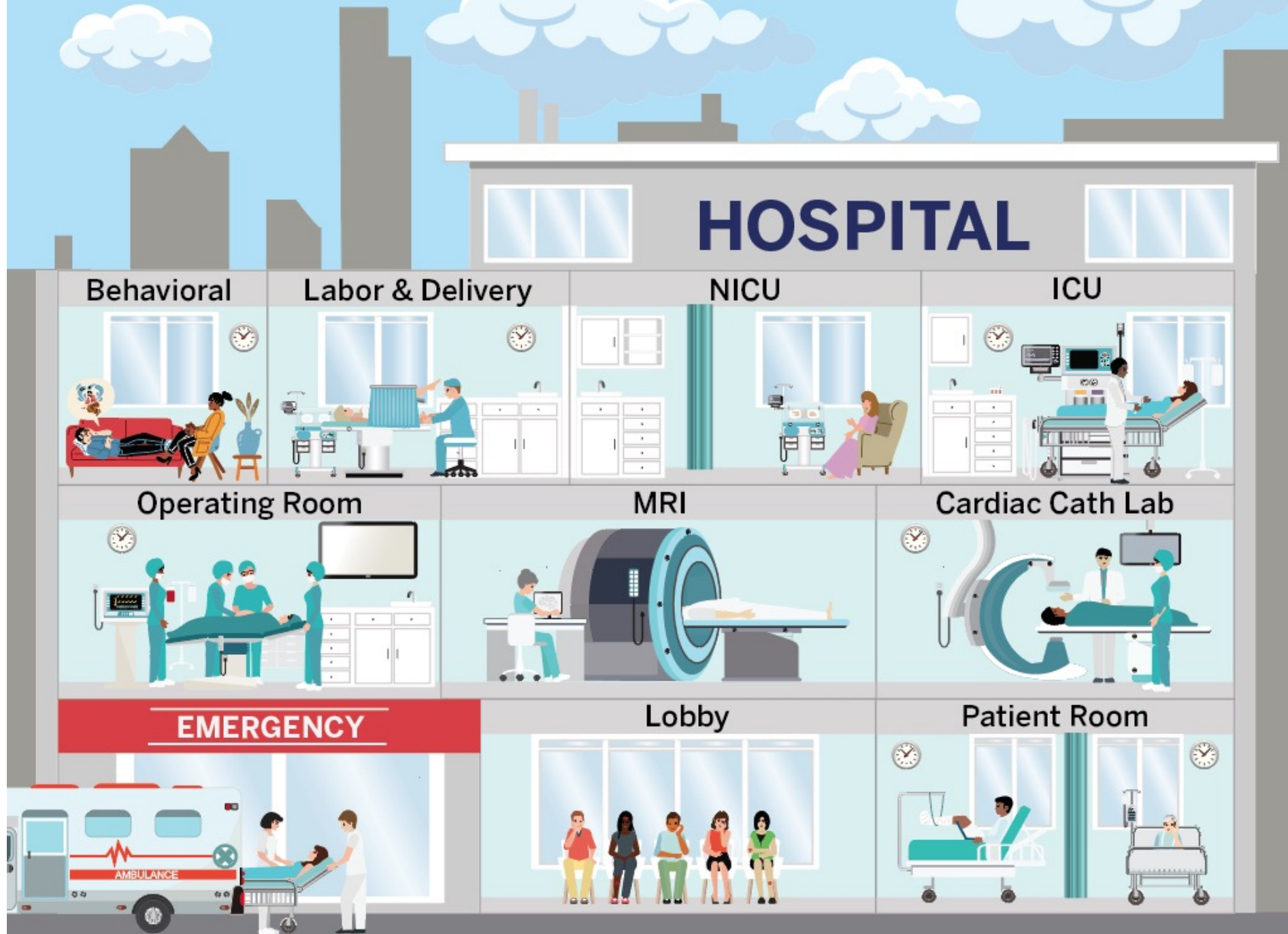


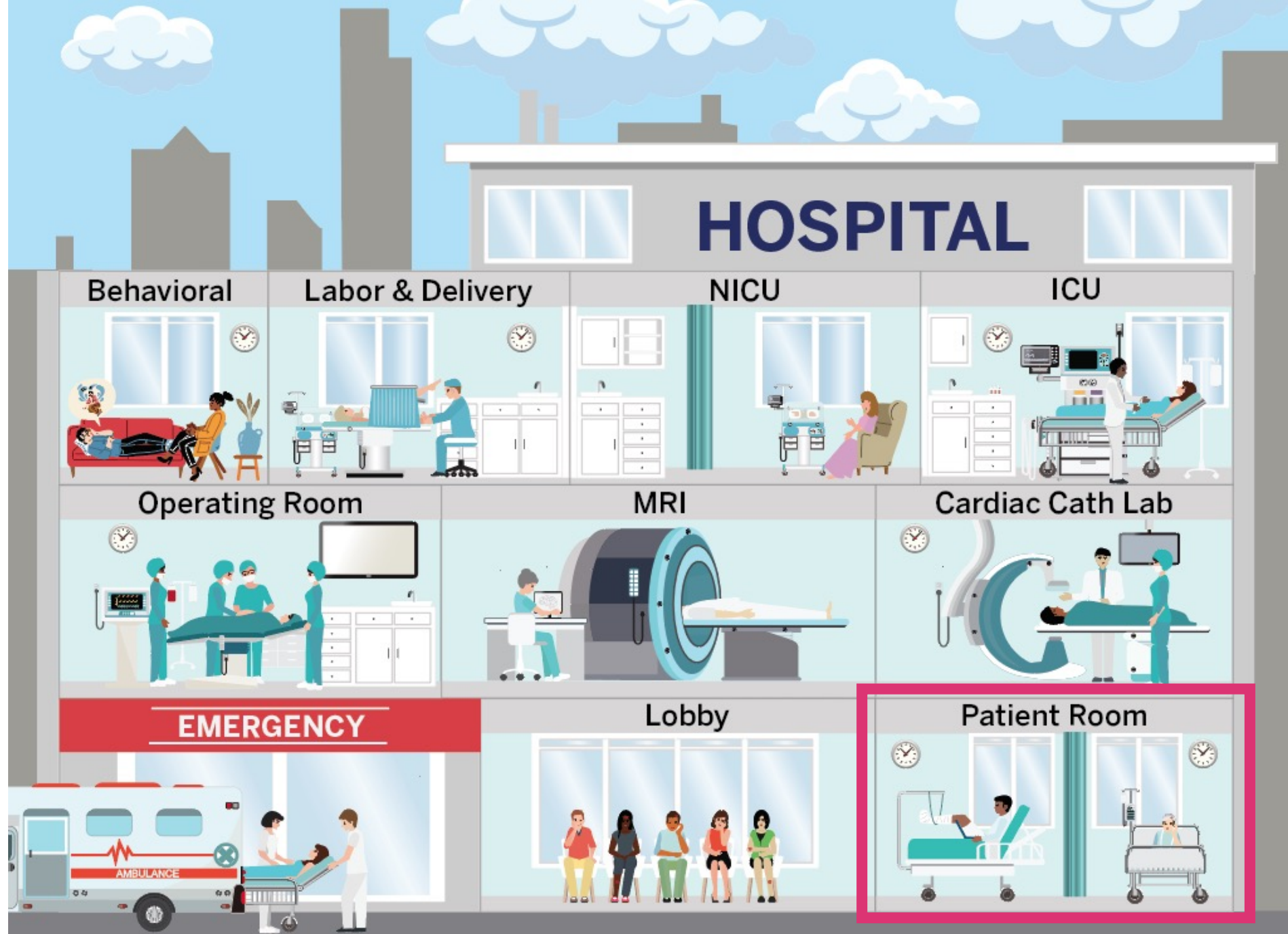
SCOTT

Regional Manager - Central

Kirlin's Key Focus Areas







The Multi-Purpose Room

The Patient Room is the most common room in many hospitals, and the site for:

Pediatric Care



Step-Down Units



Oncology Care



Pre-/Post-Surgery



Infection Treatment



Rehabilitation



Long-Term Care



Three Core Principles for any Procedure/Patient

1



Enhanced Visual
Acuity

2



A Safer
Environment

3



Improved Patient
Comfort

Patient Room Considerations



Enhanced Visual Acuity

- High color-rendering exam lighting enables accurate visual diagnosis with low contrast ratios



A Safer Environment

- Level 1-3 infection prevention
- Wayfinding luminaires to ensure patient safety



Improved Patient Comfort

- Use of circadian-supporting chart lights and tunable white ambient light
- Glare-free and sufficient illumination with dimming
- Clinical performance without the clinical appearance

Patient-Satisfaction Drives Reimbursement

HCAHPS Survey

SURVEY INSTRUCTIONS

- ◆ You should only fill out this survey if you were the patient during the hospital stay named in the cover letter. Do not fill out this survey if you were not the patient.
- ◆ Answer all the questions by checking the box to the left of your answer.
- ◆ You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:
☐ Yes
☒ No → If No, Go to Question 1

You may notice a number on the survey. This number is used to let us know if you returned your survey so we don't have to send you reminders.

Please note: Questions 1-25 in this survey are part of a national initiative to measure the quality of care in hospitals. OMB #0938-0981

Please answer the questions in this survey about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers.

YOUR CARE FROM NURSES

1. During this hospital stay, how often did nurses treat you with courtesy and respect?

☐ 1 Never
☐ 2 Sometimes
☐ 3 Usually
☐ 4 Always

2. During this hospital stay, how often did nurses listen carefully to you?

☐ 1 Never
☐ 2 Sometimes
☐ 3 Usually
☐ 4 Always

3. During this hospital stay, how often did nurses explain things in a way you could understand?

☐ 1 Never
☐ 2 Sometimes
☐ 3 Usually
☐ 4 Always

4. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?

