The coronavirus pandemic poses extraordinary challenges to frontline health care teams. Team leaders must manage amid high stress, limited resources, and great uncertainty. This article draws critical insights from management research on team effectiveness under urgent and uncertain conditions, and highlights practical strategies for structuring, launching, facilitating, and sustaining teamwork to inform frontline leaders in the midst of the current pandemic.

In a matter of weeks, Covid-19 has dramatically reshaped health care teams. Surgeons have redeployed to medicine services. Clinicians have traveled across the country to help hard-hit hospitals. Traditional teams and roles have been suddenly upended. There are numerous inspiring examples of Covid-19 teams coalescing and persisting in this new environment. But while this crisis has generated a powerful shared mission, its specific challenges pose enormous hurdles to frontline team leaders: high stress among caregivers, insufficient staffing, inadequate inventory, clinicians practicing at the boundaries of their training, and no clear end in sight.

Frontline leaders scrambling to reorganize care in this unprecedented context can enhance their effectiveness by leveraging evidence-informed strategies from management research. Decades of research on team effectiveness\(^1\) and high-reliability organizing\(^2\) offer valuable insights regarding predictable challenges to teamwork in urgent and uncertain circumstances. Team-effectiveness research has identified the competencies and processes underlying teamwork and has demonstrated a robust relationship between these factors and valued outcomes in health care, such as quality and patient experience.\(^3\) Research on high reliability has uncovered the attributes of teamwork that are vital when stakes are high and time is limited, drawing on a range of settings from aviation to health care.\(^4,5\)

Below we synthesize insights from these bodies of research and apply them to the unique challenges of Covid-19 care delivery across four vital stages of teams’ work: structuring, launching, facilitating, and sustaining. For each, we highlight predictable problems and potential
countermeasures documented in existing research, with practical examples obtained from managers currently involved in Covid-19–related care (summarized in Table 1).

### Structuring Teamwork

Capacity constraints may require removing clinicians from established teams and their areas of expertise to work in new groups and unfamiliar specialties. Such rapid change in team membership blurs team boundaries and interrupts typical coordinating functions, creating uncertainty about who is on the team, who is responsible for which tasks, and whom to ask for help.6

For such rapidly changing circumstances, teamwork research underscores the importance of establishing minimal team structures (e.g., a physician-nurse manager core on each unit) that can help to sustain familiarity with broad issues and trends, plan workflow, and coordinate shifting team members.7 Additionally, evidence supports incorporating brief structured team meetings (sometimes called huddles) into each shift to facilitate introductions and reach agreement on critical issues, such as delineating role responsibilities, addressing specific care-related concerns, and ensuring appropriate availability of supplies.8

### Launching the Team

An intentional team launch that sets roles, norms, and processes is beneficial for teamwork.9 However, launches may be particularly challenging for Covid-19 teams in which redeployed
providers have little familiarity with one another’s expertise, time is limited, and face masks constrain natural interpersonal connection. Research indicates that team leaders can address these challenges by establishing a short, structured launch protocol that compresses recommended launch approaches, such as by taking 3 minutes to ask, “What do I bring?” “What do you bring?” “What do we need?”

It is essential that leaders quickly build trust among teammates — a concept known as swift trust — which management research has found to be particularly important for temporary groups that lack established coordination mechanisms. Such rapid trust can be fostered by leaders’ early acknowledgment of the value that each member brings to the team. It is particularly important to encourage deference to expertise where expertise warrants (rather than automatically deferring to rank) — a vital skill in high-risk settings and one that can be effectively imparted through training. Using badges displaying first names, photos, and assigned roles on gowns (or, if time-constrained, names and roles written on tape and placed directly on caps) may help these interactions feel more personalized and become more efficient, despite the depersonalization caused by personal protective equipment.

Facilitating Teamwork

The challenges of collaborating across professional boundaries have been well documented: individuals, particularly experts, are hesitant to ask questions or admit mistakes, and miscommunication across disciplines is common due to differing interpretations in each field. These challenges are exacerbated amid stress and rapid shifts in personnel. Management research suggests three categories of responses that can serve as countermeasures:

First, to facilitate teamwork among professionals from different disciplines, training for newly redeployed team members can address not only what to do, but also how to work together. Emphasizing concepts like situational awareness (i.e., knowing what is going on) is a key aspect of high reliability in fast-moving settings and has been found to reduce serious safety events in health care. Leaders can be quickly trained in the skills of humble inquiry so that they are able to rapidly solve problems together with others from different backgrounds. Focus is essential: research on management-by-walking-around, in which managers spend time directly interacting with their frontline team members, has found that such an approach actually hinders performance unless those managers focus specifically on problem-solving. In addition, leaders should try to create psychologically safe environments that encourage team members to speak up: to ask questions, point out errors, and express concerns.
Research in health care has shown that psychological safety is systematically lower for non-physicians, such as nurses and respiratory therapists, and that inclusive leadership can ameliorate this problematic differential and foster improvement.\textsuperscript{20} Organizations can provide explicit guidance to frontline team leaders about how to practice inclusive leadership in the face of Covid-19. For example, they may need guidance on how to openly acknowledge and productively address stresses related to inadequate supplies of personal protective equipment. Any inclination to downplay these concerns or reprimand staff for raising them will likely devastate teamwork and morale.

