

Ceiling Lift Planning

Practical strategies for capacity, coverage, complex spaces, clinical adoption, and return on investment

Coverage

Clinical workflow

Collaboration

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FOUNDATION

Why Ceiling Lift Planning Matters

The design decisions made before installation often determine whether a lift becomes part of daily care or sits unused

Right footprint
Right location
Right support model

Higher utilization
Safer transfers
Stronger adoption

Lower injury exposure
Better ROI
More resilient programs

- **Design and workflow are directly linked**
- **Underused systems often start with limited coverage or poor placement**
- **Impact of staff adoption and injury reduction improves**

Session Roadmap

The emphasis throughout is on making informed decisions before installation, when we have the greatest flexibility

1

Capacity planning

Use patient metrics, injury data, and staff feedback

2

Coverage, layout, and attachment strategy

Room covering systems vs straight tracks, bathrooms, ceiling and wall options, above ceiling challenges, combi locks, switch tracks, curtain jumps, etc.

3

Complex spaces

LINAC, radiology, pools, showers, low clearance, multi bay areas, ambulance bay / car extraction areas

4

Codes, standards, and design guidance

FGI, infection prevention, maintainability, structural and MEP coordination

5

Implementation, adoption, and ROI

Clinical input, training, collaboration, injury reduction, and program value

Initial Design Drivers

In your organization, what typically has the greatest influence on initial ceiling lift design decisions?

A: Patient population and clinical workflow

B: Available capital budget

C: Existing room layout and infrastructure

D: Architect or engineering recommendations

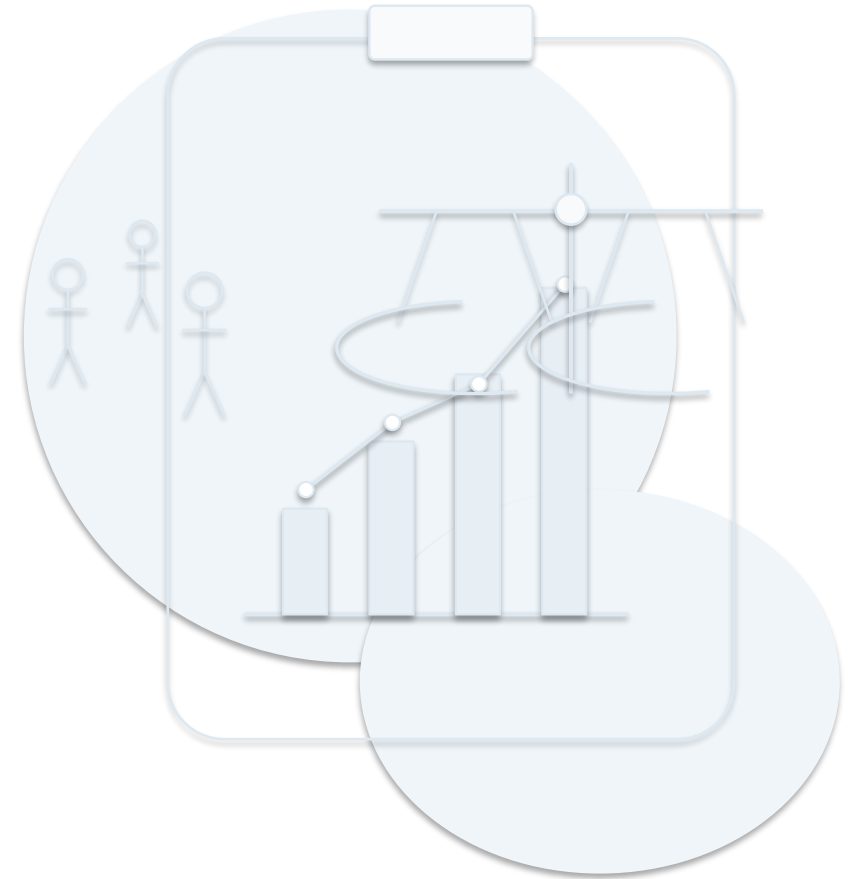
E: Standard room or system template

PLANNING PRINCIPLE

Start With Patient Metrics Before Capacity

Avoid over engineering and over-spending by matching motor capacity to actual patient population and clinical risk.

