Science Advisory Team
Crisis Standards of Care
(SAT / CSC)
Charter
I. **Purpose**

The Science Advisory Team/Crisis Standards of Care (SAT/CSC) was established by the MDH Office of Emergency Preparedness in 2005 for the purpose of developing operational processes for provision of crisis clinical care in the event of a public health emergency and provide clinical and operational expertise to MDH prior to and during events requiring such input. In 2007, the SAT/CSC was expanded to include ethics expertise.

II. **Scope and Focus**

The Science Advisory Team/Crisis Standards of Care (SAT/CSC) develops guidance for resources that may be scarce in a hospital, clinic or primary care setting during a public health emergency. The SAT/CSC advises MDH and clinicians on strategies for optimal allocation of these resources including ethical and policy considerations.

The six (6) key responsibilities of the Science Advisory Team/Crisis Standards of Care (SAT/CSC) are:

1. Consultation to MDH regarding overall and detailed patient care strategies for scarce resource situations.
2. Development of usable products of the above strategies for use by hospitals, regional bodies, clinics and primary health providers, including frameworks for extending and prioritizing the use of limited resources.
3. Engagement of Subject Matter Experts to complete the above responsibilities.
4. Consultation and assistance to MDH regarding provider education, training and rollout of products as requested.
5. Advice and assistance to MDH as requested in matters relating to crisis standards of care during public health emergency.
6. Consultation to MDH regarding ethical guidance for scarce resource situations.

SAT products and processes are designed to be integrated into regional and hospital level planning.

Accomplishments to-date by the SAT/CSC and participating members and subject matter experts are listed in Annex C.

III. **Background and authority**

During a public health emergency, where clinical resources are in short supply, MDH intends to use the technical expertise of the SAT/CSC to adjust guidance and update recommendations to reflect the needs of the incident. MDH will then use this input to inform clinical guidance and policy actions as required based on the scope of the incident.

A public health emergency can place a severe burden on inpatient and outpatient health care services. The Minnesota Healthcare System Preparedness Program (HSPP) works statewide to enhance the ability of hospital and healthcare systems to prepare for and respond to incidents of all hazard types that generate victims including public health emergencies. The Minnesota Department of Health (MDH) provides guidance and assistance, facilitating patient care needs
across the state in collaboration with Regional Healthcare Preparedness Coordinators and Multi-Agency Coordination Centers.

The SAT/CSC provides a standardized framework to assist regions in determining how to extend resources when the need for specialized equipment and supplies such as ventilators and pharmaceuticals exceeds availability, which will be modified as needed during an incident.

IV. Organization

A. Membership – representation

The SAT/CSC membership is defined and invited by the Minnesota Department of Health. Additional members and/or Content Area Specialists may be invited by the Department of Health for emerging new focus areas. Membership on the SAT/CSC is voluntary. The SAT/CSC will include representatives from the following:

- Administrative Support (MDH)
- Critical Care Medicine (Adult and Pediatric) (Non-MDH)
- Emergency Medicine (Adult and Pediatric) (Non-MDH)
- Ethics (Non-MDH)
- Facilitator (Non-MDH)
- Hospital/Clinic Administration (Non-MDH)
- Hospitalist (Non-MDH)
- Infectious Disease Medicine (Adult and Pediatric) (Non-MDH)
- Infectious Disease, Epidemiology, Prevention and Control Division (MDH)
- Legal (MDH)
- Office of Emergency Preparedness (MDH)
- Primary Care Medicine (Non-MDH)
- State Epidemiologist (MDH)
- Subject Matter Experts (MDH and Non-MDH)

Vacancies will be filled as needed, following recommendation by the SAT/CSC.

A detailed list of SAT/CSC members is located in Annex A of the Charter.

B. Tenure of SAT / CSC members

SAT/CSC members will be appointed for a period of two (2) years. At the end of the period, SAT/CSC members will have the opportunity to extend membership for subsequent year-long terms if mutually agreed upon by the individual and MDH.

C. Meetings

The SAT/CSC will meet regularly, approximately tri-annually, each calendar year (5 - 6 hours per meeting), at a time and place to be determined by MDH. Members are expected to attend at least two meetings annually.

Additional meetings may be called by the Minnesota Department of Health routinely or in response to an incident. Such additional meetings may be held in person or by conference
call or other electronic means that allow maximal participation by SAT/CSC members. During an incident or a potential incident, SAT/CSC members may be contacted by MDH to provide technical advice.

