Healthcare Investigation Fatigue Trigger Tool

Laura Pickup¹, Saskia Fursland¹, Mairi Alexander¹, Suzy Broadbent¹, Paul Davis², Kathryn Whitehill¹ & Sian Blanchard¹

¹ Healthcare Safety Investigation Branch, UK, ² Independent Consultant, UK

SUMMARY

Fatigue and the implications on human performance are well recognised in the literature and many safety critical industries. This is not currently the case in healthcare, where there are no formal approaches to monitor or investigate the impact of fatigue on clinical performance and patient safety. The Healthcare Safety Investigation Branch (HSIB) was set up in 2017 and its core function is to provide independent investigations of healthcare incidents. HSIB adopts a systems approach to investigations and this paper will describe the work in progress to develop a standardised approach to consider fatigue.

KEYWORDS

Fatigue, healthcare, tool

Introduction

The subject of fatigue in the context of healthcare cannot be discussed without noting the unprecedented pressure experienced by staff over the last 24 months due to the COVID-19 pandemic. However, the concern associated with fatigue on clinician performance and patient and clinician safety predates this period of time (Farquhar 2017), where 12 hour shifts are the norm. Healthcare has struggled to establish any formal approach to fatigue management or regulatory oversight that encompasses all job roles. The challenge for healthcare is the well documented crisis in workforce to ensure shifts are covered to manage the demand from patient caseloads (Farquhar 2017). One key challenge in healthcare is the reporting of fatigue as a contributing factor to any event or incident at work. There is a lack of awareness of the impact on performance but also concern for professional liability that could be associated with an individual reporting themselves as fatigued and the healthcare professional judged as individually responsible (Association of Anaesthetists nd). This prevents existing NHS reporting systems from capturing this as an issue and impedes recognition of fatigue relative to healthcare incidents. The silence that surrounds this issue was HSIB's motivation to capture evidence to explore the issue of fatigue in healthcare incidents.

Approach

A small team of HSIB investigators with experience of human factors requested the support of human factors peers across transport and military investigation bodies. This enabled the collation of existing approaches adopted by these bodies. A desktop review of literature in the field revealed a large body of knowledge on the impact of fatigue on performance and the necessity for fatigue management systems in safety critical industries. A small selection of healthcare articles was identified and the authors of these contacted and included as an extension of HSIB's internal team (Farquhar, 2016). This collaborative approach provided assurance of capturing key fatigue inducing characteristics, as applied across other industries, whilst, acknowledging characteristics unique to healthcare.

The questions included fields relevant to: sleep, rest, shifts and organisational approaches to fatigue management. The tool was intended to be used as part of a routine interview, which may occur several days, weeks and even months after an incident. The lapse in time seems a key difference in healthcare investigations where the evidence of harm or an incident may take time to manifest in an episode of care or consent required from families to investigate may take time to obtain at an emotional time for them. The time available to speak with staff is also often limited, due to workforce pressures, therefore the questions were rationalised and resulted in 15 questions with an open text box for comments. The tool aims to function as a fatigue trigger tool to provide information to the investigator on the presence of a higher level of risk associated with fatigue, rather than reaching for an elusive 'red line' limit (Civil Aviation Safety Authority 2014). The draft questions, currently being tested are included in the table below.

Table 1: Healthcare fatigue trigger tool

| | How many hours sleep did you have prior to the shift when you last encountered |
|--------------------|--|
| | the patient or the time of the incident? |
| Sleep: wake time | How many hours had you been awake for prior to your last encounter with the |
| | patient or the time of the incident? |
| | How much sleep did you get, approximately, 3 days before your last encounter |
| | with the patient or the time of the incident? |
| | How many consecutive shifts had you worked since your last day off, this |
| | includes bank, private work? |
| Consecutive shifts | How many consecutive night shifts had you worked? |
| | How many days rest did you get after the consecutive nights? |
| | How long is the duration of your shifts? |
| | In the 3 days before your last encounter with the patient or the time of the |
| | incident approximately how many additional hours did you complete? |
| Shift | What time did your shifts start? |
| duration/pattern | How long do you allow from leaving home to arriving for duty e.g. travel time, |
| | parking? |
| | How long was the start of the shift, on the last encounter with the patient or the |
| | time of the incident, since the end of the last shift? |
| | Do you have a regular shift pattern, what is it? |
| | How many hours continuous sleep do you normally have on the shift pattern |
| Quality of rest | described? |
| | Did you have scheduled uninterrupted breaks during the shifts described? |

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