Introduction

- The Royal London Hospital is a tertiary public (NHS) hospital in East London, UK - an area with diverse ethnicity, high levels of poverty and homelessness.
- 10% of inpatients cared for by Infectious Diseases (ID) service were people who inject drugs (PWID).
- These patients were observed to have complex medical and social problems including homelessness, domestic violence and psychiatric illness.

Aim

- To evaluate the management and treatment outcomes of PWID inpatients managed by the ID team from April 2015 to June 2017 to identify how the management of these patients could be improved.

Methods

- Patients were identified via electronic patient records from April 2015 to June 2017.
- PWID patients not under the direct care of the Infectious Diseases team were excluded.
- Reason for admission, microbiological diagnosis, antibiotic management, blood borne virus status, central line access and other specialist input were all recorded from the patient records.

Results

- 229 inpatients were cared for by the Infectious Diseases team; 22 (10%) of which were PWID.
- 13 (59%) patients were male, median age is 39.5 years (IQR 32.5-46).
- 6 (27%) were non-UK nationals.
- 10 (45%) presented with fever >38.5 °C.
- 17 (77%) had elevated white blood cell (WBC) count cases (77%)(normal range 4-10 x10⁹/L); median WBC 13.7 (IQR 10.2-19.3).
- C-reactive protein (CRP) was elevated in all patients (normal range 0-5mg/L); median CRP was 220.5 (IQR 91-273).

Management of Staphylococcus aureus bacteraemia (SAB) in 14 PWID patients

- 13/14 (93%) patients with SAB underwent trans-thoracic echocardiography (TTE), details in figure 2.
- 6/10 (55%) went on to have trans-oesophageal echocardiography (TOE).
- 5 (63%) were normal and one patient did not tolerate the procedure.
- Four major conditions were identified in patients with SAB, the antimicrobial management is detailed in table 2.
- 13 (93%) patients received flucloxacillin as the first line therapy.

Discussion

- The majority of patients admitted under our Infectious Diseases service were bacteraemic and had evidence of hepatitis C infection.
- Prolonged antimicrobial therapy was often necessary due to complicated infections, however other psychosocial issues associated with drug use influenced the length of stay.
- There were no adverse outcomes in our patient group.
- Our data supports the use of shorter courses of intravenous antibiotics in MSSA associated supplicative thrombophlebitis (similar to Mertz et al.) and MSSA vertebral osteomyelitis followed by prolonged oral therapy of an appropriate anti-staphylococcal antibiotic.
- Harm reduction already takes place here: education regarding injection technique, appropriate choice of site and opportunistic HBV vaccination. There is an opportunity at the needle exchange for an Infectious Diseases service to manage some infections via outpatient antimicrobial therapy (OAMT) potentially tied to opioid substitution prescribing. This may help prevent prolonged admissions to acute hospitals and associated costs to the National Health Service.