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ABOUT THE NATIONAL COLLABORATING CENTRE FOR HEALTHY PUBLIC POLICY

The National Collaborating Centre for Healthy Public Policy (NCCHPP) seeks to increase the expertise of public health actors across Canada in healthy public policy through the development, sharing and use of knowledge. The NCCHPP is one of six Centres financed by the Public Health Agency of Canada. The six Centres form a network across Canada, each hosted by a different institution and each focusing on a specific topic linked to public health. In addition to the Centres' individual contributions, the network of Collaborating Centres provides focal points for the exchange and common production of knowledge relating to these topics.

TABLE OF CONTENTS

INTRODUCTION

This document provides a survey of the explicit goals, ethical principles, and ethics-related recommendations put forward by a selection of salient national, sub-national and international pandemic preparedness plans and policies. It is designed to provide a concise preliminary comparison of prominent ethical frameworks in order to stimulate examination of the relevance and utility of such tools for deliberation and justification in the context of an actual public health emergency. It does not claim to be exhaustive, and reflects the information and resources available at the time the review was carried out. The survey may be useful to health sector and other authorities as they reflect on their experiences, as well as to other professionals engaged in evaluating whether, how, and which existing ethical frameworks contribute to actual deliberation and decision making during routine and emergency public health practice in different contexts. It may also serve as a primer for further discussions in which the variety of moral dilemmas that may arise during another widespread infectious disease outbreak or other public health crisis can be addressed in more detail.

Most of the information presented in this document was extracted from official publications. Please note that all titles and sub-titles in this report are hyperlinked directly to the source material. This is intended to make the PDF version of this document as user-friendly as possible. For those consulting this report in paper form, please note that all electronic links are also provided in the bibliography.

Public health ethics

Public health ethics (PHE) is a relatively new field of study that encourages interdisciplinary discussion of moral issues related to the theory and practice of public health and preventive medicine. Emerging over the last 15 years out of dissatisfaction with the traditional orientations of biomedical ethics, PHE involves the explicit use of concepts from ethical, social and political theory to discuss and evaluate collective interventions that aim to protect and promote the health of groups and populations rather than of individuals.

Public health ethics is currently the subject of a surge of interest, and no small portion of that is due to the challenges involved in confronting recent outbreaks of new and re-emerging infectious diseases. Over the past few decades, and perhaps particularly in the aftermath of SARS and in anticipation of another severe influenza pandemic, health professionals, academics, and policy-makers have increasingly grappled with the moral dimensions of protecting and promoting the health of populations. The general aims of public health are clearly distinct from those of clinical medicine due to a preventive and collective focus, which may require active interventions by government that involve major burdens or limitations on the rights of individuals and groups. Public health ethics is thus more community-oriented than medical ethics and is relevant to the day-to-day lives of citizens, when they choose or choose not to act in ways that may expose others to the risk of infection, for example, or to have themselves or their children immunized.

When a particular infectious disease begins to affect a larger than usual number of people, or to circulate globally among populations that have little immunity (as happened most recently with influenza AH1N1 2009), the specific aims of public health require that very difficult decisions be made. They are likely to have to be made, moreover, as many people become sick and some die, and under conditions of significant uncertainty, panic, time pressure, and high demand but widespread shortages. Trade and travel restrictions, quarantine, school closures, bans on public gatherings, staffing management and workplace safety assurances, testing of newly developed vaccines (particularly with vulnerable populations), reliability of different diagnostic tests, emerging resistance to pharmaceuticals, and the allocation of scarce medical and material resources are just some of the pressing issues that all societies will face during an influenza pandemic.

Although ethical principles and frameworks for decision making cannot provide definitive answers to these and other dilemmas and value conflicts that arise during a crisis such as an influenza pandemic, they can help both individuals and policy makers make good decisions in difficult times. Moral theories and concepts draw attention to and encourage debate on the variety of ends, goals, and means that can be adopted in preparing for and responding to public health emergencies. Different approaches to and strategies for balancing rights and obligations in the context of an emergency demonstrate the need to be explicit, transparent and accountable when justifying inevitably hard trade-offs and harmful choices. Shared values, finally, serve as tools that provide both a basis for assessing various alternatives and a platform for enabling the cooperation and coordination necessary across a wide range of situations to allow communities to get through the pandemics of today and of the future.

The ethical frameworks surveyed here overlap to a significant extent at the level of fundamental ethical commitments and principles, and even more so at the level of strategic or operational goals; but on the whole they provide only minimal specific guidance on how to actually realize requirements, for example, that access to vaccine or anti-virals be equitable, or that need and benefit be balanced when it comes to prioritizing groups or individuals for access to other scarce preventive and therapeutic resources. In short, more practical guidance is needed about how to implement the ethical commitments and principles endorsed in ethical frameworks, which are not algorithms that mandate particular approaches or decisions, but decision-making tools that need to be adjusted to reflect both the specific biological characteristics of any actual or potential pandemic, and the specific social circumstances in which they are used as part of a coordinated response.

REVIEW OF ETHICAL PRINCIPLES AND GUIDANCE WITHIN PANDEMIC PLANS

For the Public Health Agency of Canada's full list of federal, provincial, and territorial pandemic influenza plans, follow this link: http://www.phac-aspc.gc.ca/influenza/plans-eng.php.

1   CANADA

1.1   THE CANADIAN PANDEMIC INFLUENZA PLAN FOR THE HEALTH SECTOR (CPIP) (PUBLIC HEALTH AGENCY OF CANADA, 2006)

In support of two main goals, "**to minimize serious illness and overall deaths, and to minimize societal disruption among Canadians as a result of an influenza pandemic**" (Public Health Agency of Canada [PHAC], 2006, Section 1.0, Introduction, p. 3), six ethical principles inform the plan. Each of these, briefly described in the plan, has informed both the goals of the CPIP and the manner in which those goals should be achieved, creating a high standard for public health interventions. The principles are to:

- Protect and promote the public's health
- Ensure equity and distributive justice
- Respect the inherent dignity of all persons
- Use the least restrictive means
- Optimize the risk/benefit ratio
- Work with transparency and accountability

(PHAC, 2006, Section 2-Background, 6.0 Ethics and Pandemic Planning, pp. 14-16)

Additional federal guidance has recently been developed for those making recommendations regarding whether or not priority groups need be identified for the distribution of an influenza AH1N1 vaccine and, if so, who will belong in these groups. The *Pandemic Vaccine Prioritization Framework* (PHAC, 2009) contains a section *Ethical Considerations* in which the literature dealing with priority-setting and equitable access to therapeutic and prophylactic measures is briefly surveyed. The proposed framework is drawn directly from the World Health Organization's (WHO) guidance in *Ethical considerations in developing a public health response to pandemic influenza* (WHO, 2007) (see 2.1 below), which stresses how the processes for setting priorities and promoting equitable access must involve society and relevant stakeholders, as well as incorporate pre-established mechanisms for revising decisions and for providing timely and accurate information to the public. The framework also "emphasizes the importance of clarifying the goals of prioritization and proposes the inclusion of ethics experts and the results of modeling exercises to help guide the decision-making process" (PHAC, 2009, 2.0 Other Examples of Vaccine Prioritization Frameworks).

The following key principles are listed as being central to developing criteria for use in prioritization:

- **Utility** (the principle of acting to maximize aggregate welfare) – whether for individual or community benefit;

- **Equity** (the fair distribution of benefits and burdens) – this principle may sometimes conflict with utility considerations;

- **Age** – e.g. the "fair innings" argument (the idea that everyone is entitled to some "normal" span of life years). WHO notes that opinions were mixed on this criterion and that age-based prioritization criteria should be adopted only after wide public consultation;

- **Non-discrimination** against individuals based on inappropriate characteristics;

- The **goals of the vaccination program** (noting that possible goals may compete with each other).

