



Workplace Safety and Wellness

Comprehensive Ceiling Lift Program in Continuing Care Project Final Report

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Executive Summary

This document outlines the progress of the Comprehensive Ceiling Lift Program in Continuing Care Project performed residential care unit 3 West at Queen's Park Care Centre in New Westminster, British Columbia. The outcomes of this project have been very positive.

Planning for ceiling lifts began in 1999 with the Regional OH&S committee's submission to WCB and a departmental task group being assembled once funding approval was announced. \$272,000 was secured for the installation of ceiling lifts and an associated comprehensive training/educational program. The use of the ceiling lifts began in October of 2001. The intervention period began on October 1st, 2001 and ended on September 30th, 2002. The Project Workplan outlines the process followed in installing and using the ceiling lifts before and during the intervention period. The Injury Data section provides a summary of the injury statistics to September 2002, including days lost and claims costs incurred both before and during the intervention period. Each Quarterly Report section provides details on the specific activities and issues that occurred in that quarter. Quarters are based on the calendar year.

From October 2001 to September 2002, there have been two reports of signs or symptoms of musculoskeletal injury related to resident handling. There has been only one musculoskeletal injury claim related to resident handling on 3 West, which was accepted for Healthcare Costs only. As there has not been any time loss associated with resident handling related musculoskeletal injuries, there have been no days lost or compensation costs incurred on the intervention unit during the intervention period from October 1st, 2001 to the end of September 2002.

Annual post-intervention follow-up reports are scheduled for the end of 2003 and 2004. These reports will examine the same issues as outlined in each of the quarterly reports included in this final report.

Facility Description

Queens Park Care Centre is a 300-bed residential care facility located in New Westminster, British Columbia. The facility was in a maximum demerit on the WCB assessment rates [ERA] and needed unique technology and a comprehensive educational program. 3 West is one 75-bed unit within this facility, which has all electric beds and 10 floor lifts. They have approximately 46 FTE's which includes a staffing compliment of 22 RNs, 58 resident care attendants, a manager and unit clerk. They are supported by a clinician and Therapeutic (rehabilitation) services.



Typical 4 bed room after ceiling lift installation



Person in ceiling lift (Photo courtesy of Waverley-Glen web site)

Updated Project Workplan

Planned Activities		Inputs	Outputs	Outcomes	Milestones	Cost
		Resources required	Deliverables		Dates	
<u>1.0</u>	Establish task group	Stakeholders from QPCC	Provide list of names and titles	Meetings scheduled	Task group mtgs Feb 26,01, May 7, 01 May 28, 01	0
			Provide copy of minutes	Minutes produced	As per meeting dates	0
<u>2.0</u>	Establish criteria for RFP	Task group with assistance from purchasing dep't.	RFP document	contract bids received	Completed	0
<u>3.0</u>	Select vendor	Purchasing to evaluate and prepare report and recommendation to task group	Contract from selected vendor	Most appropriate vendor selected / contract awarded	Completed	0
<u>4.0</u>	Submit work plan to WCB	Task group to review plan and make appropriate changes	Completed work plan		15-Sep-00	0
<u>5.0</u>	Establish baseline statistics	Waqar working with OHSAH & Employee Health Services	Data analysis model	Pre-intervention statistics	Fall 2001	0
<u>6.0</u>	Submit order for equipment	Purchasing staff will do	Vendor submits timelines for installation	Timelines shared with Stakeholders and WCB	Summer and Fall 2001	\$235,246.64

Planned Activities	Inputs	Outputs	Outcomes	Milestones	Cost
	Resources required	Deliverables		Dates	
<u>7.0</u> Timelines established for: <ul style="list-style-type: none"> • movement of residents • education of staff [Bodyworks] • training in use of equipment • support of regional plant services 	task group to do with assistance from Employee Health Services	Schedule developed around installation and other priorities of 3 West @ QPCC and task group	Installation completed smoothly. Details on Maintenance process established Training package developed and timelines proposed	October 2001	0
<u>8.0</u> Create reports to: <ul style="list-style-type: none"> • WCB • Regional OH&S Committee • local OH&S Committee 	Employee Health Services to provide clerical and report template	Report template	List of dates to submit reports		0
<u>9.0</u> Audio-Visual recording of project <ul style="list-style-type: none"> • pre-installation [historical] • during installation • post-installation 	Communications department <ul style="list-style-type: none"> • Randy Smith / Jerald Walliser 	Video and still shots Video recording of entire project	A visual tool for teaching, marketing and promotion of safety in LTC. Initial video taken pre-installation. Post-installation video to be scheduled	Target completion Summer 2002	0

Planned Activities		Inputs	Outputs	Outcomes	Milestones	Cost
		Resources required	Deliverables		Dates	
<u>10.0</u>	Establish evaluation criteria/tool for ceiling lift layout in the rooms	Task group with the assistance of Employee Health Services	Evaluation tool for ceiling lift layout	Measures identified	Completed December 2000	0
<u>11.0</u>	Installation	Staff time from in-house maintenance staff, installation crew supplied by Oakhill-Labron	Modification of curtains and curtain rails systems, relocation of ceiling fans, cut-out of bathroom door headers	Successful installation in all rooms	Completed July 2001	Included in #6 above + \$13229.47 for curtains
<u>12.0</u>	Resident assessment	Input from clinicians, rehabilitation therapy, Resident Care Attendants and Employee Health	Assessment tool and process.	Resident Assessment Process and Resident Assessment Form	Documents completed August 2001. Resident Assessments completed September 2001	0
<u>13.0</u>	Purchase of slings	Results from Resident Assessment process indicating types and numbers of slings required for residents on 3 West	Order list of slings for 3 West	Orders placed and slings received	August and September 2001	Included in #6 above

Planned Activities		Inputs	Outputs	Outcomes	Milestones	Cost
		Resources required	Deliverables		Dates	
<u>14.0</u>	Education plan	Input from staff, supervisors (RNs) and managers	Safe work procedures. Department processes to support use of ceiling lifts	Training package Schedule of education sessions for 64 staff	Completed 12 Dec. 01	~\$6400.00 for relief costs
<u>15.0</u>	Surveys	Employee Health Services with 3 West staff	Pre-/post-intervention survey and distribution process	Pre-intervention survey and distribution process developed	Pre-intervention surveys collected September 2001 Post-intervention surveys collected September 2002 Analysis to be completed December 02	0

Injury Data

Reports and Injury Incidence Summary

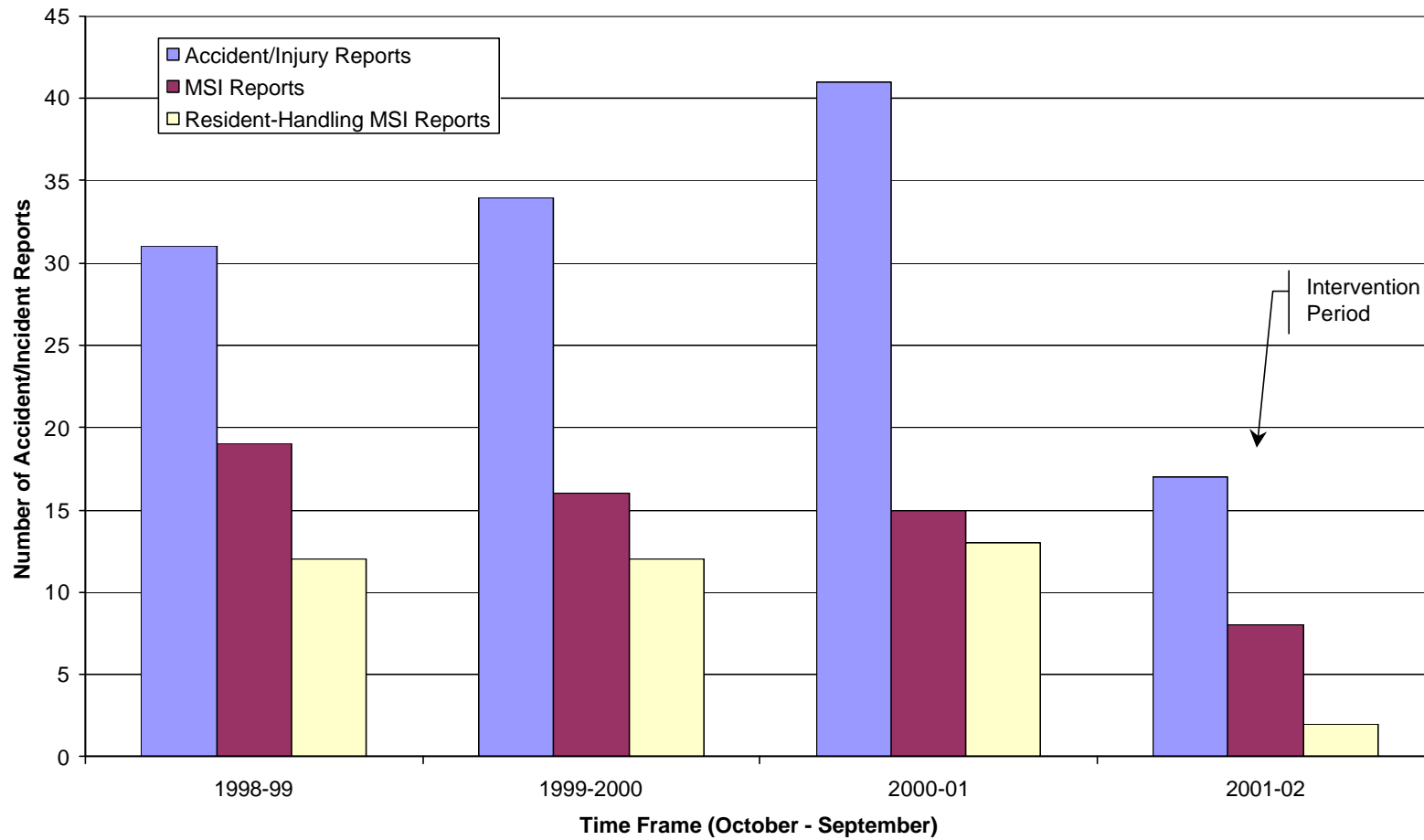
Yearly periods reported in this table cover from October 1st to September 30th of each period. The intervention period data is bolded. The last column describes the percent reduction in each category of data when comparing the intervention period to the average of the previous three 12-month periods.

