



Patient Lifting System Design Guide

Room Layouts

Rail designs may vary from simple straight rails to complex multi-room systems. Long term benefits are best achieved through a co-ordinated approach involving planners, management and care staff along with your CHS representative.

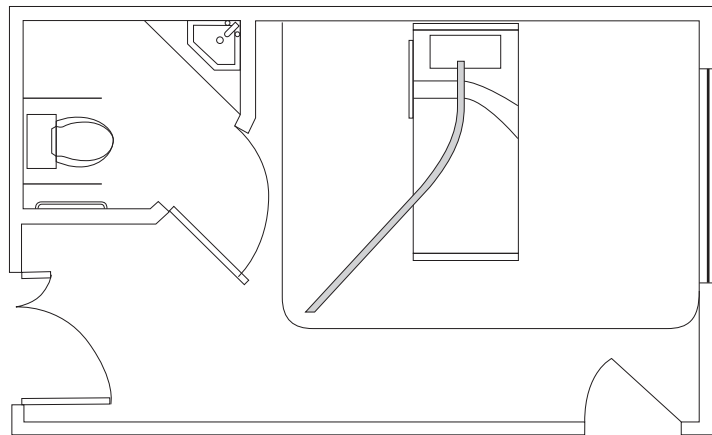
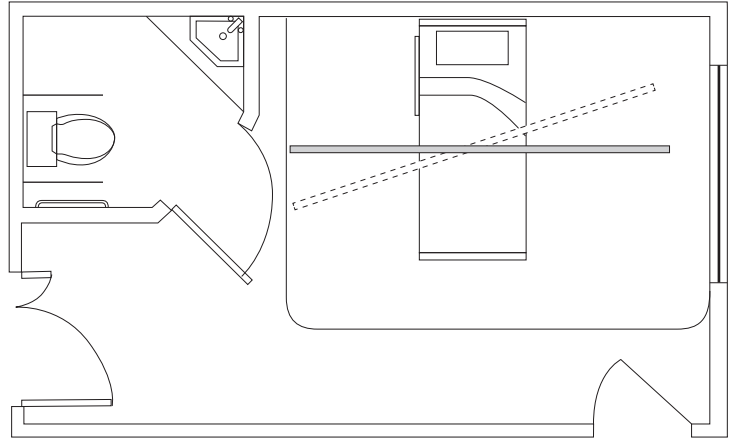
When planning rail configurations, the primary recommended considerations are;

- Coverage area for patient handling
- Mobility/manoeuvrability requirements
- Ability of rail configurations to meet coverage and healthcare needs for today's and tomorrow's patient/ resident population.

STRAIGHT MONORAIL

A single rail, typically running perpendicular to the bed, provides coverage from bed to chair. Limited in coverage, repositioning options, and flexibility of furniture location. Where required, the rail can be put on an angle to access a more suitable transfer area.

COST INDICATOR	\$ \$ \$ \$ \$
CLINICAL FLEXIBILITY	* * * * *



J-RAIL (OPTION A)

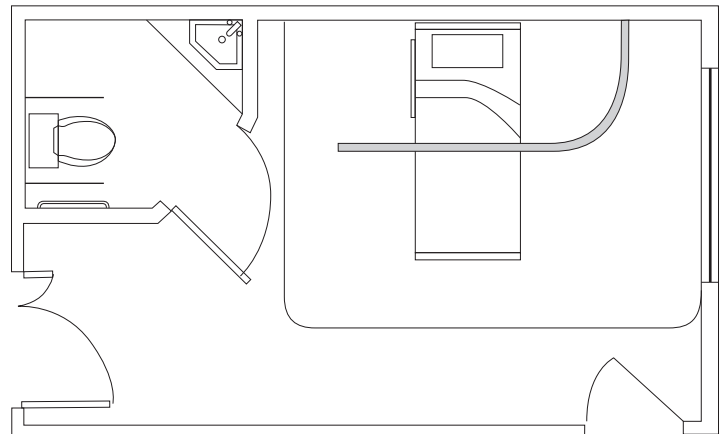
A single straight rail and curved rail in the shape of a J. Provides coverage from bed to chair or stretcher, and aids in repositioning. Limited in coverage area and manoeuvrability options.

COST INDICATOR	\$ \$ \$ \$ \$
CLINICAL FLEXIBILITY	* * * * *

J-RAIL (OPTION B)

A single rail and curved rail in the shape of a J. This version provides the same clinical effectiveness as a Straight Monorail with the curved portion offering a more suitable charging/docking station in many cases.

