Contents

Environmental Scan and Literature Review: Crisis Standards of Care (CSC)

Background

[Detailed methodology will be included in appendix.]

Articles in this review were primarily identified through a PubMed search within EndNote using the following search terms: crisis standards of care, equity, disabilities, race, workforce, resources, scarcity, transparency, ethics, surge, triage, and staffing. Certain state Crisis Standards of Care (CSC) plans were reviewed to address the priority research questions listed below. Final methodology, including specific search terms and exclusions, will be compiled when the review is finalized. Key findings and research methods were taken directly from the articles, government documents, and law reviews.

The Minnesota, Colorado, and Arizona Crisis Standards of Care guidelines reviewed were selected because the plans are featured resources in the TRACIE Healthcare Emergency Preparedness Information Gateway, and other national sites. While no reviews rate quality, these states did well in national comparisons for completeness and for meeting review criteria. Each of these plans addresses the core research questions and can serve as a model for content, key considerations, and planning.

While all plans shared similar content areas, plans differed in the level of detail. In contrast to the Minnesota plan with a high-level operations plan and several attachments serving as stand-alone guides, the Arizona plan is very detailed in its Clinical Concept of Operations. Colorado's plan is the longest, its operations detail level falls between the other two states and includes lengthy resource sections in the appendix. All plans have been updated in the past two years with Colorado's posted plan being updated most recently. The output of this review is organized into "evidence tables" that are focused on specific areas of focus which were translated into research questions.

Articles and state Crisis Standards of Care guidelines cover multiple areas of focus and are included in multiple evidence tables. Relevant findings in each evidence table reflect the research question. The tables were created to facilitate writing for Phase 2 of the Kansas Crisis Standards of Care Guidance. This document was not written for publication and therefore may include abbreviations, phrasing, and other elements that do not adhere to the publication style for the organizations charged with producing it. Finally, this is a draft and should not be reviewed as complete or final – missing or needed sections can be added during for already reviewed articles.

Long-Term Care Services and Supports (LTSS)

Background

[Detailed methodology will be included in Appendix A.]

Many states have updated their crisis standards of care (CSC) guidance to address the unique challenges posed by the COVID-19 pandemic and to address the health disparities and racial/ethnic injustices highlighted during the pandemic. While many frameworks, guidance documents, and resources exist to help healthcare systems and stakeholders prepare for and respond to emergencies with CSC) few specifically address the needs of long-term care facilities (LTC).

The Johns Hopkins Bloomberg School of Public Health developed guidance on protecting individuals in Long-term Care Facilities (LTCF) to promote preparedness and response efforts within the facilities. Their recommendations include improving situational awareness, ensuring proper infection prevention and control, maintaining adequate staffing levels, supporting screening and testing of residents and staff, isolating sick and quarantined residents, and reducing the risk of staff and resident exposure.

The Arizona Department of Health Services has developed specific long-term facility COVID-19 guidance that mirrors the recommendations of Johns Hopkins. The guidance includes sections on proper infection education, prevention and control; screening and testing of staff and residents; facility quarantine plans for residents and return to work plans for staff; and optimizing PPE and supply access.

The Post-Acute and Long-Term Care (PALTC) facility's emergency preparedness program and supporting emergency operations plan (EOP) also address the unique challenges posed by COVID-19, including: potential staffing shortages and limited resources; crisis communication; significant modifications to operations to prevent the spread of the virus; and coordination with other hospitals, PALTC facilities, local government, and PALTC organizations.

The Centers for Medicare and Medicaid Services (CMS) has established emergency preparedness requirements through its Emergency Preparedness Final Rule, which includes LTC requirements for emergency plans, policies and procedures, communication plans, training and testing, and emergency and standby power systems. The rule also includes interpretive guidance and surveyor's guidance for determining compliance.

The review output is organized into evidence tables that focus on specific areas of interest and are based on research questions. The articles and state Crisis Standards of Care (CSC) guidelines cover a range of topics and are reflected in multiple evidence tables. Each evidence table highlights relevant findings that align with the research question. These tables were created to support the development of updated Kansas CSC guidelines. Please note that this document is not intended for publication and may contain abbreviations, phrasing, and other elements that do not conform to the publication standards of the organizations responsible for

producing it. Additionally, this is a draft version and should not be considered complete or final. Any missing or needed sections can be added during the review of previously assessed articles.

Long-Term Care Services and Supports (LTSS) Research Questions

Q1. What communication strategies exist for long-term care (LTC) facilities during crisis standards of care?
Q2. How do states implement communication considerations into their CSC plans for LTC facilities?
Q3. What populations in long-term care facilities might be at risk of experiencing inequities as the result of CSC implementation?
Q4. What ethical considerations have been used to determine who gets scarce resources in long-term care facilities and who does not?
Q5. What is evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?
Q6. What strategies have been used to address long-term care staffing concerns during CSC implementation?
Q7. What role does long-term care facilities play in resource load balancing? Who are the decision makers?
Q8. What do older adults in long-term care facilities experience when hospitals are in crisis mode?

Q1. What public communication strategies exist for long-term care facilities during crisis standards of care (CSC)?

Summary of Evidence

During a crisis, public communication plays a crucial role in ensuring that all relevant stakeholders are informed and prepared to respond to the crisis. This communication must be an ongoing process, starting from the onset of the crisis and continuing until its resolution. This communication typically occurs through a variety of channels, including official statements and press conferences from government officials and public health agencies, as well as through social media and traditional news outlets. Public communication must take place from the start of a crisis until the end. Communication considerations are considered for most sections of state CSC plans. For many existing CSC plans, long-term care facilities may or may not be specifically mentioned in guidance or considerations. For plans to remain general and be applicable to different types of healthcare providers, “healthcare facilities” are used throughout guidance.

Findings from the reviewed CSC plans discuss strategies for enhancing communication and decision-making in long-term care (LTC) facilities, specifically for those receiving long-term services and supports (LTSS). These strategies include activating family councils, assigning staff as primary family contacts, utilizing gerontological social work students to assist LTC staff and requiring frequent virtual visitations. The plans suggest that to maintain the relationship between residents of LTC facilities and their families during the COVID-19 pandemic and future crises, the federal government, state and local leaders, and long-term care facilities should take proactive measures.[1]

Key Findings

- **Family Participation Enhances LTC Communication**: The families of LTSS recipients play a crucial role in improving communication within LTC facilities.
- **The Inclusion of a Long-term Ombudsman:** The inclusion of the long-term care ombudsman is critical to facilitate communication between family members, multiple providers and the residents.
- **Improving Communication Channels:** Strategies to strengthen communication channels in LTC facilities include activating family councils, assigning staff as family contacts, using social work students to support LTC staff, and encouraging virtual visitations.

Figure 1. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
[2] Amid the COVID-19 Pandemic, Meaningful Communication between Family Caregivers and Residents of Long-Term Care (LTC) Facilities is Imperative, Edem Hado & Lynn Friss Feinberg, (2020)	COVID-19 Caregivers Communication Family Adult Care Homes Long-Term Care Pandemics Social Support Long-term care	This article is based on a blog published by the AARP Public Policy Institute on April 7, 2020. The article found that to contain the transmission of COVID-19 in long-term care facilities, federal health officials issued strict visitation guidelines, restricting most visits between residents and visitors. Many older adults rely on visitors and family care for social support and to maintain their health, well-being, and safety in long-term care facilities, and therefore need to stay connected to their families.	Families of individuals receiving long-term services and supports (LTSS) play an important role in improving communication in long-term care (LTC) facilities. These families assist with navigating the system, facilitate communication with providers and participate in shared decision-making. To improve communication channels between the resident, provider and family, the article suggests implementing several strategies, including activating family councils, assigning staff as primary contacts for families, utilizing gerontological social work students to assist LTC full time employees and requiring frequent virtual visitations. The inclusion of the LTC ombudsman may also be beneficial in facilitating these efforts.
[3] Long Term Care Requirements: Centers for Medicare and	ASPR Tracie	CMS Guidance and Final Rule document that provides recommendations on LTC facilities for	The communication plan must contain the following: Names, contact information and primary and alternative means to communicate for staff, service entities, residents' physicians,

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Medicaid (CMS) Emergency Preparedness Final Rule (2021). ASPR Tracie.	Communication Plan (Section C) Emergency Preparedness	how they must develop and maintain an emergency preparedness communication plan and review and update the plan annually.	other facilities and volunteers; Federal, State, tribal, regional, or local emergency preparedness staff; the State Licensing and Certification Agency; the Office of the State Long-Term Care Ombudsman; and other sources of assistance. The plan must also contain a method for sharing resident information and medical documentation for residents under the LTC facility's care, as necessary, with other healthcare providers to maintain the continuity of care. Must Also Contain: • A means of providing information about the general condition and location of residents under the facility's care as permitted under 45 CFR 164.510(b)(4). • A means of providing information about the LTC facility's occupancy, needs, and its ability to aid, the authority having jurisdiction or the Incident Command Center, or designee. • A method for sharing information from the emergency plan that the facility has determined is appropriate with residents and their families or representatives.
[4] Crisis Standards of Care Brief: Public Messaging (2022). ASPR Tracie.	ASPR Tracie Defining Crisis Fair Decisions Personal Expectations and Action	The document outlines key aspects of crisis care to educate the public. It explains the concept of crisis care in a clear and concise manner, highlighting potential shortages of resources during a crisis and the process for making fair decisions in crisis care scenarios. Additionally, it provides an overview of	**What can the public expect?** • Healthcare facilities will do whatever they can to avoid rationing decisions. • As hospitals become more overwhelmed, patients are more likely to have poor outcomes or die compared to conventional (daily) operations. • Whenever possible, decisions will be made consistently and according to the best available evidence.

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	Public Communication Resource Shortage Examples	what the public can expect from their care during a crisis.	• Healthcare facilities will strive to avoid any bias or consideration of age, race, gender, disability, or other non-medical factors (excepting that advanced age may carry an independent increased risk for death – for example from COVID-19 – and may be included in consideration if that is the case). • Healthcare providers will always aim to provide comfort and relieve suffering, regardless of any shortage in resources. Providers will also seek second opinions when needed and will look for the best available evidence to help them make decisions. • The most common crisis care issue will be the lack of trained staff – hospitals will often need to use staff that are not as experienced with intensive care to work in those areas. **What can the public do?** • The only way to keep the healthcare system out of crisis is to prevent demand from exceeding the resources available. Reduce the burden on the healthcare system by following any public health guidelines, using emergency services only for emergencies, and asking others to do the same. • Understand and accept that the best care available may not be what you expect; there may be delays and limited choices of where you receive care. • Always seek care if you are experiencing chest pain, trouble breathing, possible stroke symptoms, or other emergencies.

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Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			• Make sure that you and your loved ones have documented your wishes for end-of-life care (e.g., if you would want to be on a ventilator for a prolonged period with little potential of survival, or if you would want aggressive treatment even if multiple body systems were failing). This can help ensure your wishes are respected and keep you from receiving treatments you may not want.
[5] Emergency Preparedness requires a Communications Plan (2014). American Health Care Association (AHCA), National Center for Assisted Living (NCAL).	Communication Plan Confidentiality Media plan Planning Ahead Stakeholders Team-based	Communication Plan Guidance outlines considerations for developing a comprehensive communication plan with a focus on media communication during a crisis.	The plan highlights the importance of forming an Emergency Communications Team (ECT) or assigning a designated person within the broader Incident Management Team. It is crucial that stakeholders, including first responders, utility companies, residents and families, media outlets, healthcare organizations, and regulators, receive customized messaging and contact information. To ensure that accurate information is communicated during a crisis, it is recommended that the Emergency Communications Team receive training in evaluating and communicating facts, which may change as new information becomes available. This training should encompass various communication scenarios with families and the media. Additionally, it is important to identify a designated primary and secondary spokesperson who is knowledgeable about policies, procedures, and the history of the situation. To aid the media in their reporting, it is suggested that the facility's website be kept up-to-date with relevant information that can be easily accessed.

Figure 1. What communication strategies exist for long-term care facilities during crisis standards of care?			
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			Basic Steps for Media Plan: 1. Prepare pre-draft emergency statements that incorporate relevant language from the organization's mission statement. 2. Make a list of communication channels (e.g., radio, TV, newspapers and senior publications). 3. Prepare media "kits" (e.g., organization history, general information). In an emergency there will not be time to prepare media materials.
[6] COVID-19: Considerations, Strategies, and Resources for Crisis Standards of Care in Post-Acute and Long-Term Care (PALTC) Facilities (2020). COVID-19 Healthcare Resilience Working Group.	Communication Considerations Crisis Communication Team Strategies	Working Group Report to inform changes to operations and care processes during crisis standards of care	The "Communications" section (*Page 10*) of the working group report highlights the significance of effective communication in during crisis . It covers the steps required to establish communication channels with relevant stakeholders, including , families residents, staff, vendors, providers, community healthcare organizations, hospitals, home health agencies and public health departments.

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[7] Medical Operations Coordination Centers (MOCC)/ Patient Load-Balancing: Summary of Lessons Learned during COVID-19 (2022). ASPR Tracie.	Communication Coordination Patient Load-Balancing	This article, published by ASPR Tracie, provides a summary of the key lessons learned by Medical Operations Coordination Centers (MOCCs) during the COVID-19 pandemic.	All MOCCs had a dedicated phone number with redundant communication pathways. Coordination, communication, and partnerships were key in moving patients when traditional referral partners could not accept transfers. The ability to monitor bed availability in hospitals combined with quantitative surge indicators helped staff identify needs and available assets and determine the best support available for hospitals under surge stress.
[8] Missouri Guidance for Long-Term Care Facilities (2021). Missouri Department of Health and Senior Services.	COVID-19 Long-Term Care Ombudsman	The Missouri Guidance for Long-Term Care Facilities (2021) is a comprehensive resource published by the Missouri Department of Health and Senior Services. This guidance provides information and recommendations for long-term care facilities in Missouri, aimed at ensuring the health, safety, and well-being of residents and staff. The guidance covers various aspects of long-term care, including infection prevention and control, resident care, and communication with resident representatives, among others. This resource serves as a valuable tool for long-term care facilities in Missouri to reference and implement best practices to protect the health of residents and staff during the ongoing pandemic and beyond.	If in-person access is deemed inadvisable (e.g., the Ombudsman has signs or symptoms of COVID-19), facilities must, at a minimum, facilitate alternative resident communication with the ombudsman, such as by phone or through use of other technology.