D. Deliberation and Consultation methodology
The SAT/CSC will deliberate and finalize recommendations / consultations through discussion and consensus (see Annex B) as facilitated by a third party under contract with the Minnesota Department of Health. If a consensus is not reached, the diverging opinions will be presented to MDH as a matter of consultation.

E. Point of contact
The HSPP Project Coordinator will be the primary point of contact for any questions, correspondence or issues regarding the SAT/CSC.

F. Working Groups
The SAT/CSC may establish Working Groups to explore and develop concepts, information, strategies and other materials relative to specific resources or situations. The SAT/CSC will define a charge and timeline for each Working Group established. Working groups, once formed, will be expected to make regular reports to the SAT/CSC. Working Groups by definition are ad hoc groups disbanded after the specific and time-bound charge is completed and presented to the SAT/CSC.

V. Changes to the charter
The Charter is reviewed biennially or as needed to reflect changes in policy or situation. Proposed changes are submitted through the HSPP Project Coordinator.

I have read and approved the SAT/CSC charter:

___________________________________                  _____________________
Signature                                      Date
Commissioner of Health
Annex A: Science Advisory Team/Crisis Standards of Care (SAT/CSC) Membership

Critical Care Medicine (Adult and Pediatric)

- J. Christopher Farmer  
  Region: SE

- Jeffrey Dichter  
  Region: Metro

- Andrew Kiragu  
  Region: Metro

Emergency Medicine (Adult and Pediatric)

- Paula Fink-Kocken  
  Region: Metro

Healthcare System Preparedness Program Medical Consultant

- John Hick  
  Region: Metro

Healthcare System Preparedness Program Medical Consultant

- Dan O'Laughlin  
  Region: Metro

Ethics

- Independent Consultant  
  Region: Metro

  J. Eline (Ellie) Garrett

Minnesota Center for Health Care Ethics

- Dorothy E. Vawter

Facilitator

- Dennis Cheesebrow

Hospital/Clinic Administration

- Member being recruited

Hospitalist

- Member being recruited

Infectious Disease Medicine (Adult and Pediatric)

- Member being recruited  
  Region: Metro

- Rodney Thompson  
  Region: SE

- Tim Burke  
  Region: NE

Infectious Disease, Epidemiology, Prevention and Control Division

Medical Director

- Aaron DeVries  
  Region: MDH

Legal Support

- Arden Fritz  
  Region: MDH

Office of Emergency Preparedness
### Director’s Office

- **Jane Braun/Cheryl Petersen-Kroeber**  
- **Judy Marchetti**

### Primary Care Medicine

- **Carol Featherstone**  
  
### State Epidemiologist

- **Ruth Lynfield**

### Administrative Support

Healthcare System Preparedness Program Project Coordinator

- **Kirsti Taipale**

### Subject Matter Experts

- **Respiratory Care**
  - **Nick Kuhnley**  
  - **Jed Gorlin**

- **Nephrology**
  - **Paul Abraham**

- **Toxicologist**
  - Member being recruited

- **Palliative Care**
  - **Joel Carter**

- **Burn Medicine**
  - Member being recruited

- **Pharmacist**
  - Member being recruited

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**MDH**  
**Metro**
Annex B: The Levels of Consensus

1. I can say an unqualified “yes” to the decision. I am satisfied that the decision is an expression of the wisdom of the group.

2. I find the decision perfectly acceptable.

3. I can live with the decision; I’m not especially enthusiastic about it.

4. I do not fully agree with the decision and need to register my view about it. However, I do not choose to block the decision or submit a dissenting opinion. I am willing to support the decision because I trust the wisdom of the group.

5. I do not agree with the decision and feel the need to submit a dissenting opinion along with the majority opinion.

6. I feel that we have no clear sense of unity in the group. We need to do more work before consensus can be reached.

Annex C: Accomplishments

The SAT/CSC has developed frameworks for anticipating and responding to scarce resources situations, as well as specific Patient Care Strategies for Scarce Resource Situations:

- Overall Scarce Resources Framework
- Oxygen
- Medication Administration
- Hemodynamic Support and IV Fluids
- Mechanical Ventilation/External Oxygenation
  - The SAT/CSC also collaborated with the Minnesota Pandemic Ethics Project in refining an ethical framework for rationing mechanical ventilators in a severe influenza pandemic. See: [http://www.health.state.mn.us/divs/idepc/ethics/ethics.pdf](http://www.health.state.mn.us/divs/idepc/ethics/ethics.pdf)
- Nutritional Support
- Staffing
- Blood Products
- Renal Replacement Therapy (Dialysis)
- Respiratory Protection and Mask Conservation (for use during 2009 H1N1 pandemic)