

# Assessing the potential for Clinical Exercise Physiologists in the Waikato: A pilot study



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## Background

Globally, physical inactivity has been directly linked to many chronic conditions or non-communicable diseases (diseases that are not passed on to others). In 2014, the World Health Organisation (WHO) reported an 11% probability of New Zealanders' between 40 and 70 years, could die of the top four non-communicable diseases (NCD's): cancer, diabetes, cardiovascular disease and chronic respiratory diseases, and 28.3% of New Zealanders were obese. Increases in morbid obesity and levels of physical inactivity have been noted across New Zealand. The Waikato DHB is the fifth largest in New Zealand, with a population of 391,770.

Clinical exercise physiology (CEP) is a sub-discipline of Exercise Science, focusing on the physiological and psychological effects exercise has on chronic illness and injury. CEP has been recognised by Health Workforce New Zealand as an Allied Health profession. There is little knowledge or understanding about CEP amongst primary healthcare in New Zealand.

## Purpose of the study

Rates of chronic, lifestyle induced conditions continue to rise in the Waikato. This indicates a clear lack of facilities and practitioners with the appropriate skills and knowledge, to cater for people in the moderate to high risk categories for NCD's in the region. It has been well documented that using a multi-disciplinary team approach (Heath et al., 2012; Holloway et al., 2007) to share information and strategies, provides a greater success rate in the treatment and management of people with NCD's than traditional methods. There were two main aims for this study:

1. To ascertain primary healthcare providers' current attitudes and practice towards counselling on PA. Did they have any barriers preventing them from providing counselling on physical activity? What level of qualifications did they feel exercise professionals needed for them to confidently refer to them?
2. To determine the current situation for people in the Waikato region of New Zealand with NCDs. Is the current system sufficient to support the numbers of people in the region with NCDs? Do all people with chronic conditions in the Waikato, have access to appropriate physical activity counselling and prescription? Is there a need for CEPs in the Waikato region of New Zealand?

