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A qualitative study of system influences on paramedic decision making and patient safety

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BACKGROUND

Paramedics routinely make critical decisions about patient care in a complex environment characterised by significant variation in patient case-mix, care pathways and linked service providers.

The aim of this study was to explore multi-level systemic influences on decision making by paramedics, focussing on care transitions and potential threats to patient safety (risk factors)

METHODS

An exploratory multi-method qualitative study in three Ambulance Services in England involved:

- **Paramedic & specialist paramedic roles**
- **Observation of 34 shifts (n= 57 staff)**
- **Digital diaries (n=10 staff)**
- **Three focus groups (n=21 staff)**
- **Feedback & prioritisation workshops**

The big jobs we used to deal with on a regular basis are now diluted and we're receiving less training than we did two years ago.

…every time you get nearly due your update it gets cancelled because of operational demands. It's very short term management where people say we'll make better decisions with more training but there just isn't the investment. 'Cos we can't invest because we won't get the money if we don't make the 8 minutes.

SYSTEM INFLUENCES ON DECISIONS

Staff training and development

Operational demands constrain opportunities for training, development and skill use.

Access to appropriate care options

There is considerable local variation in availability, accessibility and awareness of alternatives that may be better options than the Emergency Department.

Organisational resources [staff, vehicles, equipment]

Persistent high demand puts a strain on resources. Variations in availability of specialist paramedic roles, equipment, drugs and vehicles can contribute to inconsistent care.

Communication and feedback to crews

Staff feel overloaded by organisational communications but lack patient information when attending calls, feedback on performance and access to decision support.

Meeting increasing demand

The nature of demand for ambulance service care has shifted from emergency to primary care and psychosocial decisions. These are less clear cut and require more time.

Disproportionate risk aversion

Risk tolerance amongst staff was influenced by competence, confidence, experience and a perceived blame culture. Transfer of clinical responsibility minimised vulnerability.

Performance regime and priorities

Time pressures conflict with doing detailed assessments that take longer but may result in better decisions. Over-triage for an immediate response (8 min) puts pressure on resources.

Trouble is I've also had times where by trying to keep the patient at home, I've just spent ages on scene and they've ended up going in [to ED] anyway. […] Ringing the GP, ringing intermediate care, ringing social workers or mental health teams.

I worry about some decisions that I've made because we never get feedback and I never ever get told whether I made the right decision.

It's that initial time from us saying, we're leaving now and we've done x, y and z to refer you on to another service and from when that other healthcare professional takes over it's that time that we are at most risk and it is the forefront of our mind when we make these decisions about whether it's safe or not and whether it impacts on us and our professional registration.

CONCLUSIONS

The multiple methods provided consistent evidence.

The study highlights the increased complexity of paramedic decisions and multi-level system influences that can exacerbate risk.

Training and development, and access to alternative care pathways, were identified by ambulance service staff and service users as priority areas for attention.

The findings have implications for:

- **Individual Ambulance Services (e.g. ensuring an appropriately skilled workforce, supportive culture).**
- **The wider urgent and emergency care system level (e.g. ensuring access to appropriate patient care options).**

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ACKNOWLEDGEMENTS

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This project was funded by the National Institute for Health Research Health Services and Delivery Research Programme (project number 10/1007/53).
The views and opinions expressed are those of the authors and do not necessarily reflect those of the HS&DR Programme, NIHR, NHS or the Department of Health.