Crisis Standards of Care
Technical Assistance Panel Meeting
April 14, 2022
2:00-5:00 p.m.

Meeting Notes
Meeting Materials:
- Agenda
- March 10 TAP Detailed Minutes + High Level Summary
- Environmental Scan
    - COVID-19 Experience (Q1 p.3-7)
    - Triage & Management of Resources (Q5 p.17-20; Q6 p.20-22)
- April 7 CAB High Level Meeting Summary
- White's & Lo's White Paper: Additional Equity Interventions in Revised Pandemic Policy to Allocated Scarce Critical Care Resources
- Link to materials: https://www.khi.org/pages/csc

Agenda:
2:00pm – Opening Remarks
2:05pm – Level-Setting and CAB Update
2:30pm – Discussion on COVID-19 Experience
3:20pm – Brief Overview of Required Items for Incident Management Framework
3:25pm – Break (5 minutes)
3:30pm – Discussion on Scoring Tools and Tier Systems
4:50pm – Next Steps
5:00pm – Adjourn

Meeting Commitments:
- Come ready to discuss and compromise
- Keep remarks succinct and on topic
- Don't hesitate to ask clarifying questions
- Start and end on time

Attendees
TAP members: Dennis Cooley, Dennis Kriesel, Steve Simpson, Ron Marshall, Con Olson, Carla Keirns, Jean Hall, Lillian Lockwood, Gianfranco Pezzino, John Carney, Mike Burgess, Jennifer Watts, Amy Kincade, Kelsey Goddard (delegate to Jean Hall)

CAB Liaison: Ami Hyten

Guest Speaker: Richard Watson, Motient

KDHE: Edward Bell, Rebecca Adamson

Staff: Hina Shah, KHI (facilitator); Kari Bruffett, KHI; Tatiana Lin, KHI; Wendy Dang, KHI

Crisis Standards of Care (CSC): Project Overview and Level-Setting

AGENDA REVIEW

Background: *Hina (facilitator) provided an overview of the discussion that TAP will be having at the meeting.*

- **CSC Timeline:** Currently, focus groups are being facilitated by KHI with consumers, providers, and advocates regarding considerations and concerns associated with allocation of scarce medical resources during emergencies. KHI anticipates having findings readily available for TAP and CAB members by the end of April.

LEVEL-SETTING

Background: *Dr. Dennis Cooley provided an overview of the definition of "hospital setting," provided by Ron Marshall (Kansas Hospital Association), and the purpose of the Kansas CSC guidance document.*

- **Hospital Setting**: TAP members were reminded that the Kansas CSC guidance document's focus is around hospital settings only and is a foundational document that may expand to other settings in the future. The definitions are provided below:
    - An acute care hospital is a permanent institution primarily engaged in providing inpatient services, by or under the supervision of physicians, with registered professional nursing services 24 hours per day.
    - A critical access hospital provides not more than 25 acute care inpatient and swing-beds and must maintain an annual average length of stay of 96 hours or less per patient for acute inpatient care.
    - Kansas hospitals are licensed by the state and are required to comply with state laws and the CMS Conditions of Participation.
- **Types of Disasters**: Although COVID-19 experiences will be discussed in the meeting, TAP members were reminded that the Kansas CSC guidance document is intended to be utilized for all types of crises (i.e., pandemics, natural disasters, mass casualty, etc.).

Update from the Community Advisory Board (CAB)

CAB MEETING #3 OVERVIEW

Background: *Ami Hyten (CAB Liaison) provided a summary of discussion by the CAB members in their April 7th meeting.*

- **Equity (The Big Picture):** CAB members discussed that the implementation of Kansas CSC guidance document should not perpetuate existing inequities. The discussion also centered on identifying ways to address systemic issues that create inequities, such as:
    1. Increasing diversity of healthcare workers;
    2. Engaging the community on an on-going basis;
    3. Providing guidance on how hospitals should address inequities in access to care; and
    4. Incorporating correction factors into scoring systems.
    - ***Discussion*****:** A TAP member shared that Bullets 1 to 3 seemed to be out of scope of the Kansas CSC document. Although they agreed that those need to be addressed, the member was unsure if it can be address during a crisis. Another member shared that Bullet 4 is essential when discussing scoring tools. Some members stated that the Bullets 1 to 4 are within the scope if the group considers that these bullets would help provide guidance to prepare for the next disaster.

- **Factors to Not Use in Scoring Tools & Correction Factors**:

List #1: Factors to NOT Use in Score	Ability to pay; first-come first-served; quality of life, gender, gender identity, life expectancy (survivability); religion; citizenship; age; social value

  - These are factors that CAB members agreed should not be included as part of any type of decision process.

List #2: Factors to NOT Use in Score + Correction Factors	Race; ethnicity; houselessness status; long - term severe illness or disability

  - CAB members discussed that they do not want to see these factors be used against people in scoring tools, but the factors should be considered when TAP members discuss correction factors and how these factors can be included.

List # 3: Correction Factors	Geographical location; preventive behavior; individuals in high-risk occupations

  - CAB members mentioned that these factors in addition to the ones listed as part of List #3 should be considered to be included in correction factors. For preventative behaviors, some CAB members mentioned consideration for individuals who took preventative actions and used available resources. However, there were other members that disagree with the consideration of preventative behaviors. The CAB members did clarify that this should not penalize patients who were unable to utilize health supportive and preventative resources. In addition, CAB members also considered high-risk occupation as a factor as well.
- **Triage Team:** For a more equitable approach**,** CAB members recommended to focus on the concept of a triage team vs. a "triage officer." They recommended to elevate voices of patients and their families in a triage team or decision-making process. CAB members recommended including the following individuals in the triage team: clinician, patient, the patient's family/power of attorney, and people with lived experiences, especially those with disabilities. CAB also discussed the importance of training availability around disability rights, access, and accommodation. In addition, the decisions to implement the CSC should be decided at the local level with consumers involved.
  - ***Discussion*:** A TAP member shared that the CAB's proposal of a triage team is very different from what was proposed in the Kansas 2013 Modified Protocol document. They stated that the triage team had been considered more objective because the team does not have personal relationships with the patients and is able to look at scores to make objective decisions.
- **Other Considerations**: CAB members also discussed using plain and active language, so that the Kansas CSC guidance document is clear and accessible to people to understand the considerations that are being made around access to care. This is to promote trust in the healthcare system. In addition, there was a universal agreement that personal ventilators should not be taken away and reallocated to other patients.
  - ***Discussion*:** Some members raised concerns about CAB's suggestion to use active language (i.e., should versus will) in the Kansas CSC guidance document because there may be legal concerns that the group should consider and be careful to not set false expectations.

