

There is an unmet medical need for early diagnosis and monitoring of conditions that affect an ageing population, such as diabetic neuropathy. Cross-disciplinary team capable of using the transparent cornea and the accessible tear film to monitor for changes to make these diagnoses early and prevent complications.

Competitive advantage

• Established that corneal nerves and the tear film are reliable, non-invasive measures of change to peripheral nerves, providing a more accessible means by which to diagnose conditions such as neuropathy.

Impact

 It is projected that the prevalence of conditions such as diabetes in Australia will reach 2.9 million by the year 2025, significantly increasing the financial strain on the health system. Those with type 2 diabetes and neuropathy have an increased morbidity due to pain and foot ulceration. Simple and early identification may allow intervention to reduce risk factors and limit the progression of neuropathy and more severe consequences.

More Information

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Successful outcomes

• This work will translate to the development of a point-of-care assessment technique to assess the presence of diabetic peripheral neuropathy. This would involve the development of an instrument that can be used by non-specialists in remote communities and allow for referral on the basis of a positive outcome.