An Atlas Ergonomics White Paper

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Safe Patient Handling Program: Addressing Knowledge and Culture to Achieve Success

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Introduction

Safe patient handling equipment may not provide a complete solution. Knowledge and culture within a facility may be a barrier to success.

Data Collection

The process used to collect data within a health care facility.

Participants

459 employees and management from 15 units were surveyed for the study. The characteristics of the population and involved in this project are presented.

Results

The exposure and outcomes related to patient handling activities are provided. Results of knowledge and compliance surveys are presented.

Discussion

A review of the results and the illustration of the need to address knowledge and culture to optimize a safe patient handling program.

Bibliography

A list of the research articles referenced throughout the paper.

INTRODUCTION

A recent report by the Bureau of Labor Statistics (BLS) shows that health-care workers have injury rates that equal or exceed rates in other industries that are traditionally considered hazardous (see Table 1). The total cost of such injuries is unknown, but in 2000, the U.S. Veteran's Administration spent over $23 million (US) for job-related injuries related to patient care (VHA, 2001). The prevalence of low-back pain in nursing personnel has been reported at rates between 30 and 60 per cent (Lagerstrom et al, 1998; Nelson et al, 2003; Videman et al, 2005), with this issue being identified as a major reason why nurses leave their profession (Nelson et al, 2003).

Table 1: Bureau of Labor Statistics
Non-Fatal Occupation Injuries and Illness Involving Days Away from Work (per 10,000 employees)

Occupation	Sprains/Strains & Tears	Low Back Injuries	Shoulder Injuries
Nursing Aides, Orderlies and Attendants	280.8	185.2	35.9
Emergency Medical Technicians	217.8	121.7	22.3
Stock and Material Handlers	168.6	93.3	32.3
Truck Drivers, Heavy & Tractor Trailer	168.7	78.3	33.2
Transportation Ticket Agents and Travel Clerks	169.3	75.2	24.4

Musculoskeletal disorders in health-care workers have been attributed in large part to patient transfer and lifting activities. For areas of the body that are most often affected by patient handling activities (i.e. shoulders, low back), the injury rates continue to indicate that health-care employees are in one of the highest risk work categories (see Table 1). Research studies focusing on the biomechanics of the patient handling techniques have shown that these activities place high levels of compressive force on low-back structures, far exceeding the lifting limits recommended by the U.S. National Institute of Occupational Safety and Health (NIOSH) (Garg, 1999). A study by Marras et al (1999) found that virtually all manual transfer techniques, whether with one or two persons, placed employees at a high risk of developing a low back disorder. The conclusion of this study was that mechanical lift assist devices are necessary to effectively reduce the risk associated with manual handling and transfers of patients.

The high injury rates seen in the health-care sector have created a focus on developing solutions to help reduce the frequency and cost of these injuries. Waters et al (2006), in a NIOSH review of the status of the health-care sector, found significant scientific evidence that occupational risk factors exist and that effective interventions are available to reduce the risk to these workers. Various interventions have been implemented to reduce back and other musculoskeletal disorders including worker education programs, physical conditioning or exercise, disability management, organizational policies and use of mechanical lifts or other patient transfer equipment (Hignett, 2003).

Because biomechanical exposures are thought to contribute greatly to the high rates of musculoskeletal injuries in health-care workers, mechanical patient handling and transfer devices have been a major focus of efforts for prevention. Fujishiro K et al (2006) found that ergonomics consultation and financial support for implementing mechanical patient handling equipment can be effective in reducing MSDs among health-care workers; the median MSD rate decreased (pre- to post-intervention) from 12.32 to 6.64 per 200,000 employee-hours, a decrease that was found to be significant for the study period (1999-2003).

Although patient handling equipment appears to have a positive impact on injury rates, studies that have reviewed the implementation of new patient handling equipment that involved strictly installation and employee training have shown moderate to inconclusive benefits in reducing injuries, lost work days, and workers compensation costs (Li, 2004; Evanoff, 2003; Tiesman, 2003). The most consistent approach that has been shown to effectively address injuries and costs within a health-care setting are multi-component and participatory patient handling programs (Collins, 2004; Carrivick, 2001; Carrivick, 2002; Evanoff, 1999).

The multi-component and participatory approaches presented in literature all included the implementation of mechanical lift assists as part of the process, but they also included elements that continuously involved employees in understanding risk, developing solutions, and leading the implementation process. Several studies specifically note that the use of peer leaders, coaches, or change agents from within the organization was critical to the success of the program (Stenger et al, 2007; Nelson et al, 2006; Knibbe et al, 2007). The use of these internal resources provides a level of acceptance and credibility that helps an organization shift its culture from manual lifting to no lifting.

As health care facilities evaluate the feasibility of implementing a safe patient movement and handling program, questions begin to arise as to the methods of effectively justifying, planning, and implementing a successful program. These studies on multi-component and participatory programs highlight the fact that the

provision of patient handling equipment within an organization is not just a purchase, but a move towards minimal lift or zero lift programs that represent a cultural shift within an organization that requires a programmatic approach for successful implementation.

Given the scope of the multi-component programs described in the literature, a challenge that exists for a healthcare facility is the justification of both financial and employee resources. This paper presents a process used to measure three key factors that define the needs and approach for a facility. The process is illustrated using data collected at a single hospital with over 2000 employees. The following variables were measured to determine the appropriate approach for this facility:

1. Exposure – to determine the frequency and location of patient handling activities.
2. Outcomes – to determine the human and financial costs associated with manual handling and transfer of patients
3. Knowledge and Compliance – to determine the preparedness of a workplace to adopt safe work procedures.

The measures of exposure and outcomes are common variables that are used to develop a justification for implementing a SPMH program using mechanical lift assists. The measure of knowledge and compliance is included in this paper to provide insight into the cultural conditions within a facility, and how these may impact the successful implementation of a program. The complete picture created by this data is presented to illustrate the factors that must be considered to successfully justify, plan, and implement a safe patient movement and handling program.