Proposed Considerations:
The TAP members proposed the following considerations:

- **Executive Summaries:** To address CAB's suggestion to using plain language in the Kansas CSC document, TAP members agreed to including an executive summary to provide a high-level big picture in plain language in the beginning of the Kansas CSC guidance document. Templates of the executive summary can be added in the appendix for the hospitals to use as they are communicating that they will be activating a CSC.
- **Glossary of Common Use of Terms**: To ensure that people do understand the Kansas CSC guidance document, a TAP member proposed including a glossary of common use terms to ensure that the reader understands the intents and considerations of what the guidance document means.
- **Direct Feedback**: A TAP member proposed that the group should ask people with disabilities if they are able to understand the language that is included in the Kansas CSC guidance document.
- **Personal Ventilator Clarification**: A TAP member proposed that the Kansas CSC document provides a direct statement or language to state that there will be no removal of personal ventilators.

Discussion on COVID-19 Experiences

Before the discussion, TAP members were reminded that the Kansas CSC guidance document must include the following required items:

- *COVID related lessons learned*
- *COVID related impacts*
- *COVID related challenges and barriers*

HEALTHCARE COALITION (HCC) COVID-19 AFTER-ACTION REPORT/IMPLEMENTATION PLAN (AAR/IP)

Background: *Edward Bell (KDHE) provided an overview of the HCC role in the COVID-19 response. One of the HCC roles included providing the Kansas Division of Emergency Management (KDEM) information regarding what the local hospitals, small rural hospitals, and critical access hospitals were experiencing throughout the on-going pandemic event. This enables KDEM to make inform decisions on how resources would be distributed across the state.*

- **What Was Done Right:**
    - The HCC were quickly involved in providing additional information regarding the concept of operation, which allowed the incident commander to have more information to make more informed decisions.
    - HCC were able to move and work with their membership organization to increase and improve information management and sharing, which included allowing to adjust timeframes for resource deployments (i.e., personal protective equipment). In addition, HCC continued to assist with information management after state operation centers were no longer running.
    - HCC were able to increase the supplies and resources to address the resource issue through funding from COVID-19 grants and hospital preparedness funding.
    - HCC utilized their network to assist hospitals within their regions in patient transfers.
- **Areas of Improvement**:
    - Because HCC are not considered as a response entity in Kansas, there were initial hesitation from the state to get HCC involved.

- At the time, misinformation and disinformation were an on-going issue, but the HCC did their best to address it.

MISSION CONTROL BY MOTIENT

Background: *Richard Watson, MD from Motient provided COVID-19 surge data that was collected by Motient's Mission Control software. Mission Control is a software that was deployed in Kansas around Fall 2020 to be a one-stop shop for facilities needing help finding placement for patients and managing the logistics of moving or transferring patients within the state. Mission Control uses triage acuity indexing and requesting points to centralize point of requests and matches the facilities with a 24/7 logistic team to make calls and interact with the transport vendor, on the behalf of the local facility. This also provides a central communication for anyone involved in the transport to interact at a chat level and provide on-going updates of patient's conditions and other aspects of the transport. If you have additional questions regarding Mission Control, Dr. Watson* (rwatson@motient.io) *is available to answer questions regarding the data.*

- **Scoring Tool Application:** The scoring tool, which leverages the trauma scoring system and knowing capabilities behind trauma scoring, allow Mission Control to place facility in Kansas and have designation into areas that they could match the acuity of patients with the type of facility that might be able to care for them. They were able to match information of increase ICU bed capacity and the providers that commences the level of care those beds demands, which allows them to move patients out of more highly skilled beds to more normal beds or nursing facilities.

1/15/2022
Status Date

90.0%
% COVID ICU Responses On Diversion Past W...

89.9%
% ICU Responses On Diversion Past Week

Response Date
All

Tier	Facility	Floor Bed	Covid Floor Bed	ICU Bed	Covid ICU Bed	COVID ICU Consecutive Days On Diversion
1	KU - ST FRANCIS CAMPUS	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	1
	NORTH KANSAS CITY HOSPITAL	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	0
	OVERLAND PARK REG MED CTR	Case by Case	Case by Case	No Capacity | On Div...	No Capacity | On Divers...	27
	RESEARCH MEDICAL CENTER	Case by Case	Case by Case	No Capacity | On Div...	No Capacity | On Divers...	44
	SAINT LUKES HOSPITAL OF KANSAS	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	15
	STORMONT VAIL HOSPITAL	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	2
	VIA CHRISTI ST FRANCIS - WICHITA	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	144
	WESLEY MEDICAL CENTER	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	46
2a	HAYS MEDICAL CENTER	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	4
	HUTCHINSON REGIONAL MEDICAL CENTER...	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	1
	KANSAS MEDICAL CENTER LLC	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	159
	LAWRENCE MEMORIAL HOSPITAL	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	6
	MENORAH MEDICAL CENTER	Case by Case	Case by Case	No Capacity | On Div...	No Capacity | On Divers...	44
	PROVIDENCE MEDICAL CENTER	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	1
	SAINT LUKE'S SOUTH HOSPITAL	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	15
	SALINA REGIONAL HEALTH CENTER	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	3
2b	ASCENSION VIA CHRISTI HOSPITAL MANH...	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	3
	LABETTE HEALTH	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	1
	NEWTON MEDICAL CENTER	Declined Response	Declined Response	Declined Response	Declined Response	0
	ROCK REGIONAL HOSPITAL, LLC	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	3
	Southwest medical Center	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	4
	ST CATHERINE HOSPITAL	Declined Response	Declined Response	Declined Response	Declined Response	0
	Western Plains Medical Center	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	1

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4/13/2022
Status Date

39.3%
% COVID ICU Responses On Diversion Past W...

