

#### Institution: Cardiff University Unit of Assessment: UoA3

# **Title of case study:** Shaping government policy on violence prevention

### **1. Summary of the impact** (indicative maximum 100 words)

Research from the Violence and Society Research Group at Cardiff University has led directly to the development of a pioneering multi-agency data-sharing model for violence prevention that uses hospital Emergency Unit data. Results from implementation of the data-sharing model demonstrate decreases in violence. This success has encouraged international adoption in addition to the UK coalition government national commitment to implement the approach UK-wide.

### **2. Underpinning research** (indicative maximum 500 words)

In the mid-90s, Professor Jonathan Shepherd (Clinical Academic, Oral and Maxillofacial Surgeon) from Cardiff University (1991-present) established Cardiff University's Violence and Society Research Group (VSRG) to investigate the causes of community violence, its incidence, and evidenced-based approaches for its prevention. The research of Shepherd and the VSRG has been directed toward multi-agency violence prevention and victim support using a triangulation strategy of data-sharing between hospital emergency units, the police and local authority agencies <sup>[3.1,3.2]</sup>. Since 1993 Shepherd and his team have made numerous research contributions in this area, publishing over 80 research articles and receiving ca. £2.5 million in research funding.

### **Reporting of violent crime**

Investigating opportunities for data-sharing between the NHS and other agencies Shepherd and colleagues undertook (1996) a randomised stratified research survey <sup>[3,1]</sup> conducted across South Wales and involving police officers (17% of frontline personnel) and Emergency Unit staff (from five hospitals with a combined activity of greater than 30,000 emergency patient attendees per year). The VSRG researchers found poor liaison on the reporting of violent crime between police and the Emergency Unit and confusion on the part of hospital staff as to the ethics surrounding disclosure of information and working with the criminal justice system. In a four-year study initiated in 1996, Shepherd and colleagues found that 65% of community violence resulting in injury and NHS hospital treatment was not recorded by the police <sup>[3,2]</sup>, with assaults on men aged 20-40 years old least likely to be recorded. From these early investigations Shepherd and colleagues concluded that there was a lack of any real framework to institute appropriate joint working, although the studies affirmed the substantial and unique information resource (precise violence location, date/time, circumstance, weapons) that Emergency Units represented. The VSRG team proposed that Emergency Unit data, when linked to information held by the police and other agencies in a rational planned manner, should significantly impact on violence prevention <sup>[3,3]</sup>.

#### A data-sharing approach

In parallel with the above research the VSRG team (with funding from central Government - Welsh Office) also began to develop processes for the collection, disclosure and effective use and sharing of hospital Emergency Unit-derived assault data. The implication being that such data, when shared in a multi-agency approach, will reduce violent crime and assaults <sup>[3.4]</sup>. The framework of data-sharing developed by Shepherd and colleagues ultimately became known as the 'Cardiff Model' and included:

- Monthly electronic capture of customised questionnaire data from patients attending Emergency Units as victims of violence;
- Anonymisation of the above data and its sharing, through the Local Authority's Community Safety Partnership (CSP) and with a specially-formed police task force established to serve as primary respondents of the Emergency Unit information;
- Combination of all police and Emergency Unit data to inform violence prevention initiatives implemented by multiple agencies.

While developing the above data-sharing approach the Cardiff team applied similar strategies and violence prevention initiatives in a seven year Home Office funded project on alcohol-induced street violence 'Targeting Alcohol-related Street Crime' (TASC).



### Researching the effectiveness of the "Cardiff Model'

The research of Shepherd and the VSRG, which led to the development of the 'Cardiff Model' of data-sharing and violence prevention initiatives, were evaluated in practice within the city of Cardiff (1999). The Cardiff implementation included <sup>[3.4,3.5]</sup>: targeting of police resources at specific times and to specific street locations; mounting police interventions (including covert operations) at violence hotspots and problematic licensed premises; use of violence injury data to inform magistrates on public safety issues around drinks and entertainment licence applications; guiding of public space deployment of closed circuit television (CCTV) and linking CCTV evidence to Emergency Unit attendees; appointment of liaison officers to facilitate joint working with voluntary and statutory agencies; co-ordination of public transport to relieve pressures contributing to city-centre violence; informing local authority assault awareness campaigns in schools and public places and enlisting Emergency Unit staff (consultants) as advocates for injury prevention working alongside police.