(Ibid., Section 4.3-Ethical Considerations)

Noting that prioritization decisions (if required) need to be based, in part, on data unavailable until a pandemic virus has started circulating, that the supply of pandemic vaccines will be limited, and that it is important to take a global equity perspective (since industrialized countries will have secured access to most of the world's supply, and thus Canadian decisions will have an effect on the global availability of a vaccine), the *Pandemic Vaccine Prioritization Framework* summarizes the ethical principles and values identified in the framework in the CPIP, along with comments about their applicability to vaccine prioritization at a time of shortage, in the following table:

Table 1   Relevant ethical principles applied to vaccine prioritization

Ethical principle (CPIP 2006)	Applicability to vaccine prioritization strategy
Protect and promote the public's health	Underlying premise of vaccination program (but there are various strategies to do this)
Ensure equity and distributive justice (fair and equitable distribution of resources based on need)	Develop fair criteria for prioritization Multiple possible applications
Respect the inherent dignity of all persons	Offer vaccine to all; use consistent approach to prioritization decisions
Use the least restrictive means	Example of vaccinating schoolchildren to avoid disruptive school closures
Optimize the risk/benefit ratio	Maximize the benefit and minimize the risks in prioritization decisions
Work with transparency and accountability	Justify prioritization plan and decisions Public and stakeholder consultation Widespread dissemination of prioritization framework
Additional ethical values from Thomson et al. (2006)*	
Decision-making processes are reasonable, inclusive, responsive	Fair criteria, consultation process Open to review as situation changes
Reciprocity (responsibility of society to support those who face a disproportionate burden in protecting the public good)	Prioritization for health care workers Also reciprocal responsibility of health care workers to report to work and accept vaccine if offered
Trust	Build trust with stakeholders before pandemic occurs; ensure that decision-making processes are ethical and transparent
Solidarity	Communication and open collaboration with stakeholders
Stewardship	Need to consider benefit to the public good and equity

*   (Thompson, Faith, Gibson & Upshur, 2006 in PHAC, 2009, Appendix 2 – Relevant Ethical Principles to Consider).

1.2   QUÉBEC PANDEMIC INFLUENZA PLAN – HEALTH MISSION (QUÉBEC, 2006)

The mission of the Québec health and social services network during a pandemic is to "**save lives and preserve the health and well-being of the people**" (Ministère de la Santé et des Services sociaux [MSSS], 2006, Chapter 1, p. 20), and three "rules of governance" are set out to guide the actions of all authorities: **protection, solidarity and responsibility**. These and other concepts set out in the plan are said "to enable workers in the health and social services network, and their partners to acquire a common vision of the strategies put forward" (MSSS, 2006, Chapter 1, p. 19), and they include three principles of response as well as identify four groups of stakeholders (citizens, informal caregivers, various workers, and decision makers, starting with elected officials).

The plan is further broken down into five activities of equal importance:

- **Protect the health of the public** (public health);
- **Provide medical care** (physical health);
- **Ensure people's psychosocial well-being** (psychosocial response);
- **Provide clear, relevant and mobilizing information** (communication);
- **Keep the network** [of health and social services] **working** (continuity of services).

The three principles of response are to:

1. Match response strategies with the functions of the network;
2. Adopt a top-down decision-making process; and
3. Deliver a highly effective organization.

(Ibid., pp. 19-20)

As soon as it was released, this plan was reviewed by the Comité d'éthique de santé publique-CESP (Québec Public Health Ethics Committee), in its *Volet santé publique du Plan québécois de lutte à une pandémie d'influenza — Mission Santé* (Opinion about the public health dimension of the Québec plan for fighting against pandemic influenza) (2006, only available in French). This report, by a specialized committee reporting to the Québec Minister of Health and Social Services (Ministère de la Santé et des Services sociaux), highlights that **scarcity and uncertainty are likely to frame social choices and test social bonds during a pandemic** (Comité d'éthique de santé publique [CESP], 2006, p. IX), and suggests placing importance on **information and communication as key ethical dimensions of democratic risk management** (CESP, 2006, p. 9, pp. 14-15). Good information and communication are both needed, according to the CESP opinion, to generate and maintain **public trust and adherence** (Ibid., p. 33), as well as ensure the **effectiveness** of public health responses (Ibid., p. 15). **Consultation mechanisms** are recommended to promote public and stakeholder knowledge, discussion, and solidarity (Ibid., pp. 31-34). Recommendations are also made with regard to the stockpiling and use of antivirals for prevention, and on respecting **confidentiality and equity** while conducting effective surveillance. The **global dimensions** of pandemic planning are also emphasized, along with ethical issues related to pharmaceutical industry activity, intellectual property and inequity among countries and continents (Ibid., pp. 11-12).

The provincial policy response to a pandemic is also be informed by the "key values and ethical principles" contained within the province's ten-year *Public Health Program (2003-2012)*, which is among the first policy statements at this level to incorporate a detailed ethics framework. These values and principles include:

Public interest, beneficence, non-malfeasance, autonomy, respect for confidentiality & privacy, responsibility, solidarity, protection of vulnerable individuals, groups & communities, and justice.

(MSSS, 2003, p. 19)

1.3   ONTARIO HEALTH PLAN FOR AN INFLUENZA PANDEMIC (ONTARIO, 2008)

Echoing the Canadian federal plan, the Ontario strategy aims first to **minimize serious illness and overall deaths** and, second, to **minimize societal disruption**. Adapting the University of Toronto Joint Centre for Bioethics' report *Stand on Guard for Thee* (2005), Ontario's response to an influenza pandemic is to be based on the following substantive and procedural core ethical values:

- **Individual Liberty** – Individual liberty (i.e., respect for autonomy) is a value enshrined in our laws and in health care practice.

- **Protection of the Public from Harm** – Public health authorities have an obligation to protect the public from serious harm.

- **Proportionality** – Restrictions on individual liberty and measures to protect the public from harm should not exceed the minimum required to address the actual level of risk or need in the community.

- **Privacy** – Individuals have a right to privacy, including the privacy of their health information.

- **Equity** – All patients have an equal claim to receive the health care they need, and health care institutions are obligated to ensure sufficient supply of health services and materials, and to establish fair decision-making processes and criteria.

- **Duty to Provide Care** – Health care workers have an ethical duty to provide care and respond to suffering.

- **Reciprocity** – Society has an ethical responsibility to support those who face a disproportionate burden in protecting the public good.

- **Trust** – Trust is an essential part of the relationship between government and citizens, between health care workers and patients, between organizations and their staff, between the public and health care workers, and among organizations within a health system.

- **Solidarity** – Stemming an influenza pandemic will require solidarity among community, health care institutions, public health units, and government.

- **Stewardship** – Those entrusted with governance should be guided by the notion of stewardship, which includes protecting and developing one's resources, and being accountable for public well-being.

- **Family-centred Care** – The health system will respect a family's right to make decisions on behalf of a child, consistent with the capacity of the child. Health care providers will respect families' unique beliefs and values, and acknowledge that their choices will be informed by their beliefs and values.

- **Respect for Emerging Autonomy** – When providing care to young people, the health system will respect their emerging autonomy, and disclose age appropriate information.

(Ministry of Health and Long Term Care [MOHLTC], 2008, Part 1, Chapter 2, pp. 9-11)

Acknowledging that "governments and public health authorities will have to make difficult decisions" during a pandemic, the report suggests that public trust and acceptance will be enhanced if the decision-making processes are:

- **Open and transparent** – The process by which decisions are made is open to scrutiny and the basis for decisions is explained.

- **Reasonable** – Decisions are based on reasons (i.e., evidence, principles, and values) and made by people who are credible and accountable.

- **Inclusive** – Decisions are made explicitly with stakeholder views in mind and stakeholders have opportunities to be engaged in the decision-making process.

- **Responsive** – Decisions are revisited and revised as new information emerges, and stakeholders have opportunities to voice any concerns about decisions (i.e., formal mechanisms to bring forward new information, to appeal or raise concerns about particular allocation decisions, and to resolve disputes).

- **Accountable** – There are mechanisms to ensure that ethical decision-making is sustained throughout the response.

