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## **Response from Authors**

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Dear Editor.

First of all, we would like to thank Conoscenti, and colleagues for the nice commentary mentioning our work about the multidisciplinary safety briefing for the COVID-19 critical care. In their letter Conoscenti and colleagues share some lessons learned in managing multi-disciplinary and inter-professional organization and communication in an emergency setting during the pandemic response. We, as well as we might imagine many other centres in the world, share their difficulties. We want to applaud their willingness to openly discuss them on this research platform with the ultimate aim of improving the overall safety of our patients. We think the briefing tool presented in our work (Carenzo et al., 2020) could be used as an evaluation tool, but mainly to audit performance data and inform on the critical care human factor safety profile for governance and accountability.

Regarding complexity of care and workload distribution, a number of tools have been proposed and are currently in use (Greaves et al., 2018). Regarding workload the Nursing Activity Score (NAS) is used (Lucchini et al., 2014). Regarding complexity of care, we use (a) the Clinical and Nursing Complexity Score (CNCS), an internally developed tool and (b) the presence of specific multidrug resistant organisms (MDRO) carrier patients. Table 1 presents the predetermined complexity criteria and the associated CNCS score. Each team member is assessed annually by the leadership and development team. The assessment is based on professional competencies defined on a hospital-wide platform. On this basis, professionals are aware of their personal level of knowledge and skills. Charge nurses allocate professionals with patients by combining the professional profile of the clinician with the CNCS of each patient. A score <=2 is considered suitable for junior critical care nurses while patients with scores >2 are preferably assigned to senior nurses. The information from the CNCS is integrated with the number of MDRO carrier patients admitted in the unit. MDRO patients are usually cared for by the same professional and ideally cohorted by micro-organism (in our setting we aim for a 1:2 nurse-patient ratio for Level 3 with the exception of patients on extracorporeal support). This tool has been used throughout the pandemic alongside the safety briefing, although as we can see now they are used with substantially different aims. The CNCS tool has a number of limitations: it has been developed in-house, meeting our internal needs and may not be suitable for other institutions. The score is based on a number of assumptions: it estimates the patient's complexity of care based on the type of admission rather than the level of the patient's independence (eating, self-care) or the care required (monitoring level, procedures). Future research will assess construct and external validity. In conclusion we think that each tool has specific objectives and it might not always be possible to use a single one (i.e. the briefing tool) for a broader spectrum of objectives. Specific objectives will have specific tools. The tools can however, be used together and their output should ultimately be shared in a multi-disciplinary fashion such as during the safety briefing.



## Table 1

Clinical and nursing complexity score.

Criteria		Score
Elective Admission from Operating Theatr Level 3 stay	res with =<1 night expected	1
Unplanned Admission from Operating The	eatres	2
Surgical complication <24 h from surgery		2
Any other patients with >24 h stay in the	Intensive Care	2
Readmissions from Intensive Care dischar	ge <48 h	3
Emergency Department or Ward Emerger	cy Admission	3
Any other patient with >24 h stay in ITU Al change in the last 24 h	ND any clinically significant	3
Extracorporeal Membrane Oxygenation (E	EXMO)	4
Nitrous Oxide (NO)		4
Intra-aortic Balloon Pump (IABP)/Ventricu Impella	ılar Assist Device (VAD)/	4
Specialty Airway Device (i.e. Bilumen Trad	cheal Tube)	4

## References

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