- Review historical and current patient weight data
- Stratify by unit, service line, and high-risk care areas
- Specify standard versus bariatric capacity by room type
- Protect budget for broader coverage, training, and sling access instead of overbuilding every room

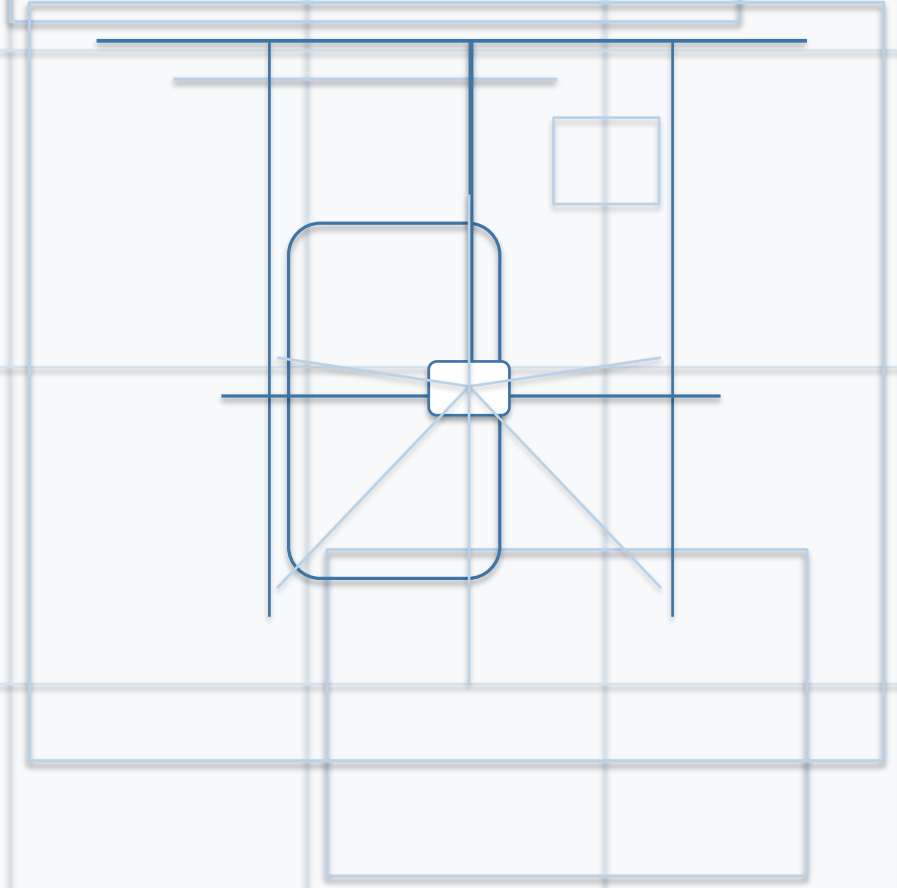


INSTALL OPTIONS

Coverage, Layout, and Attachment Strategy

Treat the room footprint and attachment method as one coordinated planning decision

- Prioritize room covering systems when workflow includes turns, boosts, repositioning, and bedside care
- Use straight track when the transfer path is truly limited and well defined
- Evaluate ceiling attachment, wall rails, upright supports, and hybrid solutions before ruling out a room
- Build the lift footprint before other room elements are allowed to constrain it