COST INDICATOR	\$ \$ \$ \$ \$
CLINICAL FLEXIBILITY	* * * * *



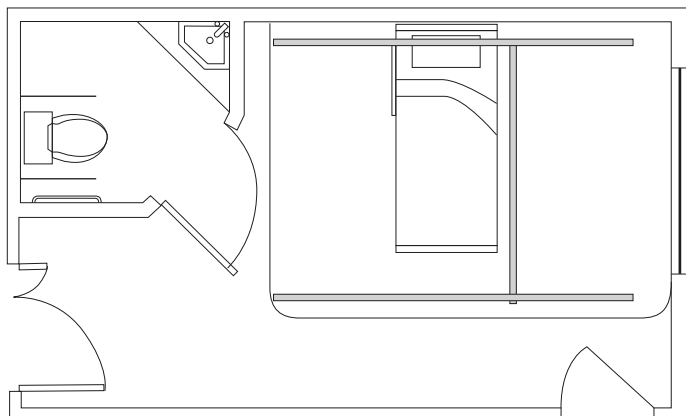
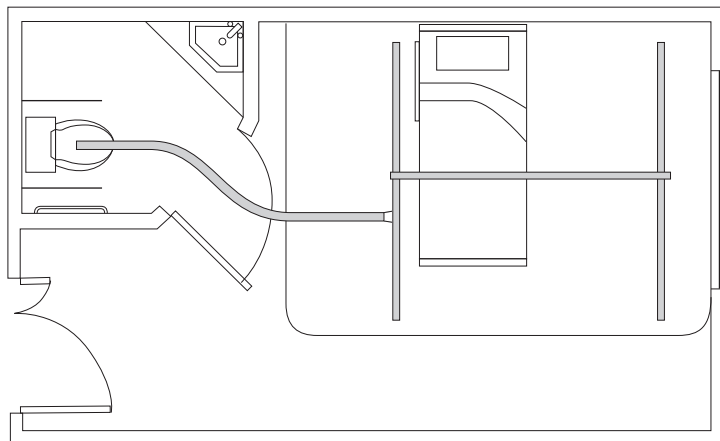
For effective and safe patient handling, rail configurations should meet the required coverage area to perform all necessary patient handling tasks. Otherwise, caregivers may be reluctant to use the hoists, limiting compliance to policy. Consequently this could impact the potential return on investment. In terms of configurations, there are a number of standard layouts.

The following are typical examples of rail layouts and can be customised to meet the requirements of any specific situation. The pricing and clinical guidelines are relevant to patient room settings. The structure, room layout and clinical application will also be factors for consideration.

XY GANTRY CEILING RAIL WITH ACCESS TO TOILET

The room covering XY gantry system allows for complete coverage beneath the XY rail system. Access can be gained to an adjacent room with the use of a Gate Assembly, allowing the caregiver to take the client directly from bed/chair to a point in the adjacent room. The XY gantry offers flexibility with respect to furniture location and offers improved clinical effectiveness, particularly for repositioning a client in bed. Door openings will require modification to accommodate the rail and hoist travel.

COST INDICATOR	\$\$\$\$\$
CLINICAL FLEXIBILITY	*****



XY GANTRY CEILING RAIL

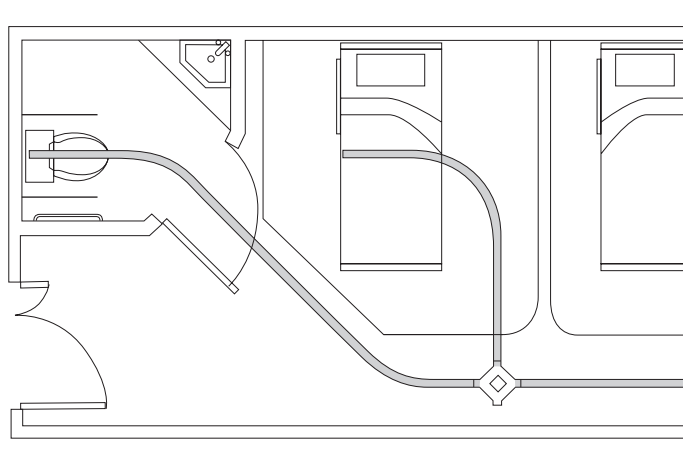
A three piece system with two parallel fixed rails and a perpendicular moving "boom" permitting coverage under the entire XY rail system. Advantages include optimal flexibility (easily made adjustments; front to back and side to side), full coverage of the bed, easy transfer to chair and pick up from the floor. Furniture location can also be altered with no impact on transfer capability.

