

Alternative Standards Of Care In Disasters

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Faculty

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Objectives

- Explain the systemized optimization of alternatives and compromises during disaster as well as preparation of a resilient and sustainable infrastructure

Objectives

- Describe how operational models are used as a tool to clearly articulate the best combination of current technology and available resources capable of a robust and reliable outcome

Objectives

- Discuss alternative standards of care as “fall-back” positions preserving a rational process with accepted outcomes
- Describe alternative standards of care in the context of the five phases/venues where such treatment is sought and provided

Objectives

- Explain the process of evaluation in defining the shortfall of necessary functional capabilities for outcome, efficiency and coordination during disaster response

Disaster



The Leopard



“If we want everything to stay the same, it is necessary for everything to change.”

– Fabrizio Tomasi, Prince of Salina

Fall Back

- Change process to maintain standards of outcome
- Deliberate decisions by authorized leadership

Fall Back

- Coordinated pullback to maintain new standards
 - Carefully planned
 - Capable of support
 - Personnel trained & equipped
- Optimize outcome under evolving conditions

Overview

- Introduction
- Metrics
- Model
- Alternative standards
- Phases & venues
- Evaluation

Introduction

- Disaster forces a population at large, some of whose members constitute the disaster specific population at risk, to adapt to changed circumstances and environmental challenges in a rational and effective fashion if the goal, consistent with national standards, is to maximize the saving of life

Guidelines & Standards

- **Guidelines & standards are needed to define measurable, acceptable and approved pathways & outcomes for individuals and agencies to pursue during a time of scarce resources**

Guidelines & Standards

- **They permit**
 - **The systemized optimization of alternatives and compromises**
 - **Within an ethical context**
 - **Upon which public morale and the preservation of civil order depends, as well as**
 - **Preparing a resilient and sustainable infrastructure**

Outcome

- **To optimize outcome, all available resources need to be preserved, coordinated and focused so as to optimize community response in dealing with**
 - **The normal ongoing needs of the stricken and spared populations**

Outcome

- **To optimize outcome, all available resources need to be preserved, coordinated and focused so as to optimize community response in dealing with**
 - **The special disaster-related needs of the population at risk**

Outcome

- **To optimize outcome, all available resources need to be preserved, coordinated and focused so as to optimize community response in dealing with**
 - **The special needs encountered by populations with special vulnerability**

Adaptability

- **Emergency events and disasters require the affected population to adapt to rapidly changing circumstances**
- **These may include an often abruptly limited scope of public health services**

Challenges

- Analyze the capacity to address the needs of vulnerable populations in emergency response and recovery
- Develop testable models for alternative standards of care

Challenges

- Determine metrics to guide the integration of alternative standards into the public health system as a component of preparedness
- Identify facilitators of such integration through pilot testing

Hierarchy Of Needs

- Safety
- Water
- Food
- Shelter/heat
- Clothing
- Medical Care
- Employment

Hierarchy Of Needs

- Companionship
- Family environment
- Stability
- Social status & advancement
- Child development
- Care of elders
- Mid & long term plans

Hierarchy Of Needs



Kibeho refugee camp, Ruwanda, 1994

Hierarchy Of Needs



JTF safe haven, Panama 1995

Hierarchy Of Needs



Kosovo school art

Hierarchy Of Needs



Meeting hut, Empire Range, JTF safe haven

Elements: Personnel

- Numbers
- Sources
- Roles
- Competencies
- Training
- Evaluation
- Remuneration

Elements: Logistics

- Equipment
 - In place
 - Transported
- Supplies
 - Timely
 - Reliable
 - Coordinated

Elements: Communications Infrastructure

- Hardware
- Process
- Availability
- Standardization
- Technical currency
- Maintenance
- Evaluation & standards

Elements: Risk Communications

- Content
- Audience
 - Senior leadership
 - Population at large
 - Population at risk
 - Responders

Elements: Risk Communications

- Purpose
- Timing
- Feedback

Metrics

- Parameters of
 - Preparation
 - Process
 - Outcome

Metrics

- Metrics are the core ingredient in providing guidelines & standards needed to define measurable, acceptable and approved pathways & outcomes for individuals and agencies to pursue during a time of scarce resources.

Measurable Standards

- Currently, few measurable standards exist to guide an effective and systems-based approach to providing the best public health services under emergency situations.

