Ethical Issues in Alaska Disaster Response

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Objectives

1. List three issues that may arise in a mass disaster.

2. Describe triage systems in ethics such as the SOFA Score and Tier Levels.

3. Discuss components of "Altered Standards of Care" and "Crisis Standards of care".

4. Examine aspects of the document "Pediatric Medical Triage and Resource Allocation in a Disaster".
How important are ethics in today's society?
Lessons Learned

  • Professional duties, duties to families, worker safety
  • 3/14/03 the Ontario Ministry of Health alerted HCW of 4 cases - Atypical pneumonia - 2 deaths same family in Toronto
  • 3/26/03 SARS was declared a provincial emergency
  • Height of the outbreak thousands of people, including HCW, mainly in Toronto - Quarantined for 10-day periods at home
    – Given specific advice on preventing family members from infection
  • Last viral transmission 6/12/03 - 375 cases were recorded, 44 deaths
Lessons Learned - Katrina

Sep 2005 – 312 patients total, many critical, Memorial Medical Center

Four days after Katrina hit, “despair was setting in”

- 7th floor was leased to a different entity – all DNR
- No power, No water, No sewage removal facilities, “Soaring temperatures”, Food shortage, Looters attempting to enter hospital

- Court statements: 'evacuation plan' for the 7th floor was not leave any living patients behind, that 'a lethal dose would be administered’

- 45 euthanized patients
- MD and 2 Nurses – charged 2nd degree murder
- Another MD admitted he left the hospital would rather abandon patients than actively kill them
Lessons Learned- Katrina

- 35 patients drowned, St. Rita’s Nursing Home, St. Bernard Parish, just outside of New Orleans. Owners charged 35 counts negligent homicide.

- 22 people died, Lafon Nursing Home, eastern New Orleans. Residents moved to 2nd floor as flooding began, lost electricity. Rescuers did not arrive at Lafon until days later.

- Six hospitals and 13 nursing homes in Louisiana investigated. At least 140 patients died in the storm and its aftermath.
Issues

1. Altered (Crisis) Standards of Care
   • State-wide coordination and authority

2. Health care workers
   • Legal protections during disasters
   • Professional duties and compensation

3. Resource Allocation
   • Alaskan communities: unique vulnerabilities
   • Fair principles of distribution
     – Ventilator distribution
Issues...

- Legal considerations of HCW /organizations in crisis events to enhance the resilience
- Legal issues related to crisis standards of care with expansion of legal authority during a public health emergency
- Potential liability issues related to “crisis standards of care”
  - Professional duties and protections
- Operational considerations in hospital planning for crisis standards of care in specific resource allocation
  - Justice for vulnerable populations
Issues...for Nurses

- Concept of "sufficient care" instead of "quality care"
- Delegate to students / family members
- Early discharge
- People turned away
- Machines (ventilators) / supplies allocated
- HCPs in disease outbreak
  - Is this an option?
  - Lack of income, could be prolonged
  - Precautions to protect oneself / family
American Nurses Association

“Nurses are obligated to care for all patients; however, in certain situations the risks of harm might outweigh a nurse's moral obligation or duty to care for a given patient. There are limits to the personal risk of harm nurses can be expected to accept. Accepting personal risk exceeding the limits of duty is not a moral obligation; it is a moral option.”

“nurse owes the same duties to self as to others, including the responsibility to preserve integrity and safety.”
American Medical Association

Updated its code of ethics in 2004

“National, regional and local responses to epidemics, terrorist attacks and other disasters require extensive involvement of physicians. Because of their commitment to care for the sick and injured, individual physicians have an obligation to provide urgent medical care during disasters. This ethical obligation holds even in the face of greater than usual risks to their own safety, health, or life. The physician workforce, however, is not an unlimited resource; therefore, when participating in disaster responses, physicians should balance immediate benefits to individual patients with ability to care for patients in the future.”
National / State Guidelines...

- National Preparedness Program and National Emergency Response Plan
- Crisis Standards of Care – UT, FL, MN
- ESAR-VHP program (Emergency System Advanced Registration - Volunteer Health Professionals)
- Institute of Medicine, September 2009
- State of Alaska – Public Health Law
- Statement from past Asst. Attorney General – Good Samaritan Law would cover HCW in Alaska
Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: A Letter Report

The current influenza pandemic caused by the 2009 H1N1 virus underscores the immediate and critical need to prepare for a public health emergency in which thousands, tens of thousands, or even hundreds of thousands of people suddenly require and seek medical care in communities across the United States. In the event of such emergencies, officials rely on standards of care policies and protocols to protect the public’s health. As the nation prepares not only for the 2009 influenza pandemic, but for any disaster scenario in which the health system may be stressed to its limits, it is important to describe the conditions under which standards of care would change due to shortage of critical resources.

