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Special Article

Palliating a Pandemic: “All Patients Must Be Cared For”

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on behalf of the Associated Medical Services Inc. Educational Fellows
in Care at the End of Life

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Abstract

In the event of an overwhelming influenza pandemic, many health care systems will implement a triage system that would potentially deny critical care treatment to some seriously ill patients. Although all triage systems have guaranteed palliative care for those who are denied critical care, no jurisdiction has yet developed a plan to accommodate the anticipated “surge” in demand for palliative care. The authors present a mathematical and ethical justification for a palliative care surge plan and outline some of the key elements that should be included in such a plan. J Pain Symptom Manage 2010;39:291–295. © 2010 U.S. Cancer Pain Relief Committee. Published by Elsevier Inc. All rights reserved.

Key Words

Palliative care, pandemic, surge planning

Introduction

Countries throughout the northern hemisphere now face the prospect of an influenza pandemic that threatens to overwhelm their health care infrastructure. Many jurisdictions have developed a comprehensive plan for allocating scarce health care resources (e.g., critical care beds) in the event of a pandemic.^{1–3}

If these plans are implemented, some critically ill patients will be denied life-sustaining therapy based on a triage system. However, all plans are clear that any patient who is denied life-sustaining therapy can still expect to receive palliative care.^{1–3} Unfortunately, they do not include a plan for coping with a large “surge” in the demand for palliative care.

A Projected Pandemic

Take Ontario as an example. Using a model developed by the Centers for Disease Control (CDC) in the United States, the Ontario Health Plan for an Influenza Pandemic estimates that more than 60,000 patients will require hospitalization, ~9,000 will require intensive care unit (ICU) admission, ~4,500 will require mechanical ventilation, and ~12,000 will die over an

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eight-week period.¹ At present, Ontario has ~1,000 ventilator-supported ICU beds, of which more than 90% are occupied at any given time. By the fourth week of the outbreak, our need for mechanical ventilation will be 200% of our capacity (assuming that the needs of noninfluenza patients do not change). By Week 5, more than 1,800 people will require hospital admission, and almost 200 will die in hospital *every day* from influenza alone. At times, the number of seriously ill patients denied life-sustaining therapy may actually *exceed* the number who receive it. According to the plan, all of the former are supposed to receive palliative care. Unfortunately, our palliative care resources are even more limited than our critical care resources, and they would likely be overwhelmed within days.

The early experience with H1N1 influenza in North America was limited, but some regions reported difficulties accommodating even a small surge in the demand for critical care resources.^{4,5} Subsequent data from Australia and New Zealand during their winter suggested that the CDC's estimates of overall disease incidence, admission rate, and need for ICU admission were fairly accurate.^{6,7} Fortunately, the "surge" in demand for hospitalization and critical care resources did not overwhelm any health care systems or create the need to implement a triage process. However, this is no guarantee that we will not need to do so in the future, either for the present H1N1 pandemic or another viral respiratory illness.

We Need a Palliative Pandemic Plan

We have an obligation to provide good symptom control for our patients. Unfortunately, we often fall short of meeting this obligation even in nonpandemic times.⁸ However, the consequences of failing to provide comfort care in a pandemic would be even more serious.

First, it would undermine one of the key principles of the triage process—the idea that all patients will be cared for. Seriously ill patients and their families might be upset by the denial of potentially life-saving therapies in a triage system, but if we cannot provide comfort care either, then they would (rightly) feel abandoned by the health care system entirely. They would suffer the double insult of being denied a role in decision making and then being forced to die (or watch a loved one die) suffering.

Second, it would exacerbate the stress of the frontline health care workers caring for those admitted with influenza. Many would be obliged to work in areas unfamiliar to them, with workloads that exceed normal levels. In addition, they would watch their patients dying with uncontrolled symptoms and feel unprepared for and unsupported in treating them. This would lead to higher rates of staff burnout and post-traumatic stress disorder—something that overwhelmed health care systems can ill afford.

