The Need for Safe Patient Handling Programs in Home Health and Hospice

I. Magnitude of the Problem:

1) Home health service workers (including nurses, aides and home care workers)* **area a rapidly growing workforce** in the United States**. The projected increase in the number of home care services workers is 55% from 2006-2016.[1]

2) **There will be millions of "baby boomers**"** who will place an increased demand for Home Health Services.[2]

3) Home health workers are exposed to highly variable "uncontrolled" work environments. Home health service workers are exposed to similar risks like those encountered by nursing assistants in a nursing home or other direct care workers in a hospital environment because they perform some common job tasks. However, studies of the home health service industry have documented the inherent occupational hazards to home health workers due to the nature of these highly variable non institutional settings and "uncontrolled" work environments. [3,4,5,6,7]
These hazards include:
- Manual handling and movement of clients with minimal access to effective lifting equipment or friction reducing devices
- Manual lifting and handling of multiple heavy and bulky medical devices equipment between a vehicle and a patient's residence.
- Work place violence
- Needle stick injuries
- Motor vehicle accidents
- Animal attack
- Outdoor environmental hazards such as ice and snow and poor physical access to homes
- General indoor environmental hazards such as second hand smoke, wood burning stoves, and household chemical use

4) Manual patient handling is a leading cause of disabling musculoskeletal injuries in the home health worker population.

For several years, the overexertion injury rate for Home Health Care workers has been more than double the national rate for all industries, ranking among the 10 highest (Bureau of Labor Statistics [BLS], 2006). [8,]

Home care aides for example typically provide a variety of services which include housekeeping, and may include personal care (bathing, dressing) and assistance with moving and transferring (patient handling). All of these tasks are characterized by risk factors for musculoskeletal symptoms, including forceful exertions and awkward postures. [9,10,11,12]
Although home health care workers perform a wide variety of manual handling tasks a growing body of evidence confirms that the leading cause of overexertion injuries is **manual patient handling.** [13,14,15,16]

5) **Disabled patient care in home settings.** Significant numbers of families care for a disabled child or parent in their homes. There is limited knowledge of the evidenced based care practices of patient handling (SPH) and equipment by primary care families and few mechanisms to finance it. [17]

6) **Obesity in our communities.** The CDC's Behavioral Risk Factor Surveillance System (BFRSS) has confirmed that our U.S. patient population from 1985-2008 has seen a dramatic increase in obesity. Thirty-two states had prevalence equal to or greater than 25%; six of these states (Alabama, Mississippi, Oklahoma, South Carolina, Tennessee, and West Virginia) had a prevalence of obesity equal to or greater than 30%. The home care services for the bariatric population will need to be addressed as this ever increasing population ages in their homes and become more dependent and they call upon the healthcare system of this country-specifically the home care service industry.[18]

7) **Medicare provides limited reimbursement and choice of electric patient lift equipment for home care clients**. [19,20] Historically, the only type of patient lift that is widely available for home use is the hydraulic manual patient lift or crank lift (commonly referred to as "Hoyer™" lift). Medicare will only cover this type of device, and only under specific circumstances. Most other insurers follow suit and use the same Medicare guidelines. The following items are generally excluded from coverage for purchase as well as on a rental basis for home use: battery powered mechanical lift devices such as total lifts and sit-stand devices, and ceiling lifts. The commonly stated rationale is that they are not medically necessary and are considered to be luxury or convenience items. [21]

   Thus home health care workers and client families are at higher risk for musculoskeletal strain injuries due to the lack of Safe Patient Handling Equipment thereby establishing the need for alternate financing mechanisms.

II. Safe Patient Handling Solutions for the Home Health Service Industry:

The Evidence Base from Canada and Europe

Fortunately, over the past decade other countries have implemented successful safe patient handling programs in home health care sector.

In at least 2 Canadian provinces, British Columbia and Ontario, assistive devices are available and used in the home care setting. These devices include ceiling lifts, floor lifts, low-friction draw sheets, or slider tubes. [22,23,24]

In British Columbia, a study of the use of ceiling lifts that were installed in home environments showed that home care clients reported **less physical stress and greater comfort** using the lift (compared to manual transfers) at six months of ceiling lift use and that 82% of clients felt safe and secure at one year of use. **The study concluded that manually operated ceiling lift devices are comfortable, safe, and acceptable to home health care workers and their clients**. [25]

From 1999 onwards safe patient handling programs that included provision of lift equipment and devices have been made available to home care clients in **the Netherlands**. **This program has shown to reduce musculoskeletal disorders in home health care workers**. [26,27]

In the UK the RCN *Safer Patient Handling Policy* has become the gold standard for UK employers working to prevent back injury to nursing staff. Healthcare organizations not working under such a policy are not in compliance with the Manual Handling Operations Regulations 1992, which applies equally to all hospitals, nursing homes, residential homes, and the domestic environment, wherever dependent patients need to be lifted and moved. This legislation has resulted in dozens of improvement notices and one prosecution with a fine. [28]

In 2005 a survey conducted to evaluate the impact of safe patient handling programs in Welsh Care Homes showed that client lifting and handling aids are widely available in care homes and that their use is widespread. Equipment that is available includes ceiling / track hoist, freestanding hoist, slide sheets, gait belts, and stand aids. **The survey report also stated that Welsh care home staff report significantly low prevalence rates for musculoskeletal disorders.** [29]

The Approach to SPH in the US Home Health Service Industry

The approach to implementation of safe patient handling programs and use of lift equipment and other devices in home health **varies** from the approach used in hospitals and long term care. Variability in the design of the physical home environment, education of home health workers and client families and delivery and set up of some lift equipment have to be addressed for successful adoption of SPH equipment in the home environment.

