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Contents lists available at ScienceDirect

The American Journal of Surgery

journal homepage: www.americanjournalofsurgery.com

Capturing the crisis ‘golden moment’ – A leadership opportunity for overcoming institutional inertia in safety-critical situations

Keywords:

Crisis management
Systems design
Safety
Surgical leadership

Healthcare crises create environments that are rich in threats and low in resources. Time and information are particularly limited.^{1,2} In these circumstances competing priorities can inhibit implementation of even the simplest countermeasures.³ The COVID-19 pandemic has been another reminder of this phenomenon, where the safety of patients, staff and institutions can be placed at risk.

Large organizations, including healthcare providers, suffer from a natural lag time in initiating a crisis response. Delays, assumptions and complacency can prove fatal in these situations. Consequently, it is down to local leadership to ferry healthcare systems across this adaptation gap. Resilient organizations typically achieve early mobilization of resources during the ‘golden moment’ of a crisis. We define this as the time interval between the onset of a crisis and the impact of its harmful consequences. The *crisis golden moment* provides strategic opportunities to prepare and reconfigure services⁴ in order to achieve crisis readiness. This article discusses several strategies for expediting institutional responses in the incipient phases of a crisis.

Create urgency

Crisis need to be recognized and acknowledged early on. Advocating for the adoption of special measures takes both humility and courage, as this can attract unwanted scrutiny or even criticism.⁵ The credibility of early responders is often at stake, as even a calm sense of urgency can be construed as panic or a threat to the *status quo*. It is important to remember that it takes time for healthcare systems to reorientate and readjust to hostile circumstances. It has been noted that “*it is a common human response to a shocking event to first try to deny it, then to explain it away or find a scapegoat*”.¹ Convincing skeptics often requires presentation of hard facts and data which can appeal to analytic reason.⁵ Others may require more emotive approaches, such as the presentation of cases, interaction with front-line staff or immersion in ‘hot’ clinical areas. Crisis managers must therefore be aware of personal and institutional sensitivities but be prepared to face criticism in advocating urgent action.

Shift gears early on

There are no half-measures in safety. Crises require a complete transition from normal patterns of activity to an emergency operating mode. In elective settings, effective teamwork relies on a consultative leadership approach and a shallow hierarchy gradient. These aim to drive steady growth and stability through standardization of processes. In critical situations however, leadership needs to be collaborative, but assertive and visible. The assumption that old methods will resolve new catastrophes⁶ can be disastrous. Clinicians must therefore mobilize, procure or create new resources, being mindful of the fact that executive leaders will lack awareness of specific requirements in individual areas of specialist practice. Examples of resource mobilization in the COVID-19 pandemic include the creation of ‘clean’ clinical areas to ensure continuation of essential healthcare provision (e.g. urgent cancer care⁷).

Be prepared to lead

Crises can often incapacitate executive leaders through high workloads or isolation from front-line realities. At a local level this should not be allowed to degenerate into inaction or the assumption that someone else is in control. The comfort of deference and the abdication of responsibility in such situations will only result in maladapted or delayed responses. Instead, front-line clinicians must face up to this leadership void, remembering that the authority to lead in a crisis is often taken and not bestowed. Clinicians must therefore feel entitled to lead small teams and take decisions in their area of expertise. An example is the formation of surgeon-led central venous access teams that can provide rapid and focused care using redeployed staff. In addition, habitual reliance on protocols can be a major barrier to a nimble response as, in many cases, there is no guidance for novel crises.⁶ Instead, decisions may have to be taken based on reason, common-sense and basic principles. Clinicians must nevertheless resist the urge to take rash, unilateral or opinion-based actions when sensing imminent danger. This so called *action bias*¹ can exacerbate underlying problems and cause a failure to rescue. Instead, crisis managers should mitigate unsafe decisions by performing careful risk assessments. Often, this can be as simple as asking: *Is it safe for the patient? Is it safe for the staff? Is it safe for the institution?* Other examples of risk assessment techniques include SWOT¹ and BRAN² analyses.²

¹ SWOT tool: strengths, weaknesses, opportunities, threats.

² BRAN tool: benefits, risks, alternative, do nothing.

<https://doi.org/10.1016/j.amjsurg.2020.08.006>

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Execute strategy

All crises face expected delays in the issuing of national or centralized guidance. Healthcare in particular is used to an analytic and evidence-based process of generating recommendations. This is highly admirable in routine circumstances but can result in a lack of agility during emergency situations. Crisis leaders should therefore stay ahead of the evidence and stabilize immediate harm through basic and timely interventions that can secure performance in vital aspects of care delivery. These rely as much on the creation of robust strategies for crisis management, as on the quality of their implementation. Strategy execution relies on several factors:

1. Assembling specialist 'strike' teams that can function autonomously and focus on specific duties⁸ (e.g. Mobile Emergency Rapid Intubation Teams - MERIT⁹).
2. Allocation of tasks to specific individuals (task owners), thereby creating accountability for action⁸ (e.g. clinical task leads).
3. Setting targets and timelines that can provide quantifiable parameters of progress.^{2,8}
4. Providing implementation tools (e.g. emergency checklists or clinical decision algorithms for patient triage to intensive care units).