DATA COLLECTION

The measures of exposure, outcome, knowledge, and compliance were assessed through reviews of records and surveys of management and employees. Four sources of data were used to highlight the current conditions within the hospital:

1. Exposure: Management Survey
2. Outcomes: OSHA 300 Logs, Discomfort Survey
3. Knowledge and Culture: Employee Questionnaire

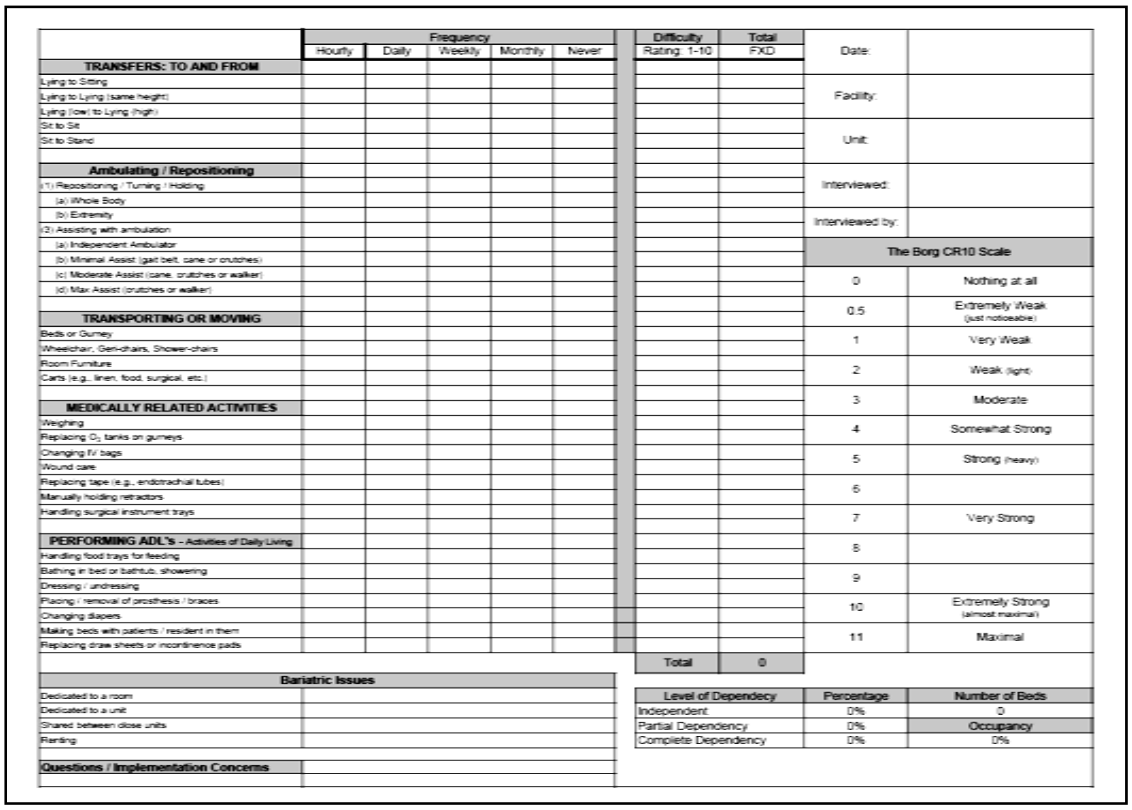
MANAGEMENT SURVEY

In looking at the risk that is present within each unit, it is important to gather measures of what types of activities employees are exposed to. Managers or key operational personnel from each unit were interviewed for approximately 20-30 minutes to determine the frequency in which certain tasks are performed, the perceived effort required to perform these tasks and the dependency level of patients typically cared for on the unit.

A questionnaire (see Figure 1) was used to collect data on a standard list of patient handling and care related tasks. For each task the manager was asked to rate how frequently the activity occurs within the unit. Next, the perceived effort for completing this task was rated on an 11-pt standardized Borg Scale. The measures of frequency and effort were used to determine the degree of exposure to patient handling activities present in each unit. Finally, managers were queried about the level of patient dependency experienced on the unit.

OSHA 300 LOG REVIEW

The OSHA 300 Logs provide a historical view of the frequency and severity of injuries that occur within a facility. OSHA logs from the years 2005-2007 were collected and reviewed for this project. In order to target patient handling activities, only those incidents that contained descriptions of injuries referring to patient handling were highlighted for further review. For each incident that occurred within a unit the number of restricted work days (RWD) and lost work days (LWD) were collected as indicators of the severity of the injuries. Each measure collected from the OSHA 300 log was converted to a rate (# injuries/100 FTE) to allow for comparison of data across departments.



	Frequency					Difficulty	Total
	Hourly	Daily	Weekly	Monthly	Never	Rating: 1-10	FXD
TRANSFERS: TO AND FROM							
Lying to Sitting							
Lying to Lying (same height)							
Lying (low) to Lying (high)							
Sit to Sit							
Sit to Stand							
Ambulating / Repositioning							
(1) Repositioning / Turning / Holding							
(a) Whole Body							
(b) Extremity							
(2) Assisting with ambulation							
(a) Independent Ambulator							
(b) Minimal Assist (gait belt, cane or crutches)							
(c) Moderate Assist (cane, crutches or walker)							
(d) Max Assist (crutches or walker)							
TRANSPORTING OR MOVING							
Beds or Gurney							
Wheelchair, Geri-chairs, Shower-chairs							
Room Furniture							
Carts (e.g., linen, food, surgical, etc.)							
MEDICALLY RELATED ACTIVITIES							
Weighing							
Replacing O_2 tanks on gurneys							
Changing IV bags							
Wound care							
Replacing tape (e.g., endotracheal tubes)							
Manually holding retractors							
Handling surgical instrument trays							
PERFORMING ADL's - Activities of Daily Living							
Handling food trays for feeding							
Bathing in bed or bathtub, showering							
Dressing / undressing							
Placing / removal of prosthesis / braces							
Changing diapers							
Making beds with patients / resident in them							
Replacing draw sheets or incontinence pads							
						Total	0

Bariatric Issues	
Dedicated to a room	
Dedicated to a unit	
Shared between close units	
Renting	
Questions / Implementation Concerns	

Date:	
Facility:	
Unit:	
Interviewed:	
Interviewed by:	

The Borg CR10 Scale	
0	Nothing at all
0.5	Extremely Weak (just noticeable)
1	Very Weak
2	Weak (light)
3	Moderate
4	Somewhat Strong
5	Strong (heavy)
6	
7	Very Strong
8	
9	
10	Extremely Strong (almost maximal)
11	Maximal

Level of Dependecy	Percentage	Number of Beds
Independent	0%	0
Partial Dependency	0%	**Occupancy**
Complete Dependency	0%	0%

