Ontario Safety Association for Community & Healthcare

OSACH Handle with Care™

A Comprehensive Approach to Developing and Implementing a Client Handling Program

Resource Manual • Third Edition

OSACH Handle with Care: A Comprehensive Approach to Developing and Implementing a Client Handling Program Resource Manual

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This resource is dedicated to the healthcare professionals who strive to make their work sites and communities safer and healthier places in which to work.

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Introduction

The Ontario Safety Association for Community & Healthcare (OSACH) is committed to preventing and reducing injuries and illnesses in health and community care by providing programs, products and services that support the internal responsibility system and self-reliance in the workplace. In demonstrating this commitment, OSACH is proud to introduce the revised edition of the Transfer and Lifts for Caregivers program titled, *OSACH: Handle with Care™ – A Comprehensive Approach to Developing and Implementing a Client Handling Program*. This program focuses on the client handling aspect of musculoskeletal skeletal disorder (MSD) prevention and identifies a step-by-step approach to policy and program development in a variety of health and community care settings.

This section sets out the purpose, goals and objectives of the *OSACH: Handle with Care*™ program. It also provides an overview of the program and a summary of key program elements.

Purpose

The purpose and intent of this document is to provide awareness, information and guidance to community and health care workplace parties, health and safety professionals, and other stakeholders in:

- Understanding the significant issues related to client handling
- Understanding the rationale for implementing a client handling injury prevention program in the workplace
- Preventing workplace injuries through recognition, assessment and control of client handling risk factors
- Developing and implementing a prevention program strategy and action plan

We recommend a multidisciplinary and participative approach to all aspects of client handling injury prevention program planning, implementation and maintenance. Involvement of management, employees with front-line knowledge of job tasks and activities, joint health and safety committee (JHSC) members, union representatives, health and safety professionals and other stakeholders is essential for a successful client handling injury prevention program.

This resource manual will also provide organizations with a summary of Ontario legislation, standards and guidelines that are relevant to client handling injury prevention. This information will assist your organization in understanding their legal obligations associated with developing and implementing a client handling prevention program.

OSACH: Handle with Care has been developed to complement *OSACH: A Planning Guide for the Implementation of Client Mechanical Lifts* for those workplaces using devices such as portable or ceiling lifts.

Goals and Objectives

A client handling prevention program is an important component of an overall Occupational Health and Safety Program. *OSACH: Handle with Care* is a control program that goes beyond training caregivers in client transfers, lifts and repositioning techniques. This program assists employers and caregivers to recognize, assess, control and evaluate the workplace hazards with respect to the handling of clients (Figure 1).

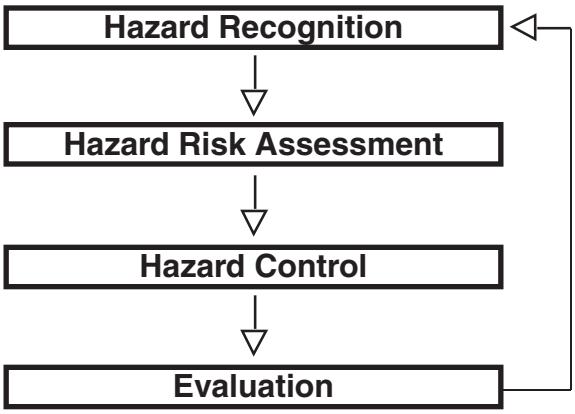


Figure 1: Health and Safety Hazard Management Flow Chart

This program enables organizations to standardize the approach to client handling techniques through a comprehensive policy and supporting program designed to reduce the risk of musculoskeletal disorders (MSDs) among caregivers.

Training staff in the proper client assessment and handling techniques is only one part of a comprehensive MSD prevention program. Job factors and workplace design must also be examined. Tools, equipment, jobs and the environment must be compatible with the capabilities of the workers. Improving the design of jobs and the work environment improves the workers' health and safety and reduces their fatigue, discomfort and long-term disability.

The *goals* of the *OSACH: Handle with Care* program are to:

- Promote high standards of care for the client by promoting consistent and safe use of client handling techniques and equipment
- Protect both caregivers and clients from injury
- Provide a step-by-step approach to program planning, development and implementation
- Provide resource materials for an effective client handling injury prevention and education program

The *objectives* of the *OSACH: Handle with Care* program are to:

- Promote maximum participation and independence in client handling procedures
- Enable caregivers to continually assess all client handling risk factors and select appropriate client handling techniques
- Enable caregivers to problem solve client handling issues
- Promote consistent use of client handling techniques and proper use of equipment
- Promote caregiver communication with clients and other caregivers during client handling assessment and procedures
- Promote safe body mechanics
- Promote consistent documentation for client handling

The *OSACH: Handle with Care* program is designed for any caregiver who handles and repositions clients. This includes caregivers in:

- Hospitals
- Group homes and community living associations
- Long-term care facilities
- Residential care facilities
- Daycare organizations
- Community medical, rehabilitation and dental clinics
- Community care agencies
- Supportive housing and attendant services
- Schools with mentally or physically challenged students

Overview of the Manual

This OSACH resource manual is comprised of seven modules.

Module 1: Background

This section provides insight into the challenges facing the health care and community care industry related to client handling and the rationale for developing and implementing a comprehensive client handling injury prevention program that is evidence-based.

Module 2: Legislation

This section outlines the relevant legislation and standards that support the development and implementation of a client handling program.

Module 3: Program Development and Implementation

The five steps in program development are described in this module:

- Securing management commitment, support and leadership
- Client handling program needs assessment
- Development of program components
- Program Implementation
- Evaluation of the program

Various assessment tools are included to assist organizations in collecting, analyzing and monitoring program data.

Module 4: Client Mobility Assessment

Client handling definitions, client assessment procedures and strategies are presented in this section. Various assessments of a client's mobility status that ensure the safe and appropriate selection of client handling techniques are the key focus of this module. Sample assessment forms and a new client mobility assessment algorithm are provided.

Module 5: Repositioning and Transfers

This module outlines various types of repositioning and transferring procedures, and step-by-step instructions on how to perform each procedure. It describes transfer

equipment and assistive devices that can be used to enhance the safety of the procedures for both staff and clients. This section presents the OSACH: Handle with Care communication logos for transfer and repositioning. It also includes the new client mobility assessment algorithm for transfers to guide caregivers in the selection of safe transfer procedures.

Module 6: Client Lifts, Sliding and Lifting Devices

This section outlines various manual lifting techniques and the safe use a mechanical lift. It outlines the use of a mechanical lift as the preferred lifting option, but with the understanding that such lifts cannot be used in some circumstances and with some clients. It also provides the OSACH: Handle with Care communication logos for lifts, and a sample pre-use equipment inspection form.

Module 7: Environment and Equipment

This module provides general information regarding transfer, lift, lateral slide and repositioning equipment and environmental design. It also outlines the employer's responsibilities related to the preventive maintenance of equipment to prevent unnecessary incidents and injuries.

Key Elements Checklist

The following outlines key elements of a patient/client handling program. By completing this table as you move through the document, you will develop an action plan.

Patient/Client Handling Safety Checklist				
Item	**Key Elements Checklist**	**Yes**	**No**	**Action**
1	**There is commitment from senior management to develop, implement and maintain a safe patient/client handling program**			
	❒ There is senior leadership commitment including financial and human resources – e.g., appointment of a program leader and development of a multidisciplinary steering committee to oversee implementation and monitoring of the program			

Patient/Client Handling Safety Checklist				
Item	**Key Elements Checklist**	**Yes**	**No**	**Action**
2	**The organization has conducted a risk assessment to assess program needs**			
	❒ Analysis of incidents, accidents and internal documents ❒ Assessment of clients' needs ❒ Assessment of equipment needs ❒ Assessment of environmental barriers ❒ Assessment of organizational safety culture			
3	**There is a documented safe patient/client handling program in place**			
	❒ Written policy demonstrating senior management commitment, goals and commitment, definitions, roles and responsibilities and commitment to annual evaluation ❒ Written procedures – e.g., client assessment, communication, safe work practices for client handling techniques, safe operating procedures for equipment, training, inspection, preventive maintenance, infection control, reporting and investigation of hazards/incidents/accidents, purchasing of equipment and devices, evaluation and quality improvement ❒ Program is developed and reviewed at least annually in consultation with the joint health and safety committee (JHSC)			
4	**There is a training program that ensures caregivers are skilled in safe patient/client handling. They have received orientation and ongoing training in:**			
	❒ Patient/client handling policies and procedures ❒ Patient/client mobility assessment, documentation & communication ❒ The organization's accepted patient/client handling procedures and techniques – e.g., transfers, lifts, lateral slides and repositioning ❒ Patient/client handling equipment – e.g., mechanical lifts, lateral sliding devices, transfer belts/ boards/disks, bed and chair repositioning devices, etc.			

Patient/Client Handling Safety Checklist				
Item	**Key Elements Checklist**	**Yes**	**No**	**Action**
5	**Patient/client mobility assessments are conducted within 24 hours of the patient/client admission and after a change in patient/client condition or status. This includes assessment of:**			
	❒ Communication (speech, vision, hearing, language, understanding) ❒ Cognition (memory, judgment, concentration, decision-making) ❒ Behaviour and emotional status (co-operation level) ❒ Medical status (condition, devices, pain, medication, skin, fatigue) ❒ Physical status (height, weight, sensation, joint range of motion, muscle strength & tone, mobility & balance, ability to weight-bear) ❒ Patient/client clothing and footwear to ensure it is appropriate for the client handling activity			
6	**Patient /client mobility assessments are documented and communicated to caregivers, e.g.:**			
	❒ Patient/client record e.g. chart, care plan, other methods ❒ Through client handling logos ❒ Verbally			
7	**Caregivers conduct patient/client mini-assessment to check for any changes in the patient/client's status**			
	❒ Change in communication ❒ Change in ability ❒ Change in resistance or co-operation, and ❒ Change in equipment and environment			

Patient/Client Handling Safety Checklist				
Item	**Key Elements Checklist**	**Yes**	**No**	**Action**
8	**Equipment is available to facilitate safe patient/client handling, and it is maintained**			
	❒ Appropriate types of equipment have been trialled and purchased ❒ Equipment purchases are based on a client mobility needs assessment and specified purchasing criteria and processes that include stakeholders and the JHSC ❒ Equipment meets standards such as CAN/CSA 10535-03, which stipulates, for example, that the patient mechanical lift equipment controls be of the "hold to run" type, requiring the caregiver to physically operate the controls ❒ An adequate amount of equipment has been purchased and is available for use ❒ An equipment inventory has been conducted and maintained ❒ There is a pre-start-up equipment inspection process in place (i.e., before initial use) ❒ There is a documented equipment preventive maintenance program in place based on manufacturer requirements, including an inventory and schedule – e.g., for batteries, slings, equipment and parts ❒ Caregivers conduct and document a pre-use inspection of equipment components prior to each use or daily use based on the manufacturer guidelines – e.g., daily mechanical lift inspection checklist ❒ There is a defective-equipment policy and procedure in place ❒ Community care providers have a client service agreement that addresses client responsibility for equipment availability, servicing and maintenance			

Patient/Client Handling Safety Checklist				
Item	**Key Elements Checklist**	**Yes**	**No**	**Action**
9	**Environment and equipment design and planning take into consideration safe patient/client handling**			
	❒ Work environment is considered – e.g., flooring surfaces appropriate for equipment, adequate lighting available, comfortable temperatures, colour contrast of surfaces to enhance client depth perception ❒ Workstation layout and workspace requirements for caregiver, clients/patients and equipment are considered – e.g., client rooms, bathrooms, tub and shower rooms ❒ Design of equipment, furniture and tools is considered to reduce the physical demands on the caregiver and ensure patient/client safety – e.g., beds, bed rails, wheelchairs, casters, transfer and lifting devices, etc.			
10	**Incident Reporting and Investigation**			
	❒ Both client/patient and employee incidents and accidents are reported and investigated promptly to identify immediate and root causes and implement timely corrective actions ❒ Equipment defects, damages and failures are reported to the manufacturer and, as required, to Health Canada			
11	**Program Evaluation**			
	❒ There is a process to evaluate the program at least annually in consultation with the JHSC, and implement quality improvements that will reduce the risk of injury to both client/patient and caregivers ❒ Quality indicators, both leading and lagging, have been selected for evaluation			

Module 1: Background

Why Handle with Care?

To gain insight into the issues and the impact of client handling injuries in the workplace, it is important to review the relevant workplace injury statistics and the current literature, and to understand the significant challenges facing the community and health care sectors.

A review of the lost-time injury (LTI) count for the Ontario community and health care sector demonstrates an overall increase in lost-time injuries from 1997 to 2003, followed by a gradual decline in the years 2004 to 2007 (Figure 2). Despite this decline, over 8,923 compensable LTIs occurred in the year 2007 for Workplace Safety Insurance Board (WSIB) rate groups served by OSACH, and 2,133 of these injuries were due to client handling (WSIB Data Source: PDM* Injury Analysis by SWA cube Snapshot date: August 31, 2008). In addition, the average cost of a WSIB claim in 2007 escalated to $21,300 (WSIB 2007) and in 2008 to 24,133 (WSIB 2008).

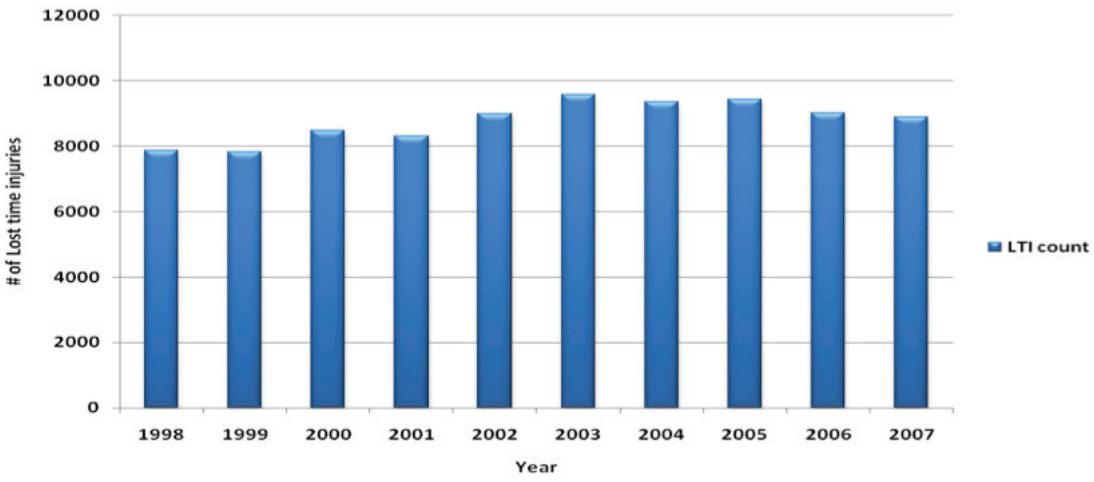


Figure 2: Lost-time Injury Count for Health and Community Care Sector
(WSIB Data Source: EIW* Claim Cost Analysis Snapshot schema, Snapshot date: July 31, 2008)

** See glossary of terms and short forms*

In 2007, the health care sector ranked third-highest for lost-time claims behind the industrial and service sectors (Figure 3).

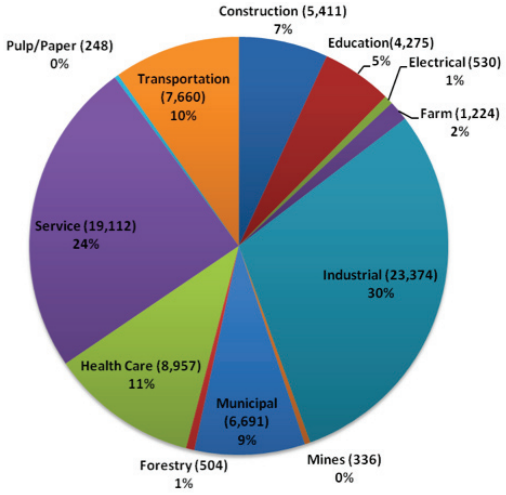


Figure 3: Lost-time Injury Count and Percentage by Sector, 2007
(WSIB Data Source: EIW Claim Cost Analysis Snapshot schema, Snapshot date: July 31, 2008)

Among all the lost-time injuries reported to Ontario's WSIB in 2007, MSDs accounted for 46 per cent. (Figure 4).

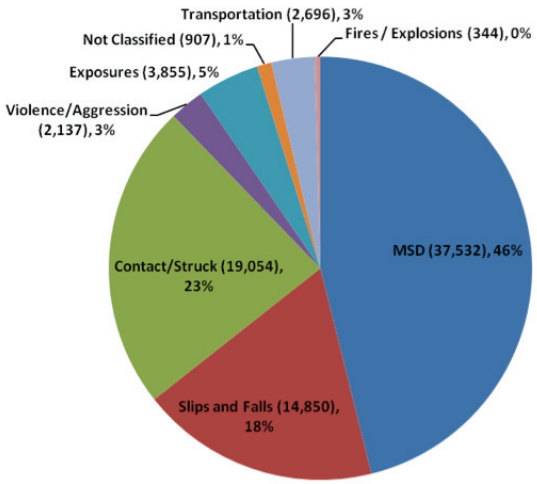


Figure 4: Lost-time Injury Count and Percentage by Classification, 2007 – Ontario
(WSIB Data Source: PDM Injury Analysis by SWA cube, Snapshot date: August 31, 2008)

The high incidence and prevalence for musculoskeletal disorders (MSDs among health care workers is well documented in the literature (Yassi et al. 1995, Leighton & Reilly 1995, Choi et al. 1996, Yassi, Gilbert & Cvitkovich 2005, Waters et al. 2006). In the community and health care sector, MSDs accounted for 54 per cent of lost-time injuries in 2007, with 24 per cent of LTIs attributed to client handling and 30 per cent related to non-client handling (Figure 5). A similar trend was identified by Yassi, Gilbert & Cvitkovich in 2005. They noted the majority of LTIs in the Canadian health care industry during the years 1992-2002 were from MSDs, mainly related to client handling tasks. Lost-time injuries due to MSDs related to client handling a significant concern for this workplace sector.

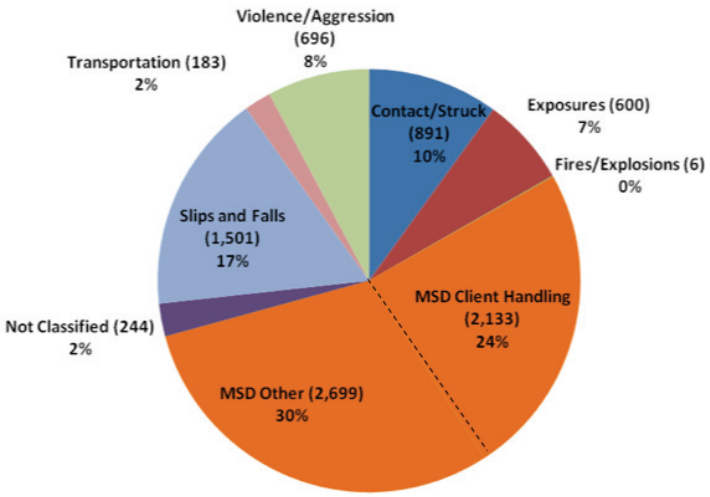


Figure 5: Lost-time Injury Count and Percentage by Classification, 2007 – Health and Community Care Sector
(WSIB Data Source: PDM Injury Analysis by SWA cube Snapshot date: August 31 2008)

The majority of lost-time injuries in the health care sector involve the back, and upper extremities and trunk (Figure 6). This is consistent for all WSIB rate groups in the sector (Figure 7). A review of the literature shows a high incidence and prevalence of neck, shoulder and back MSD in nurses (Trinkoff et al. 2002, Smedley et al. 2003).

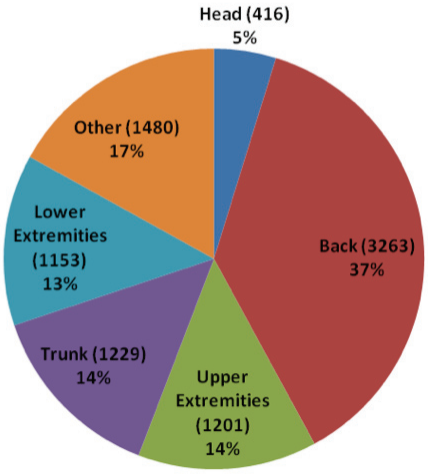


Figure 6: Lost-time Injury Count and Percentage for Health/ Community Care by Body Part, 2007
(WSIB Data Source: PDM Injury Analysis by SWA cube, Snapshot date: August 31, 2008)

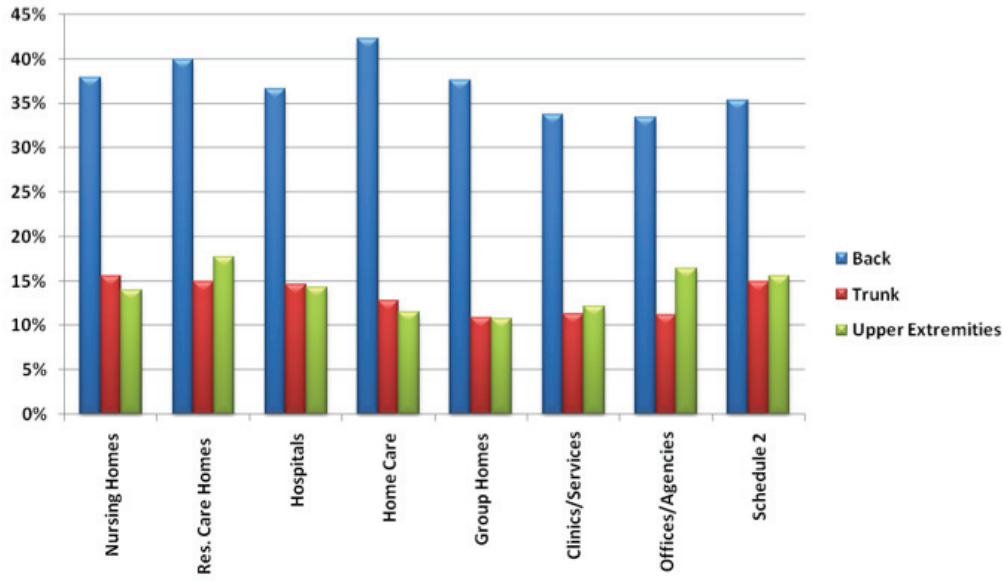


Figure 7: Lost-time Injury Percentage for Top Three Body Parts for the Health and Community Care Sector, 2007
(WSIB Data Source: PDM Injury Analysis by SWA cube, Snapshot date: August 31, 2008)

Homes for nursing care, nursing services (home care), group homes, homes for residential care and hospitals experience the highest LTI frequency** from MSDs related to client handling (Figure 8). LTI frequency for homes for nursing care has declined since 2004, however it remains notably higher than other rate groups in this sector.

*** LTI frequency is determined by the number of lost-time injuries per 100 workers.*

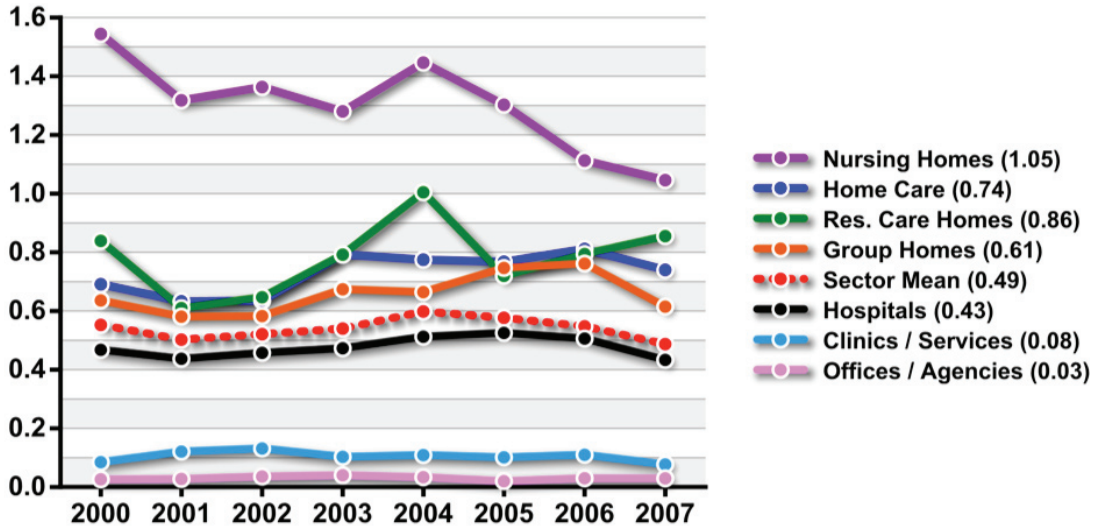


Figure 8: Lost-time Injury Frequency for Client Handling Musculoskeletal Disorders by Healthcare and Community Rate Group
(WSIB Data Source: EIW Claim Cost Analysis Snapshot Schema, PDM Firm Experience by SWA cube. Snapshot date: July 31, 2008)

Based on a review of actual lost-time injuries by count, hospitals consistently experience the most lost-time MSD related to client handling, followed closely by nursing homes, then home care services (Figure 9).

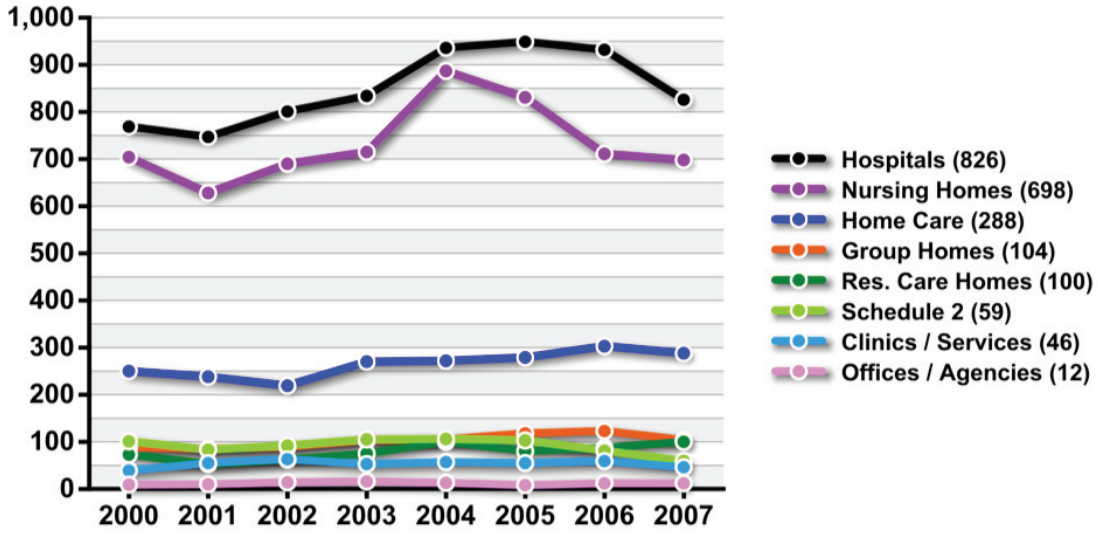


Figure 9: Lost-time Injury Count for Client Handling MSDs by Healthcare and Community Rate Group
(WSIB Data Source: EIW Claim Cost Analysis Snapshot Schema Snapshot date: July 31, 2008)

Many health care providers are engaged in physically demanding and often complex client care activities that place them at risk for injury. Client handling related injuries have been strongly associated with exposure to various MSD risk factors, which include but are not limited to forceful exertions including lifting, lowering, pushing, pulling, and awkward postures (Waters et al. 2006, Smedley et al. 2003). Employers must recognize and assess MSD risk factors related to client handling and ensure the physical demands of the work do not exceed the physical abilities of the employee.

Additional challenges impacting MSD injury in the community and health care sector include:

- Aging workforce
- Recruitment and retention of community and health care providers issues
- Organizational culture – effective leadership supporting a safety culture
- Psychosocial factors – perceived job demands, workload stress, shift work, workplace structuring
- Increased acuity of clients
- Increased rate of client obesity
- Increased proportion of the aging population requiring physical assistance from caregivers
- Lack of available equipment, resources and training

Based on the presented statistical data, recognition of client handling MSD risk factors and the challenges faced by this sector, it is apparent there is an urgent need for employers to acknowledge and address the issue of injury prevention related to client handling. Substantial evidence in the literature supports the implementation of effective intervention strategies that include a combination of engineering and administrative controls to reduce the risks of work-related MSD (Owen et al. 2002, Ronald et al. 2002, Fragula & Bailey 2003, Collins et al. 2004, Nelson et al. 2006a, Nelson & Baptiste 2006b)

Strategies include but are not limited to:

- Commitment from management to support the injury prevention program and resources
- Participative approach including stakeholders – management, employees, unions, JHSC
- Evidence-based client handling injury prevention control program that includes written policies, procedures, safe work practices, client handling assessment process and algorithms
- Provision and maintenance of appropriate client handling equipment
- Communication, education and training
- Program monitoring and evaluation

Under the Occupational Health and Safety Act, employers and supervisors are also required to take every precaution reasonable in the circumstances for the protection of the worker.

The message is clear. It is essential that community and health care employers demonstrate leadership and commitment toward the implementation of comprehensive and sustainable client handling programs to prevent unnecessary client and employee injuries and associated costs, and meet legal obligations.

Provincial Initiatives

The Ontario government has acknowledged the major issues related to MSD and, as a result, a number of provincial initiatives have been implemented in recent years to support client handling injury prevention programs in Ontario.

The Ontario Ministry of Health and Long-Term Care (MoHLTC) has recognized the financial and human resource implications related to client handling and the effects on employee and patient safety. In 2004 the government developed the Patient Lift Initiative as part of an extensive Provincial Nursing Strategy to address nursing recruitment, retention and supply concerns. Under that program, more than $60 million has been dedicated to the purchase of client lifting equipment (The Nursing Secretariat News 2005). Firms that have received equipment and committed to participating in the initiative are required to develop and implement a comprehensive client handling program based on leading practices such as the OSACH: *Handle with Care program.*

In January 2006, the Ministry of Labour (MoL) launched its Sprains and Strains campaign to prevent workplace MSD-related injuries. The Ministry's goal has been to reduce workplace injuries by 20 per cent by the year 2008. The MoL, WSIB, Safe Workplace Associations and others have collaborated with the Occupational Health and Safety Council of Ontario (OHSCO) in the development of the 2007 MSD Prevention Guidelines for Ontario and additional resources for Ontario workplaces. One OHSCO initiative requires safe workplace associations such as OSACH to develop guidelines and resource materials to address sector-specific MSD issues such as injury prevention due to client handling (Ministry of Labour Backgrounder 2007). The OSACH: Handle with Care – *A Comprehensive Approach to Developing and Implementing a Client Handling program is one of many documents developed to support this initiative.*

Module 2: Legislation

All workplace parties must be familiar with the legislation that pertains to the health and safety of workplace parties and clients. In this section, the rights, duties and responsibilities of the various workplace parties under the law in Ontario are reviewed.