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Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
[9] Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies (2016). Centers for Disease Control	Communication Coordination Barriers	The purpose of the meeting was to identify barriers to communication and coordination barriers facing the long-term care sector and to address the role that stakeholders, public health departments, and emergency management agencies can play in reducing the expected surge of patients on hospitals and other healthcare sectors within the community during a public health emergency. The Planning Guide resulted from the meeting.	Implementing crisis standards of care within a facility or agency requires clear communication to personnel, residents/patients, and their family members or legal next-of-kin, as outlined in the Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies (2016), published by the Centers for Disease Control. Providing advanced warning of the implementation of crisis standards of care helps stakeholders prepare for its impact by educating them on what to expect. Multiple modes of communication should be identified, and an up-to-date contact list of community partners and suppliers should be kept. The facility or agency should also identify sources for information and appoint individuals to receive and interpret it. During an emergency, the facility or agency may need to interact with the news media. A designated liaison officer and an alternate should be appointed to communicate with the media and a translation service should be considered to use during a public health emergency. Specific steps may include: • Determine when and how the implementation of crisis standards of care will be communicated to personnel. • Determine when and how the implementation of crisis standards of care will be communicated to residents/patients and their families or legal next-of-kin.

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Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			• Identify other external partners or other external entities that should be notified of the implementation of crisis standards of care in your facility or agency and determine when and how they will be notified. • Determine what public messaging should be developed with regard to the implementation of crisis standards of care, when it should be developed, and who should develop it. • Determine how public messaging on crisis standards of care can be coordinated within your facility or agency as well as with your external partners and other external entities. • Determine how you will notify family members or legal next-of-kin of the death of a resident/patient that may have been prevented under normal standards of care.
[10] Surge Capacity Concepts for Health Care Facilities: The CO-S-TR Model for Initial Incident Assessment; September 11, 2008; Hick JL, Koenig KL, Barbisch D, Bey TA.	Plan Model Common framework used by states	The resource is a guide for healthcare facilities to assess and respond to surges in patient demand during a public health emergency. The CO-S-TR Model for Initial Incident Assessment provides a framework for healthcare facilities to assess their capacity to respond to a sudden increase in patients and prioritize actions to ensure the safety and well-being of both patients and staff. The authors provide guidance on how to identify and mitigate potential barriers to providing care during a surge, and how to	The CO-S-TR model stands for "CO" stands for command, control, communications, and coordination and ensures that an incident management structure is implemented. "S" considers the logistical requirements for staff, stuff, space, and special (event-specific) considerations. "TR" comprises tracking, triage, treatment, and transportation: basic patient care and patient movement functions. Communication with internal and external partners is critical to successful event management. Communication Considerations: 1. Appropriate paging groups and callbacks activated? 2. Public information officer appointed? 3. General employee information release (paging, hotline, other)

Figure 1. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
		effectively communicate with partners and stakeholders. The model has been used to create resource cards for state plans, such as Michigan and Colorado.	4. Initial media messages crafted and briefing scheduled? (spokesperson/s identified?) 5. External partners notified of events and situation? 6. "Media monitor" appoint\ted? States such as Colorado, Idaho and Minnesota use the CO-S-TR model for resource allocation cards for different types of care during conventional, contingency and crisis levels of care.
[11]How to Utilize the New HHS Crisis Standards of Care Framework for PALTC Facilities, October 14, 2022, American Association of Post-Acute Care Nursing (AAPACN)		The article, written by the AAPACN about the Healthcare Resilience Working Group (HRWG) project and it's the standards of care and areas of impact. It explains how facilities should use the HRWG document to guide their decisions and provides information on how to access this important resource. The article highlights the significance of the HRWG project and its impact on healthcare facilities, making it a valuable resource for healthcare professionals.	The article highlights the importance of communication between healthcare facilities, including post-acute and long-term care (PALTC) facilities and hospitals, in managing patient transfers and resource allocation during a public health emergency. The article notes that actions taken to preserve conventional standards of care in one area may require the introduction of contingency or crisis level standards in another area. For example, conserving staff and personal protective equipment (PPE) resources may require a shift towards virtual visitations using remote communication technologies, while still allowing access to support persons and end-of-life visits by family, friends, and clergy. (Reference: Communication Considerations in the Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies (2016). Centers for Disease Control).

Q2. How do states implement communication considerations into their CSC plans for LTC facilities?

Summary of Evidence

Communication is indicated as an ongoing and necessary consideration throughout state CSC plans. Some plans directly address the public; but overall, CSC plans generally address providers and use technical and complex language when discussing clinical processes and procedures during times when crisis standards of care are deployed. The Minnesota, Colorado, and Arizona Crisis

Standards of Care guidelines reviewed were selected because the plans are featured resources in the TRACIE Healthcare Emergency Preparedness Information Gateway. While no reviews rate quality, these states did well in national comparisons for completeness and for meeting TRACIE review criteria. Each of these plans addresses the core research questions and can serve as a model for content, key considerations, and planning.

Key Findings

- **Tools Developed by Hospitals:** Many of the same communication strategies used by hospitals would be applicable to LTC facilities. For example, Arizona's communication section includes information system, operations and target audience. The same systems that share information on available beds in a hospital system would be relevant to an LTC setting.

Figure 2. How do states implement communication considerations into their CSC plans for LTC facilities?

State Plan; Date	Policy Area(s)	Audience	Relevant Findings
[12] Arizona Crisis Standards of Care Plan: A Comprehensive and Compassionate Response; 2021	Communication Systems Communication System Administrators Alert system Communication Section Shared web-based tools Target Audience	The General Public, Local health depts., hospitals, healthcare providers, epidemiologists, infection control	For the communication section, the plan includes a table which includes the information system, description of the system, administrator for the system and the target audience. Systems may include alert networks, web-based tools used to share information/track patients, systems to track available beds, and the electronic incident management tool used by response entities.
[13] Colorado Department of Public Health and Environment (CDPHE)	Conventional, contingency and crisis levels of care.	Hospitals, providers, EMS, ICS, state and local health departments and public health partners, healthcare entities, facilities, workforce	Plan includes conventional, contingency and crisis level indicators for public safety answering point/public safety communication for Emergency Medical Services (EMS).

Figure 2. How do states implement communication considerations into their CSC plans for LTC facilities?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
All Hazards Internal Emergency Response and Recovery Plan ANNEX B: Colorado Crisis Standards of Care Plan Last amended May 12, 2022	Communication activities are integrated into multiple sections of the CSC plan. Regional Resource Cards		The plan includes regional resource cards for communication and coordination at each level of care for different types of care (e.g., palliative care). For dispatch centers, plan indicates that centers may consider the implementation of a telehealth process to allow for direct EMS communication with the patient. Page 147 (Appendix G6), offers guiding principles for healthcare entities, including long-term care facilities and home care services as CSC is being deployed. Principles include ensuring consistent and timely communication with stakeholders, resource counts through shared tracking systems are accurate, enhancing communication channels to elevate patient concerns and provide educational opportunities to share best practices—specifically during a pandemic.
[14] Minnesota Department of Health, Patient Care Strategies for Scarce Resource Situations; 2021	Conventional, contingency and crisis levels of care Ethical Values Scarce Resource Allocation Regional Resource Cards	Health care facilities	Document includes resource cards for scarce resource allocation. Document also includes ethical values as front matter in the document. Communication activities are integrated into multiple sections of the document. Front matter communication consideration: Facilities and personnel implementing these strategies in crisis situations should assure communication of this to their healthcare and public health partners to assure the invocation of appropriate legal and regulatory protections in accord with State and Federal laws.
[15] Massachusetts Crisis Standards of Care	Communication activities are	Healthcare facilities	The emergency plan emphasizes the importance of clear and frequent internal and external communication during crisis

Figure 2. How do states implement communication considerations into their CSC plans for LTC facilities?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
Planning Guidance for the COVID-19 Pandemic. October 6, 2020.	integrated into multiple sections of the CSC plan.		events. Effective communication is essential to convey information, maintain situational awareness, and collaborate with hospitals, Emergency Medical Services (EMS), alternate care systems, healthcare personnel, and the public.

Q3. What populations in long-term care facilities (LTCF) might be at risk of experiencing inequities as the result of CSC implementation?

Summary of Evidence

Covid-19 has disproportionately affected older adults and those with chronic conditions placing residents of LTCF at higher risk for serious complications due to COVID-19 including death. More than 40 percent of COVID-19 deaths were attributed to nursing home residents. LTCF house some of the most at-risk populations for morbidity and mortality related to COVID-19.

In addition, COVID-19 has brought to light disadvantages faced by people with disabilities in the healthcare system. Residents of LTCF may be especially vulnerable in a public health crisis, making it critical for CSC to address the vulnerabilities, including staffing and resources needed to cope with an emergency. High minority nursing homes had 61 percent more COVID-19 related deaths as compared to nursing homes with no minorities. Policies that prohibit family visitation can exacerbate existing vulnerabilities, such as difficulty in self-monitoring symptoms or communicating independently. It is especially important for family members with a long-standing understanding of a resident's needs to provide extra caregiving to those with disabilities or communication difficulties.

Key Findings

- **Community Consistency in Care Delivery:** The implementation of CSC raises similar risks of inequities in both LTC settings and hospitals, with a focus on aging and disability.
- **Board of Aging Criticizes Minnesota's Consideration of Age in Clinical Determinations:** Minnesota received criticism from their Board on Aging for considering age as a potential discriminatory factor in clinical determinations of likelihood of survival to discharge.
- **Importance of Fair and Equitable Processes:** To ensure that the CSC are fairly constructed and implemented, it is important to have fairness, equitable processes, engagement, education, communication, and the rule of law as part of the framework.

- **Vulnerability of LTC Residents in Public Health Crises.** Residents of long-term care facilities are seen as especially vulnerable in public health crises, requiring CSC to account for staffing and resources, and relying on staff and family caregiving for safety and well-being.
- **Addressing Resource Disparities in High-Minority Nursing Homes**: High-minority nursing homes have a higher rate of COVID-19 related deaths compared to facilities with no minorities. This disparity highlights the need for additional resources, such as funding for staffing and personal protective equipment, for nursing homes serving high minority populations during a pandemic.

Figure 3. What populations in long-term care facilities might be at risk of experiencing inequities as the result of CSC implementation?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
[16]MN Board on Aging CSC Position Paper	Resource allocation Communication Agism	This position paper, approved by the Minnesota Board of Aging (MBA) on September 18, 2020, was written in response to the Minnesota Department of Health's CSC plan. The MBA expressed concerns about the disproportionate impact of the COVID-19 pandemic on long-term care facilities (LTC) and the consideration of age in the allocation of scarce resources. The paper outlines the MBA's position on the importance of addressing aging issues in the CSC plan.	MBA requested that the CSC guidelines are made in collaboration with MBA and the Ombudsman for Long-term Care and in discussions related to healthcare standards relating to people living in long-term care settings. Although the MN plan was highly regarded in many aspects, it allows for the potential use of discriminatory factors, such as age or disability, in clinical prognostication of likelihood of survival to discharge. The MBA expressed concerns about the consideration of age and disability in the scarce allocation of resources.
[17]Disability Rights as a Necessary Framework for Crisis Standards of Care and the Future of Health Care, Hastings Center Report May-June 2020	Disability rights	This Hastings Center Report was published in the May-June 2020 issue and summarized the 2010 Institute of Medicine's (IOM) "Summary of Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations." The four IOM elements are:	Residents of long-term care facilities are seen as especially vulnerable in a public health crisis. CSC must account for their vulnerability, including staffing and resources needed to cope with an emergency. The restrictions on visitors and communal dining can be onerous and increase the reliance on staff for safety and well-being. Family members with a long-standing relationship and understanding of the resident's needs can provide extra caregiving, especially for those with disabilities or

Figure 3. What populations in long-term care facilities might be at risk of experiencing inequities as the result of CSC implementation?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
		• Fairness in Crisis Standards of Care: The IOM guidelines emphasize the importance of ensuring that CSC are recognized as fair by all those affected by them to the highest degree possible. • Equitable Processes: The guidelines stress the need for transparency, consistency, proportionality, and accountability in CSC to ensure that they are fair to all affected parties. • Community and Provider Engagement, Education, and Communication: The IOM guidelines emphasize the importance of active collaboration with the public and stakeholders to ensure that CSC are effectively implemented. • Rule of Law: The IOM guidelines state that CSC should be empowered by the rule of law to ensure that necessary and appropriate	difficulties in communication. Hospital visits offer an opportunity for this extra caregiving.

Figure 3. What populations in long-term care facilities might be at risk of experiencing inequities as the result of CSC implementation?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
		actions and interventions are taken.	
[18]High-Minority Nursing Homes Disproportionately Affected by COVID-19 deaths. https://www.frontiersin.org/articles/10.3389/fpubh.2021.606364/full Accessed January 17, 2023.	Inequities Race and ethnicity disparities LTC Mortality	The report uses CMS's nursing home COVID-19 public file to study the relationship between nursing home racial/ethnic mix and COVID-19 morality.	The study found that after controlling for other facility characteristics, high-minority nursing homes had 61 percent more COVID-19 deaths compared to facilities with no minorities. This suggests that nursing homes serving high minority populations may require additional resources, such as funding for staffing and PPE, to better respond to a pandemic.

Q4. What ethical considerations have been used to determine who gets scarce resources in long-term care facilities and who does not?

Summary of Evidence

The ethical considerations of who gets scarce resources and who does not are closely tied to the discussions around health equity and access to care. All state plans reviewed include an ethics section and articulate the ethical principles, including equity, that serve as the framework. Minnesota has created a stand-alone ethical framework for transitions between conventional care, contingency care and crisis care. The framework addresses facility/systems level policies and procedures grounded in ethical guidance, and clear transparent decision making.

The focus of hospital guidelines on scarce resource allocation, such as ICU beds and medical equipment, may differ from the scarce resources faced by long-term care facilities (LTC). Out of hospital specific continuum of care examples frequently include staffing (Q6), PPE, medications, and community derived services. Regardless of the resource, the core ethical principles remain the same including fairness, duty to care, duty to steward resources, transparency in decision-making, consistency, proportionality, and

accountability. As healthcare providers strive to be person-centered first, the recognition of a duty to a wider community comes second. When resources reach a crisis level, prioritization of available resources and treatments become based on likelihood of immediate or near-term survival with treatments under consideration. Truth telling is a core ethical principle that must be reinforced during a time of crisis.

