

# Ambulance Handover Delays: Options Appraisal to Support Good Decision Making

## Scope

This document is designed to inform and support senior managers within acute hospitals and ambulance services with operational responsibility for ambulance handovers. This document has been revised in March 2022

## Background

The problem of Emergency Department crowding has long been “hidden” within the walls of the ED, where it had become normalised for EDs to soak up risk and continue accepting patients in a manner not expected in any other part of the NHS. More recently, this problem has become more visible as handover delays have dramatically increased, leading to ambulances waiting outside EDs with their patients still inside.

RCEM thinks it is important to return ambulances to active service whenever possible and safe to do so. Delaying ambulance handovers should be a last resort. Holding patients in ambulances creates two problems. Firstly, the patient in the ambulance receives unnecessary delays to their care. Secondly, a seriously ill or injured patient who requires an ambulance will have to wait longer. There are concerns that ambulance staff may be exposed to an increased risk of, amongst other things, nosocomial infection.

Ambulance handover delays are almost entirely caused by crowding in emergency departments. The root cause of these problems is “exit block” where there are delays for patients to be admitted to inpatient beds from the ED.

Patients suffer harm or die unnecessarily when they cannot get an ambulance in time, when they are held in ambulances on arrival in ED, or when they are treated in crowded EDs, (see references).

Experience during the first phase of the COVID pandemic showed that crowding is not inevitable when organisations afford appropriate priority to urgent and emergency care

Emergency Departments must have sufficient capacity to meet demand, and constant flow from the Emergency Department into inpatient beds, otherwise they will not be able to keep patients and staff safe. This means that risk must be properly shared within organisations, and through systems,

When this does not happen leadership teams tend to look for mitigation. Unfortunately, this mitigation is usually focused at the front door of the hospital, rather than being directed at the root cause of the problem.

Options that are commonly considered, and why most are not acceptable

### Acceptable

1. Improving organisational processes and utilising the whole resource of the hospital and system over extended hours. Have available options so that unnecessary admissions are avoided, that patients ready for discharge can be discharged, and escalate so that patients can be promptly admitted to assessment areas and wards from the Emergency Department.

### Temporary mitigation

2. Opening staffed post-ED clinical areas (not corridors) for patients who have been assessed and managed, to act as a buffer between the ED and admission areas (so-called Priority Admission Unit)
3. Expanding the Emergency Department footprint with increased staffing.

### Unacceptable

4. Expanding the Emergency Department footprint without increasing staffing or changing organisation processes.
5. Holding ambulances outside Emergency Departments.
6. Diverting ambulances to other hospitals.
7. Holding patients in corridors after initial Emergency Medicine assessment (“reverse queueing”)
8. Erecting a tent or build a temporary holding area at the front of the hospital.
9. Holding patients from ambulances in corridors awaiting initial Emergency Medicine assessment.
  - These last two may involve the ambulance service maintaining care for these patients (either the crews, or a cohorting crew) or the organisation taking over care.

Option 1 is the only desirable option, and the only sustainable one. Option 2 represents a “least worst” mitigation. Option 3 is essentially kicking the can down the road, and without improvements in systems is not a long-term solution. Option 4 places unreasonable pressure on already critically overstretched EDs and will eventually result in a more dangerous crowding problem. The remaining choices are poor, don’t work, represent system and organisational failure, and result in unnecessary harm to patients and staff. They increase pressure on ambulance service and ED teams. They do not solve the underlying problem.

	Recommended option	Temporary mitigation only		Unacceptable options					
	Utilise the whole resource of the hospital and system. Escalate so that patients can be admitted to assessment areas and wards from the ED	Open up staffed post-ED clinical areas for assessed and managed patients awaiting admission	Expand the ED footprint with increased staffing	Expand the ED footprint without increasing staffing or changing organisation processes	Hold patients in ambulances	Divert ambulances away from the nearest hospital	Hold patients in corridors after initial assessment in the ED	Erect a tent or build a temporary holding area at the front of the hospital	Hold patients in corridors awaiting initial ED assessment
Ambulance freed up to go to another patient	✓	✓	✓	Until ED full	X	X	Until corridor full	Until tent full, usually immediately	Until corridor full
Patient treated in their nearest appropriate hospital	✓	✓	✓	✓	✓	X	✓	✓	✓
Patients looked after with appropriate staffing ratio	✓	✓	✓	X	✓	✓	X	X	X
Patients can undergo active treatment and receive oxygen	✓	✓	✓	Varies	✓	Varies	X	X	X
Deteriorating patient can be identified early	✓	✓	✓	Varies	✓	Varies	X	X	X
Patient has undergone assessment and initial treatment in the ED	✓	✓	✓	✓	X	X	Varies	X	X
Risk of cross infection minimised	✓	✓	✓	✓	Yes for patient, uncertain for crews	✓	X	X	X
Patient privacy and dignity preserved	✓	✓	✓	✓	✓	✓	X	X	X
Patient safety improved for patient in question	✓	Varies	Varies	Varies	X	Varies	X	X	X
Patient safety improved for other patients	✓	Varies	Varies	Varies	X	X	X	X	X
Ambulance handover measurement improved	✓	✓	✓	✓	X	Varies	Varies	Varies	Varies
Flow metrics improved	✓	✓	X	X	X	X	X	X	X

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## Review

Usually within three years or sooner if important information becomes available.

## Conflicts of interest

None

## References

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## Disclaimers

The College recognises that patients, their situations, Emergency Departments, and staff all vary. This guideline cannot cover all possible scenarios. The ultimate responsibility for the interpretation and application of this guideline, the use of current information and a patient's overall care and wellbeing resides with the treating clinician.

## Research recommendations

None

## Audit standards

None

## Keywords for search

Ambulance; handover delays; Emergency Department crowding