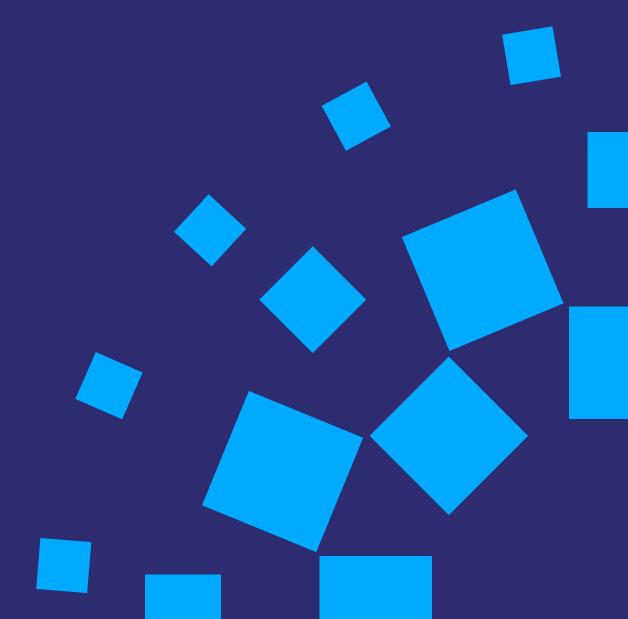




# Knife crime A problem solving guide



This guide has been produced in sections to enable quick access to information. this means depending what stage you are at in solving your knife crime problem, you can move between **Scanning**, **Analysis**, **Response** and **Assessment**.

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## Foreword by Andy Marsh, Chief Executive

Knife crime can destroy lives and fracture communities. It disproportionately blights the lives of the young and disadvantaged. After

decreasing in the early 2010s, it has risen in recent years. Tackling it must be one of policing's top priorities<sup>1</sup>.

The College has produced this guide to support forces in tackling this complex type of crime, equipping officers in all forces with good practice from across the UK and beyond. While there are no simple answers, we have provided a practical toolkit of tactics forces can use, depending on what the data shows in their area, such as interventions in schools, weapon sweeps and focused deterrence.

By setting out the strengths and limitations of each type of action, how they work and where they work best, the guide provides what is needed to help tailor a response to local problems. It builds on our **Knife crime evidence briefing**, published in April 2019, which set out in more general terms the broad approaches that are effective in tackling knife crime.

Using our expertise as the What Works Centre for Crime Reduction, the content in this guide is grounded in the best available evidence of what is effective in fighting crime. The guide has a strong focus on using data to understand problems, design responses, measure effectiveness and drive improvement.

Different approaches will work in different places. By using data effectively, we can truly understand all the dimensions of the local problem and deliver a response that saves lives, protects communities and builds public confidence.

By using this toolkit, officers responding to knife crime, as well as supervisors and senior leaders, should be confident to tackle the problems in their community, knowing that they are using interventions that work.

1 Knife crime statistics - House of Commons Library (parliament.uk)

## Foreword by DAC Graham McNulty, NPCC knife crime lead

Every police service in the UK has its own approach to tackling knife crime and to supporting and protecting their diverse communities. As the National Police Chiefs' Council (NPCC) lead for knife crime, I understand this. I also know the reasons people turn to crime may be complex and based on a large number of personal experiences or environmental factors.

Reducing knife crime is a key element in tackling violence. Officers across the country work day and night to protect the communities exposed to this abhorrent crime. Reducing knife crime requires a response from everyone in society. The public, private and third sectors must work together to deliver a lasting change. People are at the heart of policing and we all have a part to play.

We do our best in policing to predict where and when knife crime may occur and use the current tactics available to us to deploy our resources effectively. We use a range of enforcement, prevention and engagement tactics to take knives off the streets. But with the right information we can make smarter, more informed decisions.

With this work, we hope to do exactly that, using the right tactics to suit our communities, ultimately deterring people from carrying knives and reducing violence on our streets. This guide provides an excellent resource for police forces across the country to get the best from their officers and staff, deploy them effectively and work with partner agencies more efficiently.

