



Photo courtesy of Royal Melbourne Hospital Archives

In the fight against flu, forewarned is forearmed

Nurses will need to be well informed and prepared if an avian influenza pandemic eventuates. They will be called upon to provide leadership to the community as well as caring for patients, writes **Melissa Sweet**.

When an aged care service in South Australia began developing its response to the potential threat of an avian influenza pandemic, the magnitude of the task soon became clear.

How would clients be cared for if half the staff were absent? How would staff manage if the electricity or water supply failed? How would waste management systems cope with the increased demand? Would staff have to live onsite? What medicines should be stockpiled? How might the budget be affected? Who would be in charge if senior managers were absent?

These are some of the tough questions that staff at Helping Hand Aged Care have been attempting to answer as they develop their organisation's pandemic plan, which is divided into four phases – preparation, alert, pandemic, and recovery.

'We've tried to consider every single thing we possibly could,' said Robyn Murray, an RN and one of the agency's project officers. 'There's lots of creative problem-solving going on at the moment.'

Helping Hand Aged Care which has about 7000 community clients and 550 residential

clients, began work on the plan late last year to develop strategies for reducing transmission should a pandemic occur, and ensuring continuity of care. 'We thought it was time to do something about it,' said Megan Corlis, the executive officer and an RN.

Workshops have been held to raise staff awareness and knowledge, and a response team established, which includes clinical nurses skilled in infection control. Plans are underway to conduct regular infection control audits and improved training, and to develop kits to help each site respond appropriately. An audit will identify which staff may be

unavailable if schools and child care services close during a pandemic, and also the extracurricular skills that staff or volunteers might have.

Ms Corlis says work on the plan has already had positive spin-offs, in refocusing attention on the importance of infection control and seasonal influenza vaccination for staff and clients (see breakout – Vaccination is vital now). She stresses, however, that there is much more to do.

Nurses on the front-line

While Australian governments have already spent more than \$150 million on preparations for a potential pandemic, many believe now is the time for greater involvement of those who will be the front-line troops.

Nurses will be at the forefront of managing the pandemic, in hospitals, community services, general practices, patients' homes, immunisation clinics, special 'fever clinics' or screening travellers at airports, says Professor Chris Baggoley, the chief medical officer in South Australia. 'They will have a major front-line role,' he said.

Dr Dominic Dwyer, a medical virologist at Westmead Hospital, Sydney, who is closely involved in national planning, said nurses need to become informed about pandemic influenza no matter where they work. 'All nurses need to be aware of what is going on with influenza and to have an awareness of what their local plans are,' he said.

'It doesn't matter whether they're in a nursing home in western Sydney or a casualty department at St Vincent's Hospital [in the city].'

No time for heads in the sand

Victoria Gilmore, the ANF's federal liaison officer, said nurses need to know about transmission and management of avian influenza, infection control measures, and their workplace's plans. Nurses should ensure they are involved in policy and planning wherever possible. 'We can't afford to have our heads in the sand about this,' said Ms Gilmore. 'We are going to be critical players in helping this country get through a pandemic should it occur.'

The ANF and Royal College of Nursing Australia (RCNA) are working closely to develop joint communication strategies, and the ANF website now has a special link to updated information.

Lynne Andrewartha, a nursing representative on a primary care working group of the National Influenza Pandemic Action

Committee (NIPAC), said a pandemic would lead to intense professional and personal pressures for nurses right across the workforce. 'A lot of them will find they are asked to work outside of their comfort zones and to work in areas they are not accustomed to,' says Ms Andrewartha. It is critical, she adds, that nurses are well informed about how to protect themselves, their patients and their families from the risk of infection.

'The more informed they are, the easier things are going to be if anything happens,' she said.

An invisible workforce

Some nursing leaders are disappointed the profession has not been more specifically engaged in preparations at the highest level, pointing out the lack of formal representation on NIPAC, although nurses are active on a number of its sub committees and working groups.

'There are 250,000 nurses in Australia and yet we are still an invisible part of the workforce,' said Elizabeth Foley, director of policy at RCNA. 'Given that we already lobby around the whole area of nurses being involved in policy decision-making at all levels, it is disappointing that nurses are not on NIPAC.'

Meanwhile, Lynne Walker, president of the Australian Practice Nurses Association (APNA), is concerned practice nurses have not been formally involved in national or state pandemic preparations, despite their important role in general practice and triage. 'National and state authorities need to involve practice nurses and practice managers more in planning,' she said.

Nurses will provide information and stem panic

Many experts believe nurses will have a critical role in helping to allay community fears by providing practical information. Being well informed will also help nurses manage their own anxieties. 'The things we don't understand we always fear more than those we do,' said Susan Sherson, a nurse educator in Melbourne who has a particular interest in nursing ethics.

Ms Foley says nurses will be called upon to provide reassurance and information to their communities, whether that be correcting misinformation or giving public talks. 'Nurses need to understand they will be taking a lead role if the pandemic hits our shore. We want them to be a calming influence, to say to people there are some practical things you can do, like washing your hands.'

