Introduction:
The efficacy of β lactam antibiotics is related to the time above MIC. Continuous or extended infusions can be used to increase the time above MIC, especially in patients with normal or increased drug clearance. Administering antibiotics by continuous infusion is not a new concept. A review in 1992 looks at the outcomes of continuous infusions [1]. More recently an improvement in mortality has been demonstrated [2]. Our perception was that uptake of this low cost intervention was not common, so we undertook a survey to determine how commonly continuous infusions are used in England.

Methods:
A telephone survey of all intensive care units in England was undertaken. Questions included:
- Are you using continuous or extended antibiotic infusions?
- Which antibiotics are you using for continuous or extended infusions?
- If not currently using has it been considered?
Data was collected over a week in June 2017.

Results:
There was an 87% response rate. 73 (44.5%) of the units continuously infuse some antibiotics, however 71.2% of those only infuse vancomycin and not β lactams. Only 21 of the total responders (12.8%) infuse antibiotics other than vancomycin (i.e. β lactams).

Conclusion:
The theoretical advantage of continuous infusion of β lactam antibiotics has been described for over 20 years. There is now evidence that this may improve survival. Despite this, uptake in England has been slow.

References: