

PANDEMIC INFLUENZA  
SIMULATION EXERCISE FOR GENERAL  
PRACTICE

FACILITATOR NOTES



THE AUSTRALIAN NATIONAL UNIVERSITY

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Please feel free to run this exercise in your own practices. We would be grateful for any feedback you might like to provide, to help us improve it.

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## OVERVIEW

This simulation exercise is intended to raise issues general practice will address in preparing and responding to an influenza pandemic. The response to a pandemic across the health sector will be an evolving one, in which services will have to adapt to rapidly changing circumstances. The principles underlying these scenarios include:

- The need to make the best clinical response given uncertain knowledge
- The need to make best use of infection control principles
- The need to have flexible organisational systems
- The need for effective teamwork and leadership within general practice

Many questions do not have right or wrong answers. This simulation asks participants to develop strategies which address questions and underlying principles to enable safe, effective and flexible services.

## AIM

To trial strategies for preparing and responding to pandemic influenza in general practice within individual general practice teams, and across general practices, in which the service will be effective, safe, efficient and sustainable.

A prepared general practitioner has

- access to basic resources to manage patients with an influenza-like illness, and knows how to access updated information
- a plan for general practice which is consistent with the plans of the Australian and State and Territory Health Departments, as well as those of the local authority and of other primary health services, and has trialled this scenario with the general practice team.
- incorporated into the plan: clinical service, infection control, and organisational support systems.

## LEARNING OBJECTIVES:

At the end of this session, participants should be able to:

- List options for providing clinical services for patients with influenza and other patients in a pandemic
- Identify infection control strategies to interrupt spread of the virus from infectious patients, and from infectious staff
- Describe the responsibilities for contributing to public health requirements to control the pandemic
- Explain the role of antiviral medications and immunisation in a pandemic
- Assess their own clinical environment for its suitability in a pandemic
- List resources available for preparation and response to a pandemic

#### EQUIPMENT/RESOURCES:

1. Facilitator
2. 3 – 4 general practice teams (including GP, PN or PM, receptionist)
3. Large table, whiteboard and markers
4. Coffee, tea making facilities
5. Resources

Examples of PPE, including masks of different types

Resource A: Pandemic Phases, Australian Management Plan for Pandemic Influenza

Resource B: Difference between pandemic influenza, seasonal influenza and the common cold (Dr Chris Hogan)

Resource C: Draft priority groups for antivirals (Canada)

Resource D: CDC Business Continuity Plan

Resource E : template of practice pandemic flu workplan

#### OVERVIEW OF THE EXERCISE

This exercise encompasses two simulations. The first addresses internal preparation of a general practice, and response to the early stages of a pandemic (stage 6a, ie pandemic influenza has emerged in Australia, in an isolated cluster). The second addresses an established pandemic, and the need for practices to review the ways in which they practice, and possibly the structure of their practice and whether they need to collaborate with other general practice services.

#### METHODS:

Participants will be asked to combine their own knowledge and experience with their own particular practice outline in responding to the questions.

The role of the facilitator is to encourage communication between members of teams and between teams, and to synthesise responses along the way in the context of “best practice”. The facilitator will have a checklist to ensure that critical issues are covered. A copy of the exercise will be provided to all participants at the end of the session for further studies, and for conducting similar exercises with their own general practice units.

Evaluation will have three components:

- (1) process evaluation – non-participant observer, using a checklist to assess responses to particular questions, flow of questions, participation of different groups in the activity (Attachment A)
- (2) immediate outcome evaluation – ascertain immediate feedback on usefulness and weaknesses and gaps of exercise, and alternative ways in which it could be strengthened. (Attachment B)
- (3) delayed outcome evaluation – as part of the category 1 points. Participants will assess their own workplace using the Flu Workplan developed by Dr Jonathan Anderson.

Timelines:

Introduction: 30 minutes

Scenario A: 45 minutes (Day 1 of pandemic stage 6)  
30 minutes (Day 3 of pandemic)

Scenario B: 1 to 1.5 hours (with a break)

Synthesis: Up to 30 minutes. Use and distribute Haddon matrix.

