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Topic to be addressed

- Designing housing for elderly
- From 2 to 1 STAFF WISE
- Early mobilisation
- Rehabilitation
- Manage the quality of care
- Activation

Designing housing for elderly

Nursing homes
and
Independent living

Designing housing for elderly

The design must:

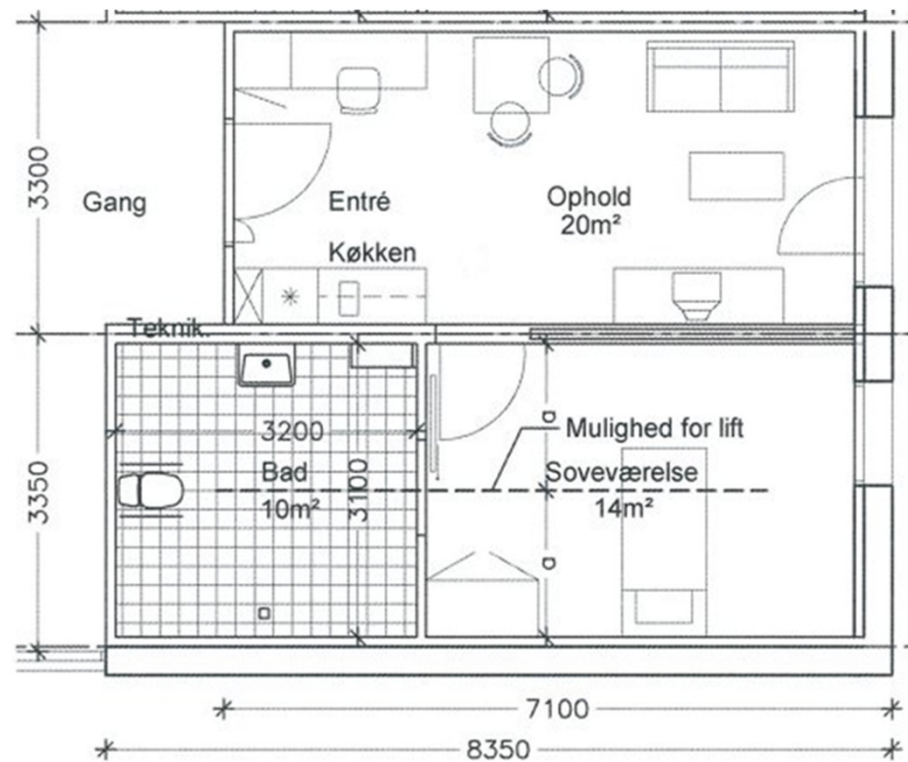
- support the possibility of implementing up-to-date technology
- be homelike
- support independent living
- support the fact that it will be a workplace for care staff sooner or later

Support the possibility of implementing up-to-date technology



Need to be homelike

And at the same time a workplace for care staff



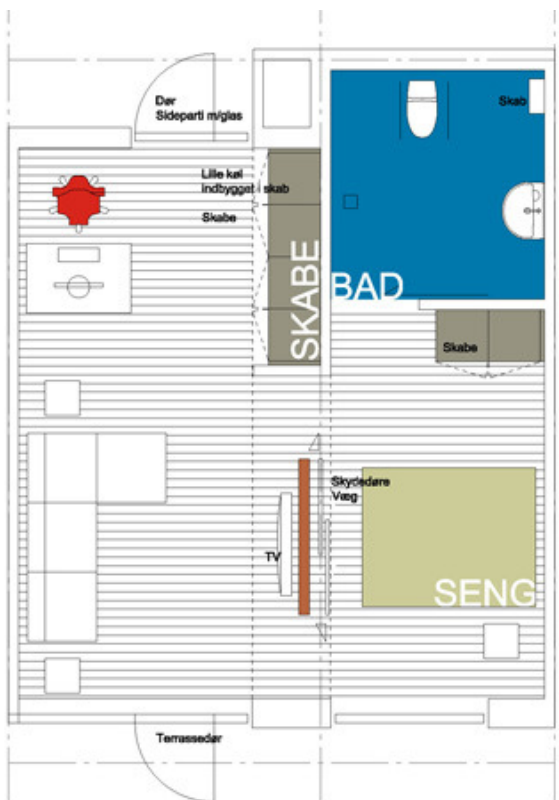
Need to be homelike

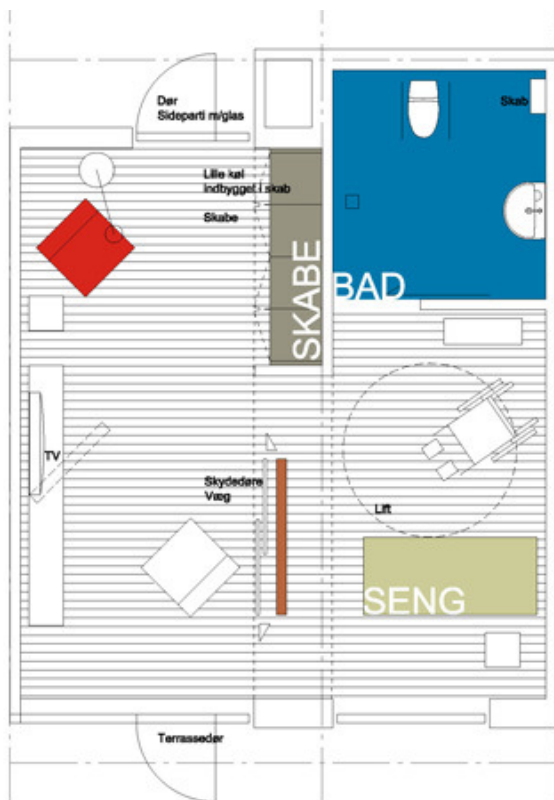
The general idea is

The general idea for the sheltered housing is:

- As flexible as possible
 - When moving in
 - If the needs should change during the stay
- Whether the residence is independent, needs care, are demented or bariatric
- Support the resident's own coping
- The residents are bringing their own furniture's
- Allowing pets
- Accepting individual routines
- And at the same time accepting the apartment can become a workplace for care staff







Need to be homelike Background

The community of Silkeborg, Sheltered Housing Gødvad

66 citizens living in sheltered housing and their use of the kitchen facility

- 35% are using their kitchen one or more times per day
- 53% are using their kitchen less than one time per month

Usages of kitchen

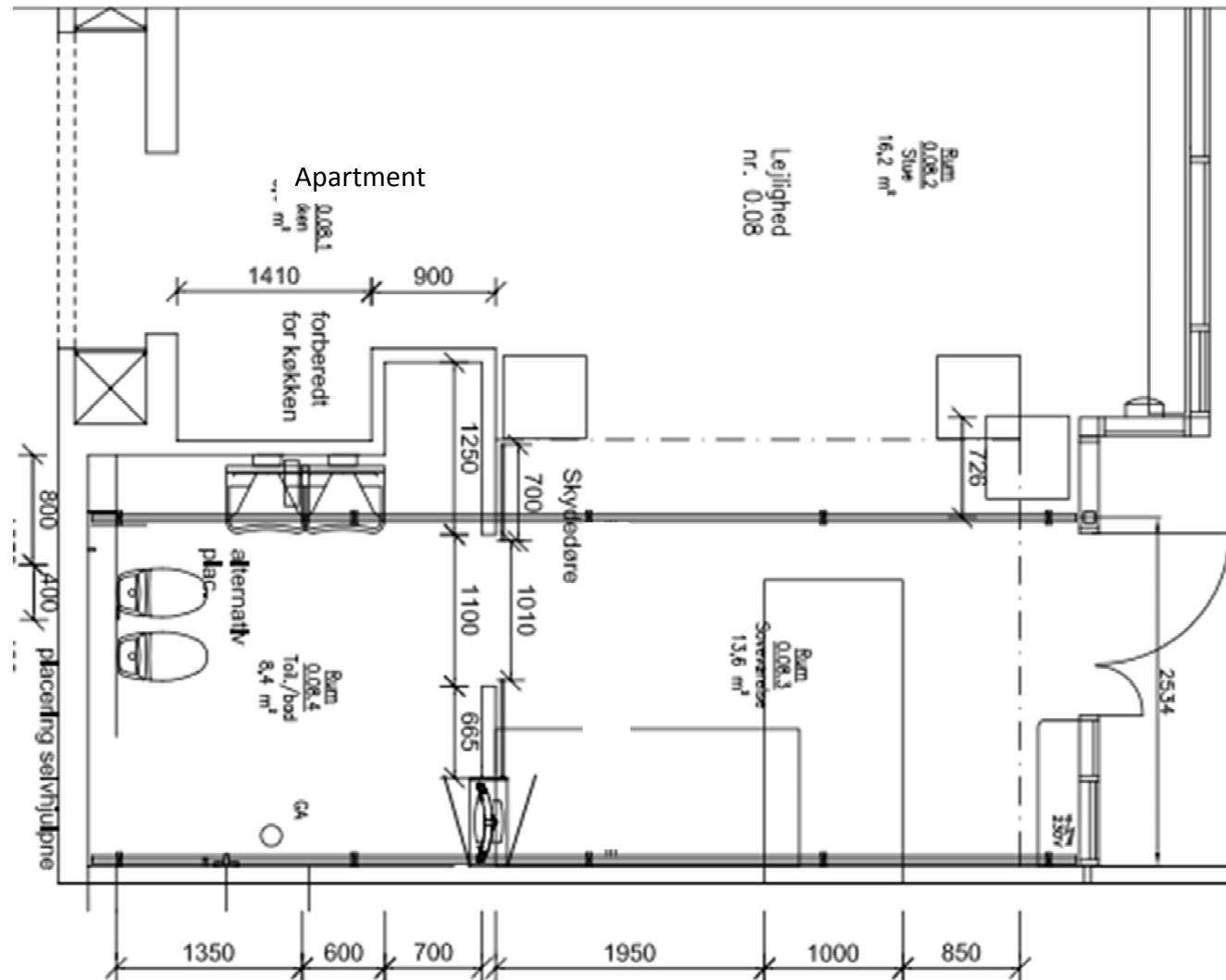
- 4 % are cooking their own meal
- 40% have a coffee machine and it is the relatives who makes the coffee
- 62% of those who do not make their own coffee are getting it from the cafeteria

Usages of the refrigerator

- 68% contains cold beverages / drinks and or chocolates or cakes
- 15% contains food
- 35% contains medicine