COST INDICATOR	\$\$\$\$\$
CLINICAL FLEXIBILITY	*****

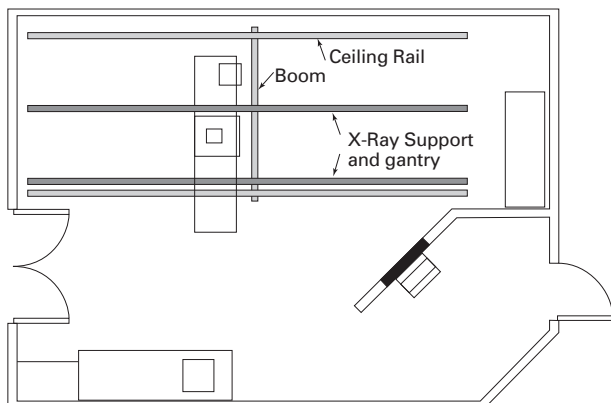
LINEAR RAIL WITH TURNTABLE

A linear rail with curved rail and turntable(s) enables mobility along the line of the rail. The turntable allows the user to change the direction of the ceiling hoist. This is suitable for rooms with multiple beds or if there is the requirement for several transfer points. Limitations include reduced coverage (along rail line only) and reduced repositioning capabilities.

COST INDICATOR	\$\$\$\$\$
CLINICAL FLEXIBILITY	*****



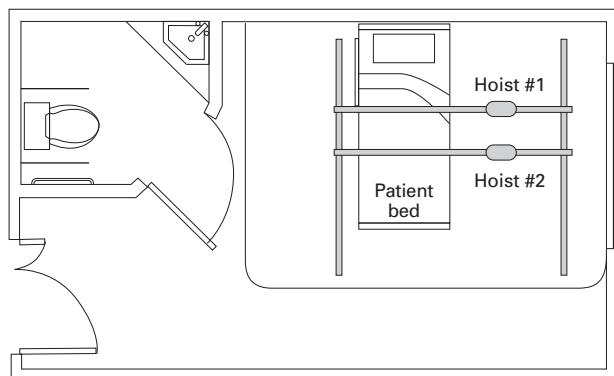
The following are sample room track configurations for different medical areas. Different needs (listed below) in each area require a ceiling hoist system designed to meet safe transfer requirements for staff and patients



X-RAY ROOM

Requirements in X-Ray

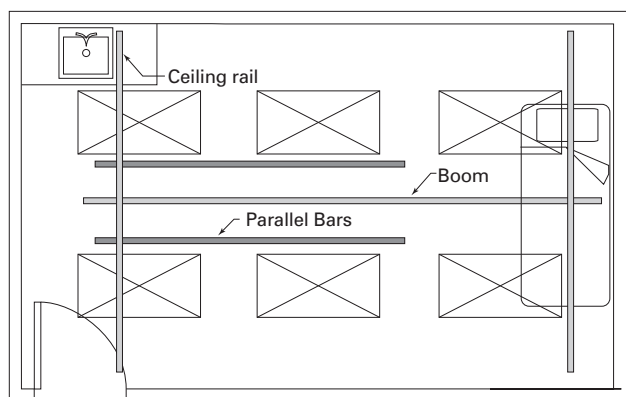
- Transfer from wheelchair or stretcher to and from table
- Support by the X-Ray unit



BARIATRIC APPLICATIONS

In most cases, bariatric clients have health related issues that need to be considered during the transfer process. As such, the use of a standard single ceiling hoist unit application may not be feasible.

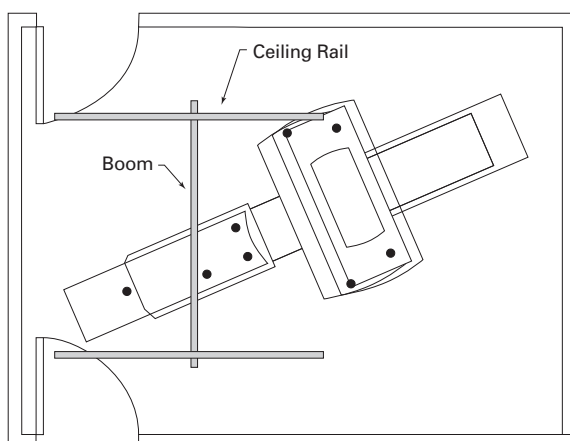
- Two Eclipse C-625 ceiling hoists operating independently allow the caregiver the flexibility to control client's body position.
- Weight capacity up to 450kg
- Flexibility of an XY gantry system.
- Standard slings are rated up to 360kg. Custom slings are rated up to 450kg. Consideration needs to be given to sling design and application.



