

10 Ethical issuesⁱ

The following text is intended 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 principles for any necessary rationing are identified and explained. These principles may form the basis of allocation procedures, and any corresponding discussion must include not just procedural considerations concerning the decision-making process, but also material considerations concerning content. The principles are guided by the goals of preserving life and minimizing the number of victims: As few people as possible should die of influenza.

A distinction is made between *prevention* (primarily through vaccination and other measures such as quarantine) and *treatment* (with antiviral drugs, intensive medical treatment and care, etc.). According to WHO nomenclature, a pandemic develops in successive phases during which various ethical issues arise. Even during the initial phases of the spread of the disease, prevention measures (for those who are still healthy) and treatment (for those who have contracted the influenza) have to be provided simultaneously.

In this context certain basic considerations that are relevant to the planning of pandemic provision should be formulated. The management of individual cases must be left to local practitioners (e.g. the emergency department of a hospital). In making their decisions, these practitioners are required to comply with the basic principles of medical ethics and general ethical standards.

1 Preserving life

1. Since influenza, and particularly pandemic influenza, is a potentially fatal illness that can affect large portions of the population, the resources for treating and preventing it are vital to all those who may be, or already are, affected. Human life is the greatest good to be preserved, because all other goods depend on it. Preserving life must therefore be accorded top priority, and corresponding precautions must be taken in order to ensure that life is also preserved in practice.
2. 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.

The reallocation of resources in order to avoid bottlenecks involves various levels of government activity and tasks undertaken by the administration, authorities and healthcare institutions. The criteria for triage and treatment planning do not involve assignment to individual institutions and hospitals, but must relate to the regional level. At hospital level, a systematic reorganization plan should ideally be prepared as a precautionary measure so that, if needed, less urgent treatments can be deferred so that additional capacity can be freed up.

2 Ethical values

Preserving life and solidarity are the core ethical values that come into play in a pandemic. Preserving life is the goal of preventive planning and of any measures taken in the event of a pandemic. Solidarity means cohesion, standing as one with and supporting those in need of help and making joint efforts to avert the threat.

A range of additional values is also important:

- 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.

ⁱ This chapter was prepared by the National Ethics Commission (NEC).

- fairness: the resources for prevention and treatment must be distributed fairly. This means, for example, 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.

3 Solidarity in the community

1. In the event of a life-threatening crisis, there is a risk of a decline in solidarity as a result of fear and traumatization or as a consequence of the instinct for self-preservation. During a crisis, the authorities must make every effort to maintain solidarity between individuals and groups, since it is the task of the state to preserve the life of all its members.
2. The framework for ensuring that individuals are able to act in a united manner beyond their immediate circle of relations is created by open, honest and effective communication. This means disclosing information concerning, for example, a scarcity of important goods, such as drugs or vaccines, inadequate or no experience of possible side effects and long-term sequelae, and the limitations of possible government action. 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.
The task of informing must always be planned with the aim of creating a climate of trust and solidarity. This assumes that the decisions taken are transparent and the result of consensus. The concern that certain information might disquiet or alarm the public does not constitute an adequate reason for failing to disclose that information.
3. On the other hand, precautions must be taken to ensure orderly distribution, since it must be expected that not all members of society will voluntarily comply with restrictions in a life-threatening crisis.

4 Approaching a fair distribution

When applied to life and health, the principle of fairness and impartiality means that every individual is of equal value.

The life of every individual, whether young or old, rich or poor, male or female, respected or marginalized, irrespective of their religion, political opinions, merits, etc. has the same worth, the same value and therefore the same right to treatment in case of illness. Certain patients should not receive privileged treatment at the expense of other patients on the basis of their ability to pay, standing, social position, etc.

