The current coronavirus disease 2019 (COVID-19) pandemic has triggered exceptionally rapid changes in the structure of our hospitals. Critical care nurses, directly involved in the care of the most severely affected patients, are experiencing new challenges with the implementation of new COVID-19 intensive care units (ICUs). At the height of the surge in COVID-19 patients in Italy, the lack of ICU beds and mechanical ventilators meant that our hospital administrators were forced to convert recovery rooms and operating rooms into new COVID-19 ICUs. These COVID-19 units provide the highest isolation precautions and represent the best of our hospitals’ logistic capacities. The real lack of resources, however, has been in “human competence.”

The surge in critically ill patients has meant sudden organizational changes imposed by hospital managers in order to provide an immediate response to this unprecedented human resource crisis in health care. These circumstances have fueled new nursing management challenges and opportunities that deserve our attention.

For example, once new ICU beds were designated, critical care nurses were needed to manage patients who were depending on organ and system supports such as mechanical ventilation, prone positioning, continuous renal replacement therapy, and extracorporeal membrane oxygenation. To overcome the shortage of staff with intensive care nursing competencies, managers have enrolled both nurses with previous ICU experience and recently graduated nurses. This solution may have lowered the staff skill mix in these ICUs below the required standards, with potential risks to patients’ safety and quality of care.

For most of the nurses in these COVID-19 ICUs, the long hours while using personal protective equipment (PPE) were associated with adverse consequences such as discomfort, fatigue, and skin damage. Scientific nursing societies should recommend standards for the maximum number of working hours wearing PPE. Nursing managers should adjust day and night shifts, taking into consideration a maximum time span for wearing PPE. Changes in how the ICU team communicates and the visual and acoustic hindrances caused by PPE should be monitored for potential increased risk for adverse events among patients and health care providers.

Nurses’ workload should be monitored through validated tools such as the Nursing Activities Score, and the staff skill mix should be adjusted on the basis of the collected data. In fact, a recent case series of critically ill patients affected by COVID-19 showed a 33% increase in nursing workload compared with the usual case mix seen with ICU patients. Surveys about nursing activities and nurse to patient ratios in COVID-19 ICUs could be useful to establish priorities in managing potential staff shortages.

Our experience with staffing during this pandemic can teach us new ways to manage nursing resources in the future. For example, limitations could be instituted to prevent nurses from working solely in a single clinical specialty area or ICU, instead encouraging nurses to change their allocation inside the hospital several times during their career. A great opportunity is available to increase each nurse’s experience and competencies and to improve nurses’ skills within multidisciplinary teams. Broadening competencies and skills could have beneficial effects for nurses such as higher resilience, increased practical and theoretical knowledge, and improved patient outcomes.
Our experience with staffing during this pandemic can teach us new ways to manage nursing resources in the future.

About the Authors
Stefano Bambi is a staff nurse in the medical and surgical intensive care unit, Careggi University Hospital, Florence, Italy. Pasquale Iozzo is a nurse manager in the Anesthesia and Intensive Care Department, “Paolo Giaccone” University Hospital, Palermo, Italy. Alberto Lucchini is a nurse coordinator in the general intensive care unit, Ospedale San Gerardo, Monza, Italy.

Corresponding author: Stefano Bambi, PhD, RN, Medical and Surgical Intensive Care Unit, Careggi University Hospital, Largo Brambilla 3 – 50134, Florence, Italy (email: bambis@aou-careggi.toscana.it).

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REFERENCES

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