38.9%
% ICU Responses On Diversion Past Week

Response Date
All

Tier	Facility Status Date	Floor Bed	Covid Floor Bed	ICU Bed	Covid ICU Bed	COVID ICU Consecutive Days On Diversion
1	KU - ST FRANCIS CAMPUS	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	29
	NORTH KANSAS CITY HOSPITAL	Critical Capacity	Critical Capacity	Critical Capacity	Critical Capacity	0
	OVERLAND PARK REG MED CTR	Normal Capacity	Normal Capacity	Normal Capacity	Normal Capacity	0
	RESEARCH MEDICAL CENTER	Normal Capacity	Normal Capacity	Normal Capacity	Normal Capacity	0
	SAINT LUKES HOSPITAL OF KANSAS	Case by Case	Case by Case	Case by Case	Case by Case	0
	STORMONT VAIL HOSPITAL	Case by Case	Case by Case	Case by Case	Case by Case	0
	VIA CHRISTI ST FRANCIS - WICHITA	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	32
	WESLEY MEDICAL CENTER	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	1
2a	HUTCHINSON REGIONAL MEDICAL CENTER...	Normal Capacity	Normal Capacity	Normal Capacity	Normal Capacity	0
	KANSAS MEDICAL CENTER LLC	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	63
	LAWRENCE MEMORIAL HOSPITAL	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	3
	MENORAH MEDICAL CENTER	Normal Capacity	Normal Capacity	Normal Capacity	Normal Capacity	0
	PROVIDENCE MEDICAL CENTER	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	1
	SAINT LUKE'S SOUTH HOSPITAL	Case by Case	Case by Case	Case by Case	Case by Case	0
	SALINA REGIONAL HEALTH CENTER	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	3
2b	ASCENSION VIA CHRISTI HOSPITAL MANH...	Critical Capacity	Critical Capacity	Critical Capacity	Critical Capacity	0
	LABETTE HEALTH	Declined Response	Declined Response	Declined Response	Declined Response	0
	NEWTON MEDICAL CENTER	Normal Capacity	Normal Capacity	Normal Capacity	Normal Capacity	0
	ROCK REGIONAL HOSPITAL, LLC	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	4
	Southwest medical Center	No Capacity | On Div...	No Capacity | On Dive...	No Capacity | On Div...	No Capacity | On Divers...	1
	ST CATHERINE HOSPITAL	Critical Capacity	Critical Capacity	Normal Capacity	Normal Capacity	0
	Western Plains Medical Center	Normal Capacity	Normal Capacity	Critical Capacity	Critical Capacity	0

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Tier	11/14/2021	11/21/2021	11/28/2021	12/5/2021	12/12/2021	12/19/2021	12/26/2021	1/2/2022	1/9/2022	1/16/2022	1/23/2022	1/30/2022
1												
Avg Floor Bed	2.66	2.51	2.79	2.78	2.85	2.74	2.87	2.90	2.86	2.70	2.74	2.68
Avg COVID Floor Bed	2.69	2.58	2.81	2.81	2.86	2.78	2.89	2.92	2.92	2.74	2.77	2.71
Avg ICU Bed	2.69	2.66	2.85	2.89	2.91	2.88	2.95	2.95	2.95	2.89	2.90	2.85
Avg COVID ICU	2.74	2.70	2.85	2.91	2.91	2.88	2.95	2.95	2.95	2.90	2.89	2.85
1 OOS												
Avg Floor Bed	2.71	2.74	2.81	2.90	2.88	2.89	2.96	2.97	2.94	2.97	2.95	2.86
Avg COVID Floor Bed	2.72	2.74	2.84	2.91	2.91	2.94	2.95	2.98	2.95	2.97	2.96	2.88
Avg ICU Bed	2.71	2.72	2.80	2.91	2.87	2.95	2.95	2.99	2.94	2.98	2.96	2.91
Avg COVID ICU	2.69	2.74	2.85	2.94	2.91	2.97	2.96	2.99	2.94	2.98	2.96	2.93
2a												
Avg Floor Bed	2.70	2.59	2.80	2.85	2.81	2.75	2.86	2.94	2.93	2.80	2.76	2.77
Avg COVID Floor Bed	2.73	2.62	2.84	2.86	2.83	2.77	2.87	2.95	2.95	2.83	2.80	2.81
Avg ICU Bed	2.79	2.74	2.86	2.90	2.92	2.91	2.95	2.96	2.97	2.92	2.93	2.89
Avg COVID ICU	2.81	2.77	2.87	2.90	2.92	2.91	2.95	2.96	2.97	2.92	2.93	2.89
2b												
Avg Floor Bed	2.58	2.40	2.82	2.78	2.80	2.83	2.87	2.92	2.91	2.87	2.79	2.73
Avg COVID Floor Bed	2.63	2.41	2.85	2.82	2.86	2.86	2.88	2.92	2.90	2.87	2.85	2.83
Avg ICU Bed	2.85	2.72	2.89	2.93	2.94	2.95	2.96	2.95	2.97	2.96	2.91	2.93
Avg COVID ICU	2.85	2.72	2.92	2.93	2.95	2.95	2.97	2.95	2.97	2.98	2.91	2.93
Avg Floor Bed	**2.67**	**2.55**	**2.80**	**2.83**	**2.84**	**2.80**	**2.89**	**2.94**	**2.91**	**2.85**	**2.82**	**2.77**
Avg COVID Floor Bed	**2.70**	**2.59**	**2.83**	**2.85**	**2.87**	**2.83**	**2.90**	**2.95**	**2.93**	**2.86**	**2.83**	**2.79**
Avg ICU Bed	**2.75**	**2.70**	**2.85**	**2.91**	**2.90**	**2.92**	**2.95**	**2.96**	**2.95**	**2.94**	**2.93**	**2.89**
Avg COVID ICU	**2.77**	**2.73**	**2.87**	**2.92**	**2.92**	**2.92**	**2.95**	**2.97**	**2.96**	**2.94**	**2.93**	**2.90**