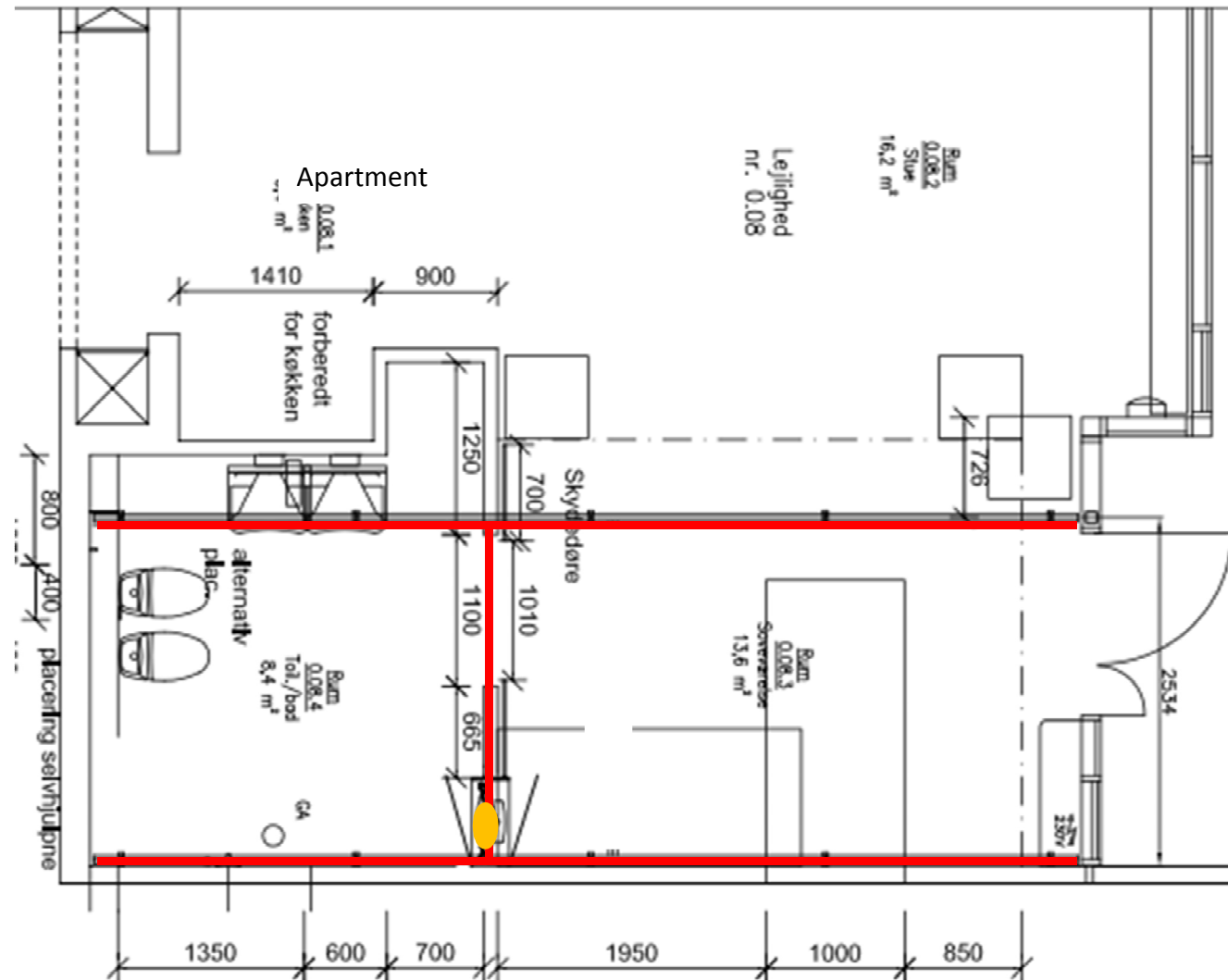
Need to be homelike

And at the same time a workplace for care staff

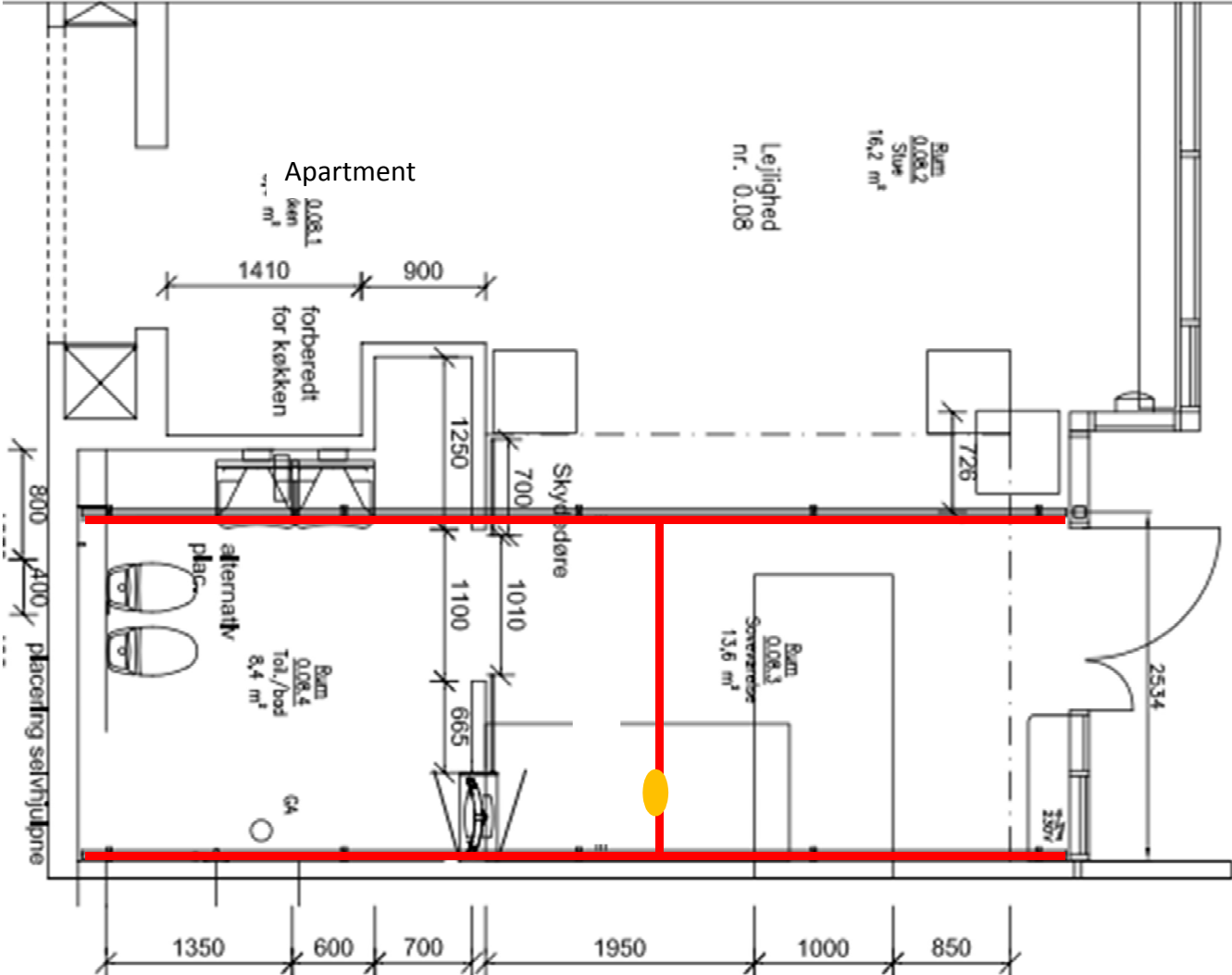


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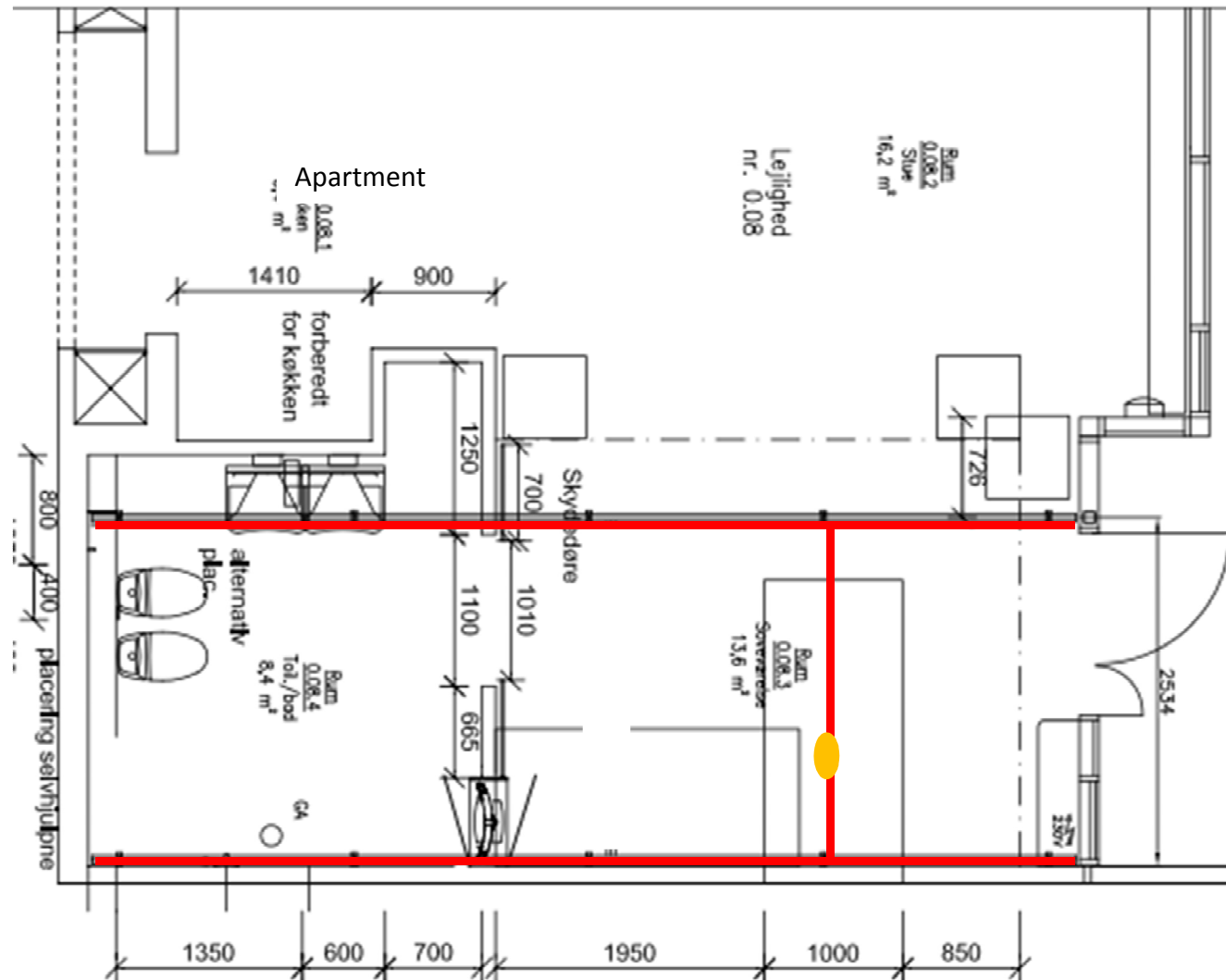
And at the same time a workplace for care staff