Evaluation: 30 minutes

## SCENARIO A

### DAY 1:

*“Pandemic influenza (WHO stage 6) has been declared in South East Asia. There have been cases of influenza like illnesses reported among backpackers in Sydney returning from South East Asian countries. On Sunday, the laboratory confirms that the backpackers have pandemic influenza. The news that Australia has its first cases of pandemic influenza is in the newspapers on Monday morning. The travel routes of these cases over the last week are detailed. You come to work at 9 am to be told by the practice receptionist that the lines have been flooded with requests from patients for information, or requests for appointments.”*

### NOTES FOR FACILITATOR

This is Australia pandemic stage 6a (localised to one area in Australia), so we are in a containment phase, in which case confirmation and intensive contact tracing are important (see Resource A). Fever clinics have not yet been established

#### *1. What kinds of resources will help you to determine your response?*

Available resources are Australian Management for Pandemic Influenza.

<http://www.health.gov.au/internet/wcms/publishing.nsf/content/phd-pandemic-plan.htm>  
(and links to FAQ)

Avian Influenza: Information Hotline: 1800 004 599

[http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-avian\\_influenza-index.htm](http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-avian_influenza-index.htm)

(and links to Medical Practitioners' Kit, which includes health education posters for the waiting room)

<http://www.racgp.org.au/document.asp?id=11896> RACGP website (more specific detail on the response)

Each State and Territory Health Department has an emergency contact number for communicable diseases. The number in the ACT is: 02 6205 2155

#### *2. What will the practice do in response to the increased demand for information and for bookings?*

Seek input from receptionists particularly for this question, and encourage them to interact with one another. Practices will need a communication strategy to handle a sudden increase in requests for information and consultations. Discuss strategies to triage phone calls. Who in the practice will take decisions for the appropriate response? Will this be an individual or a group decision? Which of the telephone callers will you agree to see on Monday? Why? How will you handle other callers? Where is this plan to be kept? Will it be available and accessible quickly in an emergency?

#### *3. Are you confident of the differences between cold, seasonal influenza, avian influenza and pandemic influenza?*

Have a look at the resource on the difference between cold seasonal and pandemic influenza (Dr Chris Hogan - Resource B). Avian influenza refers to influenza infection in birds (currently caused by the highly pathogenic strain of the virus, H5N1). It has not yet been reported in Australia. Avian influenza can affect humans, but only those in close contact with poultry, and has thus far not been readily transmissible from human to human. Control measures for avian influenza are primarily vested within animal health services, with contribution from public health to prevent close human contact with poultry. Pandemic influenza is the term used to denote a new strain of influenza to which humans do not have immunity, and which spreads readily from human to human. Control measures for pandemic influenza are directed by public health authorities.

*4. What will you do now that the disease has spread across Asia and been introduced into Australia?*

- (a) Clinical – ensure that the vulnerable and eligible are vaccinated against pneumococcal disease and seasonal influenza. This will not prevent the spread of pandemic influenza, but should help to address co-morbidity in the vulnerable due to pneumococcal and seasonal influenza infection.
- (b) Polish up preparedness. Make sure that your PPE kits are handy and ready to use, and that everyone knows how to use them. At what point would you consider the need for extra staff? Would you have a contingency plan for alerting health staff that there may be a need to use them?

DAY 1 (continued)

*“It’s now ten o’clock. In the waiting room are five patients who have booked appointments, and two patients who do not have appointments. The last two start to cough, and report that they have a fever, sore throat, and aching muscles, of recent onset. The other five patients waiting include: an elderly lady with diabetes, a University student who is in good health, a child with cystic fibrosis, a cleaner who works part time at a hospital and a nursing home, and a man in his 40s presenting for a review of knee pain.”*

#### NOTES FOR FACILITATOR

For the purposes of this exercise, priority groups and dissemination routes for antivirals were determined last month (use RESOURCE C: Priority groups for antivirals - Canada), and GPs have been made aware of these through public messages disseminated through Divisions and on the RACGP website.