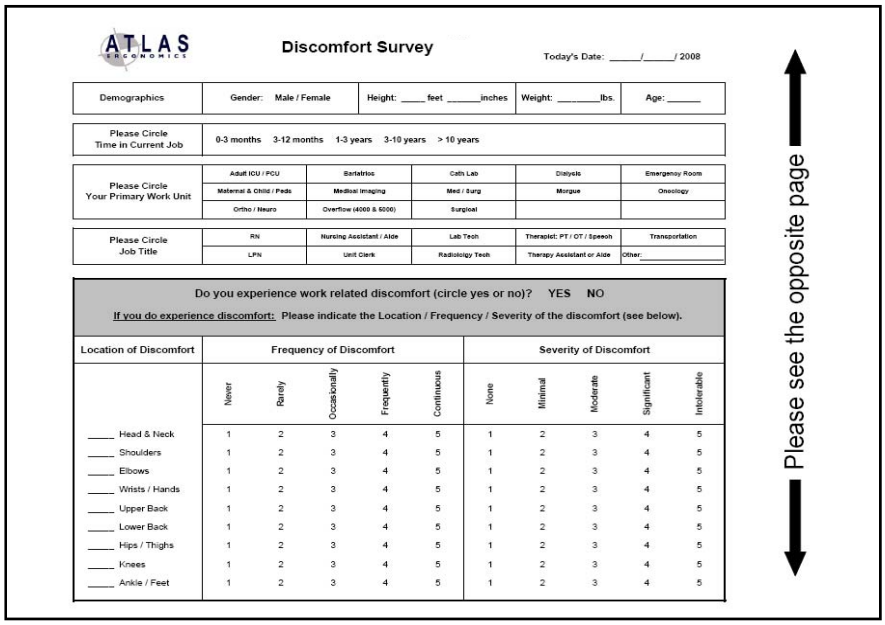
Figure 1: Management Survey

DISCOMFORT SURVEYS

Discomfort data provides a view into the status of all employees at the time of the project. Research has shown that employees that are working at high to extreme levels of discomfort have an elevated probability of reporting a recordable injury. Therefore, collecting discomfort data provides a measure of the current level of risk of injury present with a unit.

A discomfort survey (see Figure 2) was provided to each unit, and employees were provided a minimum of 48 hours to complete the surveys. All surveys were collected and entered into a database for analysis and review. Each survey contained questions to identify demographic information about the employee (e.g. gender, age, height, weight, tenure, and unit), and questions to determine if the employee is experiencing any discomfort related to work. If an employee is experiencing discomfort, then they were asked to rate the frequency and severity of the discomfort for each body part of concern. Discomfort is assessed using a

health index which is a combination of frequency and severity of symptoms on a 5-point scale.



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Discomfort Survey

Today's Date: _____/_____/ 2008

Demographics	Gender: Male / Female	Height: ____ feet _____inches		Weight: _____lbs.	Age: _____
Please Circle Time in Current Job	0-3 months	3-12 months	1-3 years	3-10 years	> 10 years
Please Circle Your Primary Work Unit	Adult ICU / PCU	Bariatrics	Cath Lab	Dialysis	Emergency Room
	Maternal & Child / Peds	Medical Imaging	Med / Surg	Morgue	Oncology
	Ortho / Neuro	Overflow (4000 & 6000)	Surgical		
Please Circle Job Title	RN	Nursing Assistant / Aide	Lab Tech	Therapist: PT / OT / Speech	Transportation
	LPN	Unit Clerk	Radiology Tech	Therapy Assistant or Aide	Other: _____

Do you experience work related discomfort (circle yes or no)? YES NO

If you do experience discomfort: Please indicate the Location / Frequency / Severity of the discomfort (see below).

Location of Discomfort	Frequency of Discomfort					Severity of Discomfort				
	Never	Rarely	Occasionally	Frequently	Continuous	None	Minimal	Moderate	Significant	Intolerable
____ Head & Neck	1	2	3	4	5	1	2	3	4	5
____ Shoulders	1	2	3	4	5	1	2	3	4	5
____ Elbows	1	2	3	4	5	1	2	3	4	5
____ Wrists / Hands	1	2	3	4	5	1	2	3	4	5
____ Upper Back	1	2	3	4	5	1	2	3	4	5
____ Lower Back	1	2	3	4	5	1	2	3	4	5
____ Hips / Thighs	1	2	3	4	5	1	2	3	4	5
____ Knees	1	2	3	4	5	1	2	3	4	5
____ Ankle / Feet	1	2	3	4	5	1	2	3	4	5

Please see the opposite page

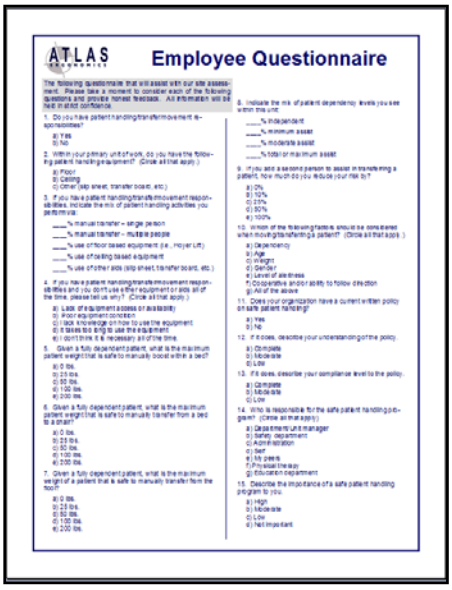
Figure 2: Discomfort Survey

EMPLOYEE QUESTIONNAIRE

In addition to the discomfort survey, employees were also provided with an Employee Questionnaire (see Figure 3). The questionnaire contained 15 questions designed to assess the employee's knowledge of such patient handling related facts such as:

- Personal responsibilities
- Dependency profile for unit
- Patient handling procedures and techniques
- SPMH policy content

In addition to the general knowledge of these facts, employees were also questioned on their level of compliance with policies and procedures and any barriers that may exist that would affect their ability to comply.



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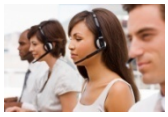
Employee Questionnaire

Figure 3: Employee Questionnaire



PARTICIPANTS

The acute care facility that participated in this study had 2458 employees and a total of 749 beds across all of its units. The facility had an average occupancy level of 75%.

The surveys submitted to management had a 100% response rate as these surveys were administered in-person. Conversely, the employee surveys were provided to the individual units and the employees were instructed to complete the surveys within 48 hours. Due to the length of the survey time and the preparedness of some of the units for participation in the study, the response rate for the employee surveys was 19.8%.

Therefore, this study used information obtained from 487 surveys that were returned by employees. An additional 5 units with a total of 28 employees were removed from the assessment as they did not involve patient handling activities. This left a subject pool of 459 employees in 15 units. Table 2 provides a list of these units, the number of employees within each unit, and the percent of the study population (out of 459) that this represents.