2.1 Occupational Health and Safety Act

The *Occupational Health and Safety Act* (OHSA) is the fundamental legal authority for health and safety in Ontario. It sets out the minimum requirements with respect to the rights, duties and responsibilities of the workplace parties and establishes basic principles. The Ontario Ministry of Labour is the enforcer of the provisions of this act.

Duties and Responsibilities of Workplace Parties

The Act outlines the duties and responsibilities of employers, supervisors and workers.

Employers

Duties and responsibilities of employers are outlined in Sections 25 and 26 of the Act. The following duties and responsibilities apply to client handling issues.

An employer shall ensure that:

- Section 25(1)(a) – the equipment, materials and protective devices provided by the employer are maintained in good condition

An employer shall:

- Section 25(2)(a) – provide information, instruction and supervision to a worker to protect the health and safety of the worker
- Section 25(2)(c) – when appointing a supervisor, appoint a competent person
- Section 25(2)(d) – acquaint a worker or a person in authority over a worker with any hazard in the work and in the handling, storage, use, disposal and transport of any article, device, equipment or a biological, chemical or physical agent

- Section 25(2)(e) – afford assistance and co-operation to a committee and a health and safety representative in the carrying out by the committee and the health and safety representative of any of their functions
- Section 25(2)(h) – take every precaution reasonable in the circumstances for the protection of worker; prepare and review at least annually a written occupational health and safety policy and develop and maintain a program to implement that policy
- Section 25(2)(j) – prepare and review at least annually a written occupational health and safety policy and develop and maintain a program to implement that policy

These responsibilities have many implications for client handling. In a health care workplace, the overall health and safety program should have a specific component dedicated to client handling. The caregivers in community health care often work alone and face client handling tasks that exceed their cap-abilities. Work site design is often poor and equipment is not always available. Community health care employers are obliged to provide a safe working environment for their workers under the OHSA even though the ministry of labour cannot enter private residences.

Supervisors

Section 27 of the Act outlines the duties and responsibilities of supervisors. Employers must appoint competent people as supervisors. A competent person means a person who:

a) is qualified because of knowledge, training and experience to organize the work and its performance,

b) is familiar with this Act and the regulations that apply to the work, and

c) has knowledge of any potential or actual danger to health or safety in the workplace.

A supervisor shall ensure that:

- Section 27(1)(b) – a worker uses or wears the equipment, protective devices or clothing that the worker's employer requires to be used or worn

A supervisor shall:

- Section 27(2)(a) – advise a worker of the existence of any potential or actual danger to the health and safety of the worker of which the supervisor is aware
- Section 27(2)(c) – take every precaution reasonable in the circumstances for the protection of a worker

A competent supervisor should also be trained in client handling techniques and ensure that all staff comply with the acceptable procedures as outlined in the program.

Workers

Section 28 of the Act outlines the responsibilities of the worker.

A worker shall:

- Section 28(1)(a) – work in compliance with the provisions of this Act and the regulations
- Section 28(1)(b) – use or wear the equipment, protective devices or clothing that the worker's employer requires to be used or worn
- Section 28(1)(c) – report to his or her employer or supervisor the absence of or defect in any equipment or protective device of which the worker is aware and which may endanger himself, herself or another worker
- Section 28(1)(d) – report to his or her employer or supervisor any contravention of this Act or the regulations or the existence of any hazard of which he or she knows

No worker shall:

- Section 28(2)(a) – remove or make ineffective any protective device required by the regulations or by his or her employer, without providing an adequate temporary protective device, and when the need for removing or making ineffective the protective device has ceased, the protective device shall be replaced immediately
- Section 28(2)(b) – use or operate any equipment, machine, device or thing or work in a manner that may endanger himself, herself or any other workers
- Section 28(2)(c) – engage in any prank, contest, feat of strength, unnecessary running or rough and boisterous conduct

Workers have a responsibility to follow the employer's client handling procedures communicated in the client handling program and the individual procedures identified for each client. They also have a responsibility to use the equipment provided and identified as appropriate to a client.

Worker Rights

The OHSA also gives workers three important rights:

- Right to know
- Right to participate
- Right to refuse

Right to Know

Workers have a right to know what hazards they are being exposed to on the job. Workers or their representatives are entitled to the following:

- Information, instructions and supervision to enable workers to protect their health and safety
- The identification of any hazard in the work and in the handling, storage, use, disposal and transport of any article, device, equipment or a biological, chemical or physical agent
- Information supplied to the joint health and safety committee (JHSC) regarding death, critical injury, lost time, medical aid or occupational illness of workers
- Injury statistics of similar workplaces for use by the JHSC or health and safety representative (HSR)

Right to Participate

The OHSA is widely administered through a principle known as the Internal Responsibility System (IRS). When the IRS is functioning effectively, management and labour work co-operatively as partners in promoting workplace health and safety. Although the Internal Responsibility System is a principal part of the Ministry of Labour's preferred method of occupational health and safety administration, it is not found anywhere in legislation.

Workers have the right to participate with their employers to identify health and safety hazards in their workplace and to recommend solutions through the

JHSC. Workers should identify workplace hazards, including those associated with client handling.

Right to Refuse

Health care providers have limited right to refuse unsafe work. A health care worker can refuse unsafe work if an impending refusal does not jeopardize the life, health or safety of another person or the action being refused is not viewed as a normal condition or one inherent to his or her job.

2.2 Regulated Health Professions Act

The employer is obliged to assess all potential hazards and to establish procedures to protect the safety of employees. In refusing to handle a client, some health care professionals must also be aware of their responsibilities under the *Regulated Health Professions Act* (RHPA). Professionals such as registered nurses, registered practical nurses, physiotherapists and occupational therapists are regulated under this Act. The scope of practice and standards of practice incorporated in this Act are monitored by their respective colleges. If the standards of practice are breached, the person may be charged with professional misconduct by their college.

In health care, a principle known as the *therapeutic relationship* requires nurses to ensure that needed nursing services are provided to clients except in the following cases:

- The client requests that services be discontinued
- An alternative arrangement has been made
- Clients have been given the opportunity to make alternative arrangements

When workers' rights under the OHSA conflict with the RHPA, the provisions of the OHSA prevail initially. Once the minimum requirements of the OHSA have been met, the other Act comes into force.

2.3 Occupiers' Liability Act

The *Occupiers' Liability Act* obliges the occupant of premises to ensure that it is reasonably safe for persons to enter those premises whether any potential danger could be caused by the condition of the premises or by an activity carried out on the premises.

Occupier's duty:

- Section 3(1) – An occupier of premises owes a duty to take such care as in all the circumstances of the case is reasonable to see that persons entering on the premises, and the property brought on the premises by those persons, are reasonably safe while on the premises.
- Section 4(1) – The duty of care provided for in section 3(1) does not apply in respect of risks willingly assumed by the person who enters on the premises, but in that case the occupier owes a duty to the person not to create a danger with the deliberate intent of doing harm or damage to the person or his or her property and not to act with reckless disregard of the presence of the person or his or her property.

Under this Act, clients have obligations to provide a safe workplace. This Act defines *occupier* as:

- A person who is in physical possession of a premises, or
- A person who has responsibility for and control over the condition of premises or the activities carried on there, or control over persons allowed to enter a premises.

2.4 Public Hospitals Act

The *Public Hospitals Act Regulation 965 Hospital Management* specifies under Bylaws Section 4(d) that the Board shall pass bylaws that establish and provide for the operation of an occupational health and safety program for the hospital that shall include procedures with respect to:

- A safe and healthy work environment in the hospital
- Safe use of substances, equipment and medical devices in the hospital
- Safe and healthy work practices in the hospital
- Prevention of accidents to persons on the premises of the hospital
- Elimination of undue risks and the minimizing of hazards inherent in the hospital environment

This simply reinforces the organization's obligation to ensure the well-being of its staff.

2.5 Health Care and Residential Facilities Regulation

The *Health Care and Residential Facilities Regulation* came into effect on June 1, 1993. It applies to hospitals, laboratories, mental health facilities, nursing homes, group homes, homes for the aged, facilities for developmentally or physically impaired persons and laundry and power plants located in these facilities. It does not cover health care provided in a client's home.

The *Health Care and Residential Facilities Regulation* is comprised of 117 sections, many of which are also contained in the *Industrial Establishments Regulation*. No section deals specifically with client handling. The sections of the Regulation that pertain to material handling equipment (75-79) do not include equipment used to lift, lower or transfer a person who is not a worker and therefore do not apply to client transfer or lift devices.

Sections 8 and 9, partially excerpted below, specify that measures and procedures must be established and written to ensure the health and safety of workers.

- Section 8 – Every employer in consultation with the joint health and safety committee or health and safety representative, if any, and upon consideration of the recommendation thereof, shall develop, establish and put into effect measures and procedures for the health and safety of workers.
- Section 9(1) – The employer shall reduce the measures and procedures for the health and safety of workers established under Section 8 to writing and such measures and procedures may deal with, but are not limited to the following:

  - Safe work practices
  - Safe working conditions
  - The proper use, maintenance and operation of equipment
  - The reporting of unsafe or defective devices, equipment or work surfaces
  - The purchasing of equipment that is properly designed and constructed
  - The use, wearing and care of personal protective equipment and its limitations

- Section 9(2) – At least once a year, the measures and procedures for the health and safety of workers shall be reviewed and revised in the light of current knowledge and practice.

- Section 9(3) – The review and revision of the measures and procedures shall be done more frequently than annually, if:
  a) the employer, on the advice of the joint health and safety committee or health and safety representative, if any, determines that such review and revision is necessary; or
  b) there is a change in circumstances that may affect the health and safety of a worker.

- Section 9(4) – The employer, in consultation with and in consideration of the recommendation of the joint health and safety committee or health and safety representative, if any, shall develop, establish and provide training and educational programs in health and safety measures and procedures for workers, that are relevant to the workers' work.

2.6 Industrial Establishments Regulation

Industrial establishment is defined by the OHSA as “an office building, factory, arena, shop or office, and any land, buildings and structures appertaining there to.”

The *Industrial Establishments Regulation* applies to all workplaces meeting this definition. In the health care sector, workplaces that are not covered by the Health Care and Residential Facilities Regulation fall under the Industrial Regulation.

Because of the title of the Regulation, some people in health and community care workplaces may not be aware that this regulation applies to them. The *Industrial Establishments Regulation* contains specific safety standards that must be complied with in workplaces to which the regulation applies. Some of the provisions contained in the regulation may not be applicable to every work-place, but employers in health and community care organizations must be familiar with the regulations to ensure that they comply with the sections that are applicable to them.

2.7 Canada Labour Code

Part II of the *Canada Labour Code* governs the health and safety of health care workers who fall under federal jurisdiction, such as those health care workers who work within workplaces on First Nations reserves. Workers under the Canada Labour Code have similar rights as those under the OHSA.

Right to Participate

Workers have the right to work through their JHSC or HSR to identify hazards in their workplace and to recommend controls to eliminate or reduce them.

Right to Refuse

The right to refuse is similar to that in the provincial legislation. If a worker has reasonable cause to believe that the use or operation of a machine or device constitutes a danger to himself, herself or another employee, or that a condition exists in any place that constitutes a danger to the employee, he or she may refuse to work.

This right is limited when the refusal would directly endanger the life, health or safety of another person or where the danger is inherent in the worker's work.

Duties and Responsibilities of Employers

Employers have a duty to ensure that the health and safety of every person employed by the employer is protected. Some specific duties that have implications for client handling include:

- Investigating, recording and reporting to the authorities all accidents and other hazardous occurrences known to the employer
- Ensuring, in the manner prescribed, that employees have safe entry to, exit from and occupancy in the workplace
- Providing each employee with the information, instruction, training and supervision necessary to ensure the health and safety of that employee at work
- Ensuring that each employee is made aware of every known foreseeable hazard in the area where the employee works

Duties and Responsibilities of Employees

Employees are responsible for taking all precautions to ensure their own health and safety and the health and safety of their co-workers.

Employees shall:

- Follow prescribed procedures with respect to the health and safety of employees
- Take all reasonable precautions to ensure the health and safety of themselves, other employees and any other person likely to be affected by the employee's acts or omissions
- Comply with all instructions from the employer concerning the health and safety of employees
- Co-operate with the health and safety committee
- Report to the employer any thing or circumstance in the workplace that is likely to be hazardous to the safety or health of the employee, the other employees or other persons granted access to the workplace by the employer
- Report in the manner prescribed every accident or other occurrence arising in the course of or in connection with the employee's work that has caused an injury to the employee or to any other person

2.8 Food and Drug Act – Medical Devices Regulation

The Medical Devices Regulation falls under the *Food and Drug Act*. A medical device is “any article, instrument or apparatus which is sold or presented for use in the diagnosis, treatment or prevention of disease or abnormal physical state, for correcting human body functions …” A client lifting device is not currently classified as a medical device, except when one is an integral part of a bathing system.

2.9 Canadian Guidelines and Standards

Guidelines and standards are voluntary and provide rules, but they are not legally enforceable unless the document is specifically referred to in a piece of legislation. However, inspectors and employers often use guidelines and standards when they are establishing organizational standards and practices.

Canadian Standards Association

The Canadian Standards Association (CSA) Standard CAN/CSA-Z10535-03 – *Hoists for the Transfer of Disabled Persons – Requirements and Test Methods* specifies compliance tests that must be performed by manufacturers to certify their equipment. This equipment certification process has been developed due to recommendations from a coroner's inquest that occurred as a result of a fatal accident where a client was raised in a faulty lift. The standard was revised in 2003 as a result of many reports of injuries and deaths resulting from misuse and malfunctions of lifting device equipment in health care workplaces. Health Canada's *Medical Devices Alert No. 109* is reproduced within this standard.

The benefit of having a certification process is that consumers can be assured of the safety and integrity of a mechanical lifting device. The many aspects of the lift that are assessed include the design and construction of the materials being used, the electrical requirements, hydraulics, valves, base design, hooks and chains, casters, controls and accessories such as slings. Performance testing must be carried out on load capability, mechanical strength, stability and brake effectiveness.

CSA has also developed an Occupational Health and Safety Management standard, Z1000-06. This standard outlines requirements for an occupational health and safety system that will assist organizations in the prevention of occupational fatalities, illness and injuries. It provides a systematic approach to managing all health and safety hazards. Annex A identifies ergonomic issues as a category of health hazard, which would include ergonomic hazards related to client handling.

Module 3: Program Development and Implementation

A coordinated and systematic approach is required to develop and implement a comprehensive and successful client handling program. The content presented in this module outlines the five key steps in program development and implementation:

1. Securing Senior Management Commitment, Support and Leadership
2. Assessing Program Needs
3. Developing Program Components
4. Implementing the Program
5. Evaluating the Program

As part of the continuous quality improvement process, many of these steps may be revisited and repeated over time.

3.1 Securing Senior Management Commitment, Support and Leadership

The organization has secured the commitment of senior leadership, has appointed a client handling program leader and established a multidisciplinary committee.

Senior management commitment, support and leadership are the foundation of an effective program. Commitment and program support ensure that resources are available to develop, implement and maintain the program. They also secure other resources such as budget, human resources, materials and equipment, and enable caregivers to obtain other required skills through further education initiatives.

SUGGESTIONS FOR IMPLEMENTATION

3.1.1 Management commitment to the program

Senior management communicates that a client handling program is an organizational priority and corporate goal. Senior management commitment is reflected by:

- Appointing a client handling program leader to assume overall program responsibility
- Establishing a multidisciplinary committee to facilitate and guide program implementation
- Allocating human and financial resources to support program planning, development and implementation
- Consulting with the JHSC when developing the program

3.1.2 Multidisciplinary Committee

Establish a multidisciplinary committee that is coordinated by the client handling program leader. The committee should be comprised of key stakeholders who provide input into the development and implementation of the program. Recognizing that in smaller organizations one individual may have responsibility for multiple services, we suggest that the committee include representatives from the following areas of expertise:

- Senior management
- Middle management (e.g. director/manager/supervisor(s) of patient care)
- Clinical educators or professional practice clinicians
- Front-line staff involved in client handling
- Joint health and safety committee (JHSC) and/or health and safety representative (HSR)
- Union
- Occupational health and safety
- Physiotherapist, occupational therapist, ergonomist, kinesiologist
- Purchasing department
- Environmental/plant maintenance

In many cases one individual may represent more than on party (e.g., JHSC union member).

The roles and responsibilities of the multidisciplinary committee should include:

- Developing the terms of reference, including defined authority and accountability (See Terms of Reference, Appendix A)
- Identifying goals and objectives
- Establishing timelines and deliverables
- Developing a marketing and communication plan
- Developing an education/training program
- Developing means to evaluate the program
- Reviewing the program annually and revising as needed in consultation with the JHSC and other stakeholders

STANDARD OR RATIONALE

- Research indicates the necessity of senior management commitment to achieve program excellence in health and safety (Stewart 1999).
- *Occupational Health and Safety Act* (OHSA) Section 25(2)(j) (Duties of the Employer) requires an employer to develop and maintain a health and safety program. Since client handling is recognized as a significant risk, this issue should be considered as part of the health and safety program.
- *Health Care and Residential Facilities Regulation* Sections 8 and 9 require an employer to develop, establish and put into effect measures and procedures for the health and safety of workers, and these measures shall be put in writing.
- A Client Handling Program Leader assures overall responsibility for coordinating program development and implementation, and delivering effective communication to senior management, the multidisciplinary committee and stakeholders.
- A multidisciplinary committee solidifies program support, contributes to program compliance, capitalizes on a broad base of skills and expertise, and provides additional human resources in developing and implementing the program. A multidisciplinary committee engages a broad base of skills to ensure consideration of best-practice outcomes.

3.2 Assessing Program Needs

The organization has conducted an assessment of risks associated with client handling, client mobility requirements, equipment, the environment and the organizational culture.

Conducting a needs or risk assessment of the client handling program is a critical step in the process of program development and one that is often omitted. An assessment of organizational factors that relate to client handling should be completed either when developing a new program or when revising an existing program. A comprehensive organizational assessment identifies the existing and potential risks with respect to client handling issues, organizational culture, clients, caregivers, equipment and environment. In addition, it will identify any existing and potential barriers that may challenge the success of the program.

The multidisciplinary committee coordinates and plans the risk assessments. This includes identifying the most appropriate person(s) in their organization to perform the various risk assessments.

SUGGESTIONS FOR IMPLEMENTATION

The following categories of information should be gathered and analyzed during this assessment process:

- Incident/accident analysis
- Client mobility assessment
- Equipment needs
- Environmental barriers
- Organizational culture

3.2.1 Incident/Accident Analysis

By identifying trends, the organization can unmask potential and/or existing problems or issues. A trend analysis of incidents/accidents related to client handling activities can reveal whether incidents/accidents involve certain types of equipment, specific client handling methods or inexperienced staff, or occur more frequently at certain times of day. While analyzing the causative factors of the incidents/accidents, it is also important to identify whether the incidents/accidents occurred during one of the following client activities:

- Lift procedure
- Lateral transfer or slide procedure
- Transfer procedure
- Client repositioning procedure

This process assists the organization in identifying needs and/or issues related to client handling activities and setting priorities requiring action.

Incident/Accident Analysis Collection Tool

Appendix B provides an example of an incident/accident analysis tool. The tool assists the organization in collating the incident/accident data from employee incident report forms. Each unit/department should be analyzed individually.

Communicating Your Incident/Accident Analysis

Following the collection of the employee incident/accident data, it is recommended that a departmental summary of the analysis detail the following information:

- Number of incidents/accidents during each shift
- Number of incidents/accidents by each causative factor
- Number of incidents/accidents during lifts, transfers and repositioning
- Number of first aid, medical aid and lost-time incidents/accidents
- Number of WSIB lost-time days
- WSIB claim costs

3.2.2 Assessing Clients Needs

An effective client handling program requires a thorough and comprehensive assessment of the client to be completed in an effort to determine the appropriate and safe client handling technique.

The following tools can be used to assess and summarize the mobility status of all the clients in each unit/department of your organization. It is essential to review the client's mobility needs prior to the onset of the program to ensure you have estimated the frequency of handling tasks and identified equipment and environmental issues that may impact on the safety of the client handling tasks.

1) Individual Client Mobility Needs Assessment Tool

The Individual Client Mobility Needs Assessment Tool (Appendix C) can be used to collect relevant data related to client handling. It should be conducted over a 24-hour period. The organization may review its available client mobility documents and/or collect information through interviews with the department employees. In addition, client profiles/records can also be used to obtain the necessary information, but it is important to ensure that the information is up-to-date and reflective of the current needs of the clients. Each client on the unit/department must be assessed regardless of their mobility status (e.g., independent or requires assistance with a client handling procedure).

The “potential barriers” portion of the individual client assessment tool assists the surveyor to identify other possible barriers. This valuable information is necessary to ensure all issues that may impact on the safe handling of every client are identified.

2) Unit/Departmental Summary Tool for Client Mobility Needs Assessments

Once the individual client assessment tool has been completed, the information collected should be summarized using the Client Mobility Needs Assessment Summary Tool (Appendix D). This tool summarizes the department’s needs in terms of:

- Number of clients requiring lifts and the specific lifting devices used
- Number of clients requiring lateral slide procedures and the sliding devices used
- Number of clients requiring transfers and the specific transfer devices used
- Number of clients requiring positioning and types of specific devices
- Number of clients whose mobility status is independent
- Identification of equipment needs

This information can then be used to help project equipment needs, staffing allocation and barriers that need to be addressed prior to the implementation of the program.

3.2.3 Assessing Equipment Needs

An assessment of all existing equipment can identify the current problems or issues as well as potential needs. An inventory of all client handling equipment and devices by department and service should be conducted and documented (Appendix E).

3.2.4 Assessing Environmental Barriers

The environment can contribute significantly to hazards associated with client handling. The environment is the area in which the client handling tasks are carried out – the client's bedroom and bathroom, tub room, surgical suite, diagnostic imaging area, etc.

A physical inspection of the environment can identify existing or potential environmental barriers that could pose challenges in client handling. An environmental assessment tool can be used to document the inspection (Appendix F).

3.2.5 Assessing the Organizational Culture

A survey of the management and staff of each department and service area will identify issues related to work organization and their perception of, attitude toward and experience with client handling. The assessment is particularly important where a previous program has been unsuccessful. The assessment examines issues such as the organization's existing policies and procedures, assignment of tasks, management's and workers' perception of client handling demands, team work versus individual assignments, allocation of equipment, client service agreements (for community service organizations) and staffing. Management and workers should both be involved in this assessment process. This can be accomplished through interviews, focus groups or by an individual questionnaire/survey. See Appendix G for a sample organizational culture assessment tool.

STANDARD OR RATIONALE

- Risk Assessment: OHSA s. 25(2)(h)
- Analysis of the location and nature of previous incidents is critical to determine the service areas with the greatest need and the type of lifts required.

- Analysis of clients' mobility status will guide specific lift selection characteristics (e.g., sling design) and lift location to match client and worker needs.
- Analysis of client handling equipment will identify the type, number, location and status of existing equipment.
- Identifying current and potential environmental barriers will allow formulation of appropriate lift placement and selection solutions.
- Identifying previous and potential issues involving work organization or staff perceptions will allow formulation of appropriate remedial and educational solutions.

3.3 Developing Program Components

The organization has developed a client handling program that consists of a policy, procedure and employee client handling education program.

The Client Handling Program is designed to control potential and existing hazards associated with client handling. The basic elements of a client handling program are:

- Policy
- Procedures
- Education and training

SUGGESTIONS FOR IMPLEMENTATION

3.3.1 Developing a Policy

Develop a safe client handling policy that clearly indicates the organization's commitment to worker health and safety such as a zero lift policy (no manual lifting of non-weight-bearing clients) or a minimal lift policy (some manual lifting permitted in exceptional circumstances, i.e., life-threatening situations) as deemed appropriate by the organization. If the organization has an existing policy, it should review and revise the policy to ensure the necessary components are included. A sample policy can be found in Appendix H. In accordance with the HCRFR, the JHSC is entitled to be consulted at least annually on the review of measures and procedures for the protection of workers.

The policy should include the following elements:

- Commitment Statement
  - This is a brief statement of senior management's commitment to employee and client health and safety in relation to client handling. It communicates the corporation's acceptable standards and behaviours for all workplace parties.

- Goals
  - Policy goals should concisely state the aim of the program, and should be achievable and measurable.

- Objectives
  - Policy objectives should identify the intended accomplishments of the program.

- Definitions
  - Definitions are required to ensure consistent terminology and interpretation of the program.

- Roles and Responsibilities of Workplace Parties
  - These clearly outline the workplace parties' roles and responsibilities for the client handling program and should include, but not be limited to, the employer, supervisors, workers and JHSC.

- Evaluation
  - This section should outline management's commitment to an annual review and evaluation of relevant quality indicators for the purposes of improving and sustaining the client handling program.

3.3.2 Developing Program Procedures

From an operations perspective, the development of comprehensive procedures provides direction to staff and management to ensure the program is followed consistently and meets various compliance standards (internal policy, legislation, manufacturer guidelines, etc.). Procedural components and content for an effective client handling program include, but are not limited to:

Client Assessments

- Conducted by trained employees
- Initial, ongoing mobility assessments and client mobility mini-assessments
- Initial assessment time frame and frequency of re-assessment
- Documentation requirements

Communication

- Methods of communication – e.g., assessment form, client profile/care plan, logo cards, verbally at shift change and rounds, etc.
- Details of communication – e.g., client handling technique, equipment and devices, number of staff required to assist, safety issues and other relevant controls

Client Handling Techniques and Equipment Procedures

- Step-by-step description of standard client handling procedures accepted by the organization – e.g., two-person, side-by-side transfer, one-person pivot transfer, etc.
- Standard operating procedures for each piece of equipment and device (also refer to manufacturer guidelines)

Mandatory Training

- Include topics such as legislation, MSD awareness and prevention, policy and procedures, compliance expectations, client mobility assessments, documentation and communication, client handling techniques, equipment use/storage
- Training Frequency
  - New hire orientation training
    (include site-specific training and department-specific issues)
  - Ongoing review training – at least annually or more frequently if required

Pre-use Inspection of Equipment

- Visual inspection of equipment prior to use
- Establish an inspection frequency (e.g., daily)
- Documentation – e.g., pre-use inspection checklist specific to the equipment (Appendix I)

Preventive Maintenance (PM) of Equipment

- Department and/or persons responsible
- Defective equipment procedure – e.g., defective tag procedure
- Maintenance request form and process
- Inventory list of equipment
- Schedule and frequency of PM – refer to manufacturer guidelines
- Documentation of PM – specify location of documents, signature of competent person completing PM, etc.

Infection Control and Cleaning

- Identify the individuals responsible for cleaning and disinfecting
- Cleaning and disinfecting procedures for client handling equipment including laundering of slings and slider sheets
- Frequency of cleaning
- Specify acceptable disinfection agents to be used and safe use of chemicals
- Specify procedure for cleaning equipment in isolation rooms
- Outline tagging procedure for soiled and cleaned equipment

Reporting and Investigation of Hazards, Accidents and Incidents

- Procedure for reporting and investigating hazards, incident and accidents – cross-reference to corporate policy
- Procedure for ergonomic referral
- Process to communicate hazards, accidents and incidents to program leader, multidisciplinary team and JHSC

Purchasing of Equipment and Devices

- Identify the person and department responsible
- Specify process for assessing equipment needs – i.e., needs assessment by the multidisciplinary committee (may reference corporate policy for requesting and purchasing minor and capital equipment)
- Specify process for contacting vendors and equipment/device trials
- Establish a product evaluation process and criteria – e.g., quality, ease of use, safety performance, warranty, storage, PM requirements, cost and vendor training – ensuring end-users are included in the evaluation

Evaluation and Quality Improvement

- Identify who is responsible for initiating the annual review of the program – i.e., program leader and multidisciplinary team
- Identify the quality indicators to be used to perform the evaluation
- Outline the review process including the workplace parties to be consulted – JHSC, staff, management, etc.
- Identify the workplace party who will approve the program annually and ensure quality improvement will be implemented – i.e., senior management

Management and staff performing client handling activities must be trained in the policies and procedures. See Appendix H for sample procedures. For further information on implementation of mechanical lifts, see *OSACH: A Planning Guide for the Implementation of Client Mechanical Lifts, 2nd Edition 2005.*

3.3.3 Developing the Training and Education Program

Comprehensive training and education is an integral part of this program. Procedures associated with training and the development of the material need to be completed prior to the program's implementation. The training should include:

- Program goals and objectives
- Legislation
- Overview of injury demographics, statistics and current trends/issues
- Musculoskeletal disorder awareness – anatomy, physiology, body mechanics, prevention
- Client handling policy and procedures, and expectations of compliance
- Client mobility assessments
- Selection of accepted client handling techniques
- Competency in performance of transfer, lift, lateral transfer/slide and reposition techniques
- Communication methods including documentation (type and location), forms, use of the assessment cards and logos, etc.
- Selection and use of equipment

3.3.4 Community Care Issues

Community-based services face some unique challenges with respect to client handling. This section addresses the issues associated with client service agreements, client-directed care and the funding of handling equipment.

Client Service Agreements

One of the main objectives of the client handling program is to minimize the amount of manual client handling. If a client is resistant to being lifted and/or moved with an assistive device, this could be a potential barrier to the program. It is beneficial for the organization to include wording in the client service agreement that supports the use of client handling aids and devices. This should clearly communicate the importance of both client and employee health and safety and set a positive tone for the culture and philosophy of the organization.

Two important issues should be addressed in the health and safety section of the Client Service Agreement:

1. Requirement that the working environment not pose a risk to the well-being of workers

2. Repairs to broken equipment are the responsibility of the client and services may have to be modified until the repairs are completed

Ongoing non-compliance may result in the discontinuation of services. See Appendix J for a sample wording of the health and safety section of a client service agreement.

Client-directed Care

Client-directed care is an important consideration in client handling in the home care environment. However, it is important to note that a client cannot direct a worker to provide care in a manner that may injure a worker. The employer needs to ensure that staff are safe and remain healthy while they are working with the clients. Hence, clients' rights to direct their own care have limits.

Workers have the right to refuse unsafe work. Although the Ministry of Labour may be denied entry to a person's home, a ministry inspector must investigate an unresolved work refusal and rule on it. There is still an obligation on the part of the employer to investigate worker complaints and work refusals, and to implement suitable controls to promote worker health and safety.

Funding for Transfer and Lift Equipment

The clients being serviced by a community care organization may have difficulty accessing funds for mechanical lifts. When a client's mobility status is assessed as requiring a lift, the organization needs to put safe work practices in place. If you cannot access a mechanical lift, a multi-person manual lift may be required. Workers who work alone should not be expected to lift a client by themselves. If a family member cannot participate in the lift, additional workers may be needed for the completion of the lift.

STANDARD OR RATIONALE

- Procedures: HCRFR, s. 8 and 9
- Education/training: OHSA, s. 25, 26, 27; HCRFR, s. 9(4)
- Reporting of occupational injuries/illness: WSIA, Reg. 1101 (first aid); OHSA, s. 51 and 52
- The policy communicates senior management's commitment and provides general program expectations and directions to guide performance requirements.
- Written procedures ensure that the program operation is defined and consistently applied by management and that compliance requirements are communicated to staff.
- Equipment inspections: HCRFR, s. 44
- The client handling education program ensures that all staff can competently and safely engage in client handling program activities.