*5. Could the two patients with cough have avian influenza, seasonal influenza or pandemic influenza?*

Yes, they could have any of these conditions. Avian influenza (with the current H5N1 virus) has been limited almost exclusively to birds and to humans who have had very close contact with poultry affected by the H5N1 virus. If the person has such a contact history over the last five to seven days, this diagnosis is possible.

It may be difficult to distinguish between seasonal and pandemic influenza based on clinical criteria alone. If either or both of these patients have been in contact with cases with confirmed pandemic influenza (eg through travel in an area in Asia already affected) it would be safest to manage them as having pandemic influenza, unless laboratory tests prove otherwise.

By this time the Health Department will have announced an updated case definition for pandemic influenza, based on clinical criteria and a recent travel history. This definition could be used to guide clinical management and notification of the case(s).

*6. What would you do to prevent further spread if you suspected pandemic influenza in these patients?*

Firstly isolate them, explaining why and dealing with any anxiety this may provoke among them or the other patients in the surgery. Put them into another room, if possible, given them a mask, and do not let them handle objects in the surgery. Wear gloves. Wipe down benches and doorknobs after they leave. Do not stand within a metre of them except to conduct the physical examination while fully clothed with PPE. Wash your hands.

DAY 1 (continued)

*7. What types of behaviours among the two cases with pandemic influenza would increase the risk of others in the waiting room being exposed to the virus? Of the five cases in the waiting room, what are the risks that they may have become infected, or the*

*risks of them being infectious to others subsequently? Who should discuss with the contacts in the waiting room their risks of developing influenza (an identified staff member, or the public health unit?)*

The people in the waiting room would be regarded as exposed. The definition of a contact in Australian Health Management Plan for Pandemic Influenza is “a person who had close (ie within one metre) contact with an infectious case or who has spent more than 60 minutes in a confined space (such as an aeroplane, or a small waiting room) with an infectious person.” Their risk of exposure would be increased if the index cases were coughing without masks, especially within a metre of another person, and if the index cases had handled doorknobs or magazines or the water dispenser, or other materials which could also be handled by other patients.

All of the people in the waiting room may pose risks to others, depending on the size of their social networks.

*8. Can you list basic preventive measures to protect staff members?*

From the Australian Health Management Plan for Pandemic Influenza (Infection Control Annex): if an infectious case presents to the medical practice without telephoning, then the patient should immediately be provided with a surgical mask and separated from other patients and staff prior to assessment by the GP, ideally in an empty room. Discourage patients from handling materials, eg tissue boxes.

#### **During clinical assessment of an infectious case**

##### **Hand-washing is one of the key actions to reduce transmission of the virus.**

The attending GP or any other person entering the room containing the infectious case should wear full PPE. PPE includes:

- (N95) mask<sup>33</sup>
- disposable gloves
- protective eyewear (ie goggles/visor/shield or glasses at least)
- long-sleeved cuffed gown

#### **Following clinical assessment of an infectious case**

Attending GPs should avoid touching their own eyes, nose and mouths until they have removed themselves from the enclosed space with the infectious cases, disposed of their gloves, eyewear, masks, gowns, and washed their hands.

Used masks, gown, and gloves should be disposed of in a sealed bag in general waste, and reusable PPE (ie goggles/visor/shield) should be kept in a sealed bag and disinfected according to the manufacturer’s instructions. Non disposable equipment used on the patient should be disinfected according to manufacturer’s instructions.

The H5N1 influenza virus is inactivated by alcohol and by chlorine. Cleaning of environmental surfaces with a neutral detergent followed by a disinfectant solution is recommended.

If the patient is sent home, then the patient should be advised to avoid contact with other persons until the infectious period has passed, and should be provided with written information advising the patient

- what infection control precautions to take and
- what actions to take if the symptoms worsen, and
- what actions may be needed for other members of the household.