Beware of media over-statement

Associate professor Anne Gardner, who represents nurses on the NIPAC clinical care subcommittee, encourages colleagues to identify reliable sources of information, such as government and professional websites and journals, and to be cautious about media sources. 'Don't rely on what you read in newspapers or hear on TV,' she said.

Professor Gardner also suggests that nurses start talking with their families and communities about what they would do if there was a pandemic – about who, for example, would care for their children if schools or child care services close.

History has some lessons for us

Kirsty Harris, a doctoral student at the University of Melbourne, considers the potential pandemic from many perspectives. She wonders what it will mean for her sister, who is a nurse. In her role as a corporate communications consultant, Ms Harris is concerned that her informal surveys of nurses suggest many are not well informed; and as a military historian she ponders the implications of the Spanish influenza pandemic of 1918-1919.

Much has changed since that epidemic, which is estimated to have killed between 20 and 40 million people worldwide and infected about one quarter of people in the United Kingdom and United States. On the positive side, medical technologies are now much more sophisticated. Australian governments have stockpiled antiviral drugs and protective equipment, and there are detailed plans for containing the pandemic to 'buy time' while vaccine manufacturers spring into production.

On the other hand, some social changes, including increased population densities, may make containment more difficult. Ms Harris says in the Spanish pandemic, nurses were single and lived onsite where their uniforms were washed. Now they may have to juggle competing priorities of caring for patients and their own families. The decline of extended family networks also means many people will rely on nurses to care for them at home.

Ms Harris says in the previous pandemic, nurses were more used to infectious diseases and quarantine arrangements. 'Now we have very small infectious diseases wards, if at all,' she said. She advises nurses to become familiar with personal protection equipment or PPE and to trial wearing it for long periods at a time.

Australian Government modeling predicts that a pandemic affecting one quarter of the

population could lead to tens of thousands of deaths and hospitalisations if vaccines or treatments were not available. However, Ms Harris says nurses should be reassured by the level of preparation. 'If we do the right thing and learn about avian flu and practise good infectious disease control, we will be protecting ourselves.'

Well prepared to ride the wave

Professor John Horvath, the Australian Government's chief medical officer, says Australia is well prepared if a pandemic arises, by virtue of its planning, excellent public health and surveillance systems, and close international cooperation. 'It's not going to be like a bomb,' he said.

'What it will be, is like a wave. It will build up – sometimes it comes in two waves – and the aim of the exercise is to stretch that wave out and flatten it for as long as possible.

'All our evidence suggests that the containment phase most probably will last longer than we originally anticipated. Our modeling says that if we aggressively treat and prophylaxis contacts [and] practise a lot of social isolation, [then] you reduce the ability

of this virus to spread and the wave may well be blunted and by the time it really accelerates, we may have a vaccine.'

Infection control will be the key

So many uncertainties surround the pandemic but experts say one thing at least is certain: improving infection control will have many immediate benefits.

'We should be ensuring that we're trying to achieve best practice for what we're dealing with now,' said Dr Ashley Watson, a senior specialist in infectious diseases at Canberra Hospital. 'We could do a whole lot better. The problem is that it sometimes takes a major new outbreak to mobilise people into doing what's necessary.'

Dr Watson said health professionals need to maintain constant low level vigilance rather than panic about the possibility of a pandemic. 'If, in 12 months time, no flu has happened and everyone forgets about the response and basic preventive measures and we go back to business as usual, then one day it could happen and we're not ready for it,' he said.

'So it's a matter of maintaining a low level of

vigilance and preparedness because that is sustainable,' said Dr Watson.

Stay home if you're sick

Dr Paul Dugdale, the ACT chief health officer, says the possibility of a pandemic also reinforces the importance of longstanding advice for health professionals to stay home when they have an infectious cough or sneeze. 'The nursing profession has a very strong work ethic and there's an idea of "I can't let the team down",' he said. 'But it's important that when people are infectious, then they shouldn't spread it around.'

Meanwhile, nurses may gain a glimpse of what a pandemic could mean during a trial run later this year to test Australia's preparations. The exercise, still in early planning stages, is expected to result in considerable disruption to services.

Robyn Murray, at Helping Hand Aged Care in Adelaide, hopes that all their work on pandemic preparations never faces a real-world test. 'I sincerely hope that all of this planning that we're doing is just an exercise,' she said. 'I'd rather have all of this in place and never have to use it.'

Vaccination is vital now

While so much attention is being focused on a potential future threat, much more could be done to reduce mortality and morbidity from a current problem – seasonal influenza.

Ensuring nurses and other health professionals are vaccinated against seasonal influenza is important for minimising the spread of the infection, protecting patients and ensuring a healthy, fit workforce, experts say.

Professor Chris Baggoley, the chief medical officer in South Australia, says it is of concern that only 20-50% of the health workforce is vaccinated annually against seasonal influenza.

Dr Barry Gilbert, a public health consultant and chair of the Workplace Infectious Disease Prevention Group, which is funded by vaccine manufacturers, says the low vaccination rates reflect the lack of systematic, well-resourced occupational health services in health workplaces.

