

# Development and implementation of a culturally competent teaching template (CCTT)



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## RECOMMENDED INTERVENTIONS

- Substitution Control:** Modify the existing trash compactor to fit the trash bins. A lifting compactor exists that eliminates the manual unloading but does not fit all bins. Current adapter system is slow, heavy and awkward.  
We recommend a strap adaptation, wheel locks might also be used
- Administrative Control:** Have worker push one cart on the 10 minute trash haul, rather than pushing one cart while pulling another.

### Consequences of the substitution control

- Eliminates dynamic forces from throwing the trash bags
- Eliminate the static forces of lifting/holding the trash bags
- Does not have a detrimental time impact
- Minimal financial cost

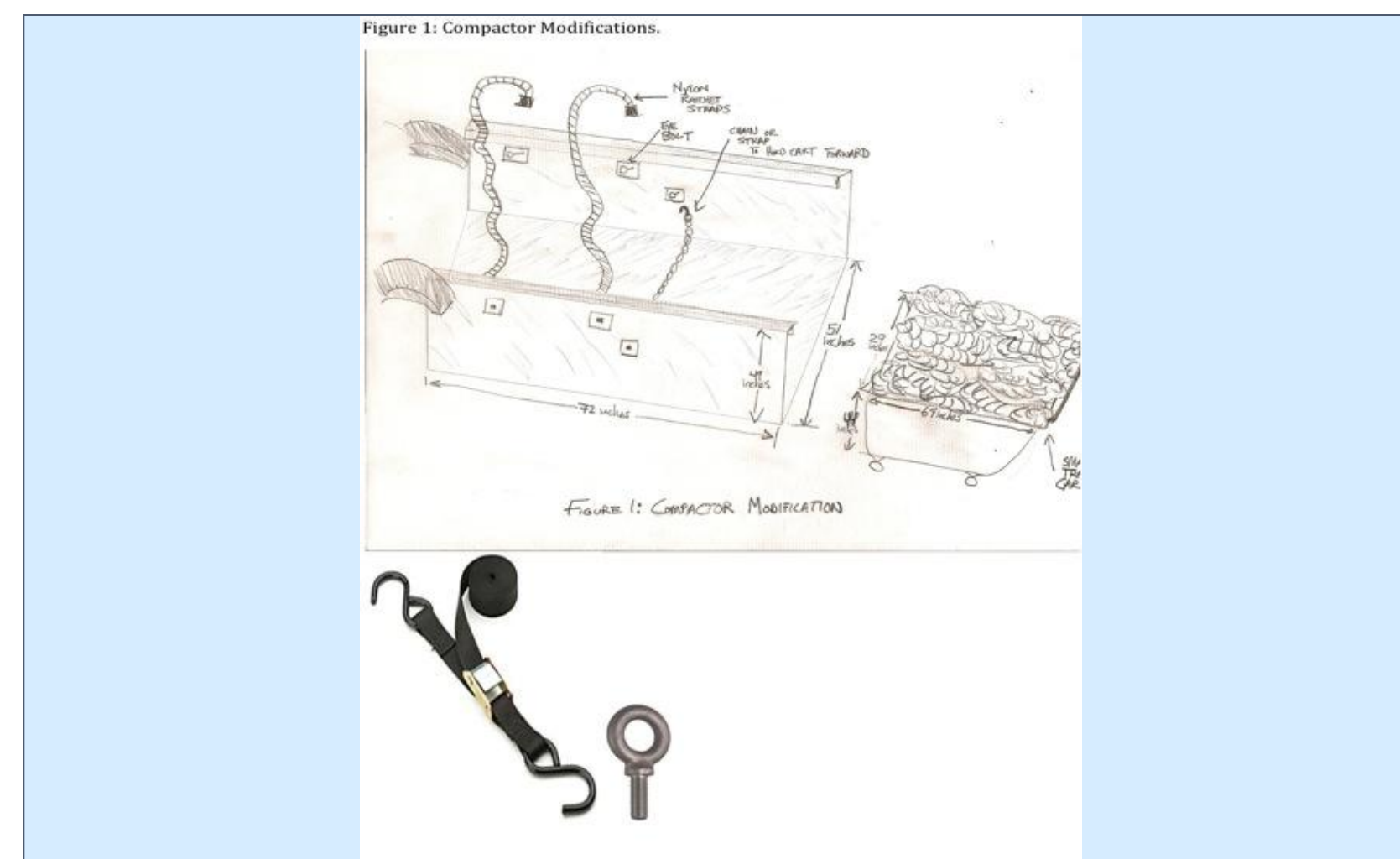
### Consequences of the administrative control

- Workers will have adequate rest between job cycles.
- Hauling one bin at a time will eliminate pull forces and eliminate external rotation of the shoulder during the task. Additionally, this will let push force be evenly distributed and shared by both arms.