After the five years of employing the Cardiff Model its effectiveness was studied by Shepherd and his team. The research showed the Emergency Unit in Cardiff to experience year on year decreases (4% per annum) in attendance due to violent crime despite a 1% annual increase in the city's population <sup>[3,4]</sup>. A substantial reduction (39%) in violence inside licensed premises was also observed <sup>[3,5]</sup>. The effectiveness of the 'Cardiff model' was also evaluated in a 51-month research study (2001-2007) where implementation of the model in Cardiff (as the 'intervention city') was compared to 14 UK comparison 'non-intervention' cities designated as 'most similar' by the UK Home Office. Here violent crime (measured in terms of hospital admissions and violence recorded by the police) was significantly reduced in the intervention city (a relative fall of 42%) compared to the 'non-intervention' group <sup>[3,6]</sup>. Recently published research <sup>[3,7]</sup> by the VSRG has shown that implementation of the data sharing approach and initiatives in Cardiff led to savings in the city's health, social, and criminal justice costs of ca. £5 million per annum (2003 to 2006) with a £6.9 million saving in 2007. This level of saving demonstrates the cost-effectiveness of a scheme that costs £0.1 million to set up and has running costs of £0.2 million per annum. The significance of the pioneering Cardiff research has been recognised by the international award to Shepherd of the 2008 Stockholm Prize in Criminology, and the 2009 Higher Education Queen's Anniversary Prize to the VSRG group at Cardiff University.

3. References to the research (indicative maximum of six references)

[3.1] **Shepherd**, **J.P.** and Lisles, C. Towards multi-agency violence prevention and victim support. Br. J. Criminology (1998) 38: 351-370. <u>http://bjc.oxfordjournals.org/content/38/3/351.full.pdf+html</u>

[3.2] Sutherland, I., Sivarajasingham, V. and **Shepherd, J.P.** Recording of community violence by medical and police services. Inj. Prev. (2002) 8: 246-247. <u>http://dx.doi.org/10.1136/ip.8.3.246</u>

[3.3] **Shepherd, J.P**. Criminal deterrence as a public health strategy. The Lancet (2001) 358: 1717-1722. <u>http://www.sciencedirect.com/science/article/pii/S0140673601067162</u>

[3.4] Warburton, A.L. and **Shepherd**, **J.P.** Development, utilisation, and importance of accident and emergency department derived assault data in violence management. Emerg. Med. J. (2004) 21: 473-477. http://emj.bmj.com/content/21/4/473.full

[3.5] Warburton, A.L. and **Shepherd, J.P.** Tackling alcohol related violence in city centres: effect of emergency medicine and police intervention. Emerg. Med. J. (2006) 23: 12-17. http://dx.doi.org/10.1136/emj.2004.023028

[3.6] Florence, C., **Shepherd, J.P.,** Brennan, I. and Simon. T. Effectiveness of anonymised information sharing and use in health service, police and local government partnership for preventing violence related injury: experimental study and time series analysis. BMJ (2011) 342: d3313. http://dx.doi.org/10.1136/bmj.d3313

[3.7] Florence, C., **Shepherd, J.P.,** Brennan, I. and Simon. T. An economic evaluation of anonymised information sharing in a partnership between health services, police and local government for preventing violence-related injury. Inj. Prev. (2013) http://dx.doi.org/10.1136/injuryprev-2012-040622

Since 1996 funding to Cardiff University to support and develop the above research and that of the VSRG has exceeded £2 million from NIHR, Home Office, Welsh Government, ESRC. For example, **Moore, S.** (co-PI), **Murphy, S., Moore, L., and Shepherd, J.** (co-PI). A feasibility study of a licensed



premise intervention to reduce alcohol misuse and violent injury. 2008-2010. MRC. £331K.

