**Background**
Singapore has the second-highest proportion of people with diabetes among developed nations. Prediabetes, a precursor stage to diabetes, affects 15% of Singaporeans, rising to 22% of those aged 60 and above. People with prediabetes have a higher chance of developing micro- and macro-vascular complications related to diabetes and a third of them will progress to have diabetes in 5 years. This transition is, however, preventable with lifestyle modification interventions. Mobile phone-delivered interventions, i.e. mHealth, have been proven effective for prevention and management of a range of chronic diseases, and increasingly used for prevention and management of diabetes. With the novel insights into behavioral change and unrelenting advancement of mobile phone technology, mHealth interventions hold promise for enabling scalable and affordable lifestyle modification interventions among people with pre-diabetes. With the highest rate of smartphone ownership in the world and increasing burden of diabetes, mHealth interventions aimed at diabetes prevention are highly pertinent for Singapore.

**Proposed work**
The aim of this doctoral project will be to evaluate the effectiveness and cost-effectiveness of the use of innovative mobile phone-delivered intervention encouraging behavioral change to prevent diabetes. It will also aim to determine the acceptability of the intervention and examine the use patterns of the mobile phone delivered intervention via data mining.

**Research competences and skills fostered as part of the doctoral project**
This project will expose the students to a variety of disciplines including clinical sciences, public health, data analysis, behavioral psychology, andragogy (adult learning), computer sciences, health economics etc. The student will also become familiar with a range of different research methodologies: clinical trials, evidence synthesis, qualitative analysis etc.
This doctoral project will foster development of competences that are imperative for an academic career in digital health and evidence-based healthcare including formulation of research question, critical appraisal of the literature, development of a study design, economic analysis, data analysis and interpretation. It will also enable development of a range of generic skills such as academic writing, communication, team working, time management and project management.

**Contact Us**

If you have questions regarding this project, please email the Principal Investigator.

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