

A bird's eye view:

Using geospatial mapping to demonstrate changes in sexual health clinic catchment areas

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Introduction

The Public Health budget has been cut by £531 Million (1), and in 2017/18 local councils spent £30 million less on sexual health compared to 2016/17. However, new attendances to sexual health clinics in England increased from 1.9 million in 2012 to 2.5 million in 2016. Local authorities are under pressure to meet increased demand despite the decreased budget. BASHH, Public Health England (PHE) and the Local Government Association have suggested that sexual health (SH) services are at the 'point of collapse'. Multiple clinics have closed in England, reducing patient access.

There has been large scale organisational change of Level 3 services in London. In line with the BASHH 'hot six key metrics' we used heat maps to illustrate the change in attendance patterns at one central London sexual health clinic.

Method

The records of all unique clinic patients attending during the month of August in the years 2015, 2016 and 2017 were reviewed.

Data comprised: number of attendances; and postcode, Lower Super Output Area (LSOA) and relevant Local Authority reported by attending patients.

Geospatial mapping (via Google Fusion Tables) was undertaken using the source data, stratified by year. Heat-maps were created. Maps demonstrate LSOA of residence of attendees, with any colour representing at least one attendance from a patient living within that LSOA. The density of the colour increases with increasing number of individuals from within that LSOA (white to dark red). The white star represents the location of the clinic.

Results and Discussion

There was a 59% increase in unique monthly attendances between 2015 and 2017 (2049 to 3243 individuals).

As shown in Figure 1 [right] there has been a clear increase in attendances from individuals residing further from the clinic, resulting in a broader catchment area (in addition to increases in absolute numbers of attendances). The clinic relocated in mid-2016 which may have influenced results in the 2015-2016 interval, but this trend continued in 2016-2017.

Further afield London postcodes and non-London postcodes are not represented in the heat-maps.

Key Messages

- With reduced sexual health services available in London, our clinic has seen significant growth in the catchment area served, with an increasing number of patient presenting from further afield.
- There is increasing demand in the face of reduced budget
- Given the reduction in available terrestrial services it will be imperative to monitor rates of STI and unplanned pregnancy to ascertain the impact of budget cuts on public health

References

- 1) Mills David et al Local Government Association. (2017). *Sexual health services at tipping point warn councils*. Available: <https://www.local.gov.uk/about/news/sexual-health-services-tipping-point-warn-councils>. Last accessed 09/04/2018.
- 2) BASHH. (2017). *Further cuts to services increase risk of 'perfect storm' for sexual health*. Available: <https://www.bashh.org/news/news/further-cuts-to-services-increase-risk-of-perfect-storm-for-sexual-health/>. Last accessed 09/04/2018.

Figure 1: Population density by LSOA of residence of attendees (August 2015, 2016 and 2017)

