



REVIEW ARTICLE

Strategies for Effective Crisis Management in Healthcare Systems: Patient Safety and Lessons Learned

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ABSTRACT

Objective: United States healthcare systems faced enormous pressure from the Coronavirus disease 2019 (COVID-19) crisis, and such scenarios may arise again at any time in the future, so an appropriate crisis action plan should be ready to face them effectively. This study explores the significance of crisis management in healthcare organizations and explains some of the foremost institutional best practices to preserve their reputations in the community. Moreover, the study aimed to detail various strategies targeted for effective crisis management in healthcare organizations to overcome the issues caused by the pandemic.

Methods: A literature survey was conducted using a comprehensive search in PubMed, Research Gate, Scopus, and Google Scholar databases. The gathered articles underwent double screening processes, and the eligible articles were included in this study to formulate this review. Broad search terms were used to find relevant literature articles, including the COVID-19 pandemic, healthcare, crisis, business strategies, and patient safety.

Results: Major healthcare systems in the United States had a proper crisis management plan to continue departmental clinical operations while upholding basic principles. The healthcare organizations acknowledged the crisis, approached it responsibly, and overcame it by reformulating appropriate crisis management plans. Clear communication, delegation, and sustainability were the basic principles held by the institutions in managing crises and serving communities. Crisis team leaders developed intranet pages for fast communication and conducted electronic discussion boards and virtual town hall meetings. They were Responsible, Accountable, Consulted, and Informed (RACI) approaches to manage the crisis by focusing on society, people, and sustainability.

Conclusion: A time-sensitive crisis management plan is critical for every institution's reputation and survival since they face unexpected issues, threats, risks, and crises from time to time. The best strategies/ practices for effective crisis management may include bold decisions, well-outlined policies, planning, informing stakeholders in time, and taking rapid action to avoid a disaster. Organizations must establish suitable crisis management teams, well-structured strategic plans, communication channels, implementation procedures, and evaluation methods to overcome a crisis.

Keywords: Crisis management, strategic planning, patient safety, healthcare systems

Introduction

Crisis management refers to the identification, planning, and mitigation actions against a detrimental crisis; a well-formulated management plan steers institutions to overcome the adverse effects of crises and maintain the organization's reputation in healthcare sector¹. An extensive management plan is necessary for the present pandemic crises, which must be robust and wide-range to handle unforeseen situations effectively. The fundamental elements of any crisis intervention strategy consist of an organization's business reputation, brand, and stakeholders' trust. A previous publication¹ adopted a modern approach to scientifically study crisis management, which included incidents like terrorism that are more probable to happen nowadays. These scenarios created the launching of very different mitigation measures required for even well-prepared institutions with clear guidelines and strategies. Various scenarios can be assumed, such as terrorist attacks, pandemics, fires, chemical emergencies, floods, or tornadoes, and they need strong leadership and teamwork to overcome such scenarios.

Strategic leaders must maintain insights from the lessons learned from the past and apply them to future scenarios like the Coronavirus disease 2019 (COVID-19) pandemic crisis as the world moves forward and eases public health restrictions². This is the time to review the lessons learned from the pandemic crisis and expand crisis management plans for unforeseen future scenarios³. It is impossible to allow crisis management to fall behind other business priorities or the latest trends. The US citizens need a resilient healthcare system in the country to meet any future healthcare challenges. The crisis survivability of an institution relies on its internal ability to manage risks, issues, and crises. These three terms could be used interchangeably to point toward similar scenarios in institutions; however, these words have different meanings in actual terms. The meaning of risks may be catastrophic events or threats from various sources, such as legal liabilities, natural disasters, strategic management errors, financial uncertainty, or accidents⁴. Issues may be a warning sign within the institution where a crisis may occur.

A crisis can be an issue that grows unmanaged and harms an institution's finances, revenues, and reputation⁴. Crisis management is a process that consists of the identification, assessment, and management of possible risks or threats⁵. Prevention is better than cure but this may not be possible always in case of a crisis; every institution implements best practices to achieve this objective and should have a proactive plan to manage any crisis. Some of the best crisis management practices have been identified, which consist of involving stakeholders in the crisis management process⁵, creating a solid culture⁶, having clear crisis management policies⁵, and appropriate crisis management⁷. Allowing the institution's incident response team to respond to a crisis internally or externally is an ideal way to move forward toward crisis management. They respond immediately to crises but should consult top management to ensure support towards response measures. It is also essential to communicate the crisis events to the teams in

