



Can overhead hoisting technology ensure effectiveness and quality in care?



Anders Haugaard, PT, V.Guldman A/S Denmark

TIME TO CARE

Background:

In times with focus on effectiveness and quality in care we have a challenge that needs to be taken up. How can we create more Time to Care for the patients in our Hospitals?

Over the years Guldman have worked and developed solutions, in overhead hoisting technology, that can free up more time and optimise work processes with fewer "hands".

These solutions have an impact on three levels: The organisation, the employee and the patient

Organisation

The organisation will be more effective and give better opportunities for the staff to utilize their time more efficiently. Complicated work processes can be done with fewer staff members and at the same time reduce the risk of injuries among staff. With improved working conditions there will also be a positive effect in retaining and recruiting qualified staff.



The implementation of a ceiling hoist program can generate economic benefits due to reduced compensation costs within 3 years of intervention (1)

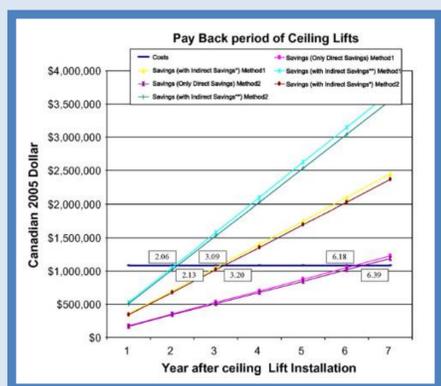


Figure 1 Payback period of ceiling lifts. Method 1: Assuming pre intervention rate = 0.16 (average of pre periode). Method 2: Assuming pre intervention rate = 0.14 (immediate past year). *Savings (Indirect Savings Equal direct savings). **Savings (Indirect Savings Twice of Direct savings)

Employee

Regarding the employees it is well known that in the health care sector musculoskeletal injuries among staff members are frequent. By implementing the right solution, it is possible to reduce these injuries and prevent wear and tear in the long run, resulting in reduced sick leave. When an organisation has a high level of sick leaves, it becomes ineffective and there is a risk of not being able to maintain quality in care.

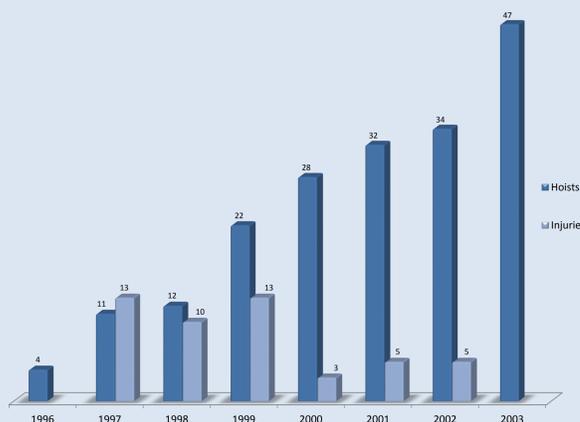
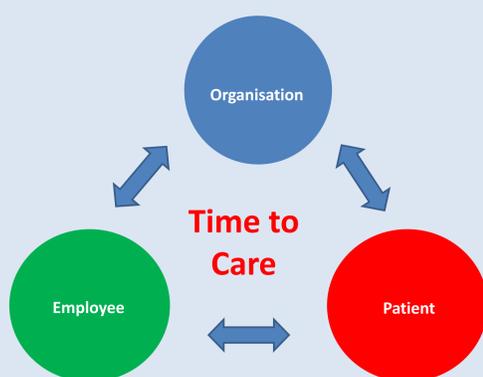


Figure 2: Numbers of ceiling hoists compared to the numbers of work related injuries among health care staff at The Regional Hospital of Horsens



Patient

Patients in hospitals spend many hours in bed which has severe health consequences (2-3). By working with overhead hoist technology it is possible to mobilise patients very early and often with a high level of safety for the patient (4). This will result in higher quality in treatment and care, more self empowerment for the patient, a faster recovery and a higher FIM score at discharge (4).



Using the ceiling hoist results in the patient concentrating on the task whilst the therapist focuses on progressing the exercises.



References:

- 1: Alamgir et al. Efficiency of overhead ceiling lifts in reducing Musculoskeletal injury among carers working in long-termcare institutions J. Care Injured 40 (2008) 570-577
- 2: Pedersen, M.M et al. Twenty-Four-Hour Mobility During Acute Hospitalization in Older Medical Patients. J Gerontol A Biol Sci: 2013 March; 68(3):331-337
- 3: Coker RH, Hays NP, Williams et al. Bed rest Promotes Reduction in Walking Speed, Functional Parameters, and Aerobic Fitness in Older Healthy Adults. J Gerontol A Biol Sci Med Sci . 2015 January; 70(1):91-96
- 4: Arnold M. et al. Changes in Functional Independence Measure Retings Associated with a safe Patient Handling and Movement Program