And at the same time a workplace for care staff

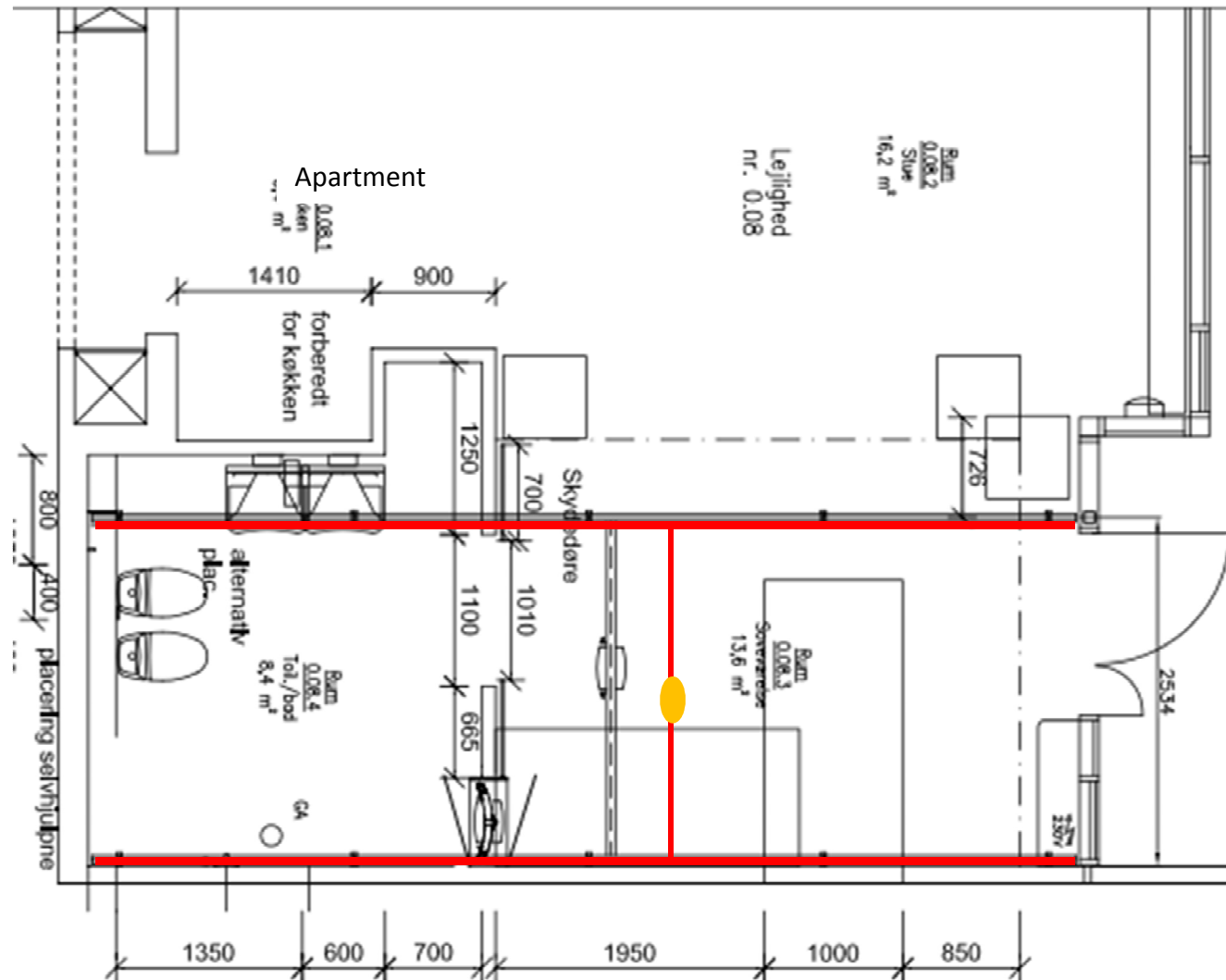


Need to be homelike
And at the same time a workplace for care staff

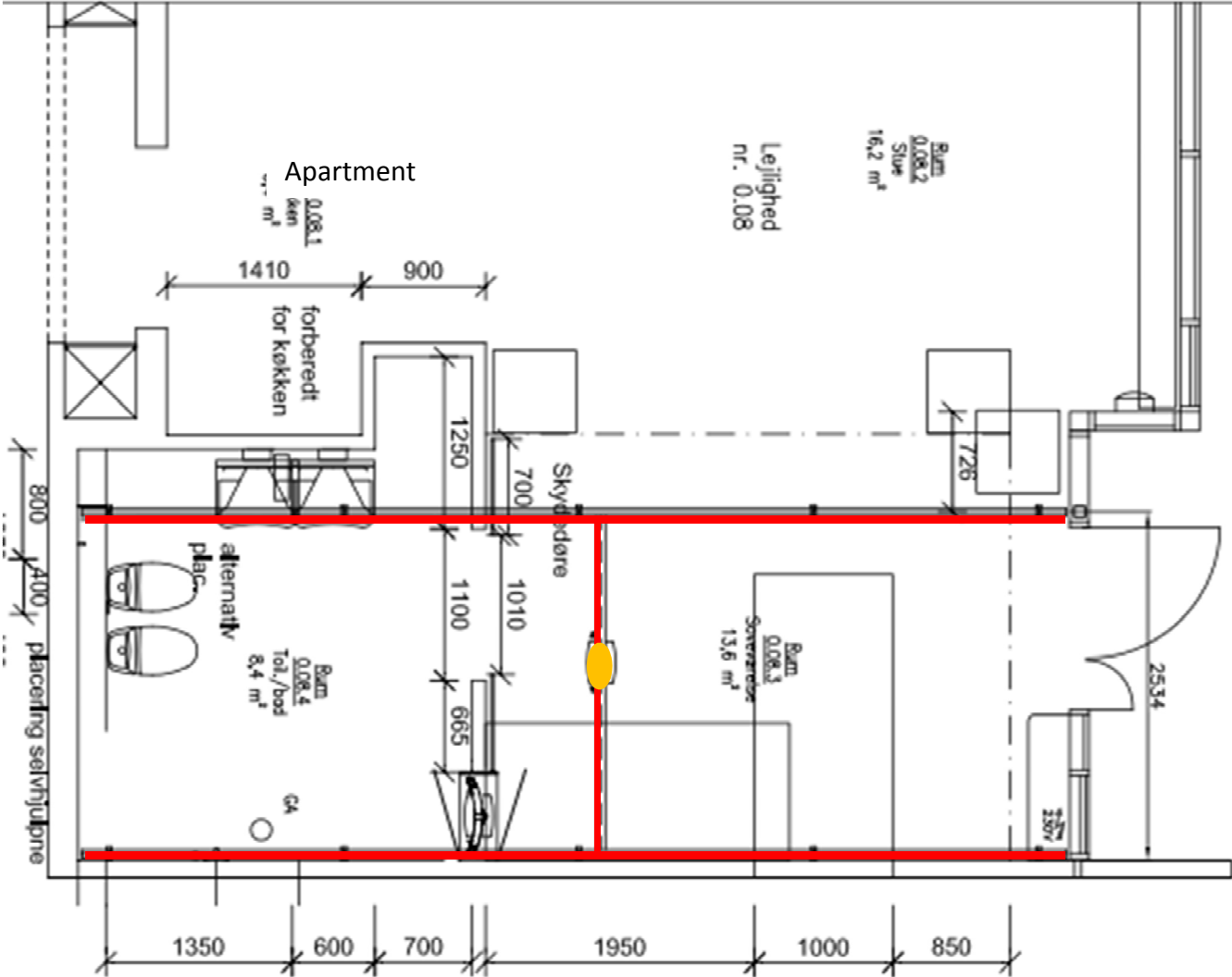


Need to be homelike

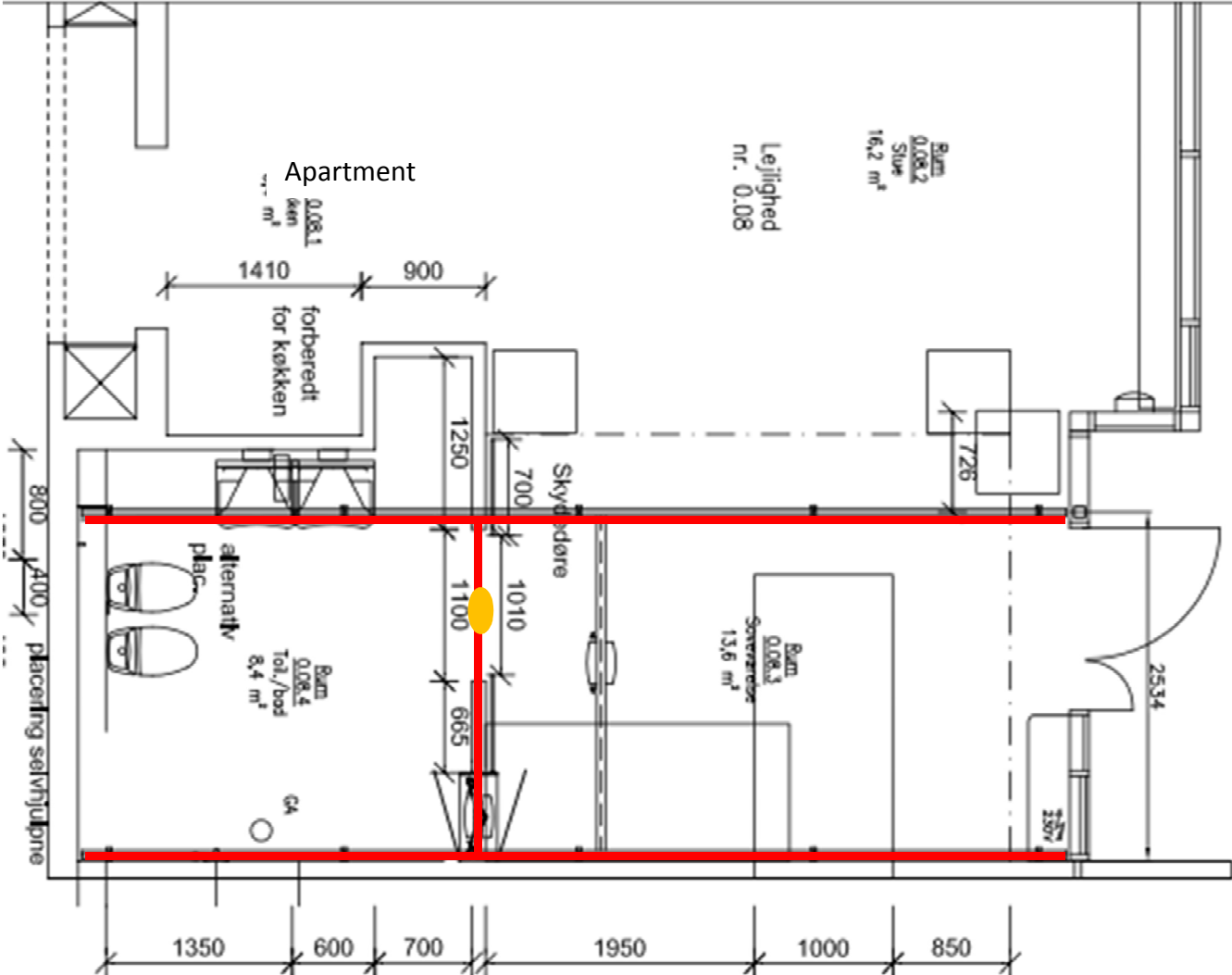
And at the same time a workplace for care staff