the organization, especially to the stakeholders⁷. It is crucial for medical institutions, as considered closely regulated organizations, to adhere closely to national regulations and regulatory entities. The COVID-19 pandemic has challenged the United States healthcare system in many ways, creating enormous pressure on business, finance, patient care, and other areas, and such scenarios may arise in the future to disrupt the system again. The present study investigates the significance of crisis management in healthcare organizations and some of the best practices adopted by foremost healthcare institutions in the country to maintain their reputations in the marketplace. Furthermore, it discussed some salient strategies healthcare institutions use for effective crisis management to surpass a broad spectrum of problems caused by the pandemic. This is a review study conducted to explore the significance of crisis management and various strategies applied to surpass them effectively. Institutional Review Board (IRB) approval is not required since the study includes no patient information. The articles were systematically collected from a comprehensive search in PubMed, Research Gate, Scopus, and Google Scholar databases using appropriate search terms such as COVID-19 pandemic, healthcare, crisis, business strategies, and patient safety. The gathered information underwent double screening, and it was found that most articles were published during the pandemic crisis period, and they adopted a qualitative approach to explain the results.

a) Significance of crisis management

Strong leadership and wise counsel are necessary to manage crises in healthcare organizations effectively, and a crisis often needs a balance between patient-centered care and wise decisions. The COVID-19 pandemic is not the only scenario where crisis management is necessary since the medical sector always chooses the best available options for patient treatments, even in a crisis⁸. Healthcare leadership should be highly responsive, empathetic, and aligned well with the population's needs, especially in a healthcare crisis. In general, crisis management in healthcare goes beyond addressing patient treatments in hospitals, and it may extend to the concerns of employees providing treatments to the patients and the supporting staff. Excellent leadership aligns well with existing organizational crisis management programs before, during, and even after crises. Key characteristics of effective healthcare leadership and facilitating quality patient treatments during a crisis involve solid planning, immediate response, good communication, and sound execution⁹. Forward-looking leadership formulates a crisis management group in the organization early enough to tackle any crisis in the future. The planning process may include developing an internal crisis leadership team¹⁰, creating a disaster management plan, seeking credible information, broadly sharing information, taking decisive actions, plan implementation, and overall process evaluation. Developing an appropriate squad should be a top priority for the leadership even before a crisis to facilitate appropriate response; the team usually

consists of representatives from executive management, department leadership, the board of directors, and members from human resources/ communication and marketing. The developed team should always be ready to communicate with all hospital departments during a crisis, analyze related problems, and propose different actions to the concerned parties to mitigate the situation. Healthcare leaders should consider the worst crisis scenarios during the plan preparation and address all facets related to the respective scenarios; furthermore, organizations should be adequately flexible to handle any unexpected events. A crisis plan should address several points, such as plan objectives, personnel contact information, strategies for mobile setup, plan testing, technological equipment requirements, rebuilding steps, recovery procedures, and time-sensitive alterations.

b) Principles of crisis management

As an initial step, leadership gathers information from credible sources during crises. Collecting and sharing information from reliable sources is essential for numerous reasons. It reduces fear of the unknown, provides adequate guidance for the future, and supports the employees/ the public to think the leadership is well involved in the scenario. Science-based, unbiased information certainly saves population lives; leaders should regularly conference and share information that may be rooted in science, technology, or safety to address them adequately. Transparently sharing information is critical in crisis management through various communication channels such as face-to-face, digital methods, messaging, emails, etc.^{11,12}. Leaders should maintain calm and take decisive actions to overcome crises as part of management¹³. They should clearly address the situation's severity and act transparently in an effective way instead of denying the issues; its repercussions may come up either during or after a crisis, which means acknowledging the seriousness of the situation and then acting appropriately to address those issues effectively would go a long way.

c) Institutional best practices

Swedish Health Services, Seattle, Washington, is a hospital network system comprising several hospitals, including five acute-care hospitals, two ambulatory care centers, and clinics treating hundreds of patients every day¹⁴; shutting down such hospital facilities in a system is not an option in any crisis. COVID-19 was a significant crisis that spread throughout communities quickly; the system activated a previously formulated Hospital Incident Command System (HICS) as a response. The system continued operations during the pandemic with three basic principles: people, clear communication, and sustainability. Anxiety and false rumors could be unpleasant, especially during uncertainty like a pandemic crisis, which creates distractions and fatigue for healthcare professionals. The system created an intranet page to address information sharing to employees that provides all necessary information during the pandemic, including Personal Protective Equipment (PPE) guidance, current clinical treatment protocols, etc.¹⁵. Leaders spend much time, energy, and

attention to keep the page active, support alleviating fears, and acknowledge challenges ahead. The system provided a source for employees seeking information methods for fast communication through emails and messaging apps. The system fostered the options for dialogue, primarily through electronic discussion boards, virtual town halls, and real-time question-answer sessions. Key points such as communication and problem-solving have emerged in response to the questions of front-line workers who deal with patients during the pandemic.