At the request of the Office of the Assistant Secretary for Preparedness and Response in the Department of Health and Human Services, the Institute of Medicine convened the Committee on Guidance for Establishing Standards of Care for Use in Disaster Situations to develop guidance that state and local public health officials can use to establish and implement standards of care that should apply in disaster situations—both naturally occurring and manmade—under scarce resource conditions. Specifically, the committee was asked to identify and describe the key elements that should be included in crisis standards of care protocols, to identify potential indica-
SOFA Score

Sequential Organ Failure Assessment (SOFA) score is used to assess patient status.

- SOFA score - scoring system to determine the extent of a person's organ function or rate of failure.
- Based on six different scores, one each for the Respiratory, Cardiovascular, Hepatic, Coagulation, Renal, and Neurological systems.
## Respiratory System

<table>
<thead>
<tr>
<th>PaO$_2$/FiO$_2$ (mmHg)</th>
<th>SOFA score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 400</td>
<td>1</td>
</tr>
<tr>
<td>&lt; 300</td>
<td>2</td>
</tr>
<tr>
<td>&lt; 200 and mechanically ventilated</td>
<td>3</td>
</tr>
<tr>
<td>&lt; 100 and mechanically ventilated</td>
<td>4</td>
</tr>
</tbody>
</table>

## Nervous System

<table>
<thead>
<tr>
<th>Glasgow coma score</th>
<th>SOFA score</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 – 14</td>
<td>1</td>
</tr>
<tr>
<td>10 – 12</td>
<td>2</td>
</tr>
<tr>
<td>6 – 9</td>
<td>3</td>
</tr>
<tr>
<td>&lt; 6</td>
<td>4</td>
</tr>
</tbody>
</table>
## Cardio Vascular System

<table>
<thead>
<tr>
<th>Mean Arterial Pressure OR administration of vasopressors required</th>
<th>SOFA score</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAP &lt; 70 mm/Hg</td>
<td>1</td>
</tr>
<tr>
<td>dop &lt;= 5 or dox (any dose)</td>
<td>2</td>
</tr>
<tr>
<td>dop &gt; 5 OR epi &lt;= 0.1 OR nor &lt;= 0.1</td>
<td>3</td>
</tr>
<tr>
<td>dop &gt; 15 OR epi &gt; 0.1 OR nor &gt; 0.1</td>
<td>4</td>
</tr>
</tbody>
</table>

*(vasopressor drug doses are in mcg/kg/min)*

## Liver

<table>
<thead>
<tr>
<th>Bilirubin (mg/dl)</th>
<th>SOFA score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 – 1.9</td>
<td>1</td>
</tr>
<tr>
<td>2.0 – 5.9</td>
<td>2</td>
</tr>
<tr>
<td>6.0 – 11.9</td>
<td>3</td>
</tr>
<tr>
<td>&gt; 12.0</td>
<td>4</td>
</tr>
</tbody>
</table>
### Coagulation

<table>
<thead>
<tr>
<th>Platelets×10^3/mcl</th>
<th>SOFA score</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 150</td>
<td>1</td>
</tr>
<tr>
<td>&lt; 100</td>
<td>2</td>
</tr>
<tr>
<td>&lt; 50</td>
<td>3</td>
</tr>
<tr>
<td>&lt; 20</td>
<td>4</td>
</tr>
</tbody>
</table>

### Renal System

<table>
<thead>
<tr>
<th>Creatinine (mg/dl) (or urine output)</th>
<th>SOFA score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 – 1.9</td>
<td>1</td>
</tr>
<tr>
<td>2.0 – 3.4</td>
<td>2</td>
</tr>
<tr>
<td>3.5 – 4.9 (or &lt; 500 ml/d)</td>
<td>3</td>
</tr>
<tr>
<td>&gt; 5.0 (or &lt; 200 ml/d)</td>
<td>4</td>
</tr>
</tbody>
</table>
## Respiration (number of patients results were available = 59)

<table>
<thead>
<tr>
<th>SOFA score</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PaO2 / FiO2</td>
<td>&lt;400</td>
<td>&lt;300</td>
<td>&lt;200</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Survivors</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Non survivors</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>12</td>
</tr>
</tbody>
</table>

