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# The Ethics of Ambulance Ramping

## Abstract

Ambulance ramping refers to the practice of requiring paramedics to continue to care for their patient rather than handover clinical oversight and responsibility to the emergency department (ED). It arose as a response to overcrowding in EDs, namely as an alternative to admitting patients to EDs that are deemed to be already operating at or beyond capacity. This paper briefly analyses the ethics of ramping.

Ramping has been embraced by some ED practitioners and health policymakers as a solution to the problem of ED patients suffering increased risks of harm as a result of waiting times within ED being increased by the admission of additional patients to an already crowded ED. But this perspective fails to adequately consider the implications, especially the opportunity cost (that is, the benefits foregone), of requiring paramedics to remain at the hospital rather than make themselves available for further call outs. From this perspective, ramping negatively impacts the wider provision of emergency medical services, with potentially serious consequences for people's health. Advocates of ramping must consider people in the community who require a medical emergency response.

## Keywords

Ambulance, Emergency department, Health Ethics, Paramedic, Ramping, Health care rationing, Resource allocation

## Introduction

Over the past five years, ambulance ramping has become an engrained part of practice for emergency departments (EDs) and ambulance services in major cities in Australia and the United Kingdom. Ramping (or 'staging', as it is known in the United Kingdom) refers to the practice of EDs not allowing paramedics and their patient entry to the ED when no beds are available. Ambulance vehicles are instead required to queue up along the 'ramp' just outside of the ED. Some ED practitioners and policymakers see this as a practical and ethically acceptable response to an overwhelmed system. By contrast, some paramedics regard ramping as a dangerous practice that imperils patient care and increases ambulance response times in the community. In this way, ramping has the potential to create tensions between ED and ambulance service providers, even when both acknowledge that the practice is less than ideal.

While consideration has been given to the increased medical risk that patients face during periods of ED overcrowding (Chalfin et al.; Trzeciak & Rivers, 2003) little consideration has been given to the ethical issues involved in keeping patients waiting for ED admission. For this reason, this paper analyses the ethics of ramping from the perspectives of both emergency and ambulance services.

## Ramping explained

When ambulance patients arrive at a hospital, usual practice is to triage based on clinical need and to move the patient from the ambulance to the hospital. Clinical handover then occurs and paramedics become available to respond to other emergencies. Ramping stops this process at triage, postponing clinical handover and maintaining the paramedic's responsibility for patient care.

Before ramping was introduced, patients underwent initial assessment in the ED (e.g. by a nurse) and were categorised according to known risk while waiting for physician assessment. While medical risk was not fully assessed, the chance of missing a serious complication was minimal, at least when waiting times were appropriate. As waiting times increased due to greater numbers of patients presenting to the ED, it became clinically risky to rely on limited assessment and EDs began to see paramedics continuing to monitor their patient as much safer. Low acuity patients may have been placed in the hospital corridor with limited nursing attention, and ramping was seen as safer than this.

However, there is some evidence to suggest that ramping is not in the best interests of the patient. In a recent multi-site study, Crilly et al. concluded that patients who had a transfer time of less than 30 minutes had better outcomes than patients who had been left in ambulances (ramped) for longer (Crilly et al., 2015). Moreover, in an attempt to understand ramping from the patient's point of view, Kingswell et al. (2015) undertook a phenomenological study of patients who had been ramped for more than 30 minutes. They found that patients felt safe in the ambulance but were frustrated and confused about their experience. This indicates that ramping could have a negative impact on both the medical and psychological needs of patients when attending hospital.

Conversely, patients whose admission to the ED was not delayed also tended to report better outcomes. It would be best to give some indication of on what basis Kingswell et al. (2015) concluded ramping gave rise to poorer outcomes.

The practice of delaying clinical handover is not accepted as appropriate standard of patient care (Monaghan, Bell, Dutton, Hodby & Morisset, 2012; ). However, some hospital performance measures may function perversely to produce delays. Four-hour targets for ED stay were set in the UK in 2004 and in Australia in 2012 (Council of Australian Governments, cited 2016; Mountain, 2010), and there is question over when the clock starts ticking for this and other set targets. If time ramped does not count as time in the ED, then ramping makes four-hour targets easier to achieve.

## Ethical analysis

Ramping can be defended by appeal to the principle of non-maleficence ('do no harm'), if admitting a patient to a crowded ED can be construed as unduly exposing the patient to risks of harm. Along this line, ramping may be defended as reducing risks to patients who have entered the health system. To adopt a liberal perspective and the attendant language of individual rights, ramping can be viewed as supporting the right of patients to safe care. As explained above, ramping is thought

by some to incur fewer risks for a patient than accommodation in an ED corridor, for example. However, evidence cited earlier of poorer outcomes for ramped patients challenges this argument (Crilly et al., 2015; Kingswell, Shaban & Crilly, 2015).

For ambulance services, doing no harm means, among other things, being available to respond. Ramping ties up ambulance resources and increases response times (Monghan et al., 2012). Therefore it puts people who need ambulance services and cannot access them at risk of harm. Research has not yet identified situations where ramping has directly impacted ambulance availability to the detriment of patients. Such research would face many confounders, since poor health outcomes for people in the community could be attributable to many factors, not just response times. But in the minds of many paramedics, by increasing response times, ramping is harming people in the community. Put differently, people in the community are being made to miss out on the health benefits of a more timely emergency response. Again, liberalism and the language of rights can be invoked at this point. From the ambulance service's perspective, ramping impinges on the rights of people to a timely emergency response and on the right of the community as a whole to good emergency care.