'I don't know of any hospital which achieves greater than 30% vaccination of nurses and health care workers,' he said.

Many experts also emphasise that nurses have an important role in promoting and supporting vaccination of high risk groups. The National Institute of Clinical Studies (NICS) has launched a campaign to encourage vaccination of at risk groups under age 65, including people with chronic illnesses such as asthma, diabetes, cardiovascular disease and those with suppressed immune systems.

While vaccination rates among older Australians have improved to about 80%, NICS cites research showing only about 42 % of younger people – at risk of complications from influenza – are vaccinated annually.

NICS also cites research showing that more than 13,000 Australians died from influenza and its complications in 2004, and that up to two thirds of people who are hospitalised for influenza are under 65.

Dr Jan Davies, executive officer at NICS, said research suggests nurses can play an important role in boosting vaccination rates, by helping to dispel uncertainty about who is at risk and some common myths, including that vaccination is ineffective or causes influenza.

She said there already are many creative examples of nurses' work in this area. Practice nurses have set up reminder systems for general practitioners and patients, as well as other approaches to promoting vaccination including establishing after hours clinics and visiting workplaces.

Lynne Walker, president of the Australian Practice Nurses Association, says nurses are increasingly playing a direct role in administering the vaccine and establishing immunisation clinics.

For more information visit the NICS site: www.fightflu.com.au

Some of the people behind the preparations



Professor Chris Baggoley



Lynne Walker



RDNS – Linda Hayford (centre)



John Horvath



Megan Corlis and Robyn Murray



Anne Gardner

Where to find more information

<http://www.health.gov.au/pandemic>

<http://www.health.gov.au/internet/wcms/publishing.nsf/Content/icg-guidelines-index.htm>

http://www.who.int/csr/disease/avian_influenza/guidelines/infectioncontrol1/en/index.html

http://www.who.int/csr/resources/publications/influenza/Mask%20Clarification10_11.pdf

<http://www.who.int/en/>

<http://www.cdc.gov>



Paul Dugdale



A community issue

When Linda Hayford gives presentations about what a pandemic might mean for community nursing, she shows a series of photographs of the squalid and impoverished living conditions of some of her service's clients.

They graphically illustrate the challenges that community nursing faces in implementing effective infection control procedures in uncontrolled environments short of even basic hygiene facilities, such as a clean sink.

A clinical nurse consultant in infection control, Ms Hayford has been helping her Adelaide-based organisation, the Royal District Nursing Service (SA) and Metropolitan Domiciliary Care, with the complex task of preparations for a potential pandemic.

Many of the best ideas have come from staff workshops, she says. Staff have, for example, suggested the RDNS pizza and

family information evenings to help engage nurses' families in planning. Information leaflets for clients are also being developed, and plans are underway to assist staff to work from home wherever possible.

PPE kits will also be kept in all service cars, so they are easily accessible if needed, and high filtration masks will also be 'fit tested' to ensure their effective use.

Ms Hayford said the preparations are having a positive impact in heightening infection control awareness but that much more work is needed to improve understanding of infection control, in both health care worker education and the workplace. 'We should be doing this all the time, not just waiting for an outbreak,' she said.

The facts about avian influenza

Avian influenza is an infectious disease of birds caused by the influenza A virus. The first documented infection of humans was reported in Hong Kong in 1997 and was due to close contact with live infected birds. Since then a number of other cases have been reported around the world. So far, none of the avian influenza viruses have developed the ability to spread easily from person to person. If this happens, however, it could lead to a pandemic as it would be a new subtype of the virus which could spread quickly because no one would have immunity to it.

Pandemics of flu are spread from person to person by respiratory secretions through: spread of droplets from person to person (eg. coughing, sneezing); touching things that are contaminated by respiratory secretions and then touching your mouth, eye or nose; and spread of particles in the air in crowded populations in enclosed spaces.

The National Incident Room, in the Australian Government Department of Health and Ageing, is closely monitoring the situation overseas for any signs of a pandemic. Symptoms of pandemic flu are the same as the seasonal flu virus, including sudden onset of high temperature. Symptoms may develop two to seven days after infection.

Mainstays of treatment include rest, adequate fluid intake and nutrition and medications to relieve fever and pain such as aspirin

(but not in children) and paracetamol. Complications, such as bacterial pneumonia, can be treated with antibiotics. Those who are severely affected may need hospitalisation, supplemental oxygen therapy and respiratory support through artificial ventilation.

General measures for preventing all respiratory diseases, including pandemic flu, include:

- general hygiene measures such as regular handwashing;
- cough hygiene (turning away from other people and covering the mouth with tissues when coughing or sneezing, disposing of the tissues afterwards and washing hands after disposal of the tissues;
- when unwell, avoiding public places and contact with children or people with underlying illnesses;
- when attending a medical practice, alerting the receptionist to your symptoms so you can be seated away from others and possibly be given a surgical mask; and
- maintaining good general health and staying up-to-date with the recommended vaccinations, such as the pneumococcal and seasonal flu vaccine for those in high risk groups.

(Source: Australian Government)