*9. Should 'contact tracing and management' be the responsibility of the GP or of the local public health unit? Does this oblige GPs to offer home service? What are the implications for funding?*

The continuing support by the general practitioner of quarantined sick people is essential. Practices will need to develop a plan for regular telephone contacts and home visits for the patient and other household members.

Quarantined well people will also need care and support from their general practitioner. A record of their names, their addresses, and best contact details will be required.

DAY 1 (continued)

*“The two patients with fever, cough and aching joints have both recently returned from multiple Asian countries, where they have been on holiday. They were in the same hotel as the backpackers in Sydney who have pandemic influenza. Neither is at this stage unwell to require hospitalisation”*

#### NOTES FOR FACILITATOR

##### *Public health background*

Pandemic influenza response is being coordinated by the public health unit. The history of recent travel to Asia means they have to be managed as patients with pandemic influenza. They have mixed with many other people in your city during the infectious phase.

##### *General practice background*

The clinical definition of influenza like illness has been formulated and distributed to general practitioners once pandemic influenza was confirmed in Asia. Definition at this stage in the pandemic is likely to include “having been in an affected Asian country in the last 2 weeks”.

10. *How would you manage the two patients?*

(a) Confirmation: The possibility of pandemic influenza needs to be confirmed in the laboratory.

This is done through a pharyngeal or nasopharyngeal swab. Swabs pose a lower risk of infection of staff than do nasopharyngeal aspirates (NPA) or nasal washes, both of which may generate aerosols. They are suitable for testing by polymerase chain reaction (PCR) which is a rapid, sensitive test employed by most public health laboratories. They can also be used for virus isolation, but are not suitable for antigen detection test such as immunofluorescent antigen detection (IFA). These sample need to be urgently transported to the laboratory.

(b) Immediate management, which will start before the diagnosis of pandemic influenza is confirmed, as there is no rapid test available yet for general practice. If the patient is stable, they could be managed at home, with monitoring. At this very early stage of the pandemic in Australia, it is possible the public health authorities may request they be managed in hospital, in isolation. If this is the case, ambulance officers need to be told in advance so they can wear PPE.

If the patient is to be monitored at home, how would you ensure the patients’ health did not deteriorate? (phone calls, home visits?)

11. *Which staff member is most likely to be exposed to pandemic influenza?*

The receptionist. The nurse and the GP have probably been given enough warning to put on their PPE.

12. *What would you do in this situation, to prevent passing on the infection at home? Can you safely isolate yourself as a contact at home?*

*13. If the exposed receptionist, doctor and/or nurse decide to isolate themselves at home, is there a contingency plan for other staff being available for a three to four day infectious period?*

*How do the various team members feel about coming to work at short notice, after being informed of this scenario?*

DAY 3

*“The Department of Health, the local public health unit and the media report further cases of pandemic influenza in different parts of your city. The cases do not all have a history of direct contact with each other. The practice has now had many requests for patients with cough and fever to be seen.”*

NOTES FOR FACILITATOR

Fever clinics have not yet been set up. A vaccine against pandemic flu will take at least 3 months. We are attempting now to prolong the containment phase for as long as possible, trying to buy time until the vaccine against the pandemic virus becomes available.

*14. How will public health authorities decide the indications for antivirals? Would you be willing to enforce guidelines (such as those in Resource C) about who should have access to antivirals? Where would you keep a stockpile of Tamiflu? Are there security implications for your practice?*

At the moment the stockpile of Tamiflu is insufficient for all exposed people, and so some rationing is needed. Rationing will be affected by: impact on duration and severity of symptoms, infectiousness of the virus, supply levels of antivirals, likelihood of exposure in people classified for pre-exposure and post-exposure treatment. Security of the stockpile is critical, in order to subvert the risk of a black market in antivirals. Decisions about rationing will be made by the chief health officer.