3.4 Implementing the Program

Upon completion of the program needs assessment and development of policies, procedures and the training and education material, an implementation strategy is required. Various approaches can be taken depending on the size of the organization and resources. A facility-wide implementation requires the program to be launched simultaneously across the organization. A more conservative approach involves staggering the implementation in the organization or to pilot the program in a unit/department. Typically, units/departments that exhibit a high incident/accident rate are selected to pilot the program.

The organization has developed a detailed plan for the implementation of the client handling program, determined the priority area for the program pilot, and addressed the various needs of the area(s) where the program will first be implemented.

SUGGESTIONS FOR IMPLEMENTATION:

The following are steps to the implementation of a pilot program:

- Summarize and rank department injury rates and costs
- Choose pilot area(s)
- Conduct and summarize unit/department needs
- Summarize the needs of the unit/department
- Prepare for education/training
- Plan for and launch the pilot program
- Evaluate and revise the program

3.4.1 Rank Statistical Information

Once the data is collected from the Incident/Accident Summary Analysis Tool, the program leader or multidisciplinary committee should organize the statistical information in a way that the priority units for immediate intervention are determined. The synopsis should include a summary of all factors gathered from the unit/departmental assessments, including first aid claims, medical aid claims, lost time and the number of WSIB claims per unit or department that occurred during client transferring, lateral transfer/slide, lifting or repositioning.

The incidents/accidents, days lost and claims costs can be totalled. Units/departments should then be ranked and classified from the highest to lowest priority based on the statistics. The highest ranking areas will require more immediate action. An incident/accident organizational tool can be use to summarize the data (Appendix K).

3.4.2 Choose the Pilot Area

Once every unit or department has been summarized and ranked from highest to lowest according to their incidents and claims, the next step is to select the pilot area based on the findings of the completed accident/incident summary tool (Appendix K). This typically would be the unit/department with the highest frequency and severity for injuries related to client handling.

3.4.3 Conduct and Summarize Unit/Departmental Needs

The unit/department chosen for the program pilot will be required to conduct a unit/department-specific assessment of client handling needs to identify and reduce or eliminate potential program barriers. Review data in Section 3.2. The following assessments for the unit/department must be completed:

- Assessing client
- Assessing equipment
- Assessing environmental barriers
- Assessing the organizational culture

Following the completion of the various assessments, the program leader or multidisciplinary committee needs to summarize the information in preparation for the actual implementation of the program.

Use the Department Summary of Client Handling Needs (Appendix L) to summarize the assessment findings. This allows the information to be analyzed and the appropriate action/remedy applied prior to the implementation of the program.

3.4.4 Address the Unit/Departmental Needs

Following the completion of the Departmental Summary of Client Handling Needs form (Appendix L), the program leader or member of the multi-disciplinary committee should review the information with the unit/department manager to ensure it is accurate. Then an action plan needs to be established to address the identified needs and barriers (Appendix M). This may require various interventions such as:

- An ergonomic evaluation
- Adjustments to the environment
- Purchasing of equipment and assistive devices
- Repair/preventive maintenance to existing equipment
- Administrative changes such as staff scheduling, staff adjustments and work method changes
- Updated/revised client mobility assessments

3.4.5 Readiness for Training

The committee or program leader must establish whether the organization is ready to commence client handling training. The following checklist should be completed before beginning training sessions:

Sample checklist:

- ☐ Have you booked the training/education facility?
- ☐ Is the organization committed to send workers to mandatory training and have supervisors arranged coverage so workers can attend?
- ☐ How many workers are attending per session?
- ☐ Has scheduling of the training sessions been arranged (number of sessions, length of session, shifts, dates and times)?
- ☐ Have you selected an educator and made financial arrangements for the educator (if applicable)?
- ☐ Do you have training materials prepared (photocopies, designated training booklets for the session, training records)?
- ☐ Have you identified a suitable location that can accommodate the appropriate training and practical demonstration of techniques and equipment?
- ☐ Have you identified all the equipment needed?
- ☐ Has a plan to physically set up the training and demonstration equipment been organized with the educator?

If all of the pertinent questions have been answered, you are prepared to present the training and education session in an organized manner.

A training matrix may be used to ensure all staff receive the training required – policy and procedures, musculoskeletal hazard awareness and body mechanics, client mobility assessment and appropriate client handling techniques, documentation procedures and safe use of equipment, etc.

3.4.6 Planning for and Launching the Pilot Program

To increase awareness and facilitate the changes required in the selected pilot work area, a marketing and communication plan is required. The initial step in launching the pilot program includes appropriate communication to all stakeholders. The initial communication plan should include a review of the program with the management team of the organization, so that management can prepare for the implementation of the program in their area. It is recommended that the program leader review the program with the management team by:

- Making a presentation at a management meeting
- Circulating a letter and the program material

Communication to staff may be delivered at staff meetings or by emails, newsletters, posters, bulletins, lunch-and-learn activities or other means. Program policies and procedures must be communicated to and understood by all staff, including managers, supervisors, workers and the JHSC/HSR.

Also ensure that:

- Training and education sessions are scheduled for both existing staff and newly hired staff at orientation. A training matrix may be used.
- Environmental and equipment issues and other program barriers are resolved, with the appropriate equipment and systems in place.
- Client handling mobility assessment documentation and communication systems are in place and current, as per policy and procedure (i.e., care plan indicates appropriate client handling technique). Client handling logos may also be used.

It is recommended that physicians, volunteers, students, contract workers and family/visitors of clients be provided with a general knowledge of the program's policies and procedures and its benefits.

3.4.7 Evaluating and Revising the Pilot Program

Upon completion of the pilot program, an evaluation of the program needs to be conducted. Results from this evaluation are used to make suitable revisions to the program for full-scale implementation. Issues that require evaluation include:

- How well did the needs assessment tools identify environmental, equipment and organizational barriers?
- How consistently and accurately were the clients assessed?
- How well was the client handling technique documented in client care plans?
- How well were policies and procedures followed?
- How many incidents/accidents were reported and how was the investigation handled?

In addition to the operational elements of the program, the material taught in the training sessions needs to be evaluated. Issues that should be considered are:

- Have all participants completed the training evaluation?
- Are staff complying with the procedures post training?
- Have problematic clients been identified and has problem-solving been carried out?

The findings from this evaluation should be documented. This information is used for possible program revisions in the next phase of implementation before the program goes organization-wide. More information on evaluation can be found in Section 3.5.

STANDARD OR RATIONALE

- Review and revision of Measures and Procedures HCRFR s. 9(3)
- An organization-wide program can be introduced all at once or in phases. For large organizations, it is recommended that one or two areas be selected for pilot implementation.
- Implementation of the program should be initiated in departments/services with high injury rates so that a greater cost benefit can be realized.
- All identified needs should be summarized and an action plan developed so that management can assess and address all needs prior to the pilot implementation. This is critical to the success of the program.
- Careful planning with the department/unit supervisor/manager, unions and JHSC will ensure that the pilot implementation runs smoothly.

- Results of the pilot program evaluation can be used to enhance the program in preparation for full-scale implementation.

3.5 Evaluating the Program

The organization has developed a process to evaluate the client handling program and ensure safe workplace practices.

The final step in the client handling program development includes the evaluation. The purpose of the evaluation is to:

- Measure and evaluate program indicators
- Determine whether the program goals and objectives have been met
- Identify program strengths and opportunities for improvement
- Make recommendations regarding quality improvements to the program
- Ensure sustainability and maintenance of an effective program

An organization can evaluate program effectiveness by identifying, measuring and monitoring indicators. This section provides sample client handling program indicators that can be measured as well as sample data collection tools.

It is the responsibility of the program leader and multidisciplinary team to:

- Select program indicators and collection tools to be used
- Coordinate and document the evaluation
- Determine the frequency of evaluation (at least annually)
- Determine how the information will be collected and communicated

SUGGESTIONS FOR IMPLEMENTATION

Identify and monitor measurable key indicators for the client handling program. Two major types of evaluative processes include qualitative and quantitative methodologies. Quantitative data relate to indicators susceptible to the measurement of quantity, while qualitative data relate to indicators involving comparisons based on qualities. The following provides examples of quantitative and qualitative indicators.

Quantitative Methodologies

- Client handling injury demographics (e.g., location, procedure causing injury)
- Employee incident/accident reports
- Near-miss and hazard incidents
- First aid accidents
- Health care claims
- Lost-time claims
- WSIB costs

A *Manager Monthly Report of Employee Incidents/Accidents Related to Client Handling Activities Tool* (Appendix N) can be used to collect data.

Qualitative Methodologies

- Evaluations to determine adequacy of training
- Records to evaluate training attendance compliance
- Organizational Culture Survey (Appendix G)
- Audit of policy and procedure compliance

A *Manager's Monthly Client Handling Program Performance Audit Tool* (Appendix O) may be useful.

The annual evaluation and review should be performed in consultation with management, staff and JHSC/HSR and reported to senior management. Senior management is responsible for reviewing and considering recommendations for quality improvements.

STANDARD OR RATIONALE

- Duties of Employer and Supervisor: OHSA, s. 25, 26, 27
- Annual Review of Measures and Procedures HCRFR s. 9(3)
- An organization cannot evaluate program effectiveness if there are no measurable indicators. Measuring and evaluating your program is vital to identifying and guiding program quality improvement opportunities.

Module 4: Client Mobility Assessment

The assessment of the client's mobility status is a critical component in a successful client handling program. All caregivers must be trained to assess all factors that impact a client's mobility. The goal of the assessment is to both maximize the client's participation in the move and ensure that the client is moved safely without jeopardizing the safety of the client or the caregiver.

The purpose of the assessment is to determine the type of procedure that should be used and how much assistance from the staff is required to safely move a client. The assessment considers issues such as:

- How much physical help can the client give and can they weight-bear?
- How much can the client co-operate?
- Does the client have perceptual problems or sensory deficits?
- Is the appropriate equipment available?
- Are there environmental factors that can interfere with the transfer?
- Are there risk factors associated with the caregiver?

There are three types of client mobility assessments:

- Initial client mobility assessment
- Ongoing client mobility assessments
- Client mini-assessment

When conducting an assessment of a client's mobility status, four major factors should be considered:

- Caregiver
- Client
- Equipment
- Environment

4.1 Definitions

The organization has clear definitions for client handling tasks that are under-stood by staff performing client handling activities.

SUGGESTIONS FOR IMPLEMENTATION

Organizations must ensure that standard terminology is used for client handling tasks and that health care providers conducting client handling assessments and procedures understand the fundamental definitions related to client handling. There is a clear distinction between the terms lift, transfer, lateral slide and repositioning procedures.

Weight-Bearing Procedures

Transfer: A procedure used to assist a client to move from one surface to another. The client must be able to weight-bear through at least one leg or both arms, and be mentally able to co-operate and follow instructions. Assistive devices, such as a transfer belt, transfer board/transfer disk, transfer sling or sit-stand equipment, should be used when appropriate.

Non-Weight-Bearing Procedures

Lift: A procedure used to support or carry the entire weight of a person from one surface to another. A lift is used to move a client who is physically unable to weight-bear through his/her arms or legs, and/or is mentally unable to co-operate in the procedure. A lift may be accomplished manually by at least two caregivers or mechanically using a lifting device. (Check mechanical lift manufacturer guidelines to determine the number of caregivers required to use equipment.)

Lateral Slide: A procedure used to move a reclined client from one flat surface horizontally to another flat surface. The client is unable to *weight-bear* through their arms or legs and/or is mentally unable to co-operate with the procedure. The client may be not be able and/or permitted to sit or to use a mechanical lifting device. Friction-reducing sliding devices such as slider sheets, slider boards, air mattress technologies, mechanized or powered platform devices should be used when appropriate.

Note: This procedure is sometimes referred to as a *lateral transfer*. However, "transfer" by definition implies that the client is weight-bearing, and this is typically a non-weight-bearing procedure. The term lateral slide is preferred.

Same-Surface Procedure

Repositioning: A procedure used to move a client to a new position on the same surface such as up in bed or in a chair. The client may or may not assist in the procedure. Friction-reducing devices such as repositioning sheets should be used when appropriate.

Manual Handling

Manual Handling: The lifting, transferring or repositioning of a client without the use of a mechanical lift, transfer belt or other assistive device.

STANDARD OR RATIONALE

- OHSA s. 25(2)(h) and 27(2)(c)
- Consistent terminology is important so that the caregivers are clear on which procedures are safe to perform in the circumstances. Referring to a procedure by different names may result in an injury to the client and/or the caregiver.

4.2 Initial Client Mobility Assessment

The organization has developed a process to assess a client's mobility within 24 hours of admission.

SUGGESTIONS FOR IMPLEMENTATION

The initial client mobility assessment should be conducted within 24 hours of the client's admission to the facility or program. When moving a client within the first 24-hour period, prior to the completion of an initial assessment, staff should obtain extra assistance from other staff to perform and ensure a safe manoeuvre. The initial mobility assessment should be integrated into the formal admission assessment that already exists within the organization.

The components of the initial assessment include:

- Communication abilities
- Cognitive capacity
- Medical status
- Emotional and behavioural status
- Physical abilities

Not only the client's abilities, but the environment, the equipment and the caregivers' abilities should be assessed as well. The initial client mobility assessment should be detailed and carried out by a staff member who is trained to conduct such assessments. Organizations must identify who these individuals will be and ensure they are appropriately trained.

The procedures for conducting an initial client mobility assessment are outlined in Section 4.4.

STANDARD OR RATIONALE

- Risk Assessment and Hazard Reporting: OHSA s. 25, 27 and 28
- Thorough assessment of client and caregiver abilities, equipment and environment will identify risk factors related to client handling. Once they are identified, appropriate administrative and engineering controls can be implemented for the safety of the client and caregiver.

4.3 Ongoing Client Mobility Assessment

The organization has developed a formal process to re-assess a client's mobility on an ongoing basis.

SUGGESTIONS FOR IMPLEMENTATION

The ongoing client mobility assessment mirrors the components of the initial client assessment. A staff member who is trained in completing client assessments should complete the ongoing mobility assessments. Organizations should incorporate an ongoing client mobility assessment into the existing review of their client's service and care plans. The procedures for the assessment are outlined below in Section 4.4. The ongoing assessment takes place at regular intervals or anytime a change is identified in a client mini-assessment (Section 4.5)

STANDARD OR RATIONALE

- Risk Assessment and Hazard Reporting: OHSA s. 25, 27 and 28
- Ongoing assessment will ensure that the most appropriate client handling technique is being carried out, especially when the client's condition changes.
- Re-assessment will ensure the selected procedure is appropriate and safe for both the caregiver and client.

4.4 Detailed Procedures for Initial and Ongoing Client Mobility Assessment

The organization has developed detailed procedures for initial and ongoing client mobility assessments that consider risk factors related to the client, caregiver, equipment and environment.

SUGGESTIONS FOR IMPLEMENTATION

Risk factors related to all aspects of client handling must be identified and assessed to ensure a safe client handling procedure is selected and performed, the appropriate equipment is selected and used, and a safe environment is prepared. Risk factors requiring assessment include:

- Client
- Caregiver
- Equipment
- Environment

The following subsections describe the associated risk factors, risk assessment for each risk factor and sample tools for information collection.

4.4.1 Risk Factors Related to the Client

To ensure the safety of both caregivers and clients during client handling procedures, it is important that the caregiver assess each of the risk factors related to the client. This section will outline:

- Client-related risk factors
- Purpose of each assessment
- Step-by-step instructions on how to conduct the assessment

Table 1 summarizes the risk factors related to the client that should be considered in a client mobility assessment.

Table 1: Risk Factors Related to the Client

Communication	Cognition	Behavioural and Emotional Status	Medical Status	Physical Status
•Speech •Vision •Hearing •Understanding •Language barrier	•Memory •Judgment •Concentration •Decision-making	•Resistive •Unpredictable •Uncooperative •Depressive •Aggressive •Confused •Agitated	•Diagnosis •Devices •Pain level •Medication •Fatigue •Skin integrity	•Weight •Height •Sensory abilities •Range of motion •Muscle strength •Muscle tone •Mobility and balance •Coordination •Weight-bearing

A) Communication

The caregiver must assess the client's ability or inability to communicate. An inability to communicate may affect the client's performance when learning new techniques, or their co-operation with the caregivers during a client handling procedure. The risk of injury to the caregiver and the client increases if the client:

- Does not speak and/or understand the same language as the caregiver
- Does not understand speech
- Does not understand non-verbal communication
- Cannot follow simple commands
- Communicates with sign language or uses devices to communicate
- Has a hearing impairment and is not using a hearing device
- Has a speech problem
- Has a low level of consciousness

Steps for Assessing Communication

To assess the level of communication:

1. Stand in front of the client if the client is sitting or stand beside the bed close to the client's head if the client is lying in bed.

2. Ask the client simple questions (for example, "Are you hungry?").

3. Give the client simple instructions (for example, "Take my hand. Give your hand to me. Take this cup.").

4. Ask the client to repeat words or short sentences.

B) Cognition

Clients may lose their short-term memory due to age, brain injury or certain physiological and/or psychological conditions. Clients can make inappropriate judgments about their ability to complete tasks. The client may overestimate or underestimate their true abilities, which would pose a risk factor in client handling. Clients may have difficulty making decisions. It is better to suggest one choice first, wait for a response and then give another choice. Clients with poor short-term memory may have difficulty in following instructions. Provide short, clear instructions, one at a time. This also helps the client concentrate during the procedure.

Steps for Assessing Cognition

To assess the short-term memory, ask the client questions related to recent events. Examples include but are not limited to:

- What day is it today?
- What time is it?
- What did you have for breakfast/lunch/dinner?
- Who has visited today?

C) Emotional and Behavioural Status

A client's behavioural and emotional state may vary throughout the day. Its assessment is important to determine whether the client and/or the caregiver

needs additional assistance. The caregiver will have to determine whether the client's behaviour will interfere with a handling procedure and, if so, to what degree. In some cases it may not be safe to proceed with the client handling activity until the client's behaviour improves. Recall that clients must be co-operative to perform a transfer procedure. The care team may be required to develop a variety of approaches and strategies to decrease the risk of provoking or triggering unwanted behaviours.

Steps for Assessing Emotional and Behaviour

The caregiver should observe and assess the client for the presence of the following behaviours/emotions. Note any triggers that may provoke any unwanted behaviours.

- **Agitated:** Client exhibits extreme restlessness and may engage in urgent or active verbal argument. An agitated client cannot concentrate on tasks.
- **Aggressive:** Client may display verbal or non-verbal hostility that can disturb and distract the caregiver.
- **Anxious:** Anxiety is characterized by feelings of mingled dread and apprehension about the future without specific cause for the fear. A high level of anxiety may restrict participation in transfers and lifts.
- **Assaultive:** Client has a history of hitting, kicking or biting caregivers.
- Confused: Client is unable to think logically and may be out of touch with reality.
- **Dependent:** Client relies totally on others for daily care.
- **Depressed:** Client exhibits a non-pathological state of despondency characterized by feelings of inadequacy, lowered activity and pessimism about the future.
- **Hostile:** Client is angry and has a tendency to inflict harm on others.
- **Impulsive:** Client habitually acts without thinking about the consequences and may not wait for instructions.
- **Low tolerance for change:** Client has difficulty adjusting to a new environment, a new caregiver or a new procedure.
- **Low self-esteem:** A client who thinks poorly of their abilities may not feel able to complete a transfer as instructed.
- **Rejected:** A client who has co-operated and performed well in the past but has not received positive feedback may hesitate to co-operate again.
- **Resistive:** Client habitually refuses to co-operate and fails to respond to orders, commands or rules.

- Self-destructive: Client seems to co-operate, but may cause an accident endangering self and caregiver.
- Unpredictable: Client is known to behave erratically and inconsistently.

D) Medical Status

It is important to understand and recognize the various signs and symptoms associated with different medical conditions (e.g., muscle weakness and/or spasticity from multiple sclerosis). These symptoms affect the client's ability to help with a procedure and the client may require more assistance and/or the use of devices.

Caregivers should be provided with education regarding a client's physiological and psychological illnesses, the relevant symptoms related to their condition and the effects that certain medications may have on their mobility status. A process is required to communicate the relevant information to the caregiver so that the caregiver is able to determine the safest and most appropriate procedure.

Steps for Assessing the Medical Status

Changes in a client's medical status must be identified and accurately documented in the client's chart/profile and communicated to all caregivers. Caregivers must carefully observe the changes in the client's medical status and how it impacts their ability to perform a transfer or lift.

E) Physical Status

A thorough assessment of the client's physical abilities is an essential component of the client assessment to ensure the safety of both the client and caregiver. Physical status factors to be assessed include:

- Height
- Weight
- Sensory abilities
- Range of motion (ROM)
- Muscle strength and tone
- Bed mobility and balance
- Weight-bearing
- Coordination
- Clothing and footwear

A *Client Mobility Assessment Physical Tool* (Appendix P) can be used to collect and document physical assessment data.

Height and Weight

The height and weight of the client in comparison to the caregiver can pose challenges to the caregiver's body mechanics. Where there is a large height discrepancy between the caregiver and client, additional assistance may be required, especially for procedures such as a weight-bearing transfer. The client's weight may also have an impact on the amount of assistance required from caregivers and the type of equipment to be selected. When using mechanical devices, the caregiver must check to ensure that the client's weight does not exceed the recommended load limit. If using a mechanical device with slings, the caregiver will be required to make a decision as to the size of a suitable sling based on the manufacturer guidelines. For patients with a body mass index (BMI) of greater than 30, bariatric equipment and additional assistance and planning may be required. (See Glossary for definitions of BMI and bariatric lift.)

Steps for Assessing Height and Weight

To obtain the height and weight, the caregiver will have to take the necessary measurements.

- Measure or estimate the client's height using normal methods
- Measure the client's weight using a weigh scale (chair scale, lift scale, bed scale, etc.)

Sensory

The human body has the ability to receive and interpret many types of sensory data that can affect how the body moves. Due to medical conditions and/or aging, some sensory organs may become impaired and this may seriously affect the client's abilities to safely perform activities. Some common sensory impairments affect the sensation of touch, proprioception (sense of limb position), body awareness, vision or hearing. The caregiver may be required to take additional precautions and steps during the handling procedure to protect the client from harm if sensory deficits are present.

Steps for Assessing Sensory Abilities

If the client is sitting, the caregiver should stand in front of them. If the client is

lying in the bed, the caregiver should stand beside the bed close to the client. Steps for assessing sensory abilities are out-lined in Table 2.

Table 2: Assessing the Client's Sensory Abilities

Sensation	Proprioception	Vision	Hearing
To assess sensation of touch: • Touch the client's finger, arm, toe and leg • Ask the client where you touched them • Ask the client to close both eyes, then repeat the procedure	To assess proprioception (sense of position of the limbs): • Ask the client to close both eyes • Move the client's finger up and down • Ask the client to identify the direction of movement • The test can be repeated on the wrist, elbow, shoulder, toe, ankle, knee, hip, etc.	To assess vision: • Ask the client to identify items from various distances • Ask the client to follow your fingers while you move them back and forth in the client's view	To assess hearing: • Stand in front of the client • Ask the client to repeat the words you say in a normal voice • Repeat the procedure while standing on each side of the client

Range of Motion

A client must have fair to good range of motion (ROM) of many of their joints to perform selected client handling procedures, especially transfers. Joints with significant restrictions or impairments may seriously interfere with client and/or caregiver's ability to conduct some client handling procedures. Additional assistance or an alternative procedure such as mechanical lift may be required.

Steps for Assessing ROM

When assessing the ROM of the joints, ensure that caregivers:
- Raise the bed to the proper height to perform the manoeuvre safely
- Position themselves properly so they can use good body mechanics to avoid injury

- Record and check whether the movement is pain-free or increases the pain
- Do not force the movement beyond the range that the client feels is comfortable
- Ensure that the system for recording ROM is consistent in your facility (Appendix P)
- Consider using a grading system to record the ROM of a joint as, for example, G (good), F (fair) or P (poor)

**See Client Mobility Assessment (Appendix P) for a sample grading guide.*

Table 3: Assessing ROM

Joint ROM	Client's position	Caregiver's position
Head and trunk	Sitting on the edge of the bed or in a chair	Stand in front of the client. While supporting the client from their shoulders, assess their ability to maintain or restore normal alignment.
Shoulder	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them. If the client is lying in the bed, stand beside the bed. Make sure the bed is raised to the proper height so that you do not have to assume an awkward posture. • Ask the client to raise their arm up and forward as far as they comfortably can. Demonstrate the movement at the same time. If the client is unable to do this, assist them by placing one hand behind and above the elbow and grasping their hand in your other hand. • Repeat the procedure with the client's other arm. • Ask the client to raise their arm up and sideways as far as they comfortably can. Demonstrate the movement at the same time. If the client is unable to do this, assist them with the movement by placing one hand behind and above their elbow and grasping their hand in your other hand. • Repeat the procedure with the client's other arm.

Elbow	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them. If the client is lying in the bed, stand beside the bed. Make sure the bed is raised to the proper height to avoid awkward posture. • Ask the client to bend and straighten their elbow. Demonstrate the movement at the same time. If the client is unable to do this, assist them with the movement by placing one hand below the elbow and grasping their hand in your other hand. • Repeat the procedure with the client's other elbow.
Wrist	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them or sit on the edge of the bed beside them or on a stool slightly to the side of the client. If the client is lying in the bed, stand beside the bed or sit on the edge of the bed. • Ask the client to bend their wrist up and down. Demonstrate the movement at the same time. If the client is unable to do this, assist them to move their wrist up and down by holding the hand and forearm. • Repeat the procedure with the client's other wrist.
Fingers	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them or sit on the edge of the bed beside them or on a stool slightly to the side of the client. Make sure the bed is raised to a proper height to avoid awkward posture. • Ask the client to make a fist. Demonstrate the movement at the same time. If they are unable to do this, assist them with the movement by bending and straightening their fingers with one hand while supporting the client's wrist with the other hand. • Repeat the procedure with the client's other hand.

Joint ROM	Client's position	Caregiver's position
Hip	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them or sit on the edge of the bed beside them or on a stool slightly to the side of the client. If the client is lying in the bed, stand beside the bed. Make sure the bed is raised to a proper height to avoid awkward posture. • If the client is sitting, ask them to lift their knee up toward the chest. Demonstrate the movement at the same time. If the client is unable to do this, assist them with the movement by placing one hand under the heel and the other hand just above the client's knee. Lift the knee toward the chest. Note that when the client is in a sitting position, extension of the hip joint cannot be assessed. • If the client is lying in the bed, ask them to lift their knee up toward the chest and then straighten the hip and the knee back down. If the client is unable to do this, assist them by placing one hand under the heel and the other one under the knee. Assist them to lift the knee up toward their chest. • Repeat the procedure with the client's other leg.

Knee	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them or sit on the edge of the bed beside them or on a stool slightly to the side of the client. If the client is lying in the bed, stand beside the bed. Make sure the bed is raised to the proper height to avoid awkward posture. • If the client is in a sitting position, ask them to straighten their knee and then bend it. Demonstrate the movement at the same time. If the client is unable to do this, place one hand under the heel and the other hand just above the knee. Assist the client to straighten and bend the knee. • If the client is lying in the bed, ask them to pull their knee up and then straighten it. Demonstrate the movement at the same time. If the client is unable to do this, assist them by placing one hand under the heel and the other hand under the knee. Assist them to bend the knee. • Repeat the procedure with the client's other knee.
Ankle	Sitting or lying in bed	If the client is in a sitting position, stand in front of them or sit on the edge of the bed beside them or on a stool slightly to the side of the client. If the client is lying in bed, stand beside the bed or sit on the edge of the bed. • Ask the client to move their foot up and down. Demonstrate the movement at the same time. If the client is unable to do this, place a hand under the client's sole or grasp the foot and assist them to move the foot up and down. • Repeat the procedure with the client's other ankle.

Muscle Strength and Tone

Muscle tone refers to the amount of tension or resistance in a muscle during movement. Caregivers should assess the quality of the muscle tone to determine whether it is normal, spastic, rigid or flaccid (lax). The caregiver should also assess and record the strength of major muscle groups of each joint (Appendices P and S). Assessing muscle strength and tone indicates how much and what kind of assistance a client needs.

Steps for Assessing Strength

To assess the strength of the muscles, ensure that for each assessment you:

- Tell the client what you are going to do and why. Position yourself properly so that you can use good body mechanics to avoid injury.
- Raise the bed to the proper height to perform the manoeuvre safely.
- Check and record whether the movement is pain-free or increases the pain.
- Place the palm of your hands at midpoint between the joints.
- Apply resistance against the direction of movement being tested and the amount of resistance provided must reflect the client's ability. Never force the movement beyond the range within which the client feels is comfortable.
- Stop immediately if there are any signs of discomfort or increasing pain (e.g., facial expression, resistance).
- Ensure that the recording of muscle strength is consistent in your facility. Record the strength of flexors and extensors of each joint using, for example, G (good), F (fair) and P (poor) (Appendix P).
- Standard instructions for assessing muscle strength should be used (see Table 4).

Table 4: Assessing Muscle Strength

Joint	Client's Position	Caregiver's Position
Shoulder	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them. If the client is lying in the bed, stand beside the bed. Make sure the bed is raised to a proper height so that you do not have to assume an awkward posture. • Grasp the client's one hand with your hand and place your other hand at the mid-point of the client's upper arm. • Ask the client to raise their arm forward and up while applying resistance to the direction of the movement. • Place one hand under the upper arm of the client and the other hand on the client's hand. • Ask the client to lower their arm while applying resistance in the direction of the movement. • Repeat the procedure with the client's other shoulder.
Elbow	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them. If the client is lying in the bed, stand beside the bed. Make sure the bed is raised to a proper height so that you do not have to assume an awkward posture. • Support the elbow with one hand and place your other hand at the mid-point of their forearm. • Ask the client to bend their elbow while you apply resistance to the direction of the movement. • Ask the client to straighten their elbow while you apply resistance to the direction of the movement. • Repeat the procedure with the client's other elbow.

Wrist	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them. If the client is lying in the bed, stand beside the bed. Make sure the bed is raised to a proper height so that you do not have to assume an awkward posture. • Place your hand on the client's hand so that your fingers are on their palm and your thumb is on the back of the knuckles. • Ask the client to bend their wrist up and down while you apply resistance to the direction of the movement. • Repeat the procedure with the client's other wrist.
Grip	Sitting or lying in the bed	If the client is in a sitting position, stand in front of them. If the client is lying in the bed, stand beside the bed. Make sure the bed is raised to a proper height so that you do not have to assume an awkward posture. • Cross your index and middle fingers. Place them in the client's palm and ask the client to squeeze your fingers. With this method, you avoid pain in your hand/fingers in the event that the client squeezes too hard.
Hip Flexors	Sitting or lying in the bed	If the client is in a sitting position, stand slightly to the side of the client. If the client is lying in the bed, stand beside the bed at about their hip/thigh level. • Place one hand on the top of the client's thigh just above the knee and the other hand under the client's heel. • Ask the client to pull their knee up toward the chest while you apply resistance with your hand on their thigh. • Repeat the procedure with the client's other hip.