The research informs us on how we can use a scientific, evidence-based approach to reduce crime. It gives us some of the tactics available to tackle knife crime and assesses their viability, weighing up both positive and negative aspects of their use. There are always challenges involved in tackling knife crime but there are also many opportunities. I hope this guide helps us focus on where we can take these opportunities, where we can overcome these challenges and, above all, how we can help keep the public safe.

## About this guide

Knife crime is a persistent problem in the United Kingdom. Between 2014 and 2020, the number of violent incidents involving knives or sharp objects rose year-on-year, with 2019/20 witnessing the largest number of police-recorded knife offences in the past decade<sup>2</sup>. The societal, economic and health implications of knife crime are both significant and highly concentrated. The burden of knife crime falls disproportionately on young males in deprived and metropolitan areas<sup>3</sup>.

Problem solving is a structured approach for tackling persistent problems. It involves four stages. First is the identification (or **scanning**) of recurring problems that affect the community and which the police are expected to handle. Second is a detailed **analysis** to uncover what might be causing the problem and what might be done to reduce it. Third is the implementation of tailored **responses** based on that analysis. Fourth is an **assessment** of whether the problem has reduced because of the implemented responses.

Problem solving requires the police to:

- conduct systematic inquiries into the nature and patterns of problems
- prioritise prevention
- work with partners
- favour responses that do not rely solely on the criminal justice system
- evaluate whether what they have done has had the desired effect

Problem solving is effective policing. Extensive evidence shows that when done well<sup>4</sup>, problem solving can lead to significant reductions in a wide range of problems, including serious violence. Simply put, in an era

<sup>2</sup> Allen and Harding (2021).

<sup>3</sup> Massey, Sherman and Coupe (2019); Sutherland and others (2020).

<sup>4</sup> Sidebottom and others (2020); Scott M (2000).

of evidence-based policing, the evidence we have tells us that problem solving is one of the best methods for reducing crime<sup>5</sup>.

Examples of problem solving applied to knife crime are limited<sup>6</sup>. This guide seeks to change that. Produced in collaboration with the College of Policing and the NPCC, and through consultation with 24 police forces and Violence Reduction Units in England and Wales, this guide provides practical and evidence-informed advice on how a problem-solving approach can help you reduce your local knife crime problem.

The guide contains six main sections. It begins by outlining the scope of the guide and clarifying the different types of knife crime. It then provides a short summary of the background, purpose and effectiveness of police problem solving. The remaining four sections are organised around SARA, the most common framework for doing problem solving.

- Scanning is about clearly defining your local knife crime problem. This section describes the sources of data and intelligence that can be used to better understand the trends and patterns in your local knife crime problem.
- Analysis is about working out why your knife crime problem persists. This section outlines some critical questions to ask of available data, and describes how to use data to better tailor and target interventions.
- Response is about designing and delivering interventions aimed at reducing knife crime. This section reviews the research evidence associated with common knife crime interventions. It also presents a framework to help work out whether particular interventions might be relevant to tackling your own local knife crime problem.
- Assessment is about learning lessons and driving improvement. This section deals with how you measure the effectiveness of your knife crime interventions. It sets out principles for good evaluation and what you can do to know if your local knife crime problem has changed as a result of your chosen activities.

<sup>5</sup> Hinkle and others (2020).

Examples of problem solving projects applied to knife crime can be searched for at the **US Centre for Problem-Oriented Policing** and the **UK Knowledge Hub**.

Throughout the guide, you will see many numbered boxes. These boxes are designed to both complement and elaborate on points in the main text, by providing illustrations of problem-solving practice, descriptions of relevant research and a discussion of key terms and concepts.

#### Defining knife crime

Knife crime refers to a broad collection of behaviours that mean different things to different people. For some, knife crime is exclusively a 'youth crime' issue, despite the fact that many older people use, and are injured with, knives. For others, knife crime is taken to mean 'serious violence', even though most knife carrying does not result in violence. For many, knife crime denotes a series of crimes that typically take place in public between strangers, despite a great deal of knife-enabled violence occurring indoors and between acquaintances. In light of these differences, it is important to make clear what we mean by the term 'knife crime', and to clarify what we do and do not cover in this guide.