# 4. Details of the impact (indicative maximum 750 words)

The research from Cardiff demonstrated that hospital data was an entirely new measure of violence that if shared appropriately would represent an innovative approach for measuring and influencing the success of violence-prevention strategies that is independent of the criminal justice system.

# UK Government policy and crime-prevention practices

During the assessment period the impact of the Cardiff research has been on policy-making and implementation at the level of National UK Government with evidence of emerging international adoption. The following indicates the trajectory along which impact has developed:

**<u>2010</u>**: Based on Cardiff research showing the effectiveness of data-sharing in reducing community violence the College of Emergency Medicine (representing over 3,000 emergency physicians in the UK and internationally) published Clinical Guidelines to its membership <sup>[5.1]</sup> recommending adoption of the 'Cardiff Model'.

In the same year the Institute of Alcohol Studies (IAS) published a factsheet <sup>[5.2]</sup> on alcohol and crime. The IAS is a government-independent organisation serving the public interest through the use of scientific evidence to underpin increased awareness. Importantly this includes drafting of commissioned government reports of alcohol-related issues in society. The IAS factsheet <sup>[5.2]</sup> used the Cardiff research to highlight that police statistics seriously underestimate the amount of violent crime actually taking place. It commented on the Cardiff approach of sharing information from Emergency Departments (four citations to Shepherd's work) *"enabling police to intervene in violent incidents earlier than would otherwise be possible, reducing the severity of the resulting injuries."* 

In May 2010 the coalition government's programme for UK government (Cabinet Office publication <sup>[5.3]</sup>) made a clear commitment to "*make hospitals share non-confidential information with the police so they know where gun and knife crime is happening and can target .....crime hot spots.*"

**2012:** The Home Office's alcohol strategy <sup>[5,4]</sup> includes a commitment to promote the College of Emergency Medicine's guidance on the 'sharing of information' to both understand the scale and range of the violence locally and to allow preventative action. The Home Office strategy explicitly cites the research of Shepherd and a commitment to the "Cardiff Model" of data-sharing, stating: "*The Coalition Programme for Government included a commitment to require hospitals to share non-confidential information with the police....The implementation of this commitment focuses on all types of violent assault - many of which are alcohol-related. To deliver this commitment, we have promoted the College of Emergency Medicine guidance which is based on the 'Cardiff model'. In Cardiff, this approach has shown a sustained reduction of violence-related attendances of up to 40% We will encourage all hospitals to share non-confidential information on alcohol-related injuries with the police..."* 

In the same year the Department of Health (DH) issued national guidance to members of Community Safety Partnerships (CSP) including the police, health authorities and local authorities. It reinforced the coalition's programme commitment on sharing information to tackle violence. The DH guidance cites the Cardiff research and the important role of hospitals to promote community safety. It explicitly links this to the government's programme to support Emergency Units in introducing the 'Cardiff Model' of data collection and sharing <sup>[5.5]</sup>. As a follow up the DH launched (January 10<sup>th</sup> 2013) a webpage on its www.gov.uk news site which promotes engagement of CSPs and NHS through the adoption of the 'Cardiff Model' and provides resources to support information sharing.

**2013:** The Coalition Government's Mid-Term Review stated "we have established a national scheme requiring hospitals to share information on gun and knife crime" <sup>[5,6]</sup>. To assess the degree of implementation the DH and the Home Office commissioned the Centre for Public Innovation and Gecko Social Health Outcomes to conduct an independent audit of progress. This audit showed one-third of Emergency Units and CSPs were sharing information at the level set out in the College of Emergency Medicine guidelines <sup>[5,1]</sup>. The report prompted Public Health Minister Anna Soubry to write to health chiefs and police chiefs throughout the country requiring them to implement effective data-sharing methods. Her letter <sup>[5,7]</sup> draws attention to the College of Emergency Medicine guidelines and to the DH guidance on information sharing (including the DH webpage of supporting



resources) both of which are explicitly based on the Cardiff research.