This situation also might cause well-intentioned staff to act out of desperation to relieve the symptoms that they are witnessing. In the aftermath of Hurricane Katrina in New Orleans, a physician and two nurses were arrested on charges of second-degree murder after all nine patients in one hospital ward died within a 3.5-hour period, with high levels of morphine and benzodiazepines in their blood.^{9,10} Although all charges were later expunged, many of the forensic pathologists consulted in the case had concluded that the deaths were homicide, and there are still civil lawsuits in progress against the physician more than three years later. Whether or not these patients were euthanized, all health care professionals should recognize the danger of having overwhelmed and unsupported staff providing care for dying patients and the potential for incidents like this to undermine public trust in health care professionals.

What Should Be in the Plan?

We can look to critical care as a model for providing "surge" capacity during a crisis. In one recently published review,¹¹ the authors identified three crucial elements: "stuff," staff, and space. We will add a fourth element: systems. Proactively planning around all four elements will be vital in providing comprehensive palliative care (Table 1).

In terms of "stuff," we need to ensure that we have the equipment and supplies to provide palliative care for large numbers of people. This would include medications to treat the common symptoms of influenza (e.g., opioids for dyspnea, haloperidol or methotrimeprazine for nausea and delirium, scopolamine for secretions, acetaminophen for fever and chills) and the equipment to deliver them (e.g., subcutaneous butterfly needles, continuous drug delivery

Table 1
Summary of Palliative Care Pandemic Plan

“Stuff”	Staff	Space	Systems
Stockpile medications for common symptoms: <ul style="list-style-type: none"> • Opioids for dyspnea and pain • Haloperidol or methotrimeprazine for nausea and delirium • Scopolamine for secretions Stockpile equipment to deliver medications: <ul style="list-style-type: none"> • Subcutaneous butterflys • Continuous drug delivery pumps Prepare kits including medications and equipment to deliver medications for long-term care facilities and home care services.	Identify all clinicians with palliative care expertise: <ul style="list-style-type: none"> • Physicians • Nurse specialists Provide focused education sessions to frontline staff for symptom management and end-of-life care for H1N1 patients. Develop standardized order sheets and protocols for symptom management and end-of-life care for H1N1 patients. Involve specialist allied health care workers to provide psychosocial support and grief and bereavement counseling. <ul style="list-style-type: none"> • Social workers • Spiritual care staff 	Identify wards and nonclinical areas in all health care facilities that would be appropriate to accommodate large numbers of patients expected to die. Maximize the use of identified palliative care unit, hospice, and ward beds.	Create a triage system to identify patients in need of specialist palliative care management (see text). Create a triaging system for intrafacility, interfacility, and community transfers to dedicated palliative care units, hospices and wards. Create a system for direct consultation support for staff in hospitals, long-term care facilities, and the community by telephone or telemedicine. Ensure that all patients currently admitted to health care facilities have clear and updated advance care plans.

SOB = shortness of breath; LTC = long-term care.

pumps). This “stuff” could be prepared in kits that could be sent to facilities that would be providing palliative care outside of hospitals (e.g., nursing homes or home care services).

In terms of staff, we must appreciate the fact that palliative care specialists could only treat a small minority of dying patients (as is currently the case). We need to identify all clinicians (physicians and nurse specialists) with palliative care expertise to boost palliative care capacity. We then need to empower frontline health care workers to provide high-quality palliative and end-of-life care before the involvement of palliative care specialists. Standardized order sheets and protocols, along with focused education sessions for physicians and nurses in hospitals, long-term care facilities, and the community, could address common influenza symptoms, such as dyspnea, nausea, and pain. Other common indications for palliative care assessment, such as psychosocial support, grief, and bereavement, could be managed instead by specialist allied health care workers, such as social workers and spiritual care staff.