<i>Accident/Injury Indicator</i>	<i>1998-99</i>	<i>1999-2000</i>	<i>2000-01</i>	<i>2001-02</i>	<i>% reduction</i>
All Accident/Injury Reports	31	34	41	17*	84%
All Musculoskeletal Injury (MSI) Reports	19	16	15	8*	84%
Resident-Handling (RH) MSI Reports	12	12	13	2*	95%
MSI WCB Claims	11	8	9	3*	89%
Resident-Handling MSI WCB Claims	7	8	9	1*	96%
% RH MSIs of all MSI Reports	63%	75%	87%	25%	89%
% RH MSIs Claims of all MSI Claims	64%	100%	100%	33%	87%
Days Lost for RH MSIs	272	424	379	0*	100%
Claims Cost for RH MSIs	\$24,915.19	\$36,158.04	\$33,460.64	0*†	100%

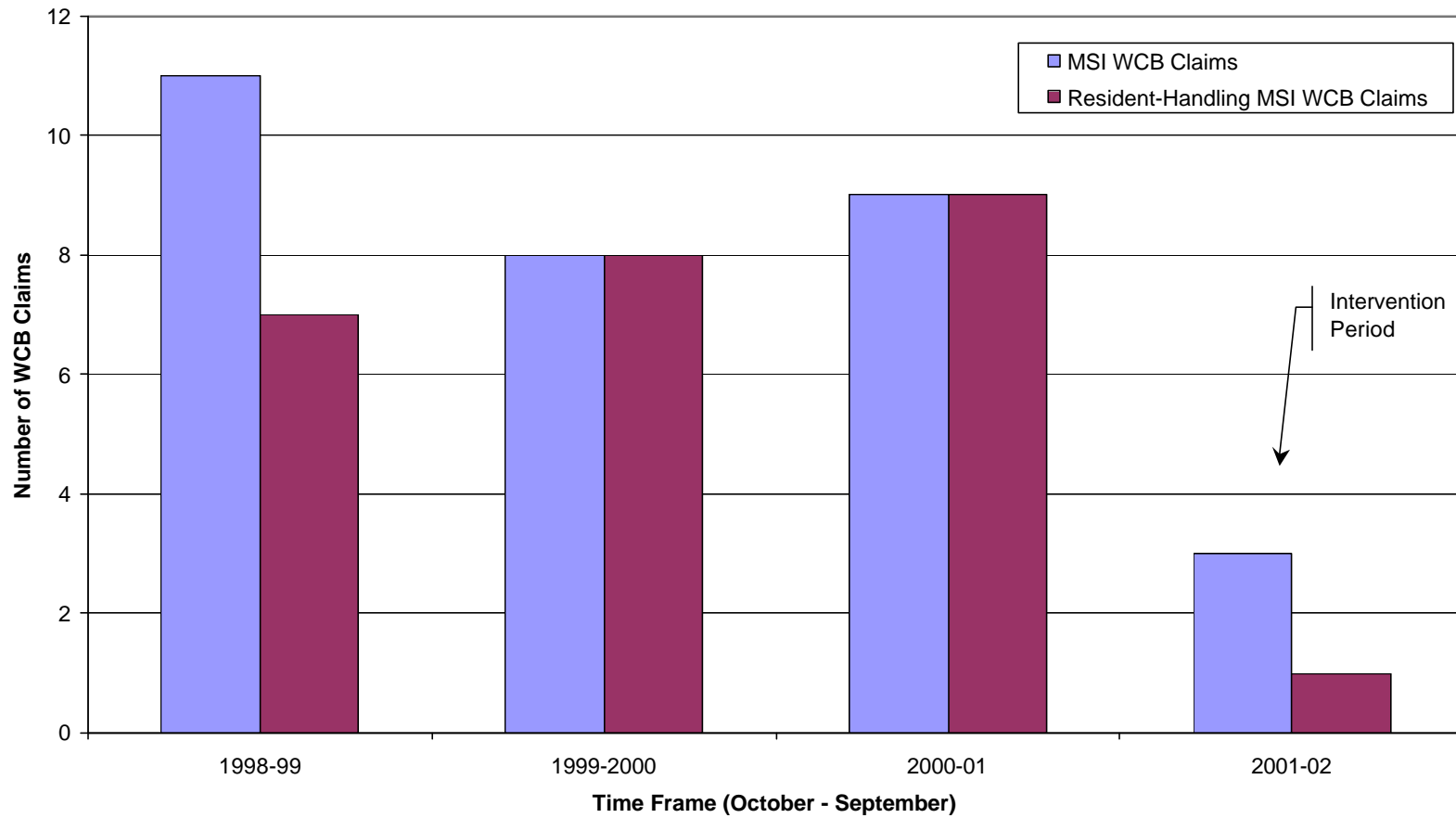
* indicates a statistically significant decrease in the intervention values for each Accident/Injury Indicator ($z = -3.57$ to -17.90 ; $p < 0.001$).

† At the time the report was written, no claims cost statement was received for the one resident-handling WCB Claim, which had been accepted for Healthcare Costs only

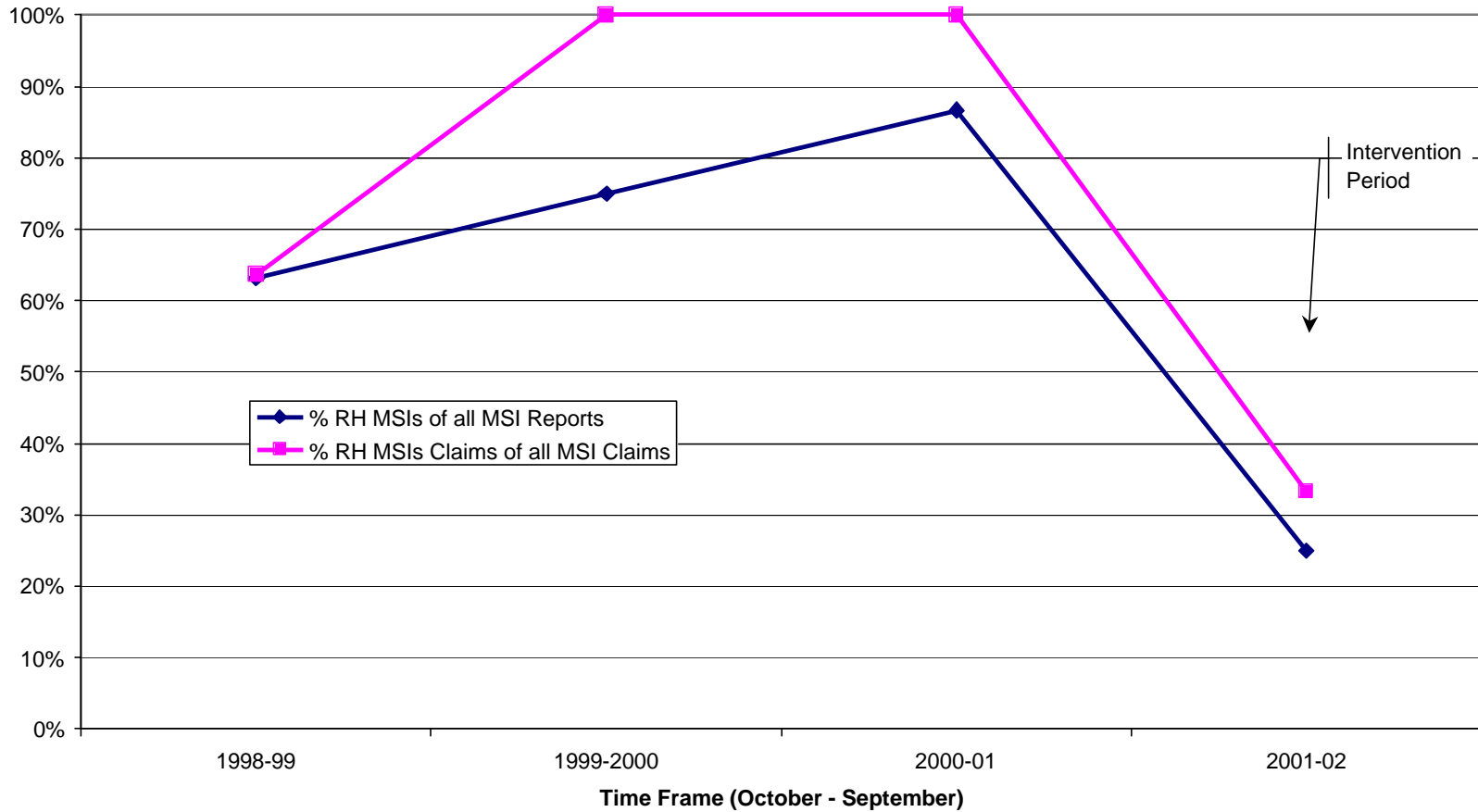
Accident/Injury Reports Profile
October 1998 - September 2002
3 West Care Unit, Queen's Park Care Centre, Fraser Health Authority