(MOHLTC, 2008, Part 1, Chapter 2, p. 8)

Three additional principles, **to educate, to reassure, and to be accountable**, are listed as the main goals of the Ontario Health and Long Term Care Ministry's *Pandemic Communications Strategy*, whose focus is on providing up-to-date and accurate information about the pandemic to both the public and health care workers/stakeholders, informing them of the steps being taken to respond to the pandemic, and advising on what to do during each phase (Ibid., Part 2, chapter 12, p. 3).

1.4 NOVA SCOTIA HEALTH SYSTEM PANDEMIC INFLUENZA PLAN: ETHICAL CONSIDERATIONS AND DECISION-MAKING FRAMEWORK (NOVA SCOTIA, 2007)

The two main goals of the 2008 *Nova Scotia Health System Pandemic Influenza Plan*, like those of the federal plan, are "**to minimize serious illness and overall deaths and to minimize societal disruption**" (Nova Scotia Department of Health, 2008). The province is unique, however, in having commissioned the development of a decision-making framework and toolkit that goes beyond merely listing principles and seeks to "promote thought and reflection on the values inherent in decisions that will have to be made before and during a pandemic" (Melnychuk, for the Nova Scotia Department of Health, 2007, p. 5). The framework includes lists of "substantive and procedural values, a discussion of emergency versus non-emergency situations, a goal and priority setting guide, and a discussion of

challenges to be faced. The latter includes an application of the [decision-making] framework" (Ibid., p. 5).

The three primary components of the Nova Scotia framework are **substantive values** (such as the core values of public health and protection of the public from harm, and the "three interrelated values of equity, trust, and solidarity", which are the criteria informing decision making), "**procedural values** (values that guide the process that seeks to achieve an end", which include fairness, transparency, and accountability), and **terminal values** (including, notably, justice and equality of access and outcomes, which shape the ultimate ends of policy by defining operational goals at the individual, organizational, and governmental levels). Four additional dimensions that influence decision making and have a role in policy discourse are discussed: "**scientific**, the evidence; **socio-historical**, recognition of and respect for cultural and historical perspectives that influence behaviours and beliefs; **philosophical**, all human endeavours are moral endeavours; and **political**, the realities of what is feasible, economical, acceptable, and realistic in the political context" (Ibid., pp. 5-6).

Accompanying materials, discussions of three case studies (on the prioritization of patients needing ventilator support, health care professionals' duty to care during staff shortages, and a health care worker's refusal to be vaccinated), and a glossary are also offered in the appendices.

The province of Nova Scotia (in conjunction with the Atlantic Provinces Public Health Collaboration) has also produced a useful primer on the means and ends of public health, *PH 101: An Introduction to Public Health* (Atlantic Provinces Public Health Collaboration, 2007) with the goal of providing a resource for new and existing practitioners to generate discussion about issues and promote the use of common language in the field. PH101 briefly and accessibly surveys the principles discussed in Upshur (2002), and adds to them the precautionary principle, but does not discuss these at much length.

1.5 FIRST NATIONS PUBLIC HEALTH: A FRAMEWORK FOR IMPROVING THE HEALTH OF OUR PEOPLE AND OUR COMMUNITIES (ASSEMBLY OF FIRST NATIONS, 2007)

This document was developed through First Nations and Inuit Health Branch (FNIHB) funding to provide a basis upon which to implement pilot projects for a First Nations-generated approach to public health. Although not primarily concerned with preparing or responding to emerging public health emergencies such as AH1N1, this document nonetheless articulates a series of recommendations (on issues ranging from the delivery and governance of public health services, to the use of electronic surveillance technologies, to capacity, programming, and funding strategies) based on the unique circumstances and issues raised by "First Nations engagement in public health-related policy and legislative development" (Assembly of First Nations, 2007, p. 9). The recommendations are presented in this report as three pillars that require strengthening, pillars that rest on core ethical values very pertinent to pandemic planning and preparedness:

- **Collective approach to decision making** – although governmental regulation and health crisis management depend on a seamless, interdependent approach to public health, *First Nations Public Health* asserts that existing mechanisms for collaborative decision making

and systematic data sharing are weak, and "governments have not adequately sorted out their roles and responsibilities" for health services, social services, public security, and public health (Ibid., p. 9).

- **Intersectoral partnerships** – since public health practice relies heavily on professionals working together across a range of disciplines, participatory approaches to coalitions with voluntary sector partners including "non-governmental agencies (such as health charities and professional associations), local associations of all kinds, community development groups, recreational associations, business groups, organized labor and other workplace programs" are crucial if First Nations are to effectively "advocate for the mitigation of health risks or for the implementation of health-enhancing changes to the various environments" (Ibid., p. 9).

- **The broad scope of essential public health functions** – although surveillance, assessment, protection, prevention, and response form the core of public health, the report argues that it is as important, from a community and population health perspective, to address the broader determinants of health, and especially those that "fall outside of the health sector, such as the environment, housing, and income disparity"; in the absence of higher rates of "employment, safe working conditions, and investments in social and human capital" (Ibid., pp. 9-11) to reduce disparities in income and wealth, positive social outcomes will remain unachieved.

One of the report's conclusions is that much remains to be done in terms of public health preparedness for many First Nations communities:

> If progress is to be made in collaboration across and within jurisdictions, First Nations governments need to invest urgently in formal mechanisms to exchange information, share best practices, undertake conjoint training, integrate and test contingency plans, and examine the interoperability of processes, protocols and equipment to respond to health emergencies (Ibid., p. 56).

2   INTERNATIONAL

For the World Health Organization's list of links to national and regional pandemic influenza plans, follow this link: http://www.who.int/csr/disease/influenza/nationalpandemic/en/index.html.

2.1   ETHICAL CONSIDERATIONS IN DEVELOPING A PUBLIC HEALTH RESPONSE TO PANDEMIC INFLUENZA (WORLD HEALTH ORGANIZATION [WHO], 2007)

This short report of minimal prescriptiveness, one that might best be understood as a tool designed to raise awareness and improve the quality of pandemic planning, summarizes the background papers and discussions of four working groups convened at the request of WHO Member States in 2006 to develop guidance on ethical issues in developing and implementing plans to respond to pandemic influenza. The report directly acknowledges that ethics cannot provide a prescribed set of policies, and instead seeks to provide practical guidance on how to incorporate ethical (and related human rights and legal) considerations into plans, preparations & responses to pandemic influenza. The text begins by providing a glossary (World Health Organization [WHO], 2007, pp. v-vi) in which a number of plain language definitions for key relevant principles are offered (including equity, utility/efficiency, liberty, reciprocity, and solidarity), before briefly discussing the following five "general ethical considerations":

1. **Balance rights, interests & values** – competing claims based on different principles must be assessed through ethical deliberations designed to reach appropriate decisions, which, if they infringe on individual liberties, "must be necessary, reasonable, proportional, equitable, non-discriminatory, and legal".

2. **Use best available evidence, but remain flexible** – because little may be known for certain about a pandemic in its early phases, judgments about public health measures must be made based on their likely effectiveness and benefits, but they must also be constantly re-evaluated in light of new evidence.

3. **Seek transparency, public engagement & social mobilization** – all aspects of planning should involve relevant stakeholders, and "[policy decisions and their justifications should be publicized and open to public scrutiny]" in order to foster public awareness, confidence, assent, feedback on local conditions, trust, legitimacy and compliance.

4. **Inform, educate & communicate** – advance planning is needed to develop strategies to reach the entire population in linguistically and culturally appropriate ways during all phases of pandemic preparedness and response (and especially to enable public participation in policy development, and public understanding both of the risks related to pandemic spread, and of the individual and collective measures that are justified and appropriate to respond to those risks).

5. **Justify resource constraints and allocations** – although what counts as "reasonable efforts to prepare" for a pandemic will vary according to the available resources and competing health priorities in any specific country, difficult allocation decisions (including contributions to the international cooperation necessary to overcome resource constraints

in developing countries) should be informed by public engagement processes and have clearly communicated rationales.

