Pandemic (H1N1) 2009 influenza in an urban Aboriginal medical service

Ana Herceg, Peter G Sharp, Christine G Arthur and Julie A Tong

TO THE EDITOR: Aboriginal and Torres Strait Islander people were more at risk of hospitalisation, admission to intensive care units and death during the 2009 influenza A pandemic than non-Indigenous Australians.\(^1\) We conducted a descriptive analysis of our response to the pandemic at Winnunga Nimmityjah Aboriginal Health Service (Winnunga) — an Aboriginal community controlled health service in Canberra, Australian Capital Territory, which provides comprehensive primary health care to more than 3500 patients per year. Data were sourced from the Winnunga electronic patient record system, pathology laboratories and ACT Health. The Winnunga Board approved this analysis and report for publication.

In May 2009, we implemented the pre-existing Winnunga influenza pandemic plan, working closely with ACT Health and the ACT Division of General Practice. We enhanced infection control, implemented influenza testing procedures, initiated electronic data collection and obtained oseltamivir from the ACT stockpile to dispense on site. We adapted ACT Health pandemic protocols to create a flow chart appropriate for Winnunga, with approval from the ACT Chief Health Officer. This involved using clinical discretion to decide whether to dispense oseltamivir to Aboriginal and Torres Strait Islander people with mild illness, and included the provision to supply prophylactic oseltamivir to high-risk household contacts, especially in overcrowded households. A plan was made to open an on-site influenza clinic, but this was not necessary.

Increased testing for influenza commenced in late May. The first patient with pandemic (H1N1) 2009 influenza was identified on 1 July (Box). Of the 168 nasal swabs tested for influenza by polymerase chain reaction analysis, 52 (31%) were positive for pandemic (H1N1) 2009 influenza. In addition, six Winnunga patients tested positive at other locations. In late July, testing guidelines changed and laboratory testing was no longer recommended for most patients with influenza-like illness.\(^2\) Consequently, we did not identify test-positive cases past the beginning of August. The actual number of cases of pandemic influenza that occurred in Winnunga patients is unknown.

Of the 58 patients who tested positive, 54 were Aboriginal and/or Torres Strait Islander, 28 were male, and 47 were ACT residents. The mean age was 22 years (range, 0–62 years), 31 patients were aged under 20 years and four patients were pregnant. There was one overnight hospitalisation.

During July, Winnunga accounted for 8% (44/551) of all notified pandemic influenza cases in the ACT — more than expected based on patient numbers alone. However, more testing may have been done at Winnunga than at other organisations because of our high-risk population.

In July and August, 13% (204/1604) of all presenting patients at Winnunga had an influenza-like illness. There were 229 recorded episodes of influenza-like illness between May and November with a sharp peak in July and a smaller peak in August (Box).

Oseltamivir dispensing commenced 1 week before identification of the first patient who tested positive, and corresponded with episodes of influenza-like illness (Box). A total of 107 courses of oseltamivir were dispensed to 33 children and 74 adults. Clinical risk factors other than Aboriginal and Torres Strait Islander status were recorded for 47 of these patients. Oseltamivir dispensed to Winnunga patients at other locations was not included in our analysis.

We do not know whether oseltamivir made a difference in reducing severity of disease or preventing hospitalisations in our patients. During July and August 2009, pandemic influenza created an increased workload at Winnunga. Although there were some staff absences due to pandemic influenza, these were short and did not significantly affect clinical functions. Pandemic influenza in patients was also not as severe as planned for. A more severe pandemic would place a significant burden on our already busy Aboriginal medical service.

A pre-existing influenza pandemic plan, internal public health capacity, good working relationships with local health agencies, on-site dispensing and service-specific protocols were important features of our response to the 2009 pandemic. Vaccination for influenza is being strongly promoted at Winnunga in 2010.

Ana Herceg, Public Health Medical Officer
Peter G Sharp, Medical Director
Christine G Arthur, Nurse Manager
Julie A Tong, Chief Executive Officer
Winnunga Nimmityjah Aboriginal Health Service, Canberra, ACT.
Ana.Herceg@winnunga.org.au