# Pandemic planning in Australia and New Zealand


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# The Health Systems

- Both countries have a mixed government (public) and non-government (private) funded health systems
- Public health is funded, administered and regulated at at both the national and state or district levels
- The private health system is partially funded and regulated by the national governments
- Disaster response is a shared responsibility of the national, state/regional and district systems

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# Before 2009

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# Australian Health Management Plan for Pandemic Influenza 2006

- Actions are dependent on levels of threat as based on WHO guidelines
- However, there are separate Global and Australian Threat levels with different actions

| WHO Phase | Aust Phases | Description of phases |
|---|---|---|
| 4 | Overseas 4 | Human infection overseas - small cluster(s), limited human to human transmission, spread highly localised; virus is not well adapted to humans |
| | Aus 4 | Human infection in Australia - small cluster(s), limited human to human transmission, spread highly localised; virus is not well adapted to humans |
| 5 | Overseas 5 | Human infection overseas - larger cluster(s) but human to human transmission still localised; virus is becoming better adapted to humans (substantial pandemic risk) |
| | Aus 5 | Human infection in Australia larger cluster(s), substantial pandemic risk |

http://www.health.gov.au/internet/wcms/publishing.nsf/Content/ohp-pandemic-ahmppi.htm

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# The Approach to Pandemic Influenza

- Delay entry of the pandemic strain into Australia
  - Restrict entry for affected areas. Early identification of entry of the pandemic strain through border surveillance and testing. Quarantine of proven/suspect cases. Contact tracing
- Slow spread once it enters
  - Quarantine/isolation of cases. Social distancing. Community hygiene. Antiviral agents for treatment and prophylaxis. Use of vaccines when available.
- Lessen impact
  - Reduce numbers, broaden peak of activity. Optimise care and treatment of cases. Undertake business continuity planning. Enable effective communication. Use antiviral prophylaxis/vaccination for essential workers.

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# Pandemic Influenza: Government activities

- Establish a structure for national leadership and coordination
- Establish a stockpile of antivirals, personal protective equipment, and other medical supplies
- Enhance surveillance
- Increase laboratory capacity
- Arrange contracts for pandemic vaccine supply
- Accelerate research relevant to pandemic influenza

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# Testing it out – Exercise Cumpston


- Small outbreak in Acamor and Bellatrix, with rapid international spread.
- Seven infected travellers introduce virus to Australia

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# Things to fix before the pandemic

1. **Re-examine some of the assumptions made about pandemic planning**
   - Better define the range of scenarios and phases
   - Better mathematical models
2. **Improve the decision making process**
   - Too slow for use during a pandemic response.
3. **Better decision support**
   - Better processes to assist decision makers, to inform them about impact, priorities, cost/ benefit, levels of uncertainty, legal frameworks for action
4. **Better surveillance**
   - More adaptable, focussed on testing assumptions and interventions
5. **Better communications**
   - within response groups, with the public, with the health care sector
6. **Better engagement with primary care**

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# Pandemic plans in the Asia-Pacific

| | Nature of plan | Year of publication | English language version available | Reference | Linked documents |
|---|---|---|---|---|---|
| Australia | Final | 2005 | Yes | 6 | - |
| Cambodia | None | - | - | - | - |
| China | Draft | 2005 | Yes | 7 | * |
| Hong Kong (SAR of China) | Final | 2005 | Yes | 9, 10 | 11 |
| Indonesia | None | - | - | - | - |
| Laos | None | - | - | - | - |
| New Zealand | Draft | 2005 | Yes | 12 | 13 |
| Thailand | Final | 2005 | Yes | 14 | 15 |
| Vietnam | Final | 2005 | No | 16 | 17 |