<div align="right">(WHO, 2007, pp. 3-4)</div>

Noting that "specific decisions will depend on local circumstances and cultural values" and thus that this global guidance must necessarily be adapted to the "regional and country-level context, with full respect to the principles and laws of international human rights" (Ibid., p. 2), the WHO report goes on to discuss in more detail (including reviews of general governmental responsibilities, broad ethical considerations, and specific decision-making criteria, as well as illustrative extracts from plans and processes from a variety of countries) the following four ethical challenges, each represented by a chapter title:

1. Priority setting and equitable access to therapeutic and prophylactic measures (Chapter 3, pp. 5-8);
2. Isolation, quarantine, border control and social-distancing measures (Chapter 4, pp. 9-12);
3. The role and obligations of health-care workers during an outbreak of pandemic influenza (Chapter 5, pp. 13-16);
4. Developing a multilateral response to an outbreak of pandemic influenza (Chapter 6, pp. 17-20).

A useful set of references, and an additional bibliography containing a series of links to key internet resources, are also provided.

2.2 GETTING THROUGH TOGETHER: ETHICAL VALUES FOR A PANDEMIC (NEW ZEALAND, 2007)

This document is the result of several years of broad public consultation to identify and discuss "widely shared ethical values to govern both how to make decisions, and what decisions to make, in the event of a pandemic" (New Zealand National Ethics Advisory Committee [NEAC], 2007b, p. 1). It is designed to be used by a "range of people, including health professionals, planners, policy makers and members of the public and the business community," (NEAC, 2007a, p. 6) as they think about and plan for their response to a pandemic. The framework of ethical values in this document has been integrated into the *New Zealand Influenza Pandemic Plan: A Framework for Action* (New Zealand Ministry of Health, 2010), the three overarching goals are to "**protect the people** (to minimise the impact of the disease, and to mitigate its effects on the people), **protect the society** (by enabling society to continue to function as normally as possible during and after a pandemic), **and protect the economy**" (Ibid., Part A, p. 9). New Zealand pandemic planning is based on a sequential five-stage strategy: "plan for it, keep it out, stamp it out, manage it, and recover from it" (Ibid., Part A, pp. 8-9). The strategy "is a means for focusing attention on the main task at hand at any given time, and a simple way of structuring plans and activities" (Ibid., p. 3) by indicating potential triggers and specific objectives for each stage.

Getting Through Together (NEAC, 2007a) focuses on how collective, shared values would help people care for themselves, their relations, and their neighbours. The document focuses specifically on using those values to guide action in a variety of situations, and perhaps most importantly for pandemic management, during situations of overwhelming demand. Key

concerns in the document include "individual and community involvement, and the importance of "neighbourly behaviour" for preventing isolation and enabling all citizens to be "carers" (NEAC, 2007a, pp. 41-42). This concern for "neighbourliness" is paired with a trio of objectives (**to minimize the harms of any pandemic, to minimize inequalities in the impact of any pandemic, and to foster acceptance of restrictions on individual freedoms when needed to protect others**), in order to animate the discussion of two hypothetical but highly detailed scenarios in two contexts: an urban setting and a hospital intensive care unit. The scenarios aim to illustrate the use of the proposed ethical values, generate discussion, and explore the challenges of using ethics to make decisions under conditions that resemble those that may occur during a severe pandemic. The report concludes that "imagination, common sense and discussion" must be applied to each particular situation during a pandemic, but that values can be acted on even when decisions must be made quickly, under stressful conditions in which resources are severely constrained, and even when "values pull us in more than one direction" (Ibid., p. 4). To this end, two quick reference guides are also proposed, one summarizing the Ethical Values for a Pandemic (NEAC, 2007b) and the other, Guidance on Pandemic Ethics (NEAC, 2007c), providing specific concise practical recommendations on four key issues. These resources are available from the following website: http://www.neac.health.govt.nz/moh.nsf/indexcm/neac-resources-publications-gettingthroughtogether.

There are three sections to *Getting Through Together*: (1) a statement of planning purposes and of ethical values, combined with practical guidance for promoting and protecting those values; (2) an application of the values to two extended case studies; and (3) a detailed discussion of the justification, importance, and implications of each of the proposed principles as they relate to both what decisions are taken, and to how decisions are made, in the context of an influenza pandemic. The statement of ethical values is summarized below, followed by the recommendations regarding the use of restrictive measures, the scope of professionals' duty to care, and a clinical triage tool for health service prioritization during a public health emergency.

Ethical values informing what decisions to make:

- **Minimising harm** – not harming others, protecting one another from harm, and accepting restrictions on our freedom when needed to protect others.

- **Respect/manaakitanga** – recognising that every person matters and treating people accordingly, supporting others to make their own decisions whenever possible, supporting those best placed to make decisions for people who cannot make their own decisions, restricting freedom as little as possible, but as fairly as possible, if freedom must be restricted for the public good.

- **Fairness** – ensuring everyone gets a fair go, prioritising fairly when there are not enough resources for all to get the services they need, supporting others to get what they are entitled to, and minimising inequalities.

- **Neighbourliness/whãnaungatanga** – helping and caring for our neighbours and friends, helping and caring for our family/whãnau and relations, working together when there is a need to be met.

- **Reciprocity** – helping one another, acting on any social standing or special responsibilities we may have, such as those associated with professionalism, agreeing to extra support for those who have extra responsibilities to care for others.

- **Unity/kotahitanga** – being committed to getting through the situation together, showing our commitment to strengthening individuals and communities.

(NEAC, 2007a, p. 5)

Ethical values informing how decisions are made:

- **Inclusiveness** – including those who will be affected by the decision and people from all cultures and communities, taking everyone's contribution seriously, striving for acceptance of an agreed decision-making process, even by those who might not agree with the particular decision made.

- **Openness** – letting others know what decisions need to be made, how they will be made and on what basis they will be made, letting others know what decisions have been made and why, letting others know what will come next, being seen to be fair.

- **Reasonableness** – working with alternative options and ways of thinking, working with and reflecting cultural diversity, using a fair process to make decisions, basing decisions on shared values and best evidence.

- **Responsiveness** – being willing to make changes and be innovative, changing when relevant information or the context changes, enabling others to contribute whenever we (and they) can, enabling others to challenge our decisions and actions.

- **Responsibleness** – acting on our responsibility to others for our decisions and actions, helping others to take responsibility for their decisions and actions.

(Ibid., p. 4)

Recommendations regarding restrictive measures:

- When possible and appropriate, **restrictions should be voluntary** rather than compulsory. Measures that promote voluntary compliance will reduce the need for compulsory restrictions.

- Restrictive measures should **restrict only those rights it is necessary to restrict**. Special attention may be needed for people who are subject to restrictions (for example, to their freedom of movement) to ensure their other rights are protected.

- **Reciprocal support** may be appropriate for people who, in order to protect others, are subject to restrictive measures.

- **Restrictive measures can only be justified when all of the narrowly defined circumstances set out in human rights law, known as the Siracusa Principles, are met:**
  - The restriction is provided for and carried out in accordance with the law.
  - The restriction is in the interest of a legitimate objective of general interest.
  - The restriction is strictly necessary in a democratic society to achieve the objective.
  - There are no less intrusive and restrictive means available to reach the same objective.
  - The restriction is not drafted or imposed arbitrarily, that is, in an unreasonable or otherwise discriminatory manner.

(Ibid., p. 35)

Recommendations regarding health professionals' responsibilities:

- **Health professionals have obligations to provide care** if a pandemic occurs, including when there is increased risk to themselves and their families.

- **Community expectations of health professionals should be reasonable**. For instance, we should not expect health professionals to provide care when personal risks outweigh patient benefits. Planning should aim to create conditions that enable health professionals to care for their patients and themselves.

- **Extra support is appropriate for health professionals and other workers in recognition of their extra responsibilities.** This includes facilitating their voluntary participation in pandemic response, minimising risk and, whenever possible, avoiding situations of unreasonable risk to health professionals. It also includes personal and public recognition of their contributions.

