

# Small interface changes have dramatic impacts: How mandatory fields in electronic medical records increased influenza vaccination rates in obstetrics patients.

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## Background

Influenza, has been the most commonly reported, vaccine preventable, notifiable disease in Australia over the past two decades<sup>2</sup>. Pregnant women have a higher risk of serious complications and death from influenza than non pregnant women of reproductive age<sup>3</sup>. Antenatal immunization of mothers with influenza vaccine is an important strategy to help reduce the risk of early postpartum infection with influenza. The safety of inactivated influenza vaccine in pregnancy has been well established in multiple studies. Local data from several studies show that the uptake of influenza vaccine by pregnant women in Australia is low from about 10-40%.<sup>4</sup> Many antenatal records are now electronic, and use of such records has been shown to improve compliance with clinical care guidelines

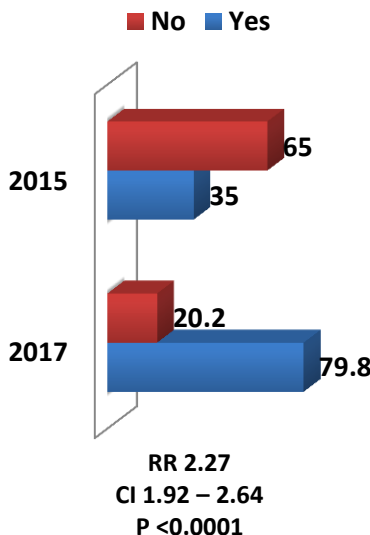
## Aims

The aim of the present study was to determine whether using a mandatory field in an electronic health record would improve compliance with an important quality indicator in maternity care, namely antenatal influenza vaccination.

## Methods

A retrospective audit study was performed with two cohorts of women who delivered at the Centenary Hospital for Women and Children between 1 to 31 July 2015 and 1 to 31 July 2017. They were compared for compliance with the quality indicator of antenatal pertussis vaccination. The single point of difference between time points was programming the electronic health record so the clinician could not close the patient file unless they inserted an answer into the box asking whether influenza vaccination had been performed or declined. Data was audited and percentage compliance rates were compared

## Percentage of women with antenatal influenza vaccination



## Results

A total of 275 and 299 women delivered in the two audit periods. There was a significant increase in the percentage of women who were vaccinated for influenza, with the rate more than doubling (baseline 97, 35.0%; post intervention 240, 79.8%; RR 2.27 95% CI 1.92 to 2.64; p < 0.0001). Multivariate analysis showed the only variable associated with a significant influence on influenza vaccination rate was the difference in audit period following intervention (p < 0.0001).

## Conclusions

Introducing an electronic prompt or mandatory field into an electronic health record system may increase compliance with steps considered best practice in maternity care.

## References

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