

Appendix B: Risks paramedics are aware of during field-referrals

1. Risk of serious adverse outcome related to medical condition: Acute stroke and STEMI are serious medical conditions and when ambulance patients receive the results of their assessment at the scene there is considerable uncertainty about what the patient's clinical outcome will be (regardless of destination), and this situation cannot be resolved in the field.
2. Increased risk of serious adverse outcome related to long transport time: For patients going to a regional centre, often the centre is located further away from the patient's location than the ED, which necessitates a bypass of the ED and longer transport time. There is a risk that the patient might deteriorate during this longer transport. Longer transport times also include more patient discomfort (related to being stretcher bound in a moving ambulance), and longer exposure to traffic and weather related risks.
3. Risk of loss of access to specialised care: The regional centres provide specialised care not available in local EDs. These interventions are time sensitive, so if the patient is taken directly to a (closer) ED it is unlikely that there will be enough time left in their time-window for a second transport to a regionalised center for specialised treatment and they will be deprived of a potentially beneficial regional intervention.
4. Risk of patient confusion and disappointment: Paramedics can only refer patients for consideration for treatment at a regional centre. Thus there is a risk that the patient will not receive the regional specialised care even though they endured longer transport to get to the centre. In such cases the patient may experience confusion about their condition, and disappointment at not receiving the specialised care, and also form negative views of their condition (meaning they may conclude they are beyond immediate help).

5. Risk of immediate repatriation: On arrival at a regional centre all patients undergo in-depth medical assessments. Some of these patients are not accepted for treatment and are transported back to the ED that was initially bypassed i.e. immediately repatriated. This involves additional road transport with more patient discomfort and exposure to traffic and weather related risks.