
Implementation of a model of care for obese patients requiring weight loss prior to elective surgery

Initiative Type

Model of Care

Status

Sustained

Added

28 November 2019

Last updated

13 February 2025

URL

<https://test.clinicalexcclence.qld.gov.au/improvement-exchange/implementation-model-care-obese-patients-requiring-weight-loss-prior-elective>

Summary

Obesity increases the risks associated with surgery. Surgeons at Logan Hospital were declining to operate on obese patients due to these associated risks, and so in 2014 a dietitian clinic was set up

to accept referrals from surgeons to assist patients to lose weight prior to surgery. The aim was to use VLCD (Very Low Calorie Diet) to facilitate weight loss. In 2017, a dietitian was placed into this workload and discovered that the VLCD Clinic patients were not successful with weight loss, and there was a high rate of non-attendance. There was a lack of structure around the treatment provided, and patients were waiting long periods of time for their surgery once they lost weight. The dietitian employed a 'knowledge to action' framework to translate research into practice, implementing comprehensive, streamlined, multi-disciplinary model of care which now underpins the successful Dietitian-led Pre-Surgical VLCD Clinic at Logan Hospital.

Key dates

Sep 2017

Dec 2020

Implementation sites

Logan Hospital

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Aim

Obesity is a major health problem in Australia, and the numbers of obese patients requiring elective surgeries is increasing. Patients are being declined surgery due to their body weight and associated risks. A successful model of care to help patients achieve safe weight loss prior to surgery is vital for the future of public healthcare. Prior to the implementation of this model of care, patients did not have access to a structured model which could provide a successful means of weight loss and proceeding to surgery. This model could mean safer, shorter operations, cost reduction for health services, and improved access to elective surgery.

Benefits

Evaluation of VLCD Clinic after Allied Health - Translating Research Into Practice (AH-TRIP) implementation (n=45 patients):

- Average weight loss 8.7kg (7% body weight), 64% of patients achieved weight loss required for surgery
- 91% of patients were set a weight loss target by surgeon, in line with new criteria
- Average wait six weeks for surgery post weight loss
- 12 surgeons were surveyed: 83% believed VLCD treatment made surgery easier, 75% believed it shortened the operating time, 100% satisfied with VLCD Clinic
- Indirect results: Recognition received by dietitian - 'Team Spirit' award and Board Chair's Awards nomination. The dietitian now plans to undertake a prospective control trial.

Background

A literature review was performed. Three systematic reviews (30 studies total) on VLCD prior to bariatric surgery, and eight studies VLCD prior to non-bariatric surgery were found, which showed:

- Successful weight loss with a structured VLCD is achievable (1.3 – 27% body weight loss)
- Patient adherence to highly structured intervention protocols was high
- VLCD is safe with no change to nutritional parameters prior to surgery, and that 10% body weight loss is a feasible weight loss goal
- Monitoring of blood tests is needed for safety of treatment
- Treatment led by a health professional appears to enhance success
- There have been no studies completed examining a model of care using VLCD prior to surgery.

Solutions Implemented

Knowledge to action framework was used. Barriers to overcome included:

- Referrals sent with no weight targets, with many patients not agreeable to starting a VLCD as the surgeon had not advised them
- Long wait times for surgery post weight loss with VLCD
- Difficulties ordering blood tests via patient's GP
- Strategies implemented:
 - Determined barriers from theatre bookings staff, anaesthetist, and surgeons
 - Developed 'VLCD Clinic Procedure' which included strict eligibility criteria (10% body weight loss target limit) and surgery dates - 6 weeks post weight loss achieved
 - Dietitian became an Accredited Optifast Health Practitioner and gained extended scope to order blood tests.

Evaluation and Results

Further evaluation of a larger group of patients (n=78) has shown an increased success rate of patients achieving the required weight loss to proceed to surgery – increased to 71% (n=78) from 64% (n=45) of patients. This highlights the feasibility of the implemented model. 91% of referrals also have a weight loss target, showing that this requirement is being fulfilled. Relationships with key stakeholders - surgeons, anaesthetics and theatre bookings - are still strong, and agreements to offer surgery dates promptly (median wait time = six weeks) are being met. Dietitian is successfully still ordering and viewing blood tests as required. Research publication due to be released mid-late 2020.

Lessons Learnt

1. Translation takes time, and relationships drive the change to practice.
2. Regular communication to stakeholders about any changes to practice, and why. Giving regular presentations citing research done previously helped to get surgeons on board.
3. Stick to the eligibility criteria. Better referrals = more successful patients. More successful patients = more appropriate referrals. Surgeons saw results and were then motivated to send more appropriate patients to the clinic.
4. Engagement with those who make the calls (e.g. theatre bookings) is essential. Getting buy-in from a passionate colleague who works closely with them was invaluable in overcoming this barrier.

