

P1714 **Patient engagement with antimicrobial decision making in secondary care: a co-designed pilot intervention**

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Background: We investigated the impact of a personalised patient information module, co-designed with patients, and embedded into a clinical decision support system (CDSS) to provide individualised information to patients and support their engagement with antibiotic decision making in secondary care.

Materials/methods: Thirty patients who had previously received antibiotics in hospital within 12 months were recruited to co-design an intervention to promote patient engagement with infection management. Two workshops, containing five focus-groups were held. These were audio-recorded. Data were analysed using a thematic framework developed deductively from previous work. Line-by-line coding was performed with new themes added to the framework by two researchers. This data informed the development of a patient information module, embedded within a CDSS.

The intervention was pilot tested over a four week period at Imperial College Healthcare NHS Trust on 30 in-patients. Pre- and post-intervention questionnaires were developed and implemented to assess short term changes in patient knowledge and understanding and provide feedback on the intervention. Data were analysed using SPSS and NVIVO software.

Results: Within the workshops, there was consistency in identified themes. The participants agreed upon and co-designed a personalised PDF document that could be integrated into an electronic CDSS to be used by healthcare professionals at the point-of-care. Their aim for the tool was to provide individualised practical information, signpost to reputable information sources, and enhance communication between patients and healthcare professionals.

Eighteen out of thirty in-patients consented to participate in the pilot evaluation with 15/18(83%) completing the study. Median (range) age was 66(22-85) years. The majority were male (10/15;66%). Pre-intervention, patients reported desiring further information regarding their infections and antibiotic therapy, including treatment side effects. Knowledge of infection diagnosis (6/15;40%) and antibiotic therapy (5/15;33%) was poor. Deployment of the intervention significantly improved short term knowledge and understanding of individuals infections and antibiotic management with median (IQR) scores improving from 3(2-5)/13 to 10(6-11)/13 ($p<0.01$). 13/15(87%) reported that they would use the intervention again.

Conclusions: A personalised, patient-centred intervention improved individual understanding and short-term knowledge of infections and antibiotic therapy. Longer term impact on attitudes and behaviours post discharge will be subject to further study.