Knife crime relates to crimes involving knives or other bladed or pointed articles. This definition reflects how the relevant laws in England and Wales are worded<sup>7</sup>. Hence, knife crime incorporates crimes involving articles other than knives. The definition of bladed or pointed articles includes, for example, razors, swords, axes, bayonets, forks, needles, arrows and broken glass bottles. Some bladed or pointed articles will be in their original manufactured form, while others may be modified (for example, a screwdriver with a sharpened tip) or improvised (such as a piece of wood with a nail driven through it).

Knife crime, as defined here, broadly relates to two kinds of behaviour. The first relates to people owning or possessing knives when doing so is illegal. This may be because their ownership is specifically banned, such as certain (de facto or 'made') offensive weapons, or because they are illegal in certain contexts, mainly being possessed in public without

<sup>7</sup> The carrying and use of a bladed weapon is prohibited in a variety of contexts and there are specific knives that are proscribed for ownership, sale and/or carrying in public. In addition, the use of a weapon in a violent incident may be an aggravating factor in sentencing. The Crown Prosecution Service has a detailed description of legislation relating to knife crime: Offensive weapons, knife crime practical guidance.

good reason. These are so-called State or Regina crimes and do not involve a victim. The second behaviour relates to the use of a knife in the commission of another offence, so-called 'knife-involved offences'. Typically, this relates to violence or threats against the person, theft, burglary or criminal damage.

#### The scope of this guide

The possession and use of knives to threaten or harm someone covers a wide range of offences, from robbery to serious sexual offences and murder. Producing a guide that covers the huge range of contexts within which knives are used illegally would be unwieldy. We do not attempt that here. Nor do we focus on offences that involve the illegal sale or importation of knives. Instead, this guide describes a process through which the broad category of knife crime can be broken down into smaller categories of specific knife-involved offences, and demonstrates how doing so can support efforts to develop appropriate, tailored and effective responses to local knife crime problems.

## Defining police problem solving

#### What is problem solving?

Problem-oriented policing – or problem solving, as it is commonly known – was first outlined by Herman Goldstein in 19798. It emerged from a critique of policing at the time, which Goldstein characterised as 'incident-driven'. Incident-driven policing comprised dealing with calls for service on an incident-by-incident basis, usually through the deployment of standard police tactics, such as rapid response and undirected police patrols. Emerging evidence in the 1970s indicated that this approach was largely ineffective. It failed to resolve persistent issues while consuming extensive resources. Goldstein recognised that the police are called upon to deal with a vast and varied range of crime and public safety issues. The causes of these issues are equally varied and vast. Responding after the event through standard police tactics does little to address the underlying causes of persistent problems, so the issues remain.

Problem-oriented policing was Goldstein's blueprint for reforming the police. Goldstein argued that police effectiveness can be improved by shifting the focus from responding to isolated incidents to understanding better the causes of persistent problems that affect the community and devising responses that address those causes. In achieving this, Goldstein called on the police to work creatively and collaboratively with partners and the communities experiencing problems, to avoid reliance solely on law enforcement and to favour preventive measures tailored to the nature and characteristics of specific problems.

#### What does problem solving involve?

The SARA process was devised to translate Goldstein's ideas into police practice<sup>9</sup>.

- Scanning the identification of persistent problems that cause harm and call for police attention.
- **Analysis** the systematic study into the causes of or conditions that lead to or enable problems to persist.
- Response the development and implementation of measures to try to reduce or eliminate the problem.
- Assessment evaluation to determine whether the response has worked out as intended and whether the problem has been removed, reduced or unintentionally aggravated.

#### Does problem solving work?

There is a strong body of evidence to show that problem solving is highly effective at reducing a wide range of crime and public safety issues<sup>10</sup>. A recent systematic review concluded that although problem solving was not successful on every occasion, overall, it had tended to produce significant reductions in crime and disorder<sup>11</sup>. The College of Policing cite problem solving as 'one of the best-evidenced policing strategies'<sup>12</sup>.

