

Caring for Frail Older Adults During COVID-19: Integrating Public Health Ethics into Clinical Practice

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During the coronavirus disease 2019 (COVID-19) pandemic, principles from both clinical and public health ethics cue clinicians and healthcare administrators to plan alternatives for frail older adults who prefer to avoid critical care, and for when critical care is not available due to crisis triaging. This article will explore the COVID-19 Ethical Decision Making Framework, published in British Columbia (BC), Canada, to familiarize clinicians and policy makers with how ethical principles can guide systems change, in the service of frail older adults. In BC, the healthcare system has launched resources to support clinicians in proactive advance care planning discussions, and is providing enhanced supportive and palliative care options to residents of long-term care facilities. If the pandemic truly overwhelms the healthcare system, frailty, but not age alone, provides a fair and evidence-based means of triaging patients for critical care and could be included into ventilator allocation frameworks. *J Am Geriatr Soc* 68:1666-1670, 2020.

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INTRODUCTION

Long-term care facilities (LTCFs) in Canada have been host to the most devastating outbreaks of coronavirus disease 2019 (COVID-19) and most of the country's deaths.¹ Most patients in Canadian LTCFs are older than 80 years, and nearly all have comorbidities and substantial frailty,² making them vulnerable to COVID-19 infection. In

the United States, an epidemiological study from a Washington state care facility showed that nearly two-thirds of residents contracted COVID-19 infection during an outbreak. Most residents experienced respiratory symptoms, half were transferred to the hospital, and the death rate was 33.7%.³ Given the burdens of COVID-19 for frail older adults, clinicians and healthcare administrators should carefully consider how frailty affects pandemic planning.

Although most pandemic ethics literature focuses on critical care restrictions and ventilator allocation in settings of resource scarcity,⁴ these frameworks do not comprehensively serve the needs of frail older adults, especially those who wish to avoid critical care. This article will use principles drawn from both clinical ethics (CE) and public health ethics (PHE) to encourage clinicians to reframe COVID-19 discussions toward what can be done for frail older adults, using examples from British Columbia's (BC's) pandemic response.⁵

COVID-19 IN FRAIL OLDER ADULTS

The medical profession has viewed hospitalization and critical care measures, including noninvasive ventilation as well as intubation and ventilation, as important means to support severely affected individuals through COVID-19 infection.⁶ However, as we care for our frail patients with COVID-19, a sobering reality is becoming apparent. A frail individual has reduced ability to withstand medical stressors due to a baseline decline in physiological reserve. Substantial research has associated frailty with adverse health outcomes, including mortality and admission to the hospital.⁷ Although age is a risk factor for frailty, not all older adults are frail.⁸ In Canada, the Clinical Frailty Scale is a validated tool that assigns frailty based on a combination of factors, including functional status, cognition, and comorbidity.⁹ Patients are graded on a scale from very fit¹ to severely frail,⁷ with scores over 5 representing increasing frailty. Although no studies have yet looked at frailty as an outcome marker in COVID-19 infection, a large body of evidence has established that frailty is a good general predictor of post-critical care functional decline and mortality.^{10,11} Further, emerging research from China, Europe, and the United States demonstrates that older adults experience

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substantial morbidity and mortality following severe COVID-19 infection.^{3,12-15}

ETHICAL DECISION-MAKING DURING COVID-19

As society responds to the healthcare system pressures arising from the COVID-19 pandemic, we must consider the accumulating body of medical evidence alongside the values and ethical principles that shape decision-making. For older adults, a frailty paradigm is a helpful contributor to ethical decision-making, even before addressing issues of resource scarcity.

CE frameworks primarily consider the needs and rights of individual patients, while also keeping in mind community safety and resource stewardship more broadly.¹⁶ The

four principles of western bioethics include autonomy, beneficence, nonmaleficence, and justice. The principle of autonomy supports voluntary and informed patient decision-making, in keeping with individual values and preferences. The principle of beneficence charges healthcare providers to provide treatment that offers the most overall benefit to the patient. The principle of nonmaleficence requires that clinicians not intentionally harm a patient, through acts of either commission or omission. The principle of justice considers the fair distribution of resources in a healthcare system.

