Controlling Extended Spectrum Beta-Lactamase Transmission in a Mental Health Care Setting – Patient Centred Strategies

Introduction
The purpose of this study was to describe how to manage an Extended Spectrum Beta-Lactamases (ESBL) transmission within a mental health ward, specifically a new build dementia assessment unit.

Patients included in this study were at varied stages of their dementia journey. Some patients required assistance with all daily activities of living, whilst others were independent. Some of the patients liked to explore the ward constantly throughout the day. Patients who explore the ward are those who like to travel around the ward, and investigate their surroundings.

This study incorporated the use of Health Protection Scotland’s (HPS), Generic Outbreak Control Measure trigger tool (Health Protection Scotland 2014).

Methods
We utilised a quality improvement methodology focus, including hand hygiene and environmental audits. We also delivered education around standard infection prevention and control precautions, and environmental cleaning. Following implementing of controls (Figure 4) contact screening was completed to measure effectiveness.

Results
Improvement in both hand hygiene (Figure 1) and environmental audit results (Figure 2) helped to reduce the spread of ESBL within the ward (Figure 3).

Discussion
Upon reflection of the screening results the discharge of patients, particularly those patients who explored the ward, who were known to be colonised with an ESBL producing organism aided the reduction of further transmission.

Conclusion
Outbreaks in mental health and dementia facilities can be complex to manage. A holistic approach must be undertaken by the Infection Prevention and Control Team with consideration given to how infection prevention and control measures can be applied and quality patient centred care delivered.