And at the same time a workplace for care staff

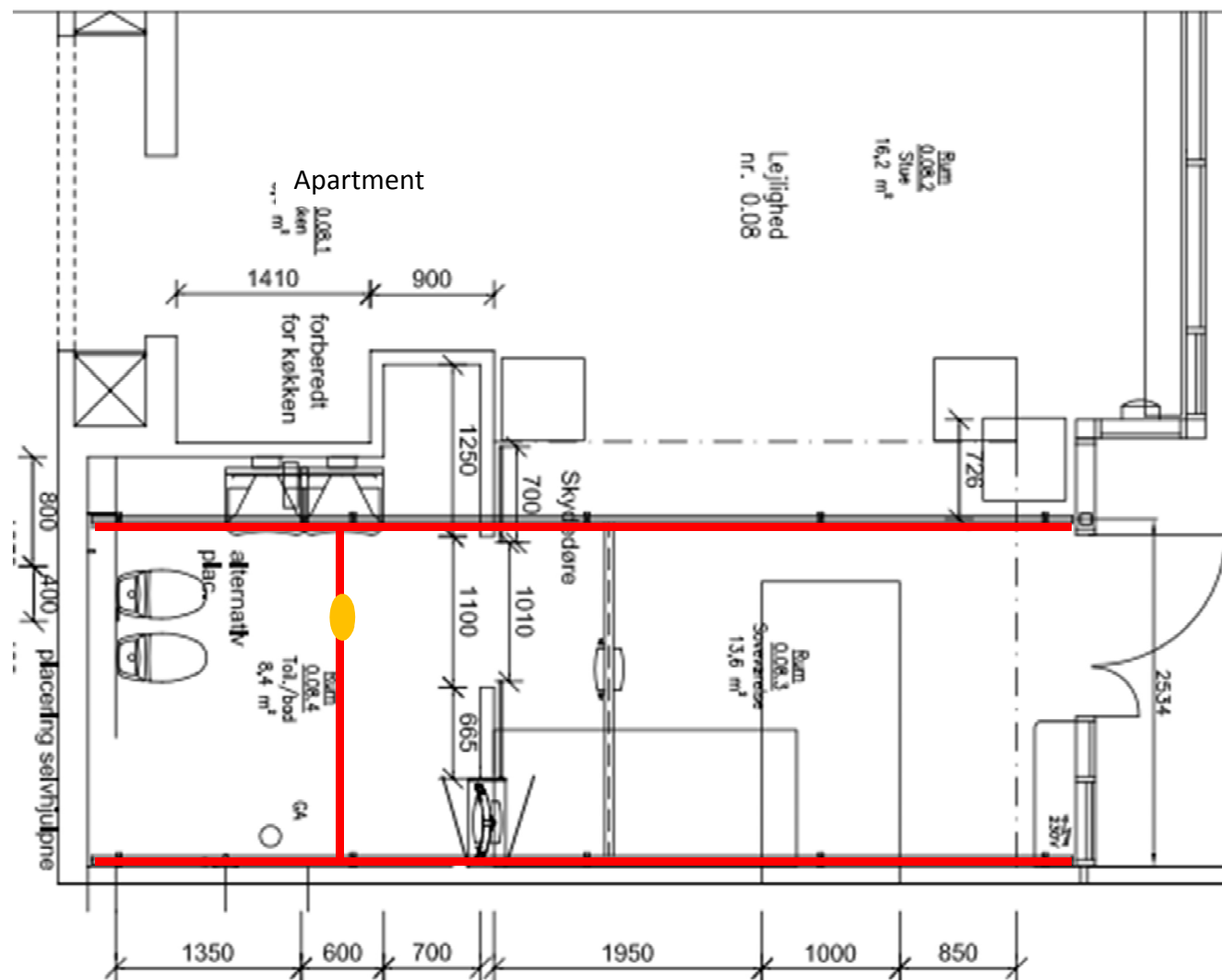


And at the same time a workplace for care staff



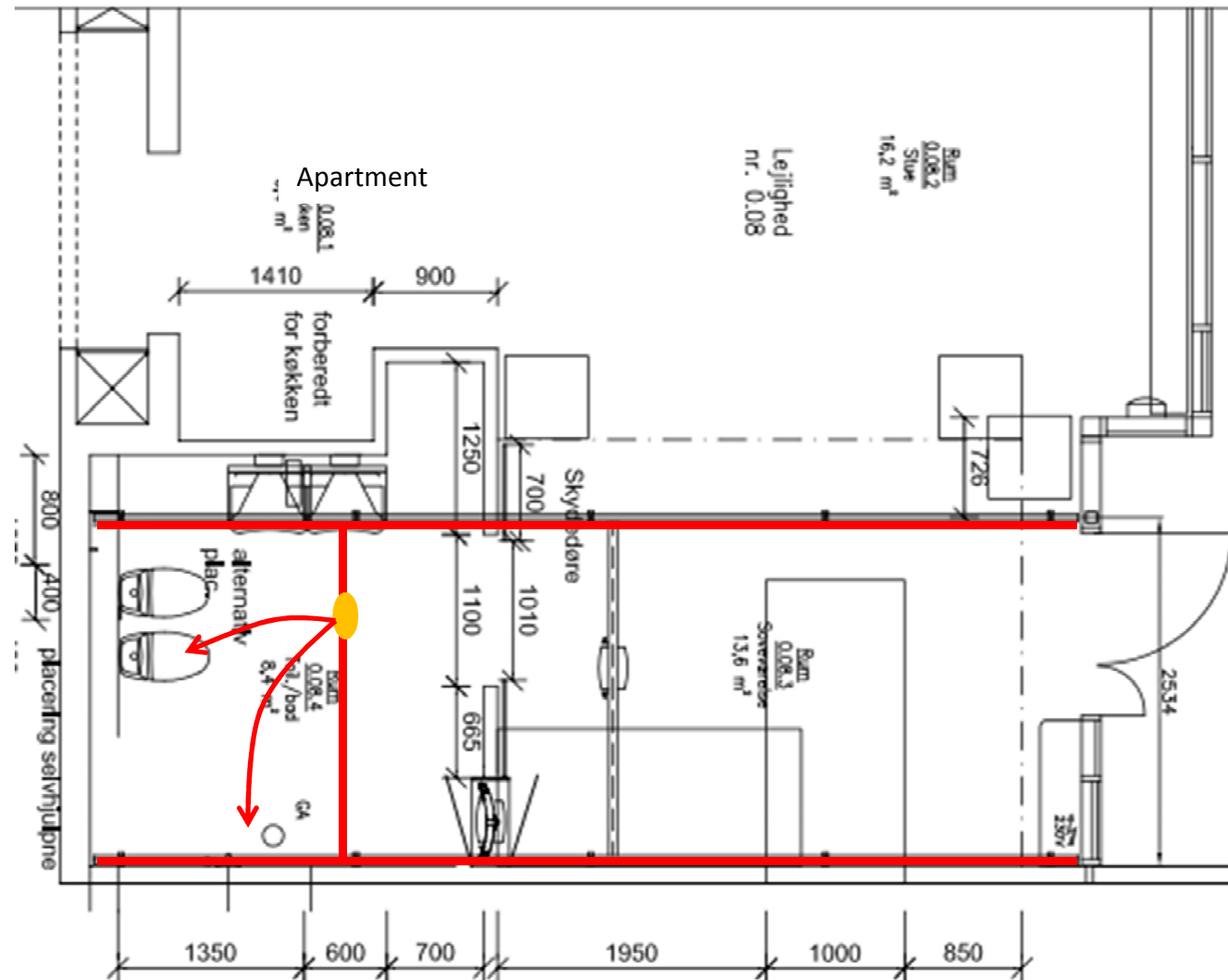
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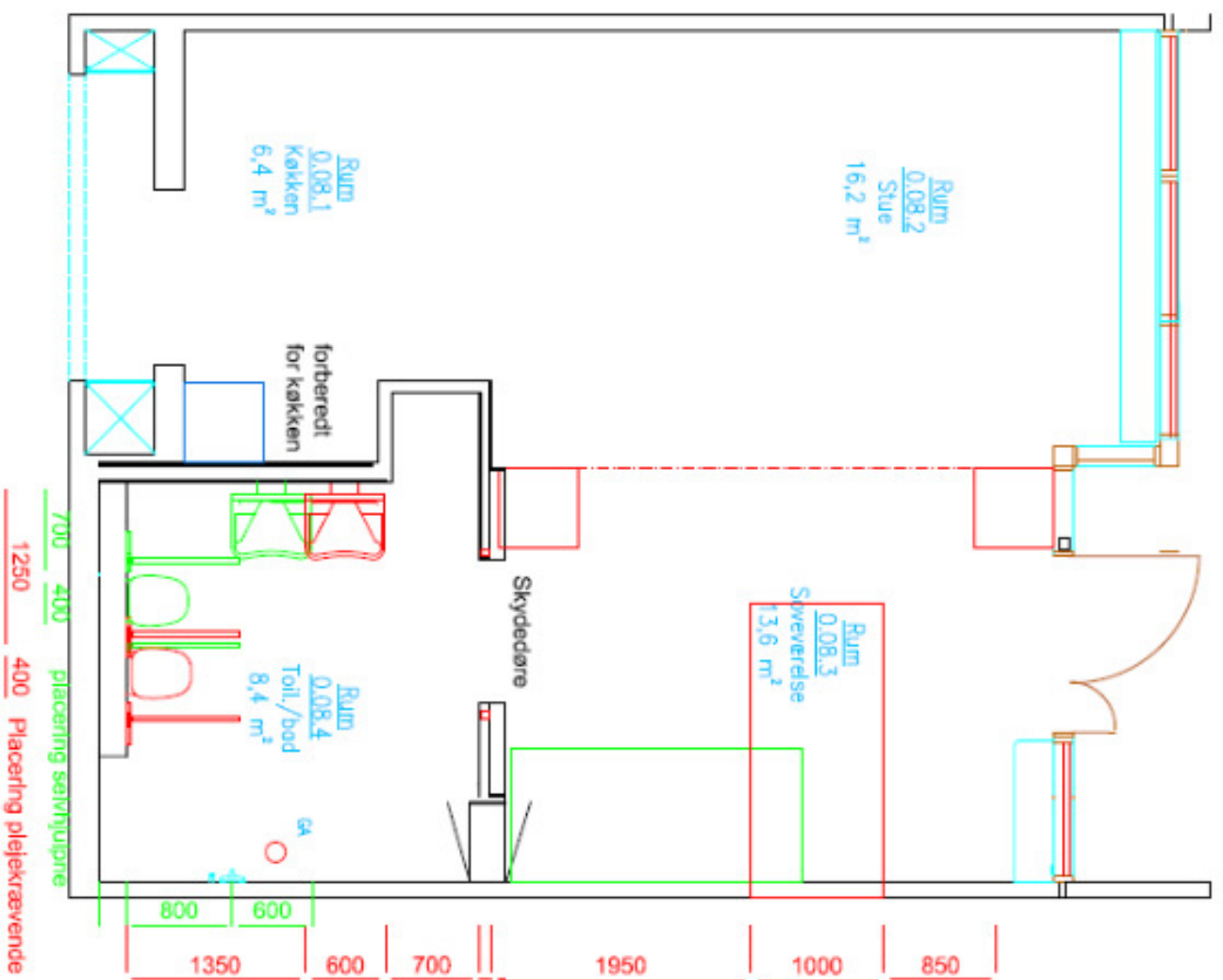


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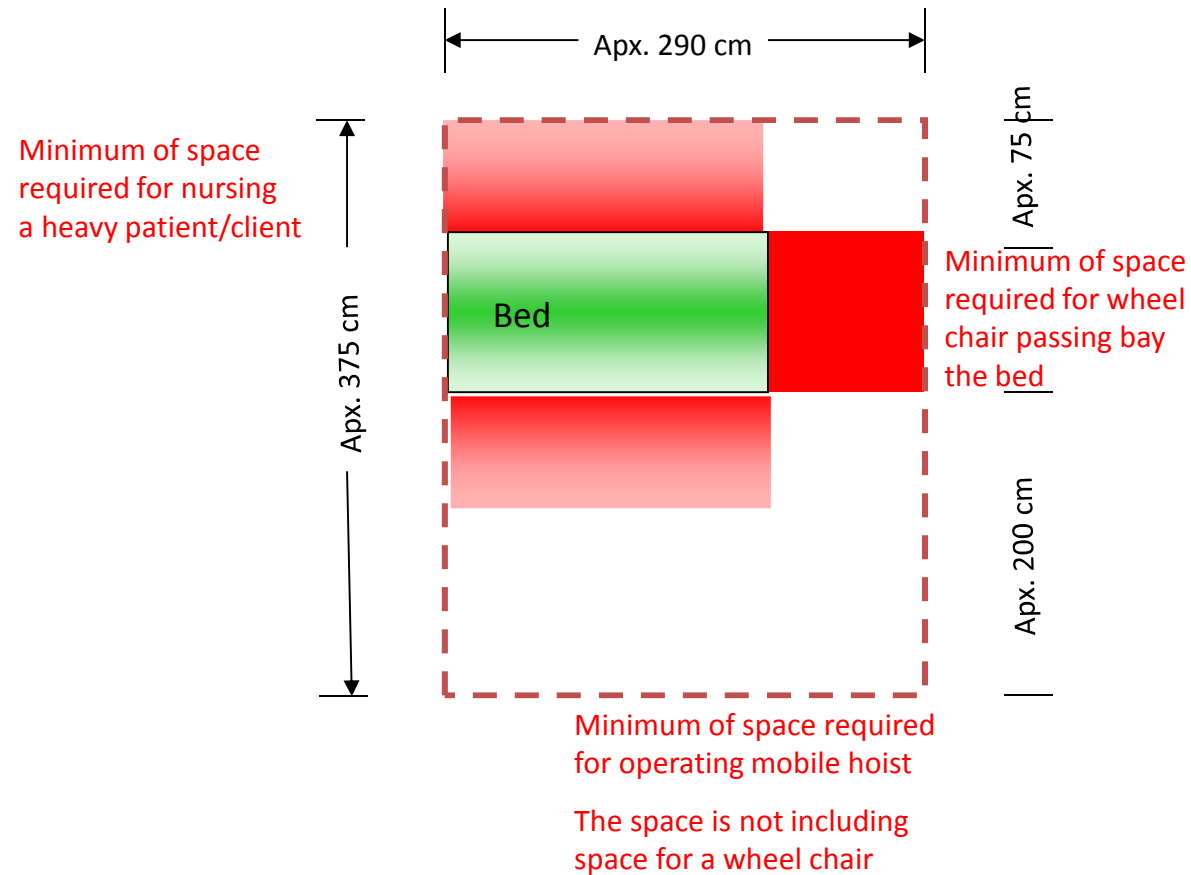