Coker R, Mounier-Jack S. *Lancet* 2006;368:886-889

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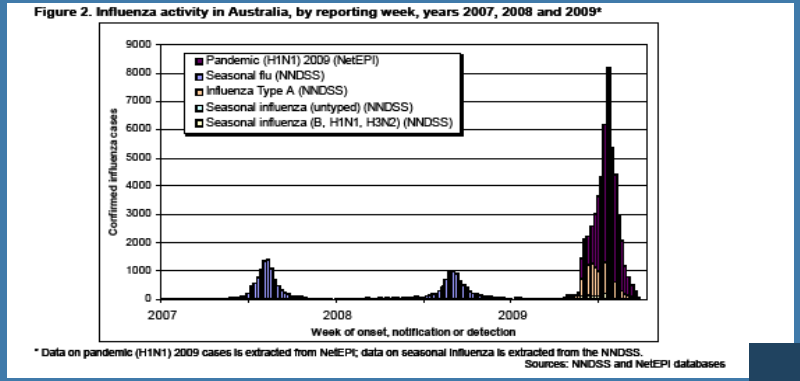
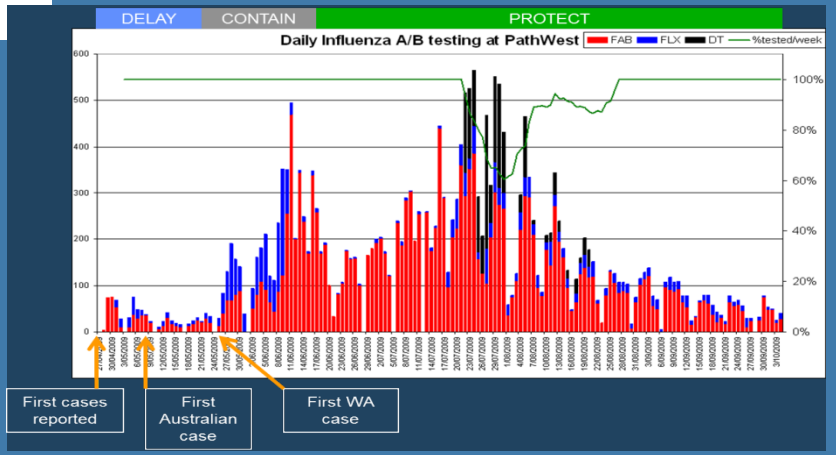
# Pandemic influenza H1N1 09 in Australia 2009




Australian Influenza Surveillance Report #22:
Commonwealth Dept of Health and Ageing

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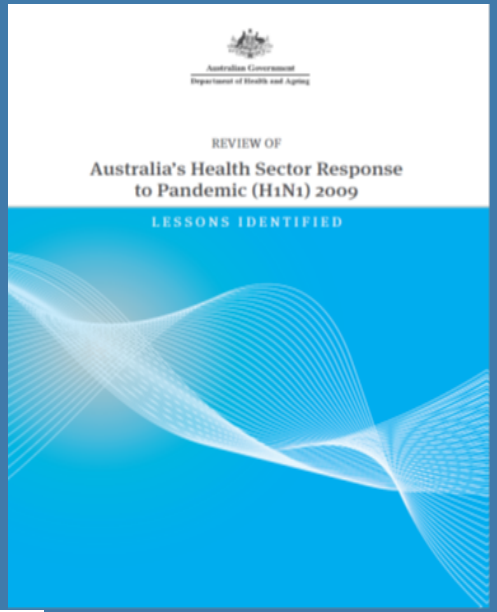
# Post 2009 review lessons identified

Overall Australia and New Zealand did very well, but the health systems were severely stressed.




- Governance and decision making
- Communications
- Surveillance
- Border measures
- Public health measures
- Health sector capacity
- Laboratory capacity
- National Medical Stockpile deployment
- Vaccination
- Aboriginal and Torres Strait Islanders

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https://www.health.gov.au/internet/publications/publishing.nsf/Content/review-2011-l/$File/lessons%20identified-oct11.pdf

# Post-pandemic review examples

| | Areas for improvement | Planned actions |
|---|---|---|
| Governance and decision making | • The plan failed to allow for variable timing of the outbreak across Australia. | • Greater flexibility in planning and delivery |
| Communications | • Different, and sometimes conflicting, information from different official sources | • Develop a clear communication plan |
| Surveillance | • No comprehensive approach to collection, analysis and reporting of detailed data about the early cases. | • Incorporate a “first few hundred” protocol |
| Border measures | • High resource requirements with minimal benefit. | • Review and update protocols for airports and seaports |
| Public health measures | • Home quarantine difficult to implement, and lack of public understanding of its importance | • Review policies on use of antiviral medications, quarantine, isolation, and school closures. |

