Te Niwha

Research Project Impact Case Study

Addressing Gaps in The Monitoring and Response to Influenza-Like Illness: Community Pharmacy-Based Feasibility Study

INFLUENZA-LIKE Illnesses - Detection and monitoring In Community Pharmacies

Key researchers

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Introduction:

When COVID-19 arrived in Aotearoa New Zealand (NZ), the existing model of detecting the viruses in the community, via GP clinics and hospitals, had to rapidly adapt to the increased demand. This project seeks to test the feasibility of extending viral surveillance of influenza-like illness (ILI) through community pharmacies, to better represent circulating viruses in the community and enhance public health response.

The Medical Research Institute of New Zealand (MRINZ) has partnered with ESR, who currently coordinate Aotearoa's respiratory virus surveillance programme and are a World Health Organisation National Influenza Laboratory. The MRINZ Pharmacy Research Network (PRN) is enrolling people presenting to pharmacy with a new onset cough and fever over the previous 10 days and obtaining nasopharyngeal swabs for testing at ESR. The study is running between April 2024 and October 2025 and will compare rates of swabbing and viruses detected in pharmacies compared to the Sentinel General Practice Respiratory Virus Surveillance System over the same period. The data will contribute to international and NZ datasets, informing public health strategy for seasonal viruses such as influenza, or SARS-CoV-2 (COVID).

Results

Across the study timeline, 22 pharmacies were initiated across Aotearoa, New Zealand in Auckland, Gisborne, New Plymouth, Napier, Rotorua, Hamilton, Tauranga, Dunedin, Taupo, Palmerston, Wellington, Christchurch and Invercargill, encompassing rural, urban and CBD pharmacies. 58 trained investigators are pharmacists and pharmacy-based nurses. Recruitment is complete, and 50.6% of all swabs have tested positive for a virus of interest. The final publication is in draft awaiting for complete statistical analysis.

Impact

This project continues to supplement national surveillance data, obtaining samples from symptomatic individuals that would otherwise not present to General Practice. By leveraging the unique research infrastructure of the Pharmacy Research Network, recruitment is highly diverse, with 20% Māori participation to date, and the pharmacy-based consultation has provided direct advice to patients for symptom management and infection control measures.

Should the project prove successful, a business case will be developed to fund permanency in community pharmacy-based ILI surveillance – enhancing NZ public health data and response. This will provide additional funding to pharmacy-based services, increasingly critical in reducing the clinical burden on General Practice. Furthermore, such a capacity will be primed to respond immediately in the event of a future pandemic.

Finally, this Te Niwha project has been directly relevant to NZ participation in developing a Horizon EU proposal with 24 countries focused on pandemic preparedness, BE READY NOW. Applied surveillance strategies to viral pathogens is a focus, and the results of this project will be presented to the relevant work package if approved by the EU commission.