Independent living



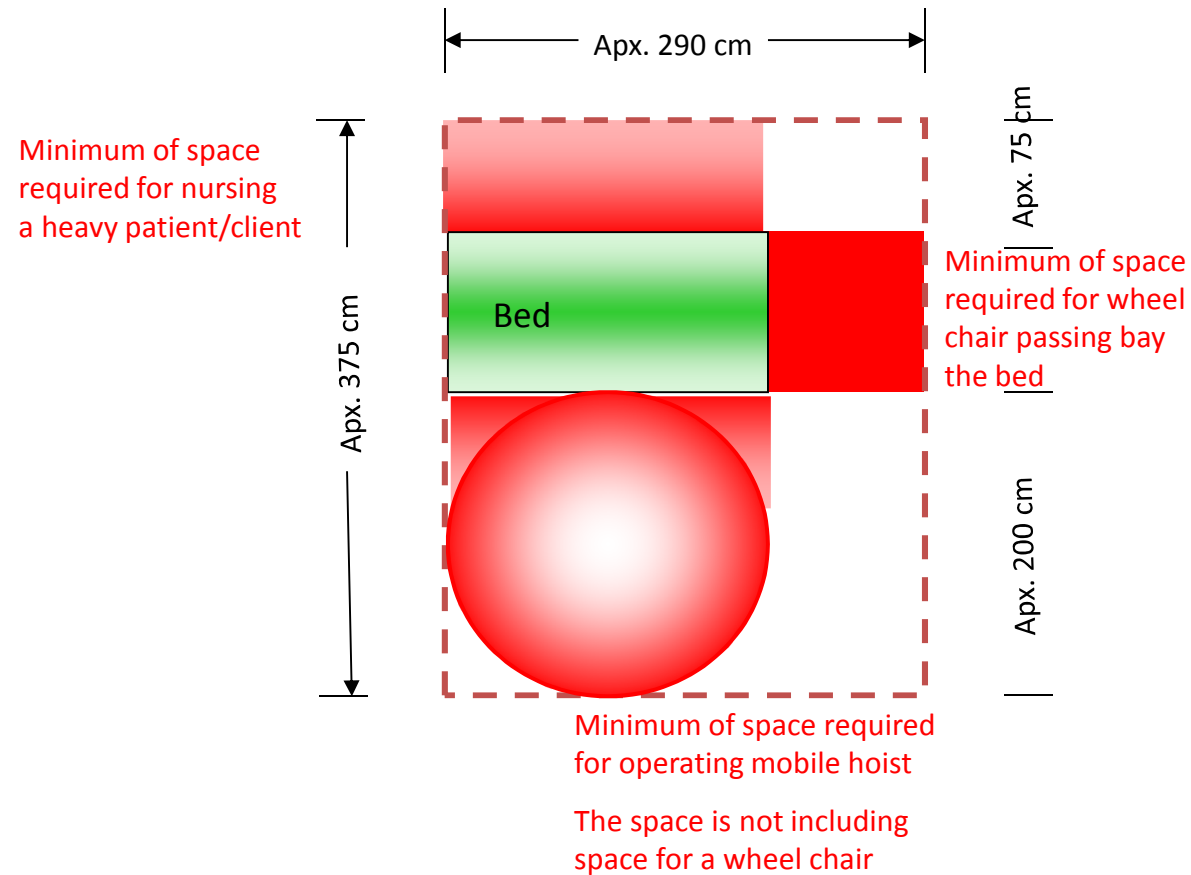
MOBILE HOIST

Recommended working space



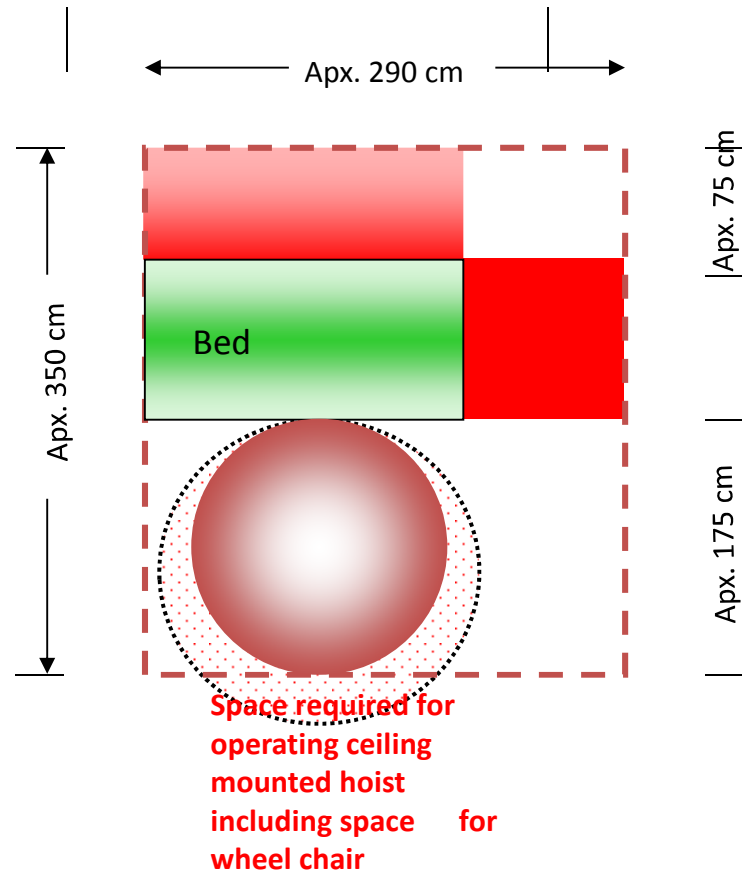
MOBILE HOIST

Recommended working space

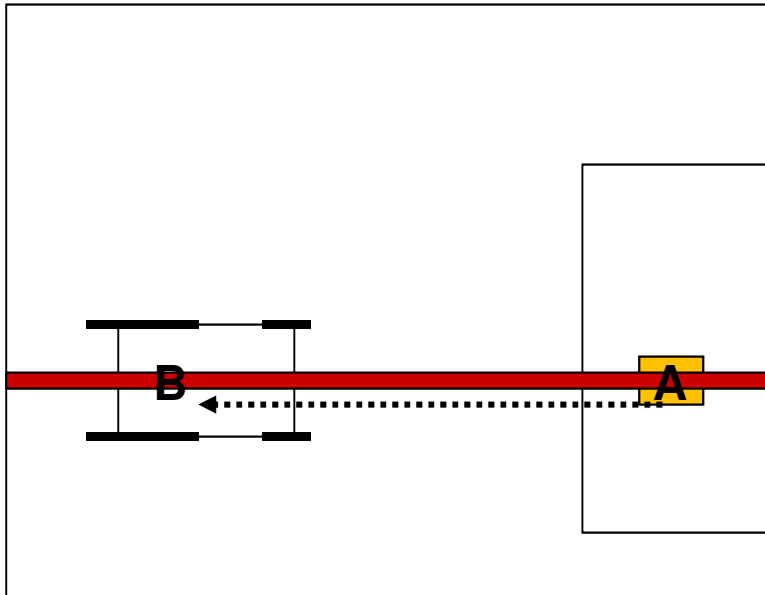


CEILING HOIST

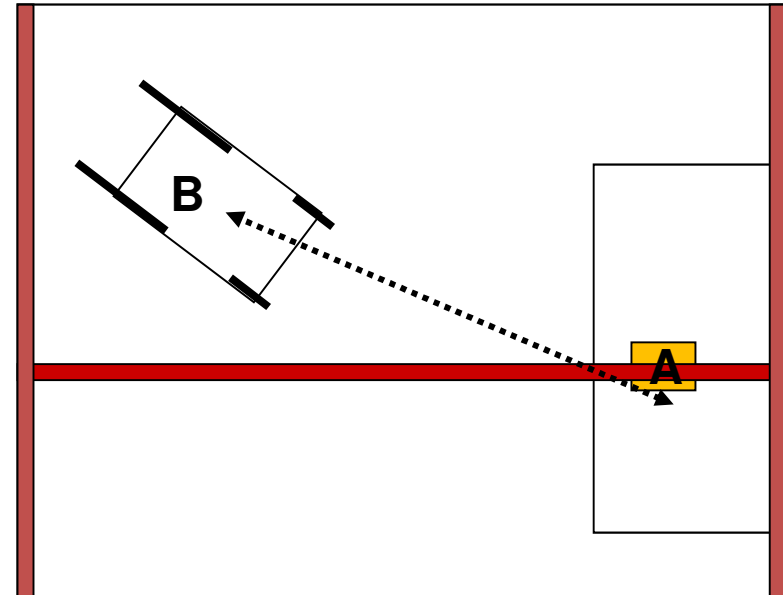
Recommended working space



From A to B

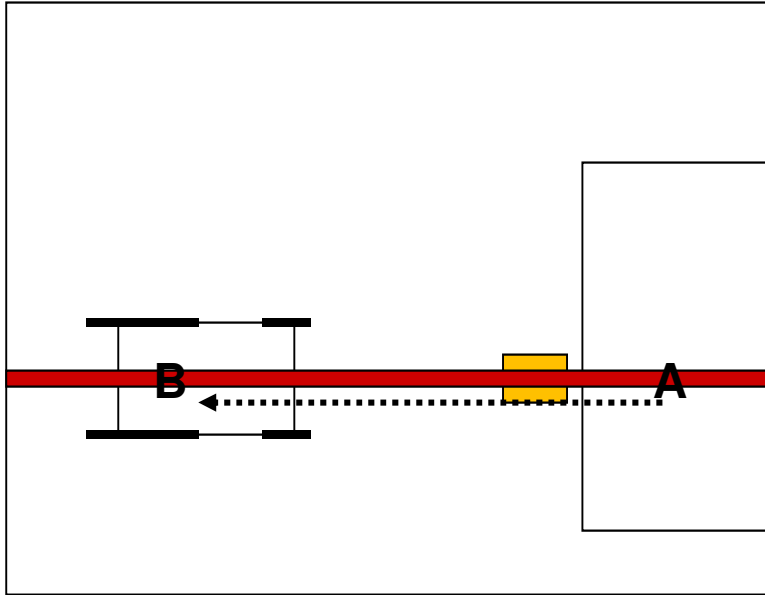


Working with a single rail system you will have to place the wheel chair centered under the rail to avoid body stress when placing the patient in the wheel chair (pt center of gravity can be off center)

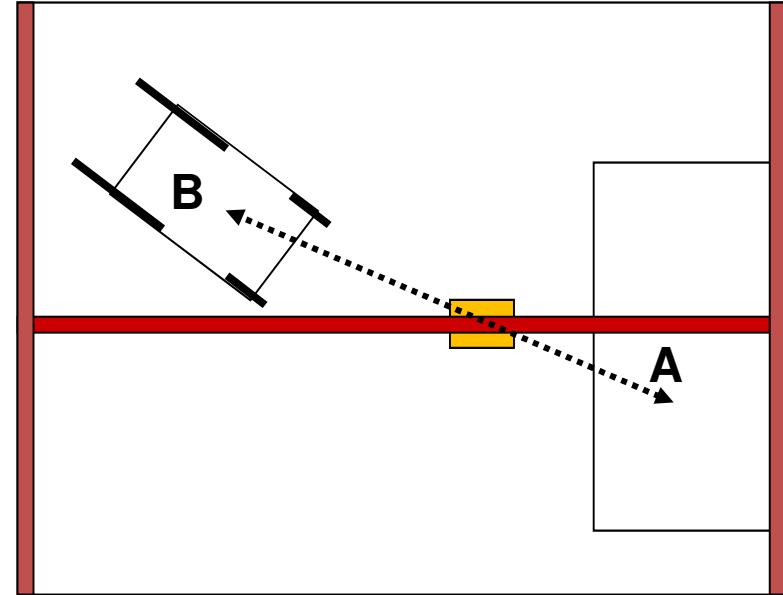


Working with a traverse system you can work intuitively, and you will not have to organize the job in details.