## Methods

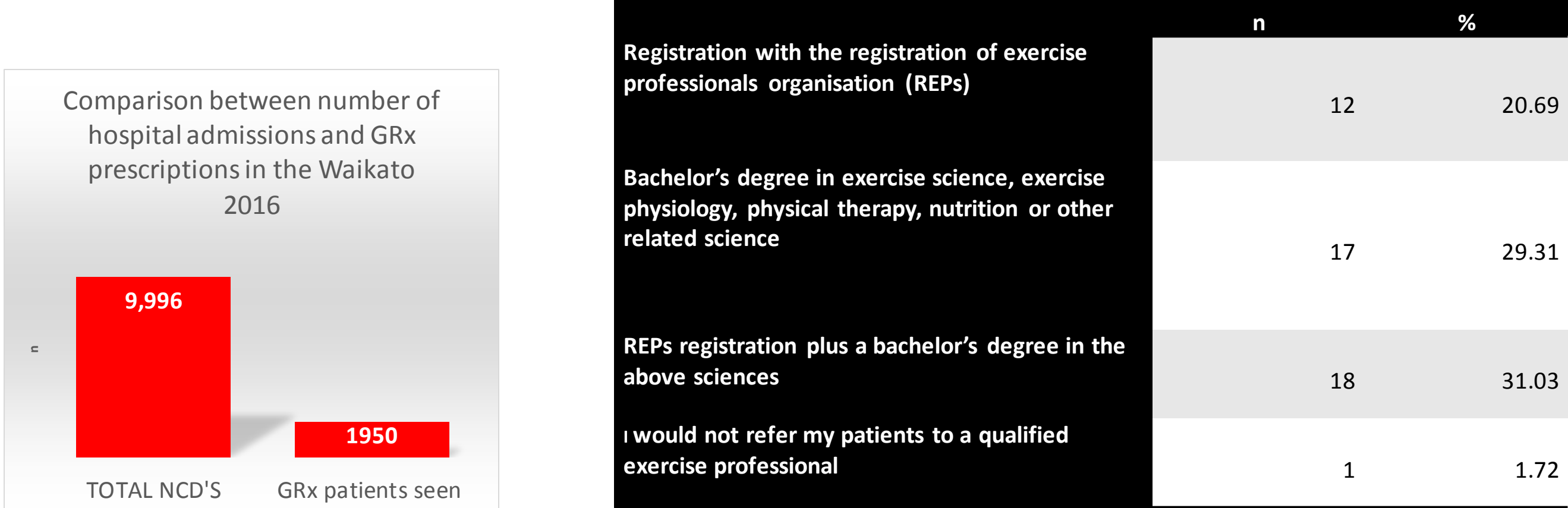
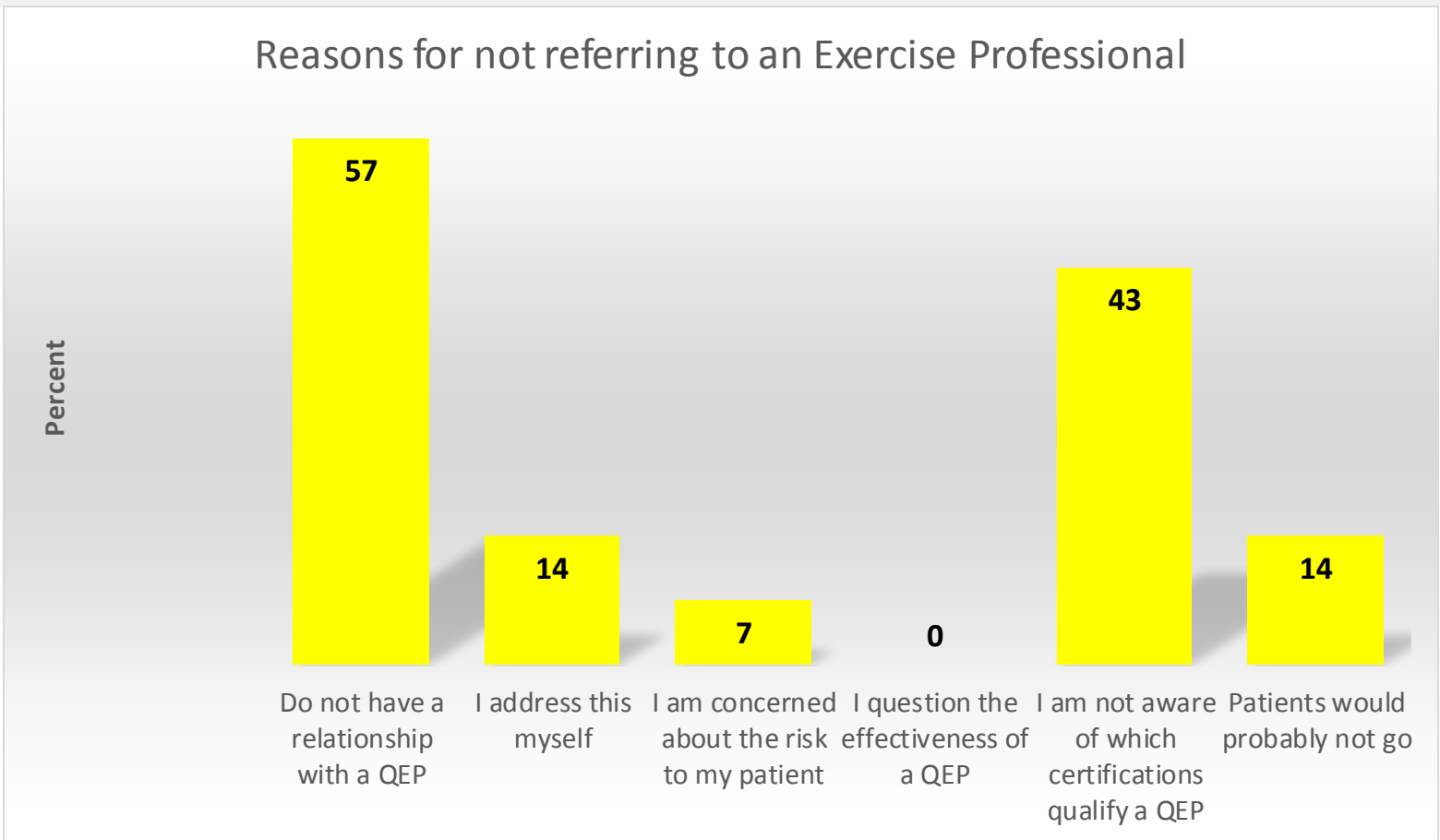
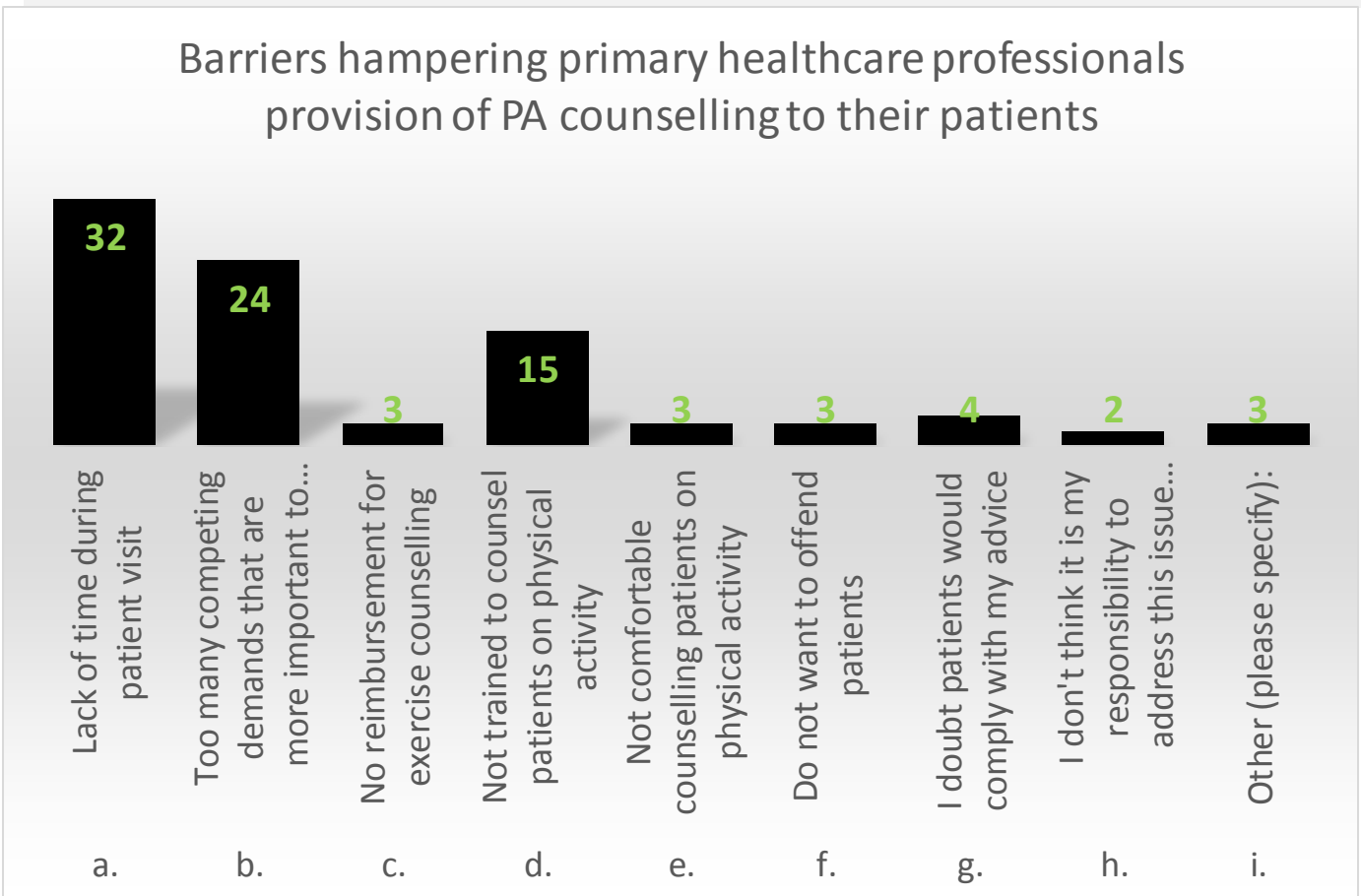
A 10 question survey was adapted from the Exercise is Medicine® Physician and Healthcare providers survey, and delivered to four local medical centres and one nursing conference. New Zealand Health Survey 2014/15 Report data was analysed. Green Prescription Patient Survey Report 2015 data was analysed. Waikato DHB Future Focus planning resource (2015) data was analysed.

