THE BARIATRIC JOURNEY IN AUSTRALIA: FUNERAL CASE STUDY



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The Bariatric Journey in Australia: Funeral Case Study

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The Bariatric Journey in Australia: Funeral Case Study

There is an increasing awareness of the risks carers of morbidly obese (bariatric) patients face during their transport and movement from home to the health care institution and then home again, or potentially to the mortuary and then to a funeral. This transport and movement has been termed "the bariatric journey" (Hignett et al 2007).

In Australia in 2004-05, some 41% of adult males and 25% of females were classified as overweight (Body Mass Index [BMI] of between 25 and 30) and 18% of males and 17% of females were classified as obese (Body Mass Index over 30). Increases have been recorded in both the overweight and obese groups across all age groups in recent years.

Morbidly obese patients are over represented in the use of healthcare. Further, there is a high mortality rate for these patients because of the patients' delay in accessing treatment. It is possible that this delay may be in part due to there being limited capacity within institutions to manage care.

The bariatric patient's journey within the health care system commences with transport from the patient's home by ambulance. On arrival at the hospital as an out-patient the journey continues through to specialist departments such as radiography, or through to a ward as an in-patient and subsequently to specialist departments, or potentially to theatre. On completion of treatment, the journey resumes with the transfer by ambulance to home or another institution. If treatment is unsuccessful, the deceased is transported via the mortuary to a funeral home and finally to the funeral service.

Bariatric patients generally have limited mobility and decreased lung capacity because of the weight of the chest wall. This reduces the patient's ability to assist during movement. Problems other than handling their weight arise because patient handling equipment, buildings and facilities are not designed for large body masses and shapes. Therefore, there are special demands placed upon carers throughout this journey with regard to patient lifting and movement.

The bariatric patient handling case studies aim to illustrate the problems that are encountered and the solutions that have been developed by

health care providers and others to assist the handling of bariatric people during their journey within the health care system in Australia.

This case study describes the particular problems that the Funeral Sector experiences and the limited options that are available to implement solutions.

This case study is part of a project funded by the Australian Safety and Compensation Council (ASCC) in 2008. The research consisted of a literature review and conduct of focus groups with personnel involved in the transport of bariatric patients. The full report of the work can be accessed via the ASCC web site at www.ascc.gov.au.

Funeral Sector Issues

Introduction

There are around one hundred and thirty-four thousand deaths in Australia each year.

The death rate is declining. Forecasts for the period 2008-2009 estimate the annual average real growth rate of the funeral industry to be 2.2% compared with an estimated GDP growth of around 3.2% (Family and Community Development Committee, 2005).

The number of funeral businesses operating in Australia is difficult to estimate owing to single firms operating under multiple business names and the constant entry of new firms into the industry. As a consequence, it is also difficult to estimate the number of people working in the funeral industry. A tally of industry association memberships in Victoria, for example, suggests that there are about 75 funeral companies operating around 200 businesses. In addition, there are non-association member firms that could double the figure.

Most of the businesses are small family owned and operated businesses and are thus subject to the same constraints that most small businesses face when dealing with the management of OHS issues.

OHS in Small business

Small business operators such as funeral directors face OHS challenges that are specific to the small business sector. In Australia small

businesses are those having less than 20 employees. The small business sector represents approximately 90% of all businesses and are generally independently owned and operated.

Such businesses are sometimes characterised as having an unstructured, less systematic and ad hoc approach to the management of OHS relative to larger businesses. The operators have limited safety management resources and experience greater difficulty in meeting OHS requirements than do larger businesses. They have limited access to external health and safety resources and are inspected by regulators infrequently.

The OHS problem within the small business sector is sometimes under recognised. Many business owners were too preoccupied with the myriad of immediate day-to-day demands associated with running a small business to consider OHS a significant issue. It has been suggested that micro-enterprises (less than 10 employees) are particularly vulnerable.

It is possible that a factor that influences compliance with OHS legislation is the lack of recognition of the OHS problem within the sector and the nature of the risks that individual businesses face is misunderstood. Some research (Cowley, 2006) has found that small business employers generally perceive their workplace as being low risk and when employers are aware of unsafe work practices by their employees, they are, on the whole reluctant to intervene.