## Coagulation (number of patients results were available = 101)

<table>
<thead>
<tr>
<th>SOFA score</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platelet count</td>
<td>&lt; 1.5</td>
<td>&lt;1</td>
<td>&lt;0.5</td>
<td>&lt;0.2</td>
</tr>
<tr>
<td>In lakhs</td>
<td>Survivors</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Non survivors</td>
<td>5</td>
<td>6</td>
<td>20</td>
<td>42</td>
</tr>
</tbody>
</table>

## Liver (number of patients results were available = 97)

<table>
<thead>
<tr>
<th>SOFA score</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilirubin mg/dl</td>
<td>1.2 – 1.9</td>
<td>2.0 – 5.9</td>
<td>6.0 – 11.9</td>
<td>&gt;12.0</td>
</tr>
<tr>
<td>Survivors</td>
<td>14</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Non survivors</td>
<td>54</td>
<td>17</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

## Renal (number of patients results were available = 103)

<table>
<thead>
<tr>
<th>SOFA score</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creatinine mg/dl</td>
<td>1.2 – 1.9</td>
<td>2.0 – 3.4</td>
<td>3.5 – 4.9</td>
<td>&gt;5.0</td>
</tr>
<tr>
<td>Survivors</td>
<td>20</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Non survivors</td>
<td>69</td>
<td>8</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

## Cardiovascular (number of patients results were available = 102)

Hypotension and vasopressor support

<table>
<thead>
<tr>
<th>SOFA Score</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survivors</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Non survivors</td>
<td>4</td>
<td>20</td>
<td>13</td>
<td>21</td>
</tr>
</tbody>
</table>
Lessons Learned - Alaska
RSV in Alaska 2007

• 53 infants and young children hospitalized at Samuel Simmonds Memorial Hospital in Barrow

• 55% required medical transport to Anchorage for ICU

11/06 – 3/07 State Lab identified RSV in 152 specimens from 9 Alaskan communities

EOC opened Health Advisories Numerous med-evacs

Figure 1. RSV Cases (N=53), by Week of Diagnosis — Samuel Simmonds Memorial Hospital, Jan 28–Mar 31, 2007

SOA Epi Bulletin #13, 4/13/07
MEP – P Grant

Ethics paper produced for pediatrics

http://a2p2.com/

Alaskan Technical Recommendations for Pediatric Medical Triage and Resource Allocation in a Disaster

For Patients Post Nursery Discharge Until 18 Years of Age

Drafted by Alaskan health care providers in conjunction with the Medical Emergency Preparedness – Pediatrics (MEP-P) Project

Adapted from Utah Hospitals and Health Systems Association’s “Pandemic Influenza and ICU Triage Guidelines”

Purpose:
The purpose of this document is to recommend procedures to Alaskan healthcare facilities to direct pediatric medical resource allocation during pandemic influenza or other public health emergency, when demand for services dramatically exceeds supply.
Exclusion Criteria For Hospital Admission

The patient is excluded from hospital admission or transfer to critical care if ANY of the following is present:

1. Known “Do Not Resuscitate” (DNR) status

2. Severe and irreversible neurologic event or condition with persistent coma and Glasgow Coma Score (GCS) <5 (Includes traumatic brain injury, severe hemorrhagic stroke, hypoxic ischemic brain injury, and intracranial hemorrhage).

3. Severe burns requiring critical care resources and those who would be transferred to an out of state burn center under normal circumstances. If circumstances prohibit out of state transfer, patients with >20% Total Body Surface Area (TBSA) (pg. 9) full thickness burns will only be provided palliative* care. Patients with <20% TBSA burns will be considered for critical care resources based on their MPSOFA score (pg. 8). Severe burns not requiring critical care resources may be cared for at the local facility.

4. Cardiac arrest not responsive to 25 minutes of Pediatric Advanced Life Support (PALS) or Basic Life Support (BLS).

5. Complex disorders with prognosis for expected lifelong assistance with most basic activities of daily living (i.e. toileting, dressing, feeding, respiration).

6. Incurable malignant disease

7. Irreversible end-stage organ failure
History of Our Group…

A few interested people started talking…

- State of Alaska, DHSS, Emergency Programs - Preparedness, EMS and Trauma,
- Ethicist, UAA
- Alaska Nurse Alert System
- Alaska Nurses Association
- Ethicist, PAMC
What we have done...