It is important to remember that complex solutions rarely work in a crisis. Instead, organizations should aim for clear-cut interventions that are easily understood and well executed.

Conclusions

Healthcare crises create enormous complexity due to a large number of competing priorities, moral dilemmas and anxieties.^{6,7,10} A perfect outcome is almost never seen and mistakes will naturally be made. Nevertheless, a *business as usual* mentality can severely impair crisis outcomes. Instead, healthcare leaders need to transform organizations in a manner that addresses local needs in a realistic time frame. This requires a sense of calm and purposeful urgency. Ideally, crisis readiness should be guided by pre-existing contingency plans and solid scientific evidence. Unsurprisingly, these are often absent in the early phases of novel emergencies. Consequently, if we find ourselves asking 'Who is in charge?' it probably means nobody is. Instead, the duty of leadership should fall on every front-line healthcare professional. Our task is to stay ahead of the situation, being reminded that "urgency does not imply ever-present panic, anxiety or fear. It means a state in which complacency is virtually absent".¹¹ The crisis golden moment is a short window of opportunity which must not be missed.

Funding

Nick Sevdalis' research is supported by the National Institute for Health Research (NIHR) Applied Research Collaboration (ARC) South London at King's College Hospital NHS Foundation Trust. He is a member of King's Improvement Science, which offers co-funding to the NIHR ARC South London and comprises a specialist team of improvement scientists and senior researchers based at King's College London. Its work is funded by King's Health Partners (Guy's and St Thomas' NHS Foundation Trust, King's College Hospital NHS Foundation Trust, King's College London and South London and Maudsley NHS Foundation Trust), Guy's and St Thomas' Charity and the Maudsley Charity. Nick Sevdalis' research is further

supported by the ASPIRES research programme (Antibiotic use across Surgical Pathways - Investigating, Redesigning and Evaluating Systems), funded by the Economic and Social Research Council. Nick Sevdalis is further funded by the National Institute of Health Research (NIHR) Global Health Research Unit on Health System Strengthening in Sub-Saharan Africa, King's College London (GHRU 16/136/54) using UK aid from the UK Government to support global health research. The views expressed in this publication are those of the author(s) and not necessarily those of the NIHR, the ESRC or the Department of Health and Social Care. Nick Sevdalis is the director of the London Safety and Training Solutions Ltd, which offers training in patient safety, implementation solutions and human factors to healthcare organizations. The other authors have no conflicts of interest to declare.

Declaration of competing interest

The authors declare no direct conflict of interest with the current publication.

References

1. Kanter RM. *Note on Management of Crisis*. Harvard Business School Publishing; 1996.
2. Gogalniceanu P. *High Performance in Healthcare - Optimising Systems, Cultures and Interventions in Surgery*. Dissertation. London, King's College London: King's College Library: Department of Abdominal Transplantation. Guy's Hospital; 2019.
3. Pfeifer JE. *Crisis Leadership: The Art of Adapting to Extreme Events*. Harvard Kennedy School Program on Crisis Leadership; 2013.
4. Back J, Ross AJ, Duncan MD, Jaye P, Henderson K, Anderson JE. Emergency department escalation in theory and practice: a mixed-methods study using a model of organizational resilience. *Ann Emerg Med*. 2017;70(5):659–671.
5. Kotter JP, Rathgeber H. *Our Iceberg Is Melting : Changing and Succeeding under Any Conditions*. 1st St. Martin's Press. New York: St. Martin's Press; 2006.
6. Howitt AM, Leonard HB, Giles DW. *Managing Crises : Responses to Large-Scale Emergencies*. Washington D.C.: CQ Press; 2009.
7. Shao C. The COVID trolley dilemma. *Am J Surg*. 2020 May. ahead of print.
8. Kenny G. 5 Simple rules for strategy execution. *Harv Bus Rev*; 2019. October <https://hbr.org/2019/10/5-simple-rules-for-strategy-execution>.
9. Carter C, Notter J. COVID-19 disease: a critical care perspective. *Clinics in Integrated Care*. 2020;100003. July.
10. Chen HA, Trinh J, Yang GP. Anti-Asian sentiment in the United States - COVID-19 and history. *Am J Surg*. 2020 May. ahead of print.
11. Kotter JP. *Leading Change*. Boston, Mass: Harvard Business Review Press; 2012.

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6 July 2020