Ramping does not contravene the principle of respect for autonomy when it comes to patients, since ramping simply produces a delay in the usual clinical pathway. While there is no choice for the patient concerning that pathway, ramping itself does not change the choices available. Patients are still free to choose not to go to hospital or to attend a different hospital. However, ramping does arguably restrict the autonomy of paramedics, in that it temporarily prevents them from responding to emergencies in the community. In this way, ramping frustrates paramedics' community orientation and therefore also the fulfilment of their professional identity and related duty. This is a very important point.

The traditional focus of ambulance practice is on emergency response, stabilisation and transport. Handover at the hospital represents the end of the ambulance process and the resolution of the paramedic's clinical intervention, much like discharge usually represents the resolution of clinical interaction in hospitals. Ramping challenges this tradition and functions to co-opt paramedics as ED practitioners when ED resources are strained. In effect, paramedics are asked to fulfill the role of ED practitioner when the role of paramedic has been fulfilled, short of completing handover. This may represent an ethically defensible shift in practice for the ambulance service. But the significance of the shift should not be missed. Paramedics are duty-bound to orient to the community and to ready themselves for the next call-out. Ramping complicates this, at the very least, and this may help to explain misgivings among paramedics.

The principle of justice is of fundamental importance to the issue of ramping. The triage process in EDs constitutes a well-established process for justly allocating ED resources, including the limited time and efforts of a limited number of ED practitioners. The triage process prioritises patients according to medical need (Cooke & Jinks, 1999). When ramping interrupts or delays the triage process, it interrupts or delays the just allocation of ED resources.

On the other hand, ramping can itself be seen as an effort to justly allocate scarce health care resources. Across the health system, there are a limited number of people who are able to provide care, and the resources comprising their time and efforts must, through some organisation of the health system, be justly directed to the people who need care. The question of justice can be asked as follows. Does ramping contribute to a more just distribution of burdens and benefits? In answering this question, it is important to consider people in the community whose emergency response may be delayed by ramping, rather than focus exclusively on people who have already entered the health system, e.g. by receiving an emergency response or presenting to hospital on their own.

## Conclusion

The practice of ramping seems to represent the following position. Let us shore up the safety of those people in the health system, even if this requires us to risk the safety of those in the community who may need urgent entry into the health system. We cannot do everything (due to resource scarcity), so we must at least guarantee the safety of those we have accepted into the health system.

This is a defensible position. However, there are potential ethical problems, which we have discussed above. In particular, ramping runs counter to, and frustrates, the community orientation of the ambulance service. In this respect, ramping challenges paramedics' professional identity and duty.

Finally, ramping may fail to minimise risks of harm across society if the risks to those in the community who are being asked to wait are far greater than the risks that would be posed to patients entering a crowded ED. This may indeed be the case, but there is no evidence of this yet. Research is needed here.

There is a clear need for further research on the impact of ramping across society and not merely within the hospital system. The arguments above appear to be summed up by asking the (ultimately empirical) question: does ramping reduce risk in some areas of health care, only to increase risk in another? Answering this question involves gaining an understanding of the impact of the practice. This research should then inform ethical debate and consequent policy on the future of ramping and on alternative responses to the problem of overcrowding in EDs.

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## References

- Breen, Kerry J., Corder, Stephen M., Thomson, Colin J. H., & Plueckhahn, Vernon D. (2010). Good Medical Practice : Professionalism, Ethics and Law Retrieved from <http://flinders.ebib.com/patron/FullRecord.aspx?p=501256>
- Chalfin, Donald B., Trzeciak, Stephen, Likourezos, Antonios, Baumann, Brigitte M., Dellinger, R Phillip, & group, for the DELAY-ED study. (2007). Impact of delayed transfer of critically

ill patients from the emergency department to the intensive care unit\*. *Crit Care Med*, 35(6), 1477-1483. doi: 10.1097/01.ccm.0000266585.74905.5a

- Crilly, J., Keijzers, G., Tippett, V., O'Dwyer, J., Lind, J., Bost, N., O'Dwyer, M., Shiels, S. and Wallis, M. (2015), Improved outcomes for emergency department patients whose ambulance off-stretcher time is not delayed. *Emergency Medicine Australasia*, 27: 216–224. doi: 10.1111/1742-6723.12399
- Council of Australian Governments. The National Health Reform Agreement - National Partnership Agreement on Improving Public Hospital Services. 2011. [Cited 4 March 2016.] Available from URL: [http://www.federalfinancialrelations.gov.au/content/npa/health\\_reform/national-workforce-reform/national\\_partnership.pdf](http://www.federalfinancialrelations.gov.au/content/npa/health_reform/national-workforce-reform/national_partnership.pdf)
- Cooke, Matthew W, & Jinks, Sarah. (1999). Does the Manchester triage system detect the critically ill? *Journal of accident & emergency medicine*, 16(3), 179-181.
- Holland, Stephen. (2007). Public health ethics. Cambridge, UK, Malden, MA: Polity.
- Kingswell, C., Shaban, R., Crilly, J. (2015) The lived experience of patients ramping in an Australian emergency department: An interpretive phenomenological study. *Australasian Emergency Nursing Journal* Vol 18 Issue 4 pp182-189
- Monaghan, M., Bell, H., Dutton, D., Hodby, C., & Morisset, A. (2012). External Review of Hospital Performance and Ambulance Ramping. Adelaide, S.A.: Government of South Australia.
- Mountain, D. (2010) Introduction of a 4 hour rule in Western Australian Emergency Departments *Emergency Medicine Australasia* Vol 22 Issue 5 pp374-378
- Trzeciak, Stephen, & Rivers, EP. (2003). Emergency department overcrowding in the United States: an emerging threat to patient safety and public health. *Emergency Medicine Journal*, 20(5), 402-405.