Key Findings

- **Scarcity of Resources in Hospitals vs. LCT Settings**: In hospital settings, scarce resources include ICU and medical equipment like ventilators. In LTC, scarce resources may include medical equipment and PPE, but also include palliative and critical care usage medication, therapies, and one-on-one care from visiting loved ones.
- **LTC as Part of a Wider Community of Healthcare System:** LTC facilities exist within a community of healthcare systems and there may be ethical considerations surrounding supplies being diverted to higher acuity patients in other systems.
- **Collaborative Crisis Standards for Holistic Health Management:** Implementing crisis standards must be part of a system-wide approach in which all stakeholders, including health professionals and the public, participate in transparent decision-making.
- **Continuum of Care Approach:** The framework follows a continuum of care approach, taking into account the availability of a 14-day and 5-day supply of medications, with recommended strategies at each stage. Triage teams are recommended to prioritize scarce resources during a crisis.
- **Strategies for Scarcity Management:** The framework includes strategies for managing the scarcity of medications, such as conserving, substituting, adapting, reallocating, and prioritizing resources. Facilities are encouraged to consult with the state's pharmaceutical advisory panel for guidance on allocation decisions.

Figure 4. What ethical considerations have been used to determine who gets scarce resources in long-term care facilities and who does not?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
[19]IOM (Institute of Medicine). 2013. Crisis standards of care: A toolkit for indicators and triggers. Washington, DC: The National Academies Press.	Equipment and supplies	The Institute of Medicine of the National Academies prepared a CSC toolkit, which includes indicators and triggers, discussion participants, key questions in a slow-onset scenario, key questions in a non-notice scenario, decision support tools for different	The out-of-hospital specific continuum of care (as listed in Table 9-1 on page 179) highlights examples of indicators of a crisis in equipment and supplies such as the diversion of supplies to higher acuity patients, shortages that require rationing, and the reuse and repurposing of equipment that is no longer adequate. In response to these challenges, difficult decisions must be made to fairly allocate available resources through

Figure 4. What ethical considerations have been used to determine who gets scarce resources in long-term care facilities and who does not?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
		indicator categories at different stages of a crisis.	rationing, and a centralized supply distribution system is needed to support equitable allocation.
[20]Recommended Policy for Fair Allocation of Currently Used Medications at High Risk for Becoming Scarce https://drive.google.com/file/d/1N8b0LmFCQUNALp2bMtmdrdFYXzcYoUtD/view	Medication supply Ethics	The purpose of this document is to outline a plan for the fair and ethical allocation of scarce medications to the populations in need.	The framework guides the ethical considerations of healthcare providers, systems and facilities to support the consistent and equitable allocation of currently used, non-pandemic specific medications; minimizing suffering due to limited supply and provide a legal framework for triage decisions in the allocation. Ethical principles are mirrored in the Colorado CSC full document. Their guiding principles are beneficence, justice, fidelity, veracity and respect for persons. Continuum of care is based on a 14-day supply and 5-day supply availability. Strategies are recommended at each stage along with thresholds. Strategies include situational awareness, conserve, substitute, adapt, reallocate, prioritize and planning. For prioritizing at the crisis level, it was recommended that each facility deploy a triage team using a tier approach for allocation/re-allocation of scarce resources including medications. Facilities may consult with the state's pharmaceutical advisory panel. The appendix includes a list of medications that might become scarce during the pandemic, palliative care and critical care usage, shortage risk, impact and substitutions within class.
[21]COVID-19: Considerations, Strategies, and Resources for CSC in Post-Acute and Long-	Ethics	FEMA through a COVID-19 Healthcare Resources Working Group developed an overview of general considerations, potential strategies, and existing resources for potential changes in operations and care process.	Practical example of ethical considerations related to the use of inhaled bronchodilators in a LTC setting is used to illustrate the tension between equity and benevolence toward individuals while also treating the community fairly and equitably.

Figure 4. What ethical considerations have been used to determine who gets scarce resources in long-term care facilities and who does not?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
term Care (PALTC) Facilities			
[22]Gostin LO, Friedman EA, Wetter SA. Responding to Covid-19: How to Navigate a Public Health Emergency Legally and Ethically. Hastings Cent Rep. 2020;50(2):8-12. doi:10.1002/hast.1090 https://www.ncbi.nlm.nih.gov/pubmed/32219845 Accessed February 15, 2022	Ethics Scarce resource allocation	The paper delves into the ethical and legal considerations surrounding the allocation of limited health resources during times of overstretched capacity. It examines the challenges faced by marginalized populations in accessing necessary care, and raises questions about the ethical obligations towards vulnerable individuals who may be separated from their loved ones and support systems. Additionally, the paper explores the delicate balance between preserving public health and upholding civil liberties.	Implementing crisis standards must be part of a system-wide approach in which all stakeholders, including health professionals and the public, participate in transparent decision-making.

Figure 4. What ethical considerations have been used to determine who gets scarce resources in long-term care facilities and who does not?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
[23]Ethical Framework for Transition Between Conventional, Contingency, and Crisis Conditions in Pervasive or Catastrophic Public Health Events with Medical Surge Implications Minnesota Crisis Standards of Care Updated November 24, 2021	Ethics	The Minnesota framework provides ethical considerations for managing challenges in pervasive or catastrophic public health events. The framework has been updated to clarify fair process requirements for expedited decision-making. They no longer address specific allocation of specific resources, or other challenges related to types of interventions (e.g, CPR) like in previous guidance.	Recommended ethical framework: • Accountable, transparent, and trustworthy • Promote solidarity and mutual responsibility • Respond to needs respectfully, fairly, effectively, and efficiently. Recommended ethical objectives: • Protect the population's health by reducing mortality and serious morbidity • Respect individuals and groups • Strive for fairness and protect against inequity.

Q5. What are evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?

Summary of Evidence

Communications is discussed with Q1 and Q2 and is an essential component of clinical decision-making and guided triage.

Advance Care Planning (ACP) discussions with patients and families are critically important for determining patient preference for medical care during a public health emergency. These discussions should cover wishes for resuscitation, intubation, prolonged aggressive multi-organ failure support during dialysis and hospitalization. Having up-to-date advanced care plans for residents' better positions facilities to adapt CSC in a way that balances resident wishes and available resources. Even with the factors that place LTC residents at higher risk of contracting and complications from COVID-19, residents can still have good outcomes.

Maximizing resources is a consideration throughout the continuum of care as a facility moves from conventional to contingency to crisis. Several examples of the continuum of care for LTCF include criteria as well as triggers and tactics. PPE burn rate is given as an indicator of supplies and equipment in conventional times. Contingency preservation strategies of PPE and medications initiated if supplies are not likely to stretch to the next delivery. Tactics including limited reuse of N95s and face masks, ration use of critical medications and collaborate with pharmacy to substitute available medications for those that are unavailable.

Also included in the decision making is what should a facility do when they can no longer provide care. Resource load balancing is considered in Q7 and Q8.

Key Findings

- **Hospital-centered Triage:** In hospital-centered CSC state plans, triage and clinical decision-making are primary based on patient factors such as limitations of the SOFA scores and other patient factors (e.g., underlying diseases and current response to treatment).
- **Focus on Resource Maximization in LTC:** In LTC, the focus is on maximizing resources and establishing effective communication between different components of the healthcare system.
- **LTC-Specific Guidance:** The Arizona Department of Health Services has developed guidance for LTC to support best practices for preventing, detecting, and controlling the spread of COVID-19 within a facility.
- **Time-Limited Trials for Resource Allocation**: In times of shortages, allocation of resources may be based on time-limited trials, where patients must show medical improvement to continue receiving treatment. If improvement is not achieved, the patient will no longer receive treatment.

Figure 5. What are evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
[24]IOM (Institute of Medicine). 2013. Crisis standards of care: A toolkit for indicators and triggers. Washington, DC: The National Academies Press.	Contingency, Crisis and Return to Conventional Equipment and supplies Communications Surveillance data	The Institute of Medicine of the National Academies prepared a CSC toolkit for indicators and triggers. The report outlines discussion participants, key questions in a slow-onset scenario, key questions in a non-notice scenario, decision support tools for different indicator categories at different stages of a crisis. The toolkit has a special section on out-of-hospital care which highlights how the out-of-hospital system could be impacted both directly (damage to a facility) or indirectly	Key Issues: The out-of-hospital system could be impacted either directly or indirectly in a public health crisis. The engagement of care delivery partners is critical to ensuring that resources are maximized. Maximizing resources improves access to care and reduces the pressure on ED and inpatient care. Creating bi-directional communication linkages among components of the out-of-hospital providers helps ensure the ability to function effectively during a crisis. Subset of key questions: Slow-onset scenario 1. What relevant information is accessible pertaining to out-of-hospital (home care, hospice, long-term care, clinics, etc.) capacity and resources?

Figure 5. What are evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
	Space and infrastructure Staffing	(requested support during a hospital surge).	2. What additional information could be accessed in pre-event planning for contingency or crisis response? 3. What indicators demonstrate that patient care services can no longer be sustained? 4. What would be done when alternate care facilities are at capacity? 5. What would be done when hospice patients are seeking treatment in acute care facilities? Subset of key questions: No-notice scenario 1. What relevant information is accessible to pertaining to out-of-hospital (home care, hospice, long-term care, clinics, etc.) capacity and resources? 2. How would this information drive actions? 3. What strategies can be used to prevent home ventilator patients and those seeking medication from needing to go to overtaxed hospitals to seek assistance? 4. What would be done when there are not enough staff for those seeking care at alternate care sites? 5. How do stakeholders ensure consistency and coordination of community-derived patient care goals? 6. How is interdependence among organizations managed within the medical specialty and with other healthcare delivery systems?

Figure 5. What are evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
			The toolkit also includes a table of indicators: surveillance data, community and communications infrastructure, staff, space/infrastructure, and equipment/supplies. For each category, the table includes specific indicators, triggers and tactics at each of the stages of contingency, crisis and return to conventional.
[25]Arizona Crisis Standards of Care Plan: A Comprehensive and Compassionate Response; 2021	Out-of-Hospital Providers Palliative Care and Comfort Care	Arizona's Crisis Standard of Care plan, while hospital focused, includes a brief section on resources and considerations for other healthcare systems. The CSC plan includes the coordination of the State Disaster Medical Advisory Committee (SDMAC) and Arizona Department of Health Services (ADHS) with local health departments and state-designated healthcare coalitions.	Specific to long-term care facilities the plan recommends the SDMAC: 1. Maintain situational awareness with all types of long-term care facilities through associations partners. 2. Implement and/or develop CSC guidelines for LTC. 3. Consult with HEOC for Part 1135 waivers, which facilitate the admission of new patients not necessarily requiring LTC. Similar recommendations are made for group homes and congregate settings.
[26]Arizona Department of Health Services Long-term Care Facility COVID-19 Guidance; 2022	Preparedness plans Staffing PPE and supplies Visitation Admission criteria	In addition to the Arizona CSC plan, ADHS prepared specific facility guide. The document serves as guidance to LTC facilities such as skilled nursing and residential healthcare to implement best practices for the prevention, detection and infection control necessary to contain the spread of COVID-19 within a facility. Live links throughout the document lead to templates, plan guidance, public health	The guide covers signs and symptoms, risk factors, identify plans and resources, testing plan and resources, plan for managing COVID-19 in the facility, assessing cleaning and hand hygiene, PPE inventory and supply access, visitor restrictions, staff screening, resident screening, staff education, resident education, vaccinations, response to new cases, contact tracing approach, admission criteria and staffing concerns.

Figure 5. What are evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
		and professional resources, and contacts.	
[27]Colorado Department of Public Health and Environment (CDPHE) All Hazards Internal Emergency Response and Recovery Plan ANNEX B: Colorado Crisis Standards of Care Plan Last amended May 12, 2022	Out of hospital care providers	The full CSC plan includes a brief section on out of hospital care providers. Modeled scarce resource allocation protocols after Minnesota Healthcare System Preparedness Program.	While long-term care facilities are not discussed in depth. There are several topics in the plan that are relevant to LTC. Key ethical principles, dialysis as a scarce resource and healthcare staffing sections are relevant to decision making in a LTC setting. Scarce Resource Strategies from Minnesota Healthcare System Preparedness Program. Flow charts for decision to allocate resources or treatment to a patient in multiple crisis scenarios.

Figure 5. What are evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
[28]Minnesota Department of Health Long Term Care Preparedness Toolkit, 2017 https://www.health.state.mn.us/communities/ep/ltc/toolkit.pdf	Emergency operations planning tool Decision making Ethical guidelines Staff care plan Regional resource and support agencies	The toolkit was developed in 2016. The toolkit was designed to be used by LTC facility owners, administrators and staff. Information includes sample templates, forms and suggested resources. After discussing the overall approach the toolkit is primarily appendix based.	Plan focuses on incident command structure and all-hazards approach that could directly or indirectly affect the facility.
[29]Minnesota Crisis Standard of Care Framework Minnesota Department of Health Concept of Operations Updated February 25, 2020	State CSC Plan	The Minnesota framework includes a community risk profile and the recommendation that regional healthcare coalitions (HCC) plan for specialized needs.	The Risk Profile section of the plan identifies the demographics of groups that may have different and specialized needs during a disaster. Pre- and post-incident assessments are recommended to determine the needs of affected communities, assist in estimating the number of people requiring special services, and the type of outreach needed to reach them.
[30]COVID-19: Considerations, Strategies, and Resources for CSC in Post-Acute and Long-term Care (PALTC) Facilities	Response and operations Daily care and enrichment Medical care and treatment	FEMA through a COVID-19 Healthcare Resources Working Group developed an overview of general considerations, potential strategies, and existing resources for potential changes in operations and care process.	Sample continuum of care resources demonstrate the kinds of information and level of detail needed to develop useful indicators. For example, surveillance data indicators for COVID-19 rate in the facility and county positivity rate in the last week. For each of the areas: surveillance data, community and communications infrastructure, staff, and supplies and equipment indicators, triggers and tactics are outlined.

Figure 5. What are evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resources**	**Relevant Findings**
	Transport and transfer Communications (internal and with families) Ethical considerations Legal Advance Care Planning		The document also offers strategies specific to response and operations, daily care and activities, medical care and treatment, and transport and transfer. The Incident Command System (ICS) provides a road map for disaster management and has been used by both private and public sectors. It provides standardization that can help improve the ability of an organization to respond to a disaster and can be adapted to fit a facility's specific needs. Advanced Care Planning is a patient-centered approach to determining patient preference for medical care in an emergency.
[31]**Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies,** 2016, Centers for Disease Control	Situational awareness Continuity of operations Facility operations Crisis Standards of Care Staffing Fatality management	Planning guide for long-term care facilities created by stakeholders from LTCs, home health, hospice care, public health departments, hospital associations, and emergency management agencies.	A planning worksheet questions include: • What will you do with residents/patients for whom you no longer have the ability to provide care? • What other long-term, home health, or hospice care facilities or agencies can you coordinate care? • Do your facilities or agency's medical resources need to be reprioritized? If so, how will you reprioritize them?