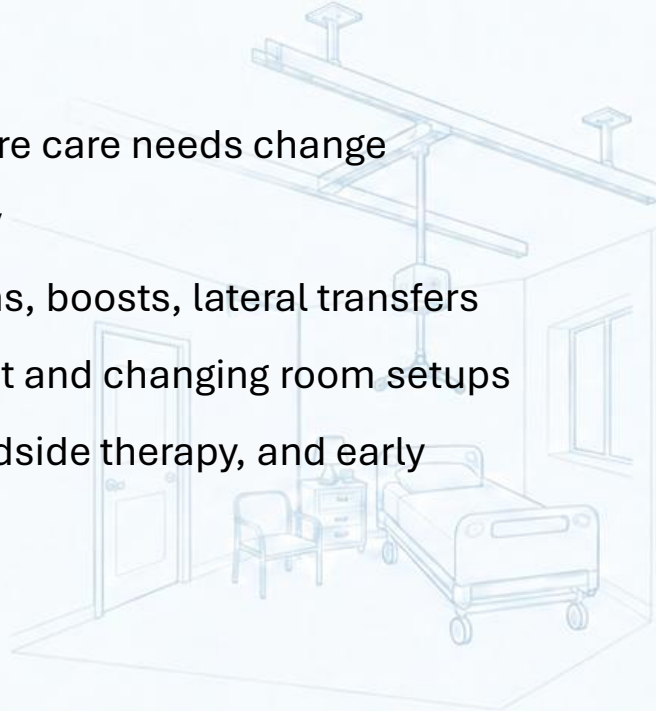


Straight Track vs Room Covering Systems

ROOM COVERING / XY SYSTEMS

Appropriate for:

- Patient rooms where care needs change throughout the day
- Repositioning, turns, boosts, lateral transfers
- Flex bed placement and changing room setups
- In bed mobility, bedside therapy, and early mobility activities



STRAIGHT TRACK

Appropriate for:

- Therapy gyms / dedicated walking tracks
- Predictable, repeated point to point transfers
- Spaces where broad room coverage is not needed
- Simple lateral transfers



Straight Track vs Room Covering Systems

ROOM COVERING / XY SYSTEMS

Advantages:

- Gives staff more usable room coverage
- Reduces the need to move the bed for transfers or point of care therapy
- Allows for room rearrangement while still providing coverage

Disadvantages:

- Higher install and material cost
- Longer and sometimes more challenging installation and planning measures



