General practice: professional preparation for a pandemic

Nick Collins, John Litt, Michael Moore, Tania Winzenberg and Kelly Shaw

eneral practice, with its 33 700 general practitioners, ¹ is the backbone of the Australian primary health care system; Australians consult GPs 94 million times per year. ² Seasonal influenza is managed mainly in the community, with most care provided by GPs and pharmacists.

General practice will have to deal with the impact of a pandemic on its workload and workforce. In Australia, up to 7.5 million excess consultations might be required during a pandemic. Furthermore, health workers are likely to acquire influenza, and an estimated 9% of GP work days could be lost at the peak of the pandemic. Some general practices may close, as seen during the recent outbreak of the severe acute respiratory syndrome (SARS), where 7.4% of Hong Kong and 37.5% of Canadian general practices closed. Therefore, the substantial increase in demand during a pandemic is likely to occur in the setting of a health care infrastructure struggling with staffing, resource, transport, and social crises.

The experience with SARS in Ontario led to the development of the Canadian pandemic influenza plan. This advocates an inclusive planning process from national to municipal governments, with emphasis on communication, ethical decision making, local antiviral stockpiling, and enhancing the capability of the hospital system to cope with increased numbers of admissions (the surge capacity). In Australia, state/territory and Commonwealth governments have developed multi-stakeholder plans^{3,8-10} based on internationally recognised strategies. Most plans acknowledge the potential role of the GP in such a disaster, 3,8-10 but there are few published data discussing the pivotal issues that GPs and their practices will face in dealing with such a crisis, or documenting the strategies which might be needed at a practice level. 12

The role of general practice

GPs are acknowledged as the masters of uncertainty¹³ in their clinical work. However, uncertainty coupled with disagreement tends towards complexity, and then chaos.¹⁴ In a situation that will be new for most Australian GPs, how can we minimise uncertainty and disagreement to ensure the best organised response to this crisis?

Local research suggests Australian GPs are likely to continue to work, influenced primarily by their sense of responsibility for their patients' welfare, but also by their responsibilities to their GP colleagues. However, GPs have caveats to this position. These include the provision of adequate protection (personal protective equipment [PPE] and antiviral medications) for themselves and their close personal contacts (including family members and practice staff).

GPs have also identified conflicting clinical roles that will challenge them ethically and logistically during a pandemic. These include reassuring the "worried well", dealing with influenza patients, managing patients with conditions unrelated to influenza, and dealing with the mental health issues (especially fear, anxiety and bereavement) during and after a pandemic. There are also significant non-clinical dilemmas to be faced by GPs and their staff. What remuneration should be paid to staff who decide not to work? How will the practice function if key clinical or non-clinical staff are absent? What billing procedures should a practice adopt? GPs need to consider their personal position and that of their family and staff, as well as their professional responsibilities, in deciding on their approach to these issues.

ABSTRACT

- General practice will play a key role in both prevention and management of an influenza pandemic. Australian pandemic plans acknowledge a role for general practice, but there are few published data addressing the issues that general practitioners and their practices will face in dealing with such a crisis.
- The outcome will revolve around preparation in three key areas:
 - ➤ Definition of the role of general practice within a broad primary care pandemic response, and adequate preparation within general practices so they can play that role well. Planning exercises and forums must include GPs, and rehearsals must include practical experience for general practices and their staff. Local Divisions of General Practice and GP practices can advocate for this, can define their role, and can prepare by using pandemic preparedness checklists.
 - > Definition and enactment of communication strategies to facilitate transfer of useful clinical and administrative data from practices and rapid dissemination of information into the community via general practice.
 - Resource provision, which should be centrally funded but locally distributed, with personal protective equipment, vaccines and antivirals readily available for distribution. Resources must include support for human resource management to ensure appropriate health care professionals reach areas of workforce demand. Administrative, clinical and financial resources must be available to train GPs and practices in pandemic awareness and response.

MJA 2006; 185: S66-S69

A further area of uncertainty for GPs will be medical indemnity. What provision might be made for practitioners providing telephone and email advice to quarantined patients? What of practitioners drafted to run fever clinics? How quickly could recently retired members be re-indemnified for practice? These issues are best addressed before a pandemic, and the medical defence organisations need to advise their members of their intentions.