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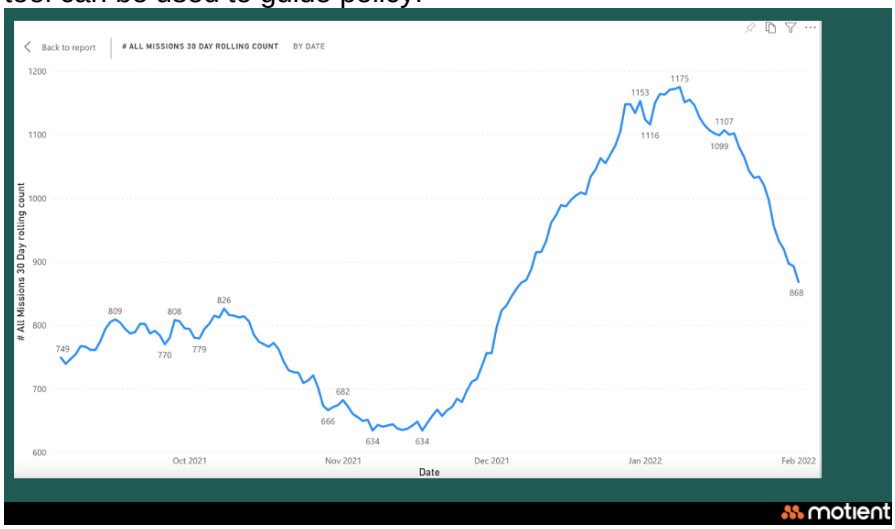
- **Findings:** The data collected from Mission Control allowed the team to get a good idea of how stressed the healthcare system was in Kansas. As the facility capacity reaches towards 3.0 in the capacity index, then the facility is on the verge of collapsing or into early stages of collapse. The amount of time spent from the patient waiting for transport related to the capacity index (or the amount of time spent in the emergency room and the increased risk of patients' dying while waiting) is around 2.5 from the data collected thus far. When discussing mitigation strategies and at what level of the capacity is strained, the metrics are provided to drive the discussion to put mitigations in place. The metrics can also provide information regarding when to step back from mitigation strategies as well.
    - **Question:** *Did you know this at the time and were you able to use this to guide decisions at the hospital level at the time or was this the learning that you were able to pull from after you saw the data?*
        - **Answer:** We were seeing that the case rate increased. There were local hospitals that asked if we knew how long this was going to last. What can be learned from the data is the shift in the slope of the curve meant that there was a change in disease incident. (See below) There was steep slope going into December, but then there was a pause, which was a change in trajectory. Delta was shifting and the increase slope was Omicron's introduction. There are public health implications of how this tool can be used to guide policy.



    - **Question:** *What's your belief about that? Do you think it will matter?*
        - **Answer:** We are working with several states to get this into post COVID-19 budget and trying to help understand and support rural health and the

disparity in care due to these kinds of things. You can keep this running in the background to provide ongoing data to address the ongoing challenges.

- **Question:** *How do you see impacting public policy, or convincing legislators or folks who are resisting to recognizing the severity of these condition?*
  - **Answer:** We would have an ongoing discussion about rural health care long before this would happen again. What we are losing in this discussion is the idea of margin and the importance of margin inside of our healthcare system. We must have a strong rural health care system. Unless the money is put forward and recognize that the margins are created by rural healthcare, we will lose a large of our local care system.
- **Question**: *On the Kansas 2013 Modified Protocol document, it alluded to the possibility of having more regional critical care and send people back down the chain to more local hospital. Would your data suggest that there was still no capacity to send them back down the chain?*
  - **Answer**: At the point of collapse, your staffing issue is a confounder there. You can do whatever you want, but you can't generate people overnight. We must do better at managing these patients at the appropriate facility at the time of the need.

LESSONS LEARNED FROM LOCAL HEALTH DEPARTMENTS

Background: *Dennis Kriesel (Kansas Association of Local Health Departments) provided some lessons learned at the local health department level. The focuses were mostly on the development of COVID-19 vaccine plan, the confusion of the vaccine plan, and the equity issue that the local health departments had with the plan. However, the lessons learned are related to scarce resources and equity concerns that would be useful in a hospital setting.*

- **Lessons Learned:**
  - Best to solve any equity matters before a situation develops.
  - Remember that in a crisis, workers are looking for the path of least resistance.
  - It is unlikely that, when demand for service is high, that providers are going to be interested in taking a lot of extra steps when there is so much demand from those who don't need additional steps to reach.

LESSONS LEARNED FROM STORMONT VAIL HOSPITAL

Background: *Amy Kincade (Stormont Vail Hospital) provided an overview of what Stormont Vail Hospital (SVH) did to modify their CSC protocols.*

Stormont Vail Hospital developed memos to modify their CSC protocols.