Since the healthcare system is inherently complex and each prominent location has leaders, the institutional operational complexity has slowed the ability to make and implement decisions, which could affect institutional agility that can not be afforded during a pandemic. The system used a Responsible, Accountable, Consulted, and Informed (RACI) approach to manage the crisis, which flattened the hierarchy and empowered teams to formulate effective responses to the unique problems. The system focused on people, society, and sustainability by learning lessons from the initial stages of the pandemic and concentrated on creating sustainable practices. Their responses consist mainly of three primary strategies: Joy of Missing Out (JOMO), expressing gratitude, and creating feedback loops. Since we do not know about the evolution of the pandemic breakout and an unknown perfect playbook for success, the system made a kind of resiliency, which the present crisis required. Clear communication, delegation, and sustainability are essential in managing a situation like a pandemic to serve communities, employees, and customers. Northwell Health System, New York, also responded similarly to Swedish Health¹⁰, and they quickly absorbed valuable lessons initially from constant feedback from employees, team members, and healthcare leadership.

d) Triage system, prioritization, saturated services in case of massive victims

Mass casualties create overcrowded situations in healthcare facilities, leading to supply shortages and increased demand in a short time¹⁶. This imbalance inevitably promotes prioritization of the victims in the clinical facility according to the severity of their medical conditions, and this decision-making is challenging for medical personnel in a disaster triage. In a healthcare facility, an inefficient triage system, staff shortages, prolonged turnaround time, etc., leads to patient queuing and inefficient operations¹⁷. The most important responsibilities of the senior management in this scenario are to share appropriate suggestions with the staff and foster teamwork. They can leverage innovations, provide adequate staffing, improve the triage system, and make positive changes in the department.

Discussion:

In a healthcare crisis, an extraordinary level of attention is required for employees in patient-related care to satisfy requirements, which puts extreme demands on medical services. Crisis management in healthcare involves adequately equipping medical staff to deal with work-related stress and satisfy patients juggling

assurances during the pandemic^{18, 19}. Leaders communicate a clear action plan with the employees to meet work-related requirements and are continuously engaged in addressing situations, leading to better hospital patient care. A suitable communication pathway is recommended to communicate employees' daily plans and system expectations²⁰. They should share new information promptly as an evolving situation with employees and continuously update this based on availability. Leaders must encourage innovation support to meet evolving hospital medical care requirements. They should also increase partnerships with other institutions to gather new, readily available information and resources to address various unique needs¹⁵. Leaders must encourage communication, treat employees holistically to maintain a positive workplace atmosphere, prevent burnout, address employee needs, and promote outstanding patient care. Forward-looking healthcare leadership is essential to address the long-term effects of a crisis, and again, a crisis often does not complete with a single event.

Establishing a crisis management team and selecting team members are critical priorities of upper organizational leadership and are essential to successfully facing healthcare crises²¹. The crisis management team plays a crucial role in preparing institutions to face potential emergencies like pandemic spread and keeping the institution up and running during the crisis. The group leaders in a crisis management team are vital to perform essential duties such as managing the response, overseeing employee assistance, emergency plan tactical operations, and ensuring the institution meets financial responsibilities. The crisis management team must have a leader who liaises with management and oversees the teams' performances during a crisis²⁰. It is essential to get executive support for the decisions made by the crisis team so that they can act freely to manage the crisis. Crisis management team members require vast experience and expertise, and they should bring comprehensive analytical communication skills and be able to perform well under high pressure²². Representation from various departments, such as medicine, human resources, operations, communications, information technology, security, finance, legal, etc., is necessary while forming a crisis management team. The team should ensure the opportunities to meet regularly, directly, or remotely in an accessible location to plan and act appropriately based on the present situation.