A suggested pragmatic checklist to assist GPs and their practices with pandemic planning is given in Box 1 and Box 2. Many strategies should be introduced now. However, the structures of general practices are very diverse, and include single practitioners with limited staff and practice space. A major challenge will be to assist individual practices to assess their own circumstances and make the best decisions around pandemic planning for their particular situation, linked with municipal and state/territory plans.

Practice organisation

Pandemic preparedness of the practice as a whole requires careful consideration, from the first telephone call from a potentially infected patient requesting advice, to the in-surgery management of an acutely unwell influenza patient. In multi-doctor practices with nursing staff, one person should be appointed to coordinate the entire response,

PREPARING FOR AN INFLUENZA PANDEMIC

Issue	Strategy
Coordination	Appoint a practice pandemic coordinator
Practice protocols	Ensure practice has protocols for all components of preventing and managing an outbreak
General practitioner and staff education and training	 Provide training on identifying and managing potential and actual cases of influenza, infection control procedures, and practice protocols
Equipment	Ensure adequate supplies of necessary equipment and disposables
Surveillance	Adopt protocols for identifying patients with early pandemic influenza
Antivirals	Ensure appropriate supply and storage of antivirals
Influenza vaccine	Maximise regular seasonal flu vaccine coverage
	Maximise ability to rapidly provide coverage for pandemic influenza strain
Pneumococcal vaccine	Maximise pneumococcal vaccine coverage of at-risk groups
Infection control	Identify an infection control coordinator
Facilities	Minimise transmission risks in waiting areas
Waste	Ensure adequate arrangements for disposal of infectious waste materials
Ethical issues	• Discuss ethical issues that will influence strategy, including who is prepared to continue working and who will not be working
Workforce and workload review	Maximise use of GP, nurse and other practice staff workforce
	Review routine tasks to identify what can be delegated or re-organised
Communication	Connect to broadband Internet to ensure rapid and reliable information access
	Consider automated phone information messages for patients
Patient education	Put up pandemic influenza-related patient education materials in the waiting room
	Be aware of key public health messages and advice
	Inform patients about how the practice will operate during a pandemic
Indemnity and legal issues	 Clarify issues related to occupational health and safety, human resources (eg, staff disability and death, and paying absentee staff), duty of care (choices about seeing or not seeing patients), and indemnity coverage for alternative patient care strategies

from patient management to disposal of contaminated waste. Smaller practices might consider combining their efforts and sharing some of the responsibilities of revising protocols for the self-management of minor ailments, reducing visit schedules for chronic disease management, and providing repeat scripts. Indeed, with illness among staff likely, there is scope for a deputy or buddy to be appointed.

Training

As most seasonal influenza is managed in the community, it may be expected that clinical staff are acquainted with the vagaries of viral illness. The media attention already given to avian influenza means untrained non-clinical staff will have preconceived ideas about pandemic influenza. Staff education must include reception, filing and cleaning teams, as well as the clinical staff. Appropriate triaging, quarantine, specimen storage, and waste disposal must be clarified. Daily surface cleaning will be required.

Clinical staff will need to revise their knowledge of influenza, especially the possible presentations where fever is absent.

Surveillance

The Australian Sentinel Practice Research Network consists of specific general practices that generate community-based surveillance data for infectious diseases, including influenza-like illness. However, all GPs should become familiar with influenza-like illness case definitions and appropriate laboratory investigations. State and

territory public health departments receive notifications for suspected avian influenza, now specified under state and territory legislation. In the "best case" scenario, early detection of initial cases, combined with rapid dissemination of information to the primary care sector (including general practice), appropriate personal hygiene measures at a community level, and prompt quarantine of suspected patients and contacts might avert an epidemic. However, it cannot be assumed that this best case scenario will come to pass, and planning must deal with both the arrival of influenza and its consequences. Once pandemic plans are activated, accurately recorded data will be vital to improve future disaster planning. The ability to interlink practice software with public health and laboratory software packages will be instrumental to this process.