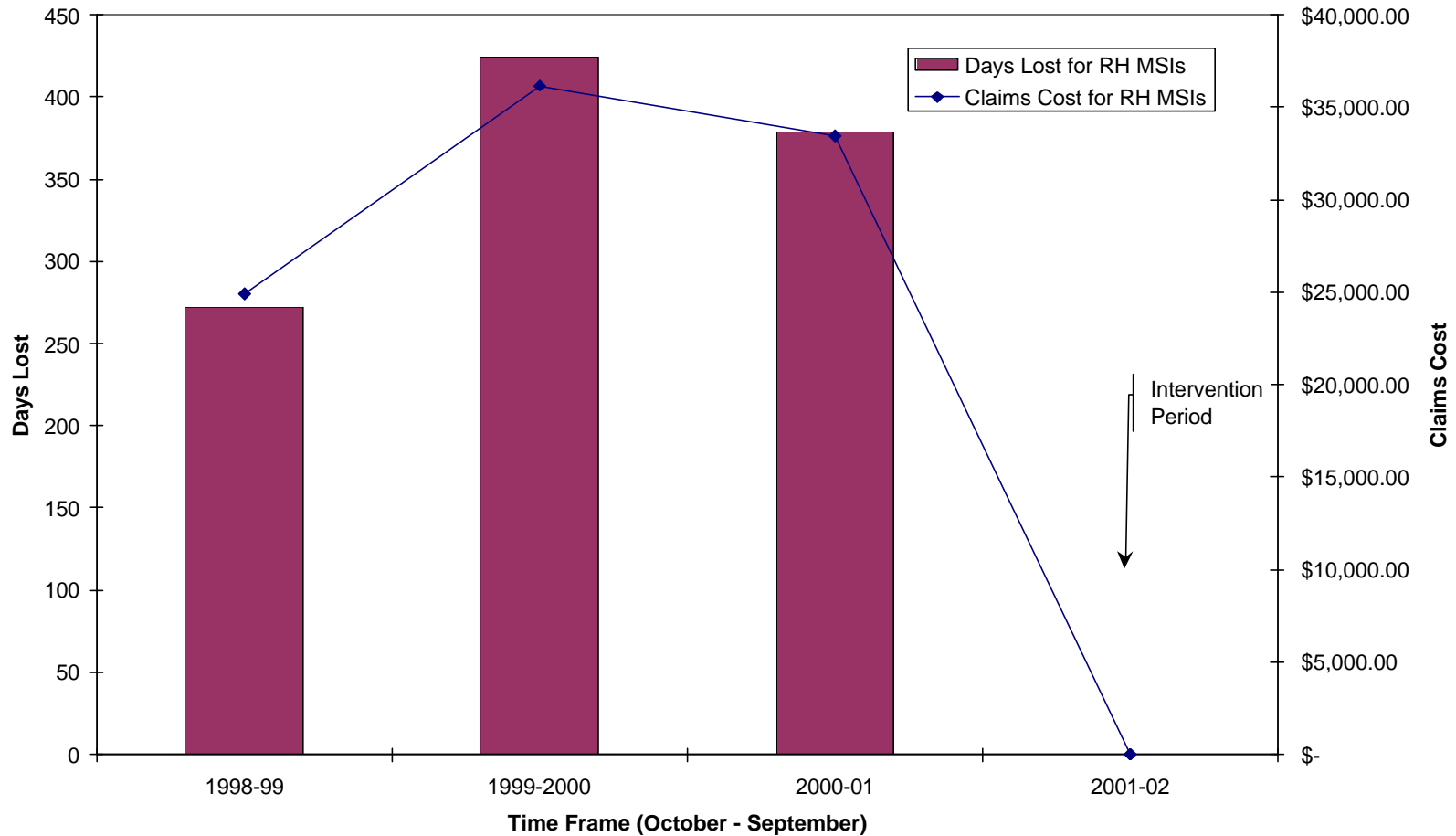
Musculoskeletal Injury (MSI) Claims Profile
October 1998 - September 2002
3 West Care Unit, Queen's Park Care Centre, Fraser Health Authority



Percent of Resident-Handling Related Musculoskeletal Injuries (PH MSIs) of all MSI Reports and Claims
October 1998 - September 2002
3 West Care Unit, Queen's Park Care Centre, Fraser Health Authority



**Days Lost and Claims Cost History for Resident-Handling Musculoskeletal Injuries
October 1998 - September 2002
3 West Care Unit, Queen's Park Care Centre, Fraser Health Authority**



Note: At the time the report was written, no claims cost statement was received for the one resident-handling WCB Claim that occurred in the intervention period, which had been accepted for Healthcare Costs only.

Days Lost and Claims Costs Summary for Resident-Handling Related Musculoskeletal Injuries

	Pre-intervention Period October 1998 - September 2001	Intervention Period October 2001 – September 2002
Number of Quarters in period	12	4
Number of Years in period	3	1
Total Number of Claims	24	1
Average Number of Claims per Quarter	2	0.25
Average Number of Claims per Year	8	0.25
Total Days Lost	1075	0
Average Days Lost per Claim	45	0
Average Days Lost per Quarter	90	0
Average Days Lost per Year	358	0
Total Compensation Costs	\$75,273.00	\$0
Total Healthcare Costs	\$19,260.87	\$0*
Total Claims Cost	\$94,533.87	\$0
Average Claims Cost per Claim	\$3,781.35	\$0
Average Claims Cost per Quarter	\$7,877.82	\$0
Average Claims Cost per Year	\$31,511.29	\$0
Total Top-up Costs	\$25,091.00	\$0
Average Top-up Costs per Quarter	\$2,090.92	\$0
Average Top-up Costs per Year	\$8,363.67	\$0

* At the time the report was written, no claims cost statement was received for the one resident-handling WCB Claim, which had been accepted for Healthcare Costs only.

Return on Investment Projection

Projected Long-Term Impact of Ceiling Lifts on Injury Costs Reduction 80%

Projected Reduction in Claims Costs per Quarter	\$6,302.26
Projected Reduction in Claims Costs per Year	\$25,209.03
Projected Reduction in Top-up Costs per Quarter	\$1,672.73
Projected Reduction in Top-up Costs per Year	\$6,690.93

Projected Reduction in Claims Costs per bed per Quarter	\$84.03
Projected Reduction in Claims Costs per bed per Year	\$336.12
Projected Reduction in Top-up Costs per bed per Quarter	\$22.30
Projected Reduction in Top-up Costs per bed per Year	\$89.21

Note: see Appendix D for additional detailed Injury Data

If ceiling lifts were only used on 3 West in QPCC, the **projected savings** (80% reduction*) in **direct costs** would be:

	2002 [†]	2003	2004	2005	2006	2007	2008 [‡]	2009 [‡]	Total
Projected Reduction of WCB Premiums [§]	\$0	\$ 16,900.00	\$ 31,140.00	\$ 38,940.00	\$ 40,710.00	\$ 38,940.00	\$ 39,530.00	\$ 39,530.00	\$245,690.00
Projected Top-up Savings	\$6,690.93	\$ 6,690.93	\$ 6,690.93	\$ 6,690.93	\$ 6,690.93	\$ 6,690.93	\$ 6,690.93	\$ 6,690.93	\$ 53,527.47
Yearly Total Savings*	\$6,690.93	\$ 23,590.93	\$ 37,830.93	\$ 45,630.93	\$ 47,400.93	\$ 45,630.93	\$ 46,220.93	\$ 46,220.93	\$299,217.47

Notes:

*The current status of effectiveness in this project is seen to be almost 100%. Therefore, **any** injury and associated costs in this project will decrease predicted savings based on 100% effectiveness. However, in the one WCB claim that was recorded, we have not yet received a claims cost statement for the healthcare costs associated with the injury. Therefore we have employed a conservative estimate of only 80% effectiveness of this intervention over the long term, and this consideration was made in the table above.

[†]Each column is calculated for a calendar year.

[‡]Predicted values based on averages for 2005, 2006, and 2007 because the WCB ERA Calculator only projected out six years.

[§]The "Projected Reduction of WCB Premiums" is the difference in predicted WCB premiums if the claims rates stayed the same and if they were reduced by the sum-total calculated amount for that employer group, and that reduction was sustained over the subsequent years. This calculation was performed using the WCB ERA Assessment Calculator available on the Internet at http://www.worksafefbc.com/for_employers/premiums/Assets/Excel/ercalculator2002.xls. Assessable payroll was increased by 2% in each projected year to reflect potential annual wage increases.

Based on the initial investment of \$272,000 in 2001 on one residential care unit at this facility, return on investment based solely on the predicted costs savings realized in reduced annual WCB premiums and top-up costs, the total amount of the investment would be realized by the end of 2009. Given that premiums are paid on an annual basis, this translates to a **Return on Investment period of approximately eight years**.

If additional consideration was made to include the reduction in claims costs of non-resident handling related musculoskeletal injuries, the period for ROI would be reduced. This reduction, however, was not included in this calculation and is therefore a conservative estimate of the direct cost savings due to this intervention.

