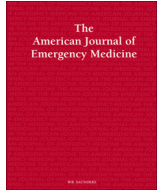




Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



Keeping pace: An ED communications strategy for COVID-19



1. Introduction

COVID-19 has required rapid innovation in emergency departments (EDs) across the world [1]. One of many challenges faced by our ED as COVID-19 emerged was how best to communicate effectively with physicians, nurses and other staff amidst unprecedented rates of operational change and new clinical data. ED schedules make rapid communication of change to an entire clinical staff difficult. Yet, the threat of COVID-19 to staff and patient safety made rapid adoption of change critically important. We therefore sought a strategy to disseminate new information in timely and digestible ways.

Our site is a quaternary-care academic referral center with 110,000 annual ED visits, staffed by more than 50 attending physicians, 40 physician assistants, 200 nurses, and 60 residents. In normal times, our operations team meets twice per month, making changes to protocols and workflows after most meetings. Since our ED COVID-19 response began six weeks ago, the operations team has met daily and made substantial changes to protocols and workflows nearly every day. Some changes flow from our Hospital Incident Command System (HICS). Others occur in response to operational patterns and problems we directly observe or learn of through our quality and safety reporting infrastructure. Finally, as we learn more about COVID-19, clinical guidance evolves as well. Disseminating this volume of consequential information to staff required methods beyond our usual communication strategies.

In response, we developed a multifaceted approach involving three streams: twice daily rounding by our physician administration team, a biweekly video-chat case conference series, and targeted e-mails (Fig. 1).

2. Rounding

We created a twice-daily rounding schedule for six physician administrators at morning and afternoon shift changes. To inform material delivered on rounds, we created an online document updated with the latest information by the same person every day. This document remains limited to one page and highlights crucial information for clinicians to know during shifts. This information includes changes in workflows, protocols, policies, and clinical guidance.

Rounding has proved the most reliable method to ensure clinicians understand and implement new changes. It also consumes the most resources as a member of our team must speak to five separate ED teams, and those clinicians must pause clinical care while listening. We therefore carefully target information for particular care areas (e.g. intubation policy only discussed in our critical care area) to keep presentations concise.

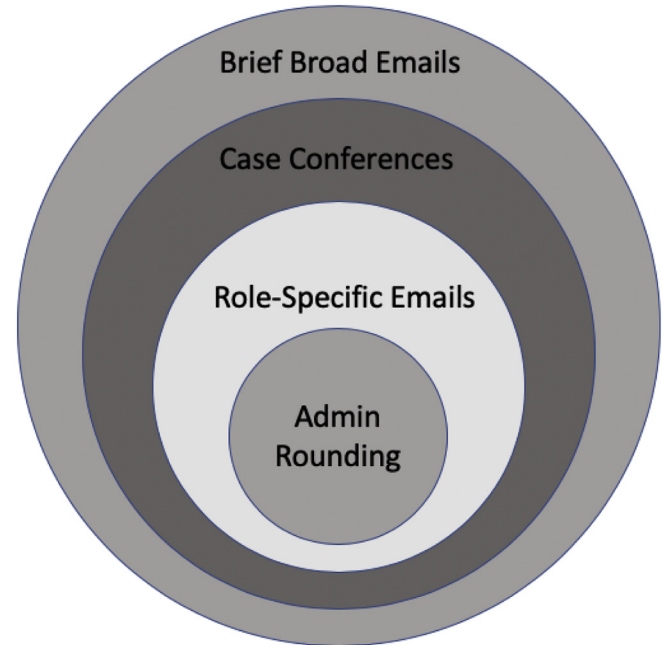


Fig. 1. Departmental communication strategy. Items closer to the center are more targeted.

3. Case conference

Our quality and safety team introduced a twice weekly COVID-19 case conference for clinical education. One conference is for faculty and involves group discussion; the other includes all clinical staff and takes a grand rounds format. These conferences supply the majority of our clinical management education, with short takeaways added to rounding material. Each case highlights a challenge of COVID-19 management and/or emphasizes the importance of an operational change. For example, a case of asymptomatic transmission was presented the week we began requiring clinical staff interacting with patients to wear masks during every encounter.

