

# An outbreak of HIV; model adaptation leading to successful clinical outcomes

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## Background

Since November 2014, Glasgow has witnessed a significant rise in HIV diagnoses amongst homeless PWIDs, almost exclusively using heroin and cocaine. In Glasgow, injecting equipment provision (IEP) is free and provided at multiple sites across the city alongside a comprehensive and accessible addictions service providing free opiate replacement therapy (ORT). The existing model of hospital based HIV care is not suitable for this cohort and a new service model taking the treatment and care to the patient to support treatment as prevention has been designed.

## Methods



Changes to care model described below. We reviewed the cohort to describe the epidemic and measured effectiveness of the new service with clinical outcome measures.

### Previous care pathway

- Hospital based appointments
- Discharge after 3 DNA
- Clinical nurse specialist could make occasional visits out with the hospital setting
- All ARV dispensed via single hospital pharmacy or home delivery (requires stable address and adherence)
- Existing BBV clinics in prison service, consultant input monthly

### New care pathway

- Drop in and fixed consultant or nurse specialist appointments in homeless healthcare facility in city centre (walking distance for most)
- Ability to provide sexual health, contraception, hepatitis C treatment (see poster #P082), skin and soft tissues infection and other serious bacterial infection management.
- Regular case review of those not engaging in care with senior Addiction colleagues to access multidisciplinary teams.
- Clinical nurse specialists (CNS) delivering care to patients in non-healthcare settings (see poster #P081)
- ARV linked to community pharmacy ORT prescriptions (daily dispensing) or delivered to patients by CNS (see poster # P080)
- Weekly linking with prison healthcare to review HIV positive inmates including starting ARV, blood monitoring, hepatitis C treatment and liberation dates.

## Results

- 133 PWIDs have been diagnosed with HIV, of whom 119 are confirmed Clade C virus with primary NNRTI mutations, 12 Clade B and 2 not known due to low viral load.
- Mean current age 40.
- 48/133 (36%) are female.
- 38/124 (31%) had avidity <40% indicating recent infection
- Avidity >40% indicating non primary infection mean baseline CD4 count 387 cells/cmm (CD4% 25%).
- 61/83 (73.4%) have reported sexual contacts alongside a history of IDU
- 20/133 (15%) are deceased, 4 moved
- 69/104 (66%) have attended the consultant led BBV clinic in homeless health facility
- 102/104 (94.2%) have ever received ART
- 99/104 (95.1%) on a current prescription, via hospital or community based pharmacy care.
- 90/104 (86.5%) had an HIV viral load <200 copies/ml at last check.

## Conclusion

Despite comprehensive IEP and addictions services, HIV has spread rapidly amongst homeless PWIDs in Glasgow. At time of diagnosis, there is a mix of acute and chronic infections and females are disproportionately affected. Transmission route is both sexual and intravenous. Traditional service models are not suitable for this group and we have developed a holistic approach resulting in high quality care. The adaptation of clinical HIV services is vital to improve health outcomes and reduce onward transmission to control the epidemic in this highly complex and multiply disadvantaged group