• Identified specific ethical issues
• Researched other state’s ethical guidelines for disasters
• Started a bibliography of current literature
• Developed a list of stakeholders
• Met with Dr. Hurlburt for support
• Considered who will give authority for recommendations
Stakeholders

- Alaska Medical Association
- Alaska Native Tribal Health Consortium
- Alaska Nurse Alert System
- Alaska Nurses Association
- Alaska State Hospital and Nursing Home Association
- Hospitals statewide – Nursing, Human Resources, CEO’s
  - Fairbanks Memorial, Ketchikan General, Mat-Su, Kodiak
- Municipality of Anchorage
  - Emergency Preparedness, Office of Emergency Management,
  - DHHS, Law Enforcement
- State of Alaska
  - Emergency Preparedness, Public Health Nursing,
  - DHSS
- University of Alaska
  - Ethics, Nursing, Public Health
Our goals…

Ethical Guidelines and Legislation

1) Liability protection for HCW after disasters

2) Define Altered / Crisis Standards of Care

3) Develop ethical guidelines for disaster triage and management
Meeting our goals...

– Keep it non political

– Develop enough consensus to put into law 2012

– Legislation requires:
  • Someone to write legislation
  • Sponsors for the legislation
  • Monitoring legislation through committees and votes
  • Statewide representation and support
Meeting our goals...

– How should they be related to the legislative process?

– Duties during disasters of medical professionals? Hospitals? State?

– Authoritative acknowledgement of ethical standards to promote uniform response

– How will the guidelines be funded?
Article 06. PUBLIC HEALTH AUTHORITY AND POWERS

- State of Alaska - Public health law, revised approx. 4 yrs ago
- Sec. 18.15.350. SARS control program authorization. [Repealed, Sec. 12 ch 54 SLA 2005].
- Repealed or Renumbered
- Sec. 18.15.355. Prevention and control of conditions of public health importance.
  - (a) The department may use the powers and provisions set out in AS 18.15.355 - 18.15.395 to prevent, control, or ameliorate conditions of public health importance or accomplish other essential public health services and functions.
  - (b) In performing its duties under AS 18.15.355 - 18.15.395, the department may

  - (1) establish standards
    - (A) for the prevention, control, or amelioration of conditions of public health importance;
    - (B) to accomplish other essential public health services and functions; and

  - (2) adopt regulations to implement and interpret AS 18.15.355 - 18.15.395.
Legislation or Guidelines?

• What would we want in legislation?

• What would we want in ethical guidelines / recommendations?
Developing Ethical Guidelines

- Legislative Task Force
- State Committee
- Ethics Board / Commission
- Study
- Omnibus (Large Bill)
- Regulations?

What do we want?
RESOLUTIONS

SUBMITTED TO:
• Alaska Nurses Association, statewide conference, October 2010
• Alaska Public Health Association, Health Summit, January 2011

OTHER POSSIBLE SUBMISSIONS:
• Alaska Medical Association
• Alaska School Nurses Association
• Alaska Behavioral Health Association
• Alaska Pharmacists Association
• Alaska Nurse Practitioner Association
• Alaska Bar Association
• Paramedic Association of Alaska
• Alaska Chapter - National Association of Social Workers
• Law Enforcement - APD, Troopers
• Alaska State Hospital and Nursing Home Assoc
• Emergency Services for the State
RESOLUTIONS

2010 / 2011 Resolution

• To encourage legislation for protection of Health Care Professionals (HCP) and to support a diverse task force and charge it with addressing ethical issues in regard to resource allocation in a disaster setting by following the recommendations made by the 2009 Institute of Medicine.

• Historically, Alaska has been at the forefront of many newsworthy disaster situations. In 1964, the second largest earthquake in the world killed 115 persons in Alaska and resulted in major disruption of daily life.
RESOLUTIONS

• The September 2001 disaster in New York, resulted in the grounding of all air traffic in the United States. This action resulted in an interruption of the delivery of required medical supplies to Alaska and a special dispensation by FAA was sought after to allow for delivery of these much needed resources.

• In Barrow, March 2007, a spike of over 26 cases of the serious respiratory infection RSV (Respiratory Synctial Virus) resulted in over a dozen children who were in serious condition and medically evacuated to Anchorage and exceeded pediatric ICU bed capacity. Again in the spring of 2010, the number of RSV cases was elevated, but controlled in the regional medical center of Bethel.
RESOLUTIONS

• The flooding situation of spring 2009 displaced hundreds of residents from numerous towns and villages. The town of Eagle was severely affected and needed assistance from many agencies which included a request for additional medical support. The Alaska Nurse Alert System was put on alert, and volunteer Nurse Practitioners were sent to the devastated area.

