

Predicting asthma attacks using digital technology

Have you had an asthma attack in the last 12 months or have you been experiencing more asthma symptoms for two or more days?

Asthma is very common in New Zealand and all over the world. Asthma attacks can happen suddenly without warning. Unfortunately, we do not currently know when an attack is about to happen.

This research aims to **develop a prediction model for asthma attacks**, by capturing changes in the body that may happen before an attack occurs, using smart devices such as smartwatches. The data will then be used with machine learning to look at developing new ways to predict asthma attacks.

Who can take part?

- Aged 12 years or older
- Be diagnosed with asthma
- Had an asthma attack* in the last 12 months
- Currently taking asthma inhalers
- Be comfortable with using technology for 6 months

What's Involved?

- Two in-person appointments (at enrolment and at 6 months)
- Fortnightly online surveys (<5 min)
- Wearing a Fitbit and using a cough monitor every day
- Using a smart inhaler with your usual inhaler(s)

*An asthma attack can be having more asthma symptoms for 2 days or more (not limited to attacks where you need to see a doctor or visit a hospital / A&E).

Your mahi / contribution will be acknowledged with a total of \$100 shopping vouchers, and an MTA \$20 voucher if you come into the Grafton university clinic. Once you finish the study, you may choose to keep the Fitbit we provide, valued at RRP \$100.

All data collected as part of this study will be de-identified and stored securely by the research team. The research findings may help save lives and keep people with asthma out of hospital.

To find out more or to take part, please scan the QR code below or email the study team on digipredict@auckland.ac.nz.



Scan the QR code below to sign up and check your eligibility!



Or <https://tinyurl.com/digipredict>