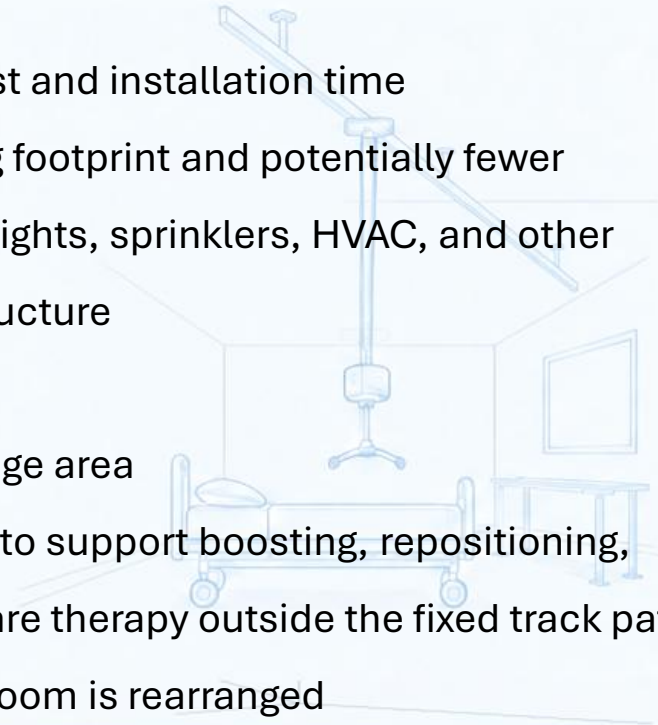
STRAIGHT TRACK

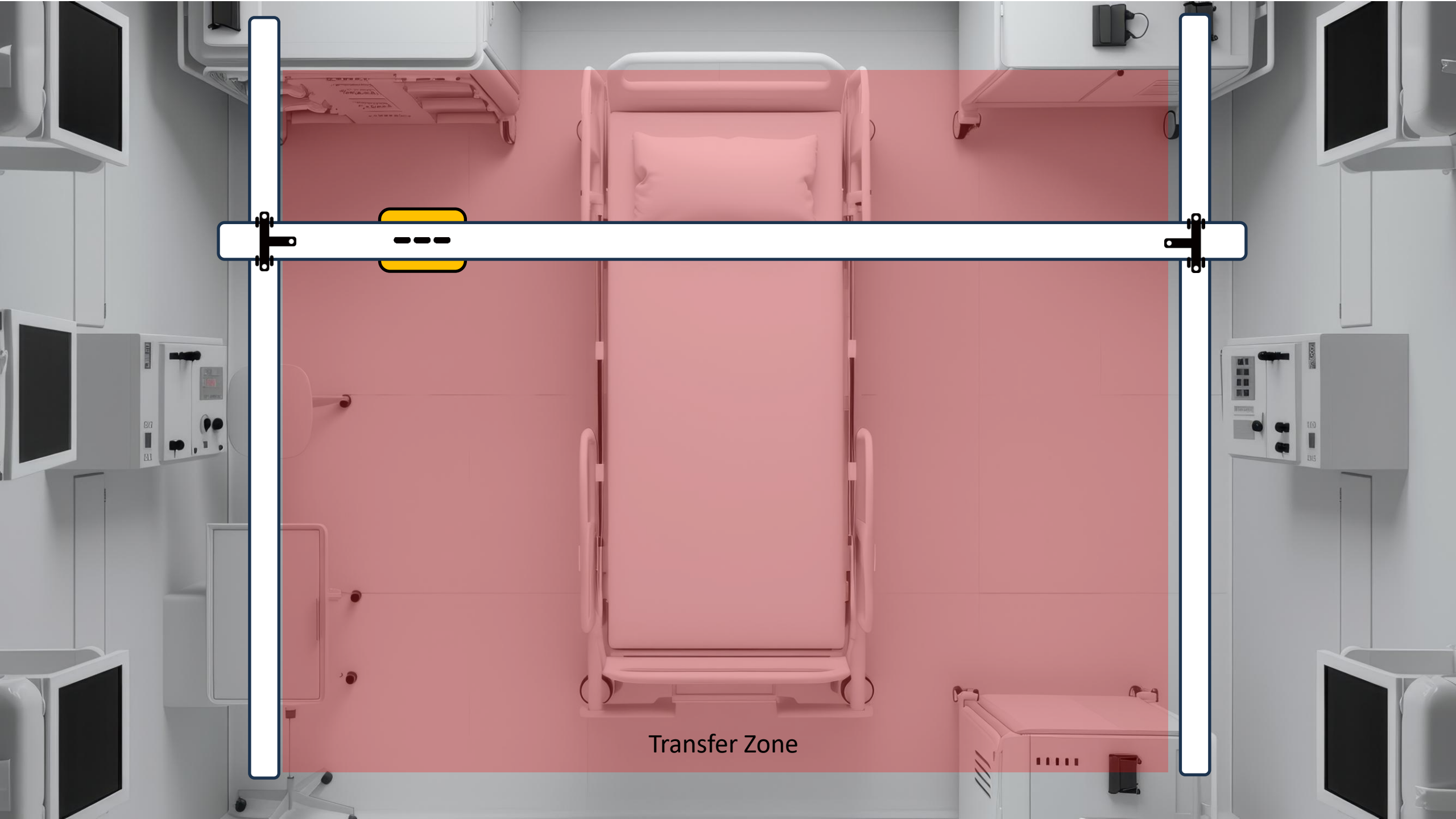
Advantages:

- Decreased cost and installation time
- Smaller ceiling footprint and potentially fewer conflicts with lights, sprinklers, HVAC, and other ceiling infrastructure

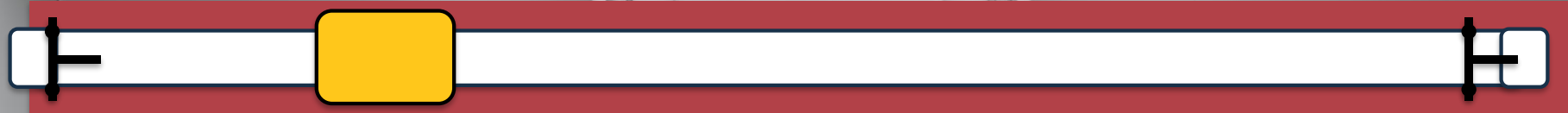
Disadvantages:

- Limited coverage area
- Limited ability to support boosting, repositioning, and point of care therapy outside the fixed track path
- Not flexible if room is rearranged





Transfer Zone



Straight / Linear Track Coverage

DECISION POINT

When Should Bathroom Access Be Included?