During COVID-19, clinicians and administrators should also consider principles from PHE, whose central aim is to improve the health of the general population. PHE principles inform public health actions, including

Table 1. Public Health Ethics Principles (Adapted from the COVID-19 Ethical Decision Making Framework)

Public health ethics principle ^a	Definition	Example of principle in use during COVID-19 pandemic
The harm principle	<ul style="list-style-type: none"> A society has a right to protect itself from harm. The government is justified in limiting the freedoms of individuals to protect the community from harm. Restrictions should be commensurate with the perceived risk, and the least intrusive measures that are effective should be sought. 	<ul style="list-style-type: none"> Implementing visitor restrictions at LTCFs and hospitals to reduce COVID-19 spread.
Respect	<ul style="list-style-type: none"> To whatever extent possible, individual autonomy, liberties, and cultural safety must be respected. 	<ul style="list-style-type: none"> Allowing visitors into LTCFs for end-of-life religious ceremonies, despite strict policies that limit visitation.
Fairness	<ul style="list-style-type: none"> Everyone matters equally, but not everyone will be treated with the same medical interventions or resources. Equity: those who most need and can derive the greatest benefit should to be offered resources preferentially. Efficiency: resources should be distributed to achieve the maximum benefits to the greatest number. Consistency: resource allocation decisions must be applied consistently, regardless of social standing. 	<ul style="list-style-type: none"> Personal protective equipment is allocated first to healthcare providers who have the greatest risk of COVID-19 exposure, to reduce chances of infection and thereby ensure healthcare providers remain healthy for the duration of the pandemic to care for patients.
Least coercive and restrictive means	<ul style="list-style-type: none"> Any infringements on personal rights and freedoms must be carefully considered, and the least restrictive means must be sought. 	<ul style="list-style-type: none"> Social distancing measures are preferred over strict quarantine of all households.
Working together	<ul style="list-style-type: none"> Cooperation is essential during this international threat—between individual citizens, health regions, provinces, and nations. 	<ul style="list-style-type: none"> Every individual adheres to social distancing measures to reduce COVID-19 spread.
Reciprocity	<ul style="list-style-type: none"> If people are asked to take increased risks, or face disproportionate burdens during a pandemic, the risks and burdens should be minimized as far as possible. 	<ul style="list-style-type: none"> Healthcare providers should be provided with personal protective equipment to reduce the risk of COVID-19 infection.
Proportionality	<ul style="list-style-type: none"> Measures implemented, especially restrictive ones, should be proportionate to and commensurate with the level of risk. 	<ul style="list-style-type: none"> Social distancing measures are preferred over strict quarantine of all households.
Flexibility	<ul style="list-style-type: none"> Any plan must be iterative and adapted to new knowledge that arises. 	<ul style="list-style-type: none"> After finding increased mortality in nursing homes without COVID-19 outbreaks, visitation restrictions should be relaxed to reduce the detrimental effects of social isolation.
Procedural justice	<ul style="list-style-type: none"> Decision-makers should be identifiable and be held accountable for decisions. There will be a fair and transparent decision-making process that is inclusive of stakeholder input. Pandemic protocols should be publicly available. Decisions are made based on reason and medical evidence. 	<ul style="list-style-type: none"> Ventilator allocation triage protocols are published in the public domain.

Note: For full details of the COVID-19 Ethical Decision Making Framework, see COVID-19 Ethical Decision Making Framework, British Columbia, Canada, Center for Disease Control.⁵

Abbreviations: COVID-19, coronavirus disease 2019; LTCF, long-term care facility.

^aNo principle is ranked above any other. Principles may be weighed against each other in the course of decision-making.

rationing.¹⁷ The PHE principles in this article, summarized in Table 1, are taken from the British Columbia COVID-19 Ethical Decision Making Framework.⁵ The framework and its principles arose following deliberations by a team of provincial ethicists, and have influenced actions taken by clinicians and healthcare administrators in BC.

Principles used in CE and PHE overlap substantially and are not mutually exclusive. During nonpandemic times, clinicians use the CE principle of justice to balance the needs of individual patients while still ensuring the health of populations. This is illustrated by the need for driving restrictions in dementia and organ transplantation criteria. In pandemic settings, clinicians must try to uphold the PHE principle of respect (Table 1), which mirrors the CE principle of autonomy, valuing individual patient preferences, as far as possible.