2. If the resources required to treat all patients properly are not available, then a truly "fair" decision is not possible, because fair would mean treating all according to their needs. The least unfair solution must therefore be sought. Decisions are based on the following objectives:
 - containing the infection (the minimum number of people are affected) and
 - saving the maximum number of patients who are in a life-threatening condition.
3. Those who are suffering from influenza and other patients who require intensive care should be placed on the same level and assessed according to the same criteria. Influenza patients should not be given preferential treatment over other patients requiring acute care, but neither should they be treated any worse.

5 Principles for the distribution of scarce resources for prevention and treatment

1. Allocation does not involve an evaluation of the value of people's lives. Rather, it involves allocation in the knowledge that it is not possible to treat everyone equally. Since the rules and practice of allocation should not be allowed to negatively affect the equal value of all individuals, everyone must therefore have the same chances of access at the outset. Inequalities are justified only if they lead to a more effective containment of infection or to the saving of a relatively large number of

human lives. The efficiency of prevention is an ethical good because it involves the preservation of as many lives as possible.

2. If there are insufficient resources for everyone, the first to be excluded should be those who are not in need, i.e. those who will not suffer any disadvantage as a result of the exclusion (examples: no accumulation of vaccine or drugs, no Tamiflu treatment for those with a cold). At the same time, all possible resources should be mobilized to maximize availability.
3. Rationing must be based on criteria which ensure that the decisions taken are reasonable. The decision-making criteria should be reviewable in relation to the appropriateness of the steps. The key aspects are:
 - 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.

5.1 Principles for the allocation of scarce preventive resources

Allocation principles for vaccines and for other influenza **prevention** measures should be based on the objective of ensuring that as few people as possible fall ill during the pandemic. The question of allocation can be approached in different ways depending on the amount of vaccine available. If sufficient vaccine is available, decision-makers must establish who is to be vaccinated first in the vaccination timetable. If insufficient vaccine is available, criteria according to which the scarce vaccines are allocated must be drawn up.

The following ethical criteria should apply:

1. The first to be treated by prophylactic measures should be those who are in frequent contact with people, and who are thus at increased risk of becoming infected themselves and, moreover, who would propagate the illness to a particularly great extent if they were infected. This principle produces the maximum preventive effect with relatively small quantities of vaccine. The specific groups concerned in each case cannot be determined in advance. It also depends on how much vaccine is available, i.e. how large or small the proportion of the population that can be vaccinated is, and on when what quantity of further supplies can be expected.
On the basis of experience with "conventional" flu, the groups include, for example, schoolchildren, but also people working in healthcare who have direct contact with patients. Individuals with certain key functions that are essential to the maintenance of public order and orderly supply structures (parts of the police force) should also be assigned to the first category. In certain cases there should even be compulsory prophylaxis for these individuals.
2. In second place are those who might be most likely to die from influenza, i.e. those who would probably be most at risk if they were infected. These are the high-risk groups (e.g. the chronically ill).
3. In third place are those who are indispensable for maintaining public services. A distinction should be made within public services between those individuals with tasks that require specialist knowledge and those whose tasks could be assumed by others if necessary (for example refuse collection).
4. In fourth place are the rest of the population.

The definitive allocation of groups of individuals should be undertaken by a specially designated and competent body on the basis of the actual circumstances, epidemiological dynamics and the available and expectable quantities of vaccine.

Prevention through antiviral drugs

Since it is unlikely that a vaccine will be available in sufficient quantities from the moment the first pandemic cases are identified in Switzerland, it may prove necessary to use antiviral drugs as a preventive measure in certain cases. In this case the drugs would have to be given to individuals who look after infected patients or who come into contact with infected patients.

If sufficient drug stocks are available, prophylactic treatment might also be made available to individuals who are not directly exposed to the virus, provided this does not adversely affect the general protection of the public (e.g. as a result of the development of resistance). Supplies should be allocated according to the principles outlined above.

The epidemiological situation should be the decisive factor in allocating stocks of antiviral drugs to prevention and treatment.

