Introduction

- Screening for carriage of carbapenemase-producing Enterobacteriaceae (CPE) is an important measure in preventing transmission.\(^1\)
- We implemented risk-factor based CPE admission screening in June 2015, using a modified version of the PHE Toolkit.\(^2\)
- Risk factors that trigger screening are overnight hospitalisation in the previous 12 months, and overseas residence.
- Implementing CPE risk factor assessment and screening into the admission pathway has proved challenging operationally.

Methods

- A private patients ward in an acute NHS hospital Trust was selected for a quality improvement programme in collaboration with NHS Improvement to improve compliance with CPE admission screening.
- CPE screening compliance was calculated by determining the number of admissions with overnight hospitalisation in our Trust in the past 12 months (denominator) and the number of patients who were screened within 24 hours of admission (the numerator).
- The intervention to improve compliance began in April 2016 and included a range of measures involving staff and patient education, information and investigation of barriers co-developed with the ward team (see Figure).

Results

- The rate of admission screening compliance increased from 56% prior to intervention 1 (71 of 126 admissions screened between Jun-15 and Mar-16) to 79% during the intervention phase (34 of 43 admissions screened) \((p=0.21\) using a Fisher’s exact test).
- There is some evidence that the improvement on one Private Patients ward ‘leaked’ to other wards, where compliance increased from 33% in July 2015 to 61% in July 2016 \((p=0.111)\).
- These figures do not capture patient refusals.

Discussion

- An intervention based on raising staff and patient awareness of the need for risk factor based CPE screening increased compliance in a private patients ward, although this increase was not statistically significant.
- Identifying patients colonised with CPE is vital for preventing ‘silent transmission’ of CPE.\(^1\)
- We have developed a communications strategy in order to extend this successful intervention across all private patients wards, and then across the Trust to improve compliance with CPE admission screening.

References