*15. With some staff members away from work, would you be able to keep running the practice? If the principal and/or practice manager were absent for one week, would other staff members be able to continue running the practice?*

What particular elements of business continuity would reception/nursing/medical staff need to know? (RESOURCE D: CDC Business continuity in general practice)  
A plan tailored for use in Australia is being developed in collaboration with DoHA

*16. The staff are all getting pretty tired. How would you go about monitoring them for signs of work stress, family stress, and what might you do if these issues were becoming apparent?*

*17. What kinds of social distancing measures may public health authorities introduce to reduce transmission of the virus at the community level?*

Containment measures include asking people with suspected influenza like illnesses to isolate themselves at home, using PPE. Public transport is likely to continue. Universities will probably close. People will be asked not to congregate in confined public spaces. This will probably mean a decrease in school attendance or closure of schools, reduced church attendance, concerts, and possibly general practice attendance.

NOW: summarise and synthesise key points before the next scenario, emphasising:  
(1) clinical service

- (2) public health responsibilities
- (2) infection control
- (3) organisational support.

## SCENARIO B

### DAY 7 - AUSTRALIA 6b (Pandemic spreads to many cities)

*Two doctors, one reception staff and the practice nurse in the one practice are all off work with influenza. This has occurred in the first week of the pandemic (ie the peak attack rate among health workers occurs at an earlier stage than for the general public). Fever clinics have now been set up in your local area. The nearest one to your clinic is set up in a carpark outside a major hospital. There is a call for GPs and/or nurses to work in the fever clinics. They will be paid through a contractual arrangement with the state.*

#### NOTES FOR FACILITATOR

Assume that public health authorities have been able to get the fever clinics up and running. At this point in the simulation, give out new roles and scripts to the three general practice units.

*18. Would you be willing to work in a fever clinic? If yes, under what conditions? What would your GP partners think of this if it compromised the care they were able to give to their patients?*

*19. Would the collapse of the neighbouring practice due to illness or for other reasons, have any implications for your general practice? Would you take on those patients? How would you go about maintaining essential primary health care?*

Possible models to consider are streamed services, such as some practices specialising in general practice, others in influenza clinics. Think about what to do about aged residential care – encourage teams to talk amongst themselves to work out an integrated plan to respond to the crisis..

What kinds of changes to Medicare and other funding systems would be necessary to support your work under these changed circumstances? If Medicare funding systems did not change, how would your clinical services be affected? What kind of changes are needed for professional indemnity? Why? Who should initiate changes that may be needed with Medicare and professional indemnity?

What kind of clinical work would you prioritise, and what would you now decide to defer (eg would you defer Pap smears? Routine immunisations?) If the local hospital was overwhelmed with managing people with influenza, would you agree to provide some of the services usually provided by the Accident and Emergency Services, eg relatively minor trauma, acute asthma?

DAY 14

*“Because of the effectiveness of the containment strategy, ie sustained social distancing measures, there has not been a vast increase in cases, and we remain in a containment phase. The elderly, and those with chronic diseases, increasingly choose to stay at home, and ring the surgery to ask for advice on their health care.”*

*20. How do social distancing measures change the ways in which you perform clinical services? What ways would suit you best to provide clinical care with a reduction in direct person to person contact?*

Use the example of someone who needs their diabetic ulcer dressed regularly.

*21. How much reduction in cases with pandemic influenza can one expect from good social distancing measures?*

Modelling from NCEPH suggests that we could expect about a 30% reduction in transmission from social distancing (a greater reduction in transmission than would be expected from antiviral use alone)

*22. Would you be willing to work with other GPs, medical or nursing students, other allied health practitioners to provide general medical care? Or influenza related care? What kinds of policy support would you need if you were willing to undertake collaborative work of this kind?  
How can the various general practice organisations help you in preparation or response?*

Medicolegal issues that are likely to impact upon work are the current restrictions on delegation, and risk of being sued for substandard practice. Some kind of short term tort law modification could be introduced as part of a state of emergency, freeing doctors from concerns about medicolegal challenge in relation to their management of patients during an influenza epidemic (within reason).

*23. How would you respond in your practice to an increased demand for home visits or to residential aged care)? Would you be able to meet an increased demand for consultations at home or over the phone?*

General practice funding systems may in the short term become more flexible to cover non-contact fee for service. Do they have physical facilities to switch to telephone or email consultations?