Measurable Standards

- Of specific importance is the lack of data to inform decision making regarding addressing the needs of vulnerable populations by a potentially severely strapped public health system

Metrics

- Permit the systemized optimization of alternatives and compromises within an ethical context upon which public morale and the preservation of civil order depends
- Prepare a resilient and sustainable infrastructure

Metrics

- Ability of local command and control agencies to prepare, muster and employ personnel
 - Time
 - Numbers
 - Roles
 - Competencies
 - Training

Metrics

- Ability of local command and control agencies to prepare, muster and execute required logistics
 - Standing infrastructure
 - Locally warehoused

Metrics

- Ability of local command and control agencies to prepare, muster and execute required logistics
 - Newly required equipment & supplies
 - Timely
 - Proper
 - Reliable
 - Coordinated

Metrics

- Ability of local command and control agencies to develop prepare, and employ an effective and supportable communications Infrastructure
 - Hardware
 - Process

Metrics

- Ability of local command and control agencies to develop, prepare, and employ
- Risk Communications
 - Content
 - Purpose
 - Timing
 - Audience

Metrics

- Risk Communications
 - Audience
 - Senior leadership
 - Population at large
 - Population at risk
 - Responders

Metrics

- **Ability of local command and control agencies to achieve population-wide action including**
 - **Information**
 - **Motivation**
 - **Facilitation**
 - **Enforcement**

Metrics

- **Capability of addressing victims' hierarchy of needs including standards of**
 - **Access**
 - **Venue**
 - **Security**
 - **Safety**
 - **Information**
 - **Privacy**
 - **Disability**
 - **Cultural needs**

Metrics

- **Drive Operational Models**
 - **Adequate for existing perils**
 - **Consistent with available resources**
 - **Capable of optimal consequence management**

Operational Model

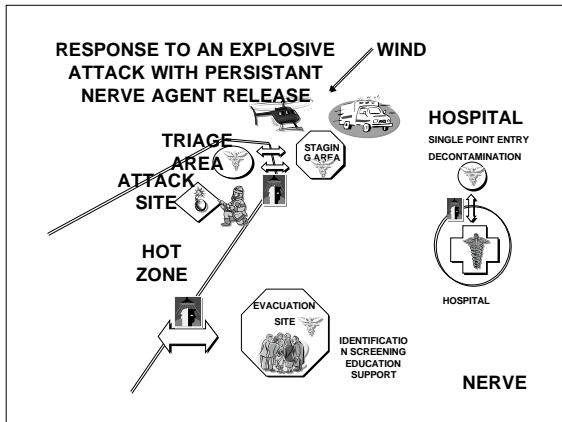
- **Achieving the best results for vulnerable communities involves**
 - **Identifying reasonably foreseeable perils**
 - **Developing effective doctrine supporting an operational model**

Operational Model

- **The operational model clearly articulates the best amalgam of current technology and available resources capable of a robust and reliable outcome**

Operational Model

- **The Operational Model defines how the operational elements will be best integrated for a community's response to peril**



Testable Models

- In developing testable models for alternative standards of care, all available resources have to be preserved, coordinated and focused to optimize community response in dealing with the disaster-related needs of general populations and those with special vulnerability.

Government Consultation

- Consultation with state & local governments is needed to
 - Develop models consistent with the perils and intrinsic needs of communities
 - Drive acceptable and achievable outcomes in community response to significant perils

Government Consultation

- Incorporate guidelines of process & standards of outcome into community planning
- Reinforce resilient design so as to optimized the support or evacuation of vulnerable populations
- Operate within a systematic ethical & rational process

Scenarios

- Scenarios employed should be based on likely perils which have been identified as significant by competent authorities and will drive operational models to
- Employ alternative standards of care to best coordinate/employ all potential resources
- Identify shortfalls & create alternatives

Testable Models

- The models should incorporate guidelines of process & standards of outcome with appropriate metrics to optimize the support of general & vulnerable populations

Testable Models

- Evaluate community capability by
 - Identifying what capability exists
 - Examining its elements & scope of action
 - Determining if it works through

Testable Models

- Application of metrics

Testable Models

- Evaluation of historical data

Testable Models

- Survey of health workers and support agencies

Testable Models

- Proposing and assisting appropriate trial of capabilities and plans in carefully designed & evaluated exercises

Facilitators Of Integration

- Facilitators of integration must be identified to assist in accomplishing testing to address questions and issues such as
 - Are the metrics correct?
 - Examine if existing process and infrastructure can work?
- If not, why?