Quarterly Report – Q3 2001 (July – September 2001)

Workplan Progress

Installation of ceiling lifts in all rooms on 3 West completed at the end of September 2001. Ceiling lifts coverage is 100% of 75 beds, plus a tubroom (over one tub and one toilet).

Pre-intervention survey form completed and confidential survey distribution and data collection developed. Surveys are distributed to staff on 3 West. Completed surveys were collected by end of September 2001. In total, we received 22 surveys to provide a 50% response rate based on distribution (31% response rate based on number of staff on payroll for the unit). Control unit was not identified for staff survey distribution as modifications to work practice/care delivery was occurring in all long-term care units that were not receiving ergonomic interventions. We will be able to do a retrospective analysis of injury rates, durations and costs to determine effectiveness of the ceiling lifts intervention (see pages 7 - 12 for final injury data details). Some limited cross-project comparisons will be able to be made to other projects beginning at the same time as this project.

Resident Assessment Process and associated Form was developed in consultation among the Nurses (RNs), the Resident Care Attendants, Rehab Therapists (OT/PT) and Employee Health Services. See Appendices A, B and C for relevant documentation. Assessment of all residents completed by end of September 2001 and Activities of Daily Living (ADL) sheets are updated with new lifts and transfers information at the bedside. Slings are ordered.

Education plan is proposed. Input from staff, supervisors (RNs) and managers on how to implement and support the use of ceiling lifts within current system on the unit. Content and processes developed from consultation sessions with stakeholders. All staff members from 3 West will attend a four-hour session that provides all the information regarding the use of ceiling lifts and the processes put in place to support their use on 3 West. They will be relieved from their duties on the unit as casual staff will be brought in to cover their caseload for those four hours. The relief costs for these training sessions will be covered by the project budget. Scheduled start date is October 2001, to complete in December of 2001. The use of the ceiling lifts can begin as soon as they have attended the four-hour training session.

Results achieved to date

There were two reports of musculoskeletal injury or signs or symptoms of musculoskeletal injury in this quarter. One was associated with a manual transferring task, while the other was associated with the use of a mechanical lifting device when the staff were lifting a Resident from the floor. The manual transferring task went on to experience time loss.

Additional progress as per workplan.

Status of targeted outcomes noted in 3(I)

Reduction in frequency, severity, rate and cost of resident handling injuries to workers

The use of the ceiling lifts had not yet begun in this quarter. See pages 7 - 12 for final injury data details and Appendix D for more detailed information on injury statistics for this and other quarters.

Elimination or minimization of the risk of MSI

The use of the ceiling lifts replace the use of floor lifts wherever there is coverage by the ceiling lifts. The ceiling lifts require minimal turning effort to move the resident around furniture and other fixtures in the room, thereby minimizing the high forces that are experienced in the shoulders. In addition to performing all the tasks that a floor lift performs, the ceiling lifts can also assist with the repositioning and turning activities that have been performed manually. We have eliminated the asymmetric lifts (high forces at the shoulder and lower back) that occurred with repositioning up in bed (bed boosts) for those Residents for whom it is appropriate. We have also eliminated the high forces and awkward postures (forward flexion of the lower back and shoulder flexion >90°) experienced during turning-to-side-lying tasks. We have minimized the high forces required to move a person across the bed – horizontal repositioning – which usually occurs prior to turning to side lying.

Reduction in number of manual lift, transfer and repositioning activities

Twenty repositioning slings were ordered for use on 3 West (for the 20 residents assessed to be appropriate for this type of sling). The manual repositioning and turning activities for those Residents have been replaced by ceiling-lift assisted repositioning and turning tasks. Some of the therapy and clinical staff were concerned that because of the ease of access and use of the ceiling lifts, all residents would become ceiling lift transfers. The Resident Assessment Process was designed to ensure that the appropriate type of transfer is assessed for the Resident's current condition. Hence, the floor standers (i.e., Medi-Maid, Sara, Sabina, Medi-SSL) are still being used with those Residents for whom it is appropriate. See Appendices A and B for documentation on the Resident Assessment process.

Increased available time for resident care

Initially, the amount of time required to use the ceiling lifts were comparable to the use of floor lifts due to the difficulty with the gates to/from the bathroom and having to manage the curtains differently from previous practice. A comparison of task efficiencies is planned for 3rd Quarter of 2002 that would compare time to complete tasks using floor lifters, manual repositioning techniques and the use of the ceiling lifts across appropriate tasks.

Return on investment

The broad use of the ceiling lifts has not yet begun in this quarter. Return on Investment (ROI) is to be calculated at end of project term and is presented on pages 13 and 14 of this report.

Negative outcomes

The largest hurdle to overcome during the initial phases of the use was the management of the privacy curtains during the use of ceiling lifts. This issue was highlighted during the trials in this quarter. To address this issue, the formal education and training provided to the Resident Care Attendants demonstrated very specific methods to manage the curtains prior to, during and after use of the ceiling lifts.

Positive Outcomes

Staff using the ceiling lifts report less effort is required for "those difficult Residents", making the repositioning tasks easier on day shifts, and on night shifts

Incidents involving residents during manual or mechanical lifting

None reported.

Expenditures to date

As per invoice and workplan.

List of attachments if applicable

Appendix A – Resident Transfer Assessment Process

Appendix B – Resident Transfer Assessment Form

Appendix C – ADL Sticker

Appendix D – Detailed Injury Analysis for 3 West – 1998-2002

Quarterly Report – Q4 2001 (October – December 2001)

Workplan Progress

62 slings are delivered to unit. Laminated nametags are affixed to appropriate slings to assign them to each resident. Replacement slings (extra slings meant to be used when original sling is sent for laundering) are kept in the common storage area for 3 West (in Team 2 area).

Education and training sessions are delivered to 3 West staff on proper use of lifts, and procedures and processes to support the use of ceiling lifts on 3 West. See Appendix E for the Lesson Plan, and Appendices A, B, F, and J for documentation on education and training provided. Use of the ceiling lifts began as Resident Care Attendants were trained and slings for appropriate residents became available, creating a gradual increase in the use of the lifts. Train-the-trainer model discussed with staff and manager. Train-the-trainer sessions are scheduled for January 2002.

All Accident/Injury reports from 3 West are followed closely.

Results achieved to date

Two reports of musculoskeletal injury or signs and symptoms of musculoskeletal injury were reported in this quarter. No injuries reported were related to resident lifting, transferring or repositioning.

Sixty-four staff members (plus 6 Resident Care Attendant students) were trained in the initial sessions provided by Employee Health Services.

A total of 62 slings are ordered and received.

Additional outcomes as noted in Workplan.

Status of targeted outcomes noted in 3(I)

Reduction in frequency, severity, rate and cost of resident handling injuries to workers

Only one MSI claim occurred this quarter, but it was unrelated to resident handling. No resident-handling musculoskeletal injuries were reported for this quarter. No claims costs were incurred, and no time loss occurred due to resident handling.

See "Injury Statistics" on pages 7 - 12 for complete injury reduction statistics for the project

Elimination or minimization of the risk of MSI

See same section in Q3 2001.

Reduction in number of manual lift, transfer and repositioning activities

See same section in Q3 2001.

Increased available time for resident care

See same section in Q3 2001. A comparison of task efficiencies is planned for 3rd Quarter of 2002.

Return on investment

See pages 13 and 14 for Return on Investment projection.

Negative outcomes

With the use of slings, it is discovered that the laminated nametags are a hindrance and may cause abrasions on some residents' skin. Tags are removed from slings and now staff members simply check the ADL to ensure the appropriate type of sling is being used for the Resident.

In December 2002, an incident occurred in the two-bed room that included injury to the staff and Resident. Details are in the report titled "Accident Investigation Report For The Workers' Compensation Board Of British Columbia" written by Quinn Danyluk, Safety Consultant for the Simon Fraser Health Region, sent to the WCB on November 14, 2001. This incident significantly decreased the amount of confidence the staff had in the safety and security of the ceiling lifts system.

Positive Outcomes

As a result of the incident involving the failure of the superstructure of the ceiling lifts system, a new post-installation inspection process was developed with cross-checking of work performed and documentation to provide evidence of inspection. In addition, new load testing methods were developed by the contractor in consultation with the employer and the WCB of BC. See Appendix I for an example of the post-installation checklist.

Incidents involving residents during manual or mechanical lifting

See Negative Outcomes for this quarter.

Expenditures to date

As per invoice and workplan.

List of attachments if applicable

Appendix A – Resident Transfer Assessment Process

Appendix B – Resident Transfer Assessment Form

Appendix E – Education Session Lesson Plan for 3 West

Appendix F – Skills Checklist for Use of Ceiling Lifts

Appendix I – Post-intallation Checklist for Ceiling Lifts

Appendix J – Maintenance Procedure for 3 West

Quarterly Report – Q1 2002 (January – March 2002)

Workplan Progress

Train-the-Trainer session delivered on January 4, 2002 to two Resident Car Attendants, two Registered Nurses, a Physiotherapist, an Occupational Therapist and the Nurse Clinician. Instruction was provided on how training sessions are structured, what major points must be covered, and distribution of how content is to be provided (i.e., process/procedure information in department orientation, hands-on training performed on unit with trainer-buddy, etc.). See Appendix G for training handout for Trainers.

Results achieved to date

Only one report of symptoms of musculoskeletal injury was completed in this quarter. There were no musculoskeletal injury reports, nor any that went to WCB claims status or time loss. There were no reports of musculoskeletal injury due to resident lifting, transferring or repositioning tasks.