Joint	Client's Position	Caregiver's Position
Hip Extensors	Lying in the bed on their back, lying on their side or lying on their stomach	Stand beside the bed. • If the client is lying on their back, place one hand at mid-point under the client's thigh and the other one under the heel. • Ask the client to push down against your hands and then relax. • Repeat the procedure with the client's other hip. • If the client is lying on their side, place one hand at the mid-point of the back of the thigh and the other under the heel. • Ask the client to push the leg back against your hands while you apply resistance to the direction of the movement. • Repeat the procedure with the client's other hip. • Another way to assess the strength of the hip extensors is to ask the client to bend the knees while lying on their back, then to lift the hips up and lower them gently. This is also referred to as bridging.
Knee Extensors	Sitting on the edge of the bed or in a chair/ wheel-chair	Squat in front or slightly to the side of the client or sit on a stool slightly to the side of the client. • Place one hand above the client's knee and your other hand on the top of the client's lower leg at mid-point. • Ask the client to straighten their knee while applying resistance to the direction of movement with your hand on the lower leg. • Repeat the procedure with the client's other knee. • The assessment of the strength of the knee extensors can also be done when the client is lying on their back. Your hand position is the same as when assessing the client in the sitting position.

		• Ask the client to bend one knee so that their foot is flat on the bed. • Ask them to raise the other leg straight up while applying resistance to the direction of movement with your hand on the lower leg. (Note that the lying down procedure for testing knee extensors may be contraindicated for some conditions – e.g., a client with a total hip replacement. Consult a physician as required.)
Knee Flexors	Sitting on the edge of the bed or in a chair/wheelchair	Squatting in front or slightly to the side of the client or sit on a stool slightly to the side of the client. • Place one hand above the client's knee and the other hand under and behind the client's heel while the client's knee is straight. • Ask the client to bend their knee while applying resistance to the direction of the movement with your hand under and behind the heel. • Repeat the procedure with the client's other knee.
Ankle	Sitting or lying in the bed	If the client is in a sitting position, the caregiver may sit on a stool or assume a squatting position. If the client is lying in bed, stand beside the bed at about the level of the client's lower leg or sit on the edge of the bed. • Place one hand so that your fingers are on top of the client's foot and your thumb is under the sole. Place the other hand under the client's heel. • Ask the client to bend their foot up while you apply resistance to the direction of the movement with your fingers. Then ask the client to bend the foot down while you apply resistance to the direction of the movement with your thumb. • Repeat the procedure with the client's other ankle.

Bed Mobility and Balance

Assessing client bed mobility and sitting and standing balance provides the caregiver with information about the client's trunk strength and trunk control. Clients need to have adequate trunk control and balance to perform a transfer procedure. If bed mobility and balance are poor, the client will most likely require a non-weight-bearing procedure to move from one surface to another (i.e., mechanical lift or lateral slide/transfer procedure).

Steps for Assessing Client Bed Mobility and Balance

Standard instructions for assessing client bed mobility, sitting and standing balance are available in Table 5.

Table 5: Assessing Client Bed Mobility, Sitting and Standing Balance

Client's Ability	Client's Position	Caregiver's Position
To turn to their side(s) in bed	Lying on their back	Stand beside the bed at about the client's shoulder level facing the client. • Ask the client to bend their knees so that their feet are flat on the bed. • Ask the client to roll toward you and then roll back onto their back. If the client is unable to do this, assist them to roll toward you by placing one hand on their hip while holding onto the shoulder blade. • Repeat the procedure from the other side.

To sit up	Lying on their back	Stand beside and near the bed at about the client's shoulder level facing the client. • Lower the bed rail on the side where you are standing. • Ask the client to bend their knees. • Ask the client to roll toward you. Reassure them that you are there to prevent them from falling. • Ask the client to lower their legs over the side of the bed and push up with their arms at the same time. • If the client is unable to do this, assist them to a sitting position by placing one hand under the shoulder and the other one under the knees.
To balance in sitting	Sitting on the edge of the bed, hands in their lap	Stand in front of and facing the client. • Assess the client's ability to maintain a sitting balance by first placing your hands on the client's shoulders with your palms on the front and your fingers on the back of the shoulders. • Ask the client to resist the movement or ask them to prevent you from pushing them as you gently push them side to side. • Repeat the procedure while gently pushing the client forward and backward.

To stand up	Sitting on the edge of the bed	Two caregivers may be needed to ensure that the procedure is safe for the caregiver and the client. • Face the client and stand closely in front or slightly to the side of them. • Ask the client to move forward to the edge of the bed so that they can put their feet flat on the floor. • Ask the client to lean forward, then push up from the bed with their hands. Support them by putting your arms around the waist, if necessary.

Coordination

Some medical conditions can affect a client's coordination so they have difficulty moving in a normal way. The client may exhibit jerky movements when trying to perform a task. Very poor coordination may affect the client's ability to participate in an active procedure such as a transfer. The client may have great difficulty with trunk control, reaching or grasping for target objects, foot placement or walking. Many clients with coordination problems may be able to perform procedures such as transfers. It is important the caregiver assesses the client's coordination and determine whether the client requires additional assistance, verbal instruction or extra time to complete the task.

Steps for Assessing Coordination

a) To assess hand coordination, ask the client to:

- Touch their nose with their index finger. Demonstrate the movement. Repeat with the other hand.
- Touch their index fingers together. Demonstrate the movement. If the client is unable to do this, repeat the instructions a few times while demonstrating the movements.

b) To assess leg coordination, ask the client to:

- Touch the heel of one foot to the inside of the other knee and then run the heel down the inside of the shin to the ankle and back up to the knee. Repeat the procedure a few times.
- Repeat the procedure with the other leg.

Weight-bearing Status

Assessing a client's weight-bearing status is one of the most important steps in the physical assessment. Weight-bearing status will help determine the type of procedure to be selected. If the client is able to weight-bear consistently and able to co-operate, a transfer procedure will most likely be selected. However, other parameters such as joint range of motion and equipment availability must also be assessed prior to a decision being made. Non-weight-bearing clients or inconsistently weight-bearing clients will more likely require a non-weight-bearing procedure such a lift or lateral slide procedure. Clients with a body mass index (BMI) of greater than 30 may require specialized bariatric equipment and assistance from additional caregivers.

Steps for Assessing Weight-bearing

To assess the client, the client must be able to attain a sitting position and should have sufficient ROM and strength in at least one leg. Start the client in the sitting position with feet flat on the floor.

1. Initially ask the client to put both hands on the bed or arms of the chair, lean forward and push down on the bed or chair arms as if they were about to stand.

2. Ask the client to push down hard enough to raise their bottom off the surface they are seated on.

3. Ask the client to stand (provide them with a support to lean on if necessary).

4. Ensure the client can remain standing with or without the support for approximately five seconds.

Clothing and Footwear

It is necessary to assess the type of clothing the client is wearing before performing transfers and lifts. Slippery fabrics may make it difficult to hold a client firmly, increasing the risk of injury to the client and the caregiver. Poorly fitting or worn-out slippers and shoes interfere with safe and proper transfers. Appropriate footwear gives the client stability and enables them to reach their full potential during transfers.

Steps for Assessing Clothing and Footwear

Observe the type of clothing and footwear the client is using. Make the necessary recommendations to the client or the family regarding appropriate attire.

4.4.2 Risk Factors Related to the Caregiver

Many risk factors related to the caregiver may contribute to caregiver and client injuries (see Table 6). Although a formal assessment of the individual caregiver is not conducted, it is important that caregivers conducting client handling procedures recognize where there may be risk factors related to them or another caregiver. When caregivers recognize potential risks that affect a client handling technique, they need to address these issues by consulting with their unit/department manager.

Table 6: Risk Factors Related to the Caregiver

Skills Knowledge Experience Height Size relative to client	Attitude Approach	Time of day Time pressures Shift Work Fatigue Frequency of lifting Number of caregivers
		
	Wellness Fitness Strength	

a) Relative Sizes of the Caregiver(s) and the Client

The risk of injury increases during a transfer or lift when there is a great difference in weight and/ or height between the caregiver(s) themselves and between the caregiver(s) and the client. The height difference between two caregivers may affect the performance of some transfers and/or lifts. The caregivers should discuss and problem-solve the best approach to a client handling procedure before they attempt the procedure.

b) Physical Condition of the Caregiver

The caregiver's general health, fitness, alertness, strength and fatigue level may vary at different times of the day and can affect safe task performance. To assess caregiver-related risk factors, communication with co-workers is necessary to ensure that all precautions have been taken when preparing for a transfer or lift. If the caregiver feels that they do not have their usual strength at a given moment, they should ask someone else to be the leader.

c) Shift Work

Shift work affects the caregivers for various reasons:

- The number of caregivers varies from shift to shift. There may not be as many staff in the afternoon shift as in the morning shift and yet it may be necessary to perform the same number of transfers and lifts. This may increase the risk of injury to the caregiver and the client.
- The frequency of transfers and lifts may vary by the shift.
- The caregivers may have difficulties maintaining their sleep and activity patterns due to the design of the shifts (e.g., rotating counter-clockwise, too rapid/slow rotation).

d) Skills, Knowledge and Experience

To ensure that client handling procedures are performed in the safest and most appropriate way, assess the caregiver's skills and knowledge with respect to client mobility. Caregivers must be trained and demonstrate competence in client handling and equipment procedures. Caregivers must also comply with the procedures that are set out by the organization. Issues that commonly arise in this area include new staff and/or replacement staff from external organizations, who may not possess the necessary skills, knowledge and experience with the organization's client handling procedures. These issues should be reported to the unit/department manager. Managers are responsible to ensure the caregiver possesses the necessary skills and knowledge to perform their tasks.

e) Workload Restraints

Caregivers facing heavy workloads may be tempted to rush to complete client handling procedures. This increases the risk of injury to the caregiver and the client. To ensure that the planned procedure is the safest and most appropriate, caregivers need to assess, plan and communicate their intentions to clients and to each other. Caregivers should also work at a safe speed and comply with organizational policy and procedures.

f) Clothing

To reduce the risk of injuries to employees, it is important for organizations to identify risk factors related to clothing and footwear and establish policies and procedures that prevent injuries to caregivers participating in client

handling activities. Appropriate footwear with non-slip soles and closed toe and heel gives the caregiver stability and decreases the risk of slips and falls. Appropriate clothing allows the caregiver unrestricted movement during the procedures. Jewellery may become a risk factor if it becomes entangled with the client or the client pulls on it.

g) Approach

The caregiver's approach to a client is important to assess. Training in how to approach an aggressive client or client with responsive behaviours must be provided by the organization. This may include identification of triggers that provoke unwanted behaviour. A consistent and non-confrontational approach by the caregiver reduces the risk of injury to both the caregiver and the client.

4.4.3 Risk Factors Related to Equipment

Equipment risk factors include the following:

- Inadequate training in the use of equipment
- Improper use of equipment
- Use of faulty equipment
- Lack of an equipment preventive maintenance program
- Non-compliant equipment (e.g., not meeting CSA standards)
- Non-adjustable equipment (e.g., bed heights)
- Fixed arm and leg rests on wheelchairs and geriatric chairs
- Poorly designed equipment features that require excessive force to operate (e.g., bed cranks, bed rails, brake)
- Fit of the equipment with respect to the client and environment
- Ease of use of the equipment
- Availability of the equipment
- Storage of equipment

Medical devices (catheter bags, intravenous tubing or prostheses, etc.) attached to the client may increase the risk of injury to the caregiver and the client. An equipment assessment process can be used to identify risk factors. See Section 3.2.3 and Appendix E.

4.4.4 Risk Factors Related to the Environment

The environment impacts on how safely a client handling manoeuvre is completed. The following environmental risk factors need to be considered:

- **Space** – restricted spaces such a bathrooms may hinder caregiver and client mobility
- **Lighting** – poor lighting may affect the client's ability to see
- **Temperature** – high or low room temperature may be uncomfortable for caregivers
- **Obstacles** – may cause trip and fall hazards
- **Noise** – excessive noise may distract the caregiver and/or client
- **Floors** – polished or wet floors may contribute to slip hazards; carpeting increases the force required to move wheeled equipment
- **Layout** – designs may not accommodate equipment and caregivers during client handling activities
- **Colours** – pastels and contrasts (e.g., black and white) create visual perception obstacles for elderly clients

4.4.5 Client Mobility Assessment Summary Form and Algorithm

The Client Mobility Assessment Summary Form (Appendix Q) can be used to collate the information collected during an initial or ongoing client mobility assessment. A thorough assessment considers the risk factors associated with the client, equipment, environment and caregiver(s).

The summary form will assist caregivers to analyze the assessment data and carefully select the correct client handling procedure. If the answer is "No" to any questions in Appendix Q, a lift or lateral slide is the preferred method for the client handling manoeuvre. If the answer to all of the questions is "Yes", then a transfer procedure may be selected. Once the decision is made about whether the manoeuvre is to be a transfer or lift, the assessor must then determine which type of transfer, lift or lateral slide technique is most appropriate. To assist caregivers in determining the appropriate procedure refer to the Client Mobility Assessment Algorithm (Appendix R).

STANDARD OR RATIONALE

- Due Diligence OHSA s. 25(2)(h) and 27(2)(c)
- Safe Work Practices HCRFR s. 8 and 9

4.5 Client Mini-assessment (C.A.R.E.)

The organization has developed and implemented a methodology to briefly assess any changes in client's medical status or abilities prior to any client handling activity.

SUGGESTIONS FOR IMPLEMENTATION

This client mini-assessment based on communication, ability, resistance and equipment/environment (C.A.R.E.) is the third type of assessment to be completed in a client handling program. A mini-assessment must take place prior to any planned client handling activity to ensure that the previously chosen procedure is still appropriate. A mini-assessment reminds a caregiver to look for changes in a client's medical condition, communication, cognitive status, behaviour, strength and ROM, as well as changes in the environment or issues with the caregivers themselves. All caregivers should be trained to conduct this client assessment while they are preparing for the client handling procedure.

A sample Client Mini-assessment (C.A.R.E.) tool can be used to help a caregiver through the process of a mini-assessment (Appendix S).

STANDARD OR RATIONALE

- Due Diligence OHSA s. 25(2)(h) 27(2)(c)
- Safe Work Practices HCRFR s. 8 and 9
- To ensure client safety, caregivers are required to assess clients informally and formally.

4.6 Communication of Client Assessment Plan

The organization has developed a client assessment plan to communicate and document the client mobility assessment findings.

SUGGESTIONS FOR IMPLEMENTATION

Upon completion of the client assessment, a mobility plan must be developed, communicated and documented in the client's chart or service delivery notes. This may be done on the organization's charting system. A client mobility plan outlines a variety of potential reposition, transfer, lateral slide and lift techniques as well as the equipment that might be utilized (Appendix T).

A logo system consisting of pictograms of the organization's accepted client handling procedures is an effective way to augment communication of the chosen procedure to all staff. Logos can be reduced in size and inserted into the client's chart.

OSACH has developed 15 logos to complement this program. Logos may be posted by the client's bedside or in client documents as a communication tool. Logo cards are available for download from the OSACH Product Catalogue (ergonomics section) at www.osach.ca. An organization may decide to supplement the types of logos that are available to include specific equipment and techniques that are being used within your organization. See Modules 5, 6 and 7 for sample logos. The following logos are included with this program:

- Independent unsupervised transfer
- Supervised independent transfer
- Minimal assistance transfer
- Two-person side-by-side transfer
- One-person pivot transfer
- Two-person pivot transfer
- Sit-stand device
- Transfer belt
- Transfer disk
- Transfer board
- Patient handling sling
- Lifting device
- Ceiling lift
- Lateral slide device
- Repositioning sheet

STANDARD OR RATIONALE

- Due Diligence OHSA s. 25(2)(h) 27(2)(c)
- Measures and Procedures HCRFR s. 8 and 9
- A documented and communicated client mobility plan facilitates consistent use of selected client handling procedures.

4.7 Assessing in a Community Setting

Organizations providing care in the community setting have developed and implemented strategies to reduce the exposure of safety hazards to caregivers.

SUGGESTIONS FOR IMPLEMENTATION

Caregivers face a variety of risk factors while providing client care in the community. In a community setting, the caregiver may not have the same level of assistance as in an organization such as a hospital, long-term care facility or group home. The organization providing client services in the community should ensure that the client and the client's home have been assessed to determine the level of assistance and equipment required. An assessment should be completed to determine the presence of any actual or potential safety hazards that may impact the caregiver. This should be completed prior to the caregiver providing service. A control plan can be developed to reduce the caregiver's risk of exposure to the hazards(s). In many cases administrative policies and procedures, and caregiver training are required.

The following checklist outlines risks that may be present in a home care environment:

- To ensure client safety, caregivers are required to assess the client informally and formally
- Doorways too narrow to accommodate equipment
- Assisting clients up and down stairs
- Rugs
- Pets
- Children
- Family members not available to assist
- Family members not capable of properly assisting with the procedure
- Cultural issues
- Shoes not allowed to be worn indoors
- Icy walkways, stairways, driveways
- Unsafe structures
- Transferring clients into and out of vehicles
- Old/unsafe household equipment
- Low beds
- Lack of equipment

STANDARD OR RATIONALE

- Risk Assessment and Due Diligence OHSA s. 25(2)(h) and 27(2)(c)
- Safe Work Practices HCRFR s. 8 and 9

Module 5: Repositioning and Transfer Procedures

The task of transferring or repositioning clients can be as hazardous to caregivers as manual lifts. The use of assistive devices and proper techniques can reduce excessive forces on the low back (Garg et al. 1991a, Garg et al. 1991b). To reduce the risk of injury to clients and caregivers, organizations need to support the use of appropriate transfer and repositioning procedures and devices. It is essential that caregivers use the assistive devices with which they have been provided.

The Goals of the Transfer or Repositioning Procedure are to:

1. Ensure the safest and most comfortable procedure for the client and the caregiver
2. Allow the client to feel as independent as possible by allowing them to participate
3. Reduce the risk of injury to both the client and the caregiver
4. Provide good control and ensure that the client feels secure
5. Reduce the intensity of biomechanical stresses and physical demands for the caregiver such as awkward postures, high forces associated with lifting/lowering and/or pushing or pulling
6. Permit the caregiver to assume a position with good leverage

This module provides:

- Information on preparing for a transfer or repositioning procedure
- Step-by-step instructions for turning, repositioning and transferring clients with and without assistive devices such as transfer boards, belts and discs as well as handling slings, slide boards and slider sheets

This document does not intentionally endorse any particular brand of equipment.

5.1 Preparing for a Transfer or Repositioning Procedure

The organization has developed a preparation process for a client transfer or repositioning activity.

SUGGESTIONS FOR IMPLEMENTATION

Preparing for a safe reposition or transfer procedure begins with the caregiver confirming that the prescribed transfer is the most appropriate technique for the particular client. This is determined through the assessment process detailed in Module 4 and should be conducted each time a caregiver is preparing to carry out a repositioning or transfer procedure with a client.

Preparation for a client handling procedure is required in four areas:

1. Caregiver
2. Client
3. Environment
4. Equipment

5.1.1 Caregiver

Before starting a client handling procedure, caregivers must:

- Be wearing appropriate clothing to allow unrestricted movements and non-slip, low heel, closed toe/heel footwear that provides adequate support.
- Perform a client mobility mini-assessment (C.A.R.E) to determine appropriateness of the selected procedure.
- Discuss the procedure with colleague(s) to determine who will take the lead role.
- Make eye contact (if possible) and explain the procedure to the client and how they can assist the caregivers to make things easier.
- Arrange the furniture to ensure that the distance the client travels during the procedure is the shortest possible.
- Follow standard health and safety procedures such as locking bed or chair brakes, lowering bed rail, adjusting head and height of bed, removing chair foot pedals or armrests as appropriate.
- Place themselves in the best position to ensure the client can understand communication (hear and see caregiver) and feel safe and respected.

- Place themselves in the best position to maintain a good base of support, use correct postures and proper body mechanics to decrease the risk of injury. Tightening abdominal and buttock muscles and using leg muscles helps to protect the spine from injury.
- Avoid rotating or twisting the spine by moving your feet and whole body in the direction of the client handling procedures.
- Give short, simple commands and instructions that are clearly communicated to the client one at a time.
- Be prepared for the unexpected.
- Never grasp a client under the armpits as it can cause a shoulder injury.
- Avoid grasping a client's pants as this can cause injury and the fabric may give way. If a secure hold is required, a transfer belt is recommended, barring any contraindications to its use.
- Where two caregivers are moving a client in bed, select an appropriate bed height for both caregivers. Ensure the height is comfortable for the shorter of the two caregivers.
- Postpone the procedure if the client is resistant, uncooperative and/or aggressive.

5.1.2 Client

Prior to every client handling procedure, caregivers must ensure that:

- The client is wearing proper clothing including non-slip footwear and that his/her dignity is preserved.
- The client's equipment such as IV tubes and poles, urine bags and safety belts is positioned so it is safe for the client and does not interfere with the transfer.
- The client places their hands on the caregiver's forearms, hips or on a piece of equipment and not around the caregiver's neck.

5.1.3 Environment

Caregivers must prepare the client's environment (usually room) prior to every client handling procedure. Ensure that:

- The path for the procedure is clear (remove obstacles and re-arrange furniture if necessary).
- The floor is dry and clear of tripping hazards.
- The lighting and noise levels (radio, TV, etc.) are appropriate.

5.1.4 Equipment

Prior to every client handling procedure, caregivers must prepare the equipment. Ensure that:

- Transfer equipment such as sit-stand devices, slings, belts or disks are checked before each procedure for safety.
- Any faulty equipment is tagged and removed immediately.
- Equipment (sling, belts, etc.) is the correct size.
- Equipment to which the client is being transferred (wheelchair, commode, chair, etc.) is inspected and positioned correctly.
- Slings, splints or braces are applied and removed according to manufacturers' policies and procedures and/or instructions.
- The height and head of bed are adjusted to suit the heights of caregivers and comfort of client respectively.
- The wheels on all equipment are locked unless otherwise required.
- The bed rails are lowered if necessary.
- The wheelchair arm and leg rests are removed if necessary (unless otherwise required).

STANDARD OR RATIONALE

- Duties of employers, supervisors and workers OHSA s. 25, 27 and 28.
- Safe Workplace Practices HCRFR s. 8 and 9
- Equipment HCRFR s. 44
- A well defined and executed preparation process that addresses issues with the caregiver, client, equipment and the environment reduces the risk of injury to the caregiver and client prior to client handling.

5.2 Client Repositioning Procedures

The organization has established standard procedures for turning and repositioning clients.

The effort or force required to reposition clients in chairs or beds is surprisingly high. In addition, the postures of the caregivers are often awkward. Back and other musculoskeletal injuries happen often to caregivers performing such tasks. The benefits of using proper body mechanics and using transfer and repositioning devices during the repositioning of clients cannot be emphasized enough.

SUGGESTIONS FOR IMPLEMENTATION

The next sections will outline the steps for various repositioning and turning techniques. Organizations with caregivers who provide such services must ensure the caregivers are familiar with these procedures. Caregivers are required to complete the four preparation steps outlined in section 5.1 prior to repositioning or transferring the client.

Instructions for the following client handling techniques will be provided:

1. Turning a client in bed
2. Repositioning a client in bed
3. Repositioning a client from lying to sitting
4. Repositioning a client form sitting to standing
5. Repositioning a client in a chair
6. Repositioning a client in a high-back or geriatric chair

5.2.1 Turning a Client in Bed

Turning a client in bed with one caregiver

This sample procedure outlines the steps to turn a client in bed with the assistance of only one caregiver.

Requirements

- Turning or draw sheet optional
- One caregiver

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Caregiver instructs the supine client to bend their knees and hips. The caregiver may need to assist the client with this task.

Step 3: Caregiver asks the client to initiate the turn by bringing their shoulder/arm furthest away toward the caregiver. If the client can bend their knees, the caregiver can also ask the client to roll their knees toward the caregiver at the same time. The caregiver assists by guiding the client's shoulders and hips/knees towards the caregiver. The caregiver must ensure they use proper body mechanics – use a walk-stride stance (one foot in front of the other), keep back straight, bend at the hips and knees.

Step 4: Once the patient is in desired position on their side, ensure that the client is comfortable, safe and well supported before raising the bed rails.

Turning a client in bed with two caregivers

This sample procedure outlines the steps to turn a client in bed with the assistance of two caregivers (Figure 10). Add additional caregivers as needed.

Requirements:

- Turning or draw sheet
- Two caregivers (Caregiver 1 – leader, Caregiver 2 – assistant)

Client Position: Supine (lying on back)

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Caregiver 1 – Prepare turning or draw sheet by rolling it up halfway (lengthwise).

Step 3: Caregivers stand on opposite sides of bed.

Step 4: Caregiver 2 – Place both feet on floor or the knee nearest client's head onto bed, then bend slightly at the hips/knees.

Step 5: Caregiver 2 – Ask or assist client to bend their knee furthest away from him/her and fold arms across chest. Reach across to client's bent knee and shoulder on the same side then gently roll client onto side (toward Caregiver 2). Ensure the client is stable in the side lying position.

Step 6: Caregiver 1 – Place rolled sheet along client's back from shoulder to hip, ensuring that unrolled portion of sheet is spread out on bed. Caregiver 2 then gently rolls client onto back on the sheet.

Step 7: Caregiver 1 – Place both feet on floor or place the knee nearest client's head on bed, then bend slightly at the hips/knees.

Step 8: Caregiver 1 – Ask or assist client to bend their knee furthest away from him/her and fold arms across chest again. Reach across to client's knee and shoulder on the same side, then gently roll client onto their other side. Caregiver 2 unrolls the sheet on client's "other" side.

Step 9: Caregiver 1 – Gently roll client back to the supine position (lying on back).

Step 10: Both caregivers move to one side of the bed. Ensure the bed rail is raised on the side opposite the two caregivers to protect the client from rolling out of bed. Caregivers should use a walk-stride stance (one foot in front of the other) or put one knee on the bed and the other on the floor. Keeping their backs straight, both caregivers grasp the rolled sheet firmly with palms up and count “1, 2, 3, slide”, at which time they pull the client gently toward themselves.

Step 11: Caregiver 1 moves to the other side of the bed and lowers the railing. Using proper body mechanics Caregiver 1 proceeds to once again gently roll the client onto his/her side.

Step 12: Once the client is lying in the desired position on their side, straighten the turning sheet. Ensure that the client is comfortable, safe and well supported before raising the bed rails.

If using a specialized turning or repositioning sheet follow the manufacturer guidelines.

Client Position: Side-lying

For a client already in side-lying position, begin sequence as outlined above eliminating Steps 3-4 and complete with Steps 5-10.

Figure 10: Turning a Client in Bed with Two Caregivers (Steps 10 and 11)

5.2.2 Repositioning a Client: Moving up in the Bed

This procedure is most appropriate for repositioning a client who has slid down to the end of the bed or is lying sideways on the bed (Figure 11).

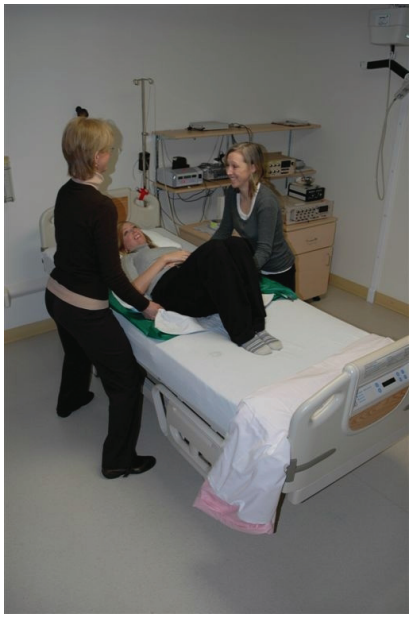


Figure 11: Repositioning a Client in Bed with Two Caregivers

Requirements:

- Draw sheet, turning sheet or repositioning sheet
- Two caregivers (Caregiver 1 – leader, Caregiver 2 – assistant)

Client Position: Supine (lying on back)

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Caregiver 1 – Place lower edge of pillow under top of client's shoulders. Alternatively the pillow may be removed from under the client's head to reduce friction while client lifts and holds their head up. For some clients removing the pillow may be uncomfortable.

Step 3: Caregiver 1 – Ask client to bend knee(s) and place arms across chest, assisting if necessary.

Step 4: Caregivers 1 and 2 position themselves on either side of the bed.

Step 5: Perform steps 2-5 of the procedure for turning a client in bed if the draw sheet is not already underneath the client. Otherwise, caregivers 1 and 2 roll the draw sheet in close to the client and grasp the draw sheet with both hands using an underhand grip. Repositioning sheets may be used.

Step 6: Caregivers 1 and 2 should have both feet on the floor, a wide base of support and hips and knees bent slightly. Alternatively, the knee that is closest to the head of the bed may be placed on the bed and the other foot should be on the floor. Caregivers may then brace thighs firmly against the bed and tuck in their trunk area.

Step 7: Together, count “1, 2, 3, move”. On the command “move”, move the client up in bed. Repeat in several small stages. The caregivers should move their feet and knees forward at each stage. The client’s head should not be touching the head board.

Step 8: Once the client is in desired position, straighten the draw sheet and bed linens. Ensure the client is comfortable, safe and well supported before raising the bed rails.

Note:

- If repositioning slider sheets are used, follow the manufacturer’s guidelines
- Beds that can assume a Trendelenburg or head-down tilt position can be used to facilitate sliding the client up the bed providing the head-down position is not medically contraindicated for the client. This gravity-assisted position reduces the force required by the caregivers to move the client.

5.2.3 Lying to Sitting at Bedside

This procedure is used to reposition a client from a lying position to a sitting position.

Requirements:

- One caregiver. A second caregiver may stand by to assist as required.

Client Position: Supine (lying on back)

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Ask the client to shift to the side of bed nearer the caregiver. They may use a monkey bar or bed ladder if available. Otherwise, assist client using re-positioning method 5.2.1.

Step 3: The caregiver(s) should be positioned on the side of the bed where the client will sit. Lower the bed to a height that will allow the client to place their feet on the floor. Ask the client to bend their hips and knees. The caregiver may assist if the client is unable. If the head of the bed can be elevated, raise the head of the bed to assist the client into sitting if desired.

Step 4: Ask the client to roll onto the side that faces the caregiver. Assist them if they are unable to do this by placing one hand on their back of their shoulder and one on the backside of the hip, and rolling them toward the caregiver.

Step 5: The caregiver must be positioned close to client while maintaining proper body mechanics and posture (feet apart, with a wide base of support, head up, trunk stabilized with the low back curve maintained, hips and knees slightly bent).

Step 6: Place one hand under the client's shoulder that is against the bed and the other hand over and around the lower legs just below the knees.

Step 7: Allow the legs to move off the bed first then in one motion ask the client to push up off the bed using their elbow and raise their trunk while simultaneously lowering the legs over the side of the bed. The caregiver may guide and support the client's trunk with the one hand while gently controlling their legs with the other until the feet are placed flat on the floor. Remain in front of and close to client. If required, support the client from the shoulders until they are able to balance.

5.2.4 Sitting to Standing

This procedure is used to reposition a client from a sitting to standing position (Figure 12). The following procedure outlines a manual sit-to-stand procedure.

Note there are assistive devices available to sit, stand and transfer clients. The use of transfer belts is recommended as a best practice.