(Ibid., p. 47)

Questions for health service prioritisation in situations of overwhelming demand:

A guide for the prioritisation of resources (such as treatment in an intensive care unit), where 'yes' answers indicate that it might be appropriate to prioritise the patient in question:

1. Would this patient meet the clinical criteria for this treatment during normal times? (That is, when there is not overwhelming demand for the resource.)
2. Is this treatment the most beneficial form of treatment for this patient?
3. Does this patient require this treatment immediately? (That is, it is not possible for this patient's treatment to be safely deferred.)
4. Could capacity to deliver this service be expanded to treat this patient, with only minimal disadvantage to others?
5. Is it possible to mitigate the negative effects for this patient of missing out on this treatment?
6. Can this patient be ranked highly enough based on benefit from this treatment?
7. Can this patient be ranked highly enough based on order of presentation?
8. Can this patient be ranked highly enough based on random selection?

(Ibid., p. 53)

2.3 RESPONDING TO PANDEMIC INFLUENZA: THE ETHICAL FRAMEWORK FOR POLICY AND PLANNING (UNITED KINGDOM, 2007)

Designed to be used systematically as a checklist, but without ranking any principles or objectives above the others, this framework (UK Department of Health 2007a) was developed by an independent committee with cross-UK representation in order to inform and guide the 2007 National framework for responding to an influenza pandemic (UK Department of Health 2007b). The UK National plan, unlike its Canadian counterparts, aims to achieve simultaneously numerous strategic objectives (listed below). The UK Ethical framework proposes that **equal concern and respect** (in the sense not only that everyone matters, but also that the interests and suffering of everyone matter equally, and thus that minimizing the harm that a pandemic might cause is a collective concern) is the fundamental principle that draws together a number of other principles and that ought to underpin the public response

to an influenza pandemic (UK Department of Health, 2007a, p. 1). The other values that inform preparedness and response activities are:

- **Respect** – which means, as much as possible, keeping people informed of what is happening and what is going to happen, and letting people make their own treatment choices.

- **Minimizing harm** – which means minimizing the spread of pandemic abroad and at home, through learning from experience to minimize the risk of medical complications at the individual level, and the risk of disruption at the social level.

- **Fairness** – which means that the interests of everyone who may be affected by a decision must be considered, such that people with an equal chance of benefiting from health or social care resources should have an equal chance of receiving them.

- **Working together** – which means cooperating, mutual helping, acting responsibly (e.g.: not exposing others to risk), and sharing skills, resources, and information.

- **Reciprocity** – which means mutual exchange, such that those facing increased risks or burdens should be supported in doing so, and those risks and burdens should be minimized as far as possible.

- **Keeping things in proportion** – which means neither exaggerating nor minimizing the situation, and ensuring that decisions are based on the most accurate assessment of the relevant risks and benefits of the proposed action.

- **Flexibility** – which means that plans are adapted in light of changing circumstances and that people have the chance to express concerns about or disagreement with decisions affecting them.

- **Good decision making** – which means respect for **openness & transparency** (such that those concerned are consulted and there is openness about what, why and by whom decisions are made), **inclusiveness** (such that all relevant views are expressed, particular groups are not excluded, and disproportionate impacts are considered), **accountability** (such that decision makers are answerable for the decisions they do or do not take), and **reasonableness** (such that decisions are rational, practical, not arbitrary, and based on appropriate evidence and processes), as well as appropriate record-keeping of decisions taken and the justifications for them.

(Ibid., pp. 2-6)

In planning and preparing for an influenza pandemic, the UK Government's strategic objectives are to:

- **Protect** citizens and visitors against the adverse health consequences as far as possible.

- **Prepare** proportionately in relation to the risk.

- **Support international efforts** to prevent and detect its emergence and prevent, slow or limit its spread.

- **Minimise the potential health, social and economic impact**.

- **Organise and adapt the health and social care systems** to provide treatment and support for the large numbers likely to suffer from influenza or its complications whilst maintaining other essential care.

- **Cope** with the possibility of significant numbers of additional deaths.

- **Support the continuity of essential services and protect critical national infrastructure as far as possible**.

- **Support the continuation of everyday activities as far as practicable**.

- **Uphold the rule of law and the democratic process**.

- **Instil and maintain trust and confidence** by ensuring that the public and the media are engaged and well informed in advance of and throughout the pandemic period.

- **Promote a return to normality and the restoration of disrupted services** at the earliest opportunity.

(UK Department of Health, 2007b, p. 9)

Many of these values and objectives are also taken up in another prominent UK publication, *Public Heath: Ethical Issues* (Nuffield Council on Bioethics, 2007), which attempts to put the ethics of pandemic planning and response into both a deeper and broader context: deeper in the sense of how the issue connects and challenges various philosophical traditions and policy processes and practices, and broader in the sense of how it is just one element of an overall population health strategy, a strategy that necessarily involves political, regulatory, and economic considerations and that requires justification by explicit reference to "value judgements about what is or is not good for people" (Ibid., p. xvi). This report thus considers the responsibilities of government, industry, individuals and others in promoting people's health, all while respecting the central value of autonomy. It suggests that the state has a particular duty both to help people lead a healthy life and to aim to reduce health and other inequalities, and suggests that the adoption of a 'stewardship model' for public health policy can assist in outlining how that duty can be discharged and those aims achieved. The stewardship model attempts to balance John Stuart Mill's *harm principle* (which holds that the only legitimate basis for interfering with a competent individual's autonomous choices is where such a decision might harm other people (Dawson, 2008), and is frequently referred to in the public health ethics literature) against Mill's far less frequently cited view that coercion may be justified if and as necessary to ensure that individuals bear their fair share of the communal work needed to secure the interests of society. Stewardship is said to involve adherence to the "intervention ladder", a decision guide that assists in minimizing the restriction of individual liberties, and in avoiding unnecessary paternalism or coercion.

The extensive report considers in deep detail (including comparative international data and several hundred citations) the acceptability of different public health policies and measures that aim to provide and maintain at least some public goods. It also notes the responsibilities of industries for the health effects of products they produce, and argues that state intervention is justified when market failures put population health at significant risk. The key ethical issue in relation to infectious disease, according to the report, "is how to reconcile consent and civil liberty concerns with community benefit" (Nuffield Council on Bioethics, 2007, p. 77), and three principles are said to be of "special importance" when evaluating

public health interventions: the harm principle, caring for the vulnerable, and autonomy & consent (Ibid., pp. 143-144).

Case studies and policy recommendations are offered for four issues: **Infectious disease**, **Obesity**, **Alcohol and tobacco**, and **Water fluoridation**. The discussion of infectious disease as an important case study for public health ethics is not focused solely on influenza pandemics nor on control measures. Instead, the causes and consequences of infectious diseases more broadly (including vaccine preventable illness and HIV and other notifiable diseases) are reviewed, vaccination strategies and programs are compared in detail, and the importance of surveillance, information sharing, and a more equitable global distribution of public health resources is emphasized.

2.4 ETHICAL GUIDELINES IN PANDEMIC INFLUENZA (US CENTERS FOR DISEASE CONTROL AND PREVENTION, 2007)

Developed by a committee of prominent American bioethics scholars convened through the US Centers for Disease Control and Prevention (CDC), this document provides "a foundation for decision-making in preparing for and responding to pandemic influenza" informed by the twin goals of (1) **preserving the functioning of society** and (2) **protecting the public's health**. The guidelines aim to provide practical assistance by articulating "the boundaries and underlying ethical premises that can serve as a marker against which to test implementation decisions," although decision makers at all levels (federal, local, state, tribal, etc.) are encouraged "to continue to exercise their best judgment in particular situations" (Kinlaw and Levine, 2007, p. 2). A Fact Sheet and Ethics Checklist were also developed to summarize the ethical issues relevant to pandemic influenza and enhance ethical considerations in decision-making. These documents are available from the following website: http://www.cdc.gov/od/science/integrity/phethics/guidelinesPanFlu.htm.

