

# FACULTY OF PRE-HOSPITAL CARE

## Student and Trainee Group

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### Essay Competition: 2<sup>nd</sup> Place

### Topic: 'Making Decisions with Incomplete Information: The Reality of Pre-Hospital Care'

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#### Introduction

In prehospital care (PHC), very few decisions are made with the full story to hand. With each patient encounter, we accumulate information from the patient, relatives, bystanders, the dispatch screen, and the surrounding environment. PHC operates by the continual management of uncertainty through risk assessment and team-based decision-making, often under significant time and resource constraints. Unlike other specialties where there is more time and information available, PHC requires clinicians to act before uncertainty can be fully resolved. Excellence in PHC therefore is achieved not through diagnostic certainty, but in making safe clinical decisions to provide the patient with life sustaining measures, increased quality of life, comfort, and time-alive.

#### Why Information is Incomplete

In hospital, one has access to resources seldom found prehospitally. If clinically indicated, a patient can have continuous monitoring, access to historic medical records, complex investigations, and consults from relevant departments. Prehospitally, access to such breadth and depth of information is often far more limited. Croskerry (2005) emphasised that 'Effective treatment cannot begin until an accurate diagnosis has been made',<sup>1</sup> and so the pressure is on the prehospital clinician's clinical gestalt to identify the most accurate diagnosis with limited information, in order to channel the patient into the correct pathway and treatment. They must 'respond to omnipresent time pressures and resource availability with expeditious decision and action... [and] think on one's feet and go with clinical intuition' (*ibid.*). Whilst advancements are being made to bring more to the roadside (e.g., community emergency medicine services such as the Physician Response Unit in London use clinicians to 'take the emergency department to the patient'<sup>2</sup>), on the whole patients prehospitally are still assessed without the full picture.

## **Decisions and Diagnoses**

*In times of stress, we don't rise to the level of our expectations, we fall to the level of our training*

Prehospital decision-making is not about definitive diagnosis. Decision-making becomes a science and a skill to master in its own right, separate from clinical abilities. In prehospital critical care the priority is to establish a safe scene, how unstable the patient is, what can be done in the golden hour to prevent deterioration, and to transport them to definitive care quickly.<sup>3</sup> All these factors are balanced to provide optimal patient care in a high-stress environment. Whilst the bystander effect may take hold of those on scene, Morgan (2020) stated, 'If you panic, they panic and others panic – and panic has never saved a life'.<sup>4</sup> To address this, a teaching from the aviation industry (often linked to PHC teaching, e.g., Crew Resource Management<sup>5</sup>) feels apt: 'Aviate, Navigate, Communicate'.<sup>6</sup> In times of increased workload or stress, these three words are the basics a pilot returns to. Translating this to PHC, 'Keep the patient alive through the necessary assessments and interventions; Create a plan for the patient; Communicate with your team'.

As Lieutenant Commander James Newton DFC explained in a talk at London Air Ambulance's Clinical Governance Day, 'if you have the basics nailed as muscle memory, then you give your brain the space to think about the complexities'.<sup>7</sup> Finding spare mental capacity and situational awareness is crucial, and requires that prehospital clinicians and services undertake continuous professional development to achieve this. In times of stress, we don't rise to the level of our expectations, we fall to the level of our training, and so unlike the in-hospital aims of diagnosis and disease-specific treatment, in prehospital critical care one aviates, navigates, and communicates to give a patient time and preserve their quality of life.

## **Managing Uncertainty**

*Stay and Play or Scoop and Run*

Prehospitally, one is likely to have encountered the familiar dilemma of 'stay and play' versus 'scoop and run'.<sup>8</sup> Whether a patient would benefit more from a complex intervention on scene versus making haste to definitive care is an important question, and the answer must consider the patient's best interests and the specifics of each case. The answer, however, is not black and white, and uncertainty inevitably becomes uncomfortably involved in the process. However, the prehospital field has worked hard to create safety nets and alleviate human factors affecting this decision-making process. Guidelines, such as the NICE Major Trauma Guidelines provide structured frameworks that support decision-making,<sup>9</sup> helping to manage risks to patients and the treating team. The use of guidelines as a standard, whilst not accounting for all situations, helps to support the team and reduces the risk of moral distress and cognitive overload.

Naturally, all clinicians aspire to understand their patient's condition, reach the correct diagnosis, and provide appropriate care. However, despite this, clinicians will make mistakes and feel that they have failed their patients. This is especially relevant in PHC, where hindsight in the form of further hospital investigations or post-mortems often yields greater clarity than what was apparent at the roadside. Croskerry describes the consequences of this, where a clinician is left with 'guilt, soul-searching, self-recrimination, and, in some cases, despair. The physician may become the second victim'. PHC lends itself to a high risk of personal moral injury, a phrase describing 'the strong cognitive and emotional response that occurs when an individual witnesses or participates in actions that violate their moral or

ethical code'.<sup>10</sup> There may be times where a clinician working prehospitally knows that a particular investigation or intervention would provide the information needed to guide patient care; however due to the circumstances, this is simply not possible. It is important to acknowledge the impact of moral injury on those working in PHC, and to recognise how uncertainty can intensify these experiences, leaving clinicians questioning whether they made the right decisions within the constraints of the situation.

### **Conclusion**

At the heart of it, every prehospital clinician strives to deliver the best possible care for their patient. The prehospital environment presents challenges rarely encountered within the hospital setting, demanding that clinicians make critical decisions in the face of uncertainty. By treating decision-making as a dynamic and patient-centred process rather than a search for certainty, prehospital clinicians are able to provide safe, compassionate, and evidence-based care. PHC is therefore not merely a means of transporting patients to hospital, but an invaluable specialty where early assessment, intervention, and clinical judgement can fundamentally shape patient outcomes for the better.

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