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Accident and Emergency department data sharing to support violence prevention in Lambeth*

Accident and Emergency department (A&E) data can play a key role in understanding and preventing violence, yet are often under-utilised by local partners. The government has prioritised work to improve A&E data sharing for violence prevention[1]. Based on interviews with local partners (i.e. King's College Hospital A&E, Lambeth and Southwark public health team, and Lambeth Community Safety Partnership [CSP]) in September 2013, this case study focuses on data sharing at King's College Hospital A&E, outlining how data sharing pathways have been developed and how A&E data have informed multi-agency violence prevention (Box 1).

1. Overview

Violence prevention is a multi-agency priority in Lambeth local authority (LA), addressed by police, the CSP and public health partners through a range of community-based activities. Lambeth experiences above average levels of violence in terms of violent crime, hospital admissions and presentations to A&Es for assault[2]. However, levels of violence for these measures have been decreasing in recent years[3]. Violence prevention issues that were being prioritised by local partners at the time of interviews included: gang violence, knife and gun crime, alcohol-related violence, domestic violence and sexual assault.

The King's College Hospital A&E, part of the King's College NHS Foundation Trust, is located within Lambeth LA. It is a Major Trauma Centre and the A&E sees more than 120,000 patients every year. Partners in Lambeth have been working together to ensure that A&E data from King's College Hospital A&E are regularly collated, shared and combined with other evidence to improve understanding of violence in the borough. At the time of interviews the A&E collected and shared data from assault patients, including some of the fields recommended by the College of Emergency Medicine (CEM[4]; see Box 3). Data have been

Box 1: Summary

- In September 2013, A&E data on assault patients, including fields recommended by the CEM, were being collected, shared and used by local partners to support violence prevention activity.
- Examples of data use included: informing hospital-based activities to reduce and prevent violence towards A&E staff; enabling A&E-based youth workers to identify and support youths treated for knife and gunshot injuries,; increasing knowledge of domestic violence in the borough; contributing towards a needs assessment; and informing police operations to reduce violence in problematic areas.
- Successful features of the data sharing system include: strong relationships between partners and recognition by the A&E of the importance of data sharing.

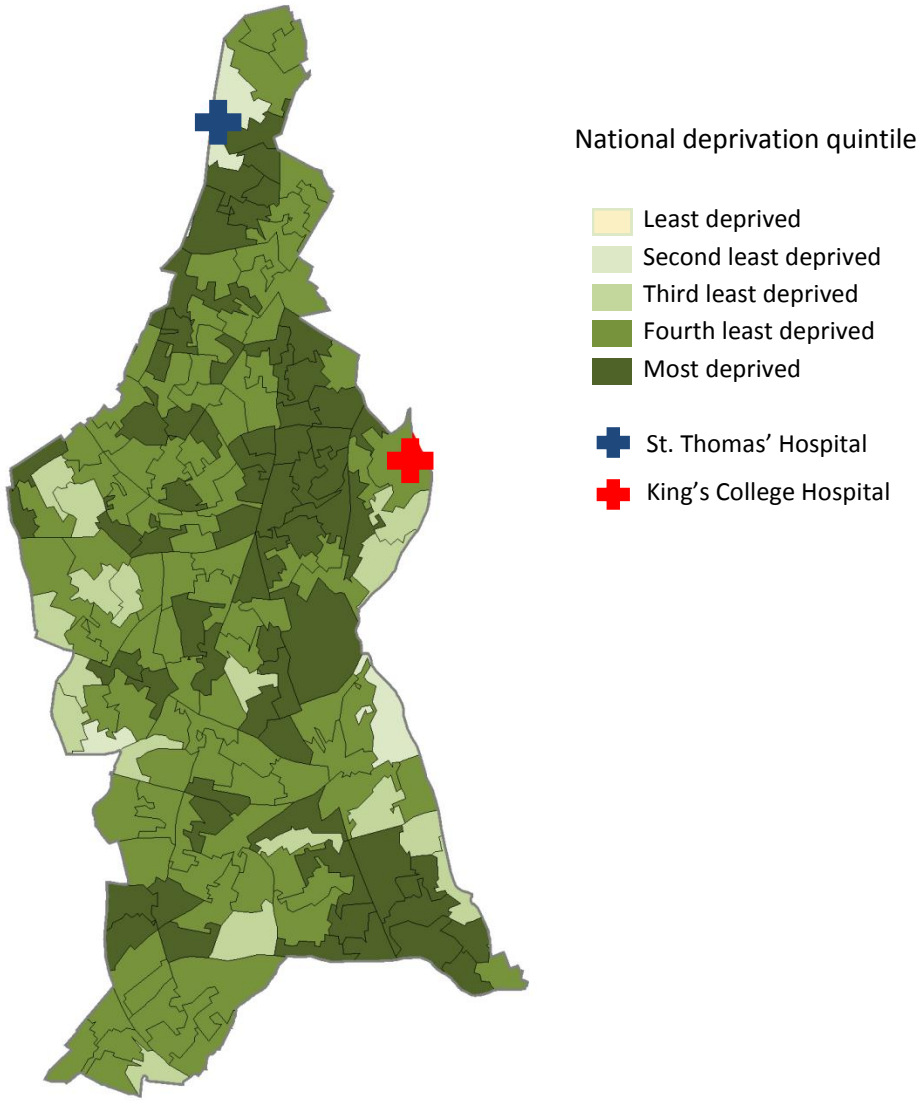
*A case study produced as part of the **Optimising the use of NHS intelligence in local violence prevention and measuring its impact on violence project** funded by the Department of Health. Lambeth is one of nine local authorities participating in the project. The case study has been informed through interviews with King's College Hospital A&E, Lambeth and Southwark public health team, and Lambeth CSP. For more information on the project visit http://www.cph.org.uk/optimising-the-use-of-nhs-intelligence-in-local-violence-prevention-and-measuring-its-impact-on-violence/

