An outbreak of HIV amongst homeless people who inject drugs (PWIDs) – describing the epidemic and developing an innovative service model

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Background
Since 2014, Glasgow has witnessed a significant rise in HIV amongst homeless people who inject drugs (PWIDs) with 119 new diagnoses. This worrying epidemic is ongoing despite excellent needle exchange services and accessible addictions services providing opiate replacement therapy (ORT).

To manage this epidemic, the existing model of hospital based HIV care was recognised as not suitable and a new service model to target this under-served population has been implemented.

Results
119 PWIDs have been diagnosed with HIV of whom 104/119 (87%) are confirmed Clade C with primary NNRTI mutations (E138A, V179E). There were more new diagnoses in 2017 than 2016 (37 vs 30).

The mean age is 41 with 44/119 (37%) female. Of those with results, 40/114 (35%) had IgG avidity <40% indicating recently acquired HIV infection and 66/111 (59%) have current Hepatitis C co-infection (HCV antigen or PCR positive).

Of those with complete partner notification, 62/84 (74%) reported sexual contacts alongside a history of injecting drug use.

13/119 (11%) are deceased and 2/119 (2%) moved, therefore the current cohort has 104 diagnosed patients.

Conclusion
HIV is spreading rapidly amongst homeless PWIDs in Glasgow and this is despite very good needle exchange provision, a comprehensive addictions service across the city and accessible ORT. Traditional HIV service models are not suitable for this severely disadvantaged population and an alternative service model, in collaboration with addictions services, mental health, homeless health and voluntary services is required. We have also combined GUM and ID consultant expertise to provide sexual & reproductive health and soft tissue infection expertise. The BBV team review patients when they attend for their ORT prescription with the homeless addictions team.

The new service model includes a BBV specialist outreach nurse to co-ordinate with multidisciplinary organisations and seek patients out including by “walking the streets”. We have developed close links with addictions teams to ensure these patients engage in HIV care.

In June 2016, a scheme to dispense antiretroviral therapy (ART) via community pharmacies to those on daily ORT was established. 102/104 (98%) have ever received ART 95/104 (91%) of those diagnosed are currently receiving ART. (This figure includes those not currently engaged in care). 72/104 (69%) had an HIV viral load measured in the last 6 months which was <40 copies/ml.

61/104 (59%) have ever received ART via community pharmacies linked to daily ORT dispensing 45/104 (42%) are currently receiving ART via this method. A recent review amongst those receiving daily supervised ART, showed adherence varied from 10% to 99%.

In September 2017, a weekly consultant led BBV clinic has been provided within the homeless health service facility, also providing sexual & reproductive health and soft tissue infection expertise. The BBV team review patients when they attend for their ORT prescription with the homeless addictions team.

A recent review amongst those receiving daily supervised ART, have ever received ART 43/104 (41%) have attended the consultant led outreach BBV clinic, with the remainder heavily supported by the BBV specialist nurse linking with community addiction teams.

Methods
We reviewed the cohort to describe the epidemic and measured effectiveness of the new service with surrogate HIV markers. We describe the new service model and the complexities of developing a response to this HIV outbreak in a hard to reach population.