REHABILITATION

Requirements for Rehabilitation

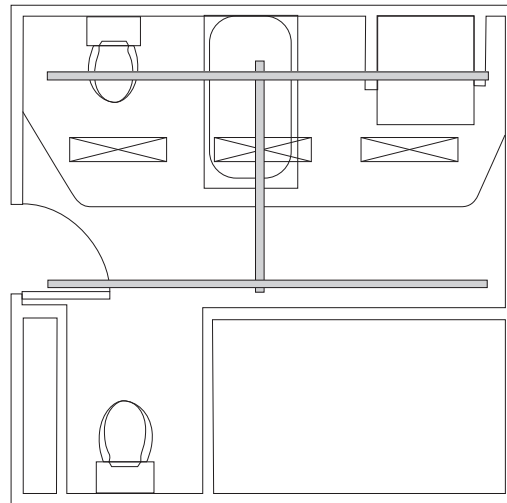
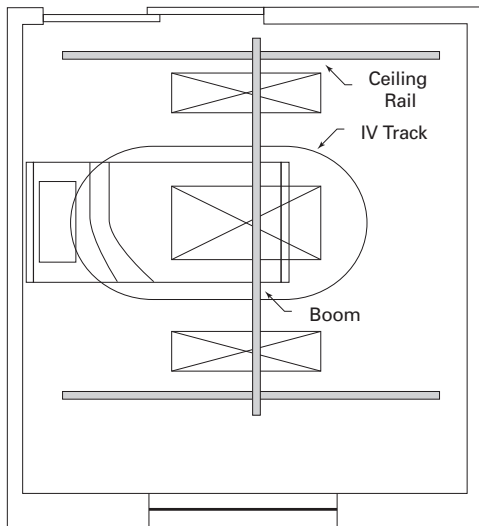
- Walking sling for use with parallel bars and to provide safety support on stress test treadmill
- Stand assist sling
- Transfer to plinth for seating assessment and physiotherapy
- XY Gantry with gait locks provides greater flexibility



IMAGING ROOM

Requirements in CAT Scan Rooms

- Transfers from wheelchair or stretcher to and from table



INTENSIVE CARE UNIT

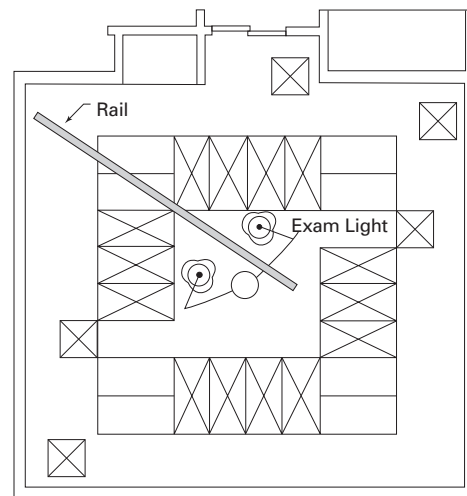
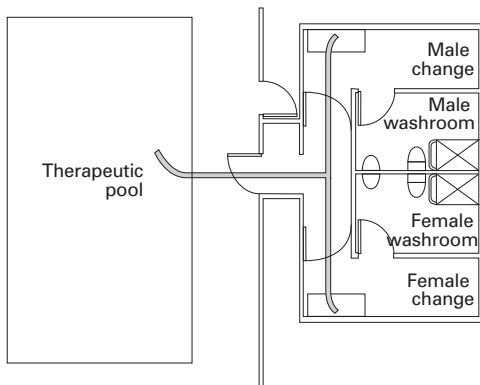
Patient Handling requirements for Intensive and Critical Care Units

- Transfer stretcher to bed
- Bed to chair or commode
- Repositioning in bed
- Diagnostic (imaging)
- Change bed linen

TUB ROOM

Bathing Transfers

- Wheelchair/stretcher to and from tub/toilet
- Bather support in tub



POOL

- Change room transfers
- Access into and out of pool and hot tub

OPERATING ROOM

Main functional requirements during surgical operations

- Transfer to O.R table
- Transfer supine patient from table to stretcher
- Turn patient if required