British Thoracic Society
Adult Community Acquired Pneumonia Audit 2012/13
(national audit period 1 December 2012 – 31 January 2013)

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THE BTS community acquired pneumonia (CAP) audit has run for the last 4 years with 5,652 patients from 132 institutions captured in the latest audit period over the winter of 2012/2013 (data collection period: 1 December 2012 to 31 January 2013). This summary describes facets of the national picture and initiatives arising.

Patient profile: No significant differences noted compared to previous years. The average age of cases was 72 years (range 15-106). Based on the CURB65 score, 43% of patients had low severity CAP (score 0 to 1), 29% moderate severity CAP (score 2) and 28% high severity CAP (score 3 to 5).

Processes of care: Some improvements over the last 4 years. The proportion of patients who received antibiotics within 4 hours of admission has increased over the 4 audit periods (figure 1). Antibiotic concordance with local CAP antibiotic guidelines has also improved. However, the proportion in whom a CXR is obtained prior to antibiotics being given has decreased over the same period.

These results suggest that there may be a move towards giving antibiotics more quickly at the cost of establishing a confirmed diagnosis of CAP radiologically. While it is desirable for antibiotics to be given early when indicated, the cost of misdiagnosis and inappropriate use of antibiotics in patients who do not have CAP must not be ignored. In the US, the lone pursuit of earlier antibiotic administration has been associated with an overall increase in the use of antibiotics, mostly inappropriate (Kanwar, 2007).

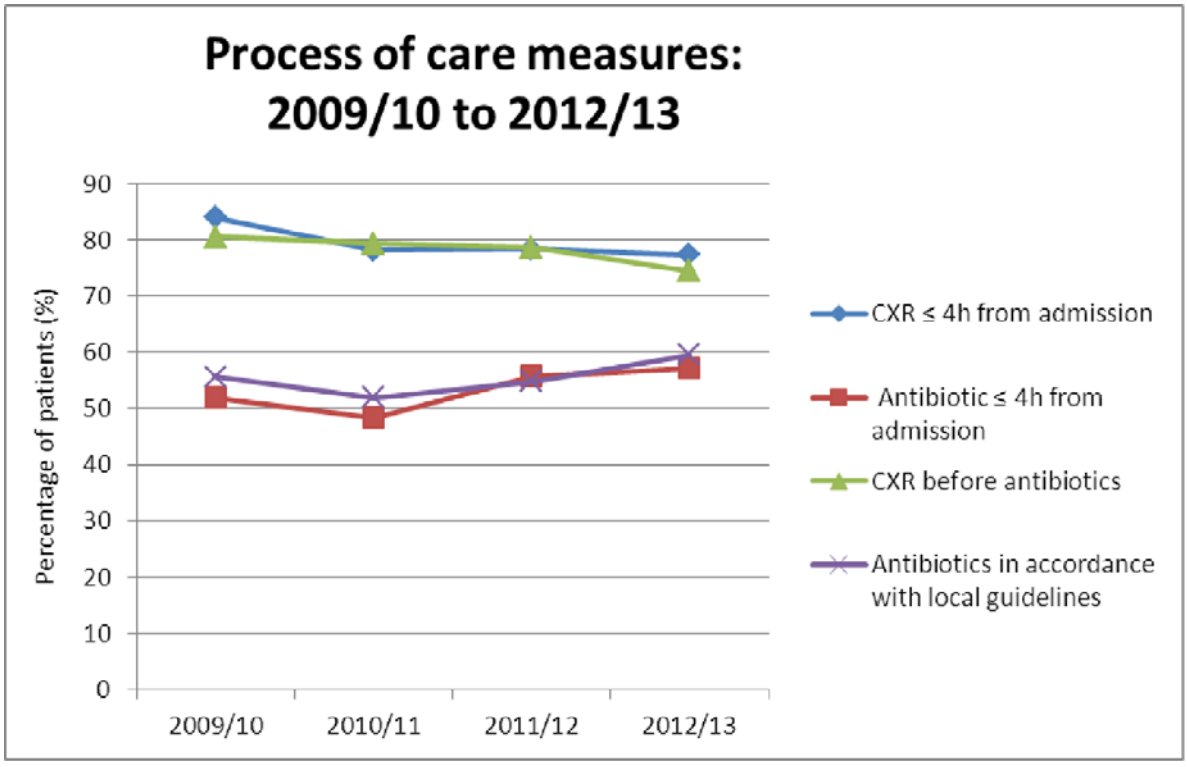

Figure 1: Comparison of process of care measures over 4 years: 2009/10 to 2012/13

Patient outcomes: Lower 30-day in-patient mortality over 4 years. A trend towards lower mortality over the last 4 years is noted. Median length of stay (LOS) was 5 days, similar to previous years while critical care admission (ICU) was required in 6.0%, which was the same proportion as in 2011/12, but lower compared to the first 2 years of the audit, 7% and 8% in 2009/10 and 2010/11 periods respectively.

