# The future of Bariatric care in TBI: Can we cope with the load?



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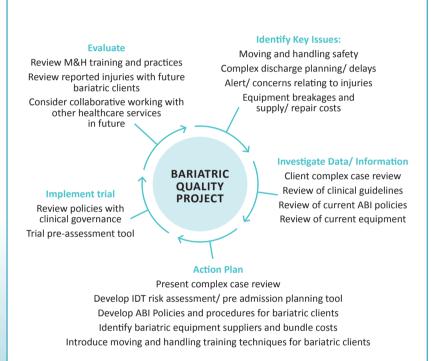
## Introduction

Obesity in New Zealand, has become an important and growing health concern in recent years, with 5.5% of adults having a body mass index (BMI) of higher than 40.0 (Ministry of Health, 2017). At ABI Rehabilitation, this has presented an additional challenge in an area of already complex rehabilitation in order to ensure healthcare provision is both effective and safe for staff and clients.

## **Methods**

A complex case review was prompted following a challenging and prolonged admission of a client with both bariatric and TBI rehabilitation needs. This initiated a quality improvement project within our rehabilitative service to improve future care of bariatric clients with a TBI in line with current best practice guidelines. ACC bariatric care guidelines were reviewed, but little advice exists for the management of bariatric client specific to TBI rehabilitation.

### **Methods: Quality Circle**



#### Case review - equipment rental cost breakdown

	COST/DAY
3x bariatric beds (due to equipment breakages)	\$17.57/ \$15.75
Bed rails	\$3.22 per day
Alternating air mattress	\$14.85/\$16.36
Bariatric shower commode	\$32.12
Bariatric flotation chair	\$28.20
Manual wheelchair	\$11.55
Gel pressure relieving cushion	\$5.44
Plus equipment delivery charges	
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Total equipment hire costs during admission:

\$34,144.93

#### Developing an admissions assessment



Current weight

Past medical history

Previous and current mobility level

Manual handling/ equipment needs/ room sizing

Current level of cognition/ PTA status

Rehabilitation potential/ expected outcome

Challenging behaviour/ mental health issues

Staff training requirements

Nutritional and medical management

Expected discharge destination

## **Results**

A complex case review was instigated following complications of a bariatric client admission.

This client acquired a severe TBI which was characterized by confusion and challenging behaviour.

Which was further complicated by his 167kg weight, non-weight-bearing status and premorbid mobility and respiratory issues. He required four people to transfer, plus specialised equipment to manage the safe working load. The discharge process was also complicated by lack of suitable discharge destinations, limited access to bariatric equipment and high care needs which extended his stay by 3 months over the AROC benchmark due to these complications.

On review of the ACC bariatric guidelines and our quality improvement project, gaps and barriers were identified in service delivery for bariatric clients. These included, access to suitable equipment, appropriate environmental setup, high care and equipment costs and limited suitable discharge destinations.

## **Conclusion**

Additional consideration is required for all clients with bariatric care needs prior to admission including their mobility level, brain injury severity and rehabilitation potential. An interdisciplinary-team approach is necessary for planning, preparation and provision of suitable rehabilitation for all bariatric care needs following a TBI with additional emphasis on environment and equipment.

At ABI rehabilitation we are in the process of developing a pre-admission screening tool to assist with the planning and preparation for bariatric clients in the future. It is an important area of consideration for funders, healthcare and rehabilitation services as it will influence the future practice throughout New Zealand.