2014/2015 Summer Studentship Project Application Form

Send to: Research Office, University of Otago Christchurch, PO Box 4345, Christchurch, by 5pm on **4 July** 2014

Supervisor Information (First named supervisor will be the contact):	
Supervisor's Name(s): Dr Sally Keeling	
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Research Category (Choose one category only – to be used for judging the students' presentations):		
Clinical	**Laboratory**	**Community YES**

Project Title (20 words MAXIMUM):

Pilot study: The long term effects of incontinence in older people.

Project Description:

OUTLINE:

This project will be overseen by a team of people with a variety of different skills in this area. They include Dr Sally Keeling (Social Gerontologist, OUC), Assoc Prof Ted Arnold (Urologist, UOC), Dr Val Fletcher (Geriatrician, CDHB), Dr Hamish Jamieson (Geriatrician, UOC), Dr Michelle Dhanak (Geriatrician, CDHB).

OVERVIEW:

Incontinence of bladder and bowel are significant issues in the community particularly in the ageing population. It has an important impact on quality of life [1,2,]. In this pilot study we assess the risk of needing residential care in those who have urinary or faecal incontinence. Results may be useful to better target incontinence resources and services in future.

This project will make use of a pre-existing dataset for older people derived from the International Residential Assessment Instrument (interRAI). The InterRAI assessment was developed by a multidisciplinary collaborative network of academics and clinicians in over thirty countries committed to improving the care of older people. The interRAI interview, takes 90 minutes and asks 236 standardised questions and is designed to be a comprehensive assessment of older people. The interRAI assessment incorporates specific questions on urinary incontinence, and how often it occurs. There are similar questions on the presence and frequency of faecal incontinence.

The primary purpose of an interRAI assessment and evaluation is to ask standardised questions and then produce standardised recommendations for patient care based on the results. An interRAI assessment is now compulsory for all those being assessed to use community care services or to enter residential care. While the assessments are used to improve clinical care, in-depth analysis of the data will lead to greater improvements in clinical care and patient well-being over the long-term. This project focusses on analyzing this unique dataset to identify risk factors for poor outcomes.

This pilot study will utilize the New Zealand National Health identifier number (NHI)-linkage of interRAI data to allow comparisons to be made with medium term outcomes such as hospital readmissions, need for residential care, and mortality. That allows the effect of urinary incontinence to be quantified. This pilot study has two aims

AIM ONE: To determine the effects of urinary incontinence on medium term outcomes for older people in Canterbury

AIM TWO: To determine the effects of faecal incontinence on medium term outcomes for older people in Canterbury

METHOD:

1. Ethics approval will be obtained. This study will examine the results of a pre-existing database. All information is stored electronically and is NHI linked, using encryption for data security.

Objective one: To determine the effects of urinary incontinence on outcomes for Older People in Canterbury

2. The results of comprehensive assessments from 1000 successive community CDHB interRAI assessments between 2006 and 2009 will be obtained.

3. Medium-term outcomes will be sourced using the NHI-linkage of the data using the National Minimum Dataset, and Mortality data for information on hospitalisations, mortality and requirement for residential care.

Objective two: To determine the effect of faecal incontinence on outcomes for older people in Canterbury

A separate analysis will be done by the degree of faecal incontinence.

For both objectives, outcomes (of recurrent hospitalisations, need for residential care and mortality) will be established for patients with incontinence.

Data will be stratified to determine the relative risk that different frequencies of incontinence have for adverse outcomes (such as residential care, mortality and recurrent hospital admissons). Results will be stratified by age, sex and ethnicity. Following statistical and clinical advice, the analyses will be designed to a) control for comorbidities, and b) to explore the algorithm which triggers the interRAI Clinical Assessment Protocol or CAP, ("risk of residential care admission"), to evaluate the relative contribution of the continence measures within both the algorithm, and predicting actual admission.

TIMETABLE:
This project is designed as a stand alone project and will be completed in six weeks for data extraction, with the remaining four weeks used for data analysis and write up.

POTENTIAL OUTCOME: This information will be used to improve the care of older people with assessed need relating to faecal and/or urinary incontinence in Canterbury.

BIBLIOGRAPHY

1. Lawhorne W, Ouslander JG, Parmelee PA, Resnick B, Calabrese B, et al. Urinary incontinence: a neglected geriatric syndrome in nursing facilities. *Journal of the American Medical Directors Association* 2008; 9(1): 29-35

2. Aguilar-Navarro S, Navarrete-Reyes AP, Grados-Chavarria, BH, Garcia-Lara JMA, Amieba H et al. The severity of urinary incontinence decreases health-related quality of life among community-dwelling elderly. *The Journals of Gerontology. Series A. Biological sciences and medical sciences* 2012; 67(11):1266-1277