

Prevalence and type of multitasking behaviour among junior doctors working out of hours

Authors: Polly Simpson,¹ James Pinchin,² Sophie Middleton³ and John Blakey⁴

Introduction

'Out of hours' care (outside 5pm–9am Monday–Friday) accounts for 75% of the NHS working year. During this time, staffing levels are lower and proportionally more of the doctors present are in training grades. Recent health policy debates suggest that changes are needed at these times to improve safety and efficiency, but also that informed decisions are difficult without objective information on how doctors' time is spent. Interventions for single aspects of doctors' activity may be ineffective if staff are rapidly switching between tasks ('multitasking').

Aims

- 1 To record the proportion of time spent rapidly switching between tasks.
- 2 To identify which tasks are commonly co-completed by junior doctors.

Methods

At a UK teaching hospital, we undertook structured observations of junior doctor activity using bespoke software on a tablet PC. For each 1-hour observation period on the medical wards, the observer recorded the location and activity of the doctor every 30 seconds. All participants provided informed consent. Patient interactions were not directly observed and are not included in the analyses. Summary statistics and analyses were conducted in SPSS.

Results

In 43 hours of observation, the largest proportions of time were spent 'looking at notes' (18% of total observation time) and 'using computers' (20%). Less than 2% of 30-second periods included 'no observable task'.

Multitasking was common, with an average of two tasks recorded per 30-second period. Doctors were very likely to

be multitasking if they were looking at or adjusting notes (all instances), talking face to face (all instances), using a PC (82% of instances) or walking (64% of instances).

While looking at, writing in or adjusting notes, junior doctors spent 24.7% of this time concurrently using a PC, and 23.7% of this time talking face to face with other staff.

Conclusions

Multitasking is usual practice among junior doctors. New ways of working should acknowledge this. The potential benefits of addressing single inefficiencies (such as paper notes) will not be fully realised while staff use this time for several concurrent activities. Measuring activity objectively and in fine grain can provide valuable insight before changes are implemented. ■

Conflict of interest statement

The authors have no conflicts of interest to declare.

Authors: ¹Leeds University Medical School, Leeds, UK; ²Horizon Digital Economy Research, University of Nottingham, Nottingham, UK; ³Aintree University Hospital, Liverpool, UK; ⁴Clinical sciences department, Liverpool School of Tropical Medicine, Liverpool, UK