Client Position: Sitting at bedside or in chair

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1

Step 2: Position the height of the bed so that the client's feet are flat on the floor. Facing the client, ask them to move to the edge of the bed. If the client is unable to do this, assist them to move as close to the edge of the bed or chair as possible. The client can do this by alternately moving their buttocks (bum walk). Support the client through the procedure.

Step 3: Be sure that the client's knees are at an 80-90° angle and the client's feet are beneath their knees.

Step 4: The caregiver should face the client and block their weaker foot or both feet if necessary. To block the client's foot/feet, the caregiver should place their feet in front or slightly on either side of the client's foot/feet. The caregiver should block the client's knee(s) with their knees on either side of the client's.

Step 5: The caregiver should place their hands around the client's waist, above the sacrum area or under the buttocks. A transfer belt may be used if available. The caregiver should be close to the client (client and caregiver look over each other's shoulder).

Step 6: Ask the client to look up and lean forward.

Step 7: The caregiver asks the client to push off the bed or chair arms with their hands on the count of 3. Alternatively, the client may place their hands on the caregiver's arms. The caregiver then assists the client to straighten their hips and knees by gently putting pressure on the lower trunk area with their hands or by pulling the transfer belt forward while simultaneously blocking the client's knees with their knees.

Step 8: To prevent falling, ensure that the client is standing straight up and not leaning forward.

See figure 12.

With a Transfer Belt

Without a Transfer Belt

Figure 12: Sitting to Standing Position (with and without transfer belt)

5.2.5 Repositioning in a Chair

Front-to-back Reposition in Chair

This procedure is suitable for clients who have slid down or are bent over the armrest of a chair with a low back or removable back support or wheelchair and are unable to correct this posture.

Requirements:

- Draw sheet or repositioning sheet
- Two caregivers (Caregiver 1 – leader, Caregiver 2 – assistant)

Optional Equipment:

- Friction-reducing products such as one-way directional repositioning sheets. Refer to the manufacturer's guidelines for proper use.

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Remove the client's seat belt or tray, foot rests and the back head rest where applicable.

Step 3: Caregiver 1 – Ask client to bend knee(s) to 80° and place arms across chest, assisting if necessary.

Step 4: Caregiver 1 – Stand behind the chair and assume a bent-knee stance. Caregiver 2 – Stand in front of the client and assume a bent-knee stance.

Step 5: Caregiver 1 – Lean client forward and grasp the client's forearms by placing your hands/arms under the client's arms, between the client's arms and chest. Caregiver 2 places hands under client's knees.

Step 6: Caregivers 1 and 2, maintain proper lifting body mechanics and tighten abdominal muscles.

Step 7: Together count "1, 2, 3, up". On the command "up", caregivers 1 and 2 slide the client up/back in the chair.

Step 8: Replace footrests, seatbelt, tray and back/head rest, where applicable, and ensure the client is comfortable, safe and well supported.

Side-by-side Reposition in Chair

This procedure is suitable for clients who have slid down or are bent over the armrest of a chair. The chair could have a high or low back.

Requirement

- Two caregivers

Optional Equipment:

- Friction-reducing products such as repositioning sheets. Refer to the manufacturer's guidelines for proper use and application.

Step 1: 2 caregivers positioned on either side of client sitting in a chair. Clients arms are bent at the elbow.

Step 2: Using their arm closest to the client the caregivers reach under the posterior aspect of clients arm and supportively grasp the clients forearm e.g. thumb is located on the upper forearm and palm under the forearm. Do no grab client under the armpit.

Step 3: The caregivers stand using a wide base of support with their back's straight, hips and knees slightly bent. Caregivers place their opposite or free hand under the client's thigh nearest them.

Step 4: One caregiver counts "1, 2, 3", then both simultaneously slide the client back into the chair while supporting the client's arms and legs.

Use of Tilt Chairs

Where clients are using chairs with combined back rest and seat pan tilt features, the tilt mechanism can be used to reposition the client back into the proper sitting position in the chair (Figure 13). The ability of the anterior seat pan to be tilted upward from the horizontal position allows gravity to reposition the client back into proper sitting position in the chair. This technique minimizes an employee's exposure to excessive forces and awkward postures during a repositioning procedure.

Figure 13: Tilt Chair
(Photo Courtesy of Halton Healthcare Services)

5.2.6 Repositioning in a Geriatric or High Back Chair

This procedure is suitable for clients who have slid down or are bent over the armrest of a high-back or geriatric chair and are unable to correct this posture.

Requirements:

- One caregiver

Optional Equipment:

- Friction-reducing products such as repositioning devices. Refer to the manufacturer's guidelines for proper use.

Client Position: Sitting slouched in geriatric chair

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Remove the client's seat belt, tray and foot rests if applicable.

Step 3: Bend the client's knees to 80° if possible and place the client's feet slightly apart.

Step 4: Caregiver stands in front of client with knees bent slightly and brace knees up against client's legs.

Step 5: Caregiver leans forward and place hands their on client's sacrum. Shift client's buttocks toward the back of the chair by raising one side of the sacrum then the other (bum walk). Gently push back on the client's knees to assist in shifting them backward. Ask the client to assist when possible.

Step 6: Replace seatbelt, tray and footrests rest where applicable and ensure the client is comfortable, safe and well supported.

STANDARD OR RATIONALE

- Safe Workplace Practices HCRFR s. 8 and 9
- Written procedures ensure the program operation is defined and consistently communicated and applied by management and employees.

5.3 Client Transfer Procedures and Algorithm

The organization has established standard procedures for transferring clients.

Transfer procedures are indicated when a client moves from one surface to another and is able to weight-bear either fully or partially through at least one leg or both arms. Clients must be co-operative. When conducting client transfers, varying levels of assistance are required, ranging from the client being completely independent to the client requiring maximum assistance of caregivers or the use of mechanical transfer device. The six categories of transfers are:

1. Independent unsupervised transfer
2. Independent supervised transfer
3. Minimal assistance transfer
4. Pivot transfer
5. Side-by-side transfer
6. Special transfers (e.g., one-person transfer with transfer board, bathtub transfer, car transfer).

For information on sit-stand transfer mechanical devices see Module 7.

An algorithm for transfers can be helpful in assisting caregivers in determining the most suitable procedures. Appendix U provides a sample Client Mobility Algorithm for Transfers.

SUGGESTIONS FOR IMPLEMENTATION

5.3.1 Independent Unsupervised

Independent unsupervised transfers are for clients assessed as totally independent and safe with transfers. No procedure required, however you must ensure the client follows all safety precautions as outlined in section 5.1.

5.3.2 Independent Supervised

Independent supervised transfers are for clients who are independent and safely transferring themselves but require verbal guidance and reminders. They may be supervised from a distance and no procedure is required, however you must ensure the client follows all safety precautions as outlined in Section 5.1.

5.3.3 Minimal Assistance Procedures

This procedure is used to transfer a client who requires minimal physical assistance of one caregiver to transfer or assistance with equipment. A transfer belt may be used and is a recommended best practice

Requirements:

- One caregiver

Assistive Devices:

- Optional transfer belt

Client Position: Sitting – in chair, wheelchair, bedside

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in section 5.1.

Step 2: Position the wheelchair or chair parallel or at a slight angle to the bed on the side on which the transfer is to be performed. Ensure wheel chair leg rests do not interfere with the transfer. The arm rest may be left on.

Step 3: Ask the client to move closer to the edge of the bed so they can place their feet flat on the floor. If they are unable to do this, assist them to the edge of the bed.

Step 4: Stand on the client's weaker side facing the client.

Step 5: Ask the client to sit on the edge of the bed. If they are unable to do this, assist them to a sitting position.

Step 6: Stabilize the client's weaker foot with your foot and the weaker knee with your knees, if necessary.

Step 7: Support the client around their waist or use a transfer belt if available.

Step 8: Ask the client to look up, lean forward and push up from the bed with their hands.

Step 9: Count "1, 2, 3, stand." On the command "stand", stand up together.

Step 10: Ask the client to turn toward their stronger side and grasp the furthest armrest of the wheelchair and assist the client to sit in the wheelchair. Ensure the client is comfortable, safe and well supported.

5.3.4 Pivot Transfers

The following examples are procedures that can be accomplished with one caregiver, with or without transfer devices such as transfer belts or disks. It should be mentioned that in most cases using equipment such as a transfer belt, disk or board is preferred to using no equipment. Please refer to Module 3 for the client mobility assessment. It provides guidelines for determining which procedures are appropriate for whom.

One-person Pivot Transfer

This procedure is used to transfer a client who is co-operative and capable of weight-bearing with at least one leg.

Requirements:

- One caregiver

Client Position: Sitting and prepared to transfer from one seated position to another seated position on another surface (bed, commode, chair, wheelchair). The client requires at least moderate assistance of one caregiver.

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Place wheelchair with the wheels parallel to the length of the bed.

Step 3: Carry out sitting at bedside to standing as per Section 5.2.4. Encourage the client to use their arms to push up from the chair.

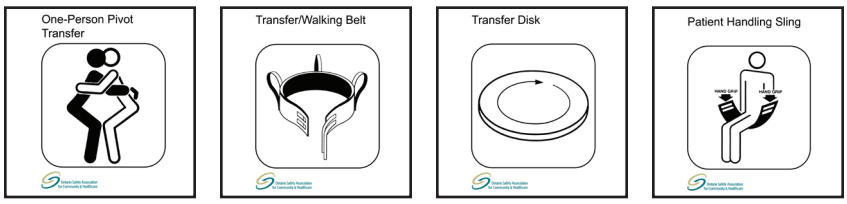
Step 4: With client standing in one place, caregiver and client take small steps to pivot their feet 90° toward the location of the wheelchair.

Step 5: Pivot the client so that the backs of their knees are against the wheelchair, then ask the client to lean forward, bend at the hip to sit, and place his/her hands on the arms of the chair or wheelchair if possible.

Step 6: As the caregiver slowly lowers the client into chair, the caregiver must maintain the normal curve in their lower back and bend their knees and hips.

Step 7: Ensure client is positioned back into the chair. Put footrests, tray and back/head rest in place, where applicable, and ensure the client is comfortable, safe and well supported.

One-person Pivot Transfer with Assistive Devices



The procedure is essentially the same as a one person-pivot. The exception is that one caregiver places the assistive devices in position as per manufacturer guidelines. See section 7.5 for additional information on assistive devices for transfers.

Transfer Belt: The transfer belt is useful for clients with balance problems during standing, transferring and walking. It is also useful for clients who demonstrate trunk and pelvic weakness when trying to stand or have arm weakness and difficulty pushing up from surfaces. The transfer belt is applied to the client's waist while the client is in sitting. Ensure the belt is the correct size and the buckle is fastened properly.

Transfer Disk: The transfer disk is ideal for clients that have difficulty pivoting or moving their feet during a transfer. The disk is placed on the ground under the client's feet. The feet should be positioned in the middle of the disk so they do not touch the outer rim.

Patient Handling Sling: The patient handling sling is helpful for clients demonstrating trunk and pelvic weakness when trying to stand or transfer. The sling is placed against the client's lower back/buttock area when the client is sitting. The caregiver grasps the sling handles on either side of the of the client prior to the transfer. The client should refrain from using slippery clothing.

Requirements:

- One caregiver

Assistive Devices:

- Transfer belt
- Patient handling sling
- Transfer disk

Client Position: Sitting and prepared to transfer from one seated position to another seated position on another surface (bed, commode, chair, wheelchair).

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Place wheelchair with the wheels parallel to the length of the bed. Place the assistive device into position as per manufacturer's guidelines prior to standing the client.

Step 3: Carry out sitting at bedside to standing as per section 5.2.4.

Step 4: With client standing in one place, caregiver takes small steps while pivoting the client 90° toward the wheelchair.

Step 5: Pivot the client so that the back of their knees are against the wheelchair, then ask client to lean forward and place his/her hands on arms of chair or the bed if possible.

Step 6: While maintaining a curve in their lower back and bending their knees and hips, the caregiver slowly lowers the client into the chair.

Step 7: Ensure client is positioned back into the chair. Remove the assistive devices. Put in place footrests, trays and back/head rest, where applicable and ensure the client is comfortable, safe and well supported.

Figure 14: Transfer Belt and Transfer Disk
(Photos courtesy of Halton Healthcare Services)

Two-person Pivot Transfer

Requirements:

- Two caregivers

Client Position: Sitting and prepared to transfer from one seated position to a seated position on another surface (bed, commode, chair, wheelchair). The client requires moderate to considerable assistance of two caregivers but is still weight-bearing.

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Place the wheelchair with the wheels parallel to the length of the bed or slightly angled to the bed.

Step 3: Caregiver 1 stands in front of the client, bends at the hips and knees if necessary and blocks the client's weaker foot or both feet if necessary. The caregiver should brace the client's weaker knee(s) by placing their knees on either side, if necessary. Caregiver 1 should place their hands around the client's waist, above the sacrum area.

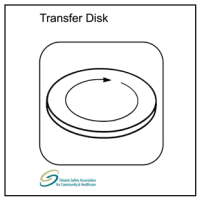
Step 4: Caregiver 2 stands behind/beside the wheelchair, close to the bed. He/she places a knee on the bed and, from the back of the client, grasps both sides of the client's sacral area or transfer belt.

Step 5: Encourage the client to lean forward and use their arms to push off the bed or chair arms. Alternatively the client can place his/her hands on the caregiver's forearms or waist.

Step 6: Caregiver 1 counts "1, 2, 3, stand" and on the command "stand", both caregivers tighten abdominal/buttock muscles while they assist client to stand. Caregiver 1 pivots the client toward the new surface while caregiver 2 lowers their knee from the bed and guides the client's hips onto the new sitting surface.

Step 7: Ensure the client is seated back on the surface if required and is comfortable, safe and well supported.

Two-person Pivot with Assistive Devices



The procedure is essentially the same as a two-person pivot. The exception is that one caregiver positions the assistive devices in place prior to the transfer. See Section 7.5 for additional information and benefits of assistive devices.

Transfer Belt: Useful for clients with balance problems during standing, transferring and walking. It is also useful for clients who have difficulty standing due to trunk and pelvic weakness or if they have arm weakness and difficulty pushing up. The transfer belt is applied to the client's waist while the client is in sitting. Ensure the belt is the correct size and the buckle closes properly.

Transfer Disk: Ideal for clients who have difficulty moving their feet during a transfer. The transfer disk is placed under the client's feet so that the feet are in the middle of the disk and do not touch the outer rim.

Patient Handling Sling: Helpful for clients demonstrating trunk and pelvic weakness when trying to stand or transfer. The sling is placed against the client's lower back/buttock area while the client is in sitting, then the caregiver grasps the handles on either side of the client prior to the transfer. The client should refrain from using slippery clothing.

Requirements:

- Two caregivers

Assistive Device Options:

- Transfer Belt or Patient Handling Sling
- Transfer Disk

Client Position: Sitting and prepared to transfer from one seated position to a seated position on another surface (bed, commode, chair, wheelchair). The client requires moderate to considerable assistance of two caregivers but is still weight-bearing.

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Place the wheelchair with the wheels parallel to the length of the bed or slightly angled to the bed.

Step 3: Place the assistive device into position as per manufacturer's guidelines prior to the client standing.

Step 4: Caregiver 1 stands in front of the client, bends at the hips and knees if necessary and blocks the client's weaker foot or both feet if necessary. The caregiver should brace the client's weaker knee(s) by placing their knees on either side, if necessary. Caregiver 1 grasps the handles of the transfer belt or sling if they are using assistive devices. If they are not using these devices, the caregiver places both hands around the client's waist, above the sacrum.

Step 5: Caregiver 2 stands behind/beside the wheelchair, close to the bed. He/she places a knee on the bed and from the back of the client, grasps both sides of the client's sacral area or transfer belt.

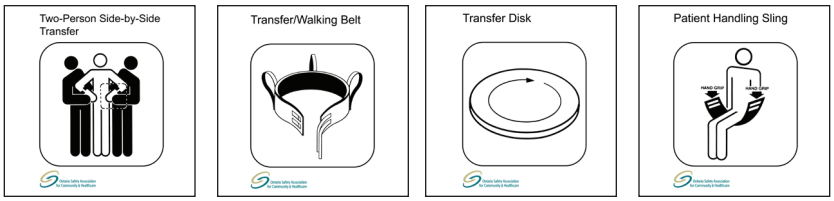
Step 6: Encourage the client to use their arms to push off the bed or chair arms. Alternatively the client can place his/her hands on the caregiver's forearms or waist.

Step 7: Caregiver 1 counts "1, 2, 3, stand" and both caregivers tighten abdominal/buttock muscles while they assist client to stand. Caregiver 1 pivots the client toward the new surface while Caregiver 2 lowers their knee from the bed and guides the client's hips onto the new sitting surface.

Step 8: Remove assistive devices. Ensure the client is seated back on the surface if required and ensure the client is comfortable, safe and well supported.

5.3.5 Side-by-side Transfers

Two-person side-by-side Transfer with and without Assistive Devices



The side-by-side transfer is appropriate for clients who have moderate difficulty initiating the standing position but do not need to have their knees blocked as required in a pivot transfer. They may have some difficulty moving their feet. Assistive devices can be used to facilitate the transfer.

Requirements:

- Two caregivers

Optional Assistive Devices:

- Transfer belt
- Transfer disk

Client Position: Sitting and prepared to transfer from one seated position to a seated position on another surface (wheelchair, bed, commode, chair). The client requires moderate assistance of two caregivers but is still weight-bearing.

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Position the wheelchair parallel or at a slight angle to the bed on the side to which the client is to be transferred, preferably the client's stronger side. If assistive devices are being use apply these as per manufacturer guidelines.

Step 3: Position the client on the edge of the bed and move forward to the edge of the bed so that the caregivers can place their feet flat on the floor.

Step 4: Caregivers sit on both sides of the client, then each places one foot in front of the client's foot closer to them. Alternatively, if the client is sitting in a chair or wheelchair, the caregivers assume a walk-stride stance on either side of the client, bending slightly at the hips and knees.

Step 5: The caregiver holds the client under their forearm and grasps gently above their wrist. Avoid lifting the client under their axilla (armpit). Ask the client to push off on the chair arm or bed if they are able. Alternatively the caregivers can offer their other hand in the palm up position and hold the client's hand, then assist them to stand. If available, caregivers may use a transfer belt to assist the client into the standing position.

Step 6: Count "1, 2, 3, stand". On the command "stand", stand together with the client.

Step 7: Assist the client to move to the wheelchair by turning slowly until the back of the client's legs are touching the wheelchair. Assist the client into the sitting position. If the client is using a transfer disk, pivot the client, then slowly lower them into the chair.

Step 8: Remove assistive devices. Ensure that the client is comfortable, safe and well supported.

5.3.6 Sit-stand Transfer Devices

Sit-stand devices are available for assisting weight-bearing clients who require considerable assistance to move from the sitting position to the standing position and back to sitting. The sit-stand device tremendously reduces the physical demands of the worker. Due to the wide variety of sit-stand devices and accessories, caregivers need to consult the manufacturers' guidelines for proper procedures.

5.3.7 Special Transfers

The following are examples of procedures that can be accomplished with one or more caregivers, with or without transfer devices such as transfer boards and belts.

One-person Transfer Using a Transfer Board

This procedure is used to transfer a sitting client from one surface to another of equal height. The client may have trunk and lower extremity weakness, hip and/knee contractors or lower extremity amputation(s) and is unable to stand. However they may have adequate upper extremity strength to slide across the transfer board with or without assistance. This procedure may also be used for a car transfer.

Requirements:

- One or two caregivers

Assistive Devices:

- Transfer board

Client Position: Sitting and prepared to transfer from one seated position to another on another surface (e.g., wheelchair, bed).

Step 1: Check that the surface of the transfer board allows for sliding (use a towel if necessary).

Step 2: Position two surfaces parallel to one another or at a slight angle. The surface to which the client is moving should be on his/her stronger side. Remove appropriate foot/arm rests.

Step 3: Request the client to lean away from the direction of movement and place the transfer board partially under client's buttock, allow board to extend halfway across the seat of the other surface, bridging the gap between them.

Step 4: Using proper body mechanics, assist client to move across the board as necessary. If using a towel, pull the towel with client on it to the new surface. Encourage the client to assist using their arms to push off the surfaces or chair arm.

Step 5: Once the client is firmly supported on the other surface, remove the board from underneath the client by requesting them to lean away from the transfer board.

Figure 15: Transfer Boards

(Photos courtesy of Halton Healthcare Services)

Bathtub Transfer in a Home Care Setting

This procedure can be used to transfer a client between a wheelchair/commode chair and bath board or bath chair.

Requirements

- One caregiver

Assistive devices:

- Transfer bath board
- Bath or shower chair or seat
- Installed grab bars
- Towel

Optional Devices:

- Hand shower head

Step 1: Place the wheelchair/commode chair parallel or at a slight angle to the side of the bathtub.

Step 2: Remove arm rest and place the bath board or bath chair securely on/in the tub approximately two-thirds from the front end of the tub.

Step 3: Stand in front of the client and assist client to stand, pivot and sit down on bath board or bath chair.

Step 4: Ask the client to hold onto grab bars. Ask client to lift legs into bathtub and assist if necessary.

Step 5: Reverse procedure to assist client out of the tub.

If client is going to be bathed in the tub, assist the client to lower themselves into the tub from the bath chair using a towel to wrap around client's chest and under armpits. The caregiver should place one foot in the tub to be able to perform good body mechanics. Reverse the procedure for getting the client out of the tub.

Wheelchair-to-car Transfer

Requirements:

- One caregiver

Assistive Devices:

- Transfer belt
- Transfer disk or swivel cushion
- Transfer board
- Special devices – e.g., car door grab bars

Step 1: Always transfer the client to the front seat of the car since the rear door does not usually open wide enough to allow an easy transfer.

Step 2: Place wheelchair parallel or at a slight angle to the side of the car, leaving enough space between the car door and the wheelchair. If a transfer belt is to be used, apply this before the client stands.

Step 3: Ask client to hold onto car door or back of car seat for hand support.

Step 4: Stand in front of the client and ask the client to move to the edge of the chair.

Step 5: Assist client to stand, pivot toward car seat and sit down gradually while protecting their head from hitting the door frame. Ensure the back of the legs are close to the car seat. If client is unable to stand, use transfer board to transfer directly from wheelchair to car seat as per Section 5.3.6.

Step 6: Ask the client to lift legs into car and assist if necessary. A transfer disk or swivel cushion may be used to facilitate the turn.

Step 7: To assist a client to transfer out of a car, reverse the procedure. A transfer belt may be appropriate.

STANDARD OR RATIONALE

- Safe Workplace Practices HCRFR s. 8 and 9
- Written procedures ensure the program operation is defined and consistently communicated and applied by management and employees.

Module 6: Manual and Mechanical Lifting and Sliding Devices

The use of mechanical lifts reduces the risk of injury to caregivers and results in fewer musculoskeletal disorders (Edlich et al. 2004, Li et al. 2004, Chhokar et al. 2005, Engst et al. 2005, Miller et al. 2006, Canadian Institute for Health Information 2007). However, caregivers use mechanical lifts less frequently than one would expect, reportedly due to time constraints, lack of perceived need and lack of manoeuvring space.

Lifts are carried out on those clients who are physically unable to bear weight or mentally unable to assist with the manoeuvre. A lift may be performed using a mechanical lifting device or manually. Manual lifting is strongly discouraged due to the high physical demands placed on the caregiver. As a best practice most organizations prohibit manual lifting except in emergency or very exceptional circumstances.

When a non-weight-bearing client is unable to use a mechanical lift or they must move from one horizontal surface to another in the reclined position, a lateral slide procedure may be performed using the appropriate equipment. The use of a sliding device reduces the friction between the client and the underlying surface (McGill & Kavcic 2005, Lloyd & Baptiste 2006), thereby reducing caregiver exposure to excessive forces. Caregivers must still use proper body mechanics and technique during the procedure to reduce the loads on the back (McGill & Kavcic 2005).

This section focuses on preparing a client for a lift, step-by-step descriptions of manual procedures, the safe use of lifting devices and lateral slide procedures.

6.1 Preparing to Lift a Client

The organization has developed a preparation process for client lifting.

SUGGESTIONS FOR IMPLEMENTATION

Preparing for a lift or slide procedure begins with the caregiver confirming that the prescribed procedure is the most appropriate technique for the particular client. This is determined through the assessment process detailed in Module 4 and should be conducted each time a caregiver is preparing to carry out a lift or lateral transfer/slide procedure with a client. Preparation for a client handling procedure is required in four areas:

1. Caregiver
2. Client
3. Environment
4. Equipment

6.1.1 Caregiver

Before starting a client handling procedure, caregivers must:

- Wear appropriate clothing to allow unrestricted movements and non-slip footwear that provides adequate support
- Perform a client mobility mini-assessment to determine appropriateness of procedure
- Discuss the procedure with colleague(s) to determine who will take the lead role
- Make eye contact (if possible) and explain the procedure to the client and how they can assist the caregivers to make things easier
- Arrange the furniture to ensure that the distance the client travels during the procedure is the shortest possible
- Follow standard health and safety procedures such as locking bed brakes; lowering bed rail and adjusting head and height of bed appropriately
- Place themselves in best position to ensure the client can understand communication (hear and see caregiver) and feel safe and respected
- Position themselves to maintain a good base of support, and use correct postures and proper body mechanics to decrease the risk of injury.
- Tighten abdominal and buttock muscles and use leg muscles, which helps to protect the spine from injury

- Avoid rotating or twisting the spine by moving their feet and whole body in the direction of the client handling procedures
- Give short, simple commands and instructions that are clearly communicated to the client one at a time
- Be prepared for the unexpected by pausing during each step of the procedure
- Never grasp a client under the armpits as it can cause a shoulder injury
- Postpone the procedure if the client resists, is uncooperative and/or aggressive

6.1.2 Client

Prior to every client handling procedure, caregivers must ensure that:

- The client is wearing suitable clothing
- The client's equipment such as IV tubes and poles, urine bags and safety belts is positioned so it is safe for the client and does not interfere with the lift
- The client places their hands on the caregiver's forearms, shoulders, hips or on a piece of equipment and not around the caregiver's neck

6.1.3 Environment

Prior to every client handling procedure, caregivers must prepare the client's environment (usually room) prior to client handling procedures. Ensure that:

- The path for the procedure is clear (remove obstacles and re-arrange furniture if necessary)
- The floor is dry and clear of tripping hazards
- The lighting and noise levels (radio, TV, etc.) are appropriate.

6.1.4 Equipment

Caregivers must prepare the equipment prior to every client handling procedure. Ensure that:

- Lift and lateral slide equipment such as lifts, slings, slider sheets, slider boards, etc. are checked and safety-ensured before each procedure
- Any faulty equipment is tagged and removed immediately

- Equipment is positioned correctly (e.g., place wheelchair, commode or chair facing client's destination)
- Equipment such as slings are the correct size
- Equipment, slings and sliding devices are cared for, applied and removed according to manufacturers' policies and procedures and/or instructions
- Height and head of bed are adjusted to suit the heights of caregivers and the comfort of the client, and to accommodate equipment as required
- Wheels on all equipment are locked unless otherwise required
- Bed rails are lowered when necessary
- Wheelchair arm and leg rests are removed when necessary (unless otherwise required)
- Patient does not exceed the equipment load limit

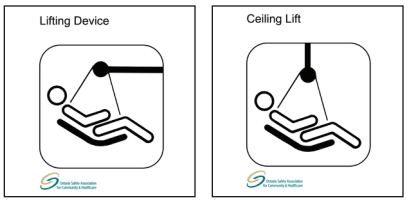
STANDARD OR RATIONALE

- Duties of employers, supervisors and workers OHSA s. 25, 27 and 28
- Safe Workplace Practices HCRFR s. 9
- Equipment HCRFR s. 44
- A well defined and executed preparation process that addresses issues with the caregiver, client, equipment and the environment prior to client handling reduces the risk of injury to the caregiver and client.

6.2 Mechanical Lifting Devices and Procedures

The organization has established standard mechanical lift procedures based on the manufacturers' guidelines.

SUGGESTIONS FOR IMPLEMENTATION



Eliminating manual client lifting is the key to reducing MSDs. Suitable lifting devices should be provided and their use enforced. Mechanical lifts must comply with CSA standards. Whether the patient is being moved from a bed, the floor, a chair or the toilet, the purpose of using a lifting device is to:

- Ensure that the client is secure and safe during the lift
- Reduce the physical demands of handling clients by eliminating or reducing the need to perform manual lifts
- Reduce the risk factors for musculoskeletal disorders such as awkward postures, excessive forces and pushing or pulling

The lifting devices come in a variety of designs and are offered in bariatric versions. They can be categorized as:

- Ceiling lifts
- Portable floor lifts
- Stationary or fixed lifts

A lifting device is indicated when a client is:

- Not physically able to move themselves
- Not mentally able to help with lifts
- Unable to bear weight using one or two legs or both arms
- Displaying inconsistent or aggressive behaviour

Operating lifting devices usually requires two caregivers. A fixed lift such as a tub lift requires one or two caregivers. Caregivers must consult their corporate policy and manufacturers' guidelines.

6.2.1 Ceiling Lift

a) Advantages:

- Ideal for tight space constraints
- Eliminates manual lifting
- Easy to manoeuvre
- Available with fixed and portable motor unit
- Portable overhead track units available for temporary applications
- Variety of tracking configurations available
- Variety of sling applications available
- Able to lift off the floor
- Variety of load limits
- Bariatric products available

b) Disadvantages:

- Cannot be moved within the room unless it has a portable motor and tracking is available elsewhere
- Many corporate policies require the lift be operated by two caregivers. Refer to the manufacturer's guidelines for the number of persons required.
- Extensive installation requirements needed (building integrity, standards and codes compliance, etc.)

6.2.2 Portable Lift

a) Advantages:

- Eliminates manual lifting
- Wheeled unit can be moved to various locations (e.g., emergency)
- Able to lift off the floor
- Variety of sling applications available
- Variety of load limits
- Bariatric products available
- Collapsible lift for cars available

b) Disadvantages:

- Many corporate policies require the lift be operated by two caregivers. Refer to manufacturer's guidelines regarding number of persons required.

- Requires additional workspace to manoeuvre (six feet for bed to chair)
- Requires space for storage

Stationary or fixed lifts are typically used at bathtubs and swimming pools.

6.2.3 Slings

Sling selection, use and maintenance are essential to the safety and comfort of patients. Most sling manufacturers offer a myriad of designs. The condition and size of the client(s) being lifted must be considered to ensure there is a proper fit. Some clients are at risk of bedsores. Refer to manufacturer guidelines to determine whether slings can be left in position under the clients. Suppliers of lifting equipment have comprehensive published guides detailing the proper use and care of slings. Only slings designed for the equipment must be used.

Types of Slings

Which of the many types of slings is used depends upon the patient's body type and position (bed, chair, etc.) and whether the slings are to be used for bathing or other activities. Common examples of slings include:

Hammock

The hammock sling cradles the client from four supporting points and provides full body support: the client's arms are tucked within the sling, the client's arms are placed across the chest, the client's bottom is covered and, depending on the size of the hammock the head is supported.

Universal Sling

A universal sling is a multi-purpose device that is also available in a high-back model with additional head support. This sling typically comes with leg and shoulder straps. Each leg is supported separately by its own strap. It allows for toileting access and is easy to apply to the client in both sitting and lying positions. It is usually available in various materials including a netting or mesh fabric.

