SUMMER RESEARCH 2024/25 PROJECT ABSTRACT



PROJECT #77

SUPERVISOR/S: Assoc Prof Lynne Chepulis & Dr Hamish Crocket

PROJECT TITLE: How clinically prepared is Aotearoa New Zealand to support the equitable funded

delivery of technology to support people living with type 1 diabetes?

FIELD: Health - Diabetes

DIVISION/SCHOOL: HECS - School of Health

PROJECT LOCATION: Hamilton

PROJECT ABSTRACT:

Type 1 diabetes (T1D) is a lifelong autoimmune disease that currently affects approximately 30,000 New Zealanders. T1D is usually diagnosed in childhood, but increasing numbers of adults are now also being diagnosed in adulthood. Importantly, people living with T1D lose up to 100% of the insulin-producing ability such that they are not able to process sugar (from food) to create energy for the body.

Treatment of T1D primarily involves taking insulin (as a medication) multiple time per day and frequently tracking blood glucose (sugar) levels throughout the day to ensure that the person maintains a healthy blood glucose level, whilst also allowing the sugars to move into the cells to provide energy. However, this process is time consuming and problematic, traditionally relying on ongoing finger prick testing for blood glucose levels, carbohydrate counting and insulin injections. More recently, technology has dramatically improved this process - both via the use of insulin pumps, automated insulin delivery and continuous glucose monitors that track blood glucose levels continuously and in real time. However, whilst these technologies are game changes for people living with T1D they are not currently funded in NZ, instead costing hundreds of dollars per month (money which many living with the disease simply do not have).

In 2023/24 PHARMAC NZ (the pharmaceutical buying agency of NZ) indicated that these devices may become fully funded for those with T1D by the end of 2024 / early 2025. As such diabetes clinics and services are preparing for this, with the hope of an optimal and equitable uptake of these these funded technologies. However, roll-out of these technologies is not straight forward and certain clinics are anecdotally more prepared than others.

Thus, this summer student project is designed to collect information (via survey, qualitative interviews and/or other methodologies) from the majority of diabetes clinics around the country around their preparedness' for funded availability of these devices. We aim to explore what the potential challenges to funded delivery of these devices might be so that we may later support these practices/clinics to optimise the provision of these technologies and required support services.

STUDENT SKILLS:

- some familiarity with how healthcare is funded in NZ and/or type 1 diabetes
- Good interpersonal skills, comfortable contacting clinics and possibly undertaking interviews (may be face to face, phone or online)
- knowledgeable with (or comfortable to learn) survey creation
- familar with microsoft office word, excel etc
- An interest in health research and a desire to contribute as a team player

PROJECT TASKS:

- Compile a list of diabetes clinics and providers across Aotearoa
- Under guidance from supervisors, create and deliver a survey to these clinics to understand their prepareness for delivery of funded T1D technologies
- Time permitting, undertake qualitative interviews with clinicians around the proposed challenges and facilitators facing clinics with regard with delivery of funded T1D technologies
- Write up the above in a summary report, and/or support the drafting of a manuscript for publication
- Other tasks as required and related to this project

EXPECTED OUTCOMES:

- Student's Research Poster (as per clause 6 of the <u>Scholarship regulations</u>)
- Research poster
- Conference output (NZ Society for the Study of Diabetes annual meeting May 2025, Hamilton)