*24. On some of your visits, you find that patients have died at home. How will you deal with this situation?*

You will need to fill out a death certificate. The requirement for an autopsy if not seen in the last three months may be relaxed in a pandemic, if you are convinced they died of influenza. Mortuary assistants are essential personnel, and have plans in place for management of corpses.

*25. What would impact on staff members be of caring duties for other family members?*

Our modelling suggests this is will result in as many lost workdays as days lost to direct illness. Is there any way you can think of mitigating this?

DAY 42

*“Nearly one and a half months into the pandemic, a vaccine is developed. The peak of the epidemic curve has been flattened by social distancing measures, but still there has been a surge in attendance to general practices. General practices are now reporting that there has been a change in the types of services they are asked to do. As the hospital emergency department becomes overloaded, patients increasingly turn to general practitioners for minor procedures (plastering, suturing) and for conditions that formerly required assessment in hospital, such as threatened miscarriage or acute asthma or croup. General practitioners may find that patients with influenza-like illness increasingly request consultations with them, rather than going to the fever clinic, because of fear of becoming infected.*

*Public health authorities tell you that they now have sufficient stocks of the vaccine. Preliminary data suggest that three shots of the vaccine will be needed. They come in multidose vials. ”*

*26. Would you have the capacity in your surgery to undertake a clinical load more attuned to procedural work and acute care?*

The practice would need sufficient room to plaster, and conduct other minor procedures, and sufficient staff to monitor patients, and oxygen and nebulising equipment. Would you collaborate with other allied health professionals, eg physios, if needed?

NOW SYNTHESISE AND SUMMARISE KEY POINTS

ATTACHMENT A  
NON-PARTICIPANT OBSERVER SHEET EVALUATION #1

Conversational input from different team members. Count instances of communication<sup>1</sup>

Evaluation time: .....

TEAM 1			
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TEAM 2			
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TEAM 3			
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DIVISION	
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<sup>1</sup> Count instances of contribution to exercise, irrespective of length of comment, or relevance of comment, over 30 minute period once exercise starts. An instance = one conversational element. A discussion between two team members in which each made three comments were made by each = 3 instances of communication each.

NON-PARTICIPANT OBSERVER SHEET EVALUATION #2

Conversational input from different team members. Comment on types of communication<sup>2</sup>

Evaluation time: .....

TEAM 1

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TEAM 2

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TEAM 3

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DIVISION

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<sup>2</sup> Comment on types of communication made by each team member (general comments on length, types of communication, whether talking to team members only or to other teams)

NON-PARTICIPANT OBSERVER SHEET EVALUATION #3

Conversational input from different team members. Count instances of communication<sup>3</sup>

Evaluation time: .....

TEAM 1

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TEAM 2

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TEAM 3

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DIVISION

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<sup>3</sup> Quantitative evaluation of instances of communication, this time to be conducted over 30 minutes in final half hour of exercise.

NON-PARTICIPANT OBSERVER SHEET EVALUATION #4

Conversational input from different team members. Comment on types of communication<sup>4</sup>

Evaluation time: .....

TEAM 1

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TEAM 2

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TEAM 3

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DIVISION

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<sup>4</sup> Choose a time in the final hour and a half of the session, comment on types of communication made by each team member (general comments on length, types of communication, whether talking to team members only or to other teams)

## ATTACHMENT B

### EVALUATION QUESTIONS FOR INDIVIDUALS AND THE GROUP

Give the group 2 minutes to write down the answer to each question, one at a time (around 6 to 8 minutes total). Ask each person to read out the dot point answers and write them on the whiteboard, then move on through the questions (around 20 minutes). Question 1 assesses the extent to which important new/key messages were communicated. Questions 2 assess their expectations, and may be incorporated into the next draft. Question 3 elicits suggestions for refining and revising the exercise.

1. What two useful things did you learn from this exercise?
2. What else would you like to have learned?
3. How else could this exercise have been conducted?
4. What concerns you most about pandemic influenza from the general practice perspective?