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# Post-pandemic review examples

| | Areas for improvement | Planned actions |
|---|---|---|
| • National Medical Stockpile deployment | • Difficult for community practitioners to get PPE supplies | • Refine and clarify stockpile requirements, distribution policies and logistics. |
| • Vaccination | • Not possible to produce and deploy a pandemic vaccine until after the first wave of the pandemic | • Identify the acceptable risk/ benefit criteria for a pandemic vaccine |
| • Aboriginal and Torres Strait Islanders | • The issues specific to Indigenous Australians with underlying medical conditions or living in remote areas | • Incorporate Indigenous issues into the pandemic planning process. |
| Health sector capacity | • Limited capacity to enhance the health workforce during a pandemic, especially if there is an expectation that "business as usual" will be maintained | • Develop a surge capacity strategy |
| Laboratory capacity | • Lack of clinician acceptance of the requirements to restrict testing | • Improve communication lines between laboratories, public health and clinical services |

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# Australian Health Management Plan for Pandemic Influenza 2014 – the enhancements

- Use of existing systems and governance mechanisms, rather than creating new ones for the pandemic
- Take a flexible approach that can be scaled and varied to meet the needs experienced at the time
- Use evidence-based decision making
- Ensure strong linkages with other emergency response arrangements
- The plan can also be applied to seasonal influenza, when it threatens to overwhelm our health systems;
- Clear guidance on the collection of national surveillance data
- Emphasise communications activities as a key tools in the response.

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# Are we better prepared?

- More practice for major public health threats– pandemic, MERS, Ebola
- Better surveillance systems
- More capacity within hospitals for patient isolation and cohorting, and more high level support for respiratory failure
- Improved interactions with general practitioners and Indigenous populations
- Greater laboratory capacity in the public and private sectors, especially PCR-based testing and high-containment laboratories
- Substantial applied research relevant to pandemic influenza

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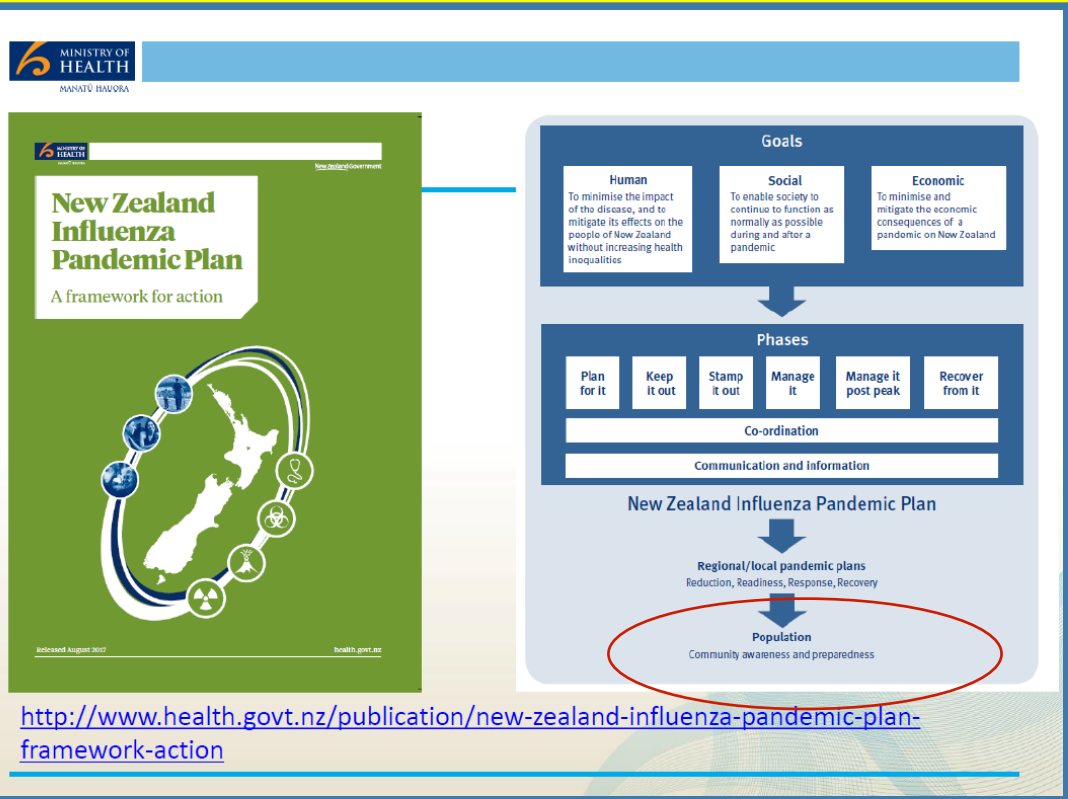
# Community Planning in New Zealand




http://www.health.govt.nz/publication/new-zealand-influenza-pandemic-plan-framework-action