Infection control

Organising the practice to enhance measures already available to protect vulnerable patients should take priority now. Acquiring broadband Internet access, improving infection control procedures, ensuring adequate influenza (current circulating strain) and pneumococcal vaccination and, where feasible, employing a practice nurse are strategies that practices should put in place now. A specific infection control nurse at practice or divisional level could work with the coordinator to enhance basic personal hygiene and cough etiquette messages, as well as optimising pneumococcal and seasonal influenza vaccination levels.

SUPPLEMENT

Issue	Strategy
Practice protocols	Activate practice protocols
Workload adjustment	 Delegate and reorganise workload tasks (eg, routine care of patients with chronic illness or acute self-limiting illness), home visits and administrative tasks (eg, referral letters and reports)
	Activate triaging protocol, including phone, routine appointments and the front desk
	Make adjustments for general practitioner and practice staff absenteeism
Surveillance	 Monitor all staff for the emergence of influenza-like illness, including self- monitoring of GPs and other clinical staff Maintain screening protocols for identifying potential patients
Equipment	Ensure adequate supplies of necessary equipment and disposables
Antivirals	Use available supplies as appropriate
Pandemic influenza vaccine	Maintain check on when available and order supplies
Communication	 Maintain frequent links with local public health unit for updates and revision of protocols
Minimising spread of infection	Review and revise infection control policies and procedures
GP and staff education and training	 Review and maintain practice protocols using continuous quality improvement principles
Patient education	Ensure appropriate information readily available to patients
Immunisation	Maximise influenza and pneumococcal vaccine coverage
Ethical issues	 Discuss risk scenarios with patients, especially those at high risk (eg, elderly, chronic disease patients, and pregnant women)

Practice coordinators need to be planning their strategies to include important self-care and viral containment information. Waiting rooms will need to be cleared of toys, games and reading material. Masks, gowns and spill-kits will replace them. Acquiring and storing the equipment may prove difficult for the practice. If held off-site, the equipment must be readily accessible and available for use in the doctor's bag. Holding rehearsals for PPE use and "dry runs" for clinical situations are imperative. Proper disposal of non-clinical and clinical waste must be guaranteed.

GP workload

The coordinators will need to delegate work and define clinical space to cater for the practice's normal workload, as well as the expected increase in daily consultations. Solutions to triage issues need to include who waits in the open waiting room, who is quarantined, and who warrants home visits. Practice newsletters and websites can carry vital information, and a recorded telephone message with simple advice on influenza management at home can save endless repetition by reception staff.

Some states or territories propose the use of "fever clinics" to alleviate excess workload from general practice and the emergency departments. Planners at all levels needs to consult with general practice to ensure such clinics are acceptable to and supported by local primary health care providers and to ensure the most effective use of clinics by general practices through appropriate referral processes.

Communication

Government has a responsibility to oversee pandemic planning and can authorise any legislative powers required during such an outbreak. Professional bodies must be invited to advise on these processes. The Royal Australian College of General Practitioners (RACGP) is already involved in government planning for a pandemic. The RACGP has a pandemic preparedness group and can identify issues relating to quality, education and standards and communicate strategies to GPs. The Australian Medical Association is focusing on industrial issues that may arise before, during or after a pandemic. Both these organisations, along with the Australian Divisions of General Practice, are represented on the National Influenza Pandemic Action Committee's Primary Care Working Group, which is soon to publish a Primary Care Annex to the Australian health management plan for pandemic influenza.³

Workforce surveillance will be critical in a pandemic. Emergency operations and logistics personnel require timely information regarding the status of general practices — whether they are open or closed, seeing patients with pandemic influenza or not, and how GPs will provide services to patients (clinics, telephone assessment and management, or home visits). Divisions of General Practice are well positioned to carry out workforce surveillance, as they have the best established local networks of all GP support organisations. Additionally, at a local level, Divisions play a crucial role in providing educational, administrative and some clinical support to general practice. They are ideally placed to link general practice with all aspects of government pandemic planning. Divisional surveys of current and retired members' intentions during a pandemic may be crucial to health authorities' decision making. Emergency operations personnel need to track workforce capacity during a pandemic; Divisions can advise whether there is the potential for redeployment of primary health staff to other duties, such as fever clinics, or act to absorb hospital staff into primary care settings. They can provide academic detailing to practices in advance of a pandemic, and assist with infection control, vaccination and PPE supply. Divisions may also be able to coordinate appropriate reimbursement for participation in pandemic preparedness.