Status of targeted outcomes noted in 3(I)

Reduction in frequency, severity, rate and cost of resident handling injuries to workers

No resident-handling musculoskeletal injuries were reported for this quarter. No claims costs were incurred, and not time loss occurred due to resident handling.

See "Injury Statistics" on pages 7 - 12 for complete injury reduction statistics for the project

Elimination or minimization of the risk of MSI

See same section in Q3 2001.

Reduction in number of manual lift, transfer and repositioning activities

See same section in Q3 2001.

Increased available time for resident care

See same section in Q3 2001. A comparison of task efficiencies is planned for 3rd Quarter of 2002.

Return on investment

See pages 13 and 14 for Return on Investment projection.

Negative outcomes

Concern has arisen regarding the condition of Resident's skin if they regularly lie on the repositioning sling in bed. The intervention provides that there will be an incontinent pad between the Resident and the sling while the Resident requires the sling. The pad is a larger size that covers approximately 90% of the sling's length, thereby reducing the amount of skin contact with the sling. These pads are to be used only with those residents that have repositioning slings in order to minimize laundering costs (it costs more to clean the larger pads than it does the smaller, more common pads).

Additional concerns were raised regarding the use of repositioning slings for Residents that have special pressure-reducing mattresses on their bed. These mattresses are used to manage poor skin condition (i.e., pressure sores, ulcers) and are designed to have direct contact with the Resident's skin. If a repositioning sling (or a sheet, or any other material) is placed between the Resident and the mattress, the effect of the mattress is reduced. There is a team of clinicians and therapists, including representation from Employee Health Services, working on developing a Skin Condition Management Process to address these exceptional cases where the Resident's skin condition is affected by the lift and transfer needs of the Resident.

There has been a long-standing issue regarding whether or not the slings should be left underneath the residents once they are transferred to their wheelchairs. The concern from the clinical and therapeutic staff is that the slings cause pressure sores and ulcers because of their bulky material. In addition, not unlike the special bed mattresses, some wheelchairs have special padding designed to increase comfort and stability for that Resident, and the placement of a sling between the Resident and the padding can decrease the effectiveness of those special supports. The Resident Care Attendants' point of view is that some Residents require a significant amount of effort to move them in their chair in order to get access to remove and replace the sling. By eliminating the task of removing the sling, the amount of effort expended by the Resident Care Attendant is reduced. Beyond the physical capabilities of the Resident, some of the wheelchairs are a tight fit, which also increases the amount of effort required to remove and replace the sling. In addition, there is the risk that the pulling and pushing of the sling may cause shearing on the skin, which can lead to skin tears and subsequent infection or other problems. The same group that is examining the special mattresses is also examining the development of a protocol that would apply to the use of slings in wheelchairs. A recent draft of the protocol is attached in Appendix H.

There is also some residual confusion among users of the ceiling lifts as to the proper orientation of the remote controller when operating the lift. The confusion lies in the orientation of the hose or cord connecting the controller to the lift. In all previous lifting devices used, the controllers had cords that were attached to the bottom of the controller when it was held in the proper orientation. The controller for the ceiling lifts has the hose coming out of the top of the controller when properly oriented. This is leading to the inadvertent raising/lowering of the sling bar when the opposition function was intended. We have not had any injury or incident directly related to this issue. Because the sling bar moves so slowly, there is a low risk of there being any severe consequence to the accidental raising or lowering in a Resident's room. An intervention

being considered is the application of new stickers to the buttons that read "UP" and "DN".

Positive Outcomes

The start of a process to develop of a Skin Condition Management protocol that would include considerations for the safe lift and transfer needs of the staff and Residents

There are very positive comments made around Queens' Park Care Centre regarding the use of ceiling lifts, and as a result there is eager anticipation of the installation and use of ceiling lifts on the other units.

Incidents involving residents during manual or mechanical lifting

None reported in this quarter.

Expenditures to date

As per workplan.

List of attachments if applicable

Appendix D – Detailed Injury Analysis for 3 West – 1998-2002

Appendix G – Train-the-Trainer Handout

Appendix H – Sling Removal Protocol - DRAFT

Quarterly Report – Q2 2002 (April – June 2002)

Workplan Progress

On-going monitoring issues with ceiling lift use. Occupational Health Nurse identified communication issues among staff on the unit regarding process to initiate re-evaluation of resident transfers (see Appendix A), as well as to initiate maintenance of equipment (see Appendix J). Nurse Clinician and Manager of unit are currently addressing both issues.

Results achieved to date

Only one report of symptoms of musculoskeletal injury was completed in this quarter. There were no musculoskeletal injury reports, nor any that went to WCB claims status or time loss. There were no reports of musculoskeletal injury due to resident lifting, transferring or repositioning tasks.

Status of targeted outcomes noted in 3(I)

Reduction in frequency, severity, rate and cost of resident handling injuries to workers

No resident-handling musculoskeletal injuries were reported for this quarter. No claims costs were incurred, and no time loss occurred due to resident handling.

See "Injury Statistics" on pages 7 - 12 for complete injury reduction statistics for the project

Elimination or minimization of the risk of MSI

See same section in Q3 2001.

Reduction in number of manual lift, transfer and repositioning activities

See same section in Q3 2001.

Increased available time for resident care

See same section in Q3 2001. Time-study is scheduled for 3rd Quarter 2002.

Return on investment

See pages 13 and 14 for Return on Investment projection.

Negative outcomes

There is some confusion around communication responsibilities on the unit regarding the assessment of the resident and the initiation of maintenance assistance. The latter process was additionally confounded by the involvement of the contractor for repair of

the ceiling lifts. Both of these issues will be followed closely over the coming months by the manager and nurse clinician of the unit.

Positive Outcomes

Two other units at Queen's Park Care Centre have installed ceiling lifts in their areas. A representative Resident Care Attendant from 3 West that had significant involvement in this project was asked to be a consultant to the processes on the other units. The intent was to share experiences and learn from the mistakes and hurdles that were encountered on 3 West.

Incidents involving residents during manual or mechanical lifting

None reported in this quarter.

Expenditures to date

None in this quarter

List of attachments if applicable

Appendix A – Resident Transfer Assessment Process

Appendix D – Detailed Injury Analysis for 3 West – 1998-2002

Appendix J – Maintenance Procedure for 3 West

Quarterly Report – Q3 2002 (July – September 2002)

Workplan Progress

Staff surveys were distributed in October 2002. Analysis of survey data to be completed by end of December 2002.

Results achieved to date

See "Injury Statistics" on pages 7 - 12 for complete injury reduction statistics for the project

Status of targeted outcomes noted in 3(I)

Elimination or minimization of the risk of MSI

See same section in Q3 2001.

See "Injury Statistics" on pages 7 - 12 for complete injury reduction statistics for the project

Reduction in number of manual lift, transfer and repositioning activities

See same section in Q3 2001.

Increased available time for resident care

At the end of the study period, staff members reported that it requires less time to access ceiling lifts and slings for each resident when compared to the time requirements for using floor lifts. Not only are there ceiling lifts in each room, enough slings were purchased for each resident such that the workers no longer have to "hide the good ones" and search for a sling when they needed one.

When comparing the task requirements for using a floor lift versus using a ceiling lift in this project, time differences lie in the three sub-tasks: 1) the time required to get the equipment, 2) the time required to get an appropriate sling, and 3) the time required to move the resident from the original location to the desired destination.

For sub-task 1, time requirements have decreased with the use of ceiling lifts due to the fact that there is one in each room. In the past, there were two floor lifts per team of four workers, so up to two members of each team could wait for the duration of a transfer (3-12 minutes) for the use of a floor lift. With the ceiling lifts, this time savings would be realized for each lifting task as long as two workers are not requiring the use of the lift in the same room at the same time.

For sub-task 2, the time requirements have decreased due to the increased number of slings purchased per resident. This project allowed the unit to purchase at least one sling per resident (e.g., universal and repositioning slings for one resident), or as many as indicated by the Resident Assessment Process, plus purchase spare slings to replace soiled slings when they are sent for laundering. This benefit could also be realized in

residential care units that have floor lifts by simply purchasing more at least one sling per resident.

For sub-task 3, the benefit is inconclusive. There are significant differences, however, in the manner in which the sub-task is completed. For floor lifts, the workers have to maneuver around any obstacles on the floor, and reposition the legs of the lift to get close to some of the larger wheelchairs and around obstacles under the bed. With ceiling lifts, there is no concern with obstacles that may be on the floor aside from the basic need to ensure a safe walking path for the worker. However, the workers now need to navigate around the curtain rails which are suspended from the room walls, and they need to consider the area of coverage of the ceiling lifts and position the wheelchair in an appropriate location under the lifting system. For this task, the workers report that while the time to complete the task may or may not have changed the level of effort required has been drastically reduced.

For repositioning tasks, the majority of staff find that they are using them for the difficult (e.g., resistive) or heavy residents more often than the more cooperative or smaller residents. Staff report that it does take considerably longer to turn someone using the ceiling lift as compared to performing the task manually, which may explain why it is used on the exceptional residents. In addition, many workers that work nights report using the lifts to turn or boost patients when they are unable to get assistance. The problem with using the lifts at night is that it can be noisy if it needs to be retrieved from the bathroom, and that lighting is required in the room during the task. Some workers have addressed these issues by leaving the lift next to the bed in a safe location (e.g., over a wheelchair) and by using flashlights during the task.

