

We're all in this together: how COVID-19 revealed the co-construction of mindful organising and organisational reliability

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Received 6 August 2021
Accepted 8 December 2021
Published Online First
19 January 2022

The pursuit of highly reliable performance has been a priority of patient safety policy-makers, practitioners and researchers alike for the past two decades. Aside from narrow examples of sustained reliability (eg, central-line bloodstream infections in the USA¹), it has largely been elusive despite considerable effort.² Prior work has argued that high reliability remains difficult and fragile because our approaches to pursuing it in both practice and research are insufficiently systemic³ or have failed to identify and create behavioural habits of high-reliability organising.⁴

On this brittle foundation, as it has with so many aspects of life and care delivery, COVID-19 provided a brutal audit.⁵ A brutal audit commences “at a moment’s notice, everything that was left unprepared becomes a complex problem, and every weakness comes rushing to the forefront” (p. 54).⁵ Surveys of safety culture during the pandemic makes this weakness evident as data from 54 US hospitals gathered by Press Ganey and 160 hospitals by the Agency for Healthcare Research and Quality provide initial evidence of a significant erosion of safety culture—leadership commitment to safety, prevention and reporting, and communication and collaboration.^{6,7}

Other data find decreases in ratings of patient experience and increases in patient fall and sepsis rates, with the findings more pronounced for hospitals that disallowed patient visitations⁸ and challenges remain even for hospitals that skilfully deployed technology to support virtual visits.⁹ We argue that emerging evidence of compromised reliability and safety during COVID-19 reveal the

necessity of incorporating a wider set of actors in producing reliability into theory and practice. That is, prior conceptual models of high reliability in healthcare¹⁰ emphasised the importance of patients and families as recipients of the processes producing reliability. We argue that patients, families and a broader set of members of care professionals (eg, chaplains) actively create and sustain mindful organising and, in turn, high reliability. First, we detail how COVID-19 compromised the processes of mindful organising underlying high reliability by reducing the quality and nuance of data about patients in two non-obvious ways—removing the patient’s personal support system (we use “family” as shorthand for the support of family, friends, personal caregivers, etc) and shrinking the care team (ie, sending home “non-essential” workers). Second, we describe how healthcare organisations can enable more holistic and robust mindful organising and reliability.

HOW COVID-19 DISRUPTED MINDFUL ORGANISING AND ORGANISATIONAL RELIABILITY

Highly reliable healthcare delivery relies on the processes of mindful organising¹¹—attention to weak signals and early signs of deterioration, the ability to quickly and richly make sense of these signals, and swift responding when intervention is warranted. Specifically, it is a function of five interrelated processes of preoccupation with failure, reluctance to simplify interpretations, sensitivity to operations, commitment to resilience and deference to expertise.¹¹ COVID-19 has contributed to deteriorating safety and reliability by limiting care providers’ access to and



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To cite: Vogus TJ, Wilson AD, Randall K, et al. *BMJ Qual Saf* 2022;**31**:230–233.

contact with patients due to heightened workload and requiring new ways of interacting with patients (eg, new equipment and procedural barriers that create distance). In other words, highly reliable performance (and care) relies on the continuous management of fluctuations, but during COVID-19 this has been especially difficult because deference to expertise to those with the most knowledge of the problem at hand has been replaced with top-down rules that both reduce adaptability and restrict information flows and collaborative problem-solving to the detriment of reliability and safety.¹¹ The pandemic has also amplified the already high levels of emotional and psychological strain that have left care providers exhausted and burnt out as well as heightened resource constraints and forced often dangerous workarounds (eg, care providers using garbage bags as personal protective equipment).¹² These demands and their psychological effects have compromised the capacity of care providers and care teams to stay alert, become aware of potential problems and make sense of them.

