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CORRESPONDENCE

Interhospital critical care transports: have a safe trip!

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Dear Editor,
We compliment Van Lieshout et al. on their study comparing the quality of interhospital critical care transports with a mobile intensive care unit (MICU) performed by a team comprising a critical care nurse and a paramedic or by team comprising a critical care nurse and a critical care physician [1]. The frequency of critical events did not differ between the groups. However, as the authors state, they were unable to establish any non-inferiority of nurse-led interhospital critical care transport and, consequently, their results should be confirmed in larger studies. The question therefore arises of whether this study has implications for the current organization of interhospital critical care in the Netherlands and other European countries where—to date—all interhospital transports of critically ill patients are performed in the presence of a critical care nurse *and* a critical care physician. Based on the results reported by Van Lieshout et al. [1] on their study population of relatively stable patients (307 randomized, 197 excluded because of positive end-expiratory pressure of >15 cm or excess vasopressor dose, triaged by an intensivist), it would appear to be possible to guarantee a safe road trip to a patient accompanied only by a critical care nurse—without a critical care physician—provided that before the start of the transfer the patient is stable in terms of hemodynamics and respiratory function. This means that in theory about half of the interhospital transports could be performed in the absence of a critical care physician. However, in the study of van Lieshout et al. adverse events occurred in 15–16 % of transports in both groups [1]. In another study we found that the percentage of adverse events during transports performed with a dedicated MICU team was 12.5 % [2], and in a successive study most adverse events appeared to be caused by failure of technical equipment [3]. It would appear, therefore, that adverse events can be patient- or equipment-related, or both, and may differ in seriousness. We doubt whether a non-inferiority design is adequate to detect a difference in low-frequency, potentially serious incidents. We consider the MICU to be a fullly operational ICU, but with fewer personnel available if problems do arise. With regards to high-intensity ICU staffing, Dutch regulations require that a physician skilled in treating patients admitted to the ICU be available at the bedside within 5 min and that a board-certified intensivist be at the bedside within 20 min. A nurse-led MICU does not comply with these rules, particularly on long journeys—in which case, a MICU is no longer an ICU. A MICU transport is a specialty with its own demands; surprises should always be expected and solved by a trained, dedicated team with a critical care nurse and a critical care physician until better evidence is available to show otherwise.

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Compliance with ethical standards

Conflicts of interest
On behalf of all authors, the corresponding author states that there is no conflict of interest.

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