#### Will problem solving work for me?

Problem solving is not prescriptive. It doesn't tell you what will work to reduce your local knife crime problem. Knife crime is too complex and too multifaceted for one specific intervention or a series of interventions to work effectively in all places and at all times. What problem solving does do is to provide you with a process – a tried-and-tested series of steps to both guide and structure efforts to reduce crime and disorder. There are many case studies where problem solving has been used effectively to reduce serious violence<sup>13</sup>. This guide seeks to build on those examples and show how problem solving is applicable to reducing knife crime.

## Scanning

Problem solving begins with scanning. The purpose of scanning is to home in on a specific problem that affects the community and that the police can do something to address. Precisely defining your problem is a key part of scanning, and is crucial to effective problem solving. Catch-all categories such as 'youth crime', 'serious violence' and even 'knife crime' are too broad for the purposes of problem solving. This is because broad categories of crime often mask the existence of several different problems, which may arise for different reasons, display different patterns, require different responses and involve different partners. In general, crime problems are easier to solve the more precisely defined they are.

Scanning typically involves three steps.

- 1. Select a broad category of crime or public safety issue that you would like to focus on.
- 2. Identify data and information relevant to the identified crime or public safety issue.
- Interrogate relevant data and information sources to arrive at, and better understand, a highly specific problem that is suitable for problem solving.

This section of the guide works through these three steps in relation to knife crime. It is formed of two parts. The first part describes the kinds of knife crime problems that are suitable for problem solving. The second part introduces some of the ways in which knife crime problems might be patterned and reviews the data and intelligence that might helpfully be drawn on when scanning for knife crime problems.

#### Selecting a suitable knife crime problem

Knife crime is one of a dizzying array of issues that the police are expected to handle. But not every issue that is brought to the police's attention will benefit from a problem-solving approach. Problems, in a problem-solving sense, refer to clusters of related and persistently

reoccurring incidents that harm the community and that the police should, and feasibly can, do something about 14. Problem solving is not about responding to one-off incidents. Nor should problem solving be directed at broad societal factors, such as poverty and inequality, which may be implicated in knife crime but clearly fall outside of the police remit.

A problem-solving approach is similarly not appropriate for a rare event that is unlikely to repeat. For example, a murder in a small village with no history of knife crime and very low risk of further incidents will require a police investigation and may need work to reassure the public. It probably does not need proactive knife crime prevention work of the sort described in this guide. Instead, your problem-solving efforts should focus on recurring issues that cause tangible harms to communities and where targeted police efforts can do the most good.

The acronym CHEERS was developed to help determine whether a problem is suitable for problem solving<sup>15</sup>. Appropriate problems should pass the CHEERS test, meaning that they should do all of the following:

- affect the **community** (whether it be the whole community or part of it)
- generate harm (directly, for victims, or indirectly for example, through fear in the community)
- be something that the public expect the police to address
- comprise discrete and clearly defined events (such as one person stabbing another)
- comprise events that are recurring (such as increases in the routine carrying of knives in a community, or a series of stabbings)
- comprise events that are **similar** to one another (such as occurring at the same or similar locations, involving the same victims, offenders and so on)

<sup>14</sup> Eck J (2003).

<sup>15</sup> Clarke and Eck (2003).

#### Selecting a specific knife crime problem

Knife crime might well meet all of the CHEERS criteria, but knife crime is too broad a problem to solve from the perspective of problem solving, for the reasons given above. Knife carrying and use in and around bars is, for example, likely to have quite different causes and have different timing, location, victim and perpetrator patterns to, for example, knife-enabled robberies.

How can we start breaking down the broad category of knife crime into specific knife-related problems that are suitable for problem solving?

