

Hall hospital, Dudley in December 2012. We calculated CURB scores and measured their lactate level, serum albumin and white cells count on admission. We also monitored their albumin levels throughout the admission. We then examined the association between these factors and LOS using Spearman's rank correlation coefficient (RS).

Results There was no mortality from CAP in our study population. Mean length of stay was 7 days (1–41). There was positive correlation between CURB65 and LOS (Rs = 0.41, p = 0.003). We did not observe any statistically significant correlation between the lactate level, albumin level or white cell count on admission and the LOS. Interestingly, we noticed that there was a statistically significant negative correlation with the day 3–5 albumin level with LOS (Rs = -0.522, p = 0.000627).

Conclusions Our study suggests that low albumin on day 3–5 increases hospital LOS therefore it could be postulated that early nutritional intervention to keep higher level of albumin might decrease length of stay. We also believe that combing admission CURB65 and day 3 albumin will give us better tool to predict LOS but prospective study is needed to evaluate these findings further.

P241 'CURE-CAP': A COMPREHENSIVE ADMISSION & DISCHARGE PNEUMONIA CARE BUNDLE

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Introduction The annual incidence of Community acquired pneumonia (CAP) is 5–11/1000. Between 22% and 42% require admission to hospital. Wide variation exists in the management of CAP despite guidelines issued by the British Thoracic Society (BTS). Care bundles have been shown to improve outcomes through standardisation of care in other diseases as well as in CAP. A BTS/NHS Improvement initiative is due to launch a pneumonia admission bundle. However, it does not address the issue of standards around comprehensive discharge care.

Objectives To design and implement a care bundle for the management of CAP, that incorporates admission and discharge standards and to assess improvements post-implementation.

Methods We formulated a CAP bundle including a triage tool, with the acronym 'CURE-CAP', focussing on seven key standards (Fig. 1). Data was collected retrospectively on consecutive patients admitted to our GP Assessment Unit with a primary diagnosis of CAP with a 3-month period of implementation in between. Compliance to standards before and after implementation of the bundle was then measured.

Results The pre-implementation cohort had 43 patients (17 (40%) male; median (range) age 74 (36–101)) and post-implementation cohort had 30 (8 (27%) male; median (range) age 82 (36–93)). Chest x-ray was performed within 4 hrs in 30/43 (70%) in the pre-implementation cohort, increasing to 30/30 (100%) post-implementation. Time from admission to x-ray improved as well (median (range) 2:49 (0:30–18:27) to 1:00 (0:21–2:42)). Urgent oxygen assessment was performed in 100% cases in both cohorts. Recording of the CURB-65 severity score improved from 35/43 (81%) to 28/30 (93%). Early antibiotic administration (within 4 hrs) increased from 12/43 (28%) to 20/30 (68%) with appropriate (severity based) antibiotics selection improving from 29/43 (67%) to 28/30 (93%). The bundle led to total compliance with all discharge standards including appropriate smoking cessation counselling (5/7 (71%) to 4/4 (100%)),

patient information leaflet provision (0% to 100%) and appropriate follow-up arranged (16/43 (37%) to 30/30 (100%)).

Conclusions We have successfully designed a CAP admission and discharge care bundle and shown improvements across all measured standards post implementation. A further study is planned to measure effects on direct patient outcomes.

Abstract P241 Figure 1. CAP Bundle

P242 WHAT IS THE PRE-ADMISSION NHS-CONSULTATION BEHAVIOUR OF ADULTS WITH COMMUNITY-ACQUIRED PNEUMONIA?

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Introduction Under 75 mortality from respiratory disease is highlighted as a target in the NHS Outcomes Framework. Community-acquired pneumonia (CAP) cases are likely to form a considerable proportion of such deaths. Most CAP deaths occur in hospital, but it is not known whether initiatives to reduce such deaths should be primarily targeted at hospital or alternatively at pre-hospital care. To help address this we set out to identify the pre-admission NHS contact behaviour of adults admitted for CAP.

Methods Adult admissions for CAP to one NHS Trust were prospectively identified between 14th May and 25th June 2013. For each case the diagnosis was validated by chest radiograph examination. After written informed consent a structured interview was conducted with each patient. Anonymous data was collected in an Excel spread-sheet and analysed with IBM SPSS 20.

Results Of 83 possible pneumonia cases, 64 were confirmed to have radiographic pneumonia and 44 included in the study (Exclusions: declined - 4; language barrier - 4; immune compromise-5; unable to provide history due to illness or confusion-7). Median age was 73 years and CURB65 distribution was 0–1 (36%), 2 (30%), 3–5 (34%) - similar to the BTS audit population. Only 17 (38%) had had some form of pre-admission NHS contact for this illness, the majority presenting directly to hospital. Pre-admission NHS contacts included GP contact (17, including 9 consultations, 5 telephone contacts, 2 home visits, 1 out-of-hours service), 1 walk-in centre and 1 A & E attendance. 1 case had 3 pre admission NHS contacts. There were no contacts with NHS Direct / 111. Those with sputum production, higher CURB65 scores and longer illness duration were significantly more likely to have had pre-admission NHS contact (Table).