Bathroom coverage can add meaningful function, but it should be weighed against other ways the same budget could improve use

- Include bathroom access when transfers are frequent, high risk, and clinically important for the unit
- Reconsider when the added material could fund more rooms, better rehab coverage, or broader bedside access
- ICU ensuite access may be useful in selected cases, but it is not always the highest value default
- Rehab and therapy areas may justify bathroom coverage more directly because of mobility goals



Transition Systems and Gated Connections

Some clinical pathways benefit from connected rail systems that reduce repeat transfers and caregiver burden

- Transition systems can support room to room transfers and bed to bathroom pathways
- A gated connection allows one motor to move across aligned systems when the care path requires it
- These applications add hardware and planning considerations that should be recognized early
- Use them where the clinical path is clear and the added complexity is justified by workflow value



Challenging Spaces and Creative Solutions

Spaces that look difficult on paper may still support overhead lifting with the right planning approach

- Examples include LINAC rooms, imaging areas, therapy spaces, dialysis, PACU, ED, infusion, pools, showers, and covered outdoor therapy
- Low clearance ceilings and congested conditions above the ceiling do not automatically eliminate overhead lifts
- Wall rails, upright supports, and hybrid strategies can solve conditions that a ceiling only approach cannot
- Do not rule out a room before exploring structure, clearance, workflow, and alternative support models





Multi Bay Treatment Areas and Curtain Jumps

In shared treatment spaces, lift coverage and privacy systems must be planned together

- Emergency department bays, PACU, infusion, dialysis, and semi-private rooms can all benefit from overhead coverage
- Build the lift footprint first, then coordinate curtains around the coverage area
- Curtain jump strategies can preserve privacy while maintaining lift access
- Late curtain planning can unintentionally block usable coverage and create redesigns or workflow compromises



Clinical Input Timing

At what stage are clinical end users typically involved in ceiling lift planning at your organization?

A: Before architectural design begins

B: During schematic design

C: During construction documents

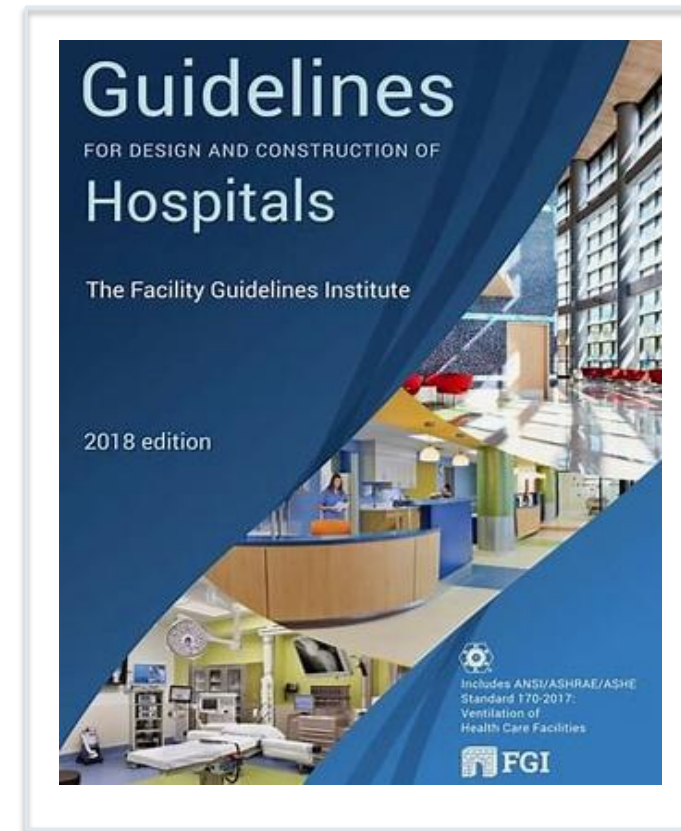
D : After the lift design is mostly complete

