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Abstract (oral session)

**Clinical microbiology liaison and broad-spectrum antibacterial use in primary care: a joint acute trust-primary care interventional study**

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Background: Treatment with quinolones, cephalosporins and co-amoxiclav has been associated with an increased risk of developing Clostridium difficile Infection(CDI). Blackpool Teaching Hospitals - primary care partnership in healthcare associated infections, antibiotic stewardship and infection control programme across whole health economy has been teamworking since last several years. We present a review of strategic planning, initiatives and results of reduction in prescriptions of these agents on C. diificile infections in primary care. Methods: Review of infection control database to establish trends in CDI across primary care [2007-till date]; Review of trends in antibiotic prescriptions in primary care from 2008 - 2011. Interventions: Between the first quarters (Q1) of 2008 and 2011 the clinical microbiology team at Blackpool Teaching Hospitals NHS Foundation Trust undertook multiple primary care antimicrobial stewardship interventions. This comprised: monthly consultant microbiologist/general practitioners "bridging the gap" lunch time study sessions involving educational content delivery followed by prescriber led-discussion/questions; microbiologist led rootcause analysis of all C. difficile infections across primary care and acute trust; introduction of a revised comprehensive primary care antimicrobial formulary; engagement with community pharmacy and infection control staff in "Whole Health Economy" meetings; an increasing volume of telephone consultations with primary care clinicians; GP trainees in hospital posts taking on leadership of antimicrobial stewardship audits; and an open invite to relevant primary care staff to the hospital antimicrobial and infection control committee meetings. The proportion of total antibacterial prescriptions that were for quinolones, cephalosporins or co-amoxiclav was assessed at the start and end of the period. A basic regression analysis was used to look for a significant downward trend. Results: The proportion of total antibacterial prescriptions made up of these 3 high risk agents decreased from 16% in Q1 2008 to 9% in Q1 2011 ( $p<0.001$ ). No other confounding variables during the same period accounting for this proportionate reduction were identified. Conclusions: These data demonstrate the value of liaison with primary care colleagues in reducing the prescription of broad spectrum antibacterials that are associated with an increased risk of CDI. Details to be presented

## C. difficile infection trend in primary care

