

**Appendix 1 - Factors identified by structured survey and semi-structured interviews as being important in the rapid delivery of appropriate antibiotics**

<b>Factors</b>	<b>Examples</b>
<b>Knowledge, Training and Clinical Experience</b>	
Undergraduate/ postgraduate training	Less than 50% of respondents rated their CAP training experiences as being good or excellent on a 5 point Likert scale [Structured survey]
Clinical experience	<i>Certainly when I was a lot more junior, I found a lot of difficulty remembering which antibiotics were appropriate</i> [Semi-structured interview]
Awareness/familiarity with CAP guidance	Only 16% of respondents were able to state 3 or 4 of the four BTS core adverse prognostic markers. 57% were able to state a BTS adherent antibiotic regimen for severe CAP [Structured survey]  <i>I'm not familiar with them [BTS guidelines] at all, I have to say</i> [Semi-structured interview]
<b>Attitudes &amp; Confidence</b>	
Attitudes to CAP and guidance	Respondents reported a <i>blasé</i> attitude towards CAP with a lower priority status in comparison to other clinical presentations ... <i>it's not quite as prioritised as much as like chest pain, which is much faster I guess the same for myocardial infarction, we can do a lot for it and minutes mean muscle to coin a phrase, whereas in pneumonia it's just pneumonia...It's the attitude to it that I see</i>  In contrast attitudes about guidelines were positive
Confidence	In the semi-structured interviews, as respondents' confidence increased use of guidance decreased. In the structured survey, however, the same respondents did not always have a sound grasp of recommended CAP practice
<b>Environmental Factors</b>	
Intensity of workload	<i>Busy day, busy nurses, lots to do, time for antibiotics to be made up ... other things to run through</i> [Semi-structured interview]
Organisational factors	In the structured survey, only one-third of respondents rated the ward environment as being conducive to managing CAP patients well
Inter-staff communications and relations	<i>When you're starting, it's really intimidating to try and find the Reg. on-call about what he thinks about their patient, so therefore you kind of leave it and wait for the ward round</i> [Semi-structured interview]
<b>Guideline Factors</b>	
Accessibility	<i>... some of them are really well set-out and some of them are just pages of text and I mean it's all good stuff, but it's not easy to flick through</i> [Semi-structured interview]
Usability	
<b>Patient &amp; Human Factors</b>	
Diagnosis	Although respondents stated that ... <i>the [diagnostic] clues are usually there</i> , examples were given of cases in which the diagnosis of CAP had been difficult
Human error	Occasionally, patients <i>just get forgotten</i> or ordered investigations (e.g. the chest radiograph) are not followed up