Unlike many of the plans reviewed, the CDC guidelines stand apart from the US national plan they were designed to supplement. In fact, the US *Pandemic Influenza Plan* (US Department of Health and Human Services [DHHS], 2005), does not contain any specific moral guidance for the prioritization of the use of limited medical supplies and hospital beds, nor a framework of overarching values or principles for other ethical dilemmas related to pandemic response, although it does outline key government roles and responsibilities (and provides planning assumptions for federal, state and local authorities during a pandemic, along with detailed guidance to state and local health departments in 11 key areas). Subsequent work by two federal advisory committees, the Advisory Committee on Immunization Practices (ACIP) and the National Vaccine Advisory Committee (NVAC), generated recommendations incorporated into the DHHS Plan on the use of vaccines and antiviral drugs in an influenza pandemic. Interestingly, those recommendations explicitly rank order the goals of pandemic response, insisting that goal "to decrease health impacts including severe morbidity and death", must take precedence over that of "minimizing societal and economic impacts" (DHHS, 2005, Appendix D).

The following "General Ethical Considerations" are said to inform the CDC guidelines:

- Identification of **clear goals for pandemic planning** – commitment to preserving the functioning of society and protecting the public's health.

- Responsibility to **maximize preparedness** – commitment to determining and articulating rules that will govern public health decision making in advance of need to make decisions.

- **Transparency and public engagement** – commitment to clarity and openness in decision making, sharing of information, and obtaining input from the public.

- Sound science – commitment to **making decisions based on the best available evidence**.

- Global community – commitment to **working with and learning from global preparedness efforts**.

- **Balancing individual liberty and community interests** – commitment to using the least restrictive public health measures necessary to protect the common good and minimizing negative impacts of these measures.

- Diversity in ethical decision making – commitment of public health officials to **foster the trust of all diverse members of society**.

- **Justice (fair process)** – commitment to fair distribution of resources, such as vaccines and antiviral medications and in imposing restrictions, both locally and globally.

(Kinlaw and Levine, 2007, pp. 2-6)

Specific recommendations are made with regard to: (1) **vaccine and anti-viral distribution prioritization**, and (2) **non-pharmaceutical social distancing interventions that would limit individual freedom**. The issues of the duty of health care professionals to provide care during a pandemic, and of providing legal protections for health care providers who are asked to act outside of their usual realm of responsibilities during a declared public health emergency, were noted to be of central importance but outside the scope of the group's mandate.

Recommendations for the distribution of vaccines and antiviral drugs

Individuals and groups of persons key to maintaining critical infrastructure should be accorded a high priority for the distribution of these resources. The primary goals of any distribution system "should be clearly specified", and distribution criteria should contribute to the realization of those goals while "maximizing fairness (equity) in the distribution process" (Ibid., p. 6). "Equal opportunity to access resources should be assured to those within agreed upon priority groups", and the "least restrictive interventions that are likely to be effective" (Ibid., p. 6) should be favoured out of respect for individual autonomy.

Distribution plans should specify:

- What scarce goods are involved in the distribution plan?
- Who (or what agency) will decide about prioritization and distribution?
- What mechanism will be used in the case of a dispute or an appeal?
- Who is eligible to be a recipient?
- What criteria will be used to assign higher or lower priorities to groups of individuals?

(Ibid., pp. 6-8)

Use of liberty-limiting and social distancing interventions

The use of liberty-limiting and social distancing interventions should be voluntary where possible, and imposed as mandatory only in cases in which voluntary actions seem unlikely to be effective. Steps should be taken to ensure that necessary support services are provided to the impacted population ("adequate access to food, water and other essential services").

Enactment of liberty-limiting measures should be justified and clearly communicated to the public, and should be based on the best available scientific evidence that:

- The liberty-limiting measure will achieve its intended goal.
- The limitation is proportional and no less restrictive measure is likely to be as effective.
- Failure to implement the measure is likely to result in grave harm to the functioning of society or to the well-being of the public.

Liberty-limiting measures should be balanced against protection of individual rights:

- There should be no unwarranted invasions of privacy and the mechanisms for maintaining confidentiality of private information should be secure.
- Steps should be taken to protect affected individuals against stigmatization.
- Steps should be taken to avoid an unequal burden being placed on specific individuals or groups.
- Restriction on personal freedom should be equitably applied.
- An appeals process for those affected should be established.

(Ibid., pp. 8-11)

Another report, also developed by a specialized committee and intended primarily for an American audience, augments the discussion around both the allocation/distribution of scarce resources and the issue of patient and provider rights and obligations during a pandemic. The United States Institute of Medicine (IOM) letter report, *Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations* (IOM, 2009) seeks to "assist state and local public health officials, health care facilities, and professionals in the development of systematic and comprehensive policies and protocols for crisis standards of care in disasters where resources are scarce" (IOM, 2009, p. 10). It summarizes a series of workshop discussions around what types of policies and protocols with regard to standards of care would best serve to protect the public's health in the event that the 2009 H1N1 virus became a public health emergency (one in which thousands or even hundreds of thousands of people suddenly require and seek medical care in communities across the country, pushing the health system to its limits).

A vision of **fair, equitable, and transparent crisis standards of care** is provided in the IOM report, which includes criteria for determining when such standards ought to be implemented, "key elements that should be included in all crisis standards of care protocols" (Ibid., p. 20), and criteria for determining when standards of care should be altered. Noting that "an ethical framework serves as the bedrock for public policy" and that the tensions that arise between different ethical principles require careful weighing in light of "local values, priorities and available resources", the report proposes "a limited set of essential elements that reflect both

core substantive ethical values and processes, and that can serve as a model or a starting point for local deliberations" (Ibid., pp. 27-28). The proposed ethical values include the concept of **fairness and the professional duties to care and to steward resources**. The proposed ethical process elements include **transparency, consistency, proportionality, and accountability**.

2.5   SELECTED US STATE PLANS

For a complete list, follow this link: http://www.flu.gov/professional/states/stateplans.html.

For a survey and assessment of ethical guidance within US state pandemic plans, see Thomas, Dasgupta & Martinot, (2006), a study that found a "striking absence of ethical language", as well as a lack of practical instruction for ethical decision making in the majority of state plans. These omissions are both signs, according to the authors, of "an underdeveloped sensitivity to the ethical concerns raised by a pandemic" in state plans, which they also describe as "more often than not… opaque in their ethical reasoning." The following three plans (California, New Mexico, Minnesota) are among the few singled out by the authors as providing the most developed and articulated sections dedicated to ethical decision making during a pandemic.

2.5.1   California Department of Health Services (CDHS) Pandemic Influenza Preparedness and Response Plan (California, 2006)

This plan "provides a framework for CDHS pandemic influenza preparedness, response, and recovery activities", the overarching goals of which are to "**reduce the morbidity, mortality, and social and economic disruption caused by pandemic influenza**", consistent with CDHS' mission "to protect and improve the health of all Californians" (CDHS, 2006, p. 1). The only state pandemic plan in the USA to include descriptions of egalitarian and utilitarian approaches to the allocation of scarce medical resources, the California plan is also notable since it outlines a policy strategy for developing recommendations in that regard on the basis of a decision-making process that explicitly discusses the tensions between the two approaches. The process, explained by a presentation guide and survey tool developed by the University of California-Berkeley (2006), encourages the simultaneous analysis of the multiple goals, criteria, and alternatives relevant to prioritizing access to limited resources, and describes the steps necessary to conduct consultations with panels of experts charged with justifying the choice of goals, strategies, and target groups.

2.5.2   New Mexico Pandemic Influenza Operational Plan (NM PIOP) (New Mexico, 2008)

Three goals are put forward to guide state activities in response to an influenza pandemic in New Mexico: a) "**ensure continuity of operations of state agencies & continuity of state government**; b) **protect citizens**; and, c) **sustain/support 17 critical infrastructure sectors and key assets**" (New Mexico Department of Health [NMDOH], 2008, p. 19). Unlike most others, the New Mexico plan was formulated not by one specific agency or specialized committee, but through a decentralized planning process that distributed the task across 27 state agencies and required their participation in the creation of the voluminous 900 page comprehensive plan. The decentralization strategy, an impressive feat of inclusion and

participation, was also designed to familiarize all state agencies and staff with the key principles and strategies, as well as to foster collaborative integrated planning activities and shared supply chain inventories.