Document Name	Policy Area(s)
Standing Orders for Scarce Resource Allocation Team	Resource Allocation; Administration
PVOS Standing Order Set (Oct. 2021 FINAL SRAT)	Resource Allocation; Lab and Nursing Checklist for SOFA Scores
Modified Scarce Resource Allocation Protocols in Acute Care Hospitals During Public Health Emergencies (Last Updated 1/14/2021)	Scarce Resource Allocation; Acute Care Hospitals; Public Health Emergencies
Addendum A. Scarce Resource Allocation Team (SRAT)	Scarce Resource Allocation; Incident Command Systems (ICS)
Addendum B. Scarce Resource Allocation Scoring Systems	Scarce Resource Allocation; Triage
Addendum C. Triage Officer and Triage Team(s)	Scarce Resource Allocation Team; Triage
Addendum D. Duties Review Committee	Triage; Withdrawing Scarce Resources; Time-Limited Trial
Lottery Pick Standard Work 11.6.20	Triage Team Lottery; Tiebreaker Procedures

- **What Was Done:**
  - SVH reviewed the Sequential Organ Failure Assessment (SOFA) Score and the Kansas 2013 Modified Protocol document to implement them into policies. SVH setup meetings to modify the 2013 guidelines to make them more objective during the pandemic.
  - SVH walked through the policies and protocols with the providers to engage the team to focus on the medical conditions that the patients may present. SVH realized that they needed a tool that was objective to aide in the clinical decision-making process.
  - SVH also practiced scenarios and tied them to the incident command levels to prepare its teams for surges.
    - **Question:** *Did SVH had a formal adoption of the protocols?*
      - **Answer:** The protocols are in our policy and would be ready to be enacted when the incident commander or CEO would enact them. However, we never had to formally adopt them.

Brief Overview of Required Items for Incident Management Framework

KDHE REQUIRED ITEMS

Background: *The speaker for the discussion on incident management framework was unable to attend the meeting. This discussion will take place in May. However, a brief overview of the required items needed in the Kansas CSC guidance document was provided.*

- *Incident Management Framework:*
  - *Operational framework for state level information management and policy development including real-time engagement of subject matter experts for technical support with allocation decisions and the coordination and decision processes for the allocation of scarce resources (e.g., pharmaceuticals or PPE) to the health and medical sector.*

- *Subsection: Actions for Prolonged Crisis Care Conditions*
  - *Actions the state will take to support prolonged crisis care conditions that cannot be rapidly addressed through standard mutual aid or other mechanisms*

Discussion on Scoring Tools and Tier Systems

SCORING TOOLS AND TIER SYSTEMS

Background: *Hina reviewed the required item (below) needed in the Kansas CSC guidance document and posed reflection questions (below) for TAP to keep in mind while considering scoring tools, tier systems, and correction factors. Dr. Steve Simpson and Dr. Jennifer Watts provided an overview of the scoring tools used in adults and pediatrics. John Carney (CPB) provided an overview of the correction factors.*

- *Required Item: Guidance for EMS and health care providers on recommended crisis care strategies*
- *Reflection Questions:*
    - *Should the Kansas CSC guidance document consider a scoring tool?*
    - *Should the Kansas CSC guidance document consider or tiered system/approach or both?*
    - *Should a correction factor be applied to scoring tools? If so, what elements should be included in it (e.g., geographic factors)?*

- **SOFA Score:** SOFA score assesses the performance of several organ systems in the body and assigns a score based on the data obtained in each category on a 5-point scale. This scoring tool can be applied to other critical illnesses and has been validated in prospective fashion and in different sources of critical illness. The SOFA score is an important all-purpose tool for disaster. Like all scoring tools though, the scoring tool does not mean that it can validate every given individual because scoring tools cannot provide true accuracy or precise decision for anything. What can be learned from scoring tools is that of a large group of patients, who is sicker based on their score. With SOFA score and any other scoring tools, they play a minor part of sorting priority.
- **KU Med's Scoring System for Frailty:** At KU, a scoring system for frailty was considered because frailty is a predictive outcome in acute critical illness. The more frail a person is, the most likelihood that the individual would die from the acute critical illness. Therefore, during triage, a person who is frail may be in a lower position on the priority scale. There are also modifications to the frailty score available for people using wheelchairs.
    - **Question:** *I appreciate that the frailty score includes modifications for people using wheelchair. Last time we talked about the Glasgow Coma Scale (GCS) and how that would score against a person with disability that is nonverbal or had paralysis, how would that be handle in the clinical setting?*
        - **Answer:** A member answered -- One of the ways the SOFA Score is applied is similar to patient diagnosis, such as looking at the increase of SOFA score due to the cause of the acute illness. If a person is mute to begin with, that should not be held against them to begin with. What the SOFA score is about, is what has happened to the person as a result of the acute illness?
- **Scoring Tools That Are Not Validated But Can Be Used:** There are other tools listed in the Colorado CSC Plan that can be used, such as the HOSPITAL Score, LACE Score NEWS-2 Score, Pneumonia Severity Index, HEART Score, and Injury Severity Score. Each tool can be used depending on the situation. For example, the HOSPITAL Score can be used as a predictor, but is less useful in triage circumstances. NEWS-2 Score is helpful for screening for who needs ICU care.
- **Need for Scoring Tools:** Scoring tools are developed to be objective and are needed to avoid anyone making judgment the quality of life.
- **Pediatric Scoring Tools:** Most adult scoring tools are modified for kids, which may or may not work. The pediatric scoring tools are meant to be used as adjunct tools and not

to be used by itself. Modified SOFA Score and Pediatric SIRS Criteria are not the best, but it has been used. Children's Mercy Hospital uses PELOD-2, SNAPPE-II, and NICHD-OT, while also looking at the prognosis of the patients, duration of need, how they are responding to treatment, and how they are doing. The score is a small portion of that.