Table 2: Employee Distribution by Unit

Number	Percent of Population	Unit
33	7%	Adult ICU/PCU
10	2%	Bariatrics
7	1%	Dialysis
7	1%	PCU & Med/Surg
17	3%	Emergency Room
25	5%	Maternal & Child/Peds
4	1%	Interventional Rad.
145	30%	Medical Imaging
56	11%	Med/Surgical
8	2%	Rehabilitation
15	3%	Cath. Lab.
63	13%	OP Surgery
4	1%	Ortho/Neuro
13	3%	PACU
52	11%	Surgical

The average age of the employees within the study population was 41 with a standard deviation of 12. The distribution of gender was 84% female and 16% male. The average height of the population was 5'2" with a standard deviation of 16". The average weight of the population was 160 lbs with a standard deviation of 39 lbs. This information provides an average profile of a 41 year old female, 5'2", 160 lbs, with a BMI of 23 (normal weight).

RESULTS

PATIENT HANDLING EXPOSURE

Several of the questions contained within the management and discomfort surveys were designed to provide a measure of the level of exposure to patient handling that occurs within a facility. By determining such factors as dependency occupancy, and the methods by which patients are moved, it is possible to develop a picture of how frequently an employee must manually move or transfer a patient. Figure 4 provides an estimation of the level of dependency of the patients within the facility during their hospitalization. These numbers indicate that at some point during their hospitalization, 26% of the population is totally dependent and will require assistance to move. Additionally, 22% of the population is moderately dependent, which indicates a reasonable probability that they will need assistance.

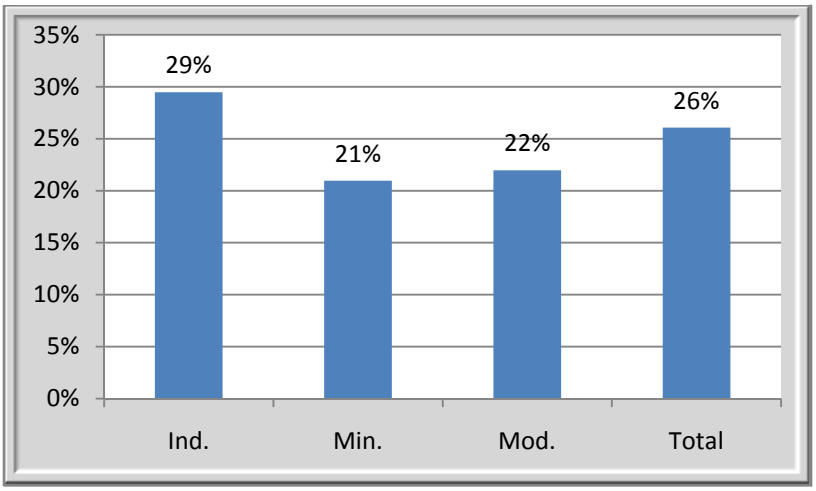


Figure 4: Estimated Dependency of Patient Population

Figure 5 provides a further breakdown of dependency by unit. This data highlights 6 units that have >50% of the patient population at moderate to total dependency during some point of their hospitalization:

1. Adult ICU/PCU – 74%
2. Dialysis – 66%
3. Rehabilitation – 79%
4. Op Surgery – 57%
5. Ortho/Neuro – 66%
6. Surgical – 65%

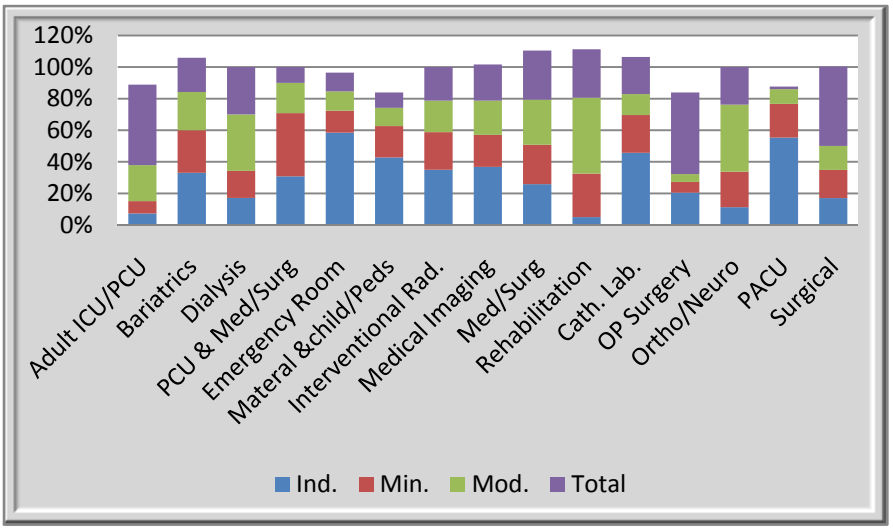


Figure 5: Estimated Dependency of Patient Population by Unit

The data on occupancy and dependency provides an indication that patient handling activities are significant for many of the departments. Figure 6 provides a measure of the types of assistive equipment that is available for the employees. The data shows that very few employees have access to powered patient handling assistive equipment. The "Other" category refers to slip sheets and similar friction reducing assists. Therefore, the majority of the patient movement and transfers that occur in this facility are performed manually.

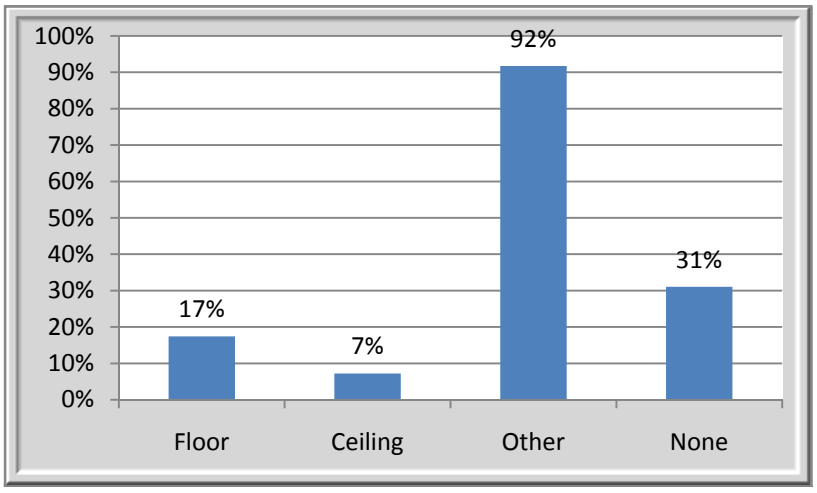


Figure 6: Availability of Patient Handling Assistive Devices

Additional detail is provided in Figure 7, where the distribution of patient handling equipment across units is illustrated. The predominant method of transferring or moving patients appears to be with basic non-mechanical assists or with no assists at all.