The New Mexico plan makes reference to a brief but rich 12 page document, the *Ethics Guidance and Matrix* (NMDOH, 2006), that describes an approach to ethical reflection and decision-making with which officials "must be familiar" (NMDOH, 2006, p. 7).

The document provides direction and resources to NMDOH personnel participating in ethics-based decision making processes initiated during health emergencies, and encourages them to examine ethical issues raised during the deliberation process prior to determining a course of action. A common language and frame of reference for decision-making is first provided. Each major ethical principle is clearly identified and explained. Specific questions and application steps are then provided to prompt and guide the practical consideration in any health emergency of nine key ethical principles, so as to provide a clear path for reaching decisions or recommendations (Ibid., p. 2).

The Ethics Guidance and Matrix insists that the nine key principles "must be applied to all challenging decisions in preparedness, prevention, response, and recovery" (Ibid., p. 6). The principles are drawn (with the notable exclusion of the principle of solidarity) directly and exclusively from *Ethics and SARS: Learning Lessons from the Toronto Experience* (2003), by the University of Toronto Joint Centre for Bioethics.

The Ethics Guidance and Matrix also directs authorities to "demonstrate their commitment to ethical practice in their sphere of responsibility" by following three "key behaviours":

1. **Identify and clearly communicate ethical principles** for consideration in health emergency management situations.

2. **Ask questions that elicit potential ethical concerns** from subordinates, external partners, colleagues, and stakeholders.

3. **Create and maintain a climate that encourages others to raise concerns** so ethical principles can be discussed openly and applied to any proposed action or recommendation.

<div align="right">(NMDOH, 2006, p. 8)</div>

2.5.3   Minnesota Department of Health (MDH) Pandemic Influenza Plan (Minnesota, 2006)

The purpose of this plan is to provide a coordinated and comprehensive state-wide response to an influenza pandemic in order to "**reduce morbidity, mortality, and social disruption and to help ensure a continuation of essential governmental functions**" (Minnesota Department of Health [MDH], 2006, p. 10). Although the plan in its current state does not contain an ethical framework, the last of the nine primary objectives of the plan is to "Assure that recommendations made during a pandemic are based on a sound, accepted, and ethical framework" (MDH, 2006, p. 10). A four page "Ethical Considerations Summary" (Attachment E) forms the basis for the MDH plan to address ethical considerations not identified in the national HHS plan, as well as develop "an ethical framework for decision

makers that could be used to promote public understanding, trust and buy-in" (Ibid., p. 251). This is to be accomplished mainly through the creation of interagency multidisciplinary consultation groups (with public input components). The "Ethical Considerations Summary" identifies **priority setting** (for vaccines, antivirals, limited medical supplies, and hospital beds) and **health care workers duty to provide care** as key issues to address, and suggests that **public communication** and **flexibility** (including transparency) are accompanying issues "crucial to successful implementation of the difficult decisions that must be made."

The Minnesota consultation strategy led to the formation of groups that have since published two far more comprehensive documents related to the rationing of health resources during a pandemic that supplement state planning and policy. These two reports are briefly summarized below.

For the Good of Us All: Ethically Rationing Health Resources in Minnesota in a Severe Influenza Pandemic (Vawter, D. E., Garrett, J. E., Gervais, K. G., et al., 2009)

This report proposes rationing frameworks unique to each of the following specific resources: antiviral medications, N95 respirators, surgical masks, pandemic vaccines and mechanical ventilators. The frameworks generally provide one set of guidelines for prioritizing different groups from among the general public, and another set of guidelines for prioritizing among key workers. The report also has background information about pandemic influenza, the process followed and assumptions made by the project team, and recommended follow-up activities (Schnirring, 2009).

Implementing Ethical Frameworks for Rationing Scarce Health Resources in Minnesota during Severe Influenza Pandemic (DeBruin, D. A., Parilla, E., Liaschenko, J., et al., 2009)

> This report offers recommendations that address issues about the practical application of ethical frameworks for rationing in an influenza pandemic. While such ethical frameworks for rationing play a critically important role in pandemic planning and response, important questions nonetheless remain about how their moral guidance can be practically implemented in the enormously complex context of actual pandemic planning and response. These recommendations concern broad practical issues that span the ethical frameworks (Schnirring, 2009).

Issues include equitable access to resources, eligibility for resources, emergency powers, standards of care, implementing rationing criteria, protecting the public, ethics consultation, and palliative and hospice care.

2.6 NATIONAL PLAN FOR THE PREVENTION AND CONTROL "INFLUENZA PANDEMIC" (FRANCE, 2007)

The main objective of the French plan is to protect its mainland and overseas population (as well as French citizens abroad) against the threat of an influenza pandemic. This is said to require the following: **preparedness**; **rapid detection and intervention** (to curb the spread of a new virus); **fulfilling France's international commitments**; **ensuring the best possible access to prevention and care means**; **ensuring essential government, security, and social functions** (for the continuity of law and order and the preservation of

economic activity); **preserving the relationship of trust between the population and the authorities** (particularly through well-coordinated, transparent and continuous communication); and **learning from real events and national and international drills** (in order to improve all of the above) (General Secretariat for National Defence, 2007, p. 4).

Among the numerous aims of the "general strategy of preparedness and response" listed in the French national plan is that of **ensuring social cohesion based on ethical principles**. Noting that a serious pandemic is an exceptional situation, the plan emphasizes: (1) defining priorities for access to health services; (2) promoting solidarity at all levels; and, (3) a commitment on the part of those whose missions involve direct contact with patients. The shared ethical values regarded as essential to preserving social cohesion are as follows:

- The duty of **solidarity at all levels**, from the international to the local;

- The **duty of providing care on the part of health professionals**, the **duty of society to protect them, their families and those whose work leads them to be exposed** (including people collaborating occasionally with the public service), and the **duty to ensure the future of families of those who fall victim to the disease**;

- An **ethical approach in terms of the elaboration of priorities of access to limited resources**, including health products, and **notification of the public of these priorities** as soon as they are issued;

- **Rejection of stigmatisation** of isolated patients or quarantined people;

- The **duty for everyone to participate as much as possible in the effort** to maintain the continuity of the life of the country.

(Ibid., p. 9)

2.7 AUSTRALIAN HEALTH MANAGEMENT PLAN FOR PANDEMIC INFLUENZA (AHMPPI) (AUSTRALIA, 2008)

The overarching aim of this plan, which is said to provide "a framework for a whole of government response", is to "**protect Australians and reduce the impact of the pandemic on social function and the economy".** The health sector's goal is, more specifically, to "**minimise the impact of an influenza pandemic on health and the health sector**" (Australia Department of Health and Ageing, 2008, p. 2). The AHMPPI includes an "Ethical Framework" to guide the health sector response. The nine values contained in the framework are to be taken into account when planning and implementing actions because of the need to make difficult decisions affecting many people (including decisions about restricting individual freedom, allocating limited resources, privacy, confidentiality, provision of health care and safety of employees), and because there could be conflicts between the needs of the population and those of the individual. The nine ethical values are:

- **Protection of the public** – ensure that the protection of the entire population remains a primary focus

- **Stewardship** – ensure that leaders strive to make good decisions based on best available evidence

- **Trust** – ensure that health decision makers strive to communicate in a timely and transparent manner to the public and those within the health system

- **Equity** – ensure that care is provided in an equitable manner, recognising the special needs, cultural values and religious beliefs of different members of our community—this is especially important when providing health services to vulnerable individuals, such as Aboriginal and Torres Strait Islander peoples and people who are culturally and linguistically diverse

- **Proportionality** – ensure that measures taken are proportional to the threat

- **Reciprocity** – ensure that when individuals are asked to take measures or perform duties for the benefit of society as a whole, their acts are appropriately recognised and legitimate needs associated with these acts are met where possible

- **Provision of care** – ensure that health care workers are able to deliver care appropriate to the situation, commensurate with good practice and their profession's code of ethics

- **Individual liberty** – ensure that the rights of the individual are upheld as much as possible

- **Privacy and confidentiality** – ensure that these are protected while recognizing that, under extraordinary conditions during a pandemic it may be necessary for some elements of the respect to be overridden to protect others.

