EXTERNAL ORGANISATION: Braemar Charitable Trust
SUPERVISOR/S: Ross Lawrenson (UoW), Lynne Chepulis (UoW), Andy Wood (Waikato Hospital)
PROJECT TITLE: What are the unmet needs in Waikato children with otitis media?
PROJECT LOCATION: Waikato Hospital, Hamilton

PROJECT AIM:
The aim of this study is 1) to establish the general practice recording/prevalence of OM. 2) to establish the pattern of referrals for grommets and both pathways and barriers to care.

PROJECT ABSTRACT:
Otitis media (OM) is very common with 27% of children under 5 presenting to general practice with at least one episode. Most children with OM do not require surgical intervention in the form of ventilation tubes or “grommets”. The most recent American Academy of Otolaryngology guidelines recommend them as an option however when OM with effusion “OME” or “glue ear” has been present for 3 or more months or where 3 cases of acute OM “AOM”, referred to as recurrent AOM, have occurred over 6 months (Rosenfeld). The main non-surgical treatment used for OM is oral antibiotics although there has been a decline over the years in the use of antibiotics to manage OM in concordance with accepted best practice. Untreated OM can lead to chronic hearing loss, developmental delay of speech and learning difficulties.

In an Auckland-based cohort 4% of children with AOM develop recurrent AOM meriting consideration for grommets (Gribben B). OME is also a common condition encountered in children in New Zealand general practice and is more common in Māori and Pasifika (Johnston, Dickinson) with a rate of 25% of 2-year-old Pasifika children being reported to have OME. Among 0-4-year olds, Māori and Pacific children are more likely to be admitted acutely for AOM than European children. Despite AOM and OME being skewed towards Māori and Pacific children, they have lower rates of elective admissions for grommet surgery (McCallum). The benefit of using grommets has been questioned. Insertion of grommets has been shown to improve the child’s hearing but the benefits are relatively short lived. (Cochrane Review) Consequently the threshold for treatment in the public sector is high, resulting in a proportion of children not being treated and some resorting to management in the private sector or not at all.

Our hypothesis is that the inverse care law applies where the greatest prevalence is in those children from disadvantaged backgrounds (Māori and Pasifika ethnicities, low socio-economic status) but the greatest proportion of children receiving treatment with grommets are those from an advantaged background.

STUDENT SKILLS:
• The student should be confident in using Maori tikanga when approaching patients and have an understanding or oral health.
• Student must have an interest in health research
• Collecting and analysing routinely collected data

PROJECT TASKS:
• The student will collate the data for both groups of patients
• They will review the records of all patients identified through a search of the relevant codes in the practice record system. They will record all the data available according to a pre-determined checklist including age, gender, ethnicity, home address, number of attendances in the previous 12 months, number of episodes of OM, evidence of referral to hospital outpatients or private practice and any record of interventions including the insertion of grommets.
• For the hospital study they will identify all the out-patient referrals over a 12 month period for OM. They will record the number who are referred back to their GP with advice, the number who receive an FSA and the number who receive treatment, as well as the timeline over which assessment and treatment occurred. As per Study 1 the demographic details of patients referred to the Hospital will also be studied.

EXPECTED OUTCOMES:
• Student’s Research Poster (as per clause 6 of the Scholarship regulations)
• Students are expected to present at the Waikato Clinical Campus Research Forum
• Peer reviewed paper