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Letter to the Editor

# A dedicated multidisciplinary safety briefing for the COVID-19 critical care



Dear Editor.

The recent COVID-19 outbreak has posed an unprecedented load on critical care units worldwide (Ranney, 2020; Xie et al., 2020; Grasselli, 2020). The ability to rapidly increase the capacity of critical care beds is a strategic ability of each hospital. However, this might happen at the expense of staffing, with the need to recruit urgently members of staff with different levels of experience and familiarity with patients and procedures. The Society for Critical Care Medicine, for instance, has recommended adopting a tiered staffing strategy in pandemic situations such as COVID-19 (SCCM, 2020). That is when experienced critical care staff are mixed with, and supervise, staff from other departments to increase surge capacity. Team safety briefings and huddles, in the form of a multidisciplinary short meeting following a predetermined agenda, are extensively used by healthcare organizations, with the scope of improving patient safety by increasing team situational awareness (Franklin et al., 2020; Ryan, 2019). Raising awareness can help increase teamwork; but it's also fundamental for the prevention of loss of information, efficiency and anticipation and planning, all characteristics at risk in units staffed by a mixture of staff coming from different experience levels and hospital departments (Stapley, 2018).

Since the activation of our hospital surge capacity plan on February 24th, 2020 we have increased our intensive care Level 3 capacity to 45 beds, which represents a 200% increase compared to our usual baseline. We opened dedicated cohorted units using de-novo areas such as surgical recovery rooms. Staffing was rostered from experienced critical care consultants, consultant anesthetists, critical care nurses, scrub nurses and ward nurses. A careful skill-mix was designed to guarantee balanced levels of experience and expertise, but many found themselves working outside of their comfort zone, at least from a logistical or procedural perspective and also due to the choice or cohorting, which required staff to wear full personal protective equipment for the whole duration of the shift. For this reason, we redesigned our rotation from our previous shifts model (either 12 or 8-hour shifts) to four 6-hour shifts every day. Medical and nursing teams found themselves handing over four times a day. More details on the critical care surge capacity, the shift patterns and the training program we implemented can be found in our recent work (Carenzo, 2020). To increase staff awareness and possibly reduce communication error a dedicated multidisciplinary safety briefing was designed and implemented. The COVID-19 Critical Care safety briefing was designed following a multidisciplinary consultation, which included a revision of previous existing local instruments with input from medical, nursing and management staff. The final instrument is composed of four sections each covering a relevant aspect of team awareness and patient safety. The four items are staffing and allocations, risk management, resources and any other business, which includes a subsection about updates on new protocols or procedures newly implemented in the unit. This briefing, as it contains information about planned procedures, is run just after the clinical individual handover, as opposed to other tools where the team as a whole will meet before and then spread out. In our experience, first individual teams received handover from the leaving team members, then they joined together at a suitable place in the unit and went through the huddle. All unit members present at that time actively participate in the huddle, regardless of their role. It is run at the beginning of each team shift, so four times a day. Overall, from observational data we noted that even in the busiest days it took an average of less than five minutes to complete. The instrument is presented below and is available for download as supplementary material. Copies were printed, plasticized, and put in all the critical care units. Guided by research findings showing the benefit of huddle implementation, and an active urgent need to be met, we designed a tool that proved to be easy to implement, to use and has been well received. The huddle creates a safe environment for everyone to speak up, for presenting and discussing challenges and threats to team and patients' safety (Goldenhar et al., 2013). We do encourage other units not using safety briefing and huddles on a routine base to implement them as a necessary safety improvement process. We hope that this tool can serve as a useful tool to improve other teams' safety as they respond to this overwhelming health emergency.

#### **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.iccn.2020.102882.

#### References

Carenzo L, Costantini E, Greco M, et al. Hospital surge capacity in a tertiary emergency referral centre during the COVID-19 outbreak in Italy [published online ahead of print, 2020 Apr 4]. Anaesthesia. 2020;10.1111/anae.15072. doi:10.1111/anae.15072.

Franklin BJ, Gandhi TK, Bates DW, et al. Impact of multidisciplinary team huddles on patient safety: a systematic review and proposed taxonomy [published online ahead of print, 2020 Apr 7]. BMJ Qual Saf. 2020;bmjqs-2019-009911. doi:10.1136/bmjqs-2019-009911.

Goldenhar, L.M., Brady, P.W., Sutcliffe, K.M., et al, 2013. Huddling for high reliability and situation awareness. BMJ Qual. Saf. 22 (11), 899–906. https://doi.org/ 10.1136/bmjqs-2012-001467.

- Grasselli G, Pesenti A, Cecconi M. Critical Care Utilization for the COVID-19
  Outbreak in Lombardy, Italy: Early Experience and Forecast During an
  Emergency Response [published online ahead of print, 2020 Mar 13]. JAMA.
  2020;10.1001/jama.2020.4031. doi:10.1001/jama.2020.4031.
- Ranney ML, Griffeth V, Jha AK. Critical Supply Shortages The Need for Ventilators and Personal Protective Equipment during the Covid-19 Pandemic [published online ahead of print, 2020 Mar 25]. N. Engl. J. Med. 2020;10.1056/NEJMp2006141. doi:10.1056/NEJMp2006141.
- Ryan, S., Ward, M., Vaughan, D., et al, 2019. Do safety briefings improve patient safety in the acute hospital setting? A systematic review. J. Adv. Nurs. 75 (10), 2085–2098. https://doi.org/10.1111/jan.13984.
- Stapley, E., Sharples, E., Lachman, P., et al, 2018. Factors to consider in the introduction of huddles on clinical wards: perceptions of staff on the SAFE programme. Int J Qual Health Care. 30 (1), 44–49. https://doi.org/10.1093/intqhc/mzx162.
- Xie J, Tong Z, Guan X, et al. Critical care crisis and some recommendations during the COVID-19 epidemic in China [published online ahead of print, 2020 Mar 2]. Intensive Care Med. 2020;1–4. doi:10.1007/s00134-020-05979-7.

### **Further reading**

Society for Critical Care Medicine (SCCM). United States Resource Availability for COVID-19. Available at https://www.sccm.org/Blog/March-2020/United-States-Resource-Availability-for-COVID-19. Accessed on April 11th, 2020.

Luca Carenzo\*
Daniela Elli
Manuela Mainetti
Elena Costantini
Valerio Rendiniello
Alessandro Protti
Federica Sartori
Maurizio Cecconi

Department of Anesthesia and Intensive Care Medicine, Humanitas Clinical and Research Center – IRCCS, Via Manzoni 56, 20089 Rozzano (MI), Italy

\* Corresponding author.

E-mail address: luca.carenzo@humanitas.it (L. Carenzo)