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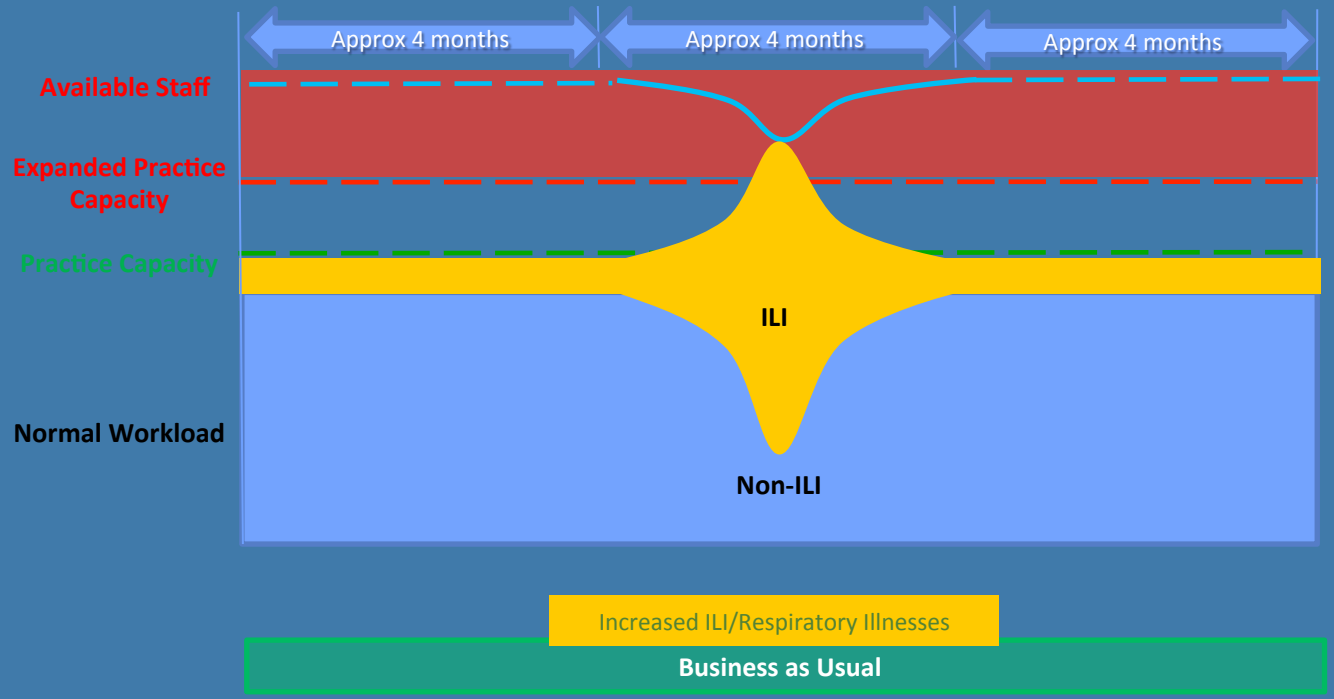
# Canterbury 2018 Primary Care Flu Response Plan: Seasonal influenza is 'path to readiness'