Q6. What strategies have been used to address long-term care staffing concerns during CSC implementation?

Summary of Evidence

In long-term care facilities (LTCF), staffing can be a scarce resource, and challenges to staffing and carrying out mission-critical functions can be impacted by factors such as availability of staff, access to childcare, paid sick leave, transportation, and education on safe use of personal protective equipment (PPE) and vaccines. Understanding the staffing needs of each critical function and the minimum requirements of those functions are key components of CSC planning. Examples of critical functions are outlined in the Minnesota Long-term Care Contingency Staffing Plan templates and include clinical care, food services, building operations, housekeeping, administrative operations and other functions that cannot be delayed or postponed.

Similar to the staffing discussion in hospital settings, adjusting patient-to-staff ratios and being transparent about providing a certain level of care in times of surge could be beneficial for staff and patient expectations. Colorado outlines the staffing issues that are also specific to long-term care: lack of assistance with activities of daily living (ADL) both basic and instrumental, medications being given late, wound care delays, prolonged shifts without breaks or staff relief, and exclusion of visitors who would normally provide required caregiving for complex needs of disabled or demented patients. Colorado lists the limits of liability for staff and facilities during an emergency. Colorado also had a medical advisory group on healthcare staffing. While the focus is on a hospital setting, much of the same material is applicable to LTCF.

Key Findings

- **Consideration of Limited Staffing:** In times of crisis, limited or reduced staffing in times of crisis should be taken into account in CSC planning and continuum of care staffing.
- **Alternative Staffing Options:** The continuum of care for staffing should include alternative staffing options, cross-training and training minimums, as well as involvement of family members as caregivers.
- **Critical Functions:** Critical functions are the daily job functions essential for delivering services and should be a key component of the staffing plan.
- **Reporting of Staffing Information:** In Arizona, LTC facilities report their scheduled staffing, current variance, and minimum number of staff by category needed to meet resident care needs to their local health department. This facilitates the allocation of staffing across systems and the implementation of emergency staffing through advance registered volunteers and medical reserve corps.

Figure 6. What strategies have been used to address long-term care staffing concerns during CSC implementation?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resource**	**Relevant Findings**
[32]IOM (Institute of Medicine). 2013. Crisis standards of care: A toolkit for indicators and triggers. Washington, DC: The National Academies Press.	Staffing	The Institute of Medicine of the National Academies prepared a CSC toolkit for indicators and triggers. The report outlines discussion participants, key questions in a slow-onset scenario, key questions in a non-notice scenario, decision support tools for different indicator categories at different stages of a crisis.	The toolkit also includes a worker functional capacity table as a resource. The table (3.1, p.90) outlines key indicators for each of the stage of the continuum of care. For example, employees working more than 150 percent of usual shift duration and increased sick calls are listed as indicators of a contingency phase. Examples of indicators of a crisis include decreased productivity, error rates increase, and compromised function of operations. Out of hospital specific continuum of care (table 9-1, p. 179) examples of indicators of a contingency include: decreased availability of staff for work and closure of schools. Examples of staffing indicators of a crisis include: critical shortages of staff, and staff are asked to volunteer to provide care to higher acuity patients (alternate care sites and hospital surges). The same table also discusses triggers (decision points) and tactics for the continuum of care. At the contingency level, triggers listed are the need for staffing augmentation and tactics include provisions needed to allow family members to augment care. At the crisis level, triggers include the inability to provide necessary healthcare staff for patient support and tactics include family members as care givers.
[33]Arizona Department of Health Services Long-term Care Facility COVID-19 Guidance; 2022	Staffing	In addition to the other resources provided, the guide includes staffing considerations related to education, screening, vaccination, and release from isolation resources.	Arizona has the capacity for LTC to contact the local health department with staffing issues. The advance registration of volunteers and medical reserve corps allows emergency management to rapidly identify and mobilize healthcare volunteers.

Figure 6. What strategies have been used to address long-term care staffing concerns during CSC implementation?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resource**	**Relevant Findings**
			LTC facilities report scheduled staffing, current variance, and minimum number of staff by category needed to meet resident care needs.
[34]Colorado Department of Public Health and Environment (CDPHE) All Hazards Internal Emergency Response and Recovery Plan ANNEX B: Colorado Crisis Standards of Care Plan Last amended May 12, 2022	Staffing	The Colorado CSC plan has a primary focus on hospitals. The Medical Advisory subgroup, healthcare staffing included LTC and overall workforce considerations in their discussions and recommendations.	Similar staffing issues are acknowledged in skilled nursing and long-term care facilities: 1. Lack of assistance with activities of daily living (ADL) both basic and instrumental. 2. Medications being given late. 3. Wound care delays. 4. Prolonged shifts without breaks or staff relief. 5. Exclusion of visitors who would normally provide required caregiving for complex needs of disabled or demented patients. Recommendations for state action related to support for the workforce protection, workforce expansion, best use of existing workforce and improvement in hospital throughput. The Colorado plan did have protection from liabilities included in the plan as follows: The conduct and management of the affairs and property of each hospital, physician, health insurer or managed healthcare organization, healthcare provider, public health worker, or emergency medical service provider shall be such that they will reasonably assist and not unreasonably detract from the ability of the state and the public to successfully control emergency epidemics that are declared a disaster emergency. Such persons and entities that in good faith comply completely with

Figure 6. What strategies have been used to address long-term care staffing concerns during CSC implementation?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resource**	**Relevant Findings**
			board of health rules regarding the emergency epidemic and with executive orders regarding the disaster emergency shall be immune from civil or criminal liability for any action taken to comply with the executive order or rule. C.R.S. § 24-33.5-711.5(2).
[35]Minnesota Department of Health Long-Term Care Emergency Preparedness website, https://www.health.state.mn.us/communities/ep/ltc/index.html Long-term Care Contingency Staffing Plan Template Webinar, https://www.youtube.com/watch?v=GxprGVzsAcA	Staffing Critical functions Essential supplies	Minnesota Department of Health created in 2020 the Long-Term Care Contingency Staffing Plan template to assist LTC facilities to coordinate strategies to ensure continuity of operations. The plan, like the LTC CSC, takes an all-hazards approach. The staffing plan also has a training webinar on YouTube TV. The webinar is focused on COVID-19.	Critical functions are the job functions that your organization does on a daily basis to deliver services. The response section of the guidance has a continuum of care to support the minimum staffing required in the critical functions assessment above.

Q7. What role do long-term care facilities play in resource load balancing?

Summary of Evidence

Load balancing in a LTCF has considerations for residents that need hospitalized, hospital discharge patients who need LTC, and discharge to home or other facilities when resident needs aren't able to be met at the facility. As with many of the topic areas communication between hospitals, local public health and other out-of-hospital care providers is essential to be able to effectively address a crisis. Like with staffing and critical functions, templates and worksheets are tools that help facilities think through all the tasks and who is responsible for each task.

Key Findings

- **Encouragement of LTC Participation:** Long-term care facilities are encouraged to play a significant role in a healthcare system's crisis standards of care (CSC) plan, even though participation is not required.
- **Consideration of Unique Patient Population and Resources:** If included, long-term care facilities should be invited to contribute to the creation of the CSC plan and take into consideration each facility's unique patient population and resources, while meeting CMS requirements.
- **Inclusion of Non-Medical Resources:** In addition to medical resources, non-medical resources such as food, water, and other non-medical equipment should be considered within the CSC.
- **Key Considerations for LTC Facilities:** The following sections should be thought through for LTC facilities: coordination of care, legal and regulatory, finance, infection control, resource management, safety and security, mental health, culture and religion, education and training, and communication.

Figure 7. What role do long-term care facilities play in resource load balancing?

Source Title, Date, Authors	Policy Area(s)	Description of Resource	Relevant Findings
[36]**Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies,** 2016, Centers for Disease Control	Situational awareness Continuity of operations Facility operations Crisis Standards of Care Staffing Fatality management	A planning guide for long-term care facilities has been created by stakeholders from LTCs, home health, hospice care, public health departments, hospital associations, and emergency management agencies.	Long-term care facilities are expected to play a large role when surge capacity is met at hospitals and other healthcare agencies. Provides multiple worksheets/activities and checklists to assist in creating a plan. These worksheets help facilities think through each step of a task, a space to write what a facility's response would be, and who is responsible for that task.

Figure 7. What role do long-term care facilities play in resource load balancing?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resource**	**Relevant Findings**
			It is important to not only determine medical resources that will be needed or may be strained, but also food, water and other non-medical equipment. The Crisis Standards of Care section specifically addresses: • coordination of care • legal and regulatory • finance • infection control • resource management • safety and security • mental health • culture and religion • education and training • communication
[37]**Long Term Care Requirements CMS Emergency Preparedness Final Rule,** ASPR TRACIE, updated 2021	Emergency preparedness CMS Long-term care	This document gathers the CMS language for long- term care facilities' emergency preparedness requirements. Facilities should refer to the specific statutes and regulations for the exact language and interpretation of the requirements. The document serves as a resource for reference.	LTC facilities have the option o participate in a healthcare system's crisis standards of care plan. If included, they should contribute to the creation of the plan, take into account each facility's unique patient population and resources, and be able to meet requirements set forth by CMS.

Q8. What do older adults in long-term care facilities experience when hospitals are in crisis mode?

Summary of Evidence

During a crisis, EMS agencies may experience significant delays, and healthcare facilities may become overwhelmed with patients. This may necessitate considering alternative options for managing patients who would normally be transferred to hospitals. The

status of local hospitals and other alternate care sites should be communicated to inform destination decisions. When funeral homes and crematoria are at capacity, a contingency plan may be necessary to accommodate the removal of deceased residents.

Key Findings

- **Change in Threshold for Hospital Transport:** During a crisis, a change in the threshold for transporting residents from LTC facilities to hospitals for acute evaluations and treatment and non-emergency conditions may need to be considered.
- **Overwhelmed EMS Services:** Emergency medical services and healthcare facilities that would normally respond during conventional times may be overwhelmed and unable to meet the increased demand.
- **Collaboration with Hospitals and Funeral Homes:** In collaboration with hospitals and funeral homes, LTC can develop an alternative plan, including temporary morgues, if funeral homes reach capacity.

Figure 8. What do older adults in long-term care facilities experience when hospitals are in crisis mode?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of Resource**	**Relevant Findings**
[38]**COVID-19: Considerations, Strategies, and Resources for Crisis Standards of Care in Post-Acute and Long-Term Care (PALTC) Facilities,** U.S. Department of Health and Human Services, 2020	PALTC facilities Crisis Standards of Care Transport and transfers	Provides an overview of general considerations for post-acute and long-term care facilities during a crisis. It is designed to complement existing CSC plans.	In a crisis situation, LTC facilities may decide to change the threshold for transport for acute evaluations and treatments, as well as defer transportation for non-emergency conditions. EMS agencies and healthcare facilities will be overwhelmed so alternative options for patients who would be transferred to the hospital in conventional times will need to be discussed. Disposition of remains may be difficult if funeral homes or crematoria are full or near capacity. A contingency plan should be in place for respectful removal.

Resource Load Balancing (RLB)

Resource Load Balancing Research Questions

[Detailed methodology will be included in Appendix B.]

Q9. What agreements exist between hospitals?
Q10. What is evidence-based practices or validated tools for guiding triage and clinical decision-making?
Q11. How do states implement resource load balancing into their CSC plans?
Q12. How is resource sharing and allocation achieved and communicated between healthcare facilities, hospitals and/or other providers?

Q9. What agreements exist between hospitals?

Summary of Findings

The implementation of crisis standards of care (CSC) often requires collaboration and coordination between hospitals. To ensure effective and efficient response efforts during a CSC event, agreements between hospitals are crucial. These agreements can address a range of issues, including mutual aid, resource sharing, coordination, legal and regulatory considerations, reimbursement, training and education, and communication. The agreements help to ensure that each hospital is clear on its responsibilities and that there is a clear and effective plan in place for responding to a CSC event. By establishing these agreements, hospitals can work together to provide the best possible care to patients during a crisis and ensure that resources are used effectively and efficiently.

Opportunities and challenges exist in agreements between hospitals during crisis standards of care (CSC) implementation. Opportunities include improved coordination and collaboration, standardized procedures, effective resource management, and improved patient outcomes. Challenges include legal and regulatory hurdles, disagreements over responsibilities, resource allocation issues, and reimbursement and disputes. It’s important for healthcare facilities to work together to find solutions to these challenges and ensure that agreements put in place are effective and efficient in responding to a CSC event.

Key Findings

During the implementation of crisis standards of care (CSC), agreements between hospitals may include:

- **Mutual Aid Agreements:** Agreements between hospitals to provide resources, staff, or other support to each other during a CSC event.
- **Resource Sharing Agreements:** Agreements between hospitals to share resources, such as equipment, supplies, or personnel, during a CSC event.
- **Coordination Agreements:** Agreements between hospitals to coordinate and communicate with each other during a CSC event, including the sharing of patient information and the coordination of patient transfers between facilities.
- **Legal and Regulatory Agreements:** Agreements between hospitals related to legal and regulatory considerations during a CSC event, such as liability protection, patient privacy, and compliance with state and federal regulations.
- **Reimbursement Agreements:** Agreements between hospitals related to reimbursement for services provided during a CSC event, including the allocation of costs and the resolution of disputes.
- **Training and Education Agreements:** Agreements between hospitals to provide training and education to staff on CSC protocols and procedures.
- **Communication Agreements:** Agreements between hospitals related to communication during a CSC event, including the sharing of information on resource availability and the coordination of response efforts.