used in a variety of ways to support local violence prevention within Lambeth (see Section 3). The government is working to ensure that all A&Es collect information from assault patients based on CEM-recommended data fields[4] (see Box 3) through their standard IT systems and share it routinely with local partners to support violence prevention (see Box 4).

Box 2: Lambeth local authority area

Lambeth LA is a borough located in South London with a population of approximately 310,200. Life expectancy at birth is 77.6 years for males and 82.3 years for females (2008-2010), marginally lower than the life expectancy for England of 78.6 and 82.6 years respectively[5]. The borough has a higher than average level of deprivation (see Figure 1) and is ranked the 14th most deprived LA in England (out of 326 LAs; based on the Index of Multiple Deprivation 2010[6]).

Figure 1: Deprivation profile of Lambeth LA by Lower Super Output Area[a]



[a]Lower Super Output Areas (LSOAs) are a set of geographical areas across England and Wales that are defined by population size (average population is 1,500).

2. Development of data sharing

How A&E data sharing was established

King's College Hospital A&E began regularly sharing A&E data with local partners in 2009, initially as part of the Home Office-led Tackling Knives Action Programme (TKAP)[b]. Initial discussions about useful data fields and how the data could best be shared were held between the A&E and the public health team in Lambeth.

Enabling the systematic collection of data on assaults, including CEM-recommended data fields

Recognising the value of collecting data at A&Es on assaults, the IT system at King's College Hospital A&E (Symphony) was adapted to incorporate the location of assault and the mode of injury (see Table 1). The cost of updating the IT system was covered through a Home Office grant via the TKAP project. At the time of interviews, the A&E was considering whether to include further information within the A&E data on alcohol consumption to allow alcohol-related assaults to be identified.

Box 3: College of Emergency Medicine (CEM) guideline on assault data[4]

All A&Es collect a core dataset on assault patients, such as patient demographics and the time of presentation. The CEM recommend collecting an additional set of data items on assault victims at patient registration (by A&E receptionists). The additional fields are:

- Date and time of the assault;
- The location of the assault ; and,
- Weapon used.

How CEM-recommended data and other assault data were collected

At the time of interviews data collection was part of the core day-to-day business of the organisation. When a presentation was defined as an assault, further details on the assault were collected by administrative staff (location of incident) and a triage nurse (mode of injury/how the incident happened). However, if the details were not collected via this route, the questions were asked by nursing and customer care officers. The information was then entered into mandatory fields within the A&E database. Initial training on collecting and recording the data was provided to A&E staff. Staff were also informed about how the collected data would feed into wider public health and violence initiatives within the borough.

How A&E data were shared

At the time of interviews, King's College Hospital A&E was sharing anonymised individual level data on a monthly basis with Lambeth CSP/public health team. Data were transferred in a password protected Excel spread sheet via secure email (to a GCSX [Government Connect Secure Extranet] account). The CSP analysed the data and shared the output with additional partners, including: contacts within the A&E, Southwark CSP, police analysts for both Southwark and Lambeth, public health analysts and an analyst from the Greater London Authority (GLA).

Overcoming data sharing problems

The public health teams and crime analysts from the CSP in Southwark and Lambeth have worked closely together to improve the collection and use of A&E data over time. Regular meetings and discussions with

[b]TKAP was a Home Office funded project that worked with a number of police force areas across England and Wales to reduce the number of teenagers killed or seriously wounded by knives.

Table 1: Fields on alcohol and violence collected by King's College Hospital A&E.

Field
Assault mode of injury (e.g. body part, blunt object, knife)
Incident location (drop down facility e.g. public place, school, home)
Detailed assault location (free text field e.g. name of venue, street)
Incident location postcode (only the first 4 digits of the postcode, captures home address if location of incident is listed as home)

Source: King's College Hospital A&E

clinicians and data managers at the A&E about data sharing allowed initial problems with data collection to be resolved. For instance, recognising that the location of assault data needed to be more specific, discussions were held between A&E staff and local partners to discuss ways to achieve this. As a result, free text fields were added to the dataset in addition to the basic incident location field (drop-down facility). The meetings also provided opportunities for partners to feed back to A&E staff plans on how the A&E data would be used and the potential benefit that improved data collection would have on violence prevention in the community.