☐ 1 Never
☐ 2 Sometimes
☐ 3 Usually
☐ 4 Always
☐ 9 I never pressed the call button

- HCA HPS survey is used to determine the reimbursement rates that hospitals receive
- Better patient experiences lead to higher reimbursement rates
 - ✓ Hospitality-inspired aesthetics
 - ✓ Wellness-focused lighting (e.g. circadian systems)
 - ✓ Patient-centric controls

KIRLIN

Lighting the Future Since 1895

The Top 10 Complaints

1. **Sleep deprivation** from clinicians coming to do tests and draw blood in the middle of the night.
2. **Noisy nurses' stations** that can interfere with sleep.
3. **Personal belongings being lost.**
4. **Staff not knocking before entering the room,** which can be interpreted as a sign of disrespect.
5. **Not keeping whiteboards updated.** Updated whiteboards allow patients to know who is caring for them. Patients would also appreciate a notebook where they can keep important information and take notes.
6. **Lack of clear communication** and not updating the patient or family members if the patient's condition changes.
7. **Messy rooms** where surfaces aren't wiped down, or the bathroom smells.
8. **Feeling unengaged in their care** or like they are not being listened to.
9. **Lack of orientation to the room and hospital.** Patients would like to know how to work the television and how to order food.
10. **Lack of professionalism from hospital staff,** especially when they are on break.

Source: Armstrong Institute for Patient Safety and Quality

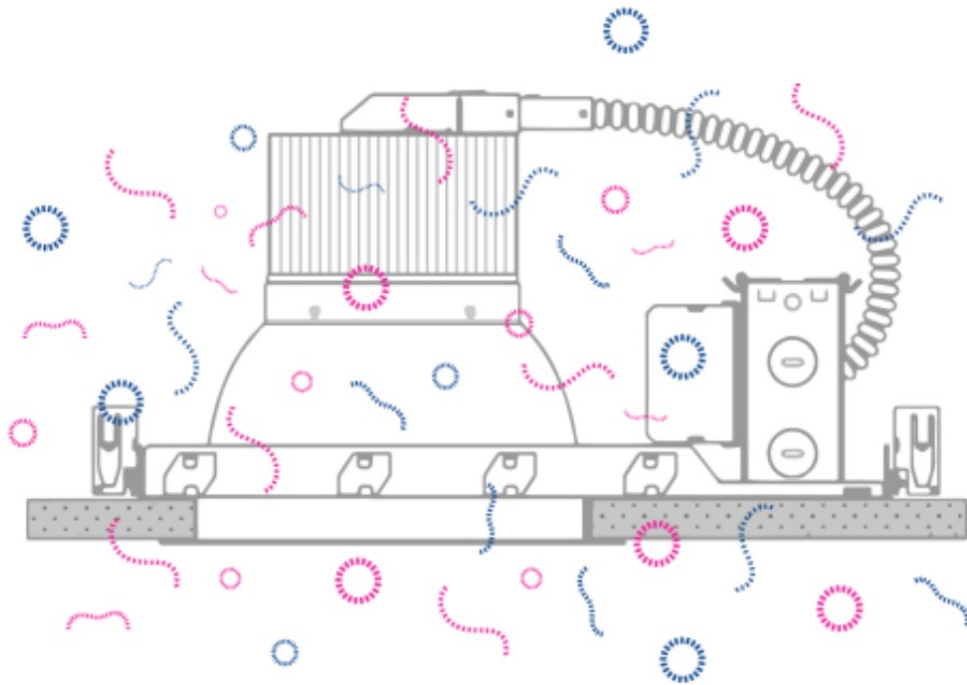
The Anatomy of a Great Patient Experience

Hospital patients suffer unnecessary pain and anxiety when their surroundings are poorly-managed. And low patient satisfaction can cost your hospital, big-time. 2% of Medicare and Medicaid reimbursements are now tied to patient satisfaction.¹ Beyond top-notch clinical care, how can your hospital provide its patients with a comfortable, healing experience?



- 1 Reliable Equipment**
Properly maintained equipment instills patient confidence and takes stress off clinicians. The right vendor can save your facility up to 20% on medical equipment maintenance management.²
- 2 Clean Environment**
Over 1.7 million patients per year contract HAIs, costing hospitals \$10 billion.³ A sterile environment reduces the risk of infection, protects patients, reassures their families, and improves employee morale.
- 3 Comfortable, Well-lit Facility**
Patients expect their rooms to be well-lit and at a comfortable temperature. A proactive approach to HVAC and lighting upgrades saves money and enhances the patient experience.
- 4 Nourishing Menu**
A food service program that provides great taste, good nutrition, and courteous service is key to patient healing and satisfaction. Patients who eat nutritiously during their stay are less likely to be readmitted.⁴
- 5 Clean Sheets**
A hygienic, comfortable bed is key to the patient's healing and creating a positive perception of the facility's overall cleanliness. Proper linen sanitation tactics are also key to curbing the spread of HAIs.⁵
- 6 Patient Sitter/Companions**
The national average hourly wage of a nurse is now above \$35 an hour.⁶ Patient companions can help provide critical attention they need while freeing up your costly nursing staff to focus on clinical needs.
- 7 Engaged Staff**
When nurses are free to focus on clinical tasks, they report higher engagement and job satisfaction, creating better patient experiences. Hospitals with engaged workers report an 8% higher net revenue.⁷