Figure 9. What agreements exist between hospitals?			
Source Title, Date, Authors	**Policy Area(s)**	**Description**	**Relevant Findings**
[39]Kansas Hospital Association. *Inter-Hospital Master Mutual Aid Agreement.* (n.d.). Retrieved January 2023, from https://www.kha-net.org/CriticalIssues/HospitalPreparedness/HospitalPreparednessProgram/EmergencyPreparednesResources/d29689.aspx?type=view	Disaster Staffing Resource loading Transfer of patients	A cooperative working agreement between participating hospitals, healthcare facilities, and medical providers in the prevention, response, and recovery from disasters.	Outlines: • responsibilities of hospitals • implementation of agreement • limitations of agreement • reimbursement and disputes • worker's compensation for shared staff • severability of agreement • termination of agreement

Figure 9. What agreements exist between hospitals?			
Source Title, Date, Authors	**Policy Area(s)**	**Description**	**Relevant Findings**
			An additional Excel file with a list of participants – not dated
[40]Healthcare Coalitions | KDHE, KS. *Healthcare coalitions.* (n.d.). Retrieved January 2023, from https://www.kdhe.ks.gov/815/Healthcare-Coalitions	Healthcare Coalition Surge	Several documents contained within HHC site: • Surge Capacity Estimator Tool • HHC Charter Template • Various project reports	While healthcare coalitions are not recognized by the state as response entities, they can provide essential resources and support during a crisis. The purpose of a healthcare coalition is to have a system-wide approach for preparing and responding to public health and medical impacts. The primary functions are planning, organizing, equipping, training, exercising, and evaluating emergencies, both short and long-term. The Kansas Healthcare Coalitions have a charter that outlines the scope, objectives, and participants in HHCs, however it has not been updated since 2013.

Q10. What are evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?

Summary of Findings

During crisis standards of care (CSC) events, healthcare providers need to make quick and informed decisions about triage and clinical management. Evidence-based practices or validated tools that can be used to guide these decisions include triage algorithms, clinical decision support systems, clinical pathways, clinical practice guidelines, and predictive models. These tools are designed to provide healthcare providers with information and guidance to support decision-making during CSC events, taking into account the available resources and the acuity of the patient population. However, it is important to note that these tools should be used in conjunction with clinical judgement, as each patient and situation is unique.

Healthcare facilities, such as long-term care (LTC), home health, and hospice, play a crucial role in public health emergencies. To help these facilities prepare and respond, the Centers for Disease Control (CDC) has developed a planning worksheet that includes questions about coordinating care with other facilities and agencies. Additionally, the Medical Operations Coordination Center (MOCC) provides a framework for load balancing during critical situations and emphasizes the importance of documenting all load-balancing efforts. The U.S. Department of Health and Human Services has also created an Incident Command System (ICS) that can be adapted to fit each facility and provides a standard approach for disaster management. In Washington State, a web-based system tracks facility status and bed availability in real-time, providing helpful information for disaster response efforts.

Key Findings

- The importance of coordinating care with other facilities and agencies: The Centers for Disease Control (CDC) developed a planning worksheet for LTC, home health, and hospice facilities for public health emergencies. It includes questions such as:
- What will you do with residents/patients for whom you no longer have the ability to provide care?
- What other long-term, home health, or hospice care facilities or agencies can you coordinate care?
- The MOCC framework for load balancing in critical situations: MOCC provides a framework for identifying indicators and triggers for initiating load balancing during critical situations. They also stress the importance of documenting all load-balancing, even non-emergent.
- The Incident Command System (ICS) for disaster management: The U.S. Department of Health and Human Services created an Incident Command System (ICS) that provides a roadmap for disaster management. It can be adapted to fit each facility and provides a standard approach.
- The real-time facility status tracking system in Washington State: Washington State utilizes a web-based system that tracks facility status and bed availability in real time that can be helpful for disaster response.

Figure 10. What is evidence-based practices or validated tools for guiding triage and clinical decision-making?			
Source Title, Date, Authors	**Policy Area(s)**	**Description**	**Relevant Findings**
[41]Centers for Disease Control. *Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies.* **(**2016). Retrieved January 2023, from, https://asprtracie.hhs.gov/technical-resources/resource/3837/long-term-home-health-and-hospice-care-planning-guide-for-public-health-emncies	Situational awareness Continuity of operations Facility operations Crisis Standards of Care Staffing Fatality management	The planning guide for long-term care facilities was created by a collaboration of stakeholders from various sectors, including long-term care (LTC) facilities, home health, hospice care, public health departments, hospital associations, and emergency management agencies. This collaboration ensures that the guide considers the unique perspectives and needs of each group and provides comprehensive guidance for preparing and responding to public health emergencies.	A planning worksheet included to include questions such as: • What will you do with residents/patients for whom you no longer have the ability to provide care? • What other long-term, home health, or hospice care facilities or agencies can you coordinate care? • Do your facilities or agency's medical resources need to be reprioritized? If so, how will you reprioritize them?
[42]COVID-19 Healthcare Resilience Working Group. *Critical Care Load-Balancing Operational Template.* (2020). Retrieved January 2023, from https://files.asprtracie.hhs.gov/documents/critical-care-load-balancing-operational-template.pdf	Load balancing Crisis Contingency Conventional	The document provides a framework for states to implement the Medical Operations Coordination Center (MOCC) and helps with the process of load-balancing during critical situations. It identifies indicators and triggers for initiating load-balancing and assists in considering all aspects of this process. The framework is	While Medical Operations Coordination Cells (MOCCs) are not response entities in Kansas, this document provides a framework of indicators and triggers that can be used to provide a consistent approach when developing and implementing load-balancing strategies.

Figure 10. What is evidence-based practices or validated tools for guiding triage and clinical decision-making?			
Source Title, Date, Authors	**Policy Area(s)**	**Description**	**Relevant Findings**
		designed to help states effectively respond to public health emergencies and ensure the safety and well-being of residents and patients.	Identifies triggers for initiating load balancing during critical situations and stresses the importance of documenting any non-emergency load balancing and "in place" clinical support when transfers are delayed. Includes the following categories: • System status • Triggers for initiating load-balancing of critical care • Step down trigger • Elective procedures • Referral management • Load-balancing • Coordination calls • Data submission • Critical care groups • Policy groups • MOCCs • Data collected/reported
[43]U.S. Department of Health and Human Services. *COVID-19: Considerations, Strategies, and Resources for Crisis Standards of Care in Post-Acute and Long-Term Care (PALTC) Facilities.* **(**2020). Retrieved January 2023, from	PALTC facilities Crisis Standards of Care Incident tracking	Provides an overview of general considerations for post-acute and long-term care facilities during a crisis. It is designed to complement existing CSC plans.	The Incident Command System (ICS) provides a road map for disaster management and has been used by both private and public sectors. It provides standardization that can help improve the ability of an organization to respond to a

Figure 10. What is evidence-based practices or validated tools for guiding triage and clinical decision-making?			
Source Title, Date, Authors	**Policy Area(s)**	**Description**	**Relevant Findings**
https://files.asprtracie.hhs.gov/documents/covid-19-considerations-strategies-and-resources-for-crisis-standards-of-care-in-paltc-facilities.pdf			disaster and can be adapted to fit a facility's specific needs. While it doesn't replace an emergency response program, it provides a structure to implement a program and aims to prevent a facility from moving to contingency or crisis standards of care.
[44]Washington State Department of Health. *WATrac Features Overview.* (2017). Retrieved January 2023, from https://doh.wa.gov/sites/default/files/legacy/Documents/1400/WATracFeatures_march2017.pdf?uid=63d07ee0ad34c	Healthcare Data tracking Resources	Provides features from WATrac, a web-based system that assists with daily tracking of facility status and bed availability and provides incident management and situational awareness during a disaster response.	WATrac provides tools for organizations to track resources, locate available trauma care, notify partners of emergency events, communicate on-line in real-time, identify vulnerabilities, share documents, and export system data in reports. • My agency • Bed availability • Regional status • Specialty availability • Report writer • Alert manager • Document hub • Emergency contacts • Command center • Survey builder • Patient tracking

Q11. How do states implement resource load balancing into their CSC plans?

Summary of Findings

States implement resource load balancing into their crisis standards of care (CSC) plans through a combination of resource allocation and distribution strategies, mutual aid agreements, and contingency planning. Some key steps in implementing resource load balancing into CSC plans include:

- **Inventory Management:** Maintaining an up-to-date inventory of available resources, including medical supplies, equipment, and personnel, is essential for effective resource load balancing during a CSC event.
- **Resource Allocation:** Resource allocation strategies are used to determine the most effective use of available resources based on patient acuity and the available resources. This may involve prioritizing patients for medical interventions or allocating resources to facilities that are most in need.
- **Mutual Aid Agreements:** Mutual aid agreements between healthcare facilities and other organizations, such as fire departments, can help to balance resource load during a CSC event by allowing resources to be shared between organizations.
- **Contingency Planning:** Contingency planning involves preparing for potential CSC events by developing alternative plans for resource allocation and distribution in the event that resources become scarce. This can help to ensure that resources are available where and when they are needed.
- **Collaboration:** Collaboration between healthcare facilities, public health departments, and other organizations is essential for effective resource load balancing during a CSC event. This may involve sharing resources, personnel, and information to ensure that patients receive the care they need.

By implementing these strategies, states can ensure that resources are available where and when they are needed during a CSC event, improving patient outcomes and reducing the impact of the event on healthcare facilities and communities.

Different states have different approaches to EMS/ambulance service responsibilities and considerations during a crisis. Minnesota emphasizes the difference between surge capacity and surge capability and the importance of planning for both. Washington includes language on equity, social justice, community engagement, and disability rights and encourages re-evaluation of patients every 24 hours. The UC Hospital System in California has a separate Triage Team available 24/7 and places importance on setting realistic goals of care with patients and their families. Arizona uses different triage programs based on the population and includes the use of alternate care sites during a surge.

Key Findings

- **Responsibilities and Considerations:** In Minnesota, an attachment to the CSC outlines the responsibilities and considerations of EMS/ambulance service agencies. The attachment highlights the distinction between surge capacity and surge capability and emphasizes the need for planning for both. It also acknowledges that surge capacity strategies may vary and that emergency response services may need to act independently without waiting for other agencies or state action."
- **Equity, Social Justice, Community Engagement and Disability Rights:** Washington's State Crisis Standards of Care Triage Team Operational Guidebook includes language on equity, social justice, community engagement, and disability rights. The plan encourages the re-evaluation of patients every 24 hours, and a Disaster Preparedness Plan Template is provided for use in long-term care facilities.
- **Hospital System Triage Team:** California (UC Hospital System specifically) plan outlines a specific Triage Team that is separate from those who provide clinical care to patients. This team is available 24/7 to provide consultation during a crisis and addresses supportive care and palliative care patients, emphasizing the importance of setting realistic goals of care with patients and their families. This plan recommends re-evaluation of patients every 72 hours.
- **Triage Programs for Different Populations:** Arizona's Crisis Standards of Care Plan includes the use of different triage programs based on the population, such as START, JumpSTART, and ADHS. The plan also includes the use of alternate care sites outside of the regular healthcare system in the event of a surge that the facility or system is unable to handle.

Figure 11. How do states implement resource load balancing into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
[45]Minnesota Department of Health. *Surge Operations and Crisis Care for Emergency Medical Services.* (2022). Retrieved January 2023, from https://www.health.state.mn.us/communities/ep/surge/crisis/framework_ems.pdf	Surge Operations Emergency Medical Services Scarce Resources Preparedness Pre-Hospital Response Emergency Management	General public Emergency Management EMS providers Hospitals Healthcare facilities PSAP/dispatchers State agencies	The attachment to the state CSC plan specifically outlines the considerations for EMS/ambulance service agencies during crisis care situations. The attachment acknowledges that there is a difference between "surge capacity" and "surge capability" and recognizes that a single case with a

Figure 11. How do states implement resource load balancing into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
			specialized needs (i.e., suspect Ebola case when a crew has inadequate PPE) can put services into crisis care mode. It is noted that not all surge capacity strategies are equal, with some being minimal risk (such as mutual aid) and others being significantly riskier (such as not answering some 911 calls due to high demand). In emergency situations, ambulance services may not have the option to wait for other agencies or state action as demand will dictate their choices. Given the limited additional ambulance capacity available, ambulance service agencies should plan for the following: Maximize the use of existing ambulances. Seek mutual aid from surrounding agencies, including knowledge of capacity, special capabilities, and response times, or from a parent health system,

Figure 11. How do states implement resource load balancing into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
			including area agencies providing non-emergency transportation if applicable. Consider alternative modes of transportation, such as buses, wheelchair vans, private transport, and military resources. Table 3.1 outlines the roles and responsibilities in these situations. Triggers can be both scripted and non-scripted. For rural ambulance services, dispatch considerations are important due to the long response and transport times in some rural areas and the lack of trained medical staff and dispatchers in many communities. Therefore, it is crucial to consider rural and urban considerations separately. (Figure 3.2 provides an example of an EMS dispatch-triage tree.)
[46]Washington State Department of Health. *Washington State Crisis Standards of Care Triage Team Operational Guidebook.*	Triage Hospital Response Resource Allocation Communication	Healthcare facilities Specialty services (pediatric, EMS, etc.) General public	The plan outlined in this document focuses on four key areas of operations: patient data entry, triage team, allocation of

Figure 11. How do states implement resource load balancing into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
(2021). Retrieved January 2023, from https://doh.wa.gov/sites/default/files/2022-02/821-151-CSC-TT-guidebook.PDF			limited resources, and communication. There is a continuous oversight and monitoring process in place, with patients being re-evaluated every 24 hours. The plan language has been developed with equity, social justice, community engagement, and disability rights in mind. In the case of resource allocation, the "tie breaker" process uses a social vulnerability index to account for past and current healthcare inequalities. The plan includes Appendix E, which provides CSC talking points for healthcare staff, and Appendix F, which provides CSC talking points for patients and families. In Washington, a Disaster Preparedness Plan Template is available for use in long-term care facilities.

Figure 11. How do states implement resource load balancing into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
[47]University of California Critical Care Bioethics Working Group. *Allocation of Critical Resources under Crisis Standards of Care.* (2020). Retrieved January 2023, from https://www.ucop.edu/uc-health/reports-resources/uc-critical-care-bioethics-working-group-report-rev-6-17-20.pdf	Triage Supportive care Crisis Coordination	Hospital system Patients & families General public Local health departments	Specifically created for the University of California hospital system. The activation of a triage plan should occur before the system reaches surge capacity. Triage officers should be designated, and they should not be providing clinical care at the same time, in order to be available 24/7 for consultation during a crisis. The plan addresses the needs of supportive care patients, including guidance on extending palliative care and clarification of realistic goals of care. The workgroup recommends re-assessment every 72 hours and provides several tables for guidance. Appendix 7 provides information on broader community considerations, including regional coordination and collaboration with departments of public health.