Return on investment

See pages 13 and 14 for Return on Investment projection.

Negative outcomes

In this quarter, staff reported a number of unresolved issues associated with the use of the ceiling lifts. While the reporting process for a broken system or lift is fairly well understood by the workers on the unit, there remains some unresolved issues around the process involved when the lift remains in unsatisfactory condition (in one example, very noisy) after the maintenance department has reported resolving the problem. The responsibility for contacting the manufacturer/distributor for warranty repair work remains unclear as to who is responsible and what are the criteria for contacting them (e.g., what level of damage can be fixed by our department, and what level of problem should be referred onto the manufacturer/distributor?).

In addition, a modification to the curtains remains to occur, where some type of fastening device (hook and loop, clips) is attached to the outer edges of the curtains where two curtains can meet at the end of the bed. Due to the arrangement of the curtain rail system, a gap can remain at the foot of the bed when both curtains are pulled around the bed, especially when a television set is mounted to a stand on the bed's footboard.

The connection where the controller cord attaches to the lift box is frequently becoming disconnected during the course of a lift or transfer task. This can occur when a pulling force is applied to the remote controller cord, as can happen when the cord catches something while workers are holding the device and lowering the resident to their desired location. Clips to attach a section of cord to the lift box are being investigated as a solution.

Positive Outcomes

Staff members are reporting increased proficiency with using the lifting system. They are better able to identify task organization issues based on the number of residents that are under their care and require the use of the ceiling lifts. They report that they are better able at preparing the room environment prior to the start of a lift or transfer task as to reduce the amount of interruptions to the task progression.

The staff cannot overstate the ease of use of the ceiling lift system. One worker reported that after back surgery and subsequent time off due to back pain, the ceiling lifts were the only reason she was able to return to her previous position as a residential care attendant. The Workplace Safety and Wellness department sees the use of ceiling lifts as a measure that would allow for workers otherwise unable to perform the functional demands of their job to return to their workplace in their previous position without aggravation of their symptoms or re-injury.

Incidents involving residents during manual or mechanical lifting

There were no incidents reported during this quarter.

Expenditures to date

The cost for relieving a resident care attendant to attend the healthcare projects forum held by the Workers' Compensation Board were the only additional costs incurred this quarter.

Appendix A – Resident Transfer Assessment Process

Transfer Assessment Process for Residents

Every member of the care team is responsible for ensuring that the lift or transfer task for a Resident is done in the safest manner possible. During the course of care, the Resident's condition or behaviour may change, therefore requiring a reassessment for the appropriate type of lift or transfer that is necessary to safely move the Resident from one location to another.

The Resident's ability to assist with the transfer is based on three factors:

- Their ability to **cooperate** with you (understand and follow your instructions),
- Their ability to **bear weight** through their legs and arms, and
- Their ability to **balance** while in an upright position.

If a change is observed in any of the above three factors, the staff member is responsible for initiating the process to have a **Transfer Reassessment** performed for that Resident.

In most Residential Care settings, **the Nurse Clinician is responsible for organizing the reassessment** of any Resident.

If a **Resident Care Aide** observes the need for a Resident to be reassessed, they must contact their Team Leader immediately and make a note in the communications book itemizing the details of concern.

If a **Nurse/Team Leader** observes the need for a Resident to be reassessed, or is informed of such a need by a Resident Care Aide, the nurse must contact the Nurse Clinician with the pertinent details requesting a Transfer Reassessment for the identified Resident.

If a member of **Rehab Services** (i.e., **PT/OT**) observes the need for a Resident to be reassessed, they will contact the Nurse Clinician with the pertinent details.

Upon notification by any of the above mentioned staff members, the **Nurse Clinician** will contact and/or arrange for the Transfer Assessment Team to meet for a reassessment of the Resident's transfer techniques. The members of the Transfer Assessment Team are:

- a Physiotherapist and/or an Occupational Therapist,
- the Nurse Clinician and/or a Team Leader, and
- a Resident Care Aide.

The Transfer Assessment Team will evaluate the resident's condition for performing transfers and determine the most appropriate method for that resident based on their abilities and presentation. (See "Resident Transfer Assessment Form")

After the assessment is completed by the Transfer Assessment Team, the ADL will be updated with the new transfer techniques and equipment required (if any) and the completed “Resident Transfer Assessment Form” will be placed in the Resident’s chart.

A note of the new transfer methods for that Resident will be made in the communications book and the change will be mentioned at the daily reports for the following day.

Completing the Resident Transfer Assessment Form

Resident Information

Complete all questions in this area to accurately identify the resident being assessed and when it occurred. List all members in attendance under “Assessment Team:”

Resident Assessment

Below are guidelines for appropriate intervention when

Does the Resident have...

Head control?	<p><i>If NO, then:</i></p> <ul style="list-style-type: none"> • Contraindication for all types of assistance except for mechanical lifter • Any sling used would need head support (see “Mechanical Device Sling Selection”) • Contraindication for Hygiene sling use
Trunk control?	<p><i>If NO, then:</i></p> <ul style="list-style-type: none"> • Contraindication for all types of assistance except for mechanical lifter • Evaluate Hygiene sling carefully – it does require significant trunk strength to use safely (extension at hips and low back)
Shoulder/axillary strength?	<p><i>If NO, then:</i></p> <ul style="list-style-type: none"> • Contraindication for all types of assistance except for mechanical lifter • Contraindication for Hygiene sling use
Neutral spinal alignment?	<p><i>If NO, then:</i></p> <ul style="list-style-type: none"> • Consider Hammock/amputee sling use for added support. Universal sling may suffice • Contraindication for Hygiene sling use
Weight-bearing ability?	<p><i>If NO, then:</i></p> <ul style="list-style-type: none"> • May be able to perform manual transfer with appropriate number of assists or with mechanical stander • If weight-bearing is contraindicated (i.e., contractures, bony fractures) use mechanical lifter

Does the Resident have...

Amputation(s)?	<p><i>If YES, then:</i></p> <ul style="list-style-type: none"> • Evaluate ability to transfer independently, or with assistance (manual 1 or 2 person, or mechanical stander or lifter) • If using a mechanical lifter, consider amputee/hammock or custom slings. Hygiene sling may be appropriate depending on ability of the resident
Relevant contracture(s)?	<p><i>If YES, then:</i></p> <ul style="list-style-type: none"> • Contraindication for all types of assistance except for mechanical lifter • Evaluate fit of sling carefully – too large a sling may increase risk of patient/resident/client slipping out of sling • Strong consideration for hammock/amputee sling
Fragile skin?	<p><i>If YES, then:</i></p> <ul style="list-style-type: none"> • Evaluate fit of sling carefully – too large a sling may cause excessive shearing of skin • Careful evaluation
The ability to comprehend and cooperate consistently?	<p><i>If NO, then:</i></p> <ul style="list-style-type: none"> • Contraindication for all types of assistance except for mechanical lifter
Difficulty repositioning in bed?	<p><i>If YES, then:</i></p> <ul style="list-style-type: none"> • Consider the use of a repositioning sling with a ceiling lift to reduce effort for boosting and turning in bed • Repositioning sling cannot be used with any device other than a ceiling lift

Type of Assistance Required

Indicate what type of assistance is required for each Transfer Task listed. If the resident does not perform that task, check "n/a". If no assistance is required, check "Independent". Indicate any other Transfer Task not listed under the row "Other."

Mechanical Device Sling Selection

Indicate the type of device to be used under the column "Device Name" (e.g., Ceiling Lift, Sabina, Golvo, Medi-SSL, etc.). Also indicate appropriate size of sling and whether or not head support is required. For slings for Mechanical Stander, indicate the sling type by the indicating the device name under "Other:".

In the table "Sling Type selected", indicate the appropriate loops by colour in the appropriate boxes. This is to ensure that any special circumstances that have been assessed are appropriately communicated to the ADL.

Completing the "Transfer" Section on the ADL

Initial

The nurse, clinician, Occupational Therapist or Physiotherapist who completes the ADL should initial here.

Date

The date of the assessment that the new ADL is based upon is indicated here.

Assistance

The items written in the column “Assistance” indicates the level of physical assistance that is required by the resident to complete the transfer indicated. The options for this section are:

- **N/A** – not applicable. The resident does not perform this transfer at all
- **Independent** – The resident is able to perform this transfer on his or her own. They do not require any assistance or supervision.
- **Manual** – The resident requires some manual assistance or supervision by a caregiver to complete the transfer.
- **Mechanical Stander** – The resident requires the use of a mechanical stander (e.g., Sara, Sabina, Medi-Maid/SSL) to complete the transfer.
- **Mechanical Lift** – The resident requires the use of a floor lift (e.g., Golvo, Medi-Man/Lifter, Arjo) or a ceiling lift to complete the transfer task.

Sling Type

There are four different categories of “Sling Type” – those for manual transfers, for mechanical standers, for floor lifts, and for ceiling lifts.

Manual Transfers

The typical “sling” used in manual transfers would be a transfer belt. Any other assistive device (e.g., transfer board) could also be indicated here.

Mechanical Standers

In most cases, the type of sling indicated would simply be the manufacturer’s name. In a few cases, a non-typical or custom sling may be manufactured for the specific use with this resident, and it would be indicated as such in this column.

Floor Lifts

The typical options for Floor lifts include a universal sling, toileting / hygiene sling, hammock sling, amputee sling, or custom sling

Ceiling Lifts

The ceiling lifts use the same type of slings as the floor lifts, with the addition of a positioning sling.