From A to B

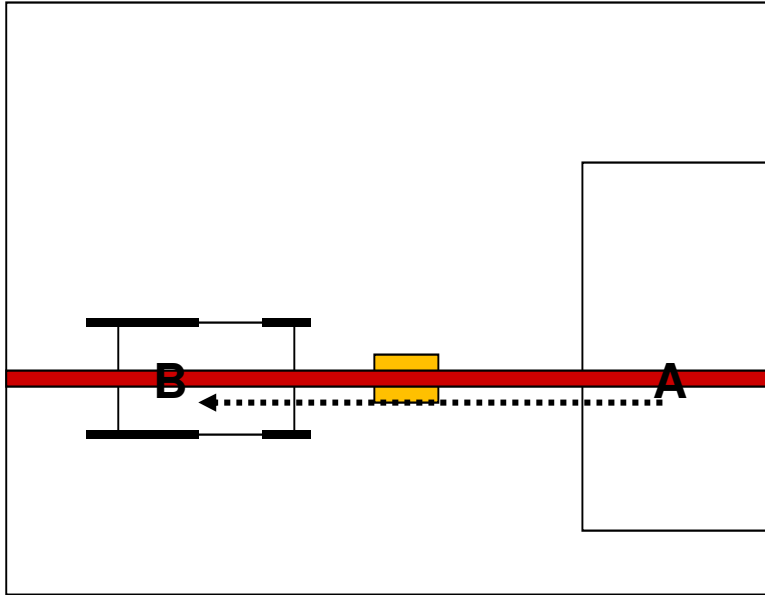


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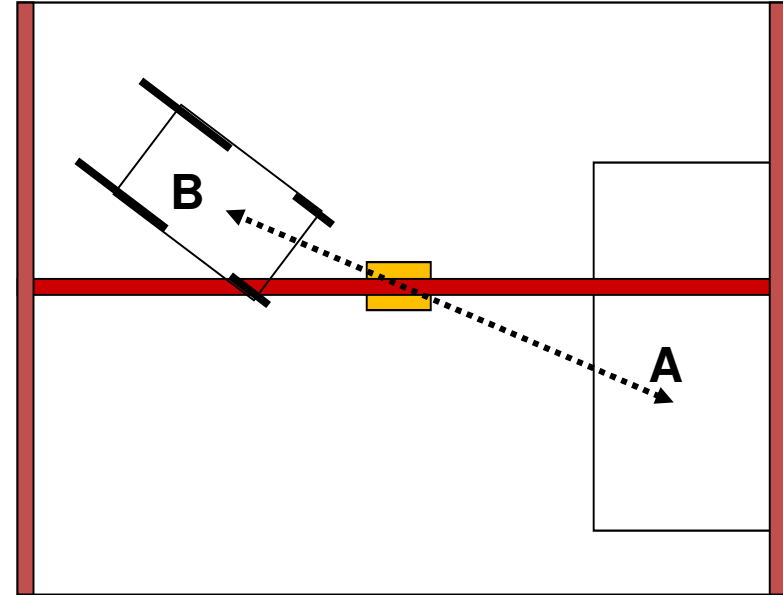


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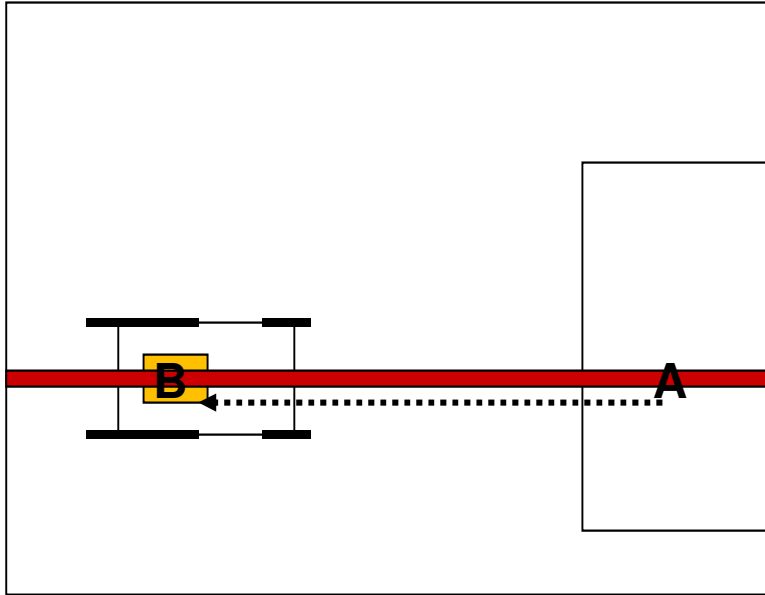


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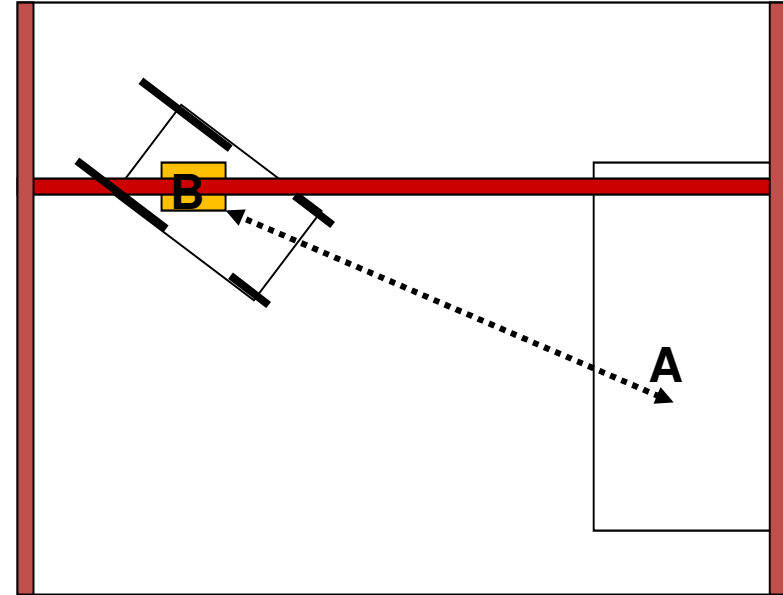


Working with a traverse system you can work intuitively, and you will not have to organize the job in details.

From A to B



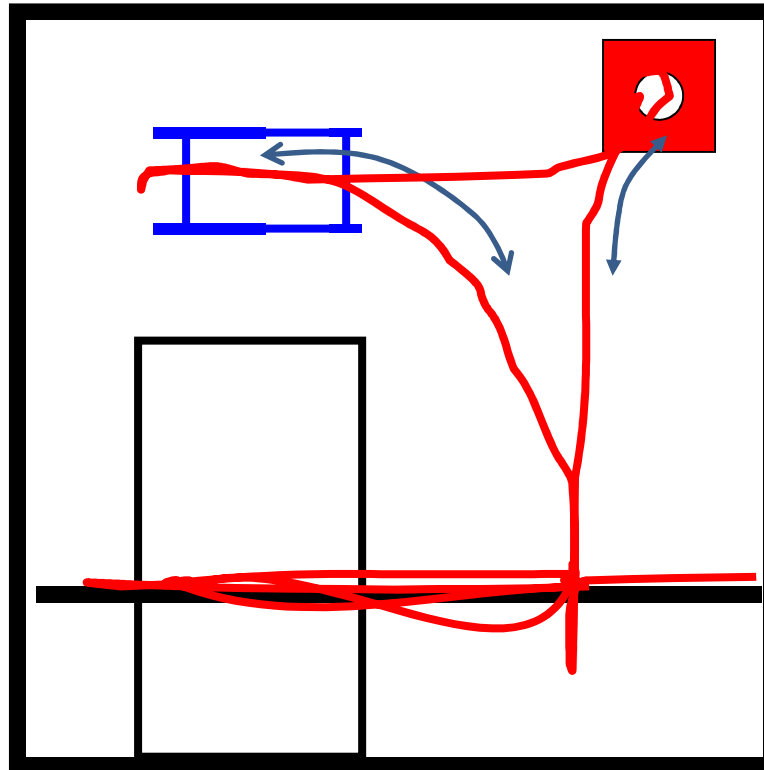
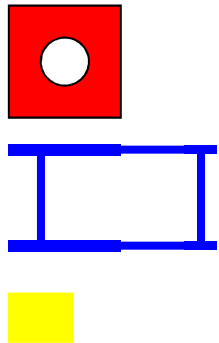
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Working with a traverse system you can work intuitively, and you will not have to organize the job in details.

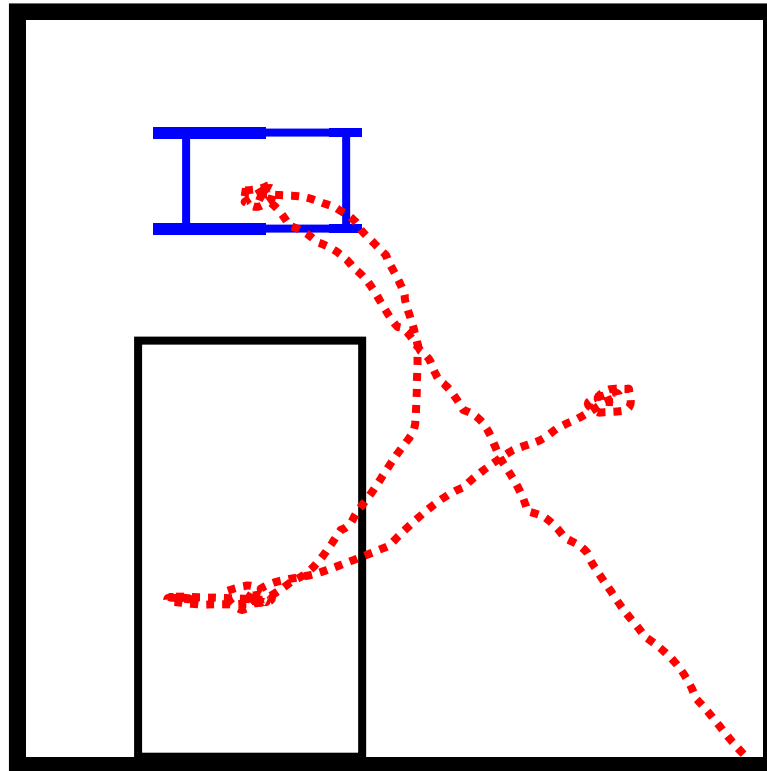
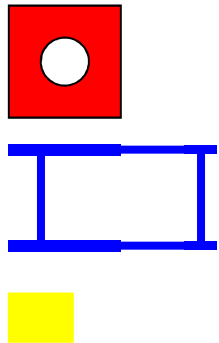
Process analysis

transfer from wheel chair to commode chair when using a single rail system



Process analysis

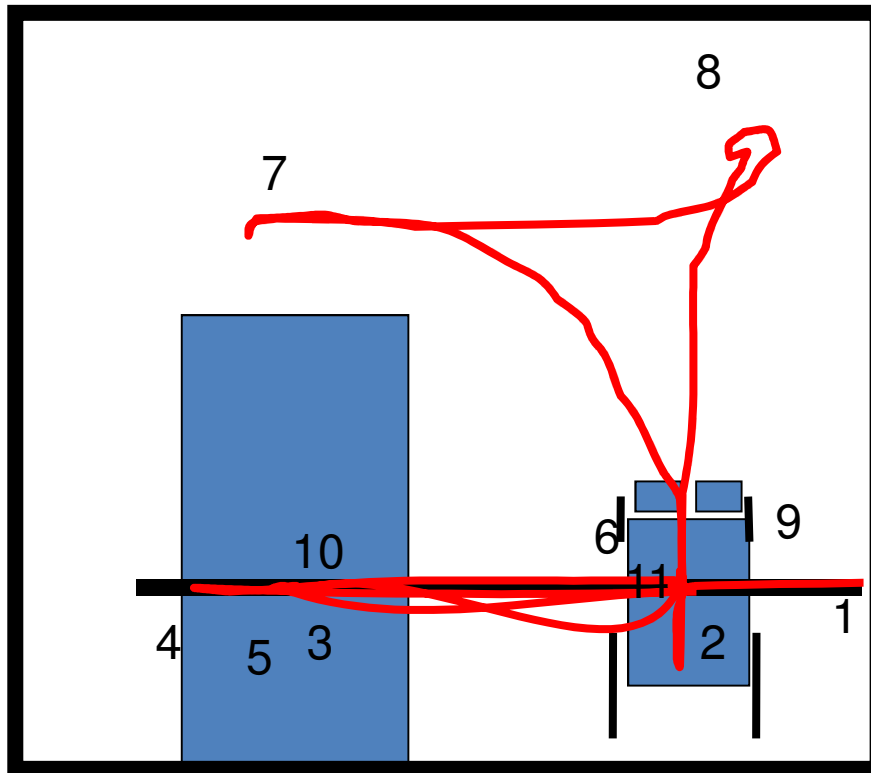
transfer from wheel chair to commode chair when using a travers rail system



