

Case Study: The “Weekend Effect”: An oversimplification

Based on: Bray BD, Cloud GC, James MA, Hemingway H, et al, 2016. Weekly variation in health-care quality by day and time of admission: a nationwide, registry-based, prospective cohort study of acute stroke care. *Lancet*, 288, 170-77. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)30443-3/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)30443-3/abstract)

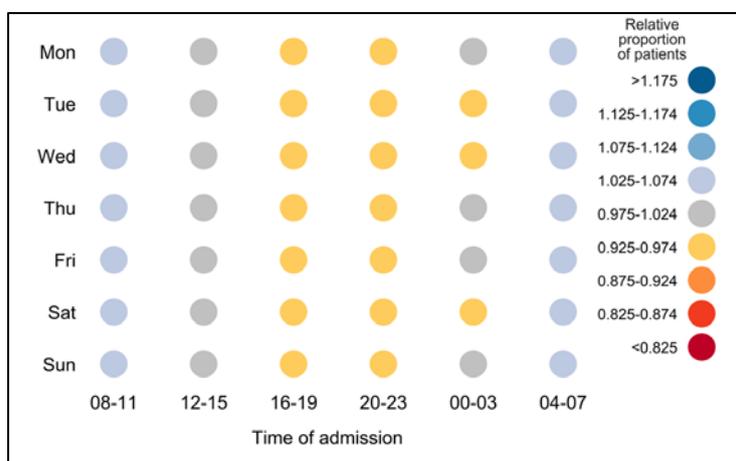
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There has been a lot of concern and controversy about whether patients admitted to hospital at the weekend receive lower quality care or have worse outcomes – the so called “weekend effect”. Despite the focus on care at the weekends, whether the quality of stroke care varies across the whole week (for example, by varying between days of the week or time of day), had not previously been studied. Using data from SSNAP, the quality of stroke care was mapped out for patients admitted to hospitals in England and Wales with stroke, showing how aspects of care varied across the whole week.

This found that there were not just differences in care between the weekend and the rest of the week, but in fact many aspects of care varied across the whole week. For example, patients waited the longest to be assessed by a physiotherapist or occupational therapist if they had been admitted on a Thursday or Friday, and patients were most likely to receive a quick brain scan if they had been admitted in the morning.

This shows that the idea of the “weekend effect” is in fact a major simplification of the variation in care that occurs across the whole week. The study also found that survival rates were no different for patients admitted at the weekend compared to those admitted on a weekday. The main message of the study is that stroke services therefore need to focus on improving care across the whole week, and not only at the weekend. You can watch a talk by Dr Bray, an author of this paper, that discusses this research and the implications of his findings at the following link: <https://vimeo.com/187347196>

Brain scanning by day of the week and time of day



This heat map demonstrates the variation across time of day and day of the week in the proportion of patients who are scanned within 12 hours of arrival at hospital. There is a daily pattern where patients who arrive in the morning are more likely to be scanned within 1 hour than patients arriving in the afternoon and evening.