Infection in the Hospital



NON-KIRLIN DESIGN

THE PROBLEM

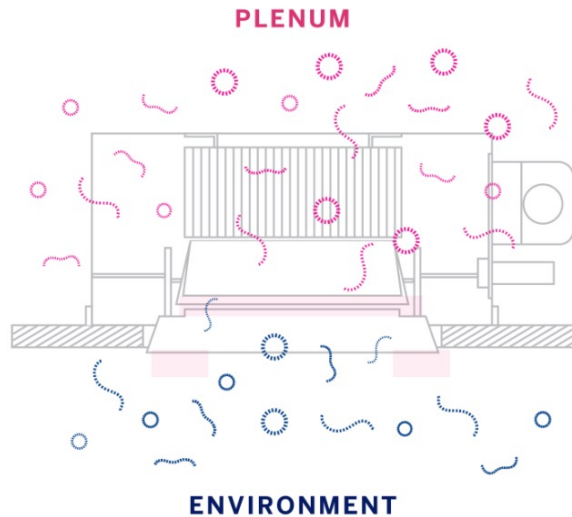
Without lensing, gasketing, or a sealed housing, pathogens and bacteria from the environment mix freely with pathogens and bacteria from the plenum, increasing the risk of widespread infection throughout the hospital.

Three Levels of Infection Control

LEVEL 1



Biogard™ Antimicrobial Finish



1

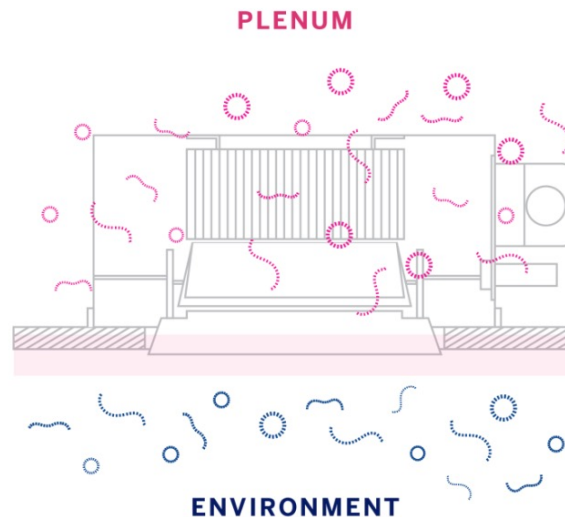
LEVEL 2



IP65 Sealed Trim



Biogard™ Antimicrobial Finish



2

LEVEL 3



ISO 5/Class 100 Sealed "Cleanroom"
Fixture with IP65 Trim



