

Commentary

Critical care transfers – a danger foreseen is half avoided

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See related research by Ligtenberg *et al.* in this issue [<http://ccforum.com/content/9/4/R446>]

Abstract

How good is the care patients receive during interhospital transfer? The results of a study in this journal make for some disturbing reading. Adverse events occur in about one-third of cases. Half the time this can be related to not following advice from the receiving centre. Of these events, 70% are, in the author's opinion, avoidable and 30% are related to technical problems. So how do we make things better? All transfer equipment needs to be standardized and be "fit-for-purpose". Each hospital needs to take responsibility for the quality of care received in transfer, and this should include guidelines, training and equipment.

It is a wet, cold Friday night. Lights flash in the distance. The sound of a siren approaches. An ambulance hurtles through the night carrying a critically ill patient. The nurse and doctor, both inexperienced and sincerely wishing they weren't there, watch the monitor anxiously. They have left the security of one hospital for that of another; like in a circus trapeze act, they hang suspended for a moment. For at that instant the sickest patient in the region is travelling at over 100 km/hour down an unknown highway. Will they catch the trapeze, or will they fall?

In an era in which we want to know the physiology and status of our patients continuously throughout their hospital stay, patients who are in transit between institutions are almost completely unobserved. Transiently invisible, they are 'someone else's problem'. So how good is the care they receive?

In this issue of *Critical Care*, Ligtenberg and coworkers [1] try to answer just this question. In truth, many studies have examined the effects of transferring critically ill patients. Some have focused on changes in physiology and monitoring [2], finding few changes of questionable consequence. Indeed, Ligtenberg and coworkers confirm this in their study. Others have focused on later outcomes [3-5], showing a moderate effect on mortality and length of stay.

However, the study by Ligtenberg and coworkers [1] goes one step further and takes a pragmatic, patient-centred view

of the consequences of transfer. It considers adverse events and whether immediate intervention was required on arrival. The results make for some disturbing reading. Adverse events occur in about one-third of cases. Half of the time this can be related to failure to follow advice from the receiving centre. Of these events 70% are, in the authors' opinion, avoidable and 30% are related to technical problems.

Why is the situation so bad? It is not due to lack of guidelines or expert opinion [6-8]. We know what we should do, so why do we not do it? This is an international issue. From my perspective (UK), our practice does not differ from the findings presented by Ligtenberg and coworkers. One reason why things have changed so little in 20 years pertains to sponsorship. Those with responsibility and authority in our speciality simply do not do transfers. It is therefore a low priority in service development. A second reason is a lack of a tension for change. We have always somehow managed. This is a problem that has truly been out of sight and out of mind.

How then do we make things better? First, transfer equipment must be standardized, because many of the adverse events described in the report by Ligtenberg and coworkers [1] are equipment related. Publication of European Standards for ambulance vehicles (CEN 1789) may represent an opportunity to achieve this [9]. That document sets out standards for safety that will mean the end of syringe drivers lying on stretchers, ventilators clipped on trolleys and monitors lying on shelves. Transfer equipment will have to be built for use and fixed appropriately. Noncompliance will technically invalidate any EU ambulance's motor insurance policy.

Each hospital must nominate a specialist with responsibility for critical care received during transfer. They would then be responsible for guidelines, training and equipment. Adverse events can then be fed back immediately so they can be acted upon. Such a small change would generate the sense of discomfort necessary to finally stimulate improvement.

Competing interests

The author(s) declare that they have no competing interests.

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