The COVID-19 pandemic highlights two major opportunities for ethical reflection. The first is that, regardless of resource abundance or scarcity, principles from both clinical and PHE encourage clinicians to focus on advance care planning (ACP), supporting frail patients to access care in keeping with their values and goals. Additionally, administrators must ensure that there is adequate supportive and palliative care for patients who wish to avoid aggressive interventions. Pandemic planning must not focus exclusively on ventilators or critical care.

The second scenario for ethical reflection is when critical care scarcity causes tension between the PHE principle of fairness (Table 1) and the CE principle of autonomy.¹⁸ If resources are limited, clinicians must think beyond their primary ethical duty to individual patients, to consider the well-being of communities. Healthcare providers, administrators, patients, and families may be confronted with unfamiliar and uncomfortable rationing. Patient frailty should carry significant weight in resource allocation decision-making. The two scenarios outlined above will be explored in detail in the following sections.

ACP DURING COVID-19

Caring for a frail older adult with severe COVID-19 is not different than caring for that same patient in the setting of any other critical illness, so long as resource scarcity does not rigidly confine treatment options. Specifically, ACP discussions during COVID-19 should include information regarding the poor outcomes observed in frail older adults who are critically ill with COVID-19.^{3,12-15} Patients who are frail, are of advanced age, are near the end of life, or have serious medical diagnoses, such as severe heart failure and emphysema, benefit from a clear understanding of the role that hospitalization and critical care play in helping them to achieve their goals.¹⁹⁻²¹

During the COVID-19 pandemic, clinicians should proactively engage their patients and substitute decision-makers (SDMs) in ACP discussions, rather than waiting until the patient is severely ill. During these discussions, patients can identify their preferred SDM, should they be unable to speak for themselves. In BC, the government has created new telemedicine billing codes to support this important work. Proactive goals-of-care discussions have taken place for numerous LTCF residents. SDMs are included in these discussions by telemedicine because of COVID-19 visitation

restrictions in place at LTCFs.²² Experts in ACP have developed serious illness conversation scripts specific to COVID-19.^{23,24}

Given the evidence of poor outcomes for frail older adults with severe COVID-19, clinicians may even wish to “flip the default” during ACP discussions, requiring frail patients to “opt out” of supportive and palliative care. However, in a case where a frail patient or SDM demands critical care despite being counseled against it, critical care should still be an option. As long as the healthcare system has capacity during standard operations, respect for autonomy often outweighs the principles of beneficence, non-maleficence, and justice in day-to-day CE.²⁵

SUPPORTIVE MEDICAL AND PALLIATIVE CARE DURING COVID-19

The healthcare system must support frail older adults who are disproportionately affected by COVID-19 illness and mortality, and minimize the burdens placed on them.⁵ Instead of asking “how do we ration a scarce resource,” clinicians and health administrators should ask “how do we best deliver holistic care to the frailest and most vulnerable among us?” The PHE principle of reciprocity (Table 1) reminds clinicians that providing excellent supportive and palliative care is a deliberate action, and not simply a philosophy of avoiding ventilators. If society cannot provide excellent supportive medical and palliative care, the public will rightly perceive that older people are being abandoned by the healthcare system.

In BC, the Public Health Officer has given an order that frail older adults who test positive for COVID-19 should remain on-site at LTCFs to receive supportive care by default, rather than transfer to an acute-care facility.²⁶ All facilities with outbreaks are assisted by a rapid response infection control team,²⁷ and LTCF nurses can now provide oxygen and parenteral fluids through hypodermoclysis, helping those who can recover to do so on-site.²⁶ Nurses have access to comfort-focused medications, and the divisions of palliative care and geriatric medicine are offering videoconferencing consultations to LTCFs to support end-of-life care. Families who wish to visit their loved ones at end of life can do so by an exemption to the LTCF visitation policy.²²

If an LTCF resident and his/her SDM believe that the benefits of transfer to the hospital outweigh the burdens, they must take part in a goals-of-care discussion by telemedicine.²⁶ Following this discussion, they can apply to the medical health officer to seek an exemption to the order. Although the order limiting transfer to hospital appears restrictive, it ensures that patients and families are informed about the expected outcomes following transfer. In this way, BC LTCFs have “flipped the default,” requiring frail older adults to “opt out” of supportive and palliative care on-site, rather than reflexively transferring patients to the hospital without first engaging in a robust discussion about the risks and benefits.