Biogard™ Antimicrobial Finish

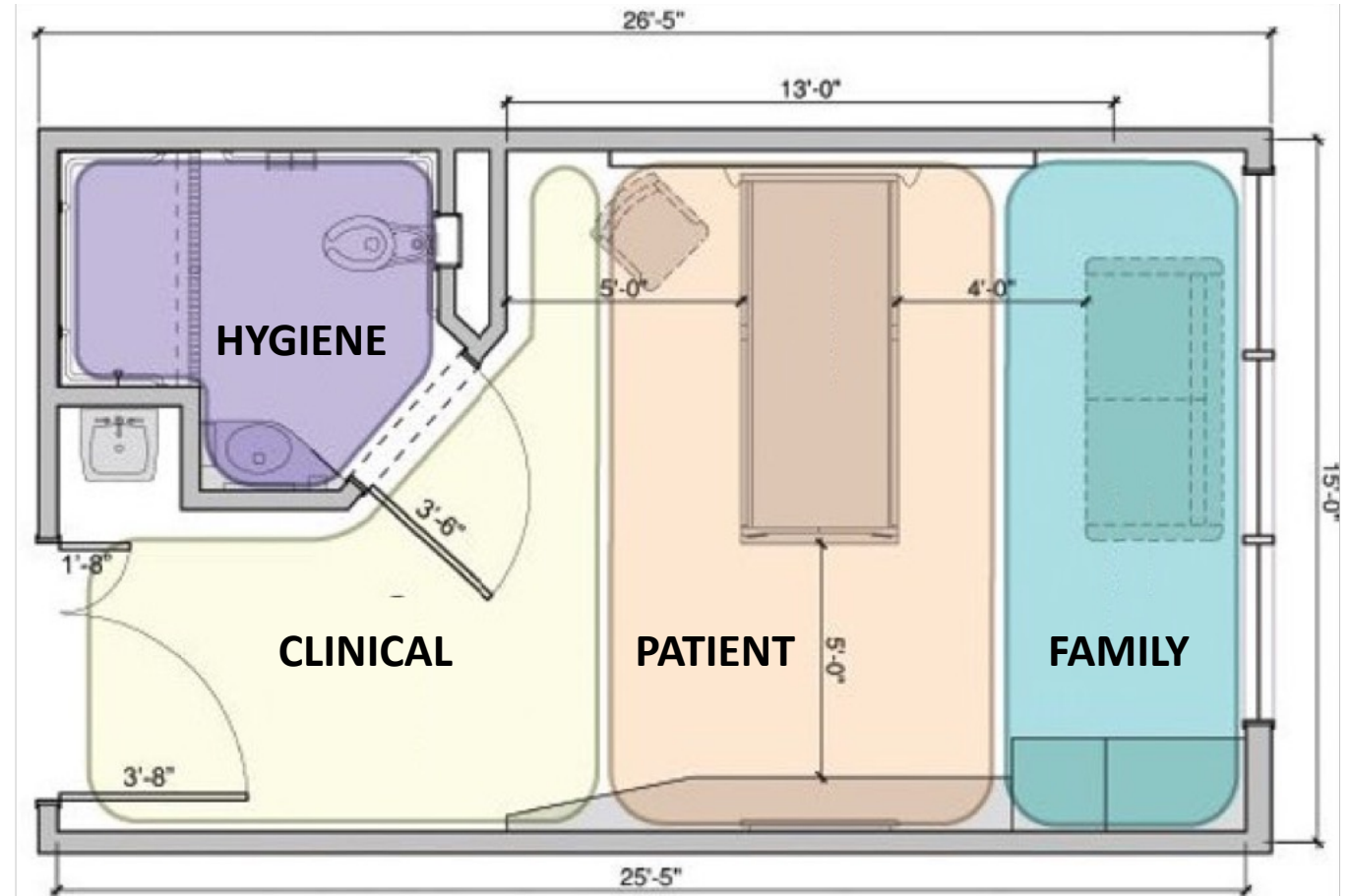


3

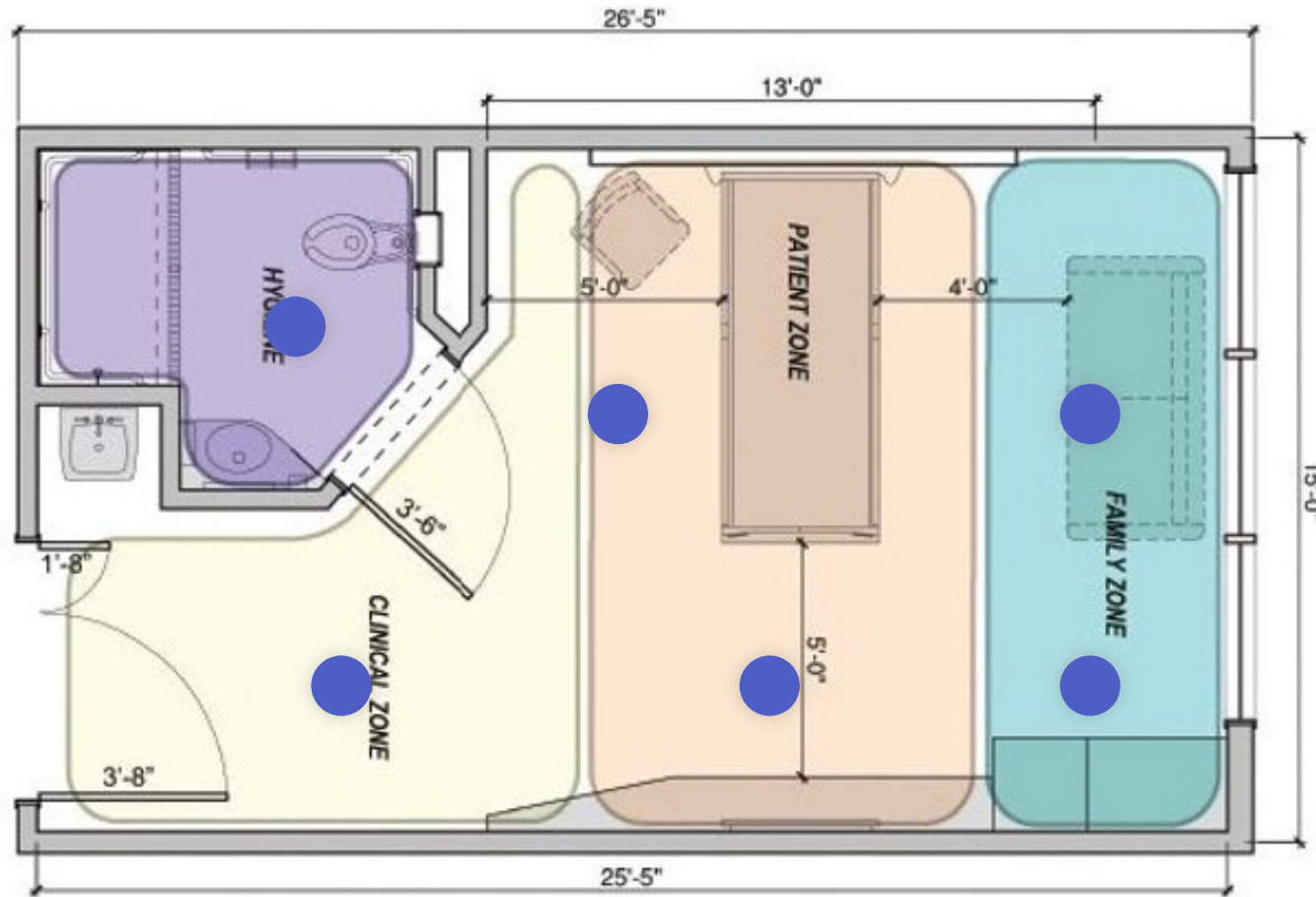
Today's Patient Room

4 Zones of Concern

- **Clinical Zone:** Well-marked & illuminated
- **Patient Zone:** High quality exam lighting & patient control
- **Family Zone:** Dimmable, separately switched
- **Hygiene Zone:** High levels of illumination, switched or sensor



The Ideal Patient Room



● Ambient

- Performance Driven: Tunable White Downlights
- Budget-Driven: Lensed Downlight

4, 6"



Level
1

4, 6"



Level
2/3

More Choice in Choice...