We argue the effects of COVID-19 on burnout and mindful organising are amplified because it diminished the capacity for mindful organising by removing personal support (ie, family) in the room and shrinking the care team. Although necessary due to the emerging understanding of the contagiousness and severity of COVID-19, removing family and shrinking the care team reduced critical, unique sources of insight into when a patient is “not right” or “a little off” in ways that might be a harbinger of medical errors (eg, adverse drug events) or unexpected deterioration (eg, unresponsiveness to treatment).^{13 14} Prior research further points to family-centred approaches to care producing cost, quality and safety benefits. Specifically, family can aid initial assessments of a patient by providing more detailed and accurate information to facilitate a swifter, more appropriate diagnosis and care plan. Family can also be a source of vigilance that effectively processes subtle signs and early warnings¹³ due to their unique, intimate knowledge of patients. That is, absent family inputs, the care team is less likely to be aware of all the potential vulnerabilities (ie, lacking a sufficient preoccupation with failure because they don't know how to interpret ambiguous signs, having less expertise to defer to).¹¹ This can be exacerbated by the fact that patients are even less able to play this role during the pandemic as the lack of psychosocial support and forced isolation can decrease cognitive ability, emotional bandwidth and situation awareness.¹⁵ Consequently, patients may be motivated to overstate their current health and downplay symptoms in hopes of an earlier discharge and reunion with family.¹⁶

Family members often play key roles in hospital routines like handovers and rounding to ensure continuity of care across shifts and sites of care.^{13 14} Family members can also advocate for the patient by ensuring safe practice by the care team—correct patient and

treatment identification, hand washing and proper use of PPE. Presence of family can also reduce the risk of deterioration in the hospital and readmission post-discharge by encouraging and motivating the patient to adhere to the care plan as well as by arranging things the patient needs (eg, follow-up appointments, managing household tasks). Moreover, unlike other aspects of care delivery, family and caregiver presence cannot be fully replaced through virtual family presence.

Although COVID-19 has largely stripped families from in-hospital care delivery, this brutal audit also reveals that family members have rarely been seen as direct contributors to the processes of mindful organising and reliability in theory, research or practice. The study of high reliability in healthcare has tended to narrowly focus on clinical members of the care team.¹⁷ A more family inclusive approach to high reliability and mindful organising views them as co-producers of mindful organising through the relevant, reliability-enhancing patient information they convey to those delivering care in a timely manner.^{13 14} Reconceptualising mindful organising and high reliability as relying on the inputs of family members and other caregivers also recognises family members are likely to point out novel potential sources of failure (preoccupation with failure), bring different assumptions about a patient's particular needs (reluctance to simplify interpretations), have greater awareness of the patient's personal circumstances (eg, social determinants of health, sensitivity to operations), detect early signs of a need for a change in care approach or treatment (commitment to resilience), and model deferring to expertise. That means studying high reliability and developing interventions to enhance reliability that include families and other sources of personal support.

Sending home “non-essential” members of the care team reduced novel sources of expertise and support those delivering care. Without case workers, chaplains and social workers, their unique insights into the lives of patients (eg, social determinants of health) were no longer available to provide indicators of potential threats to patient safety to the rest of the care team. Chaplains also help reduce patient and family anxiety by making them feel heard and connected.¹⁸ These professionals all play a crucial bridging role between patients and families and the clinical members of their care team. Sustained adverse conditions are also exhausting for those delivering care with potentially harmful long-term consequences and less reliable performance.¹⁹ Shrinking teams down to the “essential” also reduced support (eg, chaplains) for compassionately processing trauma and restoring the functioning of care teams.²⁰ Therefore, these staff need to be structurally incorporated into the ongoing care teams. Conceptually, high-reliability research has largely ignored the multifaceted ways in which a broad set of care professionals directly and indirectly

enhance mindful organising. Directly, these professionals provide unique expertise and insight because they surface and attend to different data that can enhance, for example, preoccupation with failure and reluctance to simplify interpretations. Indirectly, these care professionals provide crucial emotional support to clinical members of the care team that restore their capability to mindfully organise. They merit further study as part of highly reliable care teams and systems.

TOWARDS A MORE INCLUSIVE APPROACH TO HIGH RELIABILITY

COVID-19 has revealed multiple challenges to the theory and practice of high reliability. It highlights the difficulty of simultaneously pursuing reliability on two fronts (minimising COVID-19 transmission and preventable harm) and doing so over a much longer crisis period than typically examined in research on high reliability (ie, a more than year-long pandemic). The responses to COVID-19 have also illuminated the threats to reliability, safety, and mindful organising posed by implementing more rigid structures and decreasing the sources of information during a crisis. The challenges of COVID-19 and responses to it point to the need to rethink the conceptual and practical approach to high reliability. We need to amplify the voices of the family and members of the care team who co-produce mindful organising and reliability by providing a more holistic view of the patient (eg, social workers, chaplains) in everyday practice. We propose leader role modelling and a more inclusive organisational infrastructure as first steps in doing so (see table 1).