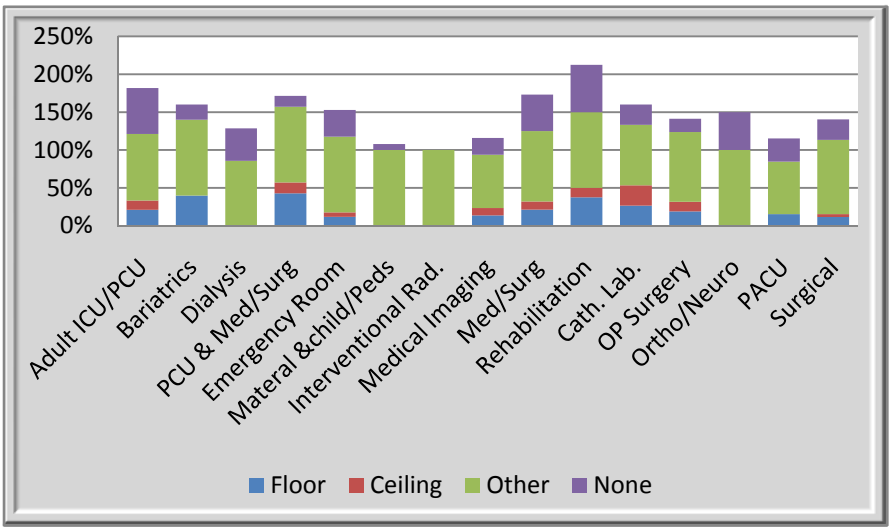


Figure 7: Availability of Patient Handling Assistive Devices by Unit

Figure 8 provides further illustration of the prevalence of manual transfers and lifting activities. Approximately 7% of the patient handling that occurs in this facility involves a mechanized assist. The remaining handling activities are performed by a single individual (24%) or in a team (39%), which may involve the use of simple assists (46% of transfer activities).

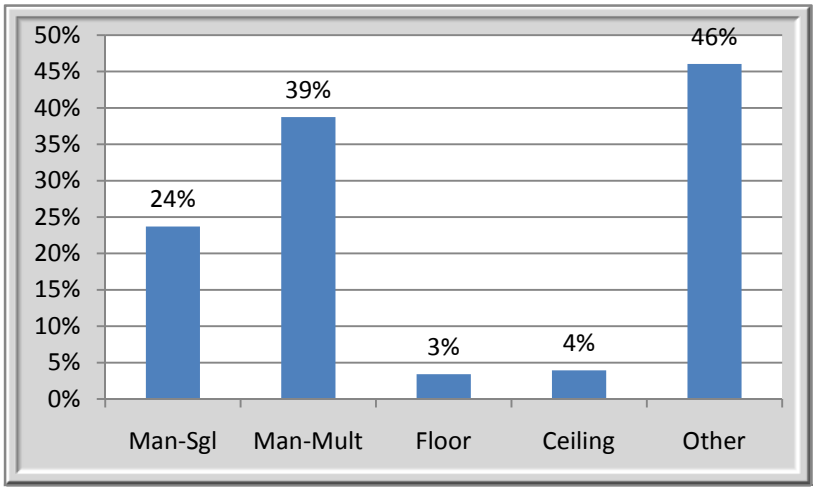


Figure 8: Frequency and Type of Patient Handling Activity

Registered nurses, nursing assistants and aides, and radiology techs represented 88% of the study population, and had significant patient handling responsibilities. As noted in Figure 9, these groups had almost zero utilization of mechanized patient handling equipment and therefore a significant level of manual patient handling activity.

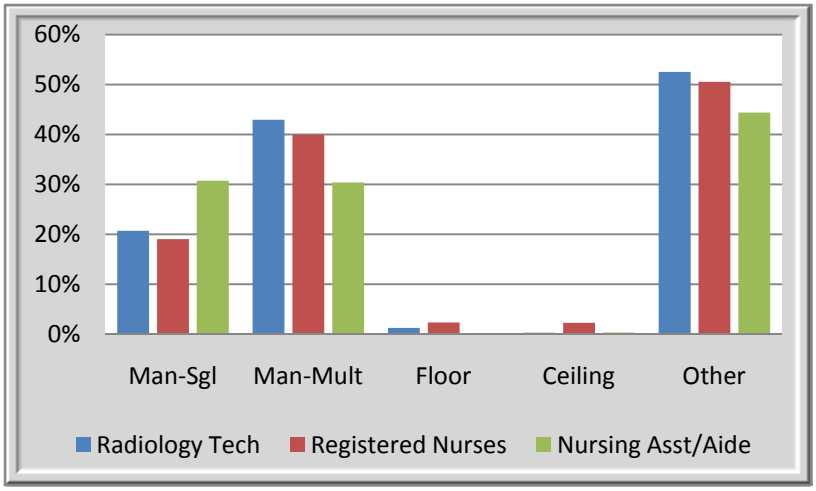


Figure 9: Frequency and Type of Patient Handling Activity by Job Title

The exposure data presents a picture of high patient handling activity based on the occupancy level of the facility and the dependency level of the patients within the studied units. Further, the type of patient handling activity is largely manual due to the low availability of equipment and the general practices of the employees with heavy patient handling responsibilities.

PATIENT HANDLING OUTCOMES

The two primary outcomes that were assessed in this study were historical injury data and discomfort; these measures provide a view of past outcomes and potential future concerns.

Table 3 provides a summary of the injury statistics over a 3-year period from 2005-2007. The table presents the total injuries, restricted work days, and lost work days seen within the facility. The OSHA logs were thoroughly reviewed to determine which injuries were related to patient handling activities; a summary of these injuries and the percentage of the total are provided. It should be noted that there were many additional overexertion and repetitive strain injuries noted in the logs, but the focus of this assessment was primarily on the patient handling related incidents.

