

Essential Functions of a Transporter in an Academic Hospital

Laura Chadbourne, BHCM, CEAS III, CSPHA, Michelle Taylor, CEAS II, CSPHA
BJC HealthCare, St. Louis, Mo

History

Barnes-Jewish Hospital (BJH) occupational health nurses and transporter management were seeing an increase in employee injury and decrease in employee retention with their current post-offer screen.

Changes in safe patient handling have been made since the screen was developed, including a safe patient handling and mobility policy (developed and implemented) and safe patient handling equipment purchased throughout the hospital.

Our question is, do we still need to perform a screen for new hires, or is there something else we need to achieve our goals, stated below.

Goal:

- Assess current screen
- Increase employee retention
- Decrease employee injury rates
- Decrease injury frequency
- Decrease injury severity
- Promote injury prevention

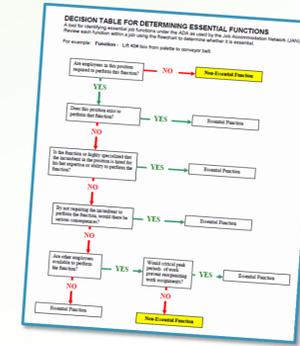


Definition

Post Offer Job Screen (POJS) — Assessment done when an employee is going through human resources employment requirements. This is to fit the worker to the essential functions (EF) of the job. Not all EF are tested because the easier EF will either be negated by a more difficult EF or, according to studies (such as Liberty Mutual Snook Tables), 90% or more of the population can perform the task.

Process

- Interview transporters:
 - What is required of you during the workday?
- Interview manager:
 - What are the required tasks of a transporter?
- Review current screen:
 - What is performed? Is it still valid?
- Determine essential functions of the job — follow developed algorithm
- Review occupational health reported injuries over the last several years
- Review changes in process over last several years:
 - Safe patient handling and movement (SPHM) policy added
 - SPHM equipment added
 - New building with patient rooms and procedural departments are divided into South and North towers
 - South tower and North tower are connected by several ramps used to transport patients across campus
- New hire education and annual training reviewed



Findings

- Tasks performed by transporters: Pushing, pulling equipment, transferring patients to/from stretchers, bed and chairs with assistance of nursing professional, assisting patient from floor, car transfers, climbing stairs (optional) and walking.
- Interview of transporters state, “The hardest part of the job is transporting patients across campus.”
- Evaluation:
 - Tested push force on ramps, since all beds and stretchers are not motorized
 - Tested initial and sustained force on longest ramp
 - Validity testing performed on bed, stretcher and wheelchair.
 - Started with 300 lbs. (average weight of patient) and decreasing by 50 lb. increments.
- Weight decreased until maximum recommended push force for male and female population identified*
- Sustained push force of empty bed or stretcher up the ramp exceeds standard for female population if performing more than once in an eight-hour shift*
- Sustained push force up the ramp for 250 lbs. in a wheelchair exceeds standards for female population if performing more than once in an eight-hour shift*



Ergonomic Recommendations

- Recommendations:
 - Purchase car extractor to eliminate manual car transfers
 - Wheelchair movers or motorized wheelchair on incline ramp for patients over 200 lbs.
 - Powered stretchers for all cross-campus transfers due to sustained push force on ramps
 - Bed movers or motorized beds for all cross-campus transfers due to sustained push force on ramps
- Following ergonomic evaluation, BJC transport department was able to purchase 35 motorized stretchers

Resources: Liberty Mutual MMH Tables, commonly known as “Snook Tables,” outline maximum acceptable weights and forces for the design of various manual material handling tasks. The tables provide design goals, in pounds of weight or force, that are deemed to be acceptable to a defined percentage of the population.

**Per Liberty Mutual Snook Table*

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Laura Chadbourne, Laura.Chadbourne@bjc.org
Michelle Taylor, Michelle.Taylor@bjc.org