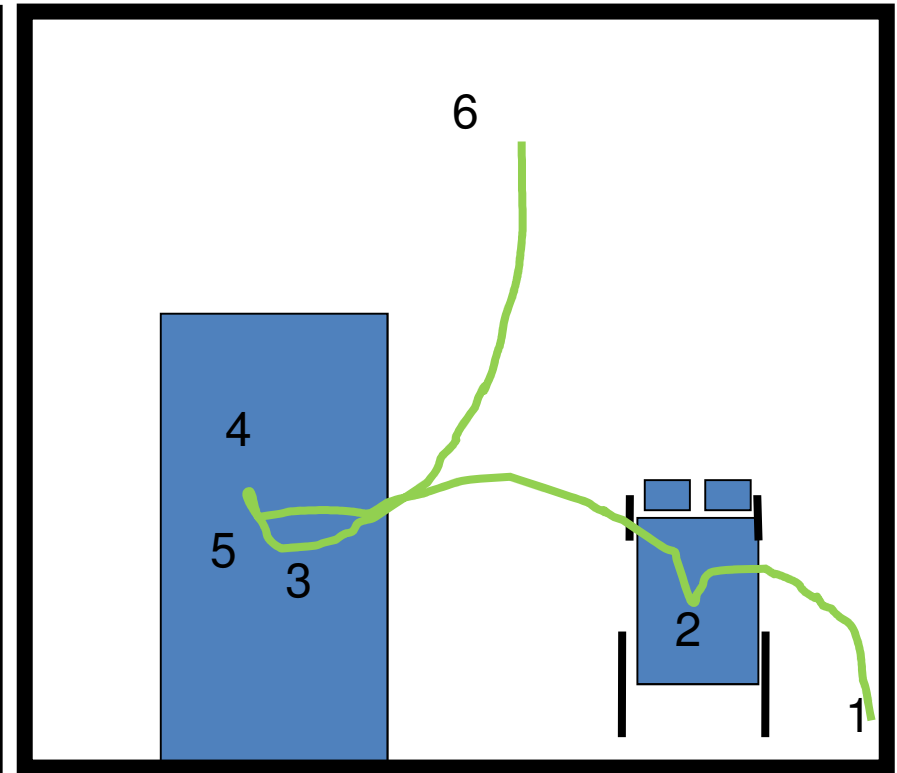
Comparing work processes

single rail versus travers rail systems

Single rail system

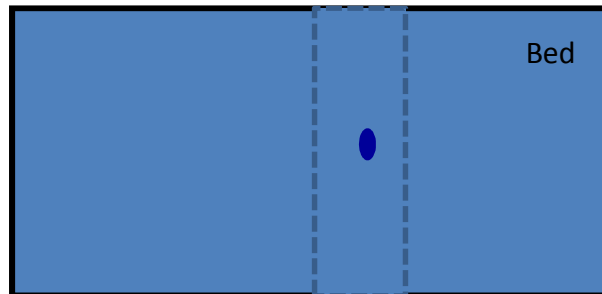


Travers rail system



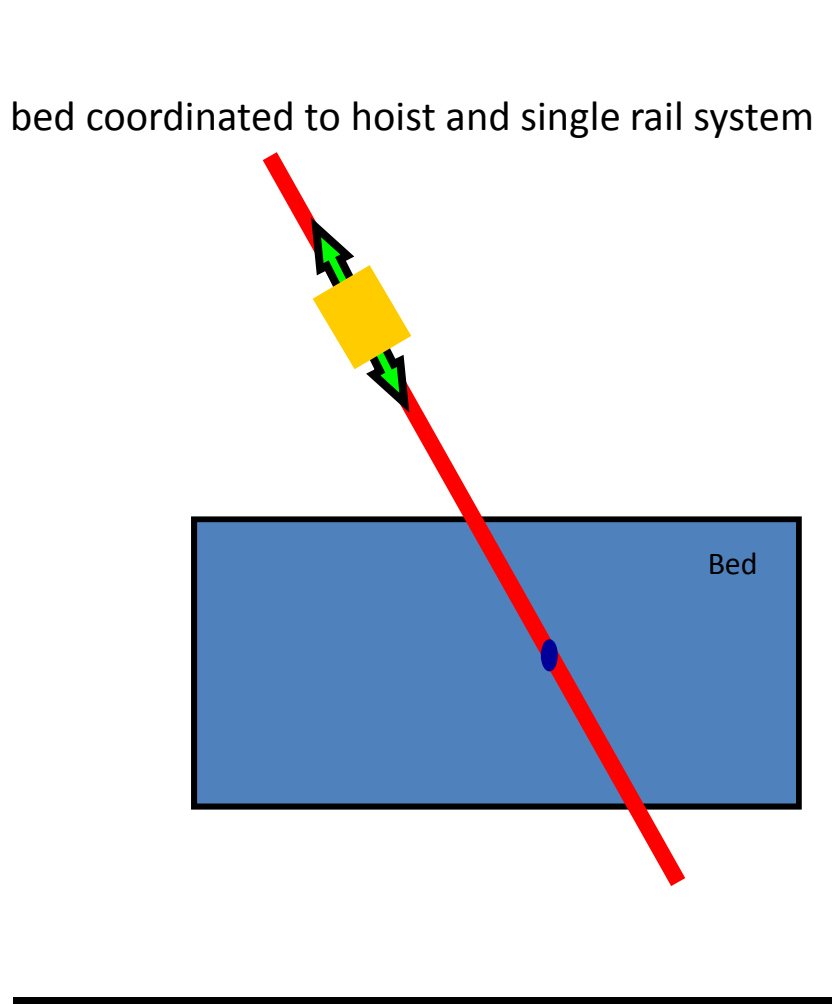
SINGLE TRACK SYSTEM

- Lowering point in bed



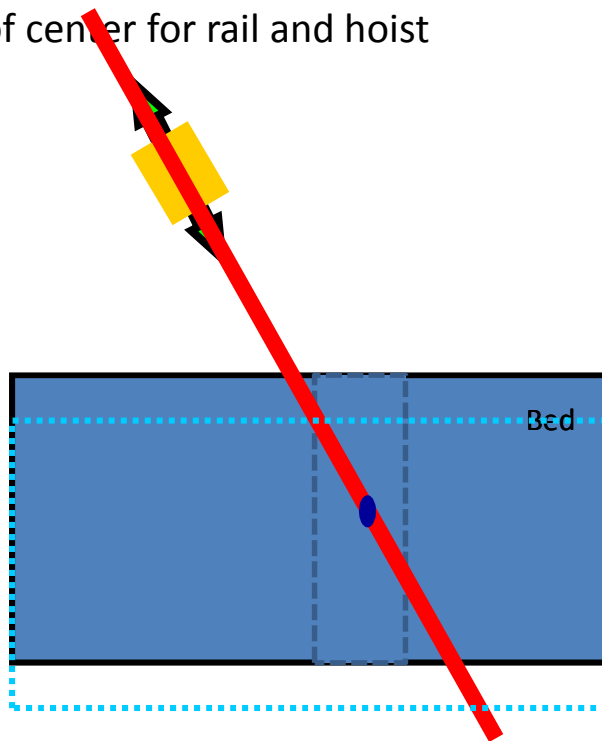
SINGLE TRACK SYSTEM

- Lowering point in bed coordinated to hoist and single rail system



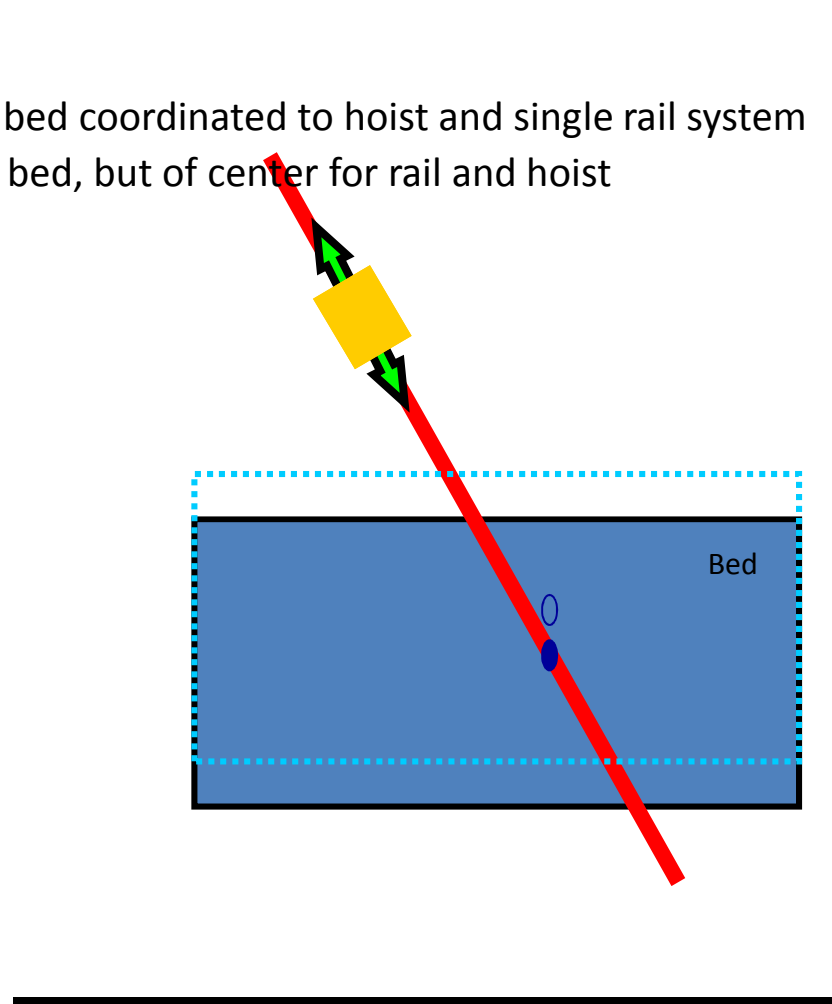
SINGLE TRACK SYSTEM

- Lowering point in bed coordinated to hoist and single rail system
- Lowering point in bed, but of center for rail and hoist