The link between all points in the pandemic planning chain is vital to ensure the best outcome. Rapid, clear and two-way communication at an interpersonal, telephone and electronic level will be instrumental in supporting the various national, state and local plans. One key difference in planning for a future pandemic is the wider variety of media available for transmitting information than was available in past epidemics. Health websites, public health broadcasts, television channels, radio segments and newspaper articles are all currently used by medical professionals to convey health messages. They must be harnessed for the benefit of the wider

PREPARING FOR AN INFLUENZA PANDEMIC

population before, during and after a pandemic. The power of the doctor in such a "consultation" should not be overlooked.

Resources

Provision of resources to enable the actions demanded by various pandemic plans is the third key area for general practice preparation. In primary health care, the human resources (both clinical and non-clinical) will be the front-line. Training, protection, remuneration and indemnity are important areas of concern for all groups. Locally based organisations are the logical choice to provide support. However, currently the Divisions receive little funding to support pandemic preparedness, and if their contribution is to be maximised, Divisions need to receive adequate funding for this.

Some areas of Australia are well supplied with GPs, but workforce shortages are recognised in some rural and outer metropolitan regions. A redistribution of clinical support to bolster local numbers will be required, and is likely to be one of the contentious issues of pandemic planning.

Whether the resource is a human one, a protective one, or a monetary one, there is an absolute requirement for government support. As Winston Churchill once said, "It is no use saying, 'We are doing our best.' You have got to succeed in doing what is necessary."

Conclusions

GPs are old hands at dealing with uncertainty in clinical practice. However, when this uncertainty is coupled with anxiety, lack of clear information and limited awareness about strategies to manage the range of possible scenarios, the outcome is more likely to be chaotic. The more certain we become of our abilities to act in a pandemic situation and the closer to agreement we are on how the best outcomes can be achieved, the more likely we are to engage in rational decision making, and play a clear and key role in maintaining and protecting the health of the Australian public.

Acknowledgements

We thank the following people for their assistance in preparing this article: Val Smyth, Chris Hogan, Ian Watts, Tori Wade, Alan Hampson and Ron Tomlins.

Competing interests

John Litt received travel expenses from Roche to attend the *Lancet* pandemic influenza meeting, Singapore, May 2006.

Author details

Nick Collins, FRACGP, General Practitioner¹
John Litt, FRACGP, MSc(Epid), DipRACOG, FAFPHM, Senior Lecturer²
Michael Moore, FRACGP, GradDipPH, Chief Executive Officer³
Tania Winzenberg, FRACGP, PhD, Research Fellow — General Practice⁴
Kelly Shaw, FRACGP, MPH, PhD, FAFPHM, Public Health Physician⁵
1 Leumeah, Sydney, NSW.

- 2 Department of General Practice, Flinders University, Adelaide, SA.
- 3 Central Sydney Division of General Practice, Sydney, NSW.
- 4 Menzies Research Institute, Hobart, TAS.
- 5 Tasmanian Department of Health and Human Services, Hobart, TAS. *Correspondence*: nickandcarol@aapt.net.au