Figure 11. How do states implement resource load balancing into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
[48]Arizona Department of Health Services. *Arizona Crisis Standards of Care Plan.* (2021). Retrieved January 2023, from https://www.azdhs.gov/documents/preparedness/emergency-preparedness/response-plans/azcsc-plan.pdf	Triage Crisis Transport Emergency management services Disasters	Healthcare professionals First responders General public	In the State of Arizona, several triage protocols should be considered during a CSC response, including: • START for adult patients, • JumpSTART© for pediatric patients, and • ADHS Alternate Triage, Treatment and Transport Guidelines for Pandemic Influenza. Depending on the situation, first responders may use one or multiple triage methodology during a CSC response. The size, duration, and scope (e.g., regional, statewide, or national) of the CSC response will determine the level of coordination between the SDMAC and the provider community. In case of emergencies or disasters that impact the healthcare infrastructure or result in a large number of casualties, the establishment of alternate care sites and systems may be necessary. An alternate

Figure 11. How do states implement resource load balancing into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
			care site or system is not a routine part of the healthcare system, but it is activated or initiated during a disaster to meet the increased demand for healthcare services. Alternate care sites may range in complexity and level of care and may be used during CSC to supplement hospital-based and out-of-hospital care. The plan includes a specific section for pediatrics and the use of JumpStart for triage. Family reunification should also be considered in disaster planning, especially when patients are being transferred to other facilities. Appendix G provides information on resource challenges by disaster type.
[49]Colorado DHSEM Planning Section. *Resource Mobilization Annex.* (2020). Retrieved January 2023, from https://drive.google.com/file/d/1	Resource management Resource distribution Crisis Incident Transportation	First responders Healthcare facilities Local health departments State organizations General public	The Distribution Management Appendix outlines the procedures for ordering, distributing, managing inventory, transporting, staging, and demobilizing resources during

Figure 11. How do states implement resource load balancing into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
GdEMTl_ihDkYx2G65_LXbBT7A7HJze8t/view			any all-hazards incident that exceeds the requesting local jurisdiction's capabilities and requires a specific distribution system. The Resource Mobilization Process ("Resource Mobilization") starts locally and progresses to the county, then to the state and, if required, the national level. Local jurisdictions first employ local resources in response to all-hazards incidents. The document outlines responsibilities for organizations pre-incident, during, and after an incident, including resource ordering and allocation, distribution methods, inventory management, transportation, and staging.

Q12. How is resource sharing and allocation achieved and communicated between healthcare facilities, hospitals and/or other providers?

Summary of Findings

The evidence highlights the importance of communication across the state, at all levels of care, to determine where resources are scarce or in excess and eligible for reallocation. The report highlights the importance of being aware of indicators and triggers for implementing crisis standards of care to initiate and complete necessary action items effectively. The Minnesota plan for surge operations includes scope, authority, planning assumptions, as w indicators/triggers, threat assessments, and communications plans, with explicit roles for state entities when Crisis Standards of Care (CSC) Framework is activated.

Key Findings

- **Regional/Coalition Information Sharing:** Use of regional/coalition information sharing for capacity, acuity and staffing information is critical.
- **Clinical Basis for Patient Transfer**: Patient transfer decisions should be based solely on clinical needs and patients loads, ignoring non-clinical factors such as insurance status.
- **Roles and Responsibilities of State Entities (Example):** The Minnesota CSC plan outlines the specific roles and responsibilities of various state entities, including the Minnesota Department of Health (MDH), the Minnesota Division of Homeland Security and Emergency Management (HSEM), the EMS Regulatory Board (EMSRB), and local and tribal public health. These entities have specific tasks related to healthcare resource requests, treatment guidance, point of contact for resource requests, support for hospitals and alternate care sites, and more.
- I**mportance of Community and Regional Consistency in Care Delivery**: Community and regional consistency in the delivery of care is crucial to avoiding pockets of crisis care and ensuring fairness during times of patient surges.
- **Refining Data Collection and Information Sharing for System Status Monitoring:** COVID-19 has forced healthcare coalitions, hospital associations, and healthcare systems to refine data collection and information sharing for system status monitoring. This has allowed for coalition/state actions such as load-balancing to maximize the use of critical care beds.
- R**ole of Healthcare Coalitions and State Entities in Resource Allocation:** Healthcare coalitions and state entities play a critical role in allocating resources such as PPE, ventilators, and staffing to facilities most in need. These coordination and prioritization mechanisms are encouraged by the Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) requirements.

Q12. How is resource sharing and allocation achieved and communicated between healthcare facilities, hospitals and/or other providers?			
Title, Author(s), Date	**Policy Area(s)**	**Research Method/Description**	**Relevant Findings**
45Minnesota Department of Health. *Surge Operations and Crisis Care for Emergency Medical Services.* (2022). Retrieved January 2023, from https://www.health.state.mn.us/communities/ep/surge/crisis/framework_ems.pdf	State entity roles Resource Requests	Minnesota has a stand-alone attachment to its Crisis Standards of Care (CSC) plan, serving as a decision support tool that outlines the roles and responsibilities for stakeholders.	Roles and Responsibilities of State Entities, such as: Minnesota Department of Health (MDH): • Facilitate healthcare resource requests to state/inter-state/federal partners. • Provide treatment and other health related guidance for clinicians, local and tribal public health, and community members, based on the nature of the event. Minnesota Division of Homeland Security and Emergency Management (HSEM): • Serve as point of contact for resource requests. EMS Regulatory Board (EMSRB) • Support hospitals by regional and state-level coordination of EMS surge capacity implementation. Local and Tribal Public Health Supports alternate care sites as appropriate.
[50]Hick JL, Hanfling D, Wynia MK, Toner E. *Crisis Standards of Care*	Equity	The paper focuses on the application of CSC in hospitals,	The paper highlights the importance of consistency in the

Q12. How is resource sharing and allocation achieved and communicated between healthcare facilities, hospitals and/or other providers?			
Title, Author(s), Date	**Policy Area(s)**	**Research Method/Description**	**Relevant Findings**
and COVID-19: What Did We Learn? How Do We Ensure Equity? What Should We Do? (2021). Retrieved from https://nam.edu/crisis-standards-of-care-and-covid-19-what-did-we-learn-how-do-we-ensure-equity-what-should-we-do/?gclid=EAIaIQobChMI3IH3uZqT_QIV0siUCR3PBQXLEAAYASAAEgIzKfD_BwE	Community engagement and coordination Declaration of a crisis Surge Staffing Resource Allocation and Rationing	but acknowledges that emergency medical services (EMS) faced similar issues. The paper sheds light on the challenges faced by both hospital and EMS in implementing CSC during times of crisis.	delivery of care across communities and regions during times of crisis. This is crucial to avoid pockets of crisis care and ensure fairness, especially during times of patient surges. Key Finding: Data Coordination and Information Sharing The COVID-19 pandemic forced healthcare coalitions, hospital associations, and healthcare systems to refine their data collection and information sharing methods for system status monitoring. This allowed for efficient allocation of resources and facilitated transfer of patients from overwhelmed facilities. Key Finding: Challenges in Patient Transfer The paper notes that some shortfalls in the patient transfer process were due to patients being refused transfer based on their insurance status. Effective coordination and communication with emergency medical services (EMS) is crucial to ensure

Q12. How is resource sharing and allocation achieved and communicated between healthcare facilities, hospitals and/or other providers?			
Title, Author(s), Date	**Policy Area(s)**	**Research Method/Description**	**Relevant Findings**
			adequate resources are available for transfers and to maintain emergency response capacity. Key Finding: Role of Healthcare Coalitions and State Entities. Healthcare coalitions and state entities play a critical role in allocating resources to facilities in most need, including personal protective equipment (PPE), ventilators, and staffing. These coordination and prioritization mechanisms are encouraged by the Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) requirements.

Public Communication

Public Communication Research Questions

[Detailed research methodology will be included in Appendix C.]

Q13. What public communication strategies exist during crisis standards of care?

Q14. How do states implement communication considerations into their CSC plans?

Q15. What public communication strategies have been used to maintain transparency around crisis standards of care?

Q13. What public communication strategies exist during crisis standards of care (CSC)?

Summary of Evidence

Public communication plays a crucial role in ensuring that all relevant stakeholders are informed and prepared to respond to a crisis. This communication must be an ongoing process, starting from the onset of the crisis and continuing until its resolution. This communication typically occurs through a variety of channels, including official statements and press conferences from government officials and public health agencies, as well as through social media and traditional news outlets. Communication strategies consider the appropriate usage of these channels at different stages of the crisis and are included in the most sections of the state CSC plans.

Findings from the reviewed CSC plans suggest strategies for enhancing communication and decision-making in long-term care (LTC) facilities, specifically for those receiving long-term services and supports (LTSS). These strategies include activating family councils, assigning staff as primary family contacts, utilizing gerontological social work students to assist LTC staff and requiring the option to have frequent virtual visitations. The plans suggest that to maintain the relationship between residents of LTC facilities and their families during the COVID-19 pandemic and future crises, the federal government, state and local leaders, and long-term care facilities should take proactive measures. In addition, the CSC plans recommend that a communication plan must be put in place that includes contact information for various staff and service entities, as well as a process for sharing resident information and medical documentation to preserve continuity of care. The plans also note that during crisis, healthcare facilities should strive to provide comfort and alleviate suffering, though they may face limitations in terms of resources and staffing.

Key Findings

- **Family Participation Enhances LTC Communication**: The families of LTSS recipients play a crucial role in improving communication within LTC facilities.
- **Improving Communication Channels:** Strategies to strengthen communication channels in LTC facilities include activating family councils, assigning staff as family contacts, using social work students to support LTC staff, and encouraging virtual visitations.
- **The Inclusion of a Long-term Ombudsman:** The inclusion of the long-term care ombudsman is critical to facilitate communication between family members, multiple providers and the residents. A Long-Term Care (LTC) Ombudsman is a designated individual or organization responsible for advocating for the rights and well-being of residents of long-term care facilities, such as nursing homes and assisted living facilities. This can include addressing concerns about quality of care, resident rights, and addressing complaints from residents, families, or staff. The LTC Ombudsman typically serves as an intermediary between residents, families, and facility administrators and works to resolve conflicts and ensure that residents receive the care they need and deserve.
- **Draft Messaging for the Public (Expectation Communication):** Communication plans for healthcare facilities during a crisis should include draft messaging that clearly conveys information about what the public can expect in terms of healthcare services. This information may include details on the measures being taken to avoid rationing decisions, the impact of increased demand on healthcare outcomes, the approach to decision making, and the impact of staff shortages. By clearly communicating these expectations to the public, healthcare facilities can help to manage patient and public expectations and ensure that care is provided in an equitable and transparent manner.
- **Emergency Communications Team is Essential in a Crisis:** Having a designated Emergency Communications Team (ECT) or a designated person within the broader Incident Management Team is crucial in a crisis. The ECT must be trained in evaluating and communicating accurate information and must have a primary and secondary spokesperson. The facility's website should also be updated with relevant information for media reporting.
- **Effective Communication and Coordination Essential for Efficient Medical Operations in Emergencies:** Redundant communication pathways, partnerships, monitoring of bed availability and quantitative surge indicators are crucial in managing patient transfers and providing support to hospitals under stress.
- **Effective Communication and Preparation Critical in Implementing Crisis Standards of Care**: Implementing crisis standards of care requires clear communication to personnel, residents/patients, and their family members or legal next-of-kin. Advanced warning and education on the impact of the implementation helps stakeholders prepare. Multiple modes of communication, an up-to-date contact list, and appointed individuals for information interpretation should be in place. A designated liaison officer and an alternate should be appointed to communicate with the media and a translation service should be considered. Effective communication and preparation are critical in implementing crisis standards of care.

- **CO-S-TR Model Key for Effective Emergency Management**: The CO-S-TR model covers Command, Control, Communications, and Coordination (CO), Logistical Requirements (S), and Tracking, Triage, Treatment, and Transportation (TR) and is crucial for effective emergency management. Effective communication with internal and external partners is emphasized and the model is used by states such as Colorado, Idaho, and Minnesota for resource allocation during emergencies. The CO-S-TR model is a key component in ensuring effective emergency management.
- **Inter-Facility Communication Critical in Emergency:** Inter-facility communication is crucial in managing patient transfers and resource allocation during a public health emergency. Effective communication ensures effective patient care and resource management.

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?

Source Title, Date, Authors	Policy Area(s)	Description of the Resource	Relevant Findings
[51] Amid the COVID-19 Pandemic, Meaningful Communication between Family Caregivers and Residents of Long-Term Care (LTC) Facilities is Imperative, Edem Hado & Lynn Friss Feinberg, (2020)	Adult Care Homes Caregivers Communication COVID-19 Family Long-Term Care Long-term care Pandemics Social Support	This article is based on a blog published by the AARP Public Policy Institute on April 7, 2020. The article found that in order to contain the transmission of COVID-19 in long-term care facilities, federal health officials issued strict visitation guidelines, restricting most visits between residents and visitors. Many older adults rely on visitors and family care for social support and to maintain their health, well-being, and safety in long-term care facilities, and therefore need to stay connected to their families.	Families of individuals receiving long-term services and supports (LTSS) play an important role in improving communication in long-term care (LTC) facilities. These families assist with navigating the system, facilitate communication with providers and participate in shared decision-making. To improve communication channels between the resident, provider and family, the article suggests implementing several strategies, including activating family councils, assigning staff as

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			primary contacts for families, utilizing gerontological social work students to assist LTC full time employees and requiring frequent virtual visitations. The inclusion of the LTC ombudsman may also be beneficial in facilitating these efforts.
[52] Long Term Care Requirements: Centers for Medicare and Medicaid (CMS) Emergency Preparedness Final Rule (2021). ASPR Tracie.	ASPR Tracie Communication Plan (Section C) Emergency Preparedness	CMS Guidance and Final Rule document that provides recommendations for LTC facilities on how they must develop and maintain an emergency preparedness communication plan. It also requires LTC facilities to review and update their plan annually.	The CMS Guidance and Final Rule document highlights the importance of having a comprehensive emergency preparedness communication plan in place for LTC facilities. The communication plan must contain the following: 1. Names, contact information and primary and alternative means to communicate for staff, service entities, residents' physicians, other facilities and volunteers 2. Federal, State, tribal, regional, or local emergency preparedness staff 3. The State Licensing and Certification Agency; The Office of the State Long-

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			Term Care Ombudsman; and other sources of assistance. The plan must also describe a process for sharing resident information and medical documentation for residents under the LTC facility's care, as necessary, with other healthcare providers to maintain the continuity of care. Must Also Contain: A means of providing information about the general condition and location of residents under the facility's care as permitted under 45 CFR 164.510(b)(4). A means of providing information about the LTC facility's occupancy, needs, and its ability to aid, the authority having jurisdiction or the Incident Command Center, or designee. A method for sharing information from the emergency plan that the facility has determined is

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			appropriate with residents and their families or representatives.
[53] Crisis Standards of Care Brief: Public Messaging (2022). ASPR Tracie.	ASPR Tracie Defining Crisis Fair Decisions Personal Expectations and Action Public Communication Resource Shortage Examples	The document outlines key aspects of crisis care to educate the public. It explains the concept of crisis care in a clear and concise manner, highlighting potential shortages of resources during a crisis and the process for making fair decisions in crisis care scenarios. Additionally, it provides an overview of what the public can expect from their care during a crisis.	Communication plans may consider creating draft messaging that conveys the following information: **What can the public expect?** • Healthcare facilities will do whatever they can to avoid rationing decisions. • As hospitals become more overwhelmed, patients are more likely to have poor outcomes or die compared to conventional (daily) operations. • Whenever possible, decisions will be made consistently and according to the best available evidence. • Healthcare facilities will strive to avoid any bias or consideration of age, race, gender, disability, or other non-medical factors (excepting that advanced age may carry an independent increased

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			risk for death – for example from COVID-19 – and may be included in consideration if that is the case). • Healthcare providers will always aim to provide comfort and relieve suffering, regardless of any shortage in resources. Providers will also seek second opinions when needed and will look for the best available evidence to help them make decisions. • The most common crisis care issue will be the lack of trained staff – hospitals will often need to use staff that are not as experienced with intensive care to work in those areas. **What can the public do?** • The only way to keep the healthcare system out of crisis is to prevent demand from exceeding the resources available.