A crisis management team has several responsibilities, including performing specific tasks such as creating a crisis management plan, developing an excellent plan to face crisis and improve communication, assessing the corporation's potential vulnerabilities, addressing stakeholders' concerns, identifying resources to respond, formulating health and safety protocols, generate financial sustainability, provide crisis specific training to employees, help healthcare leaders to analyze crisis impact, coordinate employee works, and properly analyze crisis response²³⁻²⁵. They evaluated the effectiveness of the applied crisis management plan after the pandemic, which included creating adequate

changes to the crisis management plan, replacing equipment used in a crisis, communicating differences in disaster plans, and conducting drills testing revised plans. Effective communication is essential to manage crises, and they should appropriately formulate messages to their intended audience. In healthcare, effective management communication requires empathy, expertise, and honesty²⁶. They maintained constant communications with suppliers, customers, patients, and employees. When encountering a crisis, communication via social media platforms supports the creation of a proactive employee mindset in the institutional culture and offers more training to the crisis management team²⁷. The institution should further maximize the potential of technologies in creating awareness and ensuring immediate feedback from concerned parties to the management about the current scenario. Priorities in a crisis management plan include initial situation analysis, organization, leaders setting expectations, and appropriate documentation to update any part of the plan.

The executive leaders and board members should gather regularly and discuss the needed actions for crisis management from short-to-long-term perspectives²⁸. COVID-19 pandemic crisis management required an appropriate risk assessment, courses of action development, decision implementation, monitoring and controlling, documentation, and discussions about lessons learned. Crisis management is a continuous process that deals with knowledge management and regular conversations between leadership and healthcare employees. In short, business people should be aware of the impacts of a crisis on customers, employees, suppliers, the public, and the company's value and reputation²⁹. There are some basic steps all business premises can adopt in a crisis. Every institution must have a well-defined crisis management plan with clear goals, and the program must include specific actions in an emergency. Identify a spokesperson to ensure the institution has one voice and conveys a clear message to the media. Maintaining transparency and honesty is essential to avoid negativity, stop rumors, and defuse media frenzy³⁰. All employees keep updated and informed, supporting a smooth, continuous flow that reduces internal rumors. Excellent communication with customers and suppliers is necessary to update them early and regularly³¹. Inform them about current action plans, issue statements, and upcoming developments as soon as possible. Always acknowledge social media as an essential communication channel for everyone, and ensure the team members can monitor, post, and react to activities during a crisis.

Practical Applications:

Wise, strong leadership is essential to successfully managing an unexpected crisis like the COVID-19 pandemic³². All organizations must develop a crisis management team with clear goals and specific action plans for unforeseen, unpredictable threats³³. Flexibility, innovation, and commitment are required to manage and overcome a large-scale crisis^{34, 35}. A crisis management team is vital in preparing organizations to face crisis³⁴. A plan mock drill is necessary before an original crisis to successfully prove the efficiency of a

plan in facing a crisis³⁷. Transparency and honesty are two fundamental principles upheld to avoid negativity and rumors³⁸. Excellent communication is required to overcome any crisis, and it is always better to accept that social media is an important communication channel³⁹. Good communication, sustainability, and delegation are required in crisis management^{35, 40, 41}. Leaders should promote good communication and maintain a positive work atmosphere to prevent burnout.

Conclusion:

Regardless of the organization's size, every institution faces issues, threats, risks, or crises in various degrees from time to time. Crisis management plays a crucial role in the continuity of institutional survival, and this review covers some of the best institutional practices in crisis management. Ideally, every institution should have a time-sensitive crisis management plan, which helps them face expected and unexpected issues/crises that may negatively impact institutional reputation. Identifying and deploying various strategies in an institution during a crisis is vital to reduce its impact on business reputation and crisis management. Some of the

best practices in crisis management are making solid decisions, generating well-outlined policies, implementing plans, and informing stakeholders. A cutting-edge crisis management program is necessary for all healthcare organizations involved in various crises, ranging from pandemic attacks to cybercrimes. An appropriate time-sensitive crisis management plan helps them to overcome risks and ensures robust business continuity even after threat-affected operations. Institutions must spend much effort to overcome level two or three crises that may severely impact institutional processes and business reputation. Crises may be detrimental to the reputation of the companies, and they require rapid action to prevent all stages of disasters. Institutions must establish strategic crisis plans with excellent communication channels to communicate appropriately with others and retain a positive business reputation. Since the lives/ well-being of people, employees, and society depend on existing healthcare in the nation, whether this is a COVID-19 pandemic or other emergencies, take appropriate actions to overcome the crisis by forming appropriate crisis management plans.

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