- Tunable White Lighting

2700-6500K

- Tunable White or Warm Dimming

1800K-4000K

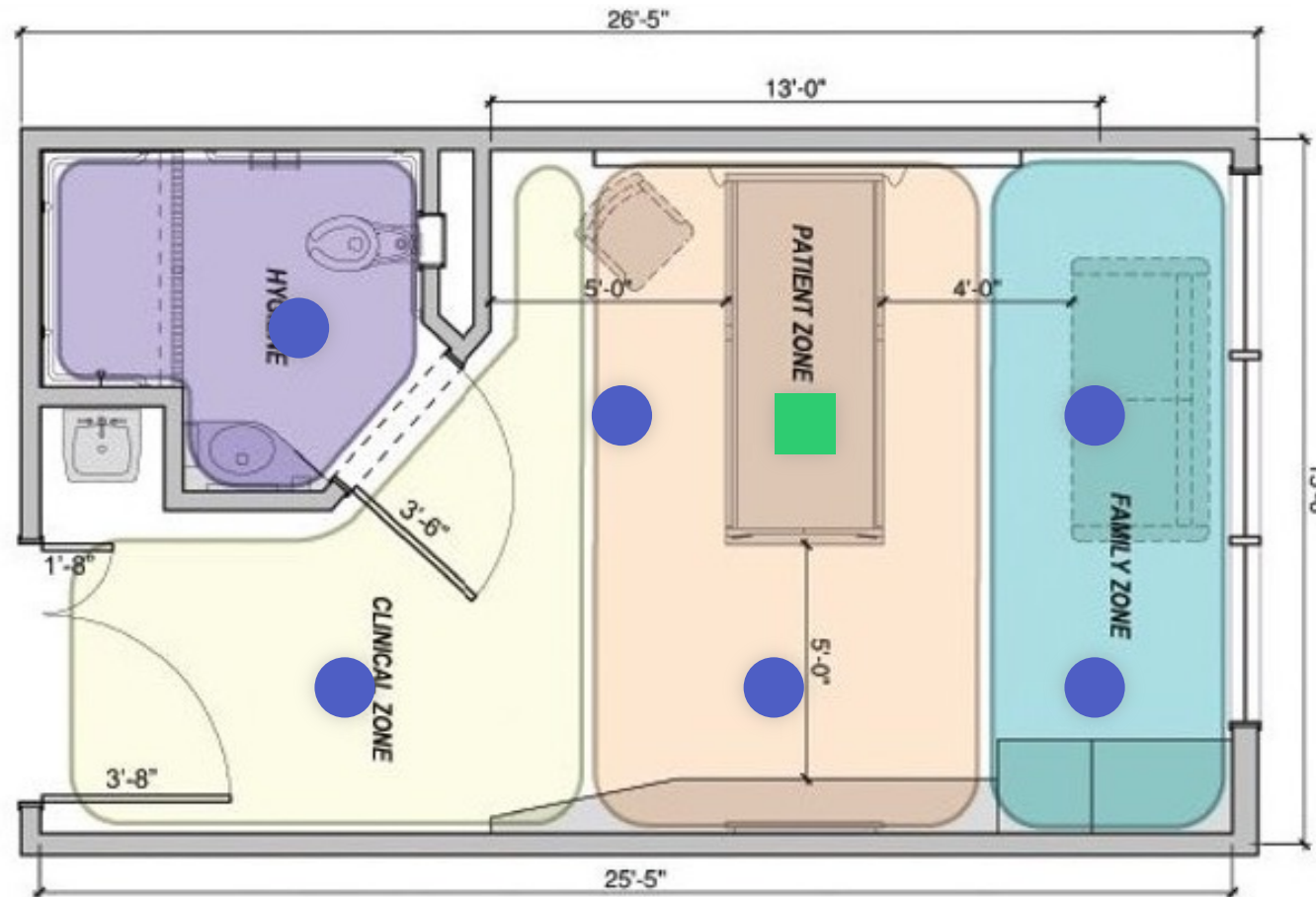
1800K-3500K

1800K-3000K

1800K-2700K



The Ideal Patient Room



● Ambient

■ Exam

- Performance Driven: PRO 25 or PRO 35
- Budget-Driven: Fixed/Adjustable Exam Light



The Dreaded 3-in-1

- Patient Should Control Ambient/Reading
- Practitioner Should Control Exam/Chart
- Night Lights Should be “Automatic”
- But we Love the ambient downlights in this room!



