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Bed occupancy continues to show on/off switching

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Details of further articles in this series are available at: www.hcaf.biz and at www.hcaf.biz/2010/Publications_Full.pdf

The original can be obtained from www.bjhcm.co.uk using an NHS Athens login.

The average bed occupancy in any health care system is the result of several competing forces such as changes in available beds, arriving demand and associated length of stay (LOS). Figure 1 shows the trend in average midnight occupancy in England for the 12-month period commencing Mar-11 through to Jun-17. From Q1 in 2010/11 to Q1 in 2017/18 the number of acute beds have declined by 7,960 (-7%), while mental health has declined by 5,066 (-22%). Beds used to service same day stay emergency admissions are counted in the available overnight bed numbers, however, they are not counted at midnight. Hence, the average day time occupancy is around 2.4% percentage points higher for acute beds than shown in Fig. 1.

A running 12-month average acts to remove the seasonal ups and downs in average occupancy, but, as can be seen a longer approximate two-year pattern remains. The up/down movements seen in Fig. 1 literally arise from on/off switching. This implies that average occupancy jumps up for 12 months, then drops down for 12 months, and then repeats the cycle. The cycle has been obscured in the earlier years for mental health due to the pattern of bed reductions, and possibly by a lower impact on mental health admissions in the earlier events (see below).

If every hospital in the country followed the same pattern, some form of policy or organisational process could be implicated. However, the fact is that the behaviour for the whole of England is a composite picture of very small-area outbreaks of something behaving like an infectious agent (Jones & Beauchant 2015, Jones 2016b,c). Also, deaths and staff sickness absence rise in parallel (Jones 2016a, 2017b). This presumed infectious agent is also known to affect mental health conditions (Jones 2013, 2017d), as observed in Fig. 1. During these events admissions for some diagnoses increase (Jones 2015a, 2017d), others are unaffected (Jones 2015b), and yet others reduce (Jones 2017a). All changes are age specific (Jones 2017c).

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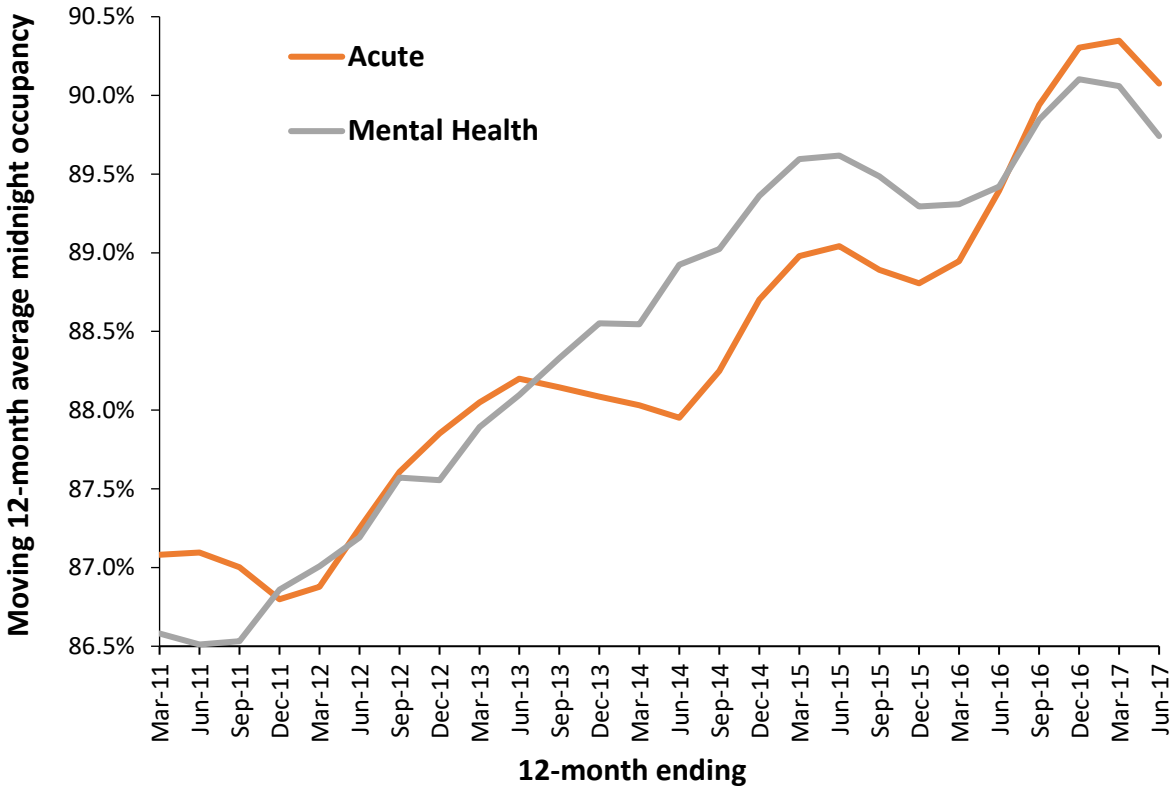
Figure 1: Moving 12-month average midnight acute and mental health bed occupancy



Data is from https://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/

At a national level these events commence the step-increase in bed occupancy somewhere in the quarter ending at June. The next event is due to initiate in 2018 and bed occupancy will most likely experience yet another 1.0 – 1.4% percentage point increase (as in Fig. 1). Is this being planned for?

Since all relevant Whitehall departments have been repeatedly informed it can only be assumed that they wish to remain silent. However, if the infectious hypothesis is correct this represents the single largest series of infectious outbreaks in the post-antibiotic era of medicine. A common non-reportable virus is the likely source. Both the NHS and the public may be being deceived, through omission (Beeknoo & Jones 2017). Only time will tell.

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