5.2 Principles for the allocation of scarce therapeutic resources

Principles for the allocation of drugs, treatment places, respirators, beds and other resources for the **treatment** of influenza are based on the goal of saving the lives of as many influenza patients as possible. During prophylaxis, drugs are allocated according to different logical principles than during the treatment phase, when the disease is spreading and increasing numbers of individuals require treatment.

The shortage of treatment options emerges gradually, because the pandemic develops in stages. At the start, all possible measures are taken to increase treatment capacity, e.g. a reorganization of hospitals or the mobilization of additional temporary staff, provisional nursing places and drug reserves.

1. During the *first phase*, **everyone** who needs treatment will receive it. This phase will continue until the number of those requiring treatment exceeds the capacity of the enhanced treatment facilities. In this phase treatment is administered to individuals on a **"first come, first served"** basis or to those who **are already being treated** for another illness.
2. The *second phase* begins when it is no longer possible to treat everyone because the therapeutic capacity is exhausted, and some have to be turned away. In this phase, the scarce therapeutic resources are reserved for those whose condition is **most threatening**.
3. Finally, there is the *third phase*, which corresponds to the triage used in war or disaster situations. Right from the outset of this phase the scarce resources should be reserved for influenza patients in a life-threatening condition. When all those who are in a life-threatening condition can no longer be treated, priority will be given to those **who are expected to have the best chance of survival as a result of treatment**. Conversely, treatment in this phase will, if possible, be withheld only from those who are unlikely to benefit from it. Individuals with a poor prognosis will only be treated palliatively in this phase; intensive treatment, for example, will not be initiated.

Preference should not be given to the treatment of individuals who are particularly important to society for "political" reasons.

If supplies of treatment resources such as ventilators or patient beds are not (yet) limited at a certain point in time, but are available in the form of warehouse stocks (e.g. drugs), it may be appropriate to bring forward the implementation of a rationing policy as part of farsighted stock management before the available resources run out.

6 Additional considerations

1. Prioritization of prophylactic and treatment measures exclusively according to occupation or broad personnel categories would be too imprecise, ultimately random and unsystematic without a more careful consideration of the allocation principles formulated for prevention and treatment in 4.1 and 4.2. It would result in a less than ideal allocation, with people in senior positions presumably receiving a larger share, and would be detrimental to those in the lower priority categories.
2. The interpretation and implementation of the principles for allocation must be specified for each phase of the pandemic and adapted to the specific circumstances. To this end, specific bodies with the necessary specialist expertise, powers and capacities should be set up.
3. Those working in the healthcare professions (particularly doctors, nurses and those with responsibility for the technical and logistical functions of healthcare provision) who are in contact with influenza patients have a duty, as part of their professional ethos, to continue working during the pandemic. They therefore have the right to priority vaccination. In turn, society has an obligation to ensure that these individuals receive the best possible health protection and reasonable living conditions (including financial resources), and is responsible for any consequences that might arise from the fulfilment of this obligation (illness, invalidity or death).
4. The obligation to be involved in treatment in the event of a pandemic and the potential ethical dilemmas that may arise from this obligation should be discussed by peer groups and professional associations. The purpose of such discussions should be to clarify in advance the modalities for fulfilling this professional duty in such a situation. The moral obligation of medical and nursing personnel to be vaccinated in the event of a pandemic should also be discussed.
5. In view of the crucial importance of the motivation of medical and nursing personnel during a crisis period, it may be counterproductive to turn the moral duties of participation in treatment and vaccination into a legal obligation. However, any person who refuses to be vaccinated should not be allowed to come into direct contact with patients suffering from influenza.
6. Measures to restrict freedom (e.g. quarantine) are legitimate if they are beneficial, appropriate and necessary. Their introduction must be accompanied by a statement explaining why the measures are appropriate and necessary, what the expected benefit is and what the consequences of failing to comply will be. The living conditions (food, medical care, etc.) of individuals affected by these measures must be guaranteed.
7. Those who are ill, or presumed to be ill, should be protected from stigmatization and must be treated in accordance with the requirements of medical confidentiality.