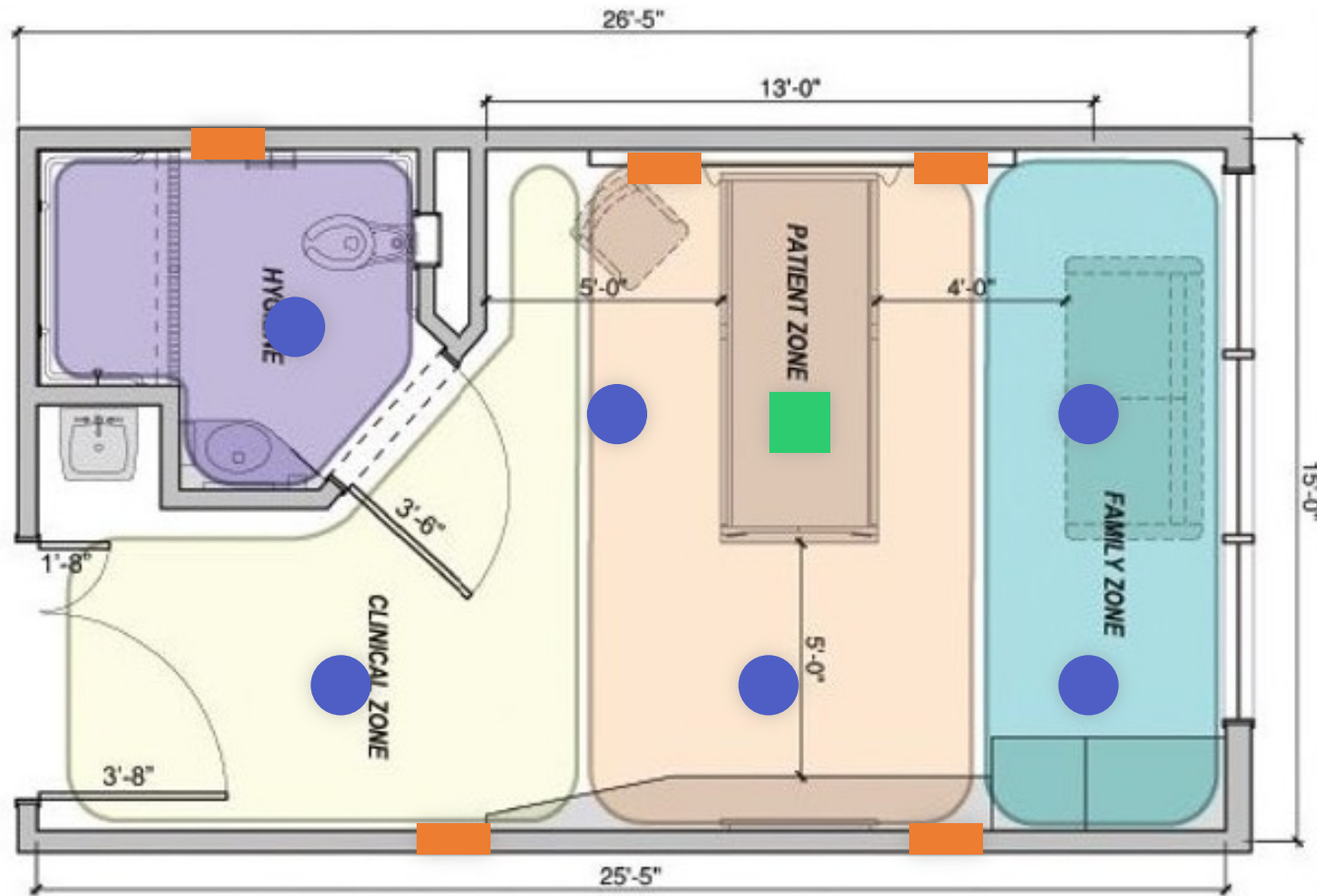
3-in-1 Troffers and Patient Lifts



Smaller Footprint & Precision Aiming with PRO 35



The Ideal Patient Room



● Ambient

■ Exam

■ Wayfinding

- NightLights (wet-listed), ChartLights



The Patient Zone at Night

1. Night Lighting:

- Patient Wayfinding
- Red Amber is Preferred
- Photocell Controlled
- Wet Location