Small business operators work in an "information vacuum" and many small businesses act on the basis of personal experience and information obtained through personal contacts. Lack of information not only negatively influences the likelihood that an employer will control risk, but it also influences the *level* of control that will be applied.

A number of studies (Cowley, 2006) have found that small business owners adopt a safe person approach to OHS and risk control, misunderstand the nature of their OHS responsibilities, and leave matters up to individual workers to deal with.

Research shows (Cowley, 2006) that small businesses have greater difficulty in meeting OHS requirements than larger businesses. They cannot match the resources that larger businesses have at their disposal and conforming with regulations often places greater financial obligation

on them as they are unable to spread their compliance costs over a range of products, markets or plants. Small businesses are often unable to afford the necessary safety specialists. Many engineering and OHS management solutions devised for large industrial concerns are not economically feasible, nor practical, for small business.

The funeral industry is highly competitive. Considerable diversity exists in the size of individual businesses and the number of funerals they conduct each year. Small businesses operating from single sites, especially in rural and regional areas, may conduct between 20 and 50 funerals a year with larger single site businesses conducting up to 100. Depending on their location, medium sized businesses operating from several sites may manage up to 200 funerals per year. Larger companies operating in the metropolitan area could cover several hundred funerals per year.

In the funeral sector, many of the problems faced in general by small business are exacerbated by the difficulty of accessing solutions that are suited to the uncontrolled environments within which they operate when transporting deceased from the home to the funeral home and, to some degree, at the cemetery.

The OHS Challenges in the Funeral Sector

The journey of a bariatric deceased following collection from the home or the hospital mortuary extends to the funeral director's mortuary where the body is prepared for funeral and burial. The deceased is then moved into the funeral director's chapel or transported to another place such as a church for a funeral service, the crematorium for a cremation service or the grave for a grave side service. Following the service the burial or cremation processes are undertaken.

Some funeral directors may also be involved in the collection of deceased on behalf of the coroner where autopsies are required prior to burial.

The funeral director's staff are exposed to the greatest risk of manual handling issues at the time of collection and at the funeral service. However the limitations of the funeral home may also create problems.

The patient's home is an uncontrolled environment, the mortuary is a controlled environment and the grave or crematorium a semi-controlled environment. The amount of control is considered to mean the amount

of control that the funeral director has over the need for manual handling, the assistive devices and other control measures available for

manual handling assistance and the influences on the manual handling process that may increase the risk of the manual handling task.

A 220kg deceased male was found on the floor of his kitchen during the night. The kitchen was small and access to the body was difficult. The only equipment that was available to the funeral director was that carried in their transfer vehicle i.e. a body scoop, a spine board and two transfer trolleys.



Typically, funeral businesses are small. Many conduct less than 100 funerals per year. The numbers of bariatric deceased among these are very small and the expense associated with the purchase of specialised equipment and the vehicles for its transport is prohibitive.

The body scoop could not be positioned under the body owing to the awkward position in the kitchen. The funeral staff requested the family to leave the room while the deceased was repositioned by dragging him towards the door.

Typically two staff are despatched to undertake the transfer of a deceased person. Rarely will the funeral director know that a deceased is obese until arrival at the home; it is insensitive to ask for such details on receipt of the call from the family. Dispatch of additional staff would considerably inflate the costs of the transfer in this highly competitive industry.



A body scoop is hinged at one end allowing it to open and slide around the body. When the body scoop was placed adjacent to the deceased it was found that it did not open sufficiently wide to be positioned without manual handling of the deceased. The deceased was log-rolled onto the scoop.

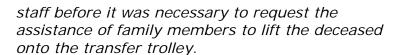
Bariatric people are not rectangular in shape like those of normal weight. Many tend towards a square shape which standard equipment for the handling of deceased is ill-suited for.

The deceased was not contained within the dish of the body scoop and it was necessary to strap the limbs in place to enable movement. It was realised that there would be difficulties associated with movement of the deceased and the staff called for a further two funeral staff to attend and assist.