Presented below are two lists. The first list outlines five broad categories of knife use:

- associated with the drugs trade
- in domestic violence
- in robbery
- in conflict within and between gangs and groups
- in conflicts between individuals

The second list outlines six different aspects of knife crime that would constitute a suitable focus for your problem-solving efforts:

- the availability and accessibility of knives
- the locations where and when knives tend to be used
- those liable to carry and/or use knives
- those likely to become victims of knife crime
- the circumstances leading up to knife crime
- the groups within which knife carrying and use is commonplace

Combining aspects of the two lists together with one or more places and times should produce a sufficiently precise, well-defined problem for the purposes of problem solving, such as:

- knife-enabled robberies of secondary school children in the period after schools have closed
- knife carrying among 18-21 year-olds on a housing estate
- illegal markets in knives in local pubs

## Describing how your local knife crime problem is patterned

Once you have identified and clearly defined your local knife crime problem, it is important to look at how the selected problem is patterned. Problem solving draws heavily on the principle that crime is highly concentrated: a small number of people and places experience a large proportion of all crime<sup>16</sup>. Targeting preventive efforts at crime concentrations is a core plank of police problem solving, and has repeatedly been shown to be an effective and efficient use of resources<sup>17</sup>.

**Box 1** describes some of the main ways in which crime is often found to concentrate. Good scanning involves checking to see if your own selected knife crime problem conforms to these patterns. Doing so can helpfully inform the development and targeting of your response. It can also provide insights into why your selected problem persists. For example, while the number of overall knife-related crimes in a given area may not change, there may be noticeable changes in the places in which they are happening, such as an increase in knife crime in and around bars or cash machines, thereby indicating the emergence of a new problem.

Alternatively, changes in the characteristics of victims of knife crimes may tell you about an emerging hate crime or the organised targeting of elderly victims. The types of weapon that are being detected by police officers or hospital records can also be informative. America provides a useful lesson here. The availability of handguns in the US was relatively

<sup>16</sup> Farrell (2015).

<sup>17</sup> Braga and others (2019); Telep and Hibdon (2019).

low in the 1970s. As the crack epidemic developed, drug-related violence led to more availability and use of handguns. Gradually, the use of handguns spread from the high-crime inner city areas where drug violence was common, towards the lower-crime suburbs.<sup>18</sup>

#### Box 1: Knife crime patterns

Common examples of problem concentrations that should be looked for when scanning for patterns of knife crime include the following:

- Repeat offenders a small proportion of offenders are responsible for a high proportion of all knife crimes and their associated harms<sup>19</sup>.
- **Repeat groups** a small proportion of groups are responsible for a high proportion of all knife crimes and their associated harms.
- **Repeat victimisation** a small proportion of victims experience a high proportion of all knife crimes<sup>20</sup>.
- Hotspots a small number of locations account for a high proportion of all knife crimes.
- **Hot times** offences tend to be concentrated at particular times of the day and days of the week.
- Hot knives certain types, makes and models of knives account for a high proportion of all knife crimes.
- Victim and offender overlaps in many violent crimes, victims and offenders share similar characteristics (such as age, gender, criminal background and membership of criminal groups).
   Similarly, those who carry and/or use knives are typically at higher risk of being victims of knife crime.

<sup>18</sup> Blumstein and Cork (1996).

<sup>19</sup> Tilley (2016).

<sup>20</sup> Grove and others (2012); Weisel (2005).

## Data and intelligence sources for knife crime problem solving

Those working on knife crime in your local area will often have a good sense of the ways in which knife crime is patterned, but it is always worth checking the data. Impressions based only on personal experience can sometimes be misleading. Moreover, some patterns are not always obvious because of the ways in which crimes are recorded.

There are many sources of data and intelligence that can help in identifying how your local knife crime problem is patterned. Here we provide an overview of the different types of data you might consider using when problem solving. These are summarised in **Box 2**.

