A Weighty Concern

Obesity is associated with reduced life expectancy and is a major risk factor for multi-system comorbidities including heart disease. While 30% of all NZ adults are obese (BMI >30), in the Counties Manukau Health (CMH) community 40% of adults are obese, with over representation of Maori and Pacific adults compared with other district health boards (50% and >60% obesity respectively).

Heart failure (HF) is a complex clinical syndrome characterised by shortness of breath, fatigue, reduced exercise tolerance and quality of life. It is one of the five main chronic conditions at CMH, HF and Obesity

The link between obesity and HF is well established, with little understood about how best this population can become more fit and healthy. Traditional land based exercise programmes are recommended for people with HF, however practical limitations restrict safe participation by those with significant obesity.

An alternative programme of exercise was explored and piloted by the Healthy Hearts team as a unique opportunity to address a weighty and heartfelt problem in South Auckland.

A Promising First ‘Plunge’

Anecdotal evidence indicates that Healthy Hearts ‘Aqua Fit’ was well received, with participants attending 76% of sessions offered and positive feedback via satisfaction survey, informal discussion and video interview.

Success of the pilot programme was influenced by:
- Thorough planning and evaluation of safety processes, staff credentialing, logistics i.e. negotiation of pool use, cultural awareness, continued quality improvement
- Close liaison with stakeholders
- Equipment purchase i.e. specialised evacuation board

Challenges encountered
- Unforeseen pool closures due to maintenance (3 sessions)
- Supported use of community facilities to link with council values.

Eight one-hour sessions were offered, with 76% attendance. Eighty participants attended, with 43 (54%) gaining 1 or more BMI points.

Overall feedback was very positive, with 97% of participants expressing interest in continuing with the programme.

A second pilot of ‘Aqua Fit’ in the Future

Healthy Hearts ‘Aqua Fit’ is being rolled out across all the Auckland Regional Health Boards.

Launching Healthy Hearts ‘Aqua Fit’

The Programme
- Co-designed with consumers and stakeholders. Launched as a pilot programme in May 2015.
- Funded by ko Awatā’s Beyond 20,000 Days campaign at CMH.
- Referrals from CMH Cardiology team.
- Inclusion criteria included stable HF, minimum weight of 140kg, ability to enter/exit pool independently via a ramp.
- 14 people assessed. Nine people enrolled in pilot programme; five provided with individualised home exercise programmes.
- Eight hour, once weekly, supervised group exercise sessions in community leisure centre teaching pool.
- Offered opportunity to engage in informal education & self-management support on an individual basis at every session.

The People
- Staff – exercise led by experienced cardiorespiratory physiotherapists trained in aqua exercise; education led by cardiology nurse practitioners. Willing to challenge ‘traditional’ practice culture and keen to innovate
- Participants – people with HF and obesity who wanted to improve their fitness and health through exercise

Healthy Hearts ‘Aqua Fit’ participants’ profile

- Ethnicity: Mean = 4.3; Range 1.4-10.0
- Gender: Mean = 4.6; Range 4.0-5.2
- BMI: Mean = 67.9 kg/m^2; Range 55.0-88.5
- Age: Mean = 48; Range = 37-56
- Distance walked: Mean = 114 metres; Range 60-175
- Comorbidities: MI of Jeopardy including: Obstructive Sleep Apnoea (15), Gout (8), Diabetes (5), Hypertension (3)

Health Needs: ‘Aqua Fit’ meets identified criteria

- For most, it’s the first time
- Involuntary池 exercises
- Sustained use, cultural
- Involuntary
- Significant (incorporated)
- Participation

‘Aqua Fit’ in the Future

A second pilot of Healthy Hearts ‘Aqua Fit’ has been funded; commencing September 2015. On completion, further and more detailed evaluation is planned including post-programme:
- Evening reassessment clinics
- Programme capacity, potential participant volume, pool availability
- Optimal programme duration and session format and frequency
- Adaptability to other community pool types and locations

The unique nature of Healthy Hearts ‘Aqua Fit’ programme lends itself to formal research, with potential for multi centre collaboration. Potential options for transition to independent exercise on completion of the supervised programme are currently under review, such as a Healthy Hearts run maintenance group.

Healthy Hearts ‘Aqua Fit’, framed by local and national strategy, offers people with HF and obesity an opportunity to participate in and shape an evidence-based, local and fun exercise programme. Ongoing funding will be sought to continue and expand the programme, allowing more people to ‘take the plunge’.