4. E-mail

The same physician who updates the rounding document sends all department-wide e-mail communications regarding COVID-19. One e-mail is sent once daily or every other day, and only when there is enough content to comprise a message with multiple bullet points. The goal in each communication is to provide the minimum amount of information necessary, with strategic bolding to highlight crucial details. Each message also contains hospital and departmental data about

COVID-19, which our clinicians have expressed a desire to receive frequently. With one person delivering messaging no more than once per day – and desired data presented alongside operational updates – we have increased the value and clarity of our department's communications. Having the same person write e-mails and update the rounding document also ensures that information is consistent across both mediums. Additionally, messages that are role-group specific are sent only to that group by their leadership to avoid cluttering others' inboxes.

5. Future needs

With this communication strategy, we have successfully kept staff informed and updated amidst extraordinarily rapid change in our ED. We have found that practice consistently changes in desired ways after an initial email providing new guidance is followed by 1–2 days of reinforcement during rounds. Staff across role groups have expressed appreciation for receiving up-to-date information through multiple avenues on a daily basis, particularly through in-person rounding. We have also received feedback that of the many hospital-affiliated e-mails they receive daily, ours is the one ED staff read fully. However, we have also recently received requests for an online database of COVID-19 information, as it has become challenging to find guidance from prior communications now that we are six weeks into our COVID-19 response. We are currently constructing such an online platform – accessible via mobile phone – where the most important information disseminated through our three streams will be immediately available. This multipronged and continuously evolving communication strategy has been vital for optimal ED performance during the COVID-19 pandemic.

Prior presentations

None.

Author contributions

JJB and BJY developed the paper concept and drafted the manuscript. JDS, KAW, ASR, BAW, PDB, and ELA were instrumental carrying out our communications work in the department. JDS, KAW, ASR, BAW, PDB, and ELA provided critical revisions of the manuscript for important intellectual content.

Financial support

None.

Declaration of competing interest

JJB, JDS, KAW, ASR, BAW, PDB, ELA, and BJY report no conflicts of interest.

Acknowledgments

None.

References

- [1] Cao Y, Li Q, Chen J, Guo X, Miao C, Yang H, et al. Hospital emergency management plan during the COVID-19 epidemic. *Academic Emergency Medicine* 2020. <https://doi.org/10.1111/acem.13951>.

Joshua J. Baugh MD, MPP

*Department of Emergency Medicine, Massachusetts General Hospital,
Boston, MA, United States of America*

Harvard Medical School, Boston, MA, United States of America

Corresponding author at: Department of Emergency Medicine,
Massachusetts General Hospital, Boston, MA, United States of America.

E-mail address: jbaugh@partners.org

Jonathan D. Sonis MD

Kelley A. Wittbold MD

Benjamin A. White MD

Ali S. Raja MD, MBA, MPH

Emily L. Aaronson MD, MPH

*Department of Emergency Medicine, Massachusetts General Hospital,
Boston, MA, United States of America*

Harvard Medical School, Boston, MA, United States of America

*E-mail addresses: jonathan.sonis@mgh.harvard.edu (J.D. Sonis),
kwittbold@partners.org (K.A. Wittbold), bwhite@mgh.harvard.edu
(B.A. White), araja@mgh.harvard.edu (A.S. Raja), e.aaronson@mgh.harvard.edu (E.L. Aaronson)*

Paul D. Biddinger MD

*Department of Emergency Medicine, Massachusetts General Hospital,
Boston, MA, United States of America*

*Division of Emergency Preparedness, Massachusetts General Hospital,
Boston, MA, United States of America*

Harvard Medical School, Boston, MA, United States of America

E-mail address: pbiddinger@partners.org

Brian J. Yun MD, MBA, MPH

*Department of Emergency Medicine, Massachusetts General Hospital,
Boston, MA, United States of America*

Harvard Medical School, Boston, MA, United States of America

E-mail address: byun@mgh.harvard.edu

9 April 2020