We collaborated with the Antibiotic Steering Group, microbiology and pharmacy teams to facilitate and peer review the introduction of antibiotic order-sets to the electronic prescribing system for ten common infections. The order-sets are grouped items that incorporate the antibiotic Trust's guidelines within the electronic prescription, minimising the potential for error associated with the previous multi-step process system (Figure 1). We promoted order-set use through teaching sessions, posters, computer screensavers, email and a newsletter article. The order-set prescription accuracy for the first 52 prescriptions was calculated using the pharmacy antibiotic audit template criteria: correct indication, adherence to Trust's guidelines, appropriate stop/review date, therapy based on culture results, appropriate intravenous to oral switch and adherence to probiotic policy. The order-set use on EAU and the Emergency Department (ED) was monitored weekly. The introduction of order-sets in antibiotic prescribing was well received. The order-sets promoted use of the Trust's antibiotic guidelines. The incorporation of order-set training in the new doctor's induction is likely to further improve the prescription accuracy. Ongoing evaluation of prescribing accuracy will provide long-term data on the safety of order-sets.

Adverse incidents on the Emergency Assessment Unit (EAU) due to incorrect antibiotic prescribing resulted in patient harm. As part of the Safer Clinical Systems approach, we aimed to achieve 100% accuracy in antibiotic prescriptions on admission to EAU in 95% of patients by October 2015.

The order-sets were most commonly used for community-acquired pneumonia (48%) followed by hospital acquired pneumonia (13%) and urinary tract infection (13%). Insufficient documentation of antibiotic escalation from the CURB65 score and non-adherence to the probiotic policy mainly impacted on prescription accuracy. The order-set use on EAU and ED increased since their release, indicating prescribers' preference over the previous system (Figure 3). Fluctuations in the order-set uptake could reflect prescribers' inexperience of their use and are likely to improve with time.

The pharmacy team are now trailing order-set promotion through monthly 15-minute updates to the on-call teams and have released additional order-sets for more conditions. The introduction of order-sets in antibiotic prescribing was well received. The order-sets promoted use of the Trust's antibiotic guidelines. The incorporation of order-set training in the new doctor's induction is likely to further improve the prescription accuracy. Ongoing evaluation of prescribing accuracy will provide long-term data on the safety of order-sets.