MODEL: Impact of Annual Winter Illnesses

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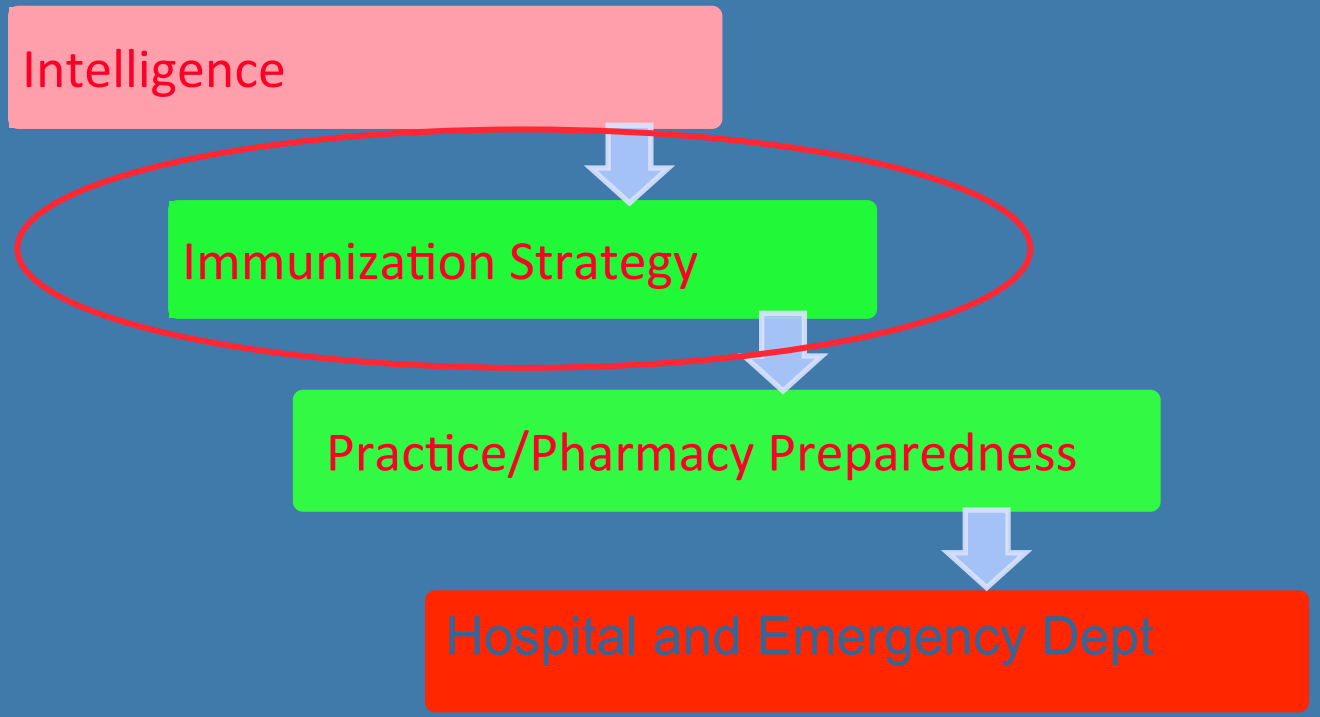
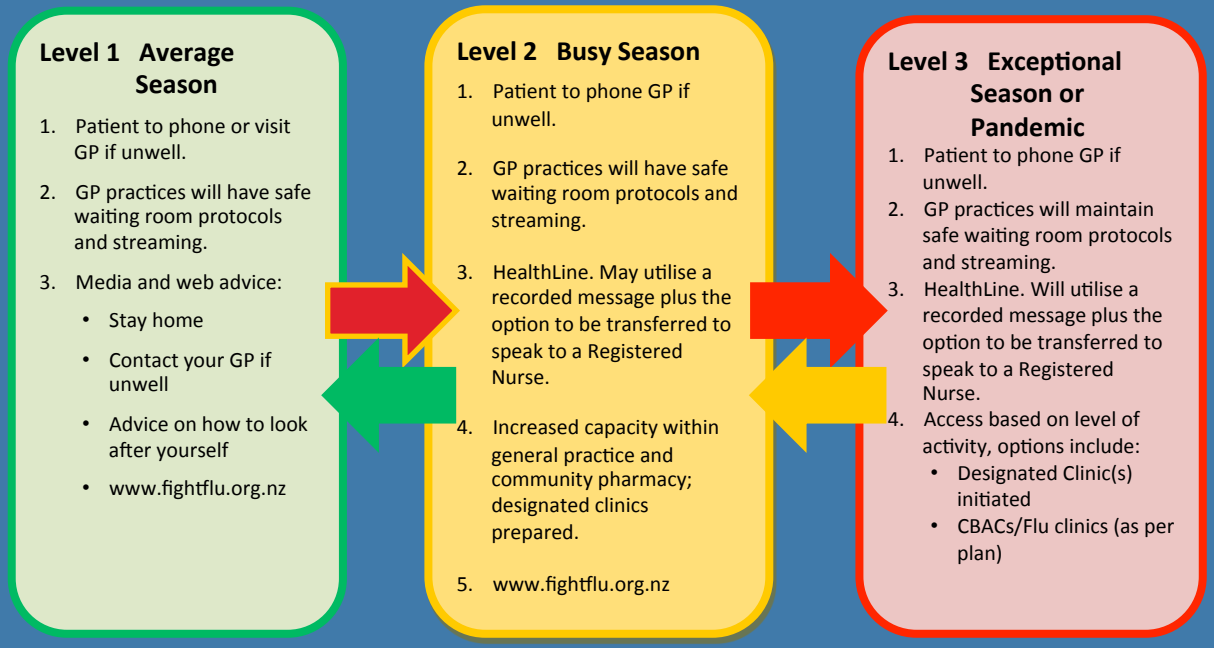
# Canterbury 2018 Primary Care Flu Response Plan



# Canterbury Influenza Season Triggers and Primary Response Escalation




**Escalation of response triggers:**
Clinical leaders meet separately to consider Community & Public Health data, incidence, severity and mortality before notifying the Chief Medical Officer (CDHB), and thereby requesting an escalated response.