Hygiene Split Leg

The split-leg sling is easier to position on a client when they are seated because it is not placed underneath the bottom. The trunk portion of the sling is positioned behind the back of the client at the sacrum and a wide leg section of the sling is positioned underneath each thigh. Securing the straps to the lifting device positions the client's legs either opened or closed. The leg straps are typically narrower than the universal sling's for hygienic reasons.

Amputee

An amputee sling positions the client in a semi-reclined position. Its special design ensures the security of the client being lifted.

Disposable

In order to reduce the risk of infection, slings have been developed that can easily be disposed of once they become soiled, damaged or contaminated in any way. They cannot be laundered. Like the reusable slings, they are colour coded for size and come in two attachment styles (four plastic clips or with loop attachment straps). It is recommended that the patient's name and date of issue be recorded on the label.

Sling Size Guide

Choosing the correct sling is important for patient safety and caregiver safety. Some manufacturers of mechanical/electrical lifts provide a tape measure specifically designed to help caregivers determine the correct sling size for each patient. Each manufacturer has its own unique sling size labelling system. Refer to manufacturers' guidelines for additional information.

Slings come in a wide variety of sizes. If the patient's weight falls into two sizes, refer to the manufacturer's guidelines to determine which one to select. Slings typically accommodate clients weighing up to 200 kg. Bariatric slings, available in a variety of sizes, are designed for patients heavier than 160 kg.

Caring for Slings

- Slings should be inspected before use. It is essential that the slings, their stitching, their straps, the trim and attachment clips are carefully inspected.
- They should be cleaned and disinfected according to manufacturers' instructions.
- Remove the sling from use if:
  - The trim or straps are frayed or cut or the clips show any signs of damage.
  - The sling label is missing or cannot be read.

General Instructions: Applying slings to a client in bed

Step 1: Roll the client toward you. Roll or fold the sling in half lengthwise and position it so that the bottom of the sling aligns with the base of the spine. It is important that patients are centred on the sling.

Step 2: Roll the client away from you and adjust the other half of the sling under the client.

Step 3: Feed the leg sections under the client's thighs, then draw them up between the thighs. They should not be too long or too short.

Step 4: When using band slings, place one under the client's thighs and the other under the upper back. Never allow the client's arms to be inside the band sling.

General Instructions: Applying slings to a client in a chair

Step 1: Place the sling between the chair and the client's back – e.g., at the base of the sacrum or coccyx. Refer to the manufacturer's guidelines.

Step 2: Position the sling equally around both sides of the client's body.

Step 3: Draw each of the leg sections along and under the client's thigh.

6.2.4 Lifting Device Procedure

Portable Floor Lift: General Procedure

Requirements:

- Two caregivers, one on either side of the bed. Refer to corporate policies and manufacturer guidelines to determine the number of persons required

Equipment:

- Portable mechanical floor lifting devices

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 6.1. Also review the manufacturer guidelines for procedures including when to lock and unlock the mechanical lift wheels. A sample checklist is available in Appendix I.

Step 2: Conduct a visual inspection of the lift prior to use. Check the load limit of the lift against the client's weight. Select and inspect the slings.

Step 3: Clear a path for the lift to be manoeuvred.

Step 4: Explain to the client the procedure and the reason for using a lifting device. Demonstrate the operation of the device, if necessary.

Step 5: Explain the client's role during the procedure.

Step 6: Place the sling(s) in the appropriate place under the client according to the previous instructions.

Step 7: Place the mobile lifting device close to the bed with the base under the bed and the boom (bar) above the client's waist level. The base may need to be reduced to fit under the bed.

Step 8: Lower the boom slowly to the point where the hooks can be attached to the sling comfortably and safely. Caregivers must confirm the attachment procedures with the manufacturer's guidelines.

Step 9: Widen the base of the lift as necessary to ensure security and safety.

Step 10: Check that all hooks and attachments are secure.

Step 11: Raise client off bed slowly with a smooth, gentle movement. Pause to ensure the client feels safe and secure. Caregiver 2 supports client's head and shoulders from the opposite side of bed if required. If client is off balance, lower and re-position.

Step 12: While still above bed, turn sling and client to face mast of lift.

Step 13: Gently move entire lift apparatus while other caregiver supports client. Guide client toward chair where they are going to be placed.

Step 14: Widen the base of the lift to fit around the chair. Move the client above the chair while gently lowering the client into the chair. Note that most manufacturers recommend the lift be in the unlocked position when lowering a client. Check the manufacturer manual.

Step 15: Ensure position in chair avoids having to reposition client.

Step 16: Remove sling(s) and straps carefully, first from the lifting device and then from the client.

Step 17: Ensure client is comfortable and secure prior to leaving.

Step 18: Place battery in recharger if a battery-operated lifting device has been used.

Refer to the manufacturer guidelines for procedures regarding ceiling lifts with fixed or portable motor and portable overhead ceiling track units. For more information on mechanical lifts refer to *OSACH: A Planning Guide for the Implementation of Client Mechanical Lifts 2nd Edition 2005.*

6.3 Manual Lifting Procedures

The organization that permits manual lifting under emergency or special circumstances has established procedures as to when and how to perform the manual lifts.

SUGGESTIONS FOR IMPLEMENTATION

Most health care and community care settings prohibit manual lifting unless there is a life-threatening emergency and/or medical reasons. Caregivers must consult their organization's safe client handling policy regarding the topic of manual lifting. The following sections describe three manual client lifting techniques:

- Front and back lift
- Side-by-side lift
- Shoulder lift

6.3.1 Front and Back Lift

The front and back lift could be used with a client who is unable to bear weight on at least one leg or with their arms. The chair to or from which the client will be moved must have a low back and removable arm and leg rests, otherwise the caregivers will not be able to assume the positions necessary to complete the lift.

Requirements:

- Two caregivers (Caregiver 1, Caregiver 2)

Assistive Devices Options:

- Transfer belt

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 5.1.

Step 2: Place wheelchair with the wheels parallel to the length of the bed.

Step 3: Using the proper procedure, assist the client to sit on the edge of the bed.

Step 4: Caregiver 1: Cross the client's arms across their chest and lean them slightly forward.

Step 5: Caregiver 1: Stand behind and close to the client with the knee that is nearest the bed resting on the bed. Shift your body weight onto that leg. Place the other leg on the inside of the chair wheel. To grip the client, use a through-arm grip and grasp the client's opposite forearms low across the client's abdomen.

Step 6: Caregiver 2: In a squat position, place one arm under the client's thighs and the other arm under the lower legs to support the legs. Hold them close to your body.

Step 7: Together count "1, 2, 3, move". On the "move" command, both caregivers shift the client close to the edge of the bed.

Step 8: Caregiver 1 takes his/her leg down from the bed and onto the floor and assume a lunge position.

Step 9: Together, check body mechanics. Tighten the abdominal and buttocks muscles. Count "1, 2, 3, lift", then move the client smoothly toward the chair until the client is above the chair.

Step 10: Together, count "1, 2, 3, down". On the "down" command, lower the client into the chair while maintaining good body mechanics.

Step 11: Replace the arm and leg rests on the chair and ensure that the client is comfortable, safe and well supported.

To move a client from a wheelchair or commode chair to bed, etc., use the same procedure in reverse.

6.3.2 Side-by-side Lift

The side-by-side lift could be used for moving a client who is unable to bear weight through the legs but is able to use their arms and is able to sit. This procedure is suitable when a client is being moved from bed to a chair with fixed arms. Assistive devices such as a client handling sling, a transfer belt or a towel can be helpful during this procedure.

Requirements:

- Two caregivers are required, with one on either side of the client. Caregiver 1 is the leader and Caregiver 2 is the assistant.

Assistive Devices Options:

- Transfer belt, client handling sling or towel

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in section 5.1.

Step 2: Place the wheelchair parallel to and about one metre from the bed.

Step 3: Using the proper procedure, assist the client to sit on the edge of the bed. If using a transfer belt, place it on client.

Step 4: Both caregivers sit on the bed, one on either side of the client.

Step 5: Ask the client to put one arm over the shoulder of each caregiver. If they are unable to do this, fold the client's arms in front of their body. The caregivers and client all face forward.

Step 6: Each caregiver grips one of the back transfer belt handles to support the client from falling backward. Place the client handling sling or towel under the client's thighs.

Step 7: Each caregiver grips one of the handles of the client handling sling while holding the transfer belt with the other hand.

Step 8: Together, count "1, 2, 3, lift". On the command "lift", tighten abdominal muscles and stand up together, lifting the client from the client handling sling. The transfer belt handles are to support the client, not to lift the client.

Step 9: Walk together to the wheelchair with the client's back facing the seat of the chair.

Step 10: Together, count "1, 2, 3, down". On the command "down", gently lower the client to the chair while maintaining tight abdominal muscles and bending knees.

Step 11: Replace the arm and leg rests of the wheelchair and ensure the client is comfortable, safe and well supported.

If you do not have a client handling sling, use a towel. If a towel is not available, place one arm behind the client's back and grip the other caregiver's wrist. Place your other arm under the client's thighs and interlock wrists with the other caregiver.

6.3.3 Shoulder Lift

The shoulder lift is an uncommon lift. It could be used to move a client who cannot bear weight with at least one leg and is unable to help with their arms. The client must be able to sit, be pain-free and have fair to full ROM in both shoulder joints. This procedure is used for a move from bed to wheelchair, commode chair, geriatric chair, etc. and the reverse.

Requirements:

- Two caregivers of similar height
- Caregiver 1 is the leader and Caregiver 2 is the assistant

Assistive Devices Options:

- Client handling sling or towel

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in section 6.1.

Step 2: Position the wheelchair parallel or at a slight angle to the bed and about one metre away.

Step 3: Using the proper procedure, assist the client to sit on the edge of the bed. If using a transfer belt, place it on client.

Step 4: Caregivers 1 and 2 stand on either side of the client and assume a lunge position, then place the knee closest to the client on the bed.

Step 5: The client leans forward (facing the caregivers) and places his/her shoulders against the caregivers' inside shoulders. Then both caregivers move as close to the client's side as possible and ask the client to place his/her arms over the back of the caregivers' closest shoulder. The client and the caregivers are facing in opposite directions throughout the procedure.

Step 6: Next, place the client handling sling or a towel under the middle of the thighs. Grasp the handle of the sling or the end of the towel.

Step 7: Place the hand furthest from the client on the bed. Pause to ensure the position is safe and that everyone is fully prepared for the lift.

Step 8: Count "1, 2, 3, lift". On the "lift" command, push down with the hands on the bed and straighten your knees. It is important that the caregivers use their legs and not their back to lift.

Step 9: Support the client's buttocks with your free hand.

Step 10: Walk in step together toward the wheelchair.

Step 11: Count "1, 2, 3, lower". On the "lower" command, lower the client gently into the wheelchair while maintaining good body mechanics – i.e., keep back straight while bending at the hips and knees. Move the hand from the client's buttocks to the armrest or the back of the wheelchair to ensure it does not move.

Step 12: Ensure that the client is comfortable, safe and well supported.

If you do not have a client handling sling, use a towel. If a towel is not available, place one arm behind the client's back and grip the other caregiver's wrist. Place your other arm under the client's thighs and interlock wrists with the other caregiver.

STANDARD OR RATIONALE

- Safe Workplace Practices HCRFR s. 8 and 9
- Written procedures ensure the program operation is defined and consistently communicated and applied by management and employees.

6.4 Lateral Sliding Procedure

The organization has established standard procedures for laterally sliding clients from one horizontal surface to another.

SUGGESTIONS FOR IMPLEMENTATION

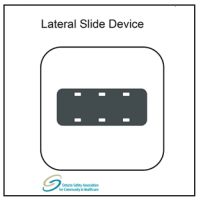
There are occasions when a client who is not able to weight-bear needs to be moved from one horizontal surface to another (e.g., stretcher to bed). This procedure is referred to as a lateral transfer or lateral slide (the latter term is preferred). Various assistive devices are available such as slider sheets, slider boards, roll boards and air mattress technologies.

You may use this procedure for a client who is:

- Reclined and unable to sit and/or help with the other transfers
- Unconscious or unable or not allowed to move
- Non-weight-bearing and unable to use a manual or mechanical lift procedure

A slide is suitable for moving a pre- or post-operative client or someone who requires diagnostic tests conducted in the lying position. The surfaces suitable for a slide include bed, stretcher, operating table or X-ray table. They should be of similar height or with the surface to which you are transferring the client slightly lower, as the slide can compensate for small height differences. Padding placed under the slide board at either end can help minimize a height difference. A bed or draw sheet should be used in conjunction with the slider device.

Lateral Sliding Device Procedure



Requirements:

- Two or more caregivers

Equipment:

- Slider sheet, slider board, roller board

Step 1: Carry out the preparation steps for caregivers, clients, environment and equipment as outlined in Section 6.1. Review and comply with equipment manufacturer guidelines.

Step 2: Ensure that surfaces are level and at a comfortable height for the caregivers, bed rails are lowered, and the head of the bed is flat unless the client's condition requires it to be raised. The surface on which the client is resting can be slightly higher than the surface to which the client is moving so gravity can facilitate the manoeuvre.

Step 3: Explain to the client what you are going to do and what their role will be (moving from bed to stretcher).

Step 4: Roll the client away from the caregiver. Roll a draw sheet or a bed sheet close to the client's back and roll the client back to their other side and pull or straighten the draw or bed sheet. Roll the client onto their back.

Step 5: Position the stretcher parallel to the bed.

Step 6: Caregivers are positioned at the side of the bed and the side of the stretcher. Ask the client to cross their arms if able.

Step 7: The caregiver closer to the client on the bed rolls the client toward them. Another caregiver tucks the slide board or slide sheet half-way under the client (and fully under for roller board and under shoulders and hips for mini-slides). The device should also be underneath the bed or draw sheet. The device should also bridge the gap between the bed and the stretcher. Roll the client onto their back.

Step 8: The caregivers roll the draw or bed sheet close to the client and grasp it with a palms up grip.

Step 9: Ideally two caregivers move to the surface adjacent to where the client is moving and together take responsibility for pulling and sliding the client over the sliding device to the new surface. Additional caregivers can assist with the sliding procedure from the side where the client is currently located. The caregivers assume a walk-stride stance with their back straight. If the surfaces

are not adjustable, some caregivers may prefer to kneel on the edge of the bed or stretcher.

Step 10: Count “1, 2, 3, slide”, then slide the client smoothly over the sliding device and onto the destination surface, all the while maintaining good body mechanics.

Step 11: Roll the client and remove the slide device.

Step 12: Ensure that the client is in the middle of the stretcher or bed, well supported and comfortable. Raise the rails of the stretcher.

A variety of air mattress technologies are available. For procedures on these technologies refer to the manufacturer’s operations manual.

STANDARD OR RATIONALE

- Safe Workplace Practices HCRFR s. 9
- Written procedures ensure the program operation is defined and consistently communicated and applied by management and employees.

Module 7: Environment and Equipment

A major objective of a client handling program is to reduce the physical demands of the caregiver, which are associated with lifting, lateral sliding, transferring and repositioning clients. The most effective way to reduce the caregiver's physical demands is to introduce engineering controls such as client handling assistive devices and technologies to assume all or a portion of the physical loads normally handled by the caregiver (Garg et al. 1991a, Zhuang et al. 1999, Zhuang et al. 2000, Pellino et al. 2006). In addition to equipment as a control mechanism, a suitable environment also has a significant impact on the overall demands of the transfer, lift, lateral slide or reposition.

This module addresses important considerations with respect to the design of the environment, equipment and tools, the various types of mechanical lifting devices and other related client handling equipment.

7.1 Environmental Design

Environmental design involves physical changes to the workstations, equipment, tools and the work environment. Considering the impact of the environmental design is important to:

- Ensure a secure and controlled client transfer/lift
- Reduce the intensity of biomechanical stresses on the caregiver associated with transfers and lifts
- Eliminate or reduce physical demands of the task, such as manually lifting, lowering pulling or pushing
- Permit the caregiver to assume postures and positions with better leverage

The organization has developed, in consultation with the JHSC, an environmental design and planning process to optimize client handling procedures and accommodate client handling equipment and activities.

SUGGESTIONS FOR IMPLEMENTATION

7.1.1 Work Environment

Floor Surfaces

An important design consideration is the type of flooring, particularly in areas where the caregiver has to push wheeled equipment. Although carpet absorbs noise and feels and looks nice, it is more difficult to push and manoeuvre wheeled equipment on carpet than on a hard surface such as linoleum. Research has shown that cart push/pull forces are the lowest on concrete rather than tile, asphalt or carpeted surfaces.

If a lip or joint is present between two surfaces or two kinds of flooring, the difference between the surfaces must be graduated to avoid presenting a significant obstacle to wheeled equipment.

Colour

Colour can also be used to enhance the general safety of the environment. Making call bells and thresholds colourful can reduce safety risks. Colour contrasts should be used in areas such as bathrooms. For example, a toilet seat should be in a different colour from the toilet bowl. Colour-coded faucets make it easier to distinguish between hot and cold temperatures. A client with impaired depth perception benefits from having a strip of red tape affixed along the edge of the bathtub and having the armrests of sofas and chairs in a different colour from the seat. All of these measures help in client handling procedures.

Temperature

Extreme temperatures have physiological effects on workers. When exposed to hot or cold temperatures, the body has to work harder. When the environment is cold, the extremities lose sensitivity and dexterity because the blood vessels constrict. This means more force is needed to handle things. High temperature and humidity in the tub/shower room are often above caregivers' comfort level and may affect their task performance. Engineering controls such as providing adequate ventilation in these areas should be considered.

Lighting

Poor, lack of, or too much lighting can contribute to the onset of MSDs. For example, reduced lighting during the night shift or excessive lighting that causes glare from reflective surfaces may force the caregiver to assume an awkward posture.

7.1.2 Workstation Layout

A workstation is a fixed place where work tasks are performed. Examples of workstations related to client handling include: areas beside a toilet, the bed-side, by the tub or shower, and beside a wheelchair. If the physical layout of the workstation does not allow the caregiver to use the equipment and perform safe procedures, the risk factors associated with client handling increase the risk of the caregiver developing MSDs.

Note that barrier-free standards set out minimal space requirements for the mobility of a handicapped individual in a wheelchair. These standards do not take into consideration the additional amount of space required by caregivers during client handling activity.

Layout of Client Rooms

The design and available space in the client's room has a major impact on the way equipment can be used. The space between the furniture and the walls should be adequate to allow the caregiver to manoeuvre mobile devices into the correct position and accommodate other needed equipment without having to constantly re-arrange the room.

General considerations:

- Locate the bed with respect to the other furniture in the room to ensure adequate space between the foot and sides of the bed and the walls
- The clearance around the bed should allow a wheelchair to move comfortably
- The caregiver should have access from either side of the bed or from the side from which the client is transferred or lifted
- Other pieces of furniture at the bedside should not interfere with the procedure
- An overhead lifting device should be considered for clients who are classified as requiring a lift and where space is limited

More recently, space recommendations are taking into consideration new equipment technology and health care issues such as the bariatric or obese clients (Arjo 2005, Batista 2005, Villeneuve 2006). For this reason, advance design planning of new or renovated workspaces, carried out collaboratively with architects, management, vendors and front-line staff, is essential.

Villeneuve (2006) has suggested safe workspace dimensions for client rooms (Table 7). Also refer to manufacturers' guidelines for specific space requirements for equipment.

Table 7: Workspace Dimensions for Client Rooms

Workspace Activity	Space Recommended
Transfer procedure from bed to wheelchair	150 cm (5 ft.)
Lateral slide/transfer from bed to stretcher	150 cm (5 ft.)
Lift procedure with portable lift from bed to geriatric chair	180 cm (6 ft.)
Lift procedure with ceiling lift from bed to geriatric chair	150 cm (5 ft.)
Standard working space area	12 m^2 (129 sq. ft.)
Standard circulation space at the foot of the bed	100 cm (39 in.)
Bariatric working space area	15 m^2 (161 sq. ft.)
Bariatric circulation space around bariatric bed (to accommodate bariatric equipment)	Add another 30 cm (1 ft.) or more on all sides

(Adapted from Villeneuve 2006)

In some facilities, too much furniture in the client's room may interfere with client handling procedures. This requires rearrangement and/or removal of the furniture to allow the caregiver to perform safe procedures and ensure ease of mobility of client devices and equipment.

Layout of Bathrooms

The design of bathrooms in health care and residential facilities is sometimes so poor that it is difficult to safely perform transfers and lifts. The limited space and poor layout of a bathroom increases the risk of injury to the caregiver and the client.

General considerations:

- Toilets should be located so that they can be accessed from both sides.
- Wall-mounted toilets are preferred in most cases since they provide additional space at toe level for equipment, client and/or caregiver mobility.

- Bariatric-designated areas should have floor-mounted toilets that can support bariatric weights.
- Where a toilet is placed near a wall that limits access to only one side of the toilet, additional precautions may be required (grab bars, handrails, additional staffing).
- Sliding bathroom doors optimize usable workspace in the bathroom.
- Toileting clients using a ceiling lift is an option for rooms with ceiling lift tracking systems that connect the client room to bathroom, however careful planning is required.

The overall design of the bathroom should allow enough room for a wheelchair, commode chair or lifting device and to accommodate one or two caregivers to assist with transfers. Villeneuve (2006) has established suggested dimensions for safe workspace in bathrooms (Table 8). Also refer to equipment manufacturers' guidelines for specific space requirements.

Table 8: Workspace Dimensions for Client Bathrooms

Workspace	Space Recommended
Space for caregiver (either side of toilet)	61 cm (2 ft.)
Space in front of toilet for pivot	106 cm (3.5 ft.)
Space beside the toilet for a lateral transfer	106 cm (3.5 ft.)
Clearance in front of toilet for equipment	150 cm (5 ft.)
Standard working space area	4.5 m^2 (48 sq. ft.)
Bariatric working space area	5 m^2 (53 sq. ft.)
Bariatric circulation space on the side of transfer	Add another 30 cm (1 ft.)

(Adapted from Villeneuve 2006)

Layout of Tub/Shower Rooms

The design of the tub/shower room should allow adequate space for at least two caregivers and the required equipment (wheelchair, commode chair, shower trolley and lifting device).

When a fixed tub lift is being used, the client is typically transferred from a wheelchair to a lifting device. The space requirements are the same as in a frontal transfer (i.e., allow adequate space for the wheelchair). Ideally the tub should be height-adjustable to minimize physical demands of bending and twisting while the caregiver is assisting a client with their bath.

A roll-in shower stall must accommodate a client in a wheelchair or a commode chair or sometimes a shower trolley. The shower stall should have a bevelled threshold and a maximum height of 13 cm (5 in.) to prevent water from draining into the general bathroom area. The thresholds must be designed to allow a smooth and safe access to the shower stall.

Accessories for the bath and shower, such as shelves for towels, blankets and/or sheets, washing and cleaning supplies, must be designed for easy access by the caregiver and client.

The suggested safe workplace dimensions for bath tub and shower trolley rooms have been established by Villeneuve (2006) (Tables 9 and 10). Shower rooms not using the larger shower trolley may be designed slightly smaller but should easily accommodate the required equipment and caregivers. Also refer to equipment manufacturers' guidelines for specific space requirements.

Table 9: Workplace Dimensions for Tub Room

Workspace	Space Recommended
Space at side of tub for stretcher or bathing chair	81 cm (32 in.)
Caregiver standing/working space	100 cm (39 in.)
Standard working space area	12 m^2 (127 sq. ft.)
Circulation space at the foot of the tub	100 cm (39 in.)
Bariatric working space area	14 m^2 (148 sq. ft.)
Bariatric circulation space on the side of transfer	Add another 30 cm (1 ft.)

(Adapted from Villeneuve 2006)

Table 10: Workplace Dimension for Shower Trolley Room

Workspace	Space Recommended
Caregiver standing/working space at side and end of trolley	100 cm (39 in.)
Standard working space area	9 m^2 (95 sq. ft.)
Bariatric working space	Add another 30 cm (1 ft.)
Bariatric circulation space at side and end of trolley area	11 m^2 (116 sq. ft.)

(Adapted from Villeneuve 2006)

STANDARDS AND RATIONALE

- Due Diligence OHSA s. 25(2)(h) and 27(2)(c)
- Safe Work Conditions HCRFR s. 9(1)
- Adequate workspace and design in client rooms, bathrooms, tub and shower rooms is essential to reduce worker exposure to awkward postures, excessive forces and repetition and to ensure the safety of both caregivers and the clients.

7.2 Equipment, Furniture and Tools

The organization has developed equipment planning and purchasing processes in consultation with the JHSC, to optimize client handling procedures and accommodate client handling equipment.

SUGGESTIONS FOR IMPLEMENTATION

To reduce the physical demands of the caregiver, engineering controls have been integrated into the design of some client equipment (e.g., hydraulic/ electric lifting devices, adjustable and/or removable chair arms). However, equipment that lacks these controls may expose the caregiver to awkward postures and excessive forces, especially of the shoulders, neck and back. Ergonomic features and engineering controls must be considered in the selection of equipment to ensure that the most appropriate and safest products are purchased. For the safety of clients and employees, workplace parties must also ensure that the weight load limit of client handling equipment – wheelchairs, mechanical lifts, sit-stand devices etc. – is not exceeded.

Table 11: Design Considerations for Equipment, Furniture and Tools

Equipment, Furniture & Tools	Design Considerations
Bed	• Must be adjustable to allow the caregiver to perform safe transfers and lifts. • Electric or hydraulic mechanisms are preferred since they are easy to operate and controls are generally accessible either on the bed rail or at the end of the bed. Mechanisms that require the caregiver to raise or lower the bed manually increase the risk of MSDs due to repetitive and forceful movements. • Cranks are usually located too low on the foot end of the bed, forcing the caregiver to assume an awkward bent and squatting posture. • The clearance under the bed must be sufficient to accommodate the base of a lifting device.
Bed Rails	• The most common type is a split design. • Design of the mechanism that unlocks the bed rail should allow the caregiver to easily operate it with one hand. • The rails should weigh as little as possible to minimize the physical demands required to lift and lower them. • Portable bed rails with various options are available for clients who use a normal bed in the residential care and community setting. The bed rail is firmly anchored between the mattress and box-spring. • The client's efficient use of bed rails can reduce the physical demands placed on the caregiver (i.e., awkward postures and excessive forces).
Bed Movers	• An electronic bed-mover is a material handling solution that reduces the physical demands of pushing and pulling bed or trolleys. The detachable, electrically powered unit is placed under the foot or the head of the bed. The bed can be moved effortlessly over workplace surfaces by pushing the waist-level steering handles. • Use of a bed mover may reduce the number of client handling procedures performed.

Equipment, Furniture & Tools	Design Considerations
Wheelchair	• Arm and leg rests should be easily removable. • If arm and leg rests have a locking mechanism that secures them in place, it should be large enough and accessible from the side of the wheelchair to enable the caregiver to operate it easily. • Cushions should be secured to the chair so they do not slip while the client is being positioned. Some cushions have straps that can be secured around the backrest of the wheelchair and some are attached to the seat pan with Velcro, allowing for easy removal for cleaning purposes. • Anti-slip repositioning sheets can be placed directly under the client to prevent them from sliding. • Hand controls such as wheelchair brakes should be located on both sides near the top section of the large wheels to enable the client and caregiver to operate the brakes easily.
Geriatric Chair	• Typically these have a fixed high back rest and seat pan, fixed arm and leg rests and, usually, the large platform type of leg rests. • This design does not allow the caregiver to assume a close and proper posture during a transfer or lift. Optimal design has removable arm and foot rests. • Some come with a two-piece backrest that allows the caregiver to remove the top portion for access to the client from behind. • Some have mechanisms for tilting the chair. These should be easy to operate by the caregiver. A tilting backrest and seat pan combination allows the care giver to tilt the client back and use gravity to reposition them in the chair.

Equipment, Furniture & Tools	Design Considerations
Full Reclining Chair	• This type of chair fully reclines to allow a lateral transfer/slide procedure from the bed to the chair. The arms of the chair are adjustable so as not to interfere with the lateral slide procedure. This eliminates awkward postures and excessive forces that typically occur with some geriatric chairs. • The chair can assume a full sitting, semi-reclined and fully reclined resting position. • Ideal for critically ill clients attached to medical equipment and/or clients who are unable to stand or use a mechanical lift. • It can be used to transport a client to other onsite locations. • Low-friction devices are recommended when performing the lateral slide procedure. • Load limits for chairs vary. Bariatric versions are available.
Commode Chair	• There are various designs including commodes incorporating the toilet basin, commodes without a basin that are positioned over a regular toilet, and combined commode and shower chairs. • Optimal features are removable arm and leg/foot rests, brakes. • Brakes on the casters are recommended. • Non-rusting materials such as stainless steel or plastic are best. • Casters of the commode chair should be made of non-slip material and have a tread. They should be large enough so that they can be pushed over a lip at the threshold of the shower room door or at the threshold of the shower itself. • Casters must be compatible with the type of flooring (e.g., carpet, tile or vinyl) on which they are to be used. • Commodes require a maintenance program to ensure casters swivel easily. The force required to move poorly maintained equipment is substantial. • Bariatric commodes that are wider and structurally reinforced are available. Door openings must be sufficient to allow entry and exit.

Equipment, Furniture & Tools	Design Considerations
Equipment Casters	• Hard casters should be used on soft surfaces and soft casters on hard surfaces. • The amount of force necessary to push and pull wheeled equipment can be measured with a force gauge to determine if it falls within safe limits. Pushing puts less force on the body than pulling. • Caregivers should be able to operate both the locking and releasing mechanism with a foot control, where possible. • The foot control must be large enough so it is easy to find and offers an advantageous angle for depressing it. • A preventive maintenance program is important because the build-up of contaminants on casters increases the resistance or the force required to push the equipment.
Grab Bars	• Correct placement of grab bars allows the caregiver to safely transfer a client from a wheelchair to the toilet and vice versa. Refer to the manufacturer's guidelines for the correct placement. • Grab bars should be placed on both sides of the toilet if there are no arm-rests. This allows the client to use the appropriate grab bar on their stronger side. • Grab bars can be secured to the back wall or extend from floor to ceiling. They can also be designed to swing up or out of the way to allow the caregiver to assist a client to transfer easily and safely. • Grab bars that do not extend to the ground allow for more freedom of movement around the toilet for mechanical lifts and caregivers.
Transfer Pole	• This floor-to-ceiling pole is typically installed at the bedside or in the bathroom, and provides an easy and stable grip for a client who is weight-bearing and able to transfer. • This reduces the physical demands on the caregiver as the client requires less assistance.

STANDARDS AND RATIONALE

- Due Diligence OHSA s. 25(2)(h) and s. 27(2)(c)
- Purchasing of equipment that is properly designed and constructed HCRFR s. 9(1)
- Proper equipment design, planning, purchasing is essential to reduce the physical demands place on caregivers and prevent unnecessary injuries.

7.3 Client Mechanical Lifting Devices

The organization has considered implementing mechanical lifting devices as an engineering control to decrease the risk of injury by eliminating or reducing forceful exertion, awkward postures and repetitive motions associated with manual client lifting.