These data are very encouraging and suggest that local measures to improve CAP care are having an observable beneficial impact. BTS is aware of local and regional initiatives around CAP management in different hospitals that have been marked with success. Nationally, the pilot programme involving the BTS CAP Care Bundle is currently running in 20 hospitals.

Variations in CAP mortality are apparent across the UK. BTS is working to further understand the reasons behind such variations and to support centres that are striving towards improvements. Issues around the clinical coding of CAP are recognised and will be the focus of a future BTS CAP Audit.

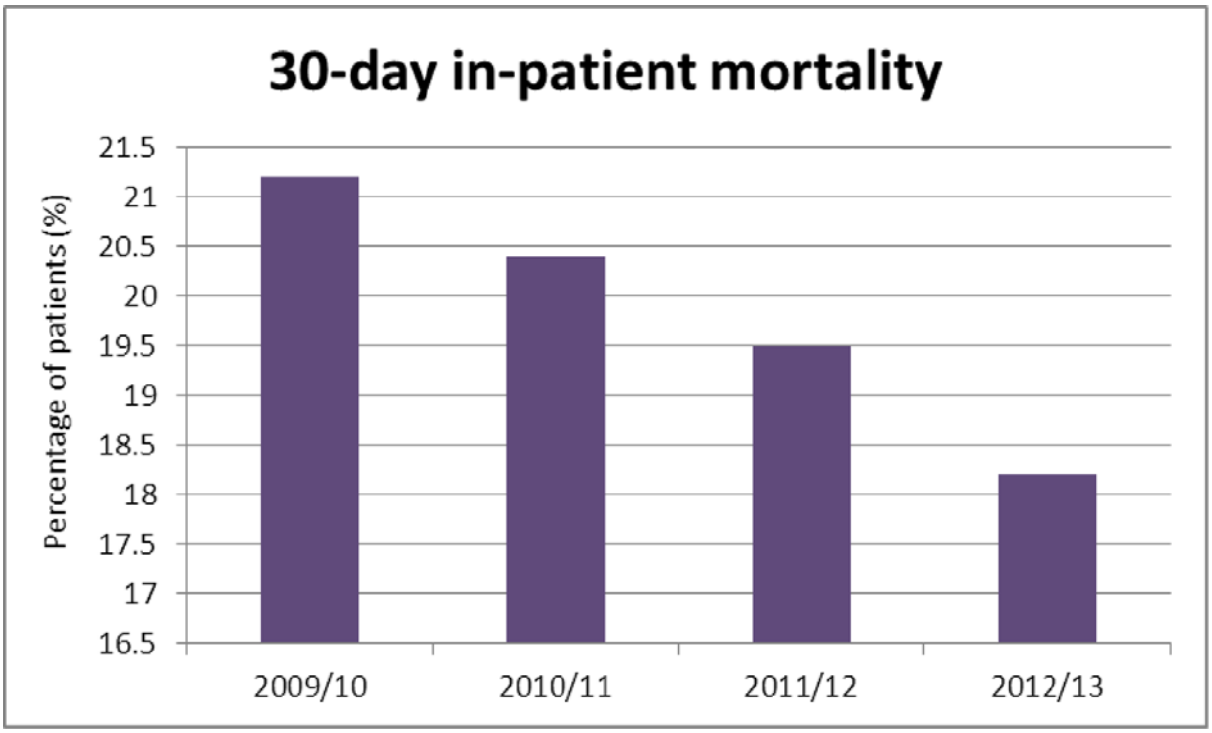

Figure 2: Thirty-day in-patient mortality: 2009/10 to 2012/13

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Reference:

Kanwar M, Brar N, Khatib R, Fakih MG. Misdiagnosis of community-acquired pneumonia and inappropriate utilization of antibiotics: side effects of the 4-h antibiotic administration rule. Chest. 2007 Jun;131(6):1865-9.

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