The Hygiene Zone at Night

Increased use of
“tubless” showers



Desire for more
wet-listed night lights



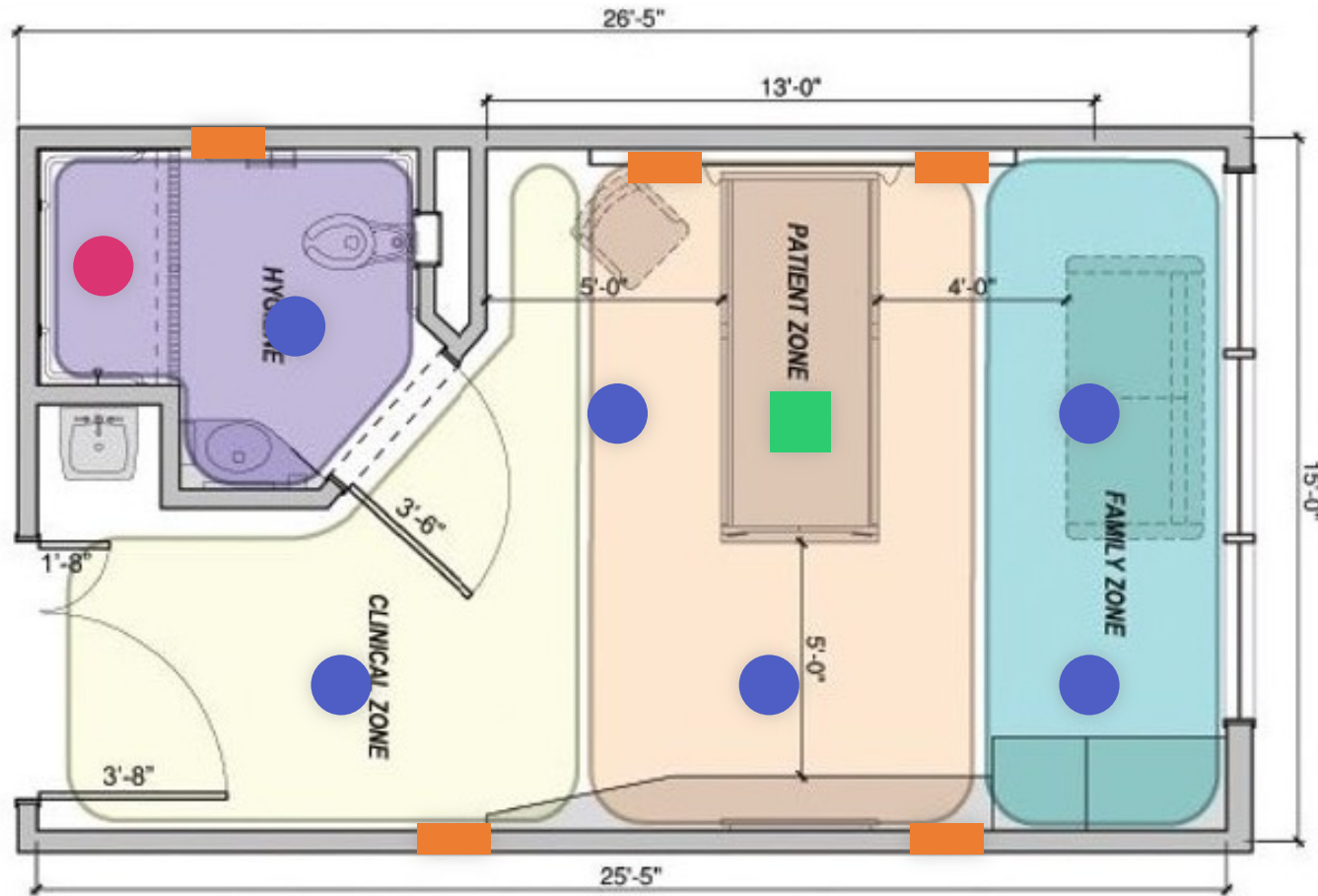
The Patient Zone at Night

2. Chart Lighting:

- Less Disruptive Night Observation and Nurse Documentation Lighting
- Red Amber or White
- Dimmable
- Switched at the door



The Ideal Patient Room



● Ambient

■ Exam

■ Wayfinding

● Shower Light

- Dead-front shower light



Best Practices for Shower Lighting



- Wet-location listed
- Rustproof, corrosion-resistant
- Dead front designs
- 30-50 fc for safety and cleaning





Patient Room Vignettes

Novant Health Presbyterian: Charlotte, NC



- Family Zone downlights
- Clinical Zone downlights



Novant Health Presbyterian: Charlotte, NC



- Family Zone downlights
- Clinical Zone downlights
- Patient Zone 3 in 1...



Novant Health Presbyterian: Charlotte, NC



- Shower Light
 - Dead Front
 - Super Shallow



Mt Sinai Hospital: New York, NY



- Patient Zone
 - Ambient
 - Reading
 - Exam



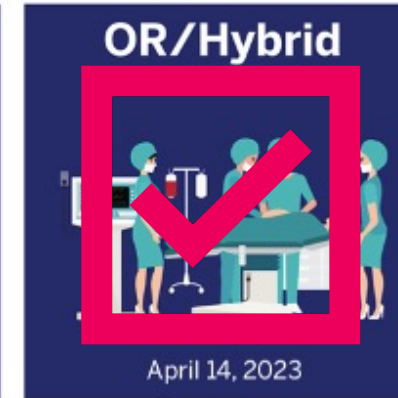
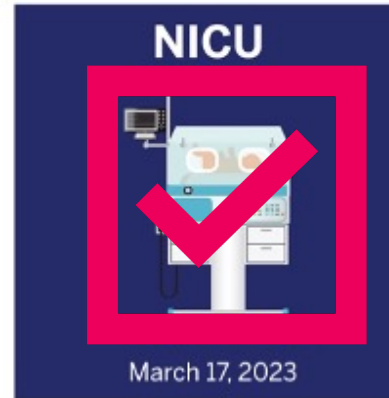
Dell Seton Medical Center: Austin, TX



- Wayfinding
 - Red-Amber
 - Throughout Patient Spaces



Join Us Every Month, or On Demand!



A photograph of a modern building's interior, featuring multiple levels with curved balconies and glass railings. The space is illuminated by recessed ceiling lights, and the overall color palette is dominated by blues and greys, with some warmer tones from the railings and floor. The word "Questions?" is overlaid in a large, white, sans-serif font in the center of the image.

Questions?