Discussion:

- **Long-term, Short-term, or Hospital Survivability:** KHI staff mentioned that there was discussion among CAB members regarding whether survivability should be considered, what type of survivability criteria is being considered, and how can the scoring tools contribute to the discussion. A TAP member stated that the tools are for hospital survivability, either at 28-day or 30-day survival. The member stated that the tools are predicting who will be able to get out the hospital alive and it doesn't say much about what happens beyond that. The best that providers can predict is hospital survival with these tools.
    - **Suggestion**: KHI staff mentioned that there were concerns from CAB about factoring in survivability because of people's experiences of being told that a family member would not survive but they did or implicit biases about the person's quality of life or condition. It was suggested TAP members can reflect upon the feedback from CAB because their perspectives reflect communities' concerns.
- **Accounting for Pre-Existing Conditions in Scoring Tools:** A TAP member mentioned that some scoring tools may provide misleading information and put individuals with pre-existing conditions at a disadvantage. Another TAP member responded that chronic conditions, whether it caused an acute illness or not, is likely to alter the person's survivability to the illness. However, a correction factor can help those with disadvantages.
- **Addressing Equity:** A TAP member shared that part of CAB objection to using specific measures or score without considering correction factors is that those tools do not address the issue of equity from the beginning.
    - **Suggestion:** The TAP member suggested that the group should have another discussion with CAB to review the White's and Lo's paper and discuss the framework (see below) and how it may need to be built into the Kansas CSC guidance document. Another member agreed that the framework provided in the White's and Lo's paper uses tools that are already objective, like Area Deprivation Index (ADI).

TRIAGE FRAMEWORK

Table 3. Triage Framework to Promote Population Health Outcomes and Justice

Principle	Criterion	Point System* +1	+2	+3	+4
Promote population health outcomes	1. Prognosis for hospital survival (assessed using a validated severity-of-illness score)†	Quartile 1: lowest risk of death (i.e., risk of death <25%)	Quartile 2 (i.e., risk of death 25–49%)	Quartile 3 (i.e., risk of death 50–75%)	Quartile 4: highest risk of death (i.e., risk of death >75%)
	2. Presence of end-stage medical condition (medical assessment of near-term prognosis)	—	—	—	Death expected within 1 yr from end-stage condition
Promote justice/equity	1. Correction for structural inequities using ADI	Subtract one point from the Triage Priority Score if the patient's ADI score is 8, 9, or 10 (on a 1–10 scale)			
	2. Priority to frontline essential workers	Subtract one point from the Triage Priority Score if the patient is an essential worker in a high-risk occupation			
	3. Priority to those who've had the least chance to live through life's stages	Tiebreaker: In the event that two patients have identical Triage Priority Scores, give priority to the younger patient when a significant age difference exists			
	4. Equal chances	Second tiebreaker: In the event that two patients have identical Triage Priority Scores and are of similar ages, use random selection to determine who receives the resource			

Definition of abbreviation: ADI = area deprivation index.
*Scores range from 1 to 8, and persons with the lowest score would be given the highest priority to receive critical care beds and services. An alternative scoring approach is to allow the minimum score to be as low as −1 (e.g., a patient with a low risk of hospital mortality, is not expected to die within a year, is an essential worker, and is from a high-ADI area). Allowing scores to be as low as −1 would likely result in a larger disparity-mitigating effect.
†Severity-of-illness scores should be adjusted for individuals with disabilities that cause baseline impairments that increase their calculated illness severity score but do not substantially impact their chances for near-term survival (e.g., a patient with a language impairment from autism or cerebral palsy should not have their Glascow Coma Scale score negatively affected by their baseline speech impairment because it does not affect their prognosis for near-term survival).

Source: White, D. B., & Lo, B. (2021). Mitigating Inequities and Saving Lives with ICU Triage during the COVID-19 Pandemic. https://doi.org/10.1164/rccm.202010-3809CP

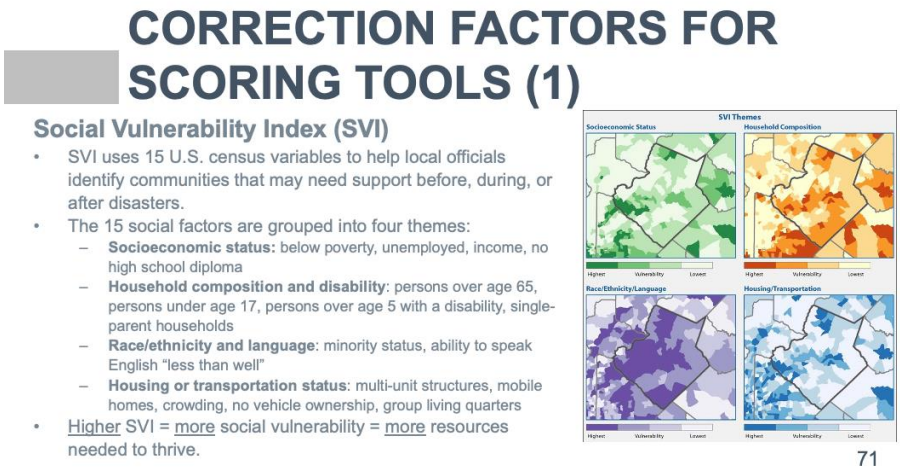
Proposed Consideration/Guideline:
The TAP proposed the following consideration:

- **Using Scoring Tools:** TAP members agreed that scoring tools should be included in the document since they are objective measures that can be used for clinical decisions. A TAP member did want the group to also consider that not all hospitals, like small hospitals, may have needed data and tools to do the same testing.