In terms of space, again, proactive planning is vital. Hospitals and other health care facilities need to identify dedicated wards and create areas to accommodate the large number of patients expected to die. These “palliative” wards should focus on comfort and dignity (as hospice wards and palliative care units

currently do) and provide a more quiet and peaceful environment for the final hours of life. They would allow facilities to focus their palliative care resources (e.g., specialist nurses, spiritual care, social work, and others) on the patients who need them. We should also aim to maximize the use of existing palliative care units and hospice beds, as past experience with Severe Acute Respiratory Syndrome (SARS) demonstrated the potential for such beds to be underutilized.¹²

In terms of systems, we need to have a triage system for identifying patients in greatest need of direct specialist care. These might include:

- Patients with complex symptom control needs
- Patients already followed by a palliative care specialist
- Patients whose symptoms have not been adequately controlled by standardized protocols
- Seriously ill patients who have been denied life-sustaining treatment because of the triage system
- Younger adults, particularly those with no significant medical history, who are parents and providers for young children

Not all of these patients will be in facilities with palliative care resources; hence, we need a plan to triage patients who are awaiting

transfer into existing palliative care units, hospices, and wards. Intrafacility, interfacility, and community transfer requests would need to be prioritized based on the severity and complexity of their symptoms. We also should establish a system of consultation support for all staff working in hospitals, long-term care facilities, and the community. When direct consultation with a palliative care specialist is not possible, telephone or telemedicine systems should be used. Finally, all health care facilities should ensure that every one of their patients has a clear and updated advance care plan in place before the arrival of the pandemic, so that treatment decisions do not have to be made in a crisis.

Ethical Considerations

We cannot develop a pandemic palliative care plan without addressing some important ethical considerations. One report identified a number of substantive values that have relevance here.¹³ These include:

- *Protection of the public from harm.* An influenza pandemic and a triage system have the potential to create significant physical and emotional distress. We have an obligation to protect those who suffer from the effects of the pandemic and the triage system.
- *Proportionality.* Any triage of palliative care resources must reflect the needs of the community and should not exceed what is necessary to provide high-quality palliative care to those in need. Medications, equipment, beds, and specialists should not be “hoarded” when others in the community need them.
- *Duty to provide care.* Palliative care is a critical component of any pandemic triage plan, and palliative care practitioners have an obligation to provide care and relieve suffering during a pandemic. We must always balance this duty against competing obligations to protect our own health and that of our families, but there are options for health care workers who have trouble finding this balance (e.g., vaccination, antiviral prophylaxis). The risks of contracting a dangerous communicable disease are well known to those who provide patient care, and they were certainly known to us when we freely chose to enter our profession.
- *Reciprocity.* We should focus greater palliative resources on patients who assume a greater burden from the triage system, such as critically ill patients who are denied life-sustaining therapy. These patients (and their families) are at great risk of feeling abandoned by the health care system, and they must not be denied care.
- *Equity.* We must ensure that high-quality palliative care is available to all patients who might need it, regardless of their location. Patients who cannot receive adequate palliative care in their present location should have a high priority for transfer to an appropriate facility. We also must ensure that palliative care is prioritized alongside “nonpalliative” care for access to medications, staff, and other resources. Palliative care patients have an equal demand to care even if they are not expected to survive.
- *Trust.* Health care providers must communicate honestly and make decisions transparently to maintain the trust of other health care workers and the public. Health care practitioners must be clear when treating symptoms that they are not seeking to hasten death or practice euthanasia. Trust can easily be lost, and it is very difficult to restore.

Conclusion

Palliative care may have a large role to play in an influenza pandemic, but our scarce resources could easily be overwhelmed, with potentially dire consequences. Although we hope that the present H1N1 influenza pandemic will be less severe than some experts predict, we must plan for the worst. By developing a plan that addresses our “stuff,” staff, space, and systems needs, we can go a long way toward fulfilling our responsibility toward those who are not expected to survive. All patients must be cared for.

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