Basic descriptive measures and Pearson's tests were calculated in Microsoft Excel 2013. Version 3.1.1. of the R statistics package was also utilised.



The Wintec Biokinetic at the Rotokauri Campus is where trainee Clinical Exercise Physiologists gain their practical experience. Patients are referred to the clinic from the Wintec Health Centre and other medical centres around Hamilton. A strong relationship has been created with some of the nurses from the Hauraki PHO also.

The majority of primary healthcare practitioners responded that providing counselling on PA was their responsibility (80%), with 62.79% stating that they currently provide PA counselling either all or most of the time. There was no significant difference between the frequency of providing PA counselling and the number of barriers identified by those surveyed (Pearson's correlation coefficient = 0.23). Only 4.55% always refer their patients to an exercise professional, while 31.82% responded that they seldom/never refer to an exercise professional.



## Discussion

Lobelo *et. al.*, (2014) noted unsatisfactory training for healthcare professionals in physical activity counselling techniques was a significant barrier for individual providers. These results support this theory. Physical activity continues to be perceived as a treatment only for obesity, which leads to many healthcare practitioners assuming that not meeting minimum daily PA recommendations is not a risk factor for other NCD's (Das & Horton, 2012). Creation of key relationships is essential to reduce patient risk from low PA levels, as it has been identified that providing counselling alone is ineffective (Heath, et. al., 2012). Waikato DHB (2016) have recognised the need to address chronic conditions, as these are the leading cause of ill health and premature death in New Zealand. Clinical Exercise Physiologists are clinically trained to manage and treat chronic conditions through exercise and are best positioned to work with the higher risk patients. Systemic change is required to improve the management and treatment of these lifestyle behaviours related NCD's. GRx is only reaching a small number of potential patients, comments from patients indicate they felt the facilitator did not have enough clinical knowledge to work with their conditions.

## Conclusions

- **Primary healthcare recognise their responsibility in the provision of PA counselling.**
- **Creating a multidisciplinary approach will be most effective.**
- **There is a need to address the delivery of the GRx in the Waikato.**
- **A risk stratification tool has been created to assist primary healthcare providers in their exercise professional selection.**
- **Clinical Exercise Physiologists would be the most appropriate referral choice for moderate to HIGH risk patients that do not meet the minimum daily PA levels.**

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