Decision Support Systems for Managing Chronic Disease Using Artificial Intelligence

Development of clinical decision support systems using machine learning techniques for telehealth systems to better support patients with chronic diseases, and reduce the clinical care burden on the health system.

Competitive advantage

- Advanced knowledge of artificial intelligence and deep learning
- Access to patient clinics and study groups
- Engagement of clinicians and stakeholders to promote user-centricsystems design

Impact

- Reduce hospital readmissions and patient mortality
- Early identification of deteriorating patient which enables healthcare workers to assess disease severity from a remote command centre
- Making possible to initiate early interventions that can change the clinical outcome in patients with chronic condition

Successful outcomes

- Will be exploited in a clinical trial throughout NSW hospitals for reducing hospital readmissions in the case of cardiovascular disease

Capabilities and facilities

- Working to integrate the artificial intelligence based predictive anlytics into a 'smart-home' designed for older Australians and Australians with Dementia
- Collaborating with a network of dedicated software developers

Our partners

- Neuroscience Research Australia (NeuRA)
- Prince of Wales Hospital

More Information

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