Second, research shows that predictable and critical miscommunications can be avoided by establishing and structuring patient handover processes, for example, through scripts or checklists. A meta-analysis of research studies on standardized handover protocols found positive effects for patient outcomes, provider experience, and organizational performance.\textsuperscript{21} These structures are even more important in the context of rapid response and emergency situations, where pressures are high and time is tight, because individuals with diverse expertise must rapidly coordinate with little time to plan.\textsuperscript{22}

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However, it is important to note that these protocols fall short when problems arise that are new or unfamiliar. Preset protocols do not account well for the unexpected and may actually undermine the immediate interactions that are vital to problem-solving in novel territory.\textsuperscript{23} Ensuring that protocols are instituted for established processes but can be bypassed in the face of a novel problem is a key function of frontline leadership. For instance, organizational research on emergency trauma care has shown that leaders’ dynamic delegation — in which senior team members delegate the leadership role to others with relevant expertise and then take over again as needed and appropriate — is vital to reliable performance in urgent, unpredictable situations.\textsuperscript{24}

Third, research shows the importance of emphasizing superordinate goals\textsuperscript{25} when diverse experts are collaborating under stress. In the case of Covid-19, leaders may be able to mitigate unproductive conflict by keeping the team focused on caring for patients, caring for themselves, and caring for one another. Leaders can help maintain teams’ focus on these superordinate goals by establishing elements of regular cadence and rituals that underscore them. Covid-19 care teams have reportedly shared inspirational quotes, sung Amazing Grace during huddles, and nominated superheroes weekly.

**Sustaining and Improving the Team**

Learning how to optimize teamwork amid this novel pandemic is essential, but efforts to learn are often sidelined amid urgent pressures and are compromised as team members rotate off shift without sharing their insights first. Research indicates that short, structured debriefs rapidly
crystallize and document learning, ensuring knowledge is shared and sustained over time. Using checklists for debriefing can help to bypass the natural temptation to push learning aside when time is tight. Many debriefing tools are currently available and can be tailored for use in Covid-19 care.

Additionally, because provider stress and anxiety are omnipresent in this crisis, supporting psychosocial needs is critical for sustaining work and enabling task-focused learning. However, simply providing mental health resources is likely insufficient. Recent research examining mental health supports to frontline soldiers in the context of the U.S. Army during wars in Iraq and Afghanistan documented important problems arising from both identity-related barriers (seeing ability to cope and being tough as part of the job) and the logistical issue that accessing mental health resources can take needed time away from frontline work. Such entrenched barriers make mental health supports hard for people to utilize in high-intensity settings, requiring structural designs that minimize these barriers in order to be effective.

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This research with the army identified an effective strategy for breaking down these barriers and facilitating mental health service uptake: assigning mental-health support personnel to specific units so that they can proactively connect with frontline workers, understand the unit’s context, and develop relationships with team leaders. Importantly, such supports will likely be needed over an extended period, as the teams continue to face additional Covid-19 surges.

Finally, because team members will change across shifts, continuity will depend on central systems that highlight and communicate issues among teams over time. Information systems tracking utilization, deaths, recoveries, and other factors related to Covid-19 are already in place in many organizations. This tracked information can be expanded to include measures capturing teamwork processes and provider experience to alert leaders to potential human-resource issues in real time.

Brief pulse-like employee surveys have been shown to reveal vital information in rapidly changing situations without overly burdening employees in responding. For instance, two simple survey questions could suffice for the context of Covid-19: “How are you doing?” and “How are we doing as a team?” with responses, “Not Great; Just OK; Fine; Quite Well; Thriving.” Organizations wishing to conduct more extensive tracking of teams can use already validated team measures for their surveys to ensure high-quality information is gathered. Sharing these data back with teams is important to assist them in identifying problem areas and encourage their continued willingness to respond.
A Path Forward

Not all aspects of this crisis spell trouble for teamwork on the front lines. In many places, the extraordinary challenges of the Covid-19 pandemic have already spurred frontline workers to collaborate in ways previously unimagined. Leveraging insights from existing teamwork research will accelerate these teams’ success. Perhaps frontline leaders and their teams will blaze a path to a new normal in which health care teams collaborate and innovate at new heights. Achieving this potential requires leaders to keep focused on organizing their frontline teams to thrive amid this crisis, precisely when it matters most.

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