Size

The typical acronyms apply here:

- XS – extra small
- S – small

- M – medium
- L – large
- XL – extra large

Again, there may be custom slings designed for the specific use with the resident, and should be indicated as such here.

Head Support

This column would only be completed for those transfer tasks that require the use of a floor lift or ceiling lift. The slings have the option of having head support to provide support to those residents who do not have head control.

The column would have either “Y” for yes, head support is required or “N” for no, head support is not required.

Loops

This column has three sub-columns: “H”, “S”, “L” indicating head, shoulder, and leg straps, respectively.

These columns would be completed only for those tasks requiring the use of ceiling lifts (with the exception of ceiling lifts and positioning slings). The new slings that are being provided to us for use with the ceiling lifts come with colour-coded loops on the straps to decrease the amount of confusion that occurs when communicating which loop is attached on the strap (e.g., the “1st loop” would depend on where the worker began counting the loops – from the end or from the sling).

The colour of the appropriate loop would be determined through assessment by the Transfer Assessment Team for that resident, and the appropriate colour would be indicated in the appropriate columns. The “H” column would only be completed for those residents that need head support.

Appendix B – Resident Transfer Assessment Form



Resident Transfer Assessment Form

Resident Information:

Resident Name: _____

Room No.: _____ Bed No.: _____ Date of Assessment: _____

Assessment Team: _____

Resident Assessment:

<i>Does the Resident have...</i>	Yes	No	<i>Comments:</i>
Head control?	<input type="checkbox"/>	<input type="checkbox"/>	
Trunk control?	<input type="checkbox"/>	<input type="checkbox"/>	
Shoulder/axillary strength?	<input type="checkbox"/>	<input type="checkbox"/>	
Neutral spinal alignment?	<input type="checkbox"/>	<input type="checkbox"/>	
Weight-bearing ability?	<input type="checkbox"/>	<input type="checkbox"/>	
Amputation(s)?	<input type="checkbox"/>	<input type="checkbox"/>	
Relevant contracture(s)?	<input type="checkbox"/>	<input type="checkbox"/>	
Fragile skin?	<input type="checkbox"/>	<input type="checkbox"/>	
The ability to comprehend and cooperate consistently?	<input type="checkbox"/>	<input type="checkbox"/>	
Difficulty repositioning in bed?	<input type="checkbox"/>	<input type="checkbox"/>	
<i>Other:</i>	<input type="checkbox"/>	<input type="checkbox"/>	

Type of Assistance Required (check appropriate boxes):

Transfer Task	N/A	Independent	Manual	Mechanical Stander	Mechanical Lift	Updated on ADL?
In-bed repositioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bed → chair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chair → bed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Toileting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Mechanical Device Sling Selection – Type and Size (check appropriate boxes):

Device Name	Sling Type	Small	Medium	Large	head support?
	Repositioning	<input type="checkbox"/>	n/a	<input type="checkbox"/>	n/a
	Universal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Y / N
	Hygiene	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	n/a
	Hammock	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Y / N
	Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Y / N

Sling Type selected	Loops			Comments:
	Head	Shoulder	Legs	
Universal				
Hammock				
Hygiene				
Other				

Appendix C – ADL Sticker

TRANSFER										<i>Date of Assessment:</i>		
Transfer Task	N/A	Inde- pendent	Manual	Mechanical Stander	Ceiling Lift	Sling Type selected	Size	Head Support	Loops			
									Head	Shoulder	Legs	
In-bed repositioning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 2p	N/A	<input type="checkbox"/>			Y / N	N/A			
Bed – chair	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1p <input type="checkbox"/> 2p	<input type="checkbox"/>	<input type="checkbox"/>			Y / N				
Chair – bed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1p <input type="checkbox"/> 2p	<input type="checkbox"/>	<input type="checkbox"/>			Y / N				
Toileting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> 1p <input type="checkbox"/> 2p	<input type="checkbox"/>	<input type="checkbox"/>			Y / N				
Other: _____			<input type="checkbox"/> 1p <input type="checkbox"/> 2p	<input type="checkbox"/>	<input type="checkbox"/>			Y / N				

Appendix D – Detailed Injury Analysis for 3 West – 1998-2002

	1998	1999				2000				2001				2002		
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4*	Q1	Q2	Q3
A/I reports	3	9	10	9	7	18	6	3	12	5	9	15	3	5	3	6
MSIs	2	4	8	5	3	7	4	2	8	1	4	2	2	1	1	4
MSIs - RH	2	3	4	3	3	5	3	1	7	1	3	2	0	0	0	2
MSIs - claims	2	2	4	3	2	2	2	2	5	0	3	1	1	0	0	2
RH-MSI claims	2	2	2	1	2	2	2	2	5	0	3	1	0	0	0	1
%RH MSIs Claims of all A/I Reports	67%	33%	40%	33%	43%	28%	50%	33%	58%	20%	33%	13%	0%	0%	0%	33%
Days Lost for RH MSIs	207	16	6	43	189	85	61	89	81	0	119	179	0	0	0	0[†]
Claims Cost for RH MSIs (in \$)	20,000.79	1,208.36	924.85	2,781.19	13,958.91	8,640.04	7,438.01	6,121.08	9,406.13	0	9,096.27	14,958.24	0	0	0	0

* Ceiling lifts intervention begins in Q4 2001

[†] At the time the report was written, no cost statement was received for the one resident-handling WCB Claim, which had been accepted for Healthcare Costs only.

Appendix E – Education Session Lesson Plan for 3 West



Lesson Plan for Bodyworks Training 3 West - Queen's Park Care Centre

Topic	Time
"The need for your participation..." or... Roles and Responsibilities	First 50 minutes
Lifting policy	
Resident Assessment procedure	
Sling washing/maintenance procedure	
Maintenance procedure - "what happens if it's broken?"	
On-unit observations	
On-unit meetings	
Incident/Injury reporting - MSIs - aggression/violence - equipment malfunction/breakdown - review how to complete an A/I Report	10 min
Coffee break	
MSI overview	Last two hours
Safe Body Mechanics	
Hands-on Practice	
- bed-chair	
- bed-toilet	
- chair-toilet	
- Repositioning – boosting up in bed - Repositioning – turning in bed	
Wrap-up (evaluation)	

Appendix F – Skills Checklist for Use of Ceiling Lifts



Skills Checklist for Ceiling Lifts

Name: _____ Employee Number: _____

Unit/Ward: _____ Site: _____ Date: _____

- Basic Operation**
1. sling bar is lowered prior to moving
 2. lift is returned to charge afterwards

- Bed-to-Chair Transfer (and return)**
3. check ADL
 4. two people are used
 5. sling is placed in appropriate location
 - bottom seam just above sacrum (universal)
 - roll/pad just below axilla (hygiene)
 6. sling bar is across width of resident
 7. attach same loops on both sides
 8. raise to just clear surface
 9. lower with pelvis back into chair
 10. check final position at destination before removing sling

- Bed-to-Toilet Transfer**
11. check ADL
 12. two people are used
 13. sling is placed in appropriate location
 14. sling bar is across width of resident
 15. attach same loops on both sides
 16. raise to just clear surface
 17. check final position at destination before removing sling
 18. leg straps are positioned to prevent soiling

- Chair-to-Toilet Transfer**
- check ADL
 - two people are used
 - sling is placed in appropriate location
 - sling bar is across width of resident
 - attach same loops on both sides
 - raise to just clear surface
 - check final position at destination before removing sling
 - sling is positioned to prevent soiling

- Repositioning in Bed – Bed Boost**
- check ADL
 - two people are used
 - sling bar is lengthways to resident
 - attach at least three straps on each side
 - straps located between head and hips
 - raise before move up bed

- Repositioning in Bed – Turn to Side Lying**
- two people are used
 - have pillows or other linen prepared at bedside
 - sling bar is lengthways to resident
 - attach at least three straps ...
 - on one side only

Signatures:

Instructor

Trainee

Trainee – by signing above you acknowledge that you have understood the points listed above

Appendix G – Train-the-Trainer Handout

Orientation Procedure to Resident Lift and Transfer Devices

This document outlines how an orientation is provided to a new worker or student who is expected to work on the unit and perform resident lifts and transfers using mechanical lifting equipment. A permanent employee of the unit who has been trained by a member of Employee Health Services provides the orientation.

The new worker is not allowed to use any of the devices until they have received the appropriate training for that device.

It is the manager's responsibility to ensure that each worker on the unit has received appropriate training prior to using the equipment.

This document is written to provide direction to the person providing the orientation.

1. Use the "Skills Checklist" to:

- organize your presentation
- ensure that you've covered all the key points for the lift or transfer
- ensure the trainee has demonstrated all the key steps in the lift or transfer

2. How to Provide the Orientation:

Part One – Observe the Skill

- speak to the main features of the equipment (as per checklist)
- you demonstrate the task
 - speak through each step
 - ensure you've covered all that is on that section of the checklist
- ask if they have any questions
- ask the trainee to demonstrate the task
 - observe the demonstration to ensure the trainee does all steps (as per checklist)
- provide feedback to the trainee once task is complete
 - ask trainee to repeat demonstration if they missed some steps

→ if you have ensured the trainee has demonstrated all the steps, you have now seen them demonstrate their understanding of the safe way of doing the task

Appendix H – Sling Removal Protocol - DRAFT

Draft 6 – July 31, 2002

APPROPRIATE USE OF TRANSFER/REPOSITIONING SLINGS Standard

1.0 PURPOSE

To promote resident comfort and dignity by removing transfer sling as appropriate. To reduce the risk of skin breakdown.