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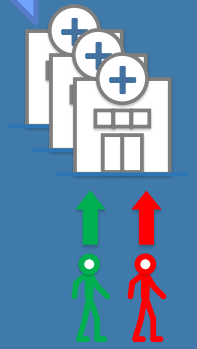
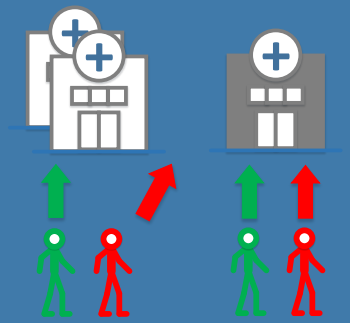
# Community Response Options

Decentralised ← → Centralised



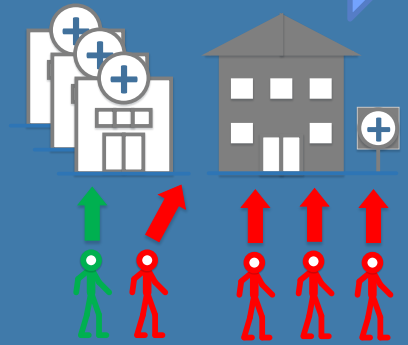
**Business as Usual or Busy Season**

- Regular patients (green) and ILI patients (red) attend at their usual general practice.
- Recommend screening patients to green and red streams.



**Sector-based Response**

- A practice/premise is established as a Designated Clinic for a small geographic area.
- The Designated Clinic manages its own green and red stream patients *and* red stream patients from other practices.



**Centralised Response**

- A Designated Clinic(s) established for **all** red stream patients from a larger geographic area, e.g. urban Christchurch.
- Green stream patients attend their usual general practice.

*The aim is to manage the response so we:*

- *Go no further to the right than we have to*
- *For no longer than we have to*
- *With no more practices than we have to*

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# Summary

- We are better prepared, but much to do
- Pandemic planning should be an ongoing process taking into consideration gaps identified during novel disease events and exercises
- Seasonal influenza outbreaks provide a pathway to “whole of society” readiness

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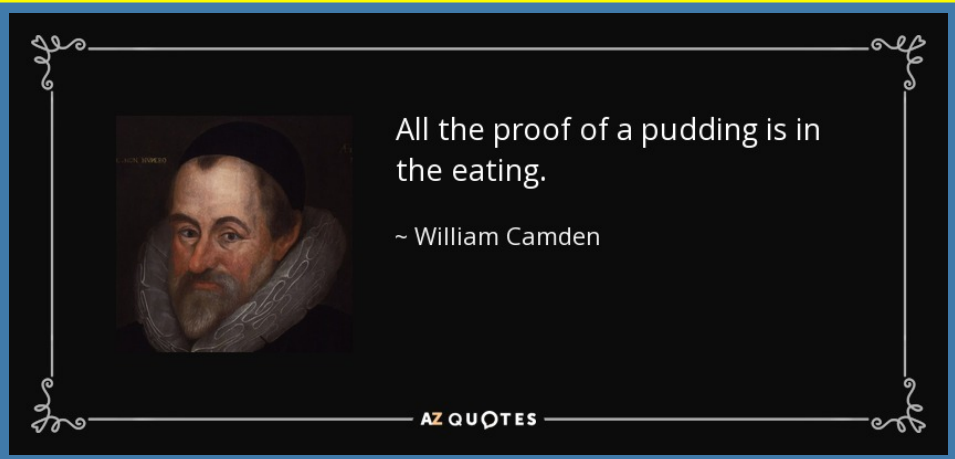
# 14th Century English proverb




"the real value of something can be judged only from practical experience or results and not from appearance or theory"

?

A well-controlled pandemic
OR
a bit of a mess?

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