SUGGESTIONS FOR IMPLEMENTATION

Mechanical lifts should be used to move non-weight-bearing clients:

- To and from a bed
- To and from a seated surface (wheelchair, geriatric chair, commode)
- Off the floor
- In and out of tubs/showers

Special lifting applications may include:

- Ambulation with a walking vest
- Lifting clients out of automobiles

There are three general categories of mechanical lifts:

- Total-body lifts
- Ambulation lifts
- Bathtub and shower lifts

Total-body Lifts

These are used to lift or move dependent, non-weight-bearing clients. There is a wide variety of lifts available. Some devices are designed to lift from the floor and some to lift bariatric clients, typically those over 180-200 kg (400-450 lb.). Smaller versions of total-body lifts with compact features are available for use in the community. Portable devices can be used in the home care setting and to lift persons in and out of cars. Battery-operated devices are preferred.

Ambulation Lifts

These lifts are designed to support a client during ambulation. The lift is pushed along by the client and caregiver while the client wears a walking vest.

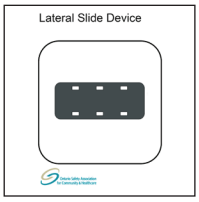
Bathtub and Shower Lifts

These lifts are designed for moving clients from the bed or chair to a bathtub or shower. Some are fixed while others are portable. The battery-operated devices are preferred.

STANDARDS AND RATIONALE

- Due Diligence OHSA s. 25(2)(h) and s. 27(2)(c)
- Mechanical lifting devices significantly reduce the exposure of caregivers to excessive forces during the task of client lifting therefore reducing the risk of injury.

7.4 Lateral Transfer/Slide Devices



The organization has considered implementing lateral slide devices as an engineering control to decrease the forceful exertion and awkward postures associated with moving a client manually from one horizontal surface to another.

SUGGESTIONS FOR IMPLEMENTATION

The following equipment is used to move or slide a reclined client horizontally from one surface to another. Refer to the manufacturer's guidelines for proper use.

Slider Sheet

The slider sheet is a low-friction product that reduces the force required to pull or push a client during a lateral slide procedure.

Features of the slider sheet:

- A low-friction, anti-static fabric tube; some are padded
- Full-size varieties are approximately 190 cm long by 50-90 cm wide
- Some mini-size tubes are available (approximately 60 x 60 cm)
- May require use of a bed or draw sheet
- Easy to store, clean and disinfect

Slider Board

The slider board is a low-friction board that reduces the force required to pull or push a client during a horizontal slide procedure.

Features of a slider board include:

- Composition is usually hard, firm plastic with a smooth, flat, low-friction surface
- Edges are usually rounded
- Some models have handles on both sides
- Come in a variety of sizes – e.g., 63.5 x 152.5 cm, 63.5 x 131.5 cm
- May require use of bed or draw sheet
- Easy to store, clean and disinfect

Roll Board

The roll board reduces the force required to pull or push a client during a lateral slide procedure.

Features of a roll board are:

- Available in a variety of sizes – e.g., approximately 180 x 50 cm, 80 x 40 cm
- Inner core is made of flexible, kink-resistant plastic covered with coated glass-fibre fabric
- Top roll material is made of tear-resistant nylon with a special coating on one side
- Folds up and is easy to clean

Air Mattress Technology

An air assist or air mattress lateral slide system operates using “hovercraft” type technology. The mattress is made of durable fabric with handles on the longitudinal sides and small perforations on its underside. Air forced into the mattress exits through the perforations, lifting the mattress slightly. This allows caregivers to easily glide the mattress, with the client on it, from one horizontal surface to another. This technology also eliminates shearing forces on the skin that sometimes occur with other lateral slide devices.

Features of air mattress technology:

- Comes in variety of sizes and applications
- Most brands cradle the client to make them feel secure
- Extension straps are available on some models
- Bariatric applications are available
- Requires some planning and the canister requires an electrical source
- Easy to clean and can be laundered

STANDARDS AND RATIONALE

- Due Diligence OHSA s, 25(2)(h) and 27(2)(c)
- Lateral slide devices significantly reduces the caregiver’s exposure to excessive forces during the task of moving a client from one horizontal surface to another, therefore reducing the risk of injury.

7.5 Client Transfer and Repositioning Devices

The organization has considered implementing client transfer and repositioning devices as engineering controls to decrease forceful exertions and awkward postures associated with client transfers and repositioning activities.

SUGGESTIONS FOR IMPLEMENTATION

The proper choice and use of equipment to transfer clients can result in reducing the physical demands on the caregiver by improving postures and reducing excessive forces related to lifting, lowering, pushing, pulling, carrying and gripping.

There is a wide variety of client handling equipment and devices available. Familiarity with the various types of equipment and their uses helps the organization select the most appropriate piece of equipment for transferring clients.

The use of transfer devices should:

- Ensure a secure and safe client transfer
- Reduce the intensity of biomechanical stresses associated with client transfers on the caregivers
- Reduce the physical demands of the task, such as pushing or pulling
- Permit the caregiver to assume a position with better leverage and optimal postures
- Allow the client to participate as much as possible

Repositioning/Turning Sheet and Repositioning Slings

Repositioning and turning sheets reduce the lifting, pushing and pulling forces required to move clients in beds and chairs. Smaller sheets can be used with clients who are less disabled and able to assist. Longer sheets, close to the length of the bed or larger, are used for clients who are unable to assist. Typically, the top surface of the sheet has a fabric lining and the bottom has a low-friction backing to allow for easy turning by the caregivers, though this may vary among products.

Anti-slip repositioning sheets are available for repositioning clients in chairs. They are placed on the seat of the chair and help prevent the client from sliding

forward due to the unidirectional anti-slip properties of the sheet. They do, however, allow the caregiver to slide and reposition the client back into the chair.

Convenient handles on some products improve the leverage of the caregiver while repositioning the client.

Some mechanical ceiling lift manufacturers have developed repositioning slings and procedures to reposition and/or turn clients, which essentially eliminate manual handling.

Transfer/Walking Belt

These belts may be used for transfer procedures. They are ideal for clients who experience balance problems during activities such as standing, walking or transferring. They are also useful for clients who have difficulty standing and pivoting due to trunk, pelvic and leg weakness.

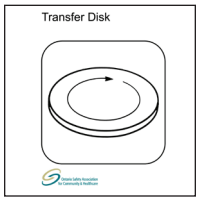
The transfer belt provides the caregiver with stable handles to secure a grip and hold on the client. It improves the caregiver's wrist, shoulder and back postures, leverage and body mechanics during the transfer procedure.

The belt is placed snuggly around the client's waist while in the sitting position prior to the transfer procedure. The transfer belt is typically used for ambulating clients and for minimal assistance, pivot and side-by-side transfers. Follow the manufacturer's guidelines.

Features of transfer/walking belts:

- Available in different widths, lengths and sizes, including bariatric; note that narrow belts may injure a client's skin
- Often padded and made of firm, flexible and durable material; avoid belts made of hard, slippery or soft materials
- There should be handles on both sides of the belt and preferably the back
- Ensure there is a reliable mechanism to fasten the belt safely and securely; avoid Velcro fasteners
- Washable and disinfectant-safe
- Affordable

Transfer Disk



The transfer disk should only be used for transfers. It is ideal for clients who have difficulty moving or pivoting their feet during a transfer. The disk assists the caregiver in pivoting the client from one seated surface to another by reducing the force required to turn the client. The disk is placed beneath both the client's feet and remains there during the transfer. The feet should not touch the outer rim of the disk. It may be helpful if the caregiver first demonstrates the pivot on the disk for the client. Transfer disks are typically used for pivot transfers and some side-by-side transfers. Follow the manufacturer's guidelines.

Features of a transfer disk are:

- A round, flat disk approximately 1.5 cm thick, covered with non-slip material on either side
- Disk rotates on graphite pads like a turntable, allowing smooth and controlled rotation
- Generally comes in two sizes, approximately 30 cm and 38 cm in diameter

Transfer Board

This procedure is used to transfer a sitting client from one surface to another at the same height. The client may have trunk and lower extremity weakness, restricted lower extremity range of motion or lower extremity amputation(s) and may be unable to stand. Adequate upper extremity strength with or without assistance is required to slide across the transfer board. To facilitate sliding across the board, a towel or other sliding material may be used. This procedure may also be used for a car transfer. Follow manufacturer's guidelines.

The key features of a transfer board are:

- Materials are usually wood or manufactured materials approximately 20 x 70 cm
- Low-friction surface
- Some have handles on the sides
- Both sides and ends may be tapered or bevelled to facilitate the client sliding on and off the board
- The edges are frequently rounded

- Another type of transfer board is approximately 2.5 cm thick, S-shaped or curved with a moveable seat on a track in the middle, and made of plastic acrylic fibreglass

Client Handling Sling

The client/patient handling sling is helpful for clients demonstrating some trunk and pelvic weakness when trying to stand during a transfer procedure. The sling is placed around the client's lower back/buttock area while the client is sitting on the end of the bed or wheelchair. The caregiver holds the handles on either end of the sling and uses a smooth movement to gently pull the client's hip and pelvic area forward to straighten the hips and stand. The client may need assistance from the caregiver to straighten his/her knees to a standing position. The client should wear non-slippery clothing to prevent the sling from sliding up. Patient handling slings are typically used for pivot transfers. Follow the manufacturer's guidelines.

The features and benefits of a client handling sling are:

- Made of a flexible polymer-based material, 3 mm thick, 51 x 20.5 cm, with two handles at each end
- Easy to store and to clean

Mechanical Transfer or Sit-stand Devices

Mechanical transfer devices, also called sit-stand devices, can be used to transfer partially weight-bearing clients from one sitting surface to another (bed, commode, chair, toilets, geriatric chair, recliner, etc). Typically the client has some degree of upper-body strength, is able to weight-bear partially and has difficulty pivoting. Devices may have a variety of vests or slings with some including leg supporting straps. Battery operated devices are the preferred type. Bariatric devices are available. Follow the manufacturer's guidelines and precautions.

STANDARDS AND RATIONALE

- Due Diligence OHSA s. 25(2)(h) and s. 27(2)(c)
- Client transfer devices and repositioning devices can reduce the exposure of caregivers to excessive forces during a client transfer or client repositioning procedures, and therefore reduce the risk of injury.

7.6 Purchasing Equipment and Devices

The organization has developed a process to plan the selection and evaluation of client handling equipment that ensures the equipment meets the organization's needs and safety is considered in the process.

SUGGESTIONS FOR IMPLEMENTATION

A collaborative team approach that includes the purchasing department, management, health and safety, JHSC, front-line users, infection control, housekeeping, maintenance and other stakeholders is recommended. The multidisciplinary client handling committee is the ideal team for this approach. The team should determine:

- The equipment required based on the initial needs assessment – i.e., injury statistics, client mobility assessment needs, environmental assessment, equipment assessment and cultural assessment (refer to Module 3)
- A list of equipment required by location

Once the organization has determined its specific equipment needs, vendors should be consulted prior to the final selection process. The following should be considered:

- Availability of the equipment and accessories –where it is made and local distribution
- Availability of service from the manufacturer or another organization
- Availability of references from other product users
- Cost and what it includes (e.g., are accessories included or extra?)
- Length of the warranty on the equipment itself and on the accessories
- Maximum weight capacity rating on mechanical devices and slings
- Operational needs and requirements (e.g., adjustability, ease of use, safety features)
- Training required to enable caregivers to operate the equipment
- Who offers initial and ongoing training and any costs involved
- Cleaning, maintenance, servicing, inspection and compliance testing considerations
- Interaction with other equipment
- Space requirements to operate and store equipment
- Requirements to meet code and standards compliance (building code, fire code, electrical code, CSA Hoists for the Transfer of Disabled Persons – Requirements and Test Methods CAN/CSA – Z10535-03, etc.)

- requirements related to building integrity (e.g., for ceiling lift installation)
- Availability of a flexible purchasing agreement and trial evaluation of equipment

Once the products have undergone the initial evaluative process and equipment has been identified for consideration, it is recommended that an onsite facility equipment trial be coordinated and conducted in consultation with the JHSC. This will determine the equipment compatibility with the facility design, and the usefulness and usability for the end users – clients and employees. Criteria should be developed for the trials and documented to assist the purchasing team in the final decisions. This is especially important during the design phase of minor and major renovations. For hospitals and like institutions, refer also to OSACH's *Ergonomics in Hospital Design: A Guide to Prevent Musculoskeletal Disorders* for more design considerations.
When conducting a product trial, the following criteria should also be considered:

- Adequacy of facility workspace for equipment use and storage (consider workplace design interactions)
- Ease of use and operation by caregivers
- Comfort of the client
- Safety features for both client and caregiver
- Adequacy of the amount of equipment available
- Whether equipment meets the corporate needs identified in the initial needs/risk assessment

The availability and accessibility of the equipment is a major factor in determining whether it will be used. The needs analysis will assist the organization in the identification of the type and amount of equipment needed. Budget restraints may require the corporation to prioritize the equipment based on risk and develop a staggered purchasing and implementation action plan.

Mechanical Lifting Equipment Considerations

There are many manufacturers of lifting devices, each one offering a wide variety of features. The organization must consider its environment, needs of the client/staff, safety requirements and its budget when choosing such equipment. It should also consider which equipment features are essential and prioritize client-handling needs before pursuing a trial or purchase of a device. Consider the following:

General

- Ability of the device to meet required lifting activities (lifts from the floor to the highest bed, bed to/from wheelchair, commode/shower chair, bath tub, pool, etc.)
- Devices have weight load limits that meet client needs (e.g., bariatric devices)
- Ease of operating controls, manoeuvring, raising and lowering
- Equipped with an emergency stop switch
- Safety, stability and comfort for the client
- Ease of cleaning, disinfecting, maintaining and storing the device
- Meets CSA standard Hoists for the Transfer of Disabled Persons – Requirements and Test Methods CAN/CSA – Z10535-03 e.g. all controls shall be of the “hold to run” type which requires an operator to engage and hold the controls during the lift operation
- Servicing, maintenance, compliance test and inspection programs available

Portable Lift

- Ability and ease of steering
- Effective brakes
- Adjustable base of support
- Compatibility of casters with the type of flooring
- Ability to fit through doorways of bedrooms and bathrooms
- Base that fits under beds and around equipment
- Equipped with rechargeable batteries with sufficient capacity and quick charging time
- Compatibility with room design, furniture and space (check manufacturer guidelines)

Ceiling Lift System

- Ensure building integrity (consult structure engineer)
- Availability of blue prints for the vendor
- Compliance with codes (building code, fire code, electrical code, etc.)
- Adequate ceiling height
- Absence of asbestos-containing materials
- Confirm available space for the ceiling track configuration – e.g., meets facility needs
- Fixed or portable motor options

- Appropriate space and location for electrical controls and fixed motor (if selected)
- Return to charge feature, if available, should be an **operator activated** type versus automatic type, to prevent potential "struck by" incidents to clients, employees and others

Portable Overhead Track System

- Appropriate where permanency is not desired

Slings

- Availability of sling sizes meeting client needs
- Ease of positioning slings (i.e., minimal lifting/pulling)
- Comfort for client and a secure attachment to the lift
- Ease of cleaning, disinfecting and maintaining slings

For more information refer to OSACH: *A Planning Guide for the Implementation of Client Mechanical Lifts 2nd Edition 2005*.

STANDARDS AND RATIONALE

- Due Diligence OHSA s. 25(2)(h) and s. 27(2)(c)
- Purchasing of Equipment HCRFR s. 9(1)
- Joint Occupational Health and Safety Committee OHSA s. 9(18)

7.7 Preventive Maintenance of Equipment and Devices

The organization has implemented a facility maintenance program and an equipment preventative maintenance program to ensure that the environment is safe, and the client handling equipment and devices are safe to use.

Equipment and Device Maintenance

Equipment must always be in good working order to avoid unnecessary acci-dents and injuries. A preventive maintenance program must be in place. Regular inspections of all parts of wheeled equipment such as beds, chairs, transfer or lift devices and their attachments must be carried out by a competent person according to manufacturers' instructions. Most equipment comes with a maintenance schedule.

A regularly scheduled maintenance program ensures that a sufficient number of safe and effective mechanical lifting devices and associated equipment is always available for use. All portable and ceiling mechanical lifts are required to follow the preventive maintenance schedule set by the manufacturer. This will ensure the reliability of the equipment and protect the organization from liability issues that could arise from faulty equipment. Slings should also be laundered according to the manufacturer's guidelines. Inappropriate cleaning may affect the integrity of the material and may result in tearing.

In addition to the standard preventive maintenance on the equipment, the organization should ensure there is:

- A process to take malfunctioning and defective equipment out of regular use
- A tracking system for prompt turnaround times
- A process to maintain equipment instruction manuals
- A documentation system for defective equipment

A well documented and communicated defective equipment policy and pro-cedure must be in place in the event that the equipment fails. This includes reporting a breakdown, removing the equipment from service and repairing it. All staff must be educated in the communication process for defective equipment.

Facility Maintenance

Maintenance of the environment is important to ensure the safety of the caregiver and client, and to ensure the easy and safe movement of equipment. This includes but is not limited to ensuring that:

- Doors open and close easily
- Floors are maintained (clean, dry, free from slip and trip hazards)
- Hallways and emergency exits are unobstructed
- Equipment storage areas are available and accessible
- Safety devices (hold-open devices, grab bars, railings, etc.) are in good working order

STANDARDS AND RATIONALE

- Due Diligence OHSA s. 25(2)(h)
- Safe Workplace Conditions HCRFR s. 9
- Proper Use, Maintenance and Operation of Equipment HCRFR s. 9
- Purchasing of Equipment that is Properly Designed and Constructed HCRFR s. 9
- Reporting of Unsafe or Defective Devices, Equipment or Work Surfaces HCRFR s. 9
- The development of environmental design, equipment, purchasing and maintenance planning processes is essential for reducing the risk of injuries related to client handling activities and equipment. These processes will help to ensure client handling equipment is suitable, available, maintained and safe for caregivers and their clients.

Glossary of Terms and Short Forms

Administrative controls

Work organization, procedures and work practices used to reduce worker exposure to workplace hazards – i.e., safety policies, rules, job rotation, and training

Assistive devices

Devices used to assist with transfer and lift procedures

Awkward posture

Position of the body other than in neutral that overloads muscles, tendons and joints

Axilla

Armpit

Bariatric lift

A generic term referring to a lift for clients with a body mass index (BMI) between 30 and 40 (see Body Mass Index)

Bariatric

An area of medicine that deals with the study and treatment of obesity

Biomechanics

Science of the internal and external forces required to manually lift, lower, push, pull and carry objects or people and the effects of these forces on the body

Body Mass Index (BMI)

BMI is a number calculated from a person's weight and height. It provides a reliable indicator of body fatness for most people. It can be used to screen for weight categories that may lead to health problems (Department of Health and Human Resources, Centers for Disease Control and Prevention). BMI is calculated by dividing the client's weight (kg) by their height (m) squared (Veterans Health Administration 2001)

Caregiver

Any person who comes into contact with clients

Client

Client, patient or resident

Cognition

Mental and intellectual functions

Engineering Controls

Controls that reduce or eliminate or isolate workplace hazards (design, re-design or modification of equipment, workstations, tools, workplace layout or processes, etc.)

Ergonomics

The science of matching the workplace environment and job tasks with workers' capabilities

EIW

Enterprise Information Warehouse

Force (forceful exertion)

Amount of work that the body must exert to perform a particular action

Hazard

Any real or potential condition that previously caused or could reasonably be expected to cause personal or property damage

HCRFR

Health Care and Residential Facilities Regulation (Ontario)

Incidence

Number of occurrences in a population within a specific time interval

JHSC

Joint health and safety committee

Lift

A procedure used to support or carry the entire weight of a person from one surface to another. A lift is used to move a client who is physically unable to weight-bear through his/her arms or legs and/or is mentally unable to co-operate in the procedure; may be accomplished manually by at least two caregivers or mechanically using a lifting device with two caregivers.

Lifting device

Device designed to take the total weight of a client during the lift procedure

Lumbar

The region of the spine below the thoracic spine and above the pelvis, also called the low back.

Lunge

A body position in which one leg is in front of the other. The forward leg, hip and knee are flexed or bent and the back hip is extended.

Musculoskeletal Disorder (MSD)

Injury, illness or other disorder of the musculoskeletal system that may be caused or aggravated by hazards or risk factors in the workplace, but not including injuries or disorders directly resulting from a fall, struck by or against, caught in or on, vehicle collision, violence, etc. (Occupational Health and Safety Council of Ontario 2007)

Musculoskeletal system

The muscles, tendons, tendon sheaths, nerves, bursa, blood vessels, joints, spinal discs and ligaments (Occupational Health and Safety Council of Ontario 2007)

OHSA

Occupational Health and Safety Act

PDM

Prevention Data Mart

Perception

Process of becoming aware of and interpreting external objects, events and relationships based on experience following the receipt of sensory information

Prevalence (of disease)

The total number of cases of a disease in the population at a given time or the total number of cases in the population divided by the number of individuals in the population

Proprioception

Sense of posture or the physical position/movement of the limbs in relation to one's environment

Psychosocial factors

Any combination of psychological and sociological conditions and their effects

Qualitative

Relating to or involving comparisons based on qualities

Quantitative

Expressed or expressible as a quantity or relating to or susceptible to measurement or relating to the measurement of quantity

Range of motion (ROM)

Spatial extent through which a joint, limb, neck or trunk can normally be moved

Repetition

Repeated movement of the body or body part(s) with a cycle time of less than 30 seconds, where the cycle is one repetition

Reposition

Procedure used to move a client to a new position on the same surface

Risk factor

General characteristics of work that increase the likelihood of physical or mental harm to the worker

Sacral

Relating to the sacrum

Sacrum

The large heavy bone at the base of the spine

SWA

Safe Workplace Association, also called Health and Safety Association

Thoracic

The region of the spine below the neck and above the lumbar or low back region; the section of the spine that gives rise to the ribs; pertaining to the chest

Transfer

A procedure used to support or carry the entire weight of a person from one surface to another

Transfer device

Equipment used to assist with a transfer (board, belt, disk, slide and slider)

Trendelenberg

A position in which the body is in the supine position (flat on the back) and the feet are higher than the head.

Trunk

The body between the neck and lower limbs (including the thoracic, lumbar and sacral areas of the spine)

Workplace components

Equipment, tools, workstation, environmental factors and work organization

Work environment

Physical, physiological, social and psychological environments within which workers perform their tasks

Work organization

Manner in which job tasks are organized and assigned

Work surface

Any surface or plane within which movement (work tasks) occur at the workplace

WSIB

Workplace Safety and Insurance Board

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Appendix A – Sample Terms of Reference – Safe Client Handling Multidisciplinary Committee

Goals of the committee:

1. To support the organization's goal of increased staff and client safety
2. To provide the best quality of care to clients while assisting them with positioning and mobility needs
3. To reduce the number and severity of staff incidents/accidents related to client handling

Purposes of the Committee:

1. To develop policies and procedures related to safe client handling
2. To identify desired outcomes based on policies, procedures and best practice
3. To participate in the selection of client mechanical lift equipment
4. To assess learning needs of clinical staff related to safe client handling
5. To develop a training program for clinical staff based on the learning-needs assessment and desired outcomes
6. To coordinate the implementation of the training program for clinical staff
7. To conduct an evaluation of the training program based on the desired outcomes
8. To develop an ongoing training program for staff education annually

Accountability:

The Committee is accountable to the senior team through the Client Handling Program Leader. The Committee provides timely progress reports to the senior team, the Joint Occupational Health and Safety Committee and other committees deemed appropriate by the organization (e.g., Quality Practice Committee).

Membership:

- Senior management
- Communications/PR support
- Client Handling Program Leader
- Educational/clinician
- Managers/supervisors
- Environmental/plant maintenance

- Front-line staff
- Union representation
- JHSC
- Purchasing/financial support
- Physiotherapy and/or Occupational Therapy

Quorum:

A majority of members

Agenda and Minutes:

1. An agenda will be circulated prior to each meeting of the committee
2. Minutes of the meetings will be distributed to members following each meeting

Appendix B – Incident/Accident Analysis Collection Tool

Date & Time	Client Handling Activity				Claim Type				Days Lost	Claim Cost	Body Part	Contributing Factor (see legend)	Yrs. on Job	Age	Gender	Other Factors
	Non-Weight-Bearing		Weight-Bearing	Same Surface	First Aid	Med. Aid	Lost Time	Hazard								
	Lift	Lateral Slide	Transfer	Reposi-tion												

Contributing Factor Legend

1. People
2. Equipment
3. Materials
4. Environment
5. Process

Appendix C – Individual Client Mobility Needs Assessment Tool

Unit/Department:										Date:								
Assessment Completed by:										Number of Clients Assessed:								
Client Name/ Location		Independent	Non-Weight-Bearing Procedures Lift (insert # of lifts) and/or Lateral Slide (insert # of lateral slides)				Weight-Bearing Procedures Transfer (insert # of transfers)			Reposition (insert # of repositions)			Potential Barriers (check if applicable)					
		Use Checkmark	Manual[a]	Mech.[b]	Lateral or Slide	Device Name	One Person	Two People	Device (Name)	Bed	Wheel chair	Device Name	1	2	3	4	5	Other
Mr. A	Days																	
	After-noons																	
	Nights																	
Mr. B	Days																	
	After-noons																	
	Nights																	
Mr. C	Days																	
	After-noons																	
	Nights																	
Mr. D	Days																	
	After-noons																	
	Nights																	

a. Manual – the entire weight of the client is lifted by workers
b. Mechanical – the entire weight of the client is lifted by a device

Legend for Potential Barriers

1. Environmental (e.g. room size, compatibility between furniture and a lift)
2. Client resistance
3. Family resistance
4. Required equipment unavailable
5. Known aggressive behaviour

Other – Note any other barriers that impact on the safe handling of client

Appendix D – Unit/Departmental Client Mobility Needs Assessment Summary Tool

Unit/Department:			
Date:			
Assessment Completed by:			
Number of Clients Assessed:			
Lifts and Lateral Slides (Non-Weight-Bearing)	**Days**	**Afternoons**	**Nights**
Total number of manual lifts[a]			
Total number of mechanical lifts[b]			
Total number of lateral slides			
Specify the names of the device and the frequency of use			
Transfers (Weight-Bearing)	**Days**	**Afternoons**	**Nights**
Total number of one-person transfers			
Total number of two-person transfers			
Specify the types of transfer devices being used and their frequency			
Repositioning	**Days**	**Afternoons**	**Nights**
Total number of bed repositions			
Total number of wheelchair repositions			
Specify the types and frequency of use of repositioning devices			
Potential Barriers	**Provide explanation**		
Specify the Environmental barriers			
Specify the Client/Family Resistance barriers			
Specify the Equipment barriers			
Specify the Aggressive barriers			
Specify other barriers			

a. Manual – the entire weight of the resident is lifted by workers
b. Mechanical – the entire weight of the resident is lifted by a device

Appendix E – Equipment Assessment Tool

Unit /Department:		**Date:**	
Assessment Completed by:			
Equipment	**Name**	**Quantity**	**Comments**
Reposition	Repositioning/turning sheet		
	Anti-slip reposition sheets-chair		
	Other		
Transfer (Weight-bearing)	Transfer board		
	Transfer belts (various sizes)		
	Patient handling sling		
	Transfer disc		
	Sit-stand device		
	Sit-stand device slings		
	Patient turner		
	Glider board		
	Transfer pole		
	Other		
Lift (Non-weight-bearing)	Portable mechanical lift		
	Portable mechanical lift – bariatric		
	Ceiling mechanical lift • Fixed motor • Portable motor		
	Ceiling mechanical lift – bariatric • Fixed motor • Portable motor		
	Shower/bath lift		
	Slings		
	Other		

Lateral Slide (Non-weight-bearing and reclined)	Slider board		
	Slider sheet		
	Roller board		
	Lateral transfer air mattress technology		
	Mechanized/powered platform devices		
	Bariatric technologies		
	Other		
General & Specialty Equipment	Grab bars		

Survey questions	Yes	No	Comments
Does the lifting equipment comply with CSA Standard Z10535-03?			
Are there proper slings (size, type) available to suit the clients?			
Are the batteries of the powered lifting devices maintained and changed regularly?			
Is the electrical equipment or battery easy to charge?			
Are the slings only used on the equipment for which they were designed?			
Do hooks and clasps secure reliably?			
Do casters suit the floor surfaces?			
Are lifts easy to manoeuvre?			
Are operating controls user-friendly?			
Are lifts regularly maintained?			
Do staff routinely use the equipment?			
Have staff had proper training in the use of the devices?			
Are there annual, mandatory training sessions for all staff on the devices?			

Appendix F – Environmental Assessment Tool

Unit/Department:		Date:	
Assessment Completed by:			
Bedroom	**Yes**	**No**	**Explanation**
Is there enough space around all three sides of the bed to work?			
Can staff work from either side of the bed?			
Will portable mechanical lift equipment fit underneath the bed?			
Is there an unobstructed path for the portable lift or sit-stand device?			
Do the portable mechanical lifts or sit-stand devices move through doorway thresholds easily?			
Is the lift or sit-stand device positioned clear of monitors, IVs, etc.?			
Where required, is there adequate space to accommodate bariatric equipment?			
Are the ceiling height and integrity of the building structure suitable for a ceiling lift system?			
For ceiling lifts, is there suitable space for docking with a safe and suitable electrical power source?			
For ceiling lifts, is the track appropriate with respect to the bed(s)?			
Bathroom	**Yes**	**No**	**Explanation**
Can a mechanical lift be used in the bathroom?			
Is a commode used in the bathroom if a mechanical lift cannot be used?			
Is the weight capacity of the commode appropriate for the client (i.e., bariatric commode required)?			
Is there space on both sides of the toilet for a worker?			
Are grab bars situated and designed such that they do not interfere with equipment or workers?			
Tub/shower room	**Yes**	**No**	**Explanation**
Can a mechanical lift be used in the tub/shower rooms?			
Is the flooring slip-resistant?			
Can mobile, independent residents transfer easily into the tub?			
Are clients secure while they are being transported to the tub room?			
Are clients secure while in the tub?			
Equipment Storage	**Yes**	**No**	**Explanation**
Is there designated storage space for the lifts and client handling equipment that is not in the hallway?			
For lifts with removable rechargeable batteries, are batteries stored in a designated and controlled area?			
For lifts being plugged in to recharge, is the recharging zone free from blocking emergency egress?			
Are slings stored in a convenient and accessible location for employees?			

a. Manual – the entire weight of the client is lifted by workers
b. Mechanical – the entire weight of the client is lifted by a device

Appendix G – Organizational Culture Assessment Tool

Unit/Department:			
Date:			
Assessment Completed by:			
Issue	**Yes**	**No**	**Explanation**
Are you aware of documented policies and procedures on client handling?			
Have you been trained in the client handling policies and procedures?			
Do you understand your policies and procedures for client handling?			
Do all staff follow the safe client handling or minimal lift policy? If not, why not?			
Do supervisors/managers enforce the client handling policy and ensure staff follow the safe client handling policy and practices?			
Do staff report client handling hazards, incidents and accidents promptly to the supervisors?			
Do supervisors/managers promptly investigate client handling hazards, incidents and accidents and implement timely corrective action?			
Have you received hands-on practical training in client repositioning, transfer, lifts or any other appropriate procedures?			
Is there sufficient staff and time to carry out transfers, lifts and/ or repositioning procedures?			
Have you received formal instruction and demonstration in the use of assistive devices, transfer and lifting equipment on your unit?			
Do you receive at least annual re-training in your client handling programs that includes policy/procedure review, practical hands-on client handling and equipment-specific training?			
Do you feel comfortable using all the client handling devices on your unit? If not, which ones are you not comfortable with?			
Do two staff participate in the operation of client mechanical lifts and sit-stand device?			
If casual and/or agency staff work in your facility, are they trained in the use of client handling equipment, policies and procedures?			

