Ambulance Design Parameters

1. Critical Care

Ambulance primarily designed around this situation (blue lights). Layout (including frequently used kit for given scenario)

- Bag valve mask (BVR)
- Space to layout drugs pre move
- Clock (some drugs administered every 8 mins)
- Bag valve mask (BVR)
- Monitor / ECG (should be viewable from most positions)
- Clinical waste / sharps bin (paramedics currently lean across patient)
- Chest compression (Standing access for CPR)

Trolley should allow paramedic to maintain BVR whilst loading (Benefits loading & taxiing the patient the other way [feet first] in some cases)

- Space to layout drugs pre move (paramedics often lay equipment on patient)

- Chest compression (Standing access for CPR)

- Monitor / ECG
- Defibrillator
- Action bag (Drugs bag, etc dependant on need)
- Suction unit
- Clinical waste / sharps bin
- Work surface
- Tissue box / paper roll / disposable gloves
- Drip / infusion bag (suspended from ceiling)
- Clock
- Clinical waste / sharps bin
- Airway devices
- Vomit bowls
- Trolley

- Oxygen valve
- Bag valve mask (BVR)

- Consumables are highlighted in grey

Key

- Paramedic
- Loved one
- Patient
- Relevant equipment
- Active area

Loved one often sits facing forward and has limited leg room in this position.
The vast majority of patients are transported in this way, here the emphasis is patient observation (no blue lights).

Key
- Paramedic
- Loved one
- Patient
- Relevant equipment
- Active area

Consumables are highlighted in grey

Ambulance Design Parameters

2. Transporting a patient

The stretcher is commonly used in the upright position.
Important kit should be accessible from the outside of the ambulance so the paramedic does not have to re-enter the cab once they have arrived on the scene in an emergency.

Layout (including frequently used kit for given scenario)

**Ambulance Design Parameters**

3. Arriving on the scene

**Equipment Hierarchy**

- Responder bag
- Oxygen bag
- Carry chair (with blanket)
- Action bag (Drugs, entonox bag, etc. dependant on need)
- Suction unit
- Spinal board
- Mangar ELK / splints / KED / RED / patslide etc.
- Stretcher / trolley
- Blankets
- Vacuum mattress / splints

**Key**

- Blue: Paramedic
- Orange: Loved one
- Red: Patient
- Green: Relevant equipment
- Blue: Active area
4. Loading the patient

Layout (including frequently used kit for given scenario)

- **Loved one (child accompanies patient during transfer onto stretcher otherwise waits outside)**
- **Disposal gloves**
- **Tilt and pull chair in transit (two required, under arm lift)**
- **Active action bag (Drugs, entonox bag, etc)**
- **Active splints / head restrainer / vacuum mattress / spinal board**
- **Stretcher / trolley**
- **Drip / infusion bag (suspended from ceiling)**
- **Responder bag**
- **Oxygen**
- **Mangar ELK / splints / KED / RED / patslide / scoop (large items)**
- **Carry chair**
- **Blankets**
- **Paper towel roll**
- **Disposable gloves**
- **Tissue box / paper roll / disposable gloves**
- **Loved one (accompany patient during transfer onto stretcher otherwise waits outside)**
- **Active area**
- **Paramedic**
- **Patient**
- **Relevant equipment**
- **Active area**
Ambulance Design Parameters

5. Make ready

*Should be easy to determine whether kit is empty or running low and easy to restock*

Layout (including frequently used kit for given scenario)

**Equipment Hierarchy**

- Responder bag
- Oxygen HX cylinders
- Drip / infusion bag
- Action bag (Drugs, entonox bag, etc. dependant on need)
- Batteries check
- Empty clinical waste bin
- Empty sharps bin
- Tissue roll
- Gloves
- Blankets
- Linen x 6
- Airway devices (Adult x 6, child x 3)
- Bandages x 6
- Vomit bowls x 6

**Consumables are highlighted in grey**