Table 3: OSHA 300 Log Data for 3 Years (2005-2007)									
	Injuries			Restricted Workdays			Lost Workdays		
	Total Injuries	Patient Handling Related	Percent of Total	Total RWD	Patient Handling Related	Percent of Total	Total LWD	Patient Handling Related	Percent of Total
Total	**2,408**	**330**	**13.7%**	**13,195**	**2,937**	**22.3%**	**1,806**	**545**	**30.2%**

As can be seen in the data, the number of patient handling related incidents was 13.7% of the total frequency, which may indicate a relatively small concern for an organization. The measures of severity provided in the logs show that the impact of these incidents is quite high as shown by the percentage of restricted work days (22.3%) and lost work days (30.2%).

The financial impact of these injuries was tracked and provided by the facility. At the point the data was collected, the total costs to the organization were $1,609,005, which results in an average cost per claim of $4,875. These numbers do not take into account any indirect costs associated with these claims; organizations such as Liberty Mutual and OSHA have estimated that indirect costs may be 3-7 times the value of the direct costs.

As a measure of the employee concerns that may lead to future costs to the organization, the prevalence of discomfort within the hospital was assessed. Figures 10 and 11 present summaries of this data indicating the percentage of employees experiencing discomfort, and the percentage of employees experiencing high to extreme levels of discomfort respectively. In Figure 10, 13 out 14 units had >50% of their employees indicating they have discomfort; in total, 74% of the study population noted some level of discomfort. As a measure of the severity of the symptoms, Figure 11 shows that 44% of the units had >50% of their employees with high to extreme discomfort (FxS>10); a total of 44% of all employees in the study had high to extreme levels of discomfort. This portion of the population represents a pool that is at elevated risk of an injury if the discomfort is not addressed.

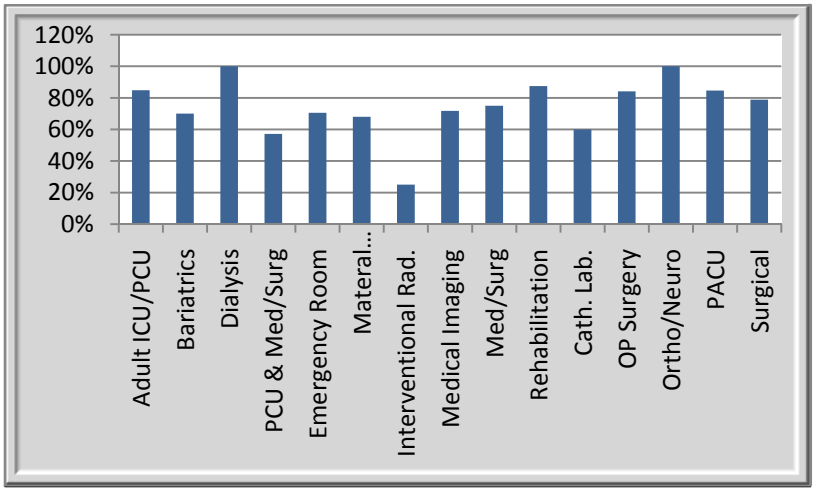


Figure 10: Prevalence of Discomfort vs. Unit

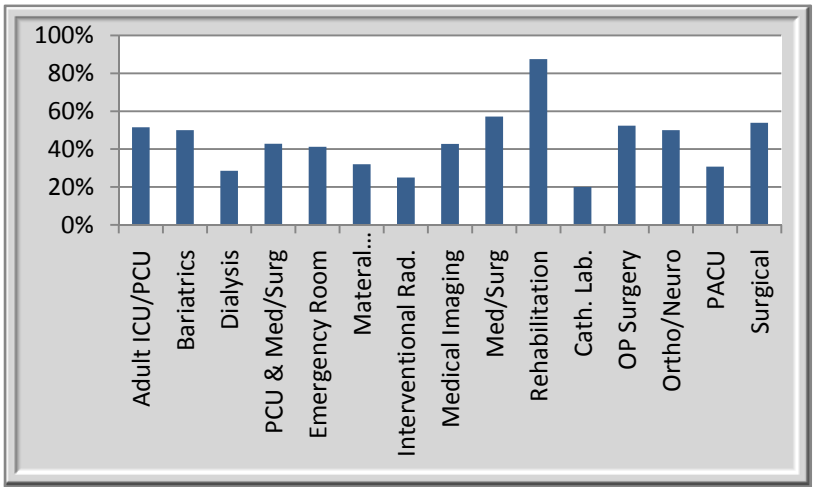


Figure 11: Prevalence of High/Extreme Discomfort vs. Unit

One final factor indicator of the potential stress related to patient handling is to review the body parts that are most significantly noted to have discomfort. Body parts such as the shoulder and low back are the most common areas that may be affected by patient handling activities. As seen in Figure 12, the shoulders and low back have the 2nd and 3rd highest average discomfort values. These high values indicate that significant stress is consistently noted by employees across the facility. Ankles and feet are the number one location of discomfort, which is related to the nature of the tasks in a hospital (i.e. predominately standing and walking on hard floor surfaces).

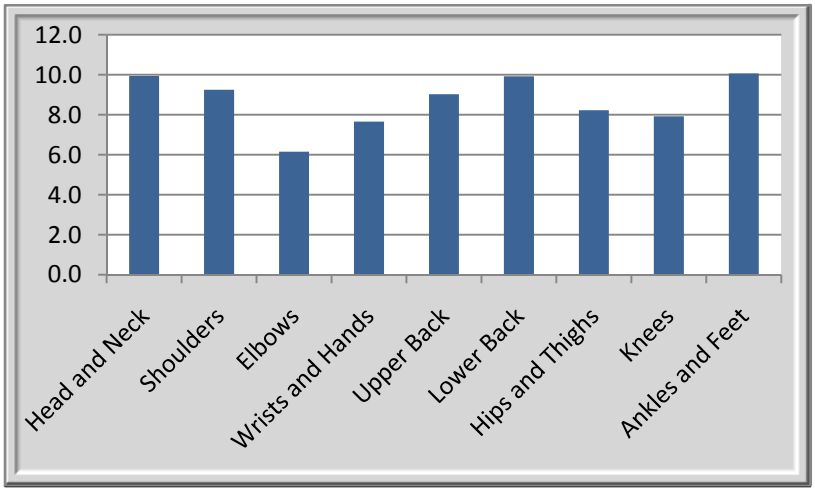


Figure 12: Average Discomfort by Body Part

SAFE PATIENT HANDLING PROGRAM KNOWLEDGE AND COMPLIANCE

The final set of measures collected during the study surveyed employees on their knowledge of safe patient handling, the current policy, and their level of compliance with this policy. Within the study group, 99% of employees noted that they had some level of responsibility to handle or move patients. Given the predominance of this task, the employees were asked to rate their perceived importance of a safe patient movement and handling program. Figure 13 illustrates that 91% of the population feels that this program is important for the hospital. This outcome provides insight into how receptive employees will be to any changes that will occur to address the exposures and outcomes noted in this paper.