Home design presents many challenges to the funeral director. Within the home, movement of the deceased is impeded by the width of doorways, stair cases and narrow passage ways. The proliferation of single fronted double storey homes is an increasing problem from the point of view of collection and transfer from upper floors to transport vehicles.

The surrounds of the house, particularly the presence of steps and grass between the house and the transport vehicle present many problems. It has been reported that in some instances it has been necessary to remove windows and doors to allow for movement inside and out of the home.

The funeral director's transfer trolley could not be used within the home. The body scoop was dragged through the house to the door by the four funeral





A limited range of equipment is available to funeral directors given the relatively small market for suppliers in Australia. Equipment purchasing decisions are very often made unilaterally by the business owner on the basis of information available at the time. The purchases are made within the constraints of the limited budget available to a small business with the intent that equipment will have a very long service life.

The transfer trolley was removed from the transfer vehicle and it was realised that the trolley would be inadequate for the transfer.



The two transfer trolleys carried in the transfer vehicle were withdrawn and strapped together using webbing material carried by the funeral director. The four funeral staff and family members lifted the deceased on the body scoop onto the two trolleys.



Staff manoeuvred the two trolleys into the vehicle.



While improvisation with equipment is common among funeral staff in the uncontrolled environment of the home and when coping with the challenges of bariatric people, the risk of equipment failure is high. Rarely will the funeral staff know the weight of the deceased and in the absence of other equipment there is a simple reliance on the ability of the equipment to cope with the stresses being imposed. Even when weights may be estimated and compared with the safe working limits provided by the manufacturer, there is doubt about the loading characteristics associated with bariatric patients where the weight is not evenly distributed and may change the centre of gravity.

At the funeral home the two transfer trolleys were withdrawn and manoeuvred to the mortuary by the funeral staff.

Many mortuaries are set up such that movement of the deceased should be possible using one person. While this rarely happens with heavier bodies, the potential is there given the system of mortuary hoists and other overhead lifting equipment which aids easy movement of all weights through different areas of the mortuary. However, in the smaller businesses, lifting equipment is limited and may not extend to overhead monorails.

The two transfer trolleys were positioned adjacent to the preparation table in the mortuary by the funeral staff. The limited existing lifting equipment was used to move the deceased to the preparation table.







The lifting device was designed and built in-house. The device has a lifting arm from which straps are suspended and passed around the deceased. The device employs bottle-jack to raise the arm. No safe limits have been determined. While the bottle jack has a stated load limit, the load imposed by the lift at the end of the lifting arm will be greater than that at the point of application of the jack force. The load imposed by the lifting of any body is therefore unknown.

Scales to allow accurate measurement of weight are sometimes present in some funeral home mortuaries; this enables an assessment for weight comparison with equipment load capacity but more commonly the weight is registered to allow detailed information to be forwarded to coffin manufacturers.

Bariatric deceased usually require specially made coffins to be built. These coffins are oversized coffins which can weigh between 40 and 60 kg. These coffins are generally box-like and because of their size often do not have the aesthetic finish of standard coffins. Additional weight due to reinforcement also adds to the weight that needs to be supported by transporting wheels.

The lifting device was used to move the deceased to the large coffin. The coffin was positioned on a standard trolley. The total weight of the deceased and the enlarged coffin was possibly in excess of the safe load limit of the trolley.







At the time of the funeral, transport of oversized coffins to the chapel and the grave or crematorium can present problems. In some cases the coffin may be too large to fit within the hearse and the transfer vehicle may be used. Tobin Brothers in Melbourne have successfully used a coach that is designed to allow a family to travel with the deceased to the funeral and the burial or to the cremation. The coach has a greater weight capacity and a larger opening where the coffin may be placed.



The coffin was taken to the funeral director's chapel on a standard chapel trolley. The total weight of the deceased and the enlarged coffin was possibly in excess of the safe load limit of the trolley.





At the conclusion of the service mourners were asked to remain in the chapel while the coffin was loaded into a van and driven to the graveside and unloaded. The mourners then attended.

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