



The 7 day challenge

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The quality effect is mixed

- The weekend effect is not a uniform phenomenon but, rather, a complex cluster of different causal pathways, shaping patients with very different diseases presenting at very different clinical services. **Not every diagnostic group demonstrates a weekend effect, and those that do are associated with quite different risk profiles, suggestive of different causal pathways.**

Recognising how these different patterns shape the impact of weekend admissions should lead to more diagnosis- and service-specific analyses and solutions.

Concha, Oscar Perez, et al. (2013), 'Do variations in hospital mortality patterns after weekend admission reflect reduced quality of care or different patient cohorts? A population-based study', *BMJ Quality & Safety*.

- Of the **100** conditions that caused the most deaths, **23** were associated with significantly higher mortality rates among patients admitted on a weekend than among those admitted on a weekday

Bell, Chaim M. and Redelmeier, Donald A. (2001), 'Mortality among Patients Admitted to Hospitals on Weekends as Compared with Weekdays', *New England Journal of Medicine*, 345 (9), 663-68.

The cause of the quality effect is unclear

- New evidence on the negative effect of weekend and after-hours hospital operation has made researchers argue about what should be the most cost-effective way of improving off-hours hospital care. If the cause of the 'weekend effect' is **understaffing** then the strategy should be to regulate workforce. If, however, the cause is **inappropriate treatment** (such as delays to surgery) not related to staffing numbers then a more cost-effective strategy could be rewarding good off-hours performance. Information technology can also help reducing the gap between the 'normal' and the 'off-hours' hospital by creating safety nets and providing information for junior doctors when senior staff are not present.

Gallego, Blanca, et al. (2015), 'Insights into temporal patterns of hospital patient safety from routinely collected electronic data', *Health Information Science and Systems*, 3 (Suppl 1), S2.

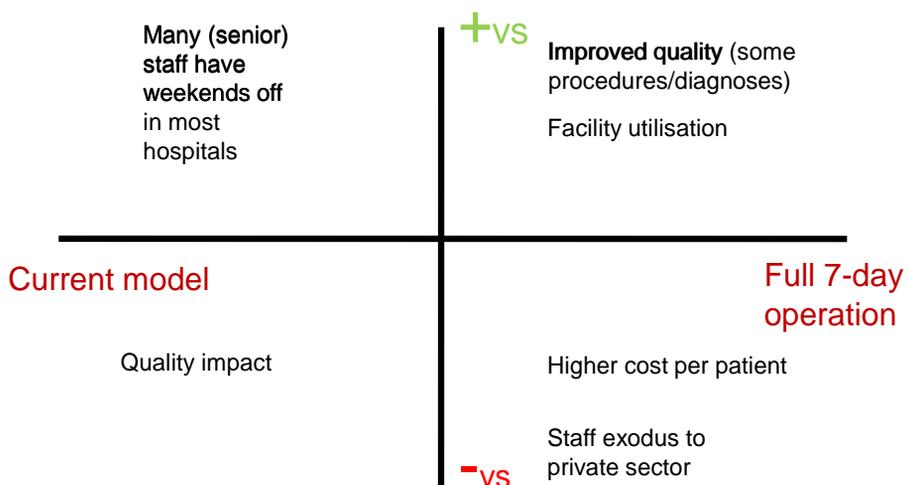
- My analysis cannot identify the portion of the mortality effect of weekend admission caused by **delay in the use of intensive procedures**, the portion caused by **reduced use of intensive procedures**, and the portion caused by other changes in **medical treatment or staffing**. Empirically, weekend admission affects both delay and incidence of intensive procedures, and may also affect dimensions of treatment that I cannot observe.

Becker, David J. (2007), 'Do Hospitals Provide Lower Quality Care on Weekends?', *Health Services Research*, 42 (4), 1589-612.

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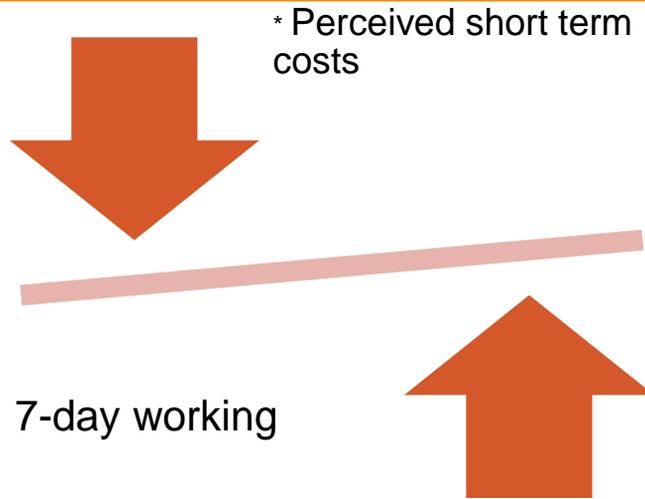
The 7-day choice



Johnson, B *Polarity management: identifying and managing unsolvable problems* HRD Press 1996

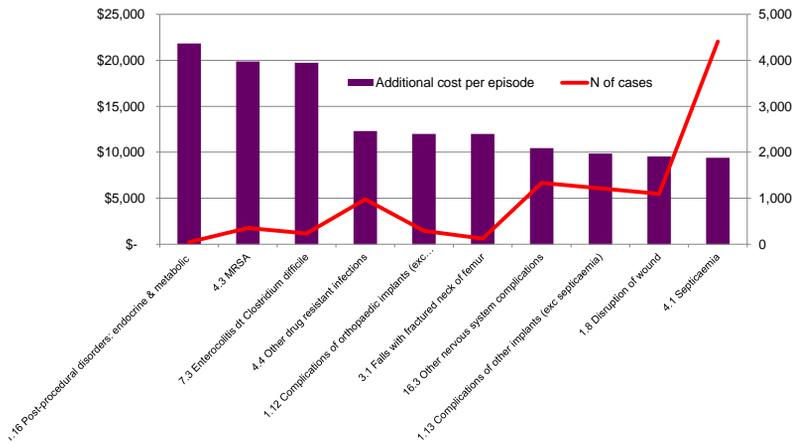
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Barriers to change



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Marginal cost of a complication (aka adverse event) by CHADx category



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Barriers to change



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Top down policy levers



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