Discussions between partners were also held around how best to analyse, share and use the A&E data. As a result of these discussions, CSP/public health analysts reported analysing the raw data on a quarterly basis, drawing out main themes and presenting a summary of the data for local partners.

There was initially some uncertainty between partners over whether data sharing agreements would be needed to share the A&E data. However, as the CEM guidance highlights[4], since the A&E data are not patient identifiable, there is no need for a formal information sharing agreement to be set up between the A&E and local partners.

Data sharing issues

Whilst data collection and use was improving in Lambeth, partners were working to resolve issues that hamper the full benefits of data sharing. These included: 1) difficulty obtaining accurate information on incident location, for example due to patients not being familiar with the local area; 2) limited feedback provided to A&Es on how the data was being used by partners; 3) limited capacity for undertaking data cleaning prior to analysis, which takes a significant amount of time; and 4) uncertainty about who should be responsible for advocating the use of A&E data.

3. The use of A&E data in violence prevention

Data from King's College Hospital A&E were being used in a variety of ways by partners in Lambeth. This section highlights examples of data use across a range of areas of work.

Aiding youth workers in the A&E

At the time of interviews, King's College Hospital A&E had youth workers embedded within the department to provide support (e.g. counselling) to young people treated for knife or gunshot wounds[7]. The youth workers used the A&E data on a daily basis to identify youths attending for knife or gunshot wounds. These individuals were then either seen face-to-face within the hospital or followed up by telephone. Additionally, with a view to expanding the youth worker service, A&E staff have analysed the number of attendances for knife and gunshot wounds

among young people to model the number of youth worker hours that will be required.

Understanding domestic violence

There has been a growing concern about domestic violence in Lambeth, with crime and health data suggesting that it has increased over the last few years. The A&E data has provided a more detailed picture of assaults taking place in the home, which was used as a proxy for domestic abuse in the borough. Analysis of the data revealed that 31% of all assaults presenting to King's College Hospital A&E occurred in the home.

Preventing violence towards A&E staff

At the time of interviews, the Safer King's Community Panel (based at King's College Hospital) met quarterly to discuss and take forward work on violence reduction and prevention. Whilst they focused on the reduction of violence towards A&E staff, the group also considered violence within the local community. A&E data on assaults were shared with the panel at each meeting to help inform work on violence prevention.

Conducting needs assessments

As part of the Serious Violence Reduction Strategy run by Lambeth and Southwark council, analysis of the A&E data fed into a serious violence needs assessment. The needs assessment utilised a number of additional health data sources including ambulance call-outs and hospital admissions for assault to determine the prevalence of serious violence and associated risk factors.

Informing police operations

A&E data have been used alongside ambulance call-out data to inform police operations. Areas of Lambeth that were identified as having significant night time economy and gang issues were targeted. Police operations in these areas used overt and covert tactics to address violence, including increased licensed venue visits.

Identifying hotspot locations for violence

At the time of interviews, analysts from the GLA SafeStats[c] were geocoding the location of assault data obtained from the A&E (where possible), to allow incident locations to be mapped. This information will then be shared with crime analysts to help identify hotspot locations for violence.

4. Partner attitudes towards sharing and using A&E data

There were positive attitudes in Lambeth towards the use of A&E data in violence prevention. There was a strong awareness that sharing and using the data can benefit both the local community and the A&E (in relieving pressure by reducing levels of violence). Through sharing the data with local partners, A&E staff perceived themselves to have an important role to play in helping to identify violence hotspots and reducing violence in the community.

> *"Violence prevention is an essential underlying theme of what we do and what we should be doing, and obviously then dealing with the results of violence…We want to be involved, we're a very outward looking organisation and we want to feel like we're making a difference, and if we're not, understand how we can"*
>
> King's College A&E

[c]SafeStats is a London based data hub, hosting data from police, emergency services and other agencies. For further information see http://www.london.gov.uk/priorities/policing-crime/safestats.

5. Summary

At the time of interviews, within Lambeth A&E data on assaults was being successfully collected, shared and used within local violence prevention. The partnerships and systems in place to achieve this have overcome a range of challenges along the way. The system operating in Lambeth has several features that have contributed to its success, including:

1) Good relationships between partners (e.g. A&Es, police, CSP and public health). Regular discussions between the A&E and local partners have helped develop and improve A&E data sharing, and helped resolve initial issues with the collection and sharing of A&E data (see section 2).

2) A&E recognition of the importance of data sharing. King's College Hospital A&E is committed to collecting data on assaults to a high standard and believes it is crucial to their work within the community. The A&E consultants based at King's College Hospital A&E place a large emphasis on the prevention of youth violence and have presented at conferences and forums to share the work they are doing in this field, as well as the importance of sharing A&E data.

Box 4: National policy around health data sharing

There is a Coalition Government commitment for hospitals to share data to prevent knife and gun crime[1]. In September 2014, the Health and Social Care Information Centre developed a new information standard on A&E information sharing to tackle violence, which will help with consistent gathering of CEM-recommended assault data fields, along with the time and date of the A&E attendance[8]. Anonymising this data and sharing regularly with local partnerships will help local areas to prevent violent crime and its health impacts.

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