References

- 1 Australian Bureau of Statistics. Year book Australia, 2006. Canberra: ABS, 2006. (ABS Cat. No. 1301.0.)
- 2 Britt H, Miller GC, Knox S, et al. General practice activity in Australia 2004– 5. Canberra: Australian Institute of Health and Welfare, 2005. (AIHW Cat. No. GEP 18.)
- 3 Australian Government Department of Health and Ageing. Australian health management plan for pandemic influenza. Canberra: Department of Health and Ageing, 2006. http://www.health.gov.au/internet/wcms/publishing.nsf/Content/ohp-pandemic-ahmppi.htm (accessed Aug 2006).
- 4 Wilson N, Baker M, Crampton P, Mansoor O. The potential impact of the next influenza pandemic on a national primary care medical workforce. Hum Resour Health 2005; 3: 7.
- 5 Wong WCW, Lee A, Tsang KK, Wong SYS. How did general practitioners protect themselves, their families and staff during the SARS epidemic in Hong Kong? *J Epidemiol Community Health* 2004; 58: 180-185.
- 6 Wong SYS, Wong W, Jaakkimainen L, et al. Primary care physicians in Hong Kong and Canada — how did their practices differ during the SARS epidemic? Fam Pract 2005; 22: 361-366.
- 7 Kort R, Stuart AJ, Bontovecs E. Ensuring a broad and inclusive approach: a provincial perspective on pandemic preparedness. Can J Public Health 2005; 96: 409-411.
- 8 NSW Health. Interim pandemic action plan. Sydney: NSW Health, 2005. http://www.health.nsw.gov.au/pubs/2005/pandemic_ap.html (accessed Auq 2006).
- 9 South Australia Department of Health. South Australia pandemic influenza. A summary of Health's operational plan. Adelaide: Department of Health, 2005. http://www.dh.sa.gov.au/pehs/publications/FLUPLANdraftv8-SUMMARY-HCW.pdf (accessed Aug 2006).
- 10 Tasmanian Department of Health and Human Services. Tasmanian health action plan for pandemic influenza. Hobart: Department of Health and Human Services, 2005. http://www.dhhs.tas.gov.au/healthyliving/pandemic/index.php (accessed Aug 2006).
- 11 World Health Organization. WHO global influenza preparedness plan. Geneva: WHO, 2005. http://www.who.int/csr/resources/publications/influenza/WHO_CDS_CSR_GIP_2005_5.pdf (accessed Aug 2006).
- 12 Shaw KA, Chilcott A, Hansen E, Winzenberg T. The GP's response to pandemic influenza: a qualitative study. Fam Pract 2006; 23: 267-272.
- 13 Armstrong RM, Van Der Weyden MB. Uncertainty in general practice: a sure thing. *Med J Aust* 2006; 185: 58-59.
- 14 Innes AD, Campion PD, Griffiths FE. Complex consultations and the "edge of chaos". Br J Gen Pract 2005; 55: 47-52.
- 15 Australian Government Department of Health and Ageing. Infection control guidelines for the prevention of transmission of infectious diseases in the health care setting. Canberra: Department of Health and Ageing, 2004. http://www.health.gov.au/internet/wcms/Publishing.nsf/Content/icg-guidelines-index.htm (accessed Oct 2006).
- 16 Australian Government Department of Health and Ageing. Interim infection control guidelines for pandemic influenza in healthcare and community settings. Canberra: Department of Health and Ageing, 2006. http://www.health.gov.au/internet/wcms/publishing.nsf/Content/ohp-pandemic-infect-control-gl.htm (accessed Oct 2006).
- 17 Victorian Department of Human Services. Victorian influenza pandemic plan. Melbourne: Department of Human Services, 2005. http://www.health.vic.gov.au/ideas/regulations/vic_influenza.htm (accessed Oct 2006).
- 18 Hogan C. Managing significant infectious risk in general practice. Unpublished report. Sunbury, VIC, 2006.
- 19 Proceedings of the RACGP SA faculty pandemic influenza information forum. RACGP SA Faculty. Unpublished report. Adelaide, 17 November 2005.
- 20 South Australia Department of Health. Draft primary care template for GP management of pandemic influenza, April 2006.
- 21 Otago Southland Avian Influenza Response Group. General practice planning for pandemic influenza. Invercargill, NZ: Southland District Health Board, 2005. http://www.southlandhealth.co.nz/files/draft_GP_planning_template.pdf (accessed Oct 2006).
- 22 World Health Organization. WHO pandemic influenza draft protocol for rapid response and containment. Geneva: WHO, 2006. http://www.who.int/csr/disease/avian_influenza/guidelines/draftprotocol/en/index.html (accessed Sep 2006).

(Received 17 Aug 2006, accepted 26 Sep 2006)