• In 2009 the World Health Organization declared a Pandemic Influenza of H1N1 with resultant needs for thousands of volunteer hours by HCP's for vaccinations and education. Alaskan HCP administered over 142,000 vaccinations against H1N1.
RESOLUTIONS

• During Hurricane Katrina, dozens of patients died in hospitals and nursing homes. As overwhelmed rescue teams attempted to treat and evacuate patients, a physician and two nurses were later accused of wrongdoing after the catastrophic event. A grand jury did not indict and charges against them were eventually dropped.
RESOLUTIONS

The Institute of Medicine, in 2009, at the request of the Assistant Secretary of Preparedness and Response in the Department of Health and Human Services, has made the following recommendations for states:

*Recommendation 1: Develop Consistent State Crisis Standards of Care Protocols with Five Key Elements

1. State departments of health, and other relevant state agencies, in partnership with localities should develop crisis standards of care protocols that include the following key elements
2. A strong ethical grounding
3. Integrated and ongoing community and provider engagement and education
4. Assurances regarding legal authority and environment
5. Clear lines of responsibility and evidence-based clinical processes and operations.
RESOLUTIONS

*Recommendation 2: Seek Community and Provider Engagement

*Recommendation 3: Adhere to Ethical Norms During Crisis Standards of Care

*Recommendation 4: Provide Necessary Legal Protections for Healthcare Practitioners and Institutions Implementing Crisis Standards of Care

*Recommendation 5: Ensure Consistency in Crisis Standards of Care Implementation

*Recommendation 6: Ensure Intrastate and Interstate Consistency Among Neighboring Jurisdictions
RESOLUTIONS

• WHEREAS, Alaska has great potential to experience disasters such as earthquake, volcanic eruption, flooding, wildfires, tsunami and major disease outbreak; and

• WHEREAS, Alaska's vast geography, isolation and vulnerability and the impact on interstate and intrastate movement of assistive personnel and resources with reliance and dependence on air delivery; and

• WHEREAS, large-scale disasters can quickly overwhelm even the most sophisticated of health care systems; and

• WHEREAS, other states have dealt with ethical issues of licensed health care workers and resource allocation during a disaster; and
RESOLUTIONS

WHEREAS, licensed health care professionals in Alaska have only a "Good Samaritan" law for protection out of the normal work day; and

WHEREAS, health care professionals (HCPs) and regulatory bodies must confront the need to alter ways in which health care is administered; more specifically, maximizing the number of lives saved may require prioritizing scarce equipment, supplies, and personnel, providing care in nonconventional settings and potentially changing thresholds for critical care; and

WHEREAS, in a disaster individual health care professionals (HCPs) may be forced to make independent decisions to prioritize scarce resources; and

WHEREAS, the weight of such decisions has the potential to cause great stress and significant liability concerns for HCP's as evidenced by the legal actions taken after the 2005 Gulf Coast hurricanes; these decisions can introduce significant legal and professional implications if not addressed in advance.
RESOLUTIONS

• THEREFORE BE IT RESOLVED THAT, the ALPHA shall support legislation directed at remedying this problem, and shall support individuals and organizations that bring this issue to legislation; and,

• THEREFORE BE IT RESOLVED THAT, the ALPHA shall distribute this resolution to all members to better educate and prepare them to encourage discussion and future legislation to protect health care workers assisting in the time of disaster and and,

• THEREFORE BE IT RESOLVED THAT, the ALPHA calls upon all members to take this resolution to their worksites to distribute and discuss these issues,

• THEREFORE BE IT FINALLY RESOLVED THAT, this resolution, upon passage, be released to state and regional broadcast, print media and Internet sources.
Considerations…

• Need pre written guidelines
  – Who gets resources
  – Loudest voice, Largest city, $$
  – Discussion regarding some will disaster allocation

• Discussions and information
  – AMA and ANA state newsletters
  – AK Pub Health Association
  – Presentations at professional conferences
Developing Ethical Guidelines

- Ethics Center - UAA
  - Proposal for the center is in process
  - Gathering spot for research and analysis of ethical issues
  - A home for developing white papers to assist communities, agencies and hospitals with ethical issues in disasters

- State Agencies
Considerations for Action..

Obstacles:
- Groups that may have concerns
- Smaller towns / villages
- Hospital management
- ???
I've been thinking...

I'm the MAN of this house, so starting tomorrow I want you to have a hot, delicious meal ready for me the second I walk thru that door...

Afterwards, while watching ESPN and relaxing in my chair, you'll bring me my slippers and then run my bath... And when I'm done with my bath, guess who's going to dress me and comb my hair?

The funeral director.
"When push comes to shove, we simply can't afford the luxury of ethics."

THANK YOU!