Facilitators Of Integration

- Facilitators of integration must be identified to assist in accomplishing testing to address questions and issues such as
 - Testing of alternative standards
 - Designing of demonstration projects
 - Survey of appropriate communities & populations

Alternative Standards Of Care

- To define personnel, logistics and communications requirements within well designed doctrine
- To establish a resilient infrastructure capable of the most effective consequence management and
- To enable early, effective & coordinated recovery

Alternative Standards Of Care

- Exercise findings can be used to enhance the capacity of public health agencies and communities to
 - Improve community resiliency
 - Emergency response capabilities, for
 - General population
 - Most vulnerable of the population

Alternative Standards Of Care

- Development of “fall-back” positions preserving a rational process with accepted outcomes permits
 - Effective preparation for emergency action
 - Definition of requirements
 - Support of effective consequence management recruitment & training

Alternative Standards Of Care

- Facilitate responder focus on the hierarchy of needs of the population at risk
- Streamline and simplify support during arduous circumstances
- Establish & preserve a rational process with accepted outcomes to drive resiliency into a preparation for emergency action

Alternative Standards Of Care

- In developing alternative standards of care, optimization of outcome requires all available resources to be
 - Preserved
 - Coordinated
 - Focused

Integration Of Alternative Standards

- Guiding the integration of alternative standards into the public health system is an important component of preparedness

Phases & Venues Of Care

- Standards for the alternative provision of medical care in a disaster affected environment should be examined in the five phases/venues where such treatment is sought and provided

Phases & Venues Of Care

- Community Care involving activity in the pre-professional setting

Phases & Venues Of Care

- Emergency Medical Services (EMS) at the first level of regular professional activity

Phases & Venues Of Care

- Hospital Care providing diagnostics, complex or urgent therapeutics & complex support

Phases & Venues Of Care

- Urgent consultation involving specialist intervention for sudden or serious/complex events

Phases & Venues Of Care

- Home care providing support in a residential setting for patients who, in normal circumstances, might require inpatient care in a sophisticated outpatient clinic

Alternative Standards Of Care

- Alternative Standards of Care imply the deliberate and planned alteration of a series of elements in the medical care process

Alternative Standards Of Care

- Who
 - Implying variation in roles, competencies and training

Alternative Standards Of Care

- How provided
 - Implying variation in process

Alternative Standards Of Care

- Where provided
 - Implying variation in sequence and venue

Alternative Standards Of Care

- How overseen
 - Implying variation in level of expertise and clinical sophistication

Alternative Standards Of Care

- How evaluated
 - Implying alteration in criteria of outcome

Evaluation

- Using responsible agencies & appropriate focus groups, metrics should be proposed and employed in defining the shortfall of functional capabilities for outcome, efficiency and coordination.

Evaluation

- Timeliness of response and time sensitivity of outcome

Evaluation

- Access for individuals within vulnerable populations at risk

Evaluation

- Quality of medical intervention and the employment of available technology

Evaluation

- Effectiveness of diagnostic and therapeutic actions in the preservation of life and health

Evaluation

- **Acceptability within the expectations and cultural sensitivities of the community**

Pilot Testing The Models

- **Present capability should be evaluated in the context of the existing virtual plan which will be subject to review in the development of an operational model including alternative standards considered most likely to optimize effective response.**

Pilot Testing The Models

- **A Delta Analysis can be used to determine modifications necessary to achieve Initial Operational Capability**
 - **The level of performance at which professionally assisted competent authority considers outcome to be satisfactory**

Pilot Testing The Models

- **The relative success of the Delta Analysis at achieving its objective should be examined through exercise (tabletop, functional & full scale)**

Pilot Testing The Models

- **Pilot programs can be used to integrate & evaluate alternative care models**

Expanded Studies

- **The pilot project should expand as**
 - **The scope and depth of the experimental matrix evolves**
 - **The validity and utility of the model drives a broader array of players regionally**
- **An expansion of the pilot process could drive a broader and more resilient regional infrastructure**

Prevention

- Shape the battlefield
- Back to the future

“The good news to a hungry person is bread.”

–Desmond Tutu



Summary

- Introduction
- Alternative standards
- Metrics
- Phases & venues
- Model
- Evaluation

“Plans are nothing, planning is everything.”

–General George Patton



Questions?

