



## Mapping Injury Surveillance Data – A Partnership Approach to Violence Reduction

The VRU has injury prevention as a key strand of its strategy and has adopted the World Health Organisation's Public Health Model to tackle violence in Scotland. Assault injuries are a major public health challenge and in order to prevent assault injury we need to understand the nature and true scale of the problem in Scotland. However, we have found this particularly difficult as violent crime is significantly under reported.

It is our belief that Injury Surveillance within A&E Departments can overcome this issue by providing good quality data to help identify effective preventative strategies and design appropriate violence interventions. The purpose of our injury surveillance pilot is to collect information on assault patients presenting at A&E Departments. This is a critical preparatory phase in rolling out Injury Surveillance on a national basis and it is intended that the Scottish Executive business case for National Injury Surveillance will be informed by the findings of the pilot.


We realise that criminal justice solutions alone cannot solve the problem of violence in Scotland. For years the majority of the allocated resources, energy and funds within Criminal Justice and Health have been committed to dealing with the consequences of violence rather than looking at the causes. A Home Office study in 2005 stated that around 3-6% of the health budget in England and Wales is spent treating the victims of violence. In Scotland this would equate to approximately £585 million.

We believe that health professionals, particularly those in A&E Departments, have a key role to play in identifying problem areas and at-risk groups. There is a huge opportunity for A&E Departments to become more than just passive receivers of the injured by sharing relevant data and working more closely with victim services. We know that violence is significantly under reported in Scotland and believe that the best way to measure violence and indeed any reduction in violence (through the combined efforts of relevant agencies) is to use A&E assault patient information obtained through injury surveillance.

Our injury surveillance model is based on a similar system developed by Jonathon Shepherd, Professor of Oral and Maxillofacial Surgery in Cardiff. By sharing anonymised information with the police and reallocating police resources accordingly, they experienced a 20% reduction in the number of assault patients presenting at A&E Departments. An equivalent system in Scotland could result in huge numbers of potential victims being protected from the physical and psychological damage caused by violent crime and a significant reduction in the associated costs.

### Background

Research carried out by Dr Michael Sheridan in 2004 in two Glasgow hospitals suggested that less than 50% of assaults requiring hospital treatment are reported to police. In practical terms these patients are denied access to services and the police are allocating resources based on only 50% of the information.



The VRU introduced an assault injury surveillance pilot in the Glasgow Royal Infirmary in February 2006 in an effort to establish a more accurate picture of the extent of violent incidents in the pilot area.

The GRI pilot involved clinical staff completing an Assault Survey Form at the initial patient assessment or in the intensive treatment area for more seriously injured patients. The forms were then passed to the VRU on a weekly basis for further analysis.

The results of the analysis were disseminated to relevant police divisions to be incorporated into the divisional Tasking And Co-ordinating process. The results of the survey support Dr Michael Sheridan's findings with regards to the under reporting of violence. In addition, a number of problem licensed premises and gang fighting hotspots were identified and targeted by local police divisions as a result of the hospital data.

Although a great deal of valuable information was obtained through the injury surveillance pilot we recognise that the current paper based system is very labour intensive (for both police and clinical staff) and is not robust enough to ensure that maximum assault data is collected. It also involves duplication of effort in data entry at the hospital and at the VRU.

There is huge potential for surveillance information to be used to target police resources and preventative programs more accurately, develop appropriate interventions and address environmental or licensing issues in identified hotspots. However in order to do this effectively we require improved collection methods and better information sharing to ensure we have a complete dataset to work from.

We believe that the only way forward with injury surveillance is to collect the information electronically. We are currently in the process of setting up an electronic injury surveillance pilot in the Lanarkshire Health Board area and we continue to work towards electronic data collection in the Glasgow Royal Infirmary.

### **The Lanarkshire Pilot**

The pilot will operate across three hospital A&E sites – Hairmyres, Monklands and Wishaw for a period of one year.

The aim of the survey is to obtain information regarding all assault patients presenting at A&E and in particular the nature and specific location of assaults. Details of the date and time of the incident, type of weapon used, relationship with the attacker and the perceived motive for the attack are also important.

The survey is completely anonymous, patient participation is voluntary and posters in the waiting area inform patients that the survey is being conducted. The information will then be incorporated into the divisional Tasking and Co-ordinating process.

The injury surveillance data will be used to enhance existing police data and intelligence. The key to the success of the pilot is ensuring that local police divisions act upon the data promptly and the VRU feed back results to the participating hospitals.



Some examples of the practical uses for the data include –

- Divisional Licensing departments can ensure that any licensed premise identified through the survey is visited and counseled with regards to customer safety, security, CCTV and door entry policy etc.
- Licensing Boards can consider the surveillance information if a license is due for renewal.
- Community Safety Departments can carry out safety surveys on any property/premise that is identified as a trouble spot through the surveillance.
- Police divisions can make recommendations with regards to environmental issues such as lighting and CCTV in identified hotspots.
- Operational officers can target identified hotspots (the hospital data will be geocoded to enable locations to be plotted on a map).
- Divisional Analysts can incorporate the information into any relevant crime problem profiles they produce as a result of the Tasking and Coordinating Process.
- The surveillance data can be incorporated in to local Community Impact Statements and attached to relevant cases before they go to court.

On a more strategic level there is potential for the information to be used to examine licensing policy, develop appropriate violence interventions and identify at risk groups and communities. The surveillance data will also be a more realistic measure of violence in the pilot area and can therefore be used for more accurate evaluation of any violence interventions in Lanarkshire.

If the success of the Cardiff project were replicated in Lanarkshire then we would hope to achieve a 20% reduction in the number of assault patients presenting at A&E departments. This would free up resources for other patients and would enable other life saving operations to be carried out. In addition, a reduction in the number of drunk and aggressive patients attending at A&E would undoubtedly have an impact on violence against A&E staff.