E: Clinical end users are rarely involved

Codes, Standards, and Design Guidance

Good planning aligns clinical intent with facility requirements before drawings are finalized

- Use applicable FGI Guidelines for hospital and ambulatory facility planning
- Coordinate early with structural, MEP, architecture, facilities, and infection prevention teams
- Account for service access and long-term maintainability, not only initial installation feasibility (i.e., transformer location)
- Recognize seismic, structural, ceiling, and infection prevention constraints early enough to influence design



Underutilization Factors

Based on what you've seen, what most often contributes to ceiling lift underutilization after installation?

A: Limited coverage or poor placement

B: Insufficient staff training or confidence

C: Inadequate sling availability or access

D: Workflow barriers that make lift use difficult

Clinical Input Belongs Early

Clinicians and SPHM leaders should help define the future workflow before the room is built

- Clinical staff can clarify transfer paths, repositioning needs, sling use, and patient mobility goals
- Leadership can define program priorities, standardization goals, and ROI expectations
- Facilities and design teams can address structure, MEP coordination, infection prevention, and constructability
- Early collaboration makes the future clinical workflow visible during architecture and design decisions



Consequences of poor system design

Limited clinical effectiveness, limited system ROI, & low staff usage



Implementation, Adoption, and ROI

The lift creates value only when staff can access it, know how to use it, and have the right tools at the point of care

- Immediate availability supports higher utilization and reduces reliance on manual handling
- Plan for end user training, sling access, refreshers, and clear unit processes
- Evaluate value across injury exposure, lost time, workers compensation, staff satisfaction, retention, and patient mobility
- A technically successful installation is only the beginning of a successful SPHM program
- Limited coverage can reduce routine exposure, staff confidence, and unit-level lift culture

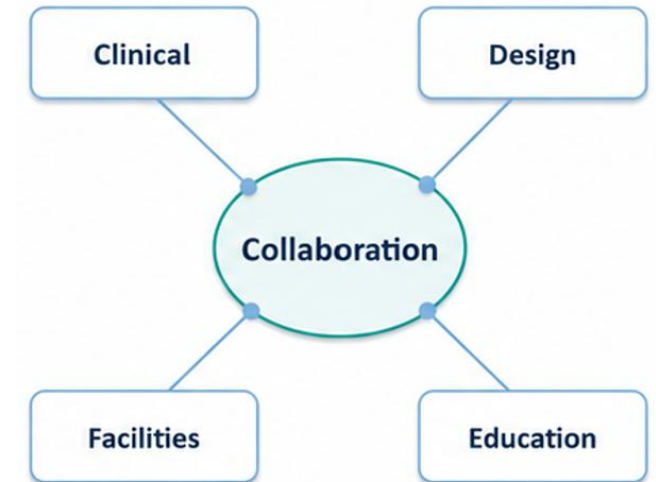


BOTTOM LINE

Use Your Consultative Partner

The company you choose should support the project before, during, and after installation at the point of care

- Collaborate with clinical stakeholders before the design is finalized
- Support architects, facilities, structural, and MEP teams throughout planning
- Offer multiple installation strategies instead of defaulting to one approach
- Provide education, follow up, and implementation support to help protect long term program value



Long-Term Value

In your experience, which factor has the greatest impact on the long-term value of a ceiling lift investment?

A: Initial equipment and installation cost

B: Coverage and layout

C: Motor capacity and equipment capability

D: Staff training, sling access, and workflow integration

E: Standardization, service, and long-term support

FINAL TAKEAWAY

Plan for Use, Not Just Installation

The best ceiling lift installation plans account for patient need, room coverage, clinical workflow, and long-term support.



Don't just check a box!

“Can we put a lift in this room?”

Most of the time... YES!

The better question is whether the system will be available, usable, maintainable, and supported at the point of care.



When these decisions are aligned:

higher utilization • safer transfers • stronger ROI



Start early. Design around workflow. Support staff after go live.

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