

service being superseded by testing by polymerase chain reaction (PCR)-testing of nose/throat swabs, for which only 1 was sent for the entire cohort.

**Conclusion** While BC collection was frequent, compliance with local guidance was less than desired. Sampling to rule out atypical pathogens in CAP appeared to be low and, occasionally, inappropriate. Although positive detection rates were low, further work appears to be indicated to optimise patient outcomes in CAP by increasing awareness amongst clinicians of tests available and ensure appropriate sampling for atypical pathogen screening.

**P213 CXR FOLLOW-UP AFTER COMMUNITY ACQUIRED PNEUMONIA (CAP): OUTCOMES OF ADHERENCE TO GUIDELINES**

<sup>1</sup>P Eaton, <sup>2</sup>HJ Curtis. <sup>1</sup>Newcastle University, Newcastle Upon Tyne, UK; <sup>2</sup>Queen Elizabeth Hospital, Gateshead, UK

10.1136/thoraxjnl-2015-207770.349

**Introduction and objectives** BTS Community Acquired pneumonia (CAP) guidelines require a chest radiograph (CXR) 6 weeks after discharge in high risk patients. This is the hospital team's responsibility. Malignancy is reported in 1.7% of patients.

We wanted to assess how this was organised across our trust and the outcomes, aiming to improve organisation of the service.

**Methods** Patients were identified via retrospective review of local NIV/COPD and critical care ICNARC databases. Xrays and reports were reviewed and eRecords interrogated for appointments, follow-up CXR and outcomes.

**Results** 102 patients were identified between December 2013 to January 2015, (mean age 69 and 56 female patients). Only 54 patients had the follow up CXR. 16 patients did not need local follow-up for a variety of reasons: co-morbidities; current malignant diagnosis; CXR clear pre-discharge or usual residence outside geographical area. 7 patients did not attend the organised follow up appointment. Ultimately, 25 patients had no follow up plans made.

The majority of follow-up CXR were organised by the hospital team (n = 53) compared to discharge correspondence instructions to GP to request a CXR (n = 14). The hospital requested CXR were significantly more likely to be undertaken, with 88% completed versus 57% from requests to GP (p < 0.05 Chi-square).

The majority of CXRs showed resolution of changes (n = 38/54), 3 patients had lung or pleural malignancy diagnosed, 2 patients are having on-going nodule follow-up and 1 patient had atypical mycobacterium diagnosed. 10 patients to date have incomplete resolution of their changes. These end-points were after 62 CXRs, 7 Ct scans, 2 bronchoscopies and 1 pleural biopsy.

**Conclusion** There is room for improvement within our trust to improve this parameter for CAP patients. This would be best fulfilled by automatic request at time of discharge follow CAP.

The follow up clearly requires increasing amounts of work and administration. How does the NHS keep up with guideline requirements and clinical outcomes in the ageing population?

The finding of 5.5% (3/54) new malignancy shows the importance of follow-up and is higher than published reports.

**P214 ARRHYTHMIAS IN PNEUMONIA: A REVIEW OF INCIDENCE, OUTCOMES AND MANAGEMENT**

DR Cox. University Hospital Aintree, Liverpool, UK

10.1136/thoraxjnl-2015-207770.350

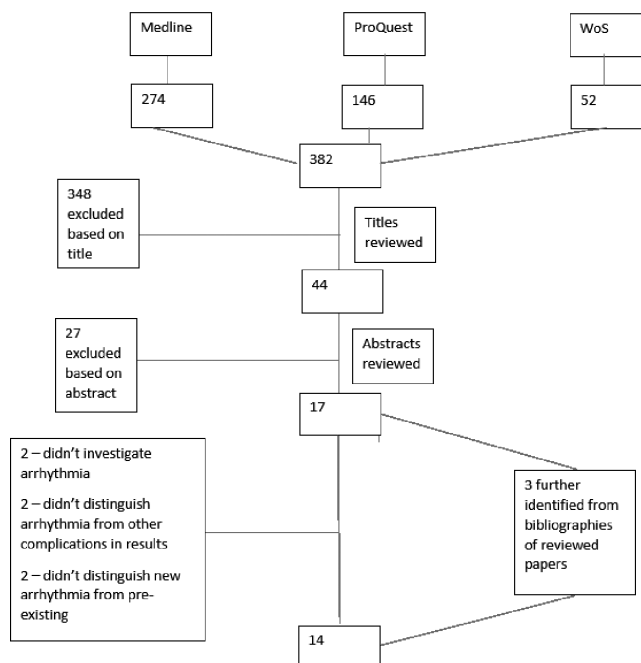
**Background** Community-acquired pneumonia (CAP) has high mortality, from 5 to 18.3%.<sup>1</sup> Arrhythmias are a recognised significant complication. Growing evidence associates this treatable complication with increases in mortality. No review has summarized data on mortality or ways to improve outcome.

**Aims** This review aimed to define the extent of the problem, collate and appraise evidence regarding outcomes and management, and identify gaps in understanding.

**Methods** Narrative review using a systematic protocol. Medline, ProQuest, Web of Science were searched for papers reporting adults with CAP complicated by arrhythmia. 382 articles were assessed and excluded based on title (348), abstract (27) and full text (6), leaving 11. Review of bibliographies added 3, totalling 14. These were appraised and coded, with Newcastle-Ottawa scores assigned.

**Results** Three reviews and 11 primary studies were included: 10 Cohorts (4 prospective, 6 retrospective) and one case series. One meta-analysis of cardiac events identified a pooled incidence of 4.7% for CAP inpatients developing arrhythmia.<sup>2</sup> N-O scores ranged from 5 to 9, Median 7.5. Outcomes reported: Incidence; 30 and 90 day mortality; Re-hospitalisation; predisposing factors. Only one paper commented on treatment.

**Discussion** There is high quality evidence of a link between CAP and arrhythmogenesis. Data linking it to mortality suggest a strong association with worse outcome. This review was limited by its single reviewer. Some evidence was limited by retrospective study designs and biased populations. The strengths of this review lie in its reproducible systematic methods and clear outlining of gaps in our understanding of this phenomenon, particularly regarding best management.



Abstract P214 Figure 1