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			Reduce the burden on the healthcare system by following any public health guidelines, using emergency services only for emergencies, and asking others to do the same. • Understand and accept that the best care available may not be what you expect; there may be delays and limited choices of where you receive care. • Always seek care if you are experiencing chest pain, trouble breathing, possible stroke symptoms, or other emergencies. • Make sure that you and your loved ones have documented your wishes for end-of-life care (e.g., if you would want to be on a ventilator for a prolonged period with little potential of survival, or if you would want aggressive treatment even if multiple body systems were failing). This can help ensure your

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			wishes are respected and keep you from receiving treatments you may not want.
[54] Emergency Preparedness requires a Communications Plan (2014). American Health Care Association (AHCA), National Center for Assisted Living (NCAL).	Communication Plan Confidentiality Media plan Planning Ahead Stakeholders Team-based	Communication Plan Guidance outlines considerations for developing a comprehensive communication plan with a focus on media communication during a crisis.	The plan highlights the importance of forming an Emergency Communications Team (ECT) or assigning a designated person within the broader Incident Management Team. It is crucial that stakeholders, including first responders, utility companies, residents and families, media outlets, healthcare organizations, and regulators, receive customized messaging and contact information. To ensure that accurate information is communicated during a crisis, it is recommended that the Emergency Communications Team receive training in evaluating and communicating facts, which may change as new information becomes available. This training should encompass various communication scenarios with families and the media.

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			Additionally, it is important to identify a designated primary and secondary spokesperson who is knowledgeable about policies, procedures, and the history of the situation. To aid the media in their reporting, it is suggested that the facility's website be kept up-to-date with relevant information that can be easily accessed. Basic Steps for Media Plan: 4. Prepare pre-draft emergency statements that incorporate relevant language from the organization's mission statement. 5. Make a list of communication channels (e.g., radio, TV, newspapers and senior publications). 6. Prepare media "kits" (e.g., organization history, general information). In an emergency there will not be time to prepare media materials.

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
[55] COVID-19: Considerations, Strategies, and Resources for Crisis Standards of Care in Post-Acute and Long-Term Care (PALTC) Facilities (2020). COVID-19 Healthcare Resilience Working Group.	Communication Considerations Crisis Communication Team Strategies	Working Group Report to inform changes to operations and care processes during crisis standards of care.	The "Communications" section (*Page 10*) of the working group report highlights the significance of effective communication during crisis. It covers the steps required to establish communication channels with relevant stakeholders, including families, residents, staff, vendors, providers, community healthcare organizations, hospitals, home health agencies and public health departments.
[56] Medical Operations Coordination Centers (MOCC)/ Patient Load-Balancing: Summary of Lessons Learned during COVID-19 (2022). ASPR Tracie.	Communication Coordination Patient Load-Balancing	This article, published by ASPR Tracie, provides a summary of the key lessons learned by Medical Operations Coordination Centers (MOCCs) during the COVID-19 pandemic.	All Medical Operations Coordination Centers (MOCCs) had a dedicated phone number with redundant communication pathways. Coordination, communication, and partnerships were key in moving patients when traditional referral partners could not accept transfers. The ability to monitor bed availability in hospitals combined with quantitative surge indicators helped staff identify needs and available assets and determine the best support available for hospitals under surge stress.

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
[57] Missouri Guidance for Long-Term Care Facilities (2021). Missouri Department of Health and Senior Services.	COVID-19 Long-Term Care Ombudsman	The Missouri Guidance for Long-Term Care Facilities (2021) is a comprehensive resource published by the Missouri Department of Health and Senior Services. This guidance provides information and recommendations for long-term care facilities in Missouri, aimed at ensuring the health, safety, and well-being of residents and staff. The guidance covers various aspects of long-term care, including infection prevention and control, resident care, and communication with resident representatives, among others. This resource serves as a valuable tool for long-term care facilities in Missouri to reference and implement best practices to protect the health of residents and staff during the ongoing pandemic and beyond.	If in-person access is deemed inadvisable (e.g., the Ombudsman has signs or symptoms of COVID-19), facilities must, at a minimum, provide means of communication with Ombudsman such as by phone or through use of other technology.

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
[58] Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies (2016). Centers for Disease Control	Audience: LTC Facilities Barriers Communication Coordination	The purpose of the meeting was to identify barriers to communication and coordination within the long-term care sector and address the role that stakeholders, public health departments, and emergency management agencies can play in reducing the expected surge of patients on hospitals and other healthcare sectors within the community during a public health emergency. The Planning Guide resulted from the meeting. The outcome of the meeting was the creation of the Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies (2016), published by the Centers for Disease Control.	Implementing crisis standards of care within a facility or agency requires clear communication to personnel, residents/patients, and their family members or legal next-of-kin, as outlined in the Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies (2016), published by the Centers for Disease Control. Providing advanced warning of the implementation of crisis standards of care helps stakeholders prepare for its impact by educating them on what to expect. Multiple modes of communication should be identified and an up-to-date contact list of community partners and suppliers should be kept. The facility or agency should also identify sources for information and appoint individuals to receive and interpret it. During an emergency, the facility or agency may need to interact

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			with the news media. A designated liaison officer and an alternate should be appointed to communicate with the media and a translation service should be considered to use during a public health emergency. Specific steps may include: • Determine when and how the implementation of crisis standards of care will be communicated to personnel. • Determine when and how the implementation of crisis standards of care will be communicated to residents/patients and their families or legal next-of-kin. • Identify other external partners or other external entities that should be notified of the implementation of crisis standards of care in your facility or agency and determine when and how they will be notified.

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			• Determine what public messaging should be developed with regard to the implementation of crisis standards of care, when it should be developed, and who should develop it. • Determine how public messaging on crisis standards of care can be coordinated within your facility or agency as well as with your external partners and other external entities. • Determine how you will notify family members or legal next-of-kin of the death of a resident/patient that may have been prevented under normal standards of care.
[59] Surge Capacity Concepts for Health Care Facilities: The CO-S-TR Model for Initial Incident Assessment; September 11, 2008; Hick JL, Koenig KL, Barbisch D, Bey TA.	CO-S-TR Plan Model Common framework used by states Resource Load Balancing Tracking	The resource is a guide for healthcare facilities to assess and respond to surges in patient demand during a public health emergency. The CO-S-TR Model for Initial Incident Assessment provides a framework for	The CO-S-TR model stands for "CO" stands for command, control, communications, and coordination and ensures that an incident management structure is implemented. "S" considers the logistical requirements for staff,

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
	Transportation Triage	healthcare facilities to assess their capacity to respond to a sudden increase in patients and prioritize actions to ensure the safety and well-being of both patients and staff. The authors provide guidance on how to identify and mitigate potential barriers to providing care during a surge, and how to effectively communicate with partners and stakeholders. The model has been used to create resource cards for state plans, such as Michigan and Colorado.	stuff, space, and special (event-specific) considerations. "TR" comprises tracking, triage, treatment, and transportation: basic patient care and patient movement functions. Communication with internal and external partners is critical to successful event management. Communication Considerations: 7. Appropriate paging groups and callbacks activated? 8. Public information officer appointed? 9. General employee information release (paging, hotline, other)? 10. Initial media messages crafted and briefing scheduled? (spokesperson/s identified?) 11. External partners notified of events and situation? 12. "Media monitor" appointed? States such as Colorado, Idaho and Minnesota use the CO-S-TR model for resource allocation cards for different types of care during

Figure 13. What communication strategies exist for long-term care facilities during crisis standards of care?			
Source Title, Date, Authors	**Policy Area(s)**	**Description of the Resource**	**Relevant Findings**
			conventional, contingency and crisis levels of care.
[60]How to Utilize the New HHS Crisis Standards of Care Framework for PALTC Facilities, October 14, 2022, American Association of Post-Acute Care Nursing (AAPACN)	Communication between facilities Resource Load Balancing Resource Reallocation	The article, written by the AAPACN about the Healthcare Resilience Working Group (HRWG) project and it is the standard of care and areas of impact. It explains how facilities should use the HRWG document to guide their decisions and provides information on how to access this important resource. The article highlights the significance of the HRWG project and its impact on healthcare facilities, making it a valuable resource for healthcare professionals.	The article highlights the importance of communication between healthcare facilities, including post-acute and long-term care (PALTC) facilities and hospitals, in managing patient transfers and resource allocation during a public health emergency. The article notes that actions taken to preserve conventional standards of care in one area may require the introduction of contingency or crisis level standards in another area. For example, conserving staff and personal protective equipment (PPE) resources may require a shift towards virtual visitations using remote communication technologies, while still allowing access to support persons and end-of-life visits by family, friends, and clergy. (Reference: Communication Considerations in the Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies (2016). Centers for Disease Control).

Q14. How do states implement communication considerations into their CSC plans?

Summary of Evidence

Communication is indicated as an ongoing and necessary consideration throughout state CSC plans. Some plans directly address the public; but overall, CSC plans generally address providers and use technical and complex language when discussing clinical processes and procedures during times when crisis standards of care are deployed. States implement communication considerations into their CSC plans by including clear and concise protocols and procedures for internal and external communication during a crisis. This helps to ensure that information is accurately and quickly communicated to all stakeholders, including healthcare providers, patients, families, and the general public. States also consider the use of technology and communication tools such as telemedicine, secure messaging platforms, and emergency alert systems to improve communication during a crisis. This helps to ensure that vital information is easily accessible and quickly disseminated to all stakeholders, including those in remote or hard-to-reach areas. In addition, states consider the importance of clear and consistent messaging and the use of public information officers to communicate with the media and the public during a crisis. This helps to maintain public trust and confidence in the healthcare system and reduce confusion and misinformation during a time of heightened stress and uncertainty.

The Minnesota, Colorado, and Arizona Crisis Standards of Care guidelines reviewed were selected because the plans are featured resources in the TRACIE Healthcare Emergency Preparedness Information Gateway. While no reviews rate quality, these states did well in national comparisons for completeness and for meeting TRACIE review criteria. Each of these plans addresses the core research questions and can serve as a model for content, key considerations, and planning.

Key Findings

Colorado, Michigan and Minnesota provide Regional Resource Cards in their CSC plan, which uses **The CO-S-TR model**.

- **“CO”** stands for command, control, communications, and coordination and ensures that an incident management structure is implemented.
- **“S”** considers the logistical requirements for staff, stuff, space, and special (event-specific) considerations.
- **“TR”** comprises tracking, triage, treatment, and transportation: basic patient care and patient movement functions.
- **Communication Systems Overview in Emergency Plan:** The emergency plan could include a table that provides an overview of the communication systems used during a public health emergency, including alert networks, web-based tools, bed tracking systems, and electronic incident management tools. The table could provide a useful resource for response efforts.

- **Guiding Principles for Healthcare Entities during Crisis Standards of Care:** The emergency plan includes guiding principles for healthcare entities, such as long-term care facilities and home care services, as crisis standards of care are being deployed. These principles include ensuring consistent and timely communication with stakeholders, accurate resource tracking, enhancing communication channels to address patient concerns, and providing educational opportunities to share best practices, particularly during a pandemic.
- **Importance of Communication in Crisis Situations:** The importance of communication during crisis situations is emphasized to ensure appropriate legal and regulatory protections by communicating implementation of crisis strategies to healthcare and public health partners.

Figure 14. How do states implement communication considerations into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
[61] **Arizona** Crisis Standards of Care Plan: A Comprehensive and Compassionate Response; 2021	Alert system Communication Section Communication System Administrators Communication Systems Shared web-based tools Target Audience	The General Public, Local health depts., hospitals, healthcare providers, epidemiologists, infection control	The communication section of the plan includes a table that lists the information system, a description of the system, the administrator for the system, and the target audience. The table lists a variety of systems that may be used to support communication during a public health emergency. These systems include alert networks, web-based tools for sharing information and tracking patients, systems for tracking available beds, and electronic incident management tools used by response entities. The table provides a comprehensive overview of the communication systems that may be used to

Figure 14. How do states implement communication considerations into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
			support response efforts during a public health emergency.
[62] Colorado Department of Public Health and Environment (CDPHE) All Hazards Internal Emergency Response and Recovery Plan ANNEX B: Colorado Crisis Standards of Care Plan Last amended May 12, 2022	Communication activities are integrated into multiple sections of the CSC plan Conventional, contingency and crisis levels of care Regional Resource Cards	Hospitals, providers, EMS, ICS, state and local health departments and public health partners, healthcare entities, facilities, workforce	The emergency plan includes conventional, contingency, and crisis level indicators for public safety answering points/public safety communications for Emergency Medical Services (EMS). It also includes regional resource cards for communication and coordination at each level of care for different types of care, such as palliative care. For dispatch centers, the plan suggests that they may consider implementing a telehealth process to allow for direct EMS communication with patients. The plan also includes guiding principles for healthcare entities, such as long-term care facilities and home care services, as crisis standards of care are being deployed. These principles include ensuring consistent and timely communication with stakeholders, accurate resource tracking through shared systems, enhancing communication

Figure 14. How do states implement communication considerations into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
			channels to address patient concerns, and providing educational opportunities to share best practices, particularly during a pandemic. (Reference: Page 147, Appendix G6 of the Long-Term, Home Health, and Hospice Care Planning Guide for Public Health Emergencies (2016). (Centers for Disease Control)
[63] Minnesota Department of Health, Patient Care Strategies for Scarce Resource Situations; 2021	Conventional, contingency and crisis levels of care Ethical Values Regional Resource Cards Scarce Resource Allocation	Healthcare facilities	The document includes resource cards for scarce resource allocation and ethical values as front matter. Communication activities are integrated into multiple sections of the document. In the front matter, the document emphasizes the importance of communication in crisis situations, advising facilities and personnel to communicate their implementation of these strategies to their healthcare and public health partners. This communication is necessary to ensure the invocation of appropriate legal and regulatory

Figure 14. How do states implement communication considerations into their CSC plans?			
State Plan; Date	**Policy Area(s)**	**Audience**	**Relevant Findings**
			protections in accordance with State and Federal laws.
[64] **Massachusetts** Crisis Standards of Care Planning Guidance for the COVID-19 Pandemic. October 6, 2020.	Communication activities are integrated into multiple sections of the CSC plan.	Healthcare facilities	The emergency plan emphasizes the importance of clear and frequent internal and external communication during crisis events. Effective communication is essential to convey information, maintain situational awareness, and collaborate with hospitals, Emergency Medical Services (EMS), alternate care systems, healthcare personnel, and the public.
[65] State of New Hampshire Crisis Standards of Care Guidance. June 2022.	Conventional, contingency and crisis level of care considerations for LTC facilities and Home Health.	Healthcare facilities	The plan includes tables (found on pages 83-85) that provide information for Long-Term Care Agencies, home health and SDMAC to consider across the healthcare standard of care continuum (conventional, contingency, and crisis).