Is there sufficient equipment for lifting, transferring and repositioning?			
Do you have sufficient time to use lift, transfer or reposition equipment?			
Is equipment stored properly and not left in hallways?			
Are there issues with defective, broken or unserviced client handling equipment or beds that impede your use of the equipment and client handling tasks?			
Are the battery charging procedures for equipment followed?			
Do clients and their families co-operate with decisions related to client handling?			
Have you been trained in initial client mobility assessments and do you complete these assessments?			
Are initial client mobility assessments conducted on new clients within 24 hours of admission?			
Do you know how to conduct a client mobility review?			
Do you conduct a client mobility review prior to moving a client?			
Do staff conduct and document inspections of equipment and slings prior to use?			
Do staff prepare for transfers, lifts and repositioning by: • Reviewing the client profile • Speaking with the client • Adjusting the height of the bed or equipment • Preparing the environment • Readying themselves • Coordinating the effort with their partner			
Community-care-specific Issues			
Are there issues with funding for equipment?			
Are there issues with preventive maintenance of equipment and maintenance of documents?			
Does the Client Service Agreement have language that supports a safe handling of clients program?			
Does the issue of client-directed care pose any potential barriers?			
Does the client's home pose any environmental barriers?			
Do the Community Care Access Centres provide you with accurate client mobility information?			

Appendix H – Guideline for Minimal Lift (Client Handling) Policy and Procedure Development

Organization Name

Departmental policy identifier: (Indicate which department is responsible for this policy and any numeric identifier that is used)

Subject: Minimal Lift Policy (Client Handling Policy)

Date approved:

Approved by: (Senior management)

Date reviewed:

Commitment Statement

This organization is committed to providing a safe and healthy working environment for all staff and clients. Our organization will demonstrate its commitment by providing financial, physical and human resources to ensure that mechanical lifts are used for the lifting of the total body weight of the client, lateral slide procedures and devices are used to move non-weight-bearing clients horizontally from one surface to another, and that assistive devices are used where appropriate for client transfers and repositioning.

This policy applies to day-to-day client handling activities. Unique client needs, unusual occurrences or emergencies will be addressed in other policies (e.g., emergency response) or by the management team. The organization is committed to annually reviewing and evaluating the program in consultation with the JHSC and stakeholders.

Goals

- Decrease the physical demands of client handling tasks
- Decrease the risk of musculoskeletal disorders associated with client handling tasks
- Promote and support the health and safety of all clients and employees
- Provide equipment, resources and effective training

Objectives (ensure objectives are measurable)

- Promote and ensure the consistent application of safe client lift, transfer and repositioning techniques
- Ensure all clients are assessed for their mobility status
- Ensure all caregivers continually review all risk factors related to client mobility
- Promote the use of mechanical client lift devices and transfer aids
- Ensure caregivers have the appropriate training and skills with respect to client mobility assessment, client handling techniques and use of all available assistive or mechanical devices

Definitions

Lift: A procedure used to support and carry the entire weight of a person from one surface to another. A lift is used to move a client who is physically unable to weight-bear through his/her arms or legs, and/or is mentally unable to co-operate in the procedure. A lift may be accomplished manually by at least two caregivers or mechanically using a lifting device.

Lateral Slide (or Transfer): A procedure used to move a reclined client from one flat surface horizontally to another flat surface. The client is unable to weight-bear through their arms or legs and/or is mentally unable to co-operate with the procedure. The client may not be able and/or permitted to sit or use a mechanical lifting device. Friction-reducing sliding devices such as slider sheets, slider boards, air mattress technologies, mechanized or powered platform devices should be used when appropriate.

Note: This procedure is sometimes referred to as a lateral transfer. However, by definition, the term “transfer” implies that the client is weight-bearing and this is typically a non-weight-bearing procedure. The term lateral slide is preferred.

Transfer: A procedure used to assist a client to move from one surface to another. The client must be able to weight-bear through at least one leg or both arms, and mentally able to co-operate and follow instructions. Assistive devices, such as a transfer belt, transfer board, transfer disk or sit-stand equipment should be used when appropriate.

Repositioning: A procedure used to move a client to a new position on the same surface such as up in bed or in a chair. The client may or may not assist in the procedure. Friction-reducing devices such as repositioning sheets should be used when appropriate.

Manual Handling: The lifting, transferring or repositioning of a client without the use of a mechanical lift, transfer belt or other assistive device.

Roles and Responsibilities of Workplace Parties

All workplace parties are required to comply with the outlined policy and procedures.

Employer

- Enforce the policy, procedures and program
- Ensure a training program is established, developed and provided in consultation with the JHSC
- Provide equipment, necessary resources and initial and ongoing staff training
- Maintain the Safe Handling of Clients Program through Continuous Quality Improvement
- Evaluate and update the program at least annually
- Take every precaution reasonable in the circumstances for the protection of workers

Supervisors

- Enforce program through regular monitoring strategies
- Conduct accident/incident investigations
- Report all findings of investigations senior management
- Ensure all staff are trained in the use of client handling equipment
- Maintain training records
- Ensure all new staff receive general and site-specific orientation to the policy and program
- Maintain equipment assigned to their department
- Conduct pre-start-up inspections of equipment
- Include the auditing of worker practice in the planned inspections and report on findings to senior management
- Ensure that all new clients have a mobility assessment within 24 hours of admission and determine lift/transfer/repositioning technique and equipment
- Ensure appropriate technique is communicated in client's care plan
- Take every reasonable precaution for the protection of the worker and client

Workers

- Comply with policy and procedures at all times
- Participate in regular training as established by the organization
- Adhere to the designated lift/transfer status as identified on each client's care plan

- Report any unsafe acts, hazards, equipment problems, change in client mobility status or any other untoward issue immediately to the supervisor or delegate
- Report any incidents, accidents and near misses to the supervisor immediately and co-operate in the investigation as required by management

Joint Health and Safety Committee

- Review incident/accident data related to client handling
- Inspect client handling activities as part of the monthly workplace inspection process
- Review policy and program annually
- Make recommendations in writing to management

Procedures

Client Assessments

- Upon admission or within 24 hours, the Team Leader or the assigned nurse completes and documents her assessment using the Client Mobility Assessment form
- Each client must have a completed Client Mobility Assessment form on their chart
- A client-handling technique will be identified for each client on their plan of care
- The assigned caregiver can carry out client handling techniques that are different from those identified on the care plan only if it entails upgrading the amount of assistance; this must be immediately followed by a request for an updated assessment
- Any downgrading or upgrading of assistance can only be approved after a formal client mobility assessment
- The Client Mobility Assessment will be reviewed and updated as required

Communication

- Staff completing client assessments will communicate the details of the assessment in the client profile/care plan – include the selected client handling technique, the amount of staff assistance required, the equipment and devices required and any other pertinent information
- Areas where a client handling logo system is approved may use logo cards depicting the appropriate client handling technique
- Where appropriate, staff will communicate client handling findings verbally to other caregivers (e.g., during shift change or client rounds)

Client Handling Techniques and Equipment

- Staff performing client handling must be trained and are required to follow the standard procedures outlined by the facility for client transfer, lateral slide, lift and repositioning or other procedures to ensure safe and consistent performance of client handling techniques (see Modules 5 and 6)
- Staff using client handling equipment must be trained and are required to use the equipment as outlined in standard operating procedures and the manufacturers' guidelines

Training

- Mandatory orientation training will be provided to all new staff required to perform client handling activities – include musculoskeletal disorder awareness and prevention, written policy and procedures and compliance expectations, client handling assessment, communication and documentation, practical training in accepted client handling techniques and the use of equipment and devices
- Staff will also be trained in site specific-client issues and equipment
- Mandatory ongoing review training will be provided to all staff at least annually
- Records of training will be documented and maintained by Human Resources, with copies to each manager

Pre-use Inspection of Equipment by Staff

- A designated shift is responsible to change the batteries on a daily basis and place in battery charger
- Any unsafe equipment and/or sling shall be removed from service and labelled immediately, and a maintenance request form forwarded to the maintenance department
- Nursing staff is responsible for inspecting the slings and reporting wear and tear to the charge nurse; a form should be completed and forwarded to the designated authority
- A designated shift is responsible for assessing the inventory of slings on the unit
- All staff are responsible for ensuring that the mechanical lift equipment is in proper working condition and addressing any concerns to the designated authority
- Equipment is to be checked at each shift and the checklist log maintained

Preventive Maintenance of Equipment

- Environmental Services will oversee the equipment preventive maintenance program
- All equipment will be maintained in safe operating condition
- Orders for and completion of preventive maintenance programs on all mechanical client lift equipment will be carried out as recommended by the manufacturers

- Complete and accurate documentation of preventive maintenance will be maintained as per preventive maintenance policy and procedure

Infection Control, Cleaning, Disinfection and Laundering

- Housekeeping is responsible for cleaning and disinfecting the mechanical lifts and devices on a daily basis – also refer to manufacturers' guidelines
- All slings shall be laundered as per manufacturers' guidelines and the schedule established by infection control
- Any soiled slings shall be removed from service until laundered
- Client handling lifts and devices being used in rooms identified with isolation precautions must be disinfected by housekeeping as per facility policy and procedure prior to removing the equipment from the room

Reporting and Investigation Hazards, Accident and Incidents

- All staff are required to report client handling hazards, accidents and incidents promptly to their supervisor for follow-up investigation to determine root cause of the event and implementation of appropriate corrective actions
- The hazard, accident or incident will be reported on the appropriate reporting and investigation forms
- Supervisors will ensure that the reports and investigation documents are completed within the required reporting timelines and submitted to the administrator
- Summary of client handling hazards, accidents and incidents is to be reviewed by the client handling committee and JHSC
- Employer will ensure compliance with reporting requirements outlined in Sections 51-53 of the Occupational Health and Safety Act and associated regulation(s)

Purchasing of Equipment and Devices

- Purchasing Services will oversee the purchase of client handling equipment and devices, once the purchase has been approved by management
- The type of equipment to be purchased will be based on the client handling program needs assessment and re-assessment
- Purchasing will consult vendors and suppliers and arrange unit-specific trials with end-users
- Equipment will be evaluated based on pre-established criteria developed by the client handling committee (meets required standards, maintenance requirements, ease of use, storage requirements, cost, vendor training, safe features, staff feedback, etc.)

• See corporate policy and procedures regarding the processes for approval to purchase minor equipment and capital budget requests

Program Evaluation and Quality Improvement

The Safe Handling of Clients program will be evaluated annually, in consultation with the JHSC and more frequently than annually on the advice of the JHSC or if there is a change in circumstance that may affect the health and safety of a worker as per the HCRFR, s. 9(2)-(4). Senior management will approve the program revisions. The following qualitative and quantitative program indicators will be collected in a timely manner by the designated authority and forwarded to the program leader, who will collate, analyze and summarize the data and make recommendations for program enhancements to senior management:

• Employee incidents/accidents
• Accident investigations
• Near misses/hazards
• Equipment inspections
• Planned monthly inspections – auditing of worker practice, etc.

Any changes to the program will be documented and communicated immediately to all affected staff and management. The designated authority will implement any changes within their area and will keep the program leader informed.

Appendix I – Sample Daily Mechanical Lift Inspection Checklist

Complete one form per mechanical lift.
Inspections for the Week of: _____

Type of Lift:			**Identification/Serial Number:**					
Unit/Department Location:								
Visual Inspection	**Sun.**	**Mon.**	**Tues.**	**Wed.**	**Thurs.**	**Fri.**	**Sat.**	**Date and Comments**
	Initials	**Initials**	**Initials**	**Initials**	**Initials**	**Initials**	**Initials**	
Portable Floor Lift Frame								
• Wheels (castors) in good working order								
• Wheels (castors) firmly attached to base of lift								
• Brakes operational								
• Nuts and screws secure								
• No cracks or sharp edges on frame								
Slings								
• No frayed edges								
• No holes								
• No ripped, loose stitching								
• Manufacturer's instructions readable								
Ceiling/Wall-mounted Lifts								
• Lift strap (between motor and spreader bar) – no signs of fraying								
• Track – flush against surface (ceiling or wall)								
• Ceiling track end plates/stops secure								
• No signs of loose hardware								
Operational Inspection (test functioning of equipment)								
• All hand controls (up, down, traverse) functional								
• Emergency controls operational								
• Return to charge feature, if available, is the operator activated type and is operational (applies to ceiling lifts only)								
• No unusual noises								
• Floor lift base width adjusts								
• Floor lift boom moves through full range								
• Ceiling/wall lift – no kinks, twists in the line connecting motor to controls								

All shortcomings must be documented, supervisor informed and equipment tagged and removed from service.
Note: This form should be customized to meet manufacturers' recommended inspection elements.

Appendix J – Sample Wording of the Health and Safety Section of a Client Service Agreement

Following are examples of health and safety language, followed by their rationale, that could be included in a community care organization's Client Service Agreement:

Client-directed services means that the Client knows what assistance is required and when and how that assistance should be provided.

- Helps to ensure that all employees carry out tasks in a similar manner. For instance, all employees use mechanical lifts rather than lifting the client manually.

The Client communicates when and how assistance should be provided to those who provide assistance.

- Addresses the importance of a communication tool. It may be verbal, via the client, or preferably written and left in the client's home.

The Client has the responsibility to develop a contingency plan in the event of service disruption (snow storm, illness, equipment break down, etc.).

- Allows the organization to limit the provision of service when a worker's safety is in jeopardy (e.g., when a mechanical lift is broken and the normal service has to be altered to avoid manual lifting).

Ensure that all equipment and supplies required for use in providing services are available to the employees.

- Emphasizes that it is the responsibility of the client to provide support for the services. Clients must provide the equipment that is deemed necessary for the service.

Ensure that all equipment that is owned or used by the Client and used in the provision of service is regularly maintained.

- Places the responsibility for the equipment on the client and emphasizes the need for caring for the equipment.

Ensure that any broken equipment used in the provision of the service is promptly repaired at the expense of the Client.

- Identifies the client as the party responsible for the equipment and the fact that they need to assume financial responsibility for maintaining the equipment.

Keep the home free of any possible health and safety hazards that may injure the employees.

- A general statement that could be useful when obscure health and safety risks arise – for example, obstacles that interfere with the mobility of a lifting device.

Interact with employees in a co-operative and non-abusive manner.

- States intolerance for abusive behaviour toward employees.

Ensure that family members and guests interact with employees in a co-operative and non-abusive manner.

- Extends the responsibility of providing for a non-abusive environment to anyone who may be in the client's home at the time of service delivery. This may occur when a family member does not want their family member lifted in a mechanical lift.

Cancellation of the Service Agreement: The Agreement may be immediately cancelled by written notice where:

a) the Client's behaviour creates a risk of serious physical or emotional harm to employees, or
b) the Client's home is used for an illegal act, trade or business

- Allows for cancellation of service if a health and safety situation cannot be resolved.

Appendix K – Incident/Accident Organizational Summary Tool

Year: _____

Dept/ Unit	Type of Client Handing Activity				Incident/Accident Type				Totals			Rating Highest to Lowest**
	Transfer	Lift	Lateral Slide	Reposition	First Aid	Medical Aid	Lost Time	Total Claim Costs	Total Incident/ Accidents	Total Days Lost	Total Claims Cost* $$	
Organization TOTAL:												

* From WSIB Claims Cost Statement

** Organization's preference for ranking may be based on total number of incidents, total days lost or total claims cost

Appendix L – Departmental Summary of Client Handling Needs

Unit/Department:		**Date:**	
Assessment completed by:			
Client Mobility Summary			
Client	Days	Evenings	Nights
Transfers			
Lifts (mechanical)			
Lifts (manual)			
Lateral slide/transfer			
Repositioning			
Independent			
Other barriers			
List of Client Handling Equipment and Devices			
Mechanical Lifts		Assistive Devices	
Identified Equipment Needs			
Mechanical Lifts		Assistive Devices	
Identified Environmental Barriers			
Environmental Barriers		Recommended Action	
Identified Organizational Barriers			
Organization Barriers		Recommended Action	

Appendix M – Department Client Handling Program Action Plan

Unit: _____ Completed by: _____
_____ Date: _____

Issue	Action	Responsibility	Target Date	Completion Date

Appendix N – Manager Monthly Report of Employee Incidents/Accidents Related to Client Handling Activities

Department:	
Date:	
Manager:	
Number of Incidents/Accidents and Near Misses by Claim Type	**Comments**
Near miss/hazard:	
First aid:	
Medical aid:	
Lost-time:	
Total:	
Number of Incidents by Body Part	**Comments**
Back:	
Shoulders:	
Upper extremities:	
Lower extremities:	
Head:	
Other:	
Number of Incidents/Accidents/Near Misses by Client Handling Activity	**Comments**
Client lift:	
Client lateral slide/transfer:	
Client transfer:	
Client repositioning:	
Number of Incidents/Accidents by Contributing Factor	**Comments**
People - e.g., employee non-compliance	
Equipment - e.g., malfunction, availability	
Materials - e.g., missing supplies	
Environment - e.g., obstacles, space	
Process - e.g., lack of safe work procedure	
Other:	
Type and Number of Supervisors' Corrective Actions	**Comments**

Appendix O – Manager Monthly Client Handling Program Performance Audit Tool

Department:	**Date:**
Manager:	
Client Mobility Assessments	**Comments**
Initial assessment completed within 24 hours of admission	
Ongoing assessments of clients completed and documented prior to every client handling procedure	
Mini-assessments conducted prior to each manoeuvre	
Current information related to client mobility documented and communicated	
Acceptable methods of client handling documented on client profile	
Client Mobility Assessments	**Comments**
Staff perform acceptable techniques during client handling activities	
Staff perform client transfers, lifts and repositioning competently	
Equipment Use	**Comments**
Total body lifts used consistently and correctly	
Stand-assist lifts used consistently and correctly	
Ambulation lifts used consistently and correctly	
Bath/shower lifts used consistently and correctly	
Lifts completed with two staff members	
Transfer devices used consistently and correctly	
Repositioning devices used consistently and correctly	
Staff Education and Training	**Comments**
All new staff oriented to program – general and site-specific	

Annual training completed and training records up to date	
Staff can demonstrate knowledge with program policies/procedures/processes	
Maintenance and Equipment	**Comments**
Pre-start-up inspections of equipment completed and recorded daily	
All equipment in good working order	
Slings laundered as per protocol	
Equipment disinfected as per protocol	
Equipment stored appropriately	
Batteries charged	
Equipment preventive maintenance completed and documented as per schedule	
Out-of-service equipment tagged appropriately and reported to Maintenance via maintenance requisition	

Appendix P– Client Mobility Assessment Tool – Physical

Client Name:		**Date:**
Unit/Department:		
Client Weight:		**Client Height:**
Diagnosis:		
Sensory		
Are the client's senses impaired (touch, proprioception, body awareness, vision, hearing)?	Yes	Comments:
	No	
Range of Motion (ROM) Indicate G = good, F = fair, P = poor		**Comments:**
Shoulder (flexion, extension and abduction)	Left	
	Right	
Elbow (flexion and extension)	Left	
	Right	
Wrist and fingers (flexion and extension)	Left	
	Right	
Hip (flexion and extension)	Left	
	Right	
Knee (flexion and extension)	Left	
	Right	
Ankle (plantar/dorsiflexion)	Left	
	Right	
Muscle Strength Indicate G = good, F= fair, P = poor		**Comments:**
Shoulder (flexors, extensors and abductors)	Left	
	Right	
Elbow (flexors and extensors)	Left	
	Right	
Wrist (flexors and extensors)	Left	
	Right	
Grip	Left	
	Right	
Hip (flexors and extensors)	Left	
	Right	
Knee (flexors and extensors)	Left	
	Right	
Ankle (plantar flexors and dorsiflexors)	Left	
	Right	

Muscle Tone	☐ Spastic ☐ Rigid ☐ Flaccid ☐ Other	Specify areas of abnormal tone, if any.
Mobility and Balance Indicate G = good, F=fair, P = poor		**Comments**
Ability to roll from side to side		
Ability to sit up unassisted		
Ability to maintain sitting balance		
Ability to stand		
Ability to maintain standing balance		
Other		
Weight-bearing Status		**Comments:**
Can the client weight-bear through at least two arms, or one or both legs? Note if client can: Fully weight-bear (FWB) or Partially weight-bear (PWB)	Yes No	☐ Both Arms ☐ FWB ☐ PWB ☐ Both Legs ☐ FWB ☐ PWB ☐ Right Leg ☐ FWB ☐ PWB ☐ Left Leg ☐ FWB ☐ PWB
Coordination		**Comments:**
Upper extremity	Left Right	
Lower extremity	Left Right	

Sample Grading Guide: Client Mobility Assessment (Physical)*			
Test	**Grade**		
	Good	**Fair**	**Poor**
Range of motion	Within normal limits for the age of the client and not interfering with client handling	Some restrictions and additional precautions may be required for client handling	Very restricted and very likely to interfere with some client handling procedures
Strength	Good strength and able to tolerate strong resistance	Some strength and able to tolerate some resistance but may fatigue	Very weak, unable to tolerate any resistance or minimal resistance, fatigues very quickly
Mobility and balance	Independent or requires minimal supervision	Requires some assistance from caregiver(s)	Requires considerable assistance from caregivers or is unable to perform the task

* Other grading methods may be used, e.g., standard muscle testing grading for strength, goniometry measurements for range of motion, etc.

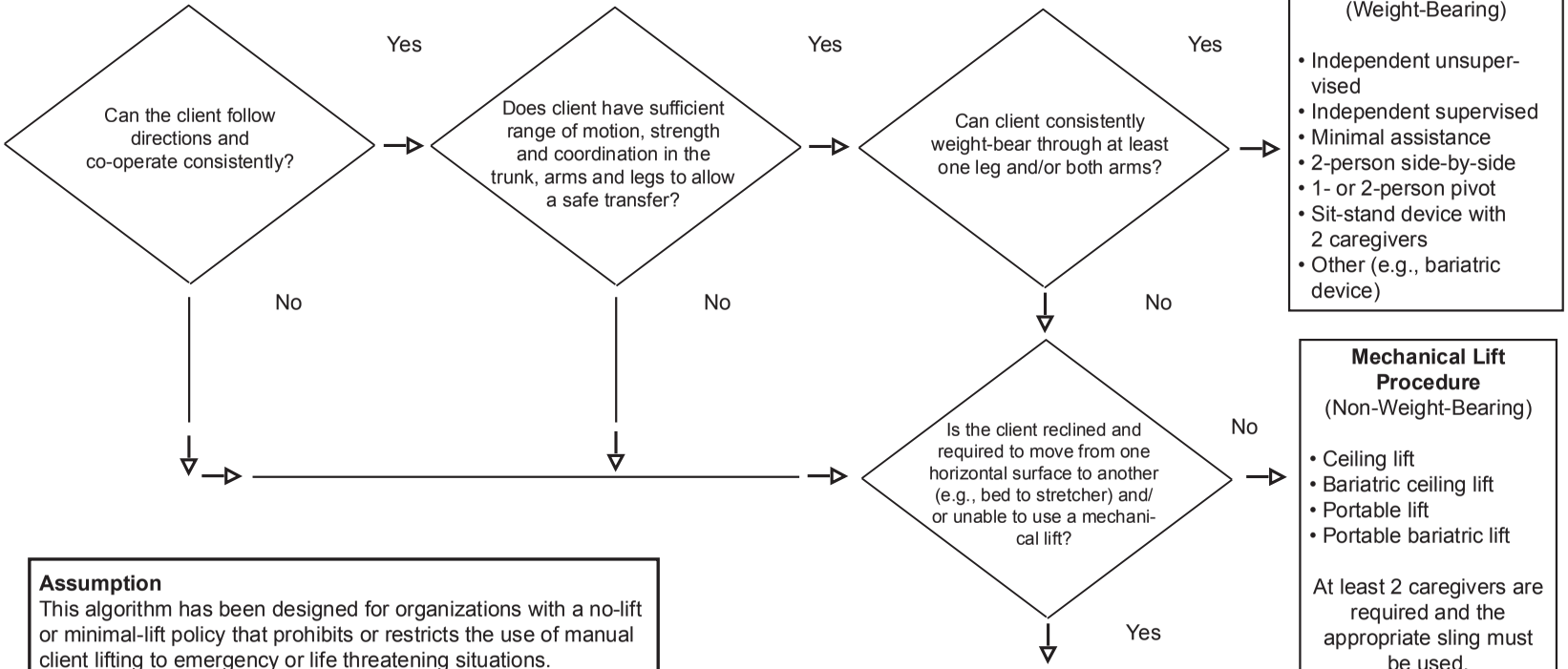
Appendix Q – Client Mobility Assessment Summary Form

Questions	Yes	No
Can the client bear weight through one leg or both arms, when moving from one surface to another?		
Is the client consistent and reliable in bearing weight?		
Can the client communicate with you?		
Can the client follow commands?		
Is the client free from pain or medical devices that may interfere with carrying out the procedure?		
Is the client co-operative and non-aggressive?		
Is the client's ROM suitable for performing a transfer?		
Is the client's strength suitable for performing a transfer?		
Are the client's mobility and balance suitable for performing a transfer?		
Analysis	Transfer Procedure If all answers are Yes	Lift Procedure* If any answers are No
Identify the type of transfer or lift		
Also ensure: • All equipment and environmental factors are suitable • All caregivers are able to perform the task		

* If a client is classified as lift and is unable to use a mechanical lift, a lateral slide/transfer procedure may be considered.

Appendix R – Client Mobility Assessment Algorithm

Prior to proceeding with the Client Mobility Assessment:
a) Ensure the client is medically safe to move including medical precautions, e.g., hip precautions. Assess client's height and weight.
b) Assess the client's pain level and medical devices to ensure they can proceed with a client handling procedure.
c) Ensure environmental conditions and equipment are suitable to perform the task.
d) Ensure the caregivers are trained and competent to perform the tasks.



Transfer Procedure
(Weight-Bearing)

- Independent unsupervised
- Independent supervised
- Minimal assistance
- 2-person side-by-side
- 1- or 2-person pivot
- Sit-stand device with 2 caregivers
- Other (e.g., bariatric device)

Mechanical Lift Procedure
(Non-Weight-Bearing)

- Ceiling lift
- Bariatric ceiling lift
- Portable lift
- Portable bariatric lift

At least 2 caregivers are required and the appropriate sling must be used.

Lateral Slide Procedure
(Non-Weight-Bearing)

- Slider board
- Slider sheet
- Roll board
- Air mattress technology
- Other devices including bariatric equipment

At least 2 care givers are required.

Assumption
This algorithm has been designed for organizations with a no-lift or minimal-lift policy that prohibits or restricts the use of manual client lifting to emergency or life threatening situations.

Bariatric Clients
Clients with a body mass index (BMI) of greater than 30 may require bariatric equipment, furniture and additional space and assistance from caregiver(s). The BMI is calculated by dividing the client's weight (kg) by their height (m) squared.

Bariatric Lift
A generic term referring to a lift for clients with a body mass index (BMI) between 30 and 40. (Veterans Health Administration, 2001)

Appendix S – Client Mini-Assessment (C.A.R.E.)

Client Mini-Assessment (C.A.R.E.) Before moving a client check for:	
Communication • Change in ability to communicate? • Change in ability to follow simple commands? • Change in eye contact?	❑ Yes ❑ No
Ability • Change in medical condition? • Change in physical ability (strength, active movement of limbs and trunk)? • Change in range of motion? • Change in energy level? • Change in mental alertness?	❑ Yes ❑ No
Resistance • Change is participation or co-operation level? • Change in level of aggression?	❑ Yes ❑ No
Equipment/**E**nvironment • Change in availability of equipment and correct accessories (e.g., slings)? • Changes travel path (e.g. obstacles)? • Change in equipment function and position? • Correct positioning of bed, equipment, etc.?	❑ Yes ❑ No

No: If the answer to all of the following questions is No, the caregiver can proceed with the prescribed procedure.

Yes: If the answer to one or more of the questions is Yes, the ongoing client assessment should be completed to determine an appropriate procedure.

Appendix T – Client Mobility Plan

Client Name: **Date:**			**Client Weight:** **Room:**	
Procedure	**Type**	✔	**Equipment (check all that apply)**	✔
Reposition	Up in bed Turn in bed In chair		Repositioning/turning sheet Anti-slip reposition sheets (chair)	
Transfer (weight-bearing)	Independent unsupervised Independent supervised Minimal assistance Two-person side-by-side One-person pivot Two-person pivot Mechanical transfer device		Transfer board Transfer belt (size S-M-L-XL) Patient handling sling Transfer disk Patient turner Glider board Sit-stand device	
Lift (non-weight-bearing)	Lifting device Side-by-side Front and back Shoulder		Portable mechanical lift Bariatric portable mechanical lift Ceiling mechanical lift Bariatric ceiling mechanical lift Specify equipment and sling size:	
Lateral slide/transfer (non-weight-bearing and reclined)	Bed to/from stretcher or bed Bed to/from reclined chair		Slider board Slider sheet Roller board Mechanized/powered platform device Lateral air mattress/slide technology	
Other (specify)				

Appendix U – Client Mobility Assessment Algorithm for Transfers

The client mobility assessment determined that: The client is able to follow directions and co-operate; has sufficient range of motion, strength and coordination in the trunk, arms and legs to allow a safe transfer; and is able to weight-bear (WB) through at least one leg or both arms.
The next step is to determine a safe type of transfer method.

Can client fully WB through at least one leg or both arms independently?

Yes → Does client need verbal guidance or reminders?

No → Independent Unsupervised Transfer

Yes → Supervised Independent Transfer

No → Can the client weight-bear through at least one leg and needs assistance?

No → Client can weight-bear through both arms and uses a transfer or glider board. Client may require assistance or specialized transfer.

Transfer Board

Yes → Determine a safe transfer procedure based on the type and amount of assistance required. Assistive devices may be used. Bariatric clients may require additional assistance/equipment.

Does the client need more than minimal assistance of one caregiver?

No → Minimum Assistance Transfer

Yes → Can client transfer with assistance of 2 caregivers, one on each side?

Yes → Two-Person Side-by-Side Transfer

No → Can 1 caregiver stabilize the client's knees & trunk for a safe pivot transfer?

Yes → One-Person Pivot Transfer

No → Can 2 caregivers stabilize the client's knees & trunk for a safe pivot transfer?

Yes → Two-Person Pivot Transfer

No → Do the 2 caregivers need to use sit-stand equipment to perform the client transfer safely?

Yes → Sit/Stand Lift

Sit-stand Device
Caregivers must check the client's weight and sit-stand equipment load limits to determine whether bariatric equipment is required.

Sample Assistive Devices

Assumptions
Clients with unique conditions or circumstances may require additional assistance and specialized equipment
(e.g., bariatric clients).

Notes

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Notes

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