

Evaluating pilot implementation of ‘PenCS Flu Topbar’ app in medical practices to improve National Immunisation Program funded season influenza vaccination in Central Queensland, Australia

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July 31, 2023

Abstract

Background: The ‘PenCS Flu Topbar’ app was deployed in Central Queensland (CQ), Australia medical practices through a pilot program in March 2021. Methods: We evaluated the app’s user experience and examined whether the introduction of ‘PenCS Flu Topbar’ in medical practices could improve the coverage of NIP funded influenza vaccinations. We conducted a mixed-method study including a qualitative analysis of in-depth interviews with key end-users, and a quantitative analysis of influenza vaccine administrative data. Results: ‘PenCS Flu Topbar’ app users reported positive experiences identifying patients eligible for NIP-funded season influenza vaccination. A total of 3,606 NIP funded influenza vaccinations were administered in the eight intervention practices, 14% higher than the eight control practices. NIP-funded vaccination coverage within practices was significantly higher in intervention practices (31.2%) than the control practices (27.3%) (absolute difference: 3.9%; 95%CI: 2.9%-5.0%; $P < 0.0001$). The coverage was substantially higher in Aboriginal and Torres Strait Islander people aged more than 6 months, pregnant women and children aged 6 months to less than 5 years for the practices where the app was introduced when compared to control practices; Incidence Rate Ratio (IRR) 2.4 (95%CI: 1.8-3.2), IRR 2.7 (95%CI: 1.8-4.2) and IRR 2.3 (1.8-2.9) times higher, respectively. Conclusions: Our evaluation indicated that the ‘PenCS Flu Topbar’ app is useful for identifying the patients eligible for NIP-funded influenza vaccination and is likely to increase NIP-funded influenza vaccine coverage in the eligible populations. Future impact evaluation including a greater number of practices and a wider geographical area is essential.

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