(Ibid., pp. 26-27)

The overarching and operational objectives of the AHMPPI are presented below (Ibid., p. 20):
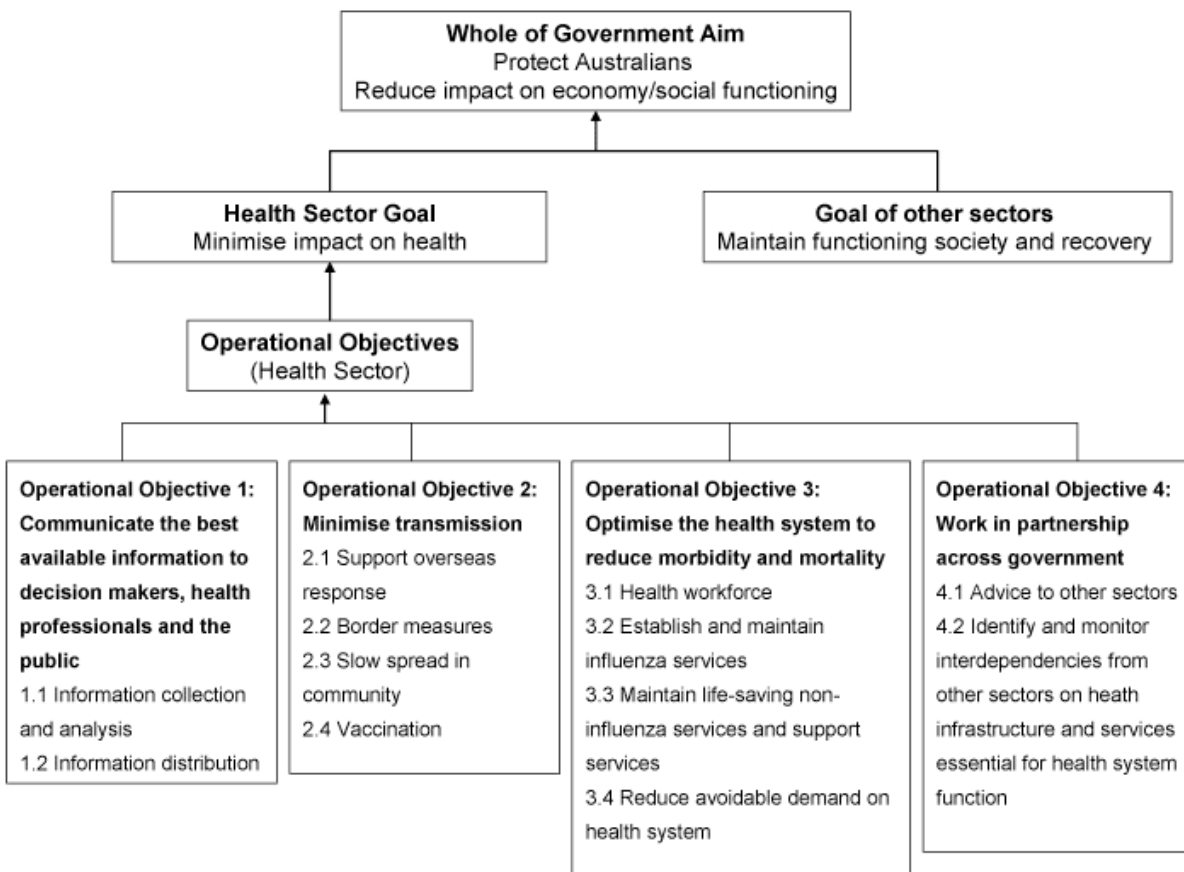
2.8   SWISS INFLUENZA PANDEMIC PLAN (SWITZERLAND, 2009)

Switzerland, one of the very few countries that committed (in 2006) to purchasing pre-pandemic vaccine in quantities sufficient to cover its entire population, commissioned the country's National Ethics Commission (NEC) to help clarify the ethical problems arising from issues relating to the distribution of scarce resources for the prevention and treatment of pandemic influenza. The resulting report, *Ethical Issues*, was prepared in 2007, and has since been integrated into the national plan as a distinct chapter. Chapter 10 reiterates the fundamental Swiss goal during a pandemic – "preserving life and minimizing the number of victims: As few people as possible should die of influenza" and asserts that the core ethical values that come into play in a pandemic are "**preserving life and solidarity**" (Swiss Federal Office of Public Health, 2009, p. 234). The Swiss plan consistently appeals for fairness, appropriateness in the imposition of public health measures, and respect for individual rights in the face of possible shortages and unequal exposure to risk. The importance of a range of additional values is also asserted, as follows:

- **Preserving life** – this is "the goal of preventive planning and of any measures taken in the event of a pandemic".

- **Solidarity** – "cohesion, standing as one with and supporting those in need of help and making joint efforts to avert the threat"; "all communication of information must be based on the principle that members of society want to act in a united manner insofar as possible, and not on the opposite assumption of an *a priori* absence of solidarity".

- **Individual freedom** – "restricting freedom is justified only if other measures that do not limit freedom cannot lead to the same outcome".

- **Proportionality** – "the extent of the measures must be directly related to the risk to public health and the expected benefit".

- **Privacy** – "personal matters may be made public only if this is essential for the health of the broader population. Any form of stigmatization must be avoided."

- **Fairness** – "the resources for prevention and treatment must be distributed fairly" (such that social privileges or disadvantages must not be allowed to affect allocation).

- **Trust** – "this includes trust in the goodwill and competence of those in positions of responsibility" (trust is not "blind", but arises from the ethical character and transparency of decisions).

<p align="right">(Ibid., pp. 234-235)</p>

"Preserving life" is such a priority in the Swiss plan that, unlike most other plans, **the avoidance of material scarcities** (and the triage decisions they impose on officials) is itself explicitly identified as an ethical imperative: "If a bottleneck occurs in the provision of resources for the treatment and prevention of pandemic influenza, **every effort must be made to make more resources available**… If necessary, resources must be transferred from other areas that are less important to life" (Swiss Federal Office of Public Health, 2009, p. 234). Elsewhere, the plan boldly asserts that "all possible resources should be mobilized to maximize availability" (Ibid., p. 236). The maintenance of solidarity between individuals and groups is also conceived of as an ethical imperative in the Swiss plan, and for the same reason: "since it is the task of the state to preserve the life of all its members" (Ibid., p. 235).

Fairness, impartiality, and equal value and respect are upheld in the Swiss plan to demonstrate that if the resources required to treat all patients properly are not available, then a truly "fair" decision is not possible (since fair would mean treating all according to their needs). The Swiss plan thus calls for the search for the "least unfair solution" (Ibid., p. 235) when it comes to the rationing of preventive and therapeutic resources, solutions which may seek to contain the spread of infection or save the maximum number of patients who are in a life-threatening condition, but which cannot accord preferential treatment to influenza patients over other patients requiring acute care. Rationing, according to chapter 10, must be based on the following criteria, which ensure that the decisions taken are reasonable and reviewable:

- **Transparency** of the measures implemented: they must be explained and justified.
- **Health benefit**: the measures must be based on scientific findings.
- **Practical feasibility**: the measures must reach the greatest possible number of individuals.

- **Adaptability**: it must be possible to review and modify previous decisions in the light of new experience and findings.

(Ibid., p. 236)

Given that the shortage of treatment option tends to emerge gradually during a crisis, the Swiss plan also calls for a **phased approach to the distribution of limited medical resources** such that they are initially provided to everyone in need, based on first come, first served. Then, when it is no longer possible to treat everyone, those resources are to be reserved for those whose condition is most threatening. In the third phase, which corresponds to the triage used in war or disaster situations (when all those who are in a life-threatening condition can no longer be treated), priority is to be given to those who are expected to have the best chance of survival as a result of the treatment, and those with poor prognoses will only be treated palliatively (Ibid. 2009, p. 237).

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