Q15. What public communication strategies have been used to maintain transparency around crisis standards of care?

Summary of Evidence

This question was also included for Phase I and can be applied for long-term care facilities. Transparency in the healthcare system occurs at three levels: through public-facing crisis standards of care (CSC) plans created with community engagement, communication within the health system about the triage plan and decision-making processes, and communication with patients and residents during the implementation of scarce resources standards of care.

At the plan level, community engagement is a critical aspect of ensuring transparency and involves is h citizens in a dialogue about complex problems. Minnesota's CSC plan includes a stand-alone appendix addressing community engagement, which outlines their six principles of successful community engagement. At the frontline level, hospital and Emergency Medical Services (EMS) staff must be knowledgeable about the facility's plan and trained to provide feedback on sensitive topics.

Key Findings

- **Raises Awareness**: Community engagement increases awareness and understanding of the need for emergency preparedness.
- **Reflects Community Values:** Engaging the community in the development of the CSC plan ensures that the plan reflects the values and priorities of the community.
- **Identifies Misunderstandings:** Active community deliberation helps to identify misunderstandings, biases, and areas of disagreement.
- **Covers Important Topics:** The Minnesota Engagement Framework covers important topics such as patient prioritization methods, fairness in decision making, and the treatment priority of specific populations, including healthcare workers.
- **Involve Diverse Demographics**: For a successful engagement process, it's important to involve community members that represent the diverse demographics of the state, including historically marginalized groups.

Q15. What public communication strategies have been used to maintain transparency around crisis standards of care?			
Title, Author(s), Date	**Policy Area(s)**	**Research Method/Description**	**Relevant Findings**
[66] COVID-19: Considerations, Strategies, and Resources for Crisis Standards of Care in Post-Acute and Long-Term Care (PALTC) Facilities	Communication Considerations Crisis Communication Team	Working Group Report outlines changes to operations and care processes during crisis standards of care.	Truth telling as a fundamental ethical principle must also be upheld during times of crisis.

Q15. What public communication strategies have been used to maintain transparency around crisis standards of care?			
Title, Author(s), Date	**Policy Area(s)**	**Research Method/Description**	**Relevant Findings**
(2020). COVID-19 Healthcare Resilience Working Group.	Strategies		Facilities must promptly report outbreaks and individual cases to state and local authorities, as well as residents, their representatives and their families.
[67]Communication and Transparency as a Means to Strengthening Workplace Culture During COVID-19 Issued March 1, 2021 Nadkarni, A Levy-Carrick, N Kroll, D Gitlin, D Silbersweig, D	Communication Transparency Workforce Culture and Staffing	This article explored the importance of two-way communication for leaders during crises to ensure effective communication with frontline staff.	Public communication can leverage technology to establish two-way communication. Communication plays a critical role in maintaining trust and engagement, and reducing uncertainty and ambiguity, leading to more collaborative decision making.
[68]Minnesota Crisis Standards of Care Framework Community Engagement Guidance Updated November 1, 2019	Community engagement at the frontline level Transparency Recommendations	This guidance outlines the community engagement practices, both at the plan level with the community and at the frontline with facility staff. The aim is to ensure effective communication and foster trust and engagement.	Six principles of successful community engagement: 1. Engage the public early in the process. 2. Accurately represent the public and include hard to reach and at-risk populations. 3. Provide information and give the opportunity to discuss issues. 4. Deliberation is the goal in and of itself. 5. Public input should be given consideration.

Q15. What public communication strategies have been used to maintain transparency around crisis standards of care?			
Title, Author(s), Date	**Policy Area(s)**	**Research Method/Description**	**Relevant Findings**
			6. Leadership, support and sufficient resources are needed to complete the process.
[69] Evolving Crisis Standards of Care and Ongoing Lessons from COVID-19: Proceedings of a Workshop Series. Crisis Standards of Care: From Plans to Reality. 2022	Communication Coordination Including community engagement Planning needs Triage	This article provides a compilation of case stories from Colorado, New Mexico and New York City.	• Colorado's plan for triage of devices was a major concern for communities, even though it was never activated. • Discussions focused on the triage of ventilators and ICU beds and what would inform those decisions. • Communication with medical operation centers to provide situational awareness and information to the front lines could have been improved.
[70] Crisis Standards of Care Community Engagement Summary Issued February 23, 2018	Community engagement strategies Resource allocation	This summary report discusses the strategies and topics used to engage in discussions about the allocation of limited resources during times of crisis. The report covers the methods used to tackle complex decision-making processes.	The report outlines methods used to facilitate discussions around complex decisions regarding the use of strained resources in times of crisis. These methods include: • Patient ranking of decision-making factors • Pre- and post-discussion surveys

Q15. What public communication strategies have been used to maintain transparency around crisis standards of care?			
Title, Author(s), Date	**Policy Area(s)**	**Research Method/Description**	**Relevant Findings**
			Discussion Topics: The report highlights important topics discussed during community engagement sessions, including: • What matters most when you can't save everyone • Treatment priority for healthcare workers • Healthcare provider's authority to reallocate treatment • Perceived level of fairness in treatment decisions

Appendix A. Long-Term Care Services and Supports Research Methodology

This section outlines the research methods, sources used, criteria, search terms and search phrases for how research questions 1-8 were answered.

Research Question	Methods	Sources	Criteria	Search Terms and Phrases
Q1. What communication strategies exist for long-term care (LTC) facilities during crisis standards of care?	The listed search terms and phrases were entered into Google search engine and the following sources were used to identify relevant resources.	National Academy of State Health Policy (NASHP); ASPR Tracie; PubMed; Kansas State University Academic Library	Peer reviewed literature must be published between 2017-2022. State crisis standards of care plans must be published between 2020 and 2023.	**"Communication" and the following phrases and terms:** "long-term care facilities" and "crisis standards of care"; "Conventional, Contingency and Crisis Levels of Care" and "long-term care facilities"; "post-acute and long-term care (PALTC)" and "crisis standards of care"
Q2. How do states implement communication considerations into their CSC plans for LTC facilities?	State plans were identified from ASPR Tracie, NASHP and the Phase I Environmental Scan and Literature Review given to KDHE.	State Agency Websites	State crisis standards of care plans must be published between 2020 and 2023.	**"Communication" and the following phrases and terms:** "long-term care facilities", "crisis standards of care state plans"; "Conventional, Contingency and Crisis Levels of Care state plans" and "long-term care facilities"; "post-acute and long-term care (PLATC)" and "crisis standards of care state plans"

Research Question	Methods	Sources	Criteria	Search Terms and Phrases
Q3. What populations in long-term care facilities might be at risk of experiencing inequities as the result of CSC implementation?	Through PubMed, articles generated through terms and phrases were reviewed and categorized by key question terms	ASPR Tracie; PubMed; State Agency Websites	Peer reviewed literature must be published between 2017-2022. State crisis standards of care plans must be published between 2020 and 2023. Recommended by other resources.	**"Crisis standards of care" and the following phrases and terms:** "long-term care", "nursing homes"
Q4. What ethical considerations have been used to determine who gets scarce resources in long-term care facilities and who does not?	Through PubMed, articles generated through terms and phrases were reviewed and categorized by key question terms	ASPR Tracie; PubMed; State Agency Websites	Peer reviewed literature must be published between 2017-2022. State crisis standards of care plans must be published between 2020 and 2023. Recommended by other resources.	**"Crisis standards of care" and the following phrases and terms:** "long-term care", "nursing homes"
Q5. What is evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?	Through PubMed, articles generated through terms and phrases were reviewed and categorized by key question terms	ASPR Tracie; PubMed; State Agency Websites	Peer reviewed literature must be published between 2017-2022. State crisis standards of care plans must be published between 2020 and 2023. Recommended by other resources.	**"Crisis standards of care" and the following phrases and terms:** "long-term care", "nursing homes"
Q6. What strategies have been used to address long-term care staffing	Through PubMed, articles generated through terms and phrases were	ASPR Tracie; PubMed; State Agency Websites	Peer reviewed literature must be published between 2017-2022.	**"Crisis standards of care" and the following phrases**

Research Question	Methods	Sources	Criteria	Search Terms and Phrases
concerns during CSC implementation?	reviewed and categorized by key question terms		State crisis standards of care plans must be published between 2020 and 2023. Recommended by other resources.	**and terms:** "long-term care", "nursing homes"
Q7. What role do long-term care facilities play in resource load balancing?			Peer reviewed literature must be published between 2017-2022. State crisis standards of care plans must be published between 2020 and 2023. Recommended by other resources.	Long-term care resource load balancing; long-term care crisis
Q8. What do older adults in long-term care facilities experience when hospitals are in crisis mode?			Peer reviewed literature must be published between 2017-2022. State crisis standards of care plans must be published between 2020 and 2023. Recommended by other resources.	Long-term care resource load balancing; long-term care crisis

Appendix B. Resource Load Balancing Research Methodology

This section outlines the research methods, sources used, criteria, search terms and search phrases for how research questions 1-x was answered.

Research Question	Methods	Sources	Criteria	Search Terms and Phrases
Q9. What agreements exist between hospitals?	The listed search terms and phrases were entered into Google search engine and the following sources were used to identify relevant resources.	Kansas Hospital Association, KDHE	None, as information regarding this topic is limited.	Kansas resource agreements; Kansas hospital resource agreements
Q10. What is evidence-based practices or validated tools for guiding triage and clinical decision-making in long-term care facilities?	The listed search terms and phrases were entered into Google search engine and the following sources were used to identify relevant resources.	ASPR Tracie, State websites	Preference for publishing date from 2020-2023. If not within those dates, they must be specific to resource load balancing.	Resource load balancing; crisis standards of care; crisis triage
Q11. How do states implement resource load balancing into their CSC plans?	State plans were identified from ASPR Tracie, NASHP and the Phase I Environmental Scan and Literature Review given to KDHE.	State Agency Websites	State crisis standards of care plans must be published between 2020 and 2023. If not within those dates, they must be specific to resource load balancing.	State crisis standards of care plans; state resource load balancing
Q12. How is resource sharing and allocation achieved and communicated between healthcare facilities, hospitals and/or other providers?	State plans and literature were identified from ASPR Tracie, NASHP and the Phase I Environmental Scan and Literature Review given to KDHE.	National Academy of State Health Policy (NASHP); ASPR Tracie	State crisis standards of care plans must be published between 2020 and 2023.	**"Communication" and "Coordination" and the following phrases and terms:** "long-term care facilities", "hospitals", "transfer", "resource allocation", "crisis

Research Question	Methods	Sources	Criteria	Search Terms and Phrases
			Peer reviewed literature must be published between 2017-2022.	standards of care state plans"; "Conventional, Contingency and Crisis Levels of Care state plans" and "long-term care facilities"; "post-acute and long-term care (PLATC)" and "crisis standards of care state plans"

Appendix C. Public Communication Research Methodology

This section outlines the research methods, sources used, criteria, search terms and search phrases for how research questions 1-x was answered.

Research Question	Methods	Sources	Criteria	Search Terms and Phrases
Q13. What communication strategies exist for long-term care (LTC) facilities during crisis standards of care?	The listed search terms and phrases were entered into Google search engine and the following sources were used to identify relevant resources.	National Academy of State Health Policy (NASHP); ASPR Tracie; PubMed; Kansas State University Academic Library	Peer reviewed literature must be published between 2017-2022. State crisis standards of care plans must be published between 2020 and 2023.	**"Communication" and the following phrases and terms:** "crisis standards of care"; "Conventional, Contingency and Crisis Levels of Care" and "long-term care facilities"; "post-acute and long-term care (PLATC)" and "crisis standards of care"
Q14. How do states implement communication considerations into their CSC plans for LTC facilities?	State plans were identified from ASPR Tracie, NASHP and the Phase I Environmental Scan and Literature Review given to KDHE.	State Agency Websites	State crisis standards of care plans must be published between 2020 and 2023.	**"Communication" and the following phrases and terms:** "crisis standards of care state plans"; "Conventional, Contingency and Crisis Levels of Care state plans" and "long-term care facilities"; "post-acute and long-term care (PLATC)" and "crisis standards of care state plans"
Q15. What public communication strategies have been used to maintain transparency	State plans and literature were identified from ASPR Tracie, NASHP and the Phase I Environmental	National Academy of State Health Policy (NASHP); ASPR Tracie	State crisis standards of care plans must be published between 2020 and 2023.	**"Communication" and "Coordination" and the following phrases and terms:** "hospitals", "transfer", "crisis

Research Question	Methods	Sources	Criteria	Search Terms and Phrases
around crisis standards of care?	Scan and Literature Review given to KDHE.		Peer reviewed literature must be published between 2017-2022.	standards of care state plans"; "Conventional, Contingency and Crisis Levels of Care state plans" and "long-term care facilities"; "post-acute and long-term care (PLATC)" and "crisis standards of care state plans"

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