2.0 DEFINITIONS

- **Transfer Sling:** Device used with mechanical lift to support person during mechanical transfer.
- **Positional sling:** A sling to assist with repositioning a person while in bed.

3.0 STANDARD

- 3.1 At least two (2) professionals will review the evidence to determine if the resident requires a sling for repositioning, the frequency of transferring or repositioning, residents' weight and abilities.
- 3.2 Transfer slings are to be removed from behind the resident when up in the wheelchair.
- 3.3 It will be stated on the ADL when a sling may remain in the wheelchair or when a repositioning sling may remain under a resident.
- 3.4 When a sling remains in the wheelchair, the resident must not be sitting on it. The leg straps must be tucked in at the sides, or secured behind the chair.
- 3.5 If a sling is left behind the resident it should be covered as much as possible from public view.

4.0 PROCEDURE

- 4.1 Review assessment criteria to determine if a resident may have a transfer sling in place:
 - The fit of the resident in the wheelchair.

- Ease of removing and inserting sling while resident is in wheelchair.
- Review of Braden Scale score to determine risk for skin breakdown.
- Non-verbal and verbal behaviours that may indicate pain when transferring or repositioning.
- Medical condition contributing to pain e.g. Arthritis or may put them at risk for skin breakdown e.g. Diabetes.
- Whether the resident becomes agitated during the procedure.

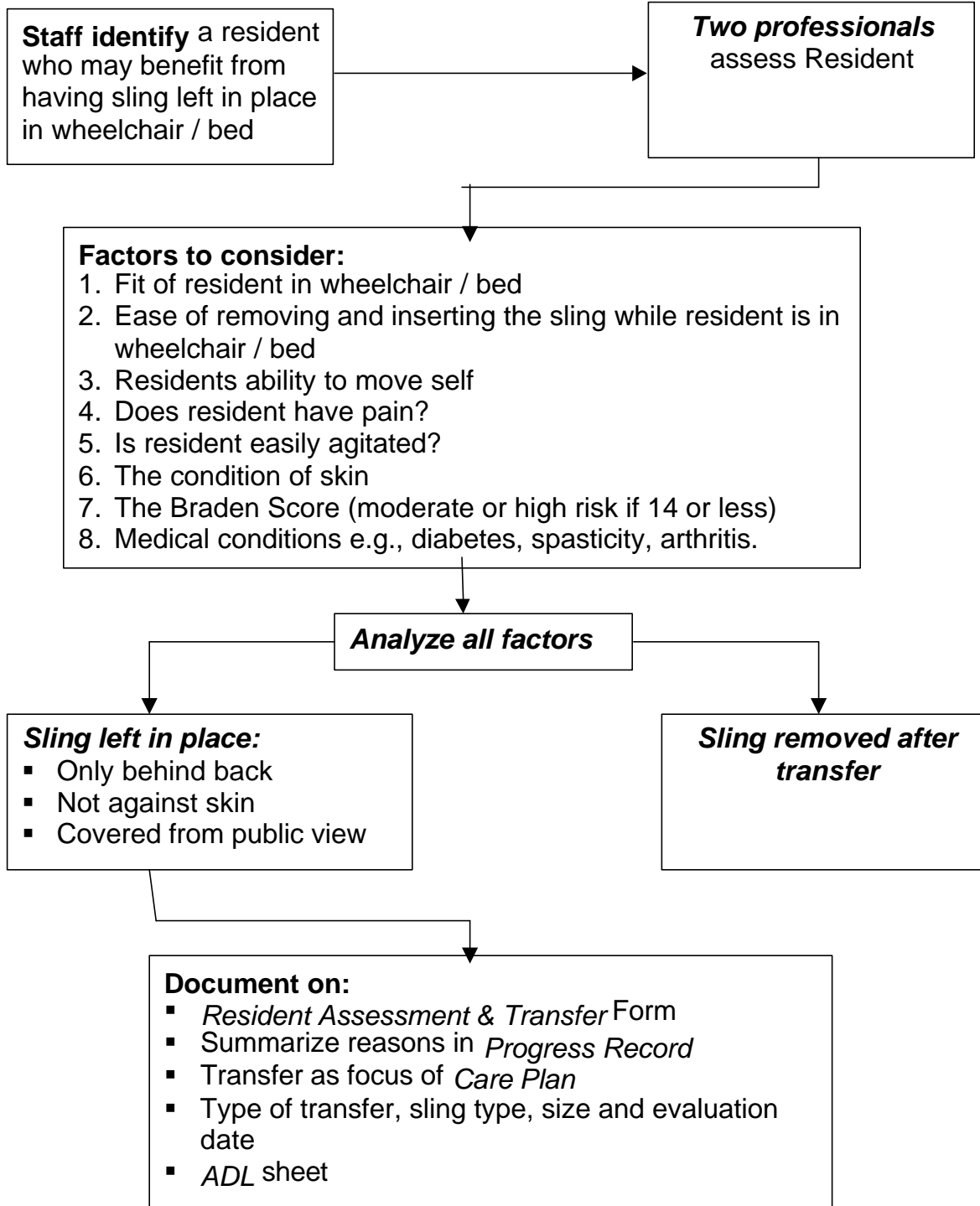
4.2 Review assessment criteria to determine if a resident may have a positional sling in place:

- Residents ability to move self in bed.
- Ease of removing and inserting sling.
- Braden scale. If below 14 to consider need for pressure reduction mattress or benefit of repositioning to prevent shearing and friction.
- Non-verbal and verbal behaviours that may indicate pain when transferring or repositioning.
- Medical condition contributing to pain e.g. Arthritis or may put them at risk for skin breakdown e.g. Diabetes.
- Whether resident becomes agitated during the procedure.

5.0 DOCUMENTATION

- **Resident Assessment Transfer Form:** transfer method, times, sling type and size.
- **Progress Record:** The transfer team will summarize the assessment findings and results.
- **Care Plan:** Focus will relate to difficulty in transfer or repositioning person, when the sling is to be used and an evaluation date.
- **ADL Sheet:** Only document if sling is to remain behind resident in wheelchair or positioning sling is to remain under resident.

DECISION MAKING FOR APPROPRIATE USE OF TRANSFER/POSITIONING SLINGS STANDARD



Appendix I – Post-installation Checklist for Ceiling Lifts

OAK HILL - LABRON

Ceiling Lift System Installation - Final checklist and inspection

Project _____ Room type _____

Date _____ Room Number _____

Checklist Item	Visual Check	Initial	Manual Check	Initial	Specification
Concrete Anchors	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	Per Manufacturers Specs
Crossbracing	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	3/8" - 19 ft. lbs. 1/2" - 50 ft lbs
Vertical ready rods and structural fittings	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	3/8" - 19 ft. lbs. 1/2" - 50 ft lbs
Ceiling brackets	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	3/8" - 19 ft. lbs. 1/2" - 50 ft lbs
Endstops	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	3/8" - 20 ft. lbs.
Trolleys	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	Factory set Check only
Lifts	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	Check Operation
Carry bar & manual lowering connection (where used)	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	Install Pins Check Pin Lock
Gate assembly	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	Check Torque and Operation
Rail deflection test	<input type="checkbox"/>	_____	<input type="checkbox"/>	_____	See reverse for procedure

Operational load test (see reverse for procedure)

Load (lbs) 400 _____ 425 _____ 600 _____



Workplace Safety and Wellness

Dynamic load test (see reverse for procedure)

Load (lbs) 500 _____ 550 _____ 750 _____

Lift Serial Numbers: 1) _____ 2) _____ 3) _____

Inspection Completed By _____ Print Name _____

Inspection Date _____ (Effective Warranty Start Date)

Witnessed By Customer _____ Print Name _____

Rail Deflection Test Procedure

The test is conducted by measuring the deflection of the rail(s) from no load to maximum operational and dynamic load at the mid-point between supports.

Operational Load Test Procedure

The lift system is checked with a load at 100% of the rated maximum lift capacity. The test is conducted by moving the load throughout the whole system coverage area.

Dynamic Load Test Procedure

The lift system supports are checked with a load at 125% of the rated maximum lift capacity. The test is conducted by moving the load along the tracks directly under the supports.

Appendix J – Maintenance Procedure for 3 West



What to do if the ceiling lift is broken, stops working or otherwise becomes unusable...

1. Go to the Ceiling Lift Resource Binder under the section "Maintenance Rec." and get a Hazard Report, a red Tag Out card and a plastic zip strip.
2. Complete the top part of the Hazard Report and give it to your Team Leader. The Team Leader will complete the bottom half and give you the top copy.
3. The Team Leader will call Maintenance at local 2731, informing them of the room number the defective lift is located in.
4. You will proceed to the room where the defective lift is located and complete the back of the Tag Out card with your name, date and time of the call to Maintenance and attach it to the lift (on the controller or the sling bar - somewhere it will be seen) with the zip strap.
5. The Team Leader will put the second copy of the Hazard Report into the Ceiling Lift Resource Binder under the section "Hazard Reports", and the third copy is to be sent to "Employee Safety - Queen's Park Care Centre" through interoffice mail (this can be given to the unit clerk to complete the next day they are at work).
6. A note is to be made in the Communications Book by either the RCA or the Team Leader regarding the date, time, location and nature of the defective equipment.