For high reliability to be pursued in a more inclusive way, leaders should role model the importance of soliciting and incorporating diverse perspectives on the patient by engaging with family. This can occur through “words and deeds ... that invite and appreciate others’ contributions” (p. 941)²¹ and meaningful, mutual dialogue. Similarly, regularly enlisting social workers and chaplains for insights on social determinants and spiritual life that influence care quality and reliability elevates their contributions to the care team. It also makes clear that their expertise is essential during adverse circumstances like pandemics. Leaders consistently role modelling greater inclusion reinforces that care and reliability are collective endeavours requiring collective mindfulness.

Family-focused organisational structures provide a consistent channel for the voice of the family in care planning and care delivery that helps ensure their concerns about threats to health and safety are heard and addressed, for example, implementing family-centred rounding that provides ample time for “family questions.” This practice is more well established in paediatric settings, but can generally enhance real-time sharing of worrisome changes or other harbingers of deterioration that require swift intervention. With

Table 1 Embedding family and boundary spanning professionals in everyday practice

Group	Reliability-enhancing contributions	Research-based practices to embed in care team
Patient personal support (eg, family, friends, personal caregiver)	Unique insight into when a patient is “not right” or “a little off” in ways clinicians may miss and be signs of medical errors (eg, adverse drug events) or unexpected deterioration (eg, unresponsiveness to treatment)	Leaders solicit and share family perspectives ²¹ Establish family-centred rounding and routines ¹³ Bedside coordinators to amplify patient voice ²³ Localise PFACs to units and/or conditions ²⁴
Boundary-spanning professionals (eg, chaplains, social workers)	Elevate the social determinants and patient/family voice regarding factors that could threaten patient safety Providing emotional and psychological support for the patient, family and team delivering care	Leaders (publicly) recognise the value of chaplains and social workers to care quality and safety ²⁰ Embed these professionals in routines (rounding) and roles (bedside coordinator, PFAC leader) that bridge patient and those delivering care ^{23–25} Create forums where they support direct care providers emotional and psychological needs (eg, processing trauma) ²⁰

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PFAC, patient and family advisory committee.

formal channels, family members are more likely to speak up and generate a mutual, shared understanding between care providers and the patient.²² In addition, a bedside learning coordinator²³ could provide another, more personalised channel that solicits family and patient insights and advocates on their behalf with their care team and leadership to ensure their needs are met and processes improved. Children’s Mercy Kansas City in the USA has implemented standing patient and family advisory committees (PFACs) for specific units and conditions (eg, cystic fibrosis) that meet regularly and provide insight on care delivery, patient experience and safety that organisational leaders acknowledge was “previously missing.”²⁴ Taken together, family-centred rounding, bedside learning coordinators and local PFACs provide formal channels to ensure the expertise of family members remain accessible to care teams (even during disruptions) to help ensure high-quality, highly reliable care. Including social workers and chaplains in these and other care routines (eg, briefings, huddles²⁵) similarly ensures that their unique perspectives on the patient and the care process are available to identify sources of unreliability. Having these professionals more embedded in existing routines can also make clear how they are “essential” workers and in future disruptions how to continue to elicit and incorporate their expertise for the benefit of patients, families and the care

team (both in the quality and safety of the care they deliver and their emotional and mental health). That is by institutionalising family and boundary-spanning care professional expertise in everyday care practice, we make it more likely it will be elicited and incorporated even if future circumstances (eg, pandemics) appropriately restrict their physical access.

COVID-19's brutal audit of safety infrastructure has been alarming, yet informative. This disruption provides an opportunity to systematically embed the underappreciated expertise and insight of the patient's personal support (eg, family) and boundary spanning professionals (eg, social workers) in care delivery teams to ensure more mindful, reliable care.

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Contributors All authors contributed to the conceptualisation, writing and revising of the manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval This study does not involve human participants.

Provenance and peer review Not commissioned; externally peer reviewed.

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