

# IMPROVING THE HEALTH OF COMMUNITY HEALTH WORKERS

## PROJECT FOCUS



O H S A H



### Why Home and Community Care?

With an aging population and a trend away from institutionalized care for disabled persons, community based healthcare has become an important part of the healthcare industry. The quality of community care services has a major impact on the health of the client, and ultimately on the community.

In 2000, the WorkSafeBC (formerly the Workers' Compensation Board of BC) injury rates for worker groups that include Community Health Workers (CHWs) were:

- 7%-30% higher than other healthcare workers.
- 65%-100% higher than all other workers in BC.

The most prevalent cause of injury among CHWs is overexertion due to patient handling. Other causes are:

- exertion due to material handling;
- improper use of devices (e.g. needlestick);
- violence; and
- exposure to infectious disease.

Home and community care has unique characteristics that are not present in other healthcare services:

- CHWs often work alone.
- CHWs have limited access to assistive equipment.
- CHWs have little control over their work environment.
- CHWs often have little task-specific training.

### Home & Community Care Study

A study involving six home and community care agencies was undertaken to evaluate various interventions as effective measures for reducing the risks for CHWs. In 2000, community and homecare proposals submitted to OHSAH identified a need for violence prevention programs and musculoskeletal injury prevention (MSIP) programs. Based on input from stakeholders, three interventions were developed.

- 1. Education and Training** - A train-the-trainer program for supervisors was developed and piloted in five of the six agencies involved in the study. Supervisors provided education and training to CHWs.
- 2. Risk Assessment Tool (RAT) and Resource Guide** - These were provided to three of the six agencies involved in the study as part of a risk management system, whereby supervisors identify each risk encountered in clients' homes, implement control measures, and then inform CHWs about these risks and control measures to reduce or eliminate the risk. These were also used as ongoing reference and resource materials for agencies when searching for control measures.
- 3. Lift Equipment Registry** - This was implemented in two agencies to measure the effectiveness of lifting devices in preventing MSI.

Expected project outcomes included:

- Increased knowledge of the nature of risks, their causes and control measures;

- Increased CHW self-confidence in identifying and addressing hazards with agency support;
- Improved access to equipment to perform client handling tasks;
- Reduced injuries and associated costs to CHWs.

- CHWs who had reported a workplace injury pre-intervention were more likely to report a workplace injury that resulted in an accepted WorkSafeBC claim during the year of the study.
- The intervention groups were more likely to report a workplace injury as compared to the control group.
- The intervention groups had fewer WorkSafeBC accepted claims and time-loss injuries compared to the control group.
- Those who felt safer on the job, reported higher job satisfaction, or who reported lower

## Methods

Home and community care agencies were invited to participate in a study designed to evaluate the effectiveness of the three interventions. Five agencies, (from 2002 to early 2005) adopted one



or more of the interventions while one agency participated as a control group. A questionnaire was used to collect information related to staff perceptions of their job, as well as demographic and employment information.

## Findings

- Over the three years prior to the study, 39% of participants reported at least one injury and 24% of participants had at least one accepted WorkSafeBC claim.
- Pre-intervention, overexertion (60%) and falls (30%) were the main source of WorkSafeBC time-loss claims, followed by exposures (5%), violence (4%), and allergic reactions (1%). There was a similar pattern post intervention: overexertion (57%), falls (29%), and exposures (3%)-except for violence, which increased to 11% of time loss claims.

## What We Learned

### Home & Community Care Study

- The interventions examined are likely associated with a culture of increased reporting. The increased reporting, however, was not associated with increased number of time loss claims.
- Results demonstrated that enhanced CHW awareness of health, safety, and job satisfaction, could reduce injuries and claims.
- Injuries due to violence seem to be increasing. While the number of incidents was small, we recommend focusing more on this area in the future. It may be worth trialing specific violence prevention training for CHWs in the future.
- More investigation is needed as to why the mechanical lifting equipment was not well-received, including measures to address any barriers identified.

pain and discomfort levels on the original baseline questionnaire were significantly less likely to sustain a workplace injury or have a WorkSafeBC claim.

## Next Steps

### Education and Training:

- Further development and evaluation of education and training materials that are specific to CHWs.

### Risk Assessment Tools:

- A risk management system will be developed and further enhanced, implementing feedback on the existing tools.
- The RAT will be made available as an online tool.

## Equipment Needs:

- Further research into the barriers and solutions of using mechanical equipment in the home.
- Additional support for staff through the use of assistive devices and mechanical equipment for patient handling.
- Continuing contact with the home and community care sector – assessing and responding to needs.
- Facilitating access to equipment where possible.

## Methods

BCIT designed a manually operated ceiling lift mechanism that complies with national and international safety and performance specifications specifically for patient lifts.

To evaluate their effectiveness in the home and community care setting, the manual lifts were installed in the homes of 20 clients and used by 36 CHWs for one year.

## What We Learned

### BCIT Homecare Lift Study

- The use of cost effective manual ceiling lift devices did not appear to increase the risk of MSI and are acceptable to CHWs and their home care clients.
- The clients reported that the top four pieces of information needed before purchasing the lift device were: cost, how the device works, maintenance information, and impact of installation (possible damage to the home).
- The majority of clients strongly agreed that if lift devices were affordable, more clients would want them in their homes.
- The benefits of installing a lift device, including increased mobility and safety for the client and increased safety for the worker, should be fully explained/demonstrated to the client.



## BCIT Homecare Lift Study

Due to our aging population, there is a relatively increasing demand for home and community care and with this, the desire to integrate healthcare effectively into the homes of clients. There is also a need to ensure a safe work environment for the CHWs who provide home and community care services. Mechanical lifting devices, such as ceiling lifts, reduce risk of injury to healthcare workers, but currently they are:

- rarely available in the homes of clients;
- prohibitively expensive; and/or
- inappropriately designed for home use.

This study, funded through a WorkSafeBC grant, addressed BCIT's objective of testing their ceiling lift prototype to determine the effects on the number and types of MSI amongst home and community care workers, as well as the usability of the lift.

An interview questionnaire was given to both the CHWs and the clients to assess psychophysical factors, (e.g. their comfort with the lift device, their perceptions of the use of lift device as an assistive aid, and the environmental context for the lift/transfer action). Injury data and claim cost information was collected from participating agencies for CHWs using the lift device. Evaluations of the interview data and the injury and cost data were performed at baseline, six months, and one year.

## Findings

- At baseline, the most common reasons clients did not want a lift in their home were: “not liking the appearance” and fear of the unknown.
- At 6 months, the most common reasons were the clients did not feel they had a medical condition requiring a lift.

- The features of the lift device that both clients and CHWs found to be acceptable were the smoothness of the lift, lower noise and time required for the transfer.
- Most clients reported less physical stress and greater comfort using the lift device than with transfers not using the lift.
- At six months, 71% of clients felt safe and secure when transferred with the lift device (as compared to transfers without a lift device), which increased to 82% at one year.
- No patient handling injuries or injuries related to using the lift device were reported by the CHWs in the intervention year.
- The most commonly cited solutions to reduce the risk of injury to CHWs were proper training, proper technique, and installing a lift.

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## Next Steps

BCIT and OHSAH received a WorkSafeBC grant in September 2006 to follow up with their lift study results and to conduct more research into the barriers of the adoption of ceiling lifts and to develop solutions to address these barriers.

## References

The list below is a partial list of references. Full reference lists are included in the final reports for these studies, and are available through OHSAH.

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