Fortunately, tools have already been developed and trialed and evaluated in other countries such as Canada and the Netherlands that can easily be adapted for use in the US. [30, 31]

Additionally, **NIOSH** is conducting a community-based participatory intervention study to develop educational materials to assist home care workers to work more safely. These materials include information on how to avoid unsafe lifting. [32]

A pilot Safe Patient Handling Program that includes implementation of SPH equipment and processes in the **home health and hospice environment is currently being developed in Oregon**.

This project is part of larger SPH pilot program that is being implemented and evaluated in a rural acute care critical access health care system, Good Shepherd Health Care System in Hermiston, OR and in a long term care facility, Dallas Retirement in Dallas, OR. Oregon's Occupational Safety and Health Division (Oregon OSHA) awarded grants to both facilities that enabled them to purchase SPH equipment and devices.[33,34,35] These facilities will become 'Facilities of Choice' in Oregon and will share their SPH program experience with health care organizations throughout the state.

The Oregon Nurses Association is providing nursing practice and ergonomics consulting and facilitation support to Good Shepherd Health Care System for SPH program implementation and measurement. The SPH program is being implemented in all patient care and diagnostic areas of the Good Shepherd hospital and in the home health and hospice unit. In addition, local Emergency Service Providers have been included in the program related to patient handling and lifting activities.

SPH equipment will be provided to home care clients following evaluation and order by a home health nurse. A comprehensive home evaluation, equipment delivery process and training and client compliance program is being developed and evaluated. Equipment delivery to clients receiving home health and hospice services is expected to commence in September 2009.

Equipment that has been approved by home care staff for practical and safe use in a wide variety of home environments includes: portable ceiling lifts; compact folding powered floor lifts; non powered sit to stand aids; friction reducing sheets; transfer boards and gaitbelts; one way slider inserts for chairs and seated transfer discs. In addition, nurses and local EMS will have access to air assist mats and a powered air device to easily and safely lift clients who have fallen to the floor.

The home care staff at Good Shepherd hopes to develop this program into a **community wide effort**, where SPH equipment is available on a loan basis to nursing homes, adult foster care and assisted living facilities as well as home care and hospice. They are inspired by the programs developed in Denmark and other areas of Europe where SPH equipment is available on **a loan basis from a central warehouse within a community.**

The materials developed from SPH program activities in the hospital and home health units such as a step-by-step safe patient handling program development guide, and worker training materials will be available free of charge upon completion. *For more information about this program please contact Lynda Enos, Nursing Practice Consultant/Ergonomist, Oregon Nurses Association. Email: enos@oregonrn.org.*

As described above and as published in the professional literature **there is a wide variety of SPH equipment** that is currently available and suitable **for use in the home care environment**.[36,37,38]

The evidence shows that simple tools and assist devices not widely found in consumers' homes can **reduce the risk of injury to home health care workers.** [39]

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Notes

* The home care industry comprises establishments primarily engaged in providing skilled nursing services in the home (including hospice care) along with a range of the following: personal care services; (homemaker and companion services; physical therapy; medical social services; medications; medical equipment and supplies; counseling; 24-hour home care; occupation and vocational therapy; dietary and nutritional services; speech therapy; audio logy; and high-tech care, such as intravenous therapy).

2002 NAICS	1997 NAICS	1987 SIC	Corresponding Index Entries
621610	621610	8082	Home care of elderly, medical
621610	621610	8082	Home health agencies
621610	621610	8082	Home health care agencies
621610	621610	8082	Home nursing services (except private practices)
621610	621610	8082	Hospice care services, in home
621610	621610	8082	Nurse associations, visiting
621610	621610	8082	Nursing agencies, primarily providing home nursing services
621610	621610	8082	Visiting nurse associations

** **Baby Boomers and the Demand on Health Care – Specifically Home Health Care:**

During the baby boomer years, 1946-1964 (inclusive), **75.8** million Americans were born. The biggest year of the boom was **1957**, when 4.3 million boomers were born.

The Census Bureau predicts that 57.8 million "Boomers" are expected to still be alive in 2030. All of them will require extended care. That's why seven of the 20 fastest-growing occupations are health-care related.

The Labor Department reports that "health care will generate 3 million new wage and salary jobs between 2006 and 2016--more than any other industry." The **health care professions** will generate 13 percent job growth in hospitals **and a stunning 55 percent increase in positions in home health care services**. The government projects that by 2031 social health workers will outnumber every Social Security recipient by two to one.

Growth is estimated at 28 percent over the decade, meaning plenty of openings at hospitals, care centers, and in private residences. The Labor Department predicts strong job growth as hospitals and clinics continue the trend toward moving geriatric services to private homes and smaller facilities.

Location	Estimated 2006	Projected 2016	Percent Change
United States	867,100	1,347,600	55%