CORRECTION FACTORS

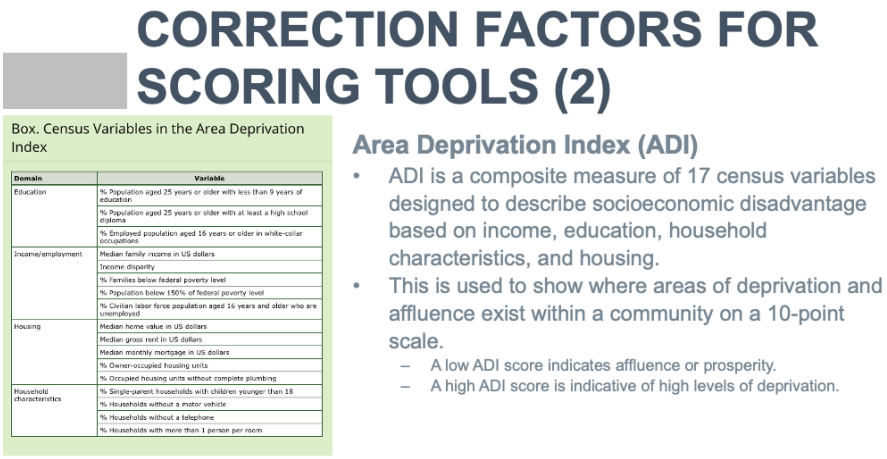
Background: *John Carney (Center for Practical Bioethics) provides an overview of the Social Vulnerability Index (SVI) and Area Deprivation Index (ADI) that can be utilized as correction factors for scoring tools.*

- **Social Vulnerability Index:** See below for the overview of SVI. The issue with utilizing SVI is that it loses its effectiveness as the population becomes more dispersed. There is a level that needs to be maintained. The problem can arise with frontier areas where multiple counties may be added together before the level is enough to determine the social vulnerability for the area. However, there are ways to accommodate and fix that.



  - **Question:** *We screen the social determinants of health currently and we correct this as they enter the hospital. There is a scoring system that we flag and connect them with community resources. The SVI is a tool that we are talking about, is the applicability of this is that you would have to ensure that that you are not using those items?*
    - **Answer:** A member answered -- You use SVI to adjust the score based on the original score by using those factors to add or subtract those points to receive the treatment. However, the more time you do that to even the playing field, the increase of likelihood of people being tied. There are suggestions from the White's & Lo's paper for tiebreakers.

- **Area Deprivation Index:** See below for overview of ADI. This tool also works better with densely population, which Kansas does not have a lot of. The application is something that TAP members need to consider as the group talk to CAB member about how both groups can make accommodations to do this. A TAP member mentioned that a consideration may be to have triage teams remotely make the decisions in small hospitals for more objective triage.



Discussion:

- **Using Correction Factors for Scoring Tools:** A TAP member shared that it is reasonable to use SVI or ADI to "even out the playing field," but cautioned to not over correct scoring tools. Another TAP member shared that correction factors should be done at the beginning before using scoring tools since both tools need to be utilized together to address inequities. A few TAP members agreed that using a correction factor in the beginning before using scoring tools would help create a more equitable environment for individuals seeking care. A CAB liaison shared their concern that the CSC guidance document would perpetuate existing inequities if the decision were to not consider using correction factors along with scoring tools. A TAP member shared that it is unrealistic to not use correction factors in a triage framework to address inequities.
    - **Another Perspective:** Another TAP member shared their concern that addressing inequities during triage would lose the objectivity of the clinical decision-making process.
  - **Question:** *Should each hospital be the entity that decides what triage tool they use in consultation with their ethics experts? Maybe an ethics on call person can be there for stat referral? Should this be in the document at the state level or at a facility level?*
    - **Answer:** A TAP member did not have a direct answer to the question but stated that it is whichever tool needed to compensate for implicit bias.
  - **Question:** We *need to consider that small rural hospitals may have one person designated to make triage decisions. What resources should be available at the state level in addition to the ethics expert? Is there a central resource outside the community that the state can provide to help small hospitals with ethics and the triage process?*
    - **Answer:** A TAP member answered that smaller hospitals may be better at triaging since they know their community. The member shared that there needs to be scalability in the plan that offers various resources to hospitals to decide which path they want to take. Another member stated that they have heard from other critical access hospitals that knowing their patients is a barrier for the hospitals because they are bearing the difficult news/decision to people that they know. The member shared that having resources offered from the state or outside of the community would take off the burden of providers.

Proposed Consideration/Guideline:

The TAP proposed the following consideration:

- **Further Discussion in Subgroup:** TAP members agreed that the scoring tools and correction factors should be discussed further in subgroups as they identify scorings tools that could be included in the Kansas CSC guidance document and how correction factors can be utilized.

CAB SURVEY REGARDING TRIAGE TEAM

Background: *Tatiana Lin, CAB facilitator (KHI) provided an overview of the survey administered to CAB members as a follow-up to the April 7th meeting. The purpose of the survey was to clarify CAB's perspectives on several issues and respond to TAP's questions addressed to CAB during the March 10 meeting. Specifically, Tatiana shared CAB's perspectives regarding a potential make up of a triage team.*

CAB SURVEY: SHOULD THE DECISION WHO GETS WHAT MEDICAL RESOURCES BE MADE THROUGH A "TRIAGE TEAM WITH BLINDED DECISION-MAKING ", A TRIAGE TEAM INCLUDING THE PATIENT AND THE PATIENT'S FAMILY / POWER OF ATTORNEY OR THE COMBINATION OF BOTH APPROACHES?

Results	Rationales
Combined ("Triage Team with Blinded Decision - Making " + Triage Team Including Family/Patient) (*2 CAB members*)	• Bringing families into the conversation early so they are informed of the current status and possibly let them make the first level decision, knowing that if resources are even more scarce the case may be referred to blind decision-making process. • Every situation is different and allowing more flexible solutions is the best option for our industry - especially in crisis.
Triage Team with Blinded Decision - Making (*2 CAB members*)	• All identity markers should be removed from the decision maker… age, race, sex, identity, preferences, family, working status, income… It should be a set of numbers and a score. • I don't believe allowing emotions into your decision making. Adding family members or power of attorney in these situations will bring in emotions.
Triage Team Including Family/Patient (*3 CAB members*)	• The team approach seems more equitable to me. The family gets to be involved in the decision. Even though they may not be imminently qualified at least they are a part of the process. • The person and their family and their primary care professional have the right to be a part of the decision-making process.

CAB QUESTION TO TAP: What are some opportunities for patients/patients' family/power of attorney to engage in triage or other decision-making processes?