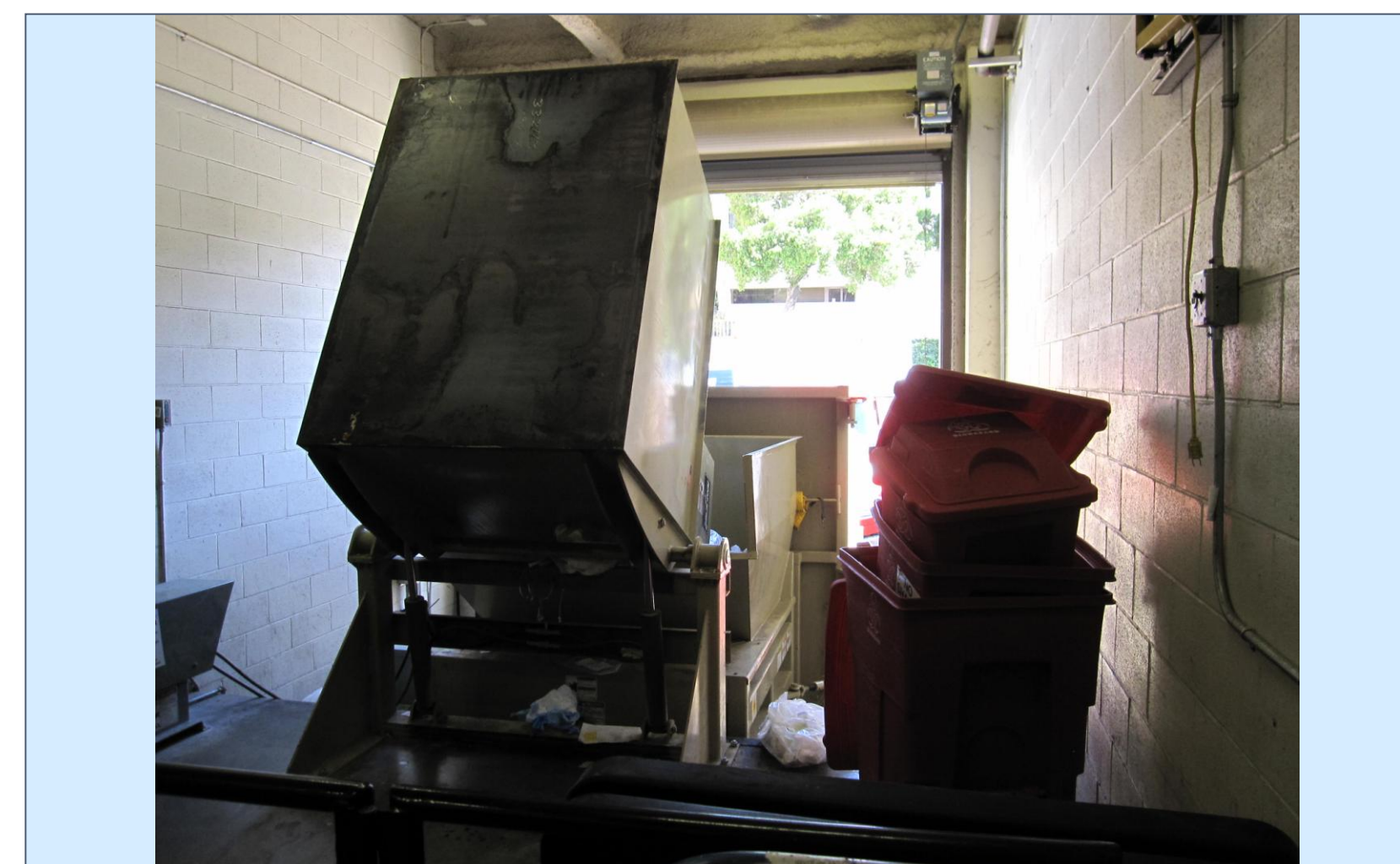
- Engineering Control:** Modify the trash receiving areas at LPCH to accommodate that larger trash bins that fit into the compactor.

### Consequences of the engineering control

- Eliminates dynamic forces from throwing the trash bags
- Eliminate the static forces of lifting/holding the trash bags
- More substantial push forces from transporting larger, heavier cart
- Prohibitive financial cost\*\*\*
- Substantial time investment for the remodel
- Workflow changes during the remodel



## THE COMPACTOR & OTHER PHOTOS



## THE UPHILL BATTLE

One might believe that to implement new policy and changes in the hospital setting. That may be true ... somewhere. My experience has been a lesson in bureaucracy, a very difficult lesson. Understanding intradepartmental politics and personality conflicts is one thing, but on the larger interdepartmental scale, these issues seem to have resulted in the general consensus of "better to do nothing than something wrong". To this end every implemented policy must be vetted and approved by all affected departments (for this project this involves housekeeping, human resources, legal, employee safety and health, engineering, and general services).  
I'd hoped, after completing the CCTT and ergonomic project in May 2011 that the very basic interventions that have been recommended would have already been implemented and that we could be beginning to evaluate the effects. Instead the implementation has thus far involved brief meetings and memorandums, mostly involving gaining permission to further analyze the recommendations (can the strap system be implemented and is it safe).  
The housekeepers themselves, while liking the concept of using the compactor, do not like the recommendation to haul one bin at a time due to the increased walking time. Knowing that implementing an unpopular policy is exceptionally difficult, this idea has been shelved while other methods of eliminating that external shoulder rotation risk are explored.

Any ideas for concepts that are safe in a hospital and won't slow down the workflow?



## CONSIDERATIONS & FUTURE DIRECTIONS

### Considerations for our project

If we had measured the force required to push and pull the cart for the long trip between LPCH and SMC we could have estimated the exact force required to push/pull the cart. With that information we could have considered specific interventions that might ease those forces (for example, wheel maintenance, cart changes, etc.).

Currently working on implementing the substitution and administrative controls we have recommended. To do this a culturally competent teaching template has been developed in order to reach all of the workers effectively and have their input. Bill Watterson in Calvin & Hobbes sums up the few have the perseverance needed for this arduous task.



## ERGONOMIC REFERENCES

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