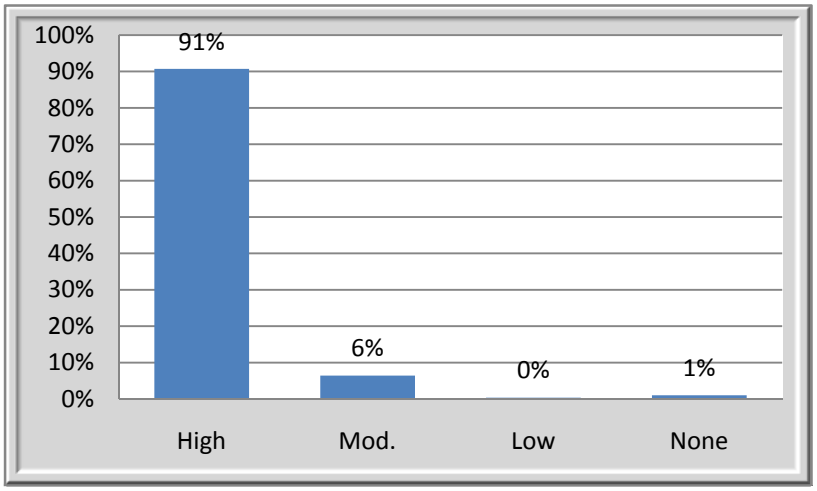


Figure 13: Importance of SPMH Program

The facility used in this study had a written safe patient handling policy that laid out the procedures and responsibilities for implementing the SPMH program; 96% of the employees indicated that they were aware that the hospital had an active policy. When asked who was responsible for implementing this policy, 69% of employees (see Figure 14) indicated "self" as one of their answers (employees could circle all that apply). Since 99% of employees perform patient handling activities, 30% of the population is not taking responsibility for implementing a program that applies directly to their activities.

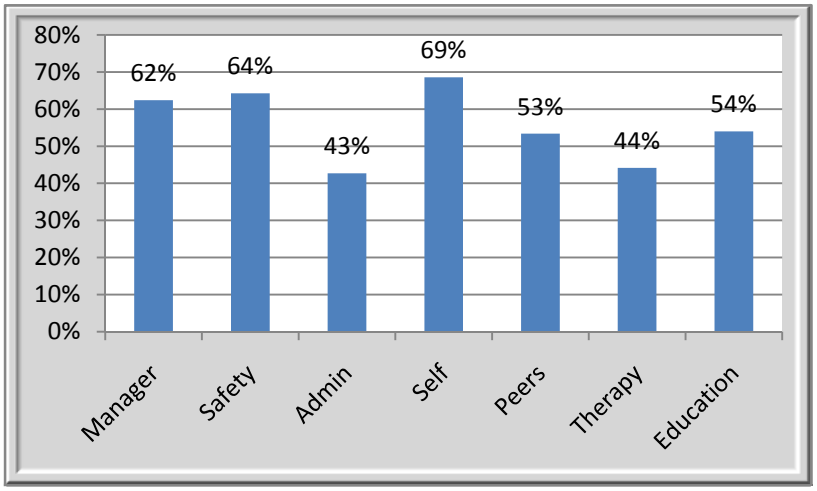


Figure 14: Importance of SPMH Program

Given that this gap in process exists, the next questions focusing on understanding and compliance with the safe patient handling policy become increasingly important. Figure 15 illustrates that less than 50% of the employees have either a complete understanding of the existing policy or comply with it. The concern raised by these results is that that while employees acknowledge a need for a program, a cultural gap surrounding personal responsibility appears to exist.

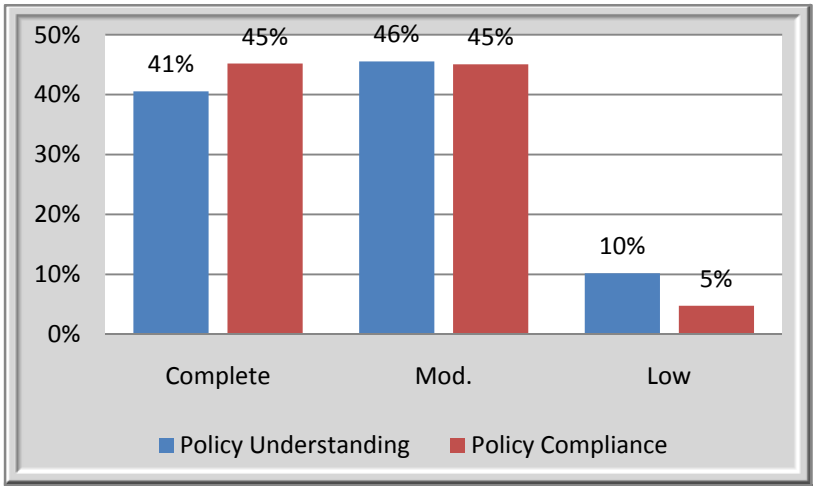


Figure 15: Importance of SPMH Program

If the program specifies that certain techniques or equipment are used to perform a patient handling task safely, then a subsequent question that can be asked is why the available lift assists are not used by the employee. Figure 16 illustrates the reasons that employees provided for not using the assists. The responses that indicate "availability" and "condition" highlight a deficiency in the facilities infrastructure to support a safe patient handling process. The solution options that are available in the units are not sufficient to meet the needs of the employees; this fact has already been indicated in Figures 6 and 7. The remaining reasons provided by the employees (i.e. knowledge, too long, and necessity) point towards potential gaps in training, or possibly a cultural issue that must be addressed.