- **Discussion**:
  - **Misunderstanding of the Triage Process:** Some TAP members shared their concerns that CAB members may be misunderstanding the triage process because the triage requires a provider to make decisive decisions in the "midst of chaos." The concern is that CAB may be misunderstanding the process and thinks about it the same way as end-of-life care which heavily involves the family in the decision-making process. Some TAP members shared that the triage process should be equitable and as objective as possible. By including family members, it would introduce bias in the decision-making process.
    - **Suggestions:**
      - A TAP member suggested to revisit this recommendation with CAB members regarding the composition of a triage team and clarify why it might be challenging to include patients and their families in the team.
      - A KHI staff suggested for TAP members to consider looking at other states' CSC plans that include guidelines for actions that can occur prior to the crisis stage, including where discussion off the patient's goals of care place. In addition, the TAP can consider how guidelines can be helpful to communicate with the community about when the CSC needs to be activated, what hospitals will do,

and what can be done in advance to address equity and understand patients' goals of care.

- A TAP member suggested that the role of families and power of attorneys to engage in the decision-making process can be done before the triage process begins. The member stated that as triage tools are being sent to the triage committee, ask the family if they want to be considered in the triage pool. This would allow families to be involved and decide to withdraw or not withdraw from the triage pool consideration.

Follow up items

TAP members were asked to:

- Send an email to Hina Shah (hshah@khi.org) or Wendy Dang (wdang@khi.org) if they were interested in participating in a subgroup meeting to review and identify scoring tools that could be included in the Kansas CSC guidance document for hospitals to utilize. Further announcements will be made regarding potential meeting times for the subgroup.

Additionally, TAP members were advised of the following meetings:

- May 5th, *CAB Meeting #4 at 2:00 p.m. to 4:00 p.m.*
- May 12th, *TAP Meeting #4 at 2:00 p.m. to 5:00 p.m.*
    - Area of Focus: equity; politics and declarations of CSC; alternative care sites, coordination of care and information sharing.
    - Kansas CSC Guidance Document:
        - Incident Command Framework
        - Authority and Legal Considerations
        - Roles and Responsibilities
        - Communication System
        - Alternative Care Sites
        - Deactivation
        - Plan Maintenance
        - Modifications while Activated
        - Appendices

TECHNICAL ADVISORY PANEL (TAP) MEMBERS		
Name	**Title**	**Organization**
Daniel Decker	DCF Director	Kansas Department for Children and Families (DCF)
Dan Goodman	Deputy Commissioner for Long-term Services and Supports	Kansas Department for Aging and Disability Services (KDADS)
Dr. Jennifer Watts	Pediatric Emergency Medicine Physician	Children's Mercy Hospital
Dr. Dennis Cooley	Pediatrician	American Academy of Pediatrics, Kansas Chapter
Con Olson	Administrative Society Representative on the KEMSA Board of Directors	The Kansas Emergency Medical Services Organization (KEMSA)
Dr. Lillian Lockwood	Clinical Advisor, Northeast and Kansas City Metro	Kansas Healthcare Coalition (HCC)
Ron Marshall	Director, Preparedness and Regulatory Affairs	Kansas Hospital Association (KHA)
Carla Keirns, MD Ph.D.	Associate Professor	University of Kansas Medical Center
Jean P. Hall, Ph.D.	Director	Institute for Health and Disability Policy Studies (KU)
Rachelle Colombo	Executive Director	Kansas Medical Society
Jane Kelly	Executive Director	Kansas Home Care & Hospice Association
Dennis Kriesel	Executive Director	Kansas Association of Local Health Departments
Michael McNulty	Emergency Manager	KDHE
Dr. Gianfranco Pezzino	Public Health Expert	Retired, Kansas Health Institute
Patrick Gaughan	Senior Vice President & Chief Values Integration Officer	Centura Health
John Carney	President and CEO	Center for Practical Bioethics
Mike Burgess	Director of Policy & Outreach	Disability Rights Center (DRC)
Dr. Steve Simpson	Professor, Pulmonary, Critical Care and Sleep Medicine	University of Kansas (KU) Medical Center
Amy Kincade	Vice President, Population Health Management	Stormont Vail Health
Christopher Harms	Critical Care/Cardiology Pharmacist	Advent Health
Dr. Dereck Totten	Family Practice Physician	Citizens Health

Dr. Samer Antonios	Chief Clinical Officer	Ascension Via Christi Health, Inc
Michael Lewis, MD, FAAP	Associate Professor Medical Director, Pediatric Inpatient and Intensive Care Units Program Director, Pediatric Cystic Fibrosis Program Division Chief, General Pediatrics	The University of Kansas Health System
Jeanne Gerstenkorn	Vice President for Health and Wellness	Presbyterian Manors of Mid-America

COMMUNITY ADVISORY BOARD (CAB) LIAISON		
Name	**Title**	**Organization**
Ami Hyten, J.D.	Executive Director	Topeka Independent Living Resource Center, Inc.

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT (KDHE) STAFF		
Name	**Title**	**Organization**
Janet Stanek	Secretary for Kansas Department of Health and Environment (KDHE)	KDHE
Ashley Goss	Deputy Secretary for Public Health	KDHE
Dr. Joan Duwve	State Health Officer	KDHE
Kendra Baldridge	Bureau Director	KDHE
Rebecca Adamson	Preparedness Program Director	KDHE
Edward Bell	HCC Program Manager	KDHE

KANSAS HEALTH INSTITUTE (KHI) STAFF			
Name	**Title**	**Organization**	**Emails**
Tatiana Lin, MA	Senior Analyst and Strategy Team Leader	KHI	tlin@khi.org
Hina Shah, MPH	Senior Analyst	KHI	hshah@khi.org
Samiyah Para-Cremer, M.Sc	Analyst	KHI	sparacremer@khi.org
Wendy Dang, MPH CPH	Analyst	KHI	wdang@khi.org
Emma Uridge, CHES	Research Assistant	KHI	euridge@khi.org
Kari Bruffett	Vice President for Policy	KHI	kbruffett@khi.org