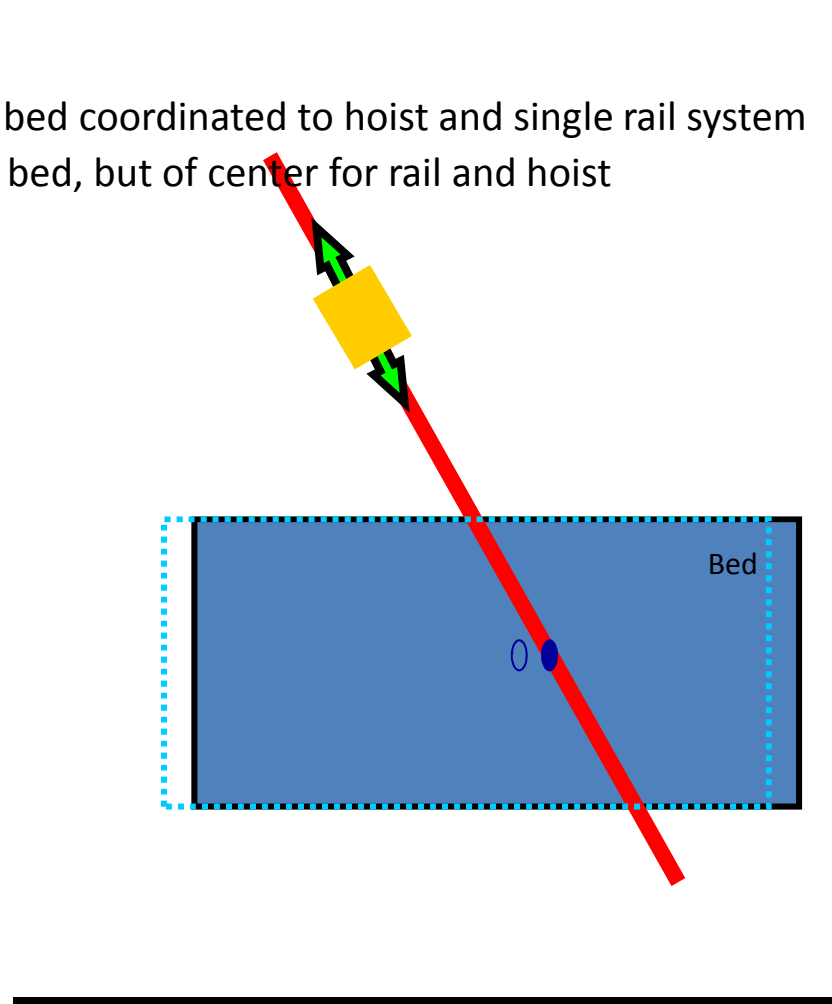
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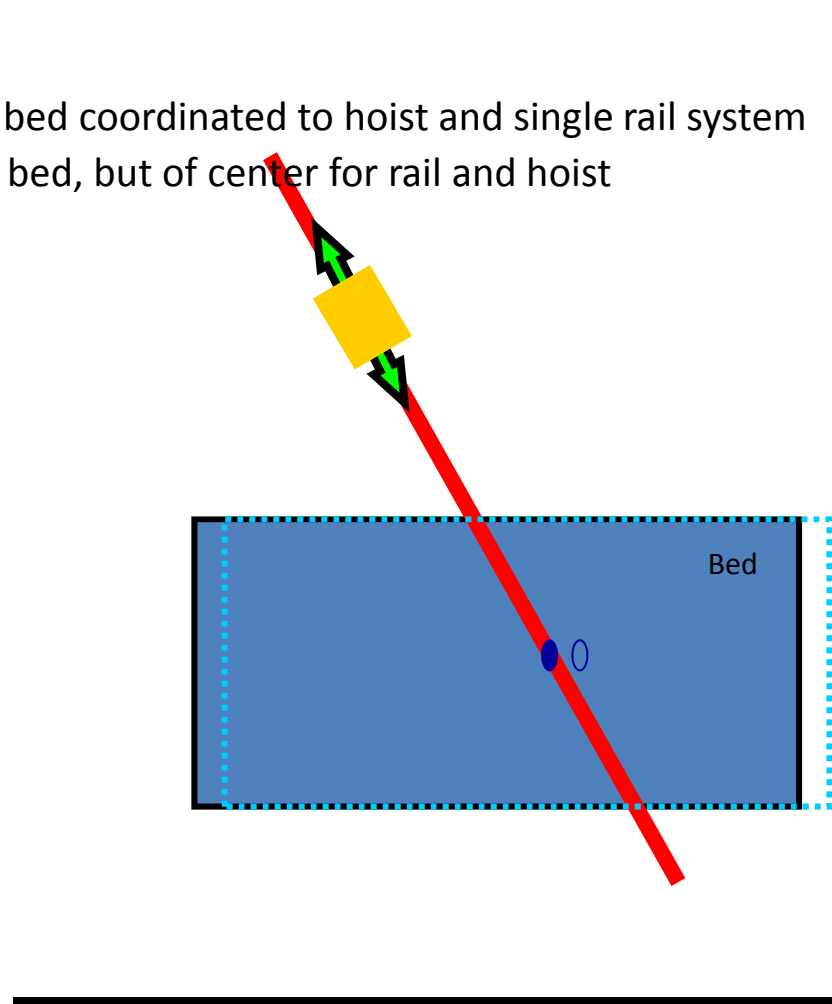
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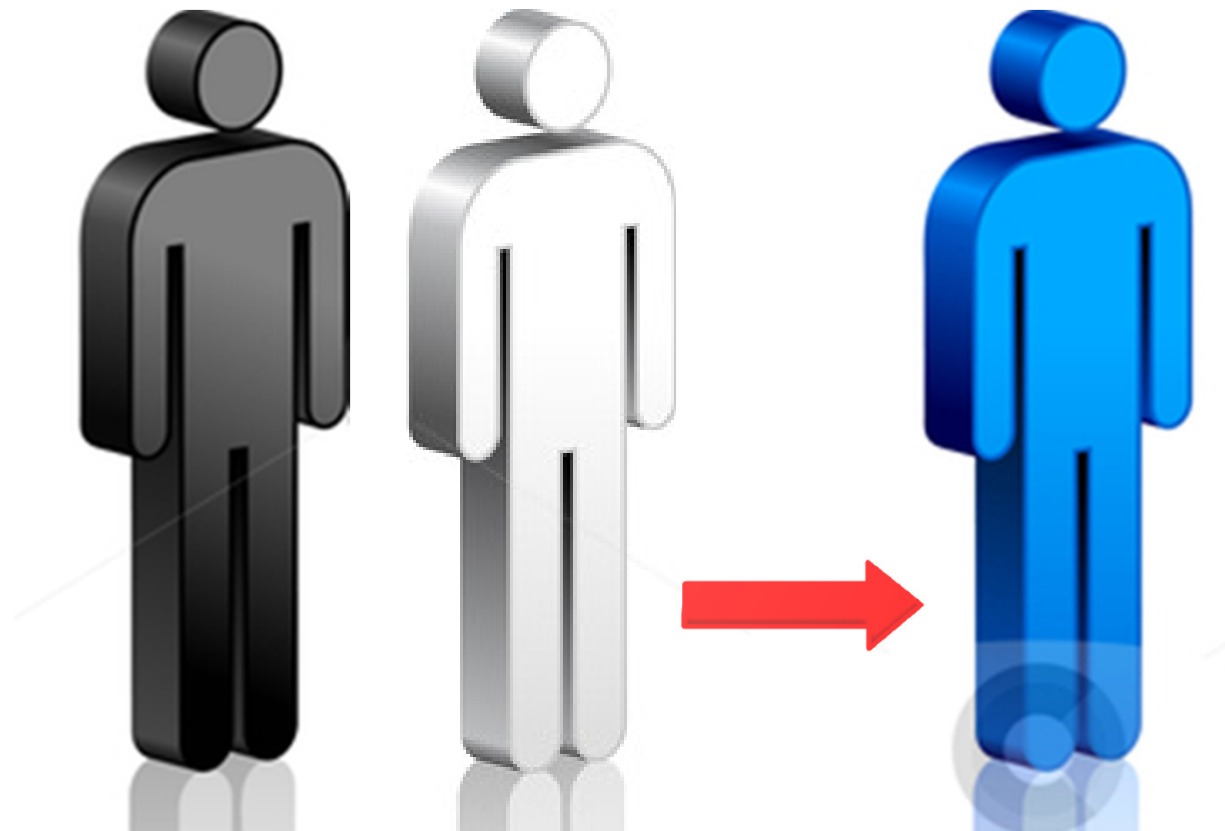


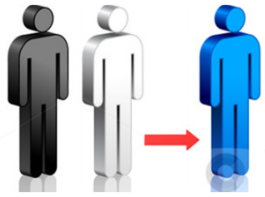
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From 2 to 1

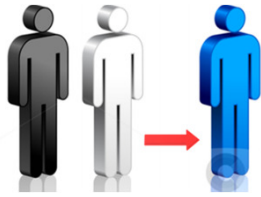




From 2 to 1

- Improving the quality of care
 - Focus on the patient / resident

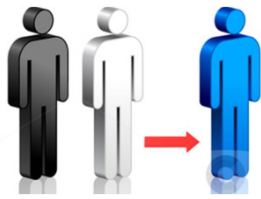




From 2 to 1

- Improving the quality of care
 - Focus on the patient / residence
- Adjusting to lack of care staff within the healthcare sector
 - The community of Fredericia (Denmark): In 2020; 80 % of all young graduated from high school must be employed in the healthcare sector if we do not implement new routines
- Utilizing hoist and appropriate slings can in most cases free one care staff when performing the following task:
 - Turning
 - Hygiene
 - Dressing
 - Putting on slings





From 2 to 1

- How design of technology can:
 - improve the quality of care
 - minimize focus on assistive technology
 - reduce no of staff – time to care



Early mobilisation

Travers system is recommended

- Checking sitting balance on bedside
 - Basic High sling
- From ICU bed to bedside chair
 - Basic High sling
- From sit to stand
 - Active Trainer
 - Bariatric Gait Trainer
- The first “3 steps”
 - Active Trainer
 - Bariatric Gait Trainer



Rehabilitation

- Supporting transfer in the first face
- Support standing and walking
 - In parallel bars
 - Stairs
 - Supporting balance – standing, on knees / crawling, balance on balls
 - Active Trainer



Rehabilitation

- Supporting transfer in the first face
- Support standing and walking
 - In parallel bars
 - Stairs
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Rehabilitation

- Supporting transfer in the first phase
- Support standing and walking
 - In parallel bars
 - Stairs
 - Supporting balance – standing, on knees / crawling, balance on balls
 - Active Trainer
- Support stimulation in snuezelroom





Knæ4stående.MOV

Rehabilitation

- Supporting transfer in the first phase
- Support standing and walking
 - In parallel bars
 - Stairs
 - Supporting balance – standing, on knees / crawling, balance on balls
- Active Trainer



- Support stimulation in snuezelroom



Manage quality of care

CLM Module

- Allow monitor hoist routines
 - Time of day
 - No of lifts
 - Weight of lifts – total weight per day, week, month etc.
 - Height of lift
 - Conjunction to work accidentence

Quality nurse can monitor different routines, assess whether procedures are being followed



Date	Time	Duration	Weight	Height		
22-11-2013	08:45:08	7	18,3	42	Day 2	1
22-11-2013	09:17:45	10	25	63	Day 2	2
22-11-2013	09:24:00	10	17,5	66	Day 2	2
22-11-2013	09:25:09	1	65,8	6	Day 2	2
22-11-2013	18:56:29	12	34,1	72	Day 2	3
23-11-2013	12:08:28	10	32,5	62	Day 3	1
23-11-2013	19:15:53	12	28,3	79	Day 3	2

How many times per day does a patient needed to be hoisted - if she is a hoist user?

Morning toileting

1. From bed to commode chair
2. From commode chair to bed
3. From bed to wheel chair

Mid morning toileting

4. From wheel chair to bed
5. From bed to commode chair
6. From commode chair to bed
7. From bed to wheel chair

Lunch; rest

8. From wheel chair to bed
9. From bed to commode chair
10. From commode chair to bed
11. From bed to wheel chair

Afternoon toileting

12. From wheel chair to bed
13. From bed to commode chair
14. From commode chair to bed
15. From bed to wheel chair

Evening toileting

16. From wheel chair to bed
17. From bed to commode chair
18. From commode chair to bed

What about night toileting?

What about training / rehab?

Activation

If we can't rely on the patients physical capability



Activation

If we can't rely on the patients physical capability

- Can the patient / residence benefit from an en suite system?
 - Walking an unstable patient / residence to the toilet in a gait trainer



Activation

If we can't rely on the patients physical capability

- Can the patient / residence benefit from an en suite system?
 - Walking an unstable patient / residence to the toilet in a gait trainer
- How can the patient / residence benefit from gait training
 - Physical activity
- If we can't rely on the patients physical capability; will we then walk the patient?