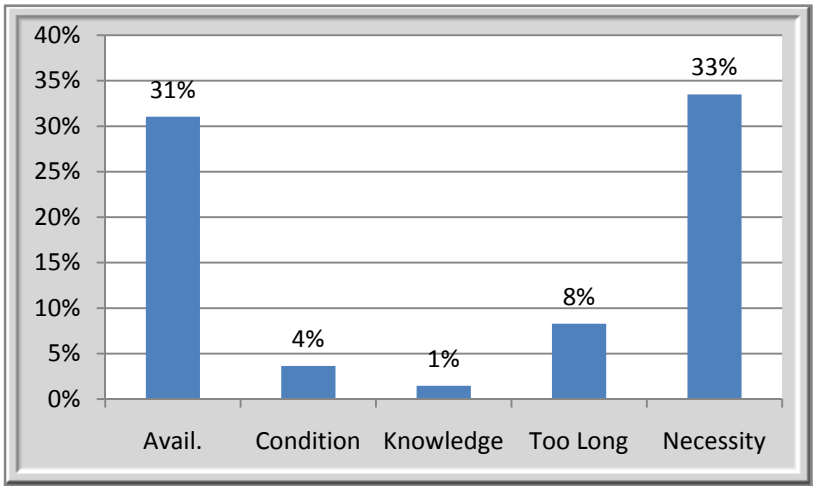


Figure 16: Reasons for Not Using Available Lift Assists

To further illustrate the potential gap in knowledge (towards safe lifting) that may exist within the population, Figure 17 presents a list of questions that were presented to employees regarding safe lifting conditions. Employees were asked to indicate if they felt it was safe to lift a fully dependent patient of various weights under three conditions: boost, bed to chair transfer, and floor to bed transfer. The data illustrates that over 33% of employees felt that manually moving a 100 lb patient is safe to perform and 11-27% of employees indicated that 200 lbs was safe depending on the transfer. In an industrial environment, manual lifting and carrying of loads of these weights would generally be considered unsafe, and employees would refuse to do so. It is apparent that the culture and mentality within a hospital environment (i.e. necessity of task), leads to an attitude that unsafe loads are safe to handle.

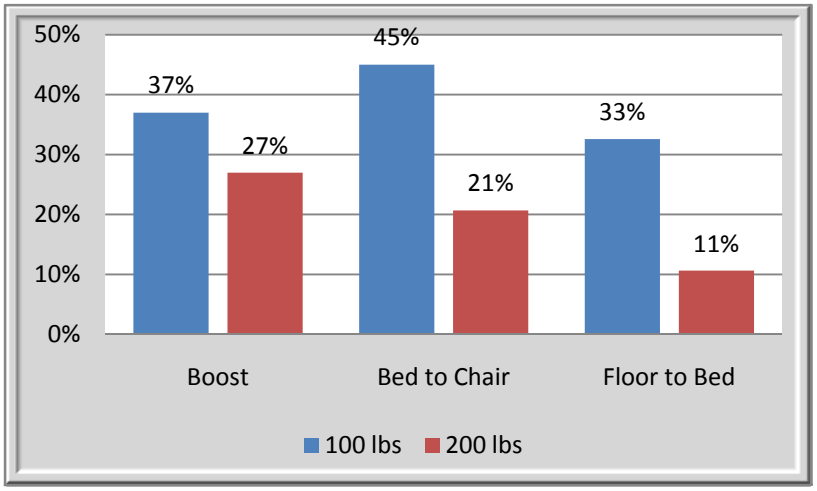


Figure 17: Patient Handling Lifting Limits (% Acceptable)

DISCUSSION

The data collected during this study of a single institution provided a picture of exposure and outcomes that clearly demonstrated a need for a change in the patient handling policy and approach. The number of lost workdays and restricted workdays related primarily to patient handling activities illustrates the severity of the conditions within the facility. The costs associated with these injuries provide a level of financial justification that can be used to determine a return on investment for purchasing mechanical patient handling equipment. As seen within the study population's policy knowledge and compliance data, the current mindset within the facility does not lend itself towards the effective utilization of a new lift system without a process to ensure complete integration, development of knowledge, and assurance of compliance.

The outcome data provides the risk and financial justification for the equipment, but the dollars that are spent to install new equipment can only realize a positive return on investment if the equipment is used consistently and correctly. These factors relate to two key measures that were included in the final phase of questioning: knowledge and compliance.

The knowledge data illustrated that employees need to have a better understanding of what is considered a safe lifting practice. Lifting 100-200 lbs should not be considered acceptable in any way, and an understanding of the risk associated with manual lift techniques (Marras et al, 1999) can provide employees with further guidance on why the shift towards a no lift policy is critical. As Figure 18 illustrates, employees are considering many factors when determining if and how to move or transfer a patient. This information, in conjunction with the attitudes demonstrated in Figure 17 illustrates the need for structuring this decision process to ensure consistency and safety. A method to provide consistent and correct decision processes is to provide algorithms to outline when patient handling equipment should be utilized. This approach was one of the core elements of the program outlined by Nelson et al (2006).

Once the new equipment is in place and the knowledge transfer has occurred, the final piece of the program that will significantly affect success is compliance. As noted in this study, over 50% of employees do not have complete knowledge of the current policy, nor do they comply with it. As the program becomes more sophisticated with the use of mechanical lift assists, and the expected outcomes of the new program rise, the need for understanding and compliance is even more critical.

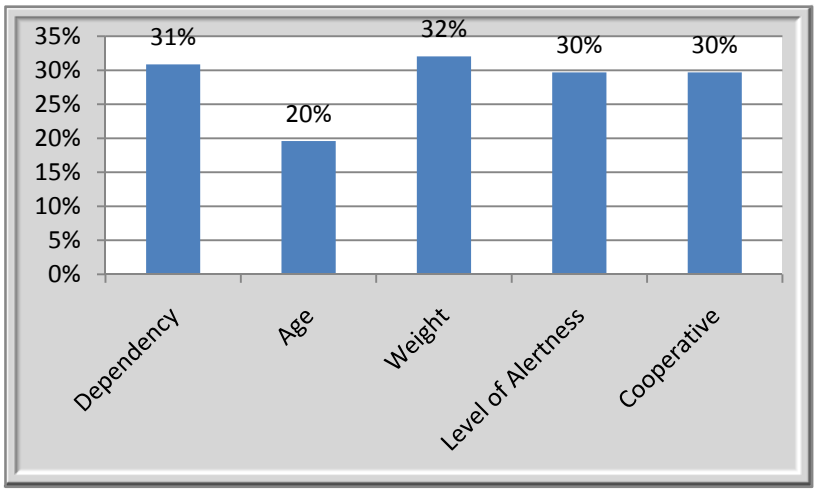


Figure 18: Decision Criteria for Method of Transferring Patient

A final program element that should be considered to ensure that the new SPMH program is effectively implemented is to incorporate periodic competency and compliance audits. A SPMH is not simply about new equipment – it is about the employees and the patients. Just as equipment is routinely inspected to ensure proper operation, the core of the SPMH program, the employees, must be periodically inspected to ensure they are operating correctly. With all the components of the program working effectively, the return on investment can be maximized.

Any questions or comments related to this paper should be directed to info@atlasergo.com

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