CRITICAL CARE TRIAGING IN COVID-19

At this time, there is no evidence in Canada or the United States that ventilator shortages are a substantial factor in

any COVID-19 deaths, especially for frail individuals. Further, excellent ACP may curtail ventilator use if frail older patients decide that they prefer supportive or palliative care options. However, a major surge in patient volumes could still lead to the utilization of most ventilators within the healthcare system. If this were to occur, public health officials will trigger rationing protocols, and place limits on the authority of individual patient autonomy.^{5,18} The PHE principle of fairness describes the rationale to allocate resources in states of scarcity.⁵ Fairness means that, although the welfare of all patients matters equally, not all patients with similar needs will receive the same treatment (Table 1).

The public health principle of equity (Table 1) indicates that those who need and can most benefit from a scarce resource should receive it preferentially over those who will not benefit as much.⁵ For example, patients who most need critical care include those with hypoxic respiratory failure from COVID-19. Should there be resource scarcity, ventilators will be provided only to those who are most likely to benefit. From the existing evidence, younger patients with fewer comorbidities are more likely to survive severe COVID-19.¹²⁻¹⁵ In the setting of pandemic resource scarcity, the principle of equity suggests that younger patients who are not frail should have preferential referral to critical care because they are most likely to benefit.

The public health principle of consistency (Table 1) requires that triaging rules operate in the same way among individuals in a similar clinical group, and not in an ad hoc fashion open to the influence of bias.⁵ Frailty provides a consistent and evidence-based model to apply when triaging patients for critical care,^{6,7} and has been used in some jurisdictions during COVID-19.²⁸ In BC, a ventilator allocation framework (in draft)²⁹ will outline the process in the case of a major patient surge, so that decision-making is fair and consistent for all patients in the province.

A ventilator allocation framework gives clinicians clear rules to follow.⁴ Relying on “heat of the moment” decisions and individual clinician judgment threatens the fidelity of any triaging protocol, and will be difficult to defend publicly. Society must not hold individual clinicians accountable for why one patient qualifies for critical care over another, and government bodies developing triage protocols must consider legal protection for clinicians. A committee of physicians, operations leaders, and ethicists should review hospital operations regularly, and trigger the crisis triage protocol during critical levels of patient surge.²⁹ This committee can monitor triage decisions to ensure that individual clinicians understand and are adhering to triage criteria.

Decisions to withhold or withdraw critical care based on ventilator allocation frameworks will be unavoidably difficult for all involved. However, if clinicians inform patients and families about the standardized process and rationale for triage, they may be more likely to accept the decision as fair, even if they disagree with the outcome. Decision-makers should publish policies and triaging frameworks so the public can hold them accountable.

Although some may argue that excluding frail older adults from critical care in a pandemic is ageist, frailty is a much fairer means to allocate scarce resources than age alone. A robust older adult is likely to derive more benefit

from critical care than a frail older adult with substantial comorbidities.^{6,7} A frailty triaging model reduces the likelihood of an undesirable “first come, first served” resource allocation outcome. In COVID-19 ACP discussions, clinicians should emphasize the CE principles of beneficence and nonmaleficence to discourage individual frail patients from critical care. This approach aligns with guidance from the PHE principle of fairness applied to frail populations, stewarding resources for those who can most benefit.

CONCLUSIONS

During the COVID-19 pandemic, ethical principles prompt us to plan for patients who want and will receive critical care, and for patients who will not, either by preference or because of resource limitations. Regardless of resource abundance or scarcity during COVID-19, clinicians caring for frail older adults must conduct ACP conversations early and often, so patients can make informed healthcare decisions. Excellent ACP may curtail ventilator use if frail older patients choose supportive or palliative care. In this way, CE principles may support public health goals by reducing pressure on society’s limited pool of critical care. If the healthcare system is truly overwhelmed, frailty scoring, but not age alone, is a fair and evidence-based means of allocating critical care resources to those who will likely benefit.

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