In February 2013, Norman Lamb (Minister of State for Care and Support, DH) publicly linked the commitment of the coalition government and DH to Cardiff research stating "*I am pleased to report on the efforts we are taking in the Department of Health to roll out the 'Cardiff Model'…We know the Cardiff model works. Now we need to ensure every community sees the benefit.*" <sup>[5.8]</sup>.

Addressing the public health need and the economic savings that can be made <sup>[see 3.7]</sup> the coalition government continues to drive forward implementation of its commitment on preventing violence through the (Cardiff) approach of multi-agency information sharing of hospital data <sup>[5.9]</sup>. In 2013 the Dutch government through the country's Ministry of Security and Justice launched a pilot National Violence Approach Programme using the 'Cardiff Model' in seven of Amsterdam's hospitals with, if successful, national rollout anticipated in 2015 <sup>[5.10]</sup>.

5. Sources to corroborate the impact (indicative maximum of 10 references)

[5.1] College of Emergency Medicine Clinical Guideline: CEM4881. Uses Cardiff research to assist Emergency Physicians on sharing of data with Community Safety Partnerships to reduce community violence. <u>https://secure.collemergencymed.ac.uk/asp/document.asp?ID=4881</u>

[5.2] IAS Factsheet using Cardiff research (pp 5-6) showing police statistics seriously underestimate the amount of violent crime and highlighting the value of the 'data-sharing' approach. Note the factsheet is available as a PDF from the HEI. Downloaded April 3<sup>rd</sup> 2013. The weblink to this particular resource is no longer active on the IAS pages. <u>http://www.ias.org.uk/</u>

[5.3] 'The Coalition: our programme for government' explicitly stating it will make hospitals share non-confidential information with the police (p 13).

https://www.gov.uk/government/publications/the-coalition-our-programme-for-government

[5.4] The Government's Alcohol Strategy, HM Government, Cm 8336, March 2012. A commitment to promote the College of Emergency Medicine's guidance and to the "Cardiff Model" of data-sharing (p 15 and bullet points 3.22 and 3.23). <u>http://www.homeoffice.gov.uk/publications/alcohol-drugs/alcohol/alcohol-strategy?view=Binary</u>

[5.5] DH guidance on data sharing to tackle violence based on the Cardiff Model (p 4). <u>https://www.gov.uk/government/publications/sharing-to-tackle-violence-guidance-for-community-</u> safety-partnerships-on-engaging-with-the-nhs

[5.6] The Coalition Mid-Term Review affirming that they have established a national scheme requiring hospitals to share information violent crime (p 26, final bullet point).

http://assets.cabinetoffice.gov.uk.s3-external-

3.amazonaws.com/midtermreview/HMG\_MidTermReview.pdf

[5.7] Letter from Anna Soubry, Parliamentary Under-Secretary of State for Public Health (Gateway No 18680, 25 January 2013) to health and police chiefs requiring implementation of the data-sharing approach citing Cardiff as an example of good practice

http://www.hsj.co.uk/Journals/2013/01/25/j/n/s/Anna-Soubry-MP---Information-Sharing-25-01-2013.pdf

[5.8] Norman Lamb, Minister of State Department of Health publicly linking the commitment of the coalition government to Cardiff research. Published in "The Liberal Democrat Voice" Tuesday 5<sup>th</sup> February 2013.

http://www.libdemvoice.org/norma-lamb-writes-tackling-gun-and-knife-crime-hospitals-and-policeworking-together-33056.html

[5.9] Contact - Director General Crime and Policing Group, Home Office UK. How the coalition government adopted the (Cardiff) approach of multi-agency information sharing, the benefits from the approach and the coalition's continued forward implementation of the policy.

[5.10] Statement from Project Manager Dutch Injury Surveillance System (Consumer Safety Institute on behalf of the Ministry of Security and Justice, The Netherlands) describing the launch of a pilot National Violence Approach Programme using the 'Cardiff Model' in Amsterdam's hospitals.

All documents, testimony and webpages saved as PDFs are available from the HEI on request.