#### Police data

Multiple police systems can be useful in understanding your local knife crime problem. Most obviously, the crime recording system will hold details of crimes involving knives. However, the quality of analysis based on police-recorded crime data is only as good as the quality of the information recorded by officers. If the design of a system makes it easy for officers to forget to add a knife crime 'flag' to an incident, it is likely that the system will show an incomplete picture of the scale of knife crime. Depending on the reliability of the data you receive, you may want to audit incoming crime reports to identify knife-related offences that have not been flagged. This can be achieved through a keyword search for terms like 'knife', 'blade' or 'sharp'. This work can be time-consuming but helps create a more robust foundation both for understanding knife crime in your local area and for tracking your progress over time. Working in this way also makes it possible to add custom flags that are not built into your data recording system. For example, if you are concerned about knife crime in the night-time economy or at unlicensed music events, you could add a flag for those types of knife crime incidents.

Incident recording (command and control) systems can help fill knowledge gaps by providing details of incidents that, for whatever reason, did not lead to a crime being recorded. For example, a third-

party call from a resident reporting a person threatening a child with a knife in a local park might not lead to a crime being recorded if no-one was present when police arrived at the scene, but would still be useful information when problem solving. Likewise, intelligence databases can hold information relevant to problem solving. For example, neighbourhood policing officers might be tasked to understand and report on tensions between different gangs that are recorded in intelligence databases. Property management systems can also be a useful source of information about the types of knives seized by police in different circumstances. This might show, for example, whether the types of knives being discovered in knife sweeps or stop and search programmes are the same as those being used in knife crime.

#### Non-police data

It is well-established that much violence is not reported to the police and does not appear in police data<sup>21</sup>. Violence in and around the night-time economy, which is often handled informally by door staff, is a prime example. That said, the public generally regard violence with a weapon as serious and more worthy of police attention than other forms of violence<sup>22</sup>. As a result, it is estimated that around 70% of violence that involves a knife is reported to the police and this is particularly true if someone is injured<sup>23</sup>. Despite this, police data alone will seldom provide a complete picture of your local knife crime problem. When problem solving, it is therefore important to find ways to triangulate the information available in police records with that from other sources. This may include the following non-police data sources:

#### Ambulance data

Ambulance data often has location and time information, as well as information about the type of injury and circumstances of an incident. Anonymised incident records from the ambulance service may be useful for understanding when and where particular types of knife crime

<sup>21</sup> Sutherland and others (2021).

<sup>22</sup> Brennan (2016).

<sup>23</sup> Brennan (2019).

occur, such as those where injuries have been caused, since ambulances are likely to have attended the scene of the incident (although not in every case). Ambulance data will be limited to more serious knife crime incidents, but its accuracy tends to be high.

#### Hospital attendance data

Because around 25% of violent incidents involving a knife results in medical treatment, many victims will visit a local hospital emergency department<sup>24</sup>. Your local hospital may participate in the Information Sharing to Tackle Violence (ISTV) scheme, sometimes referred to as the Cardiff Model, whereby all patients with an injury are asked about the circumstances of how the injury occurred<sup>25</sup>. This information can include the timing and location of the violent incident and, if a weapon was used, the weapon type. Your local hospital may have an arrangement to share this data with the police once it has been anonymised.

#### **Hospital admission data**

Hospital admission data is potentially a good source of information about the types of violence happening in an area and can be a valuable complement to police data. All hospitals collect and record data on admissions, which will indicate if a patient presents with a knife (or gunshot) injury. The General Medical Council advises doctors that, where appropriate, the police should 'usually be informed when a person presents with a wound from an attack with a knife, blade or other sharp instrument'26. All hospital admissions are recorded in Hospital Episode Statistics and given a specific code that indicates the reason for admission, such as 'X99: Assault by sharp object'. In England, this information is controlled by NHS Digital. In Wales, it is controlled by NHS Wales. Hospital admissions data can take several months to be processed and does not include location or incident time data, so it is not appropriate for immediate scanning. However, it can be a valuable source of information about trends in larger areas.

<sup>24</sup> Brennan (2019).

<sup>25</sup> NHS Digital (2019).

<sup>26</sup> General Medical Council (2019).

#### **Primary data**

The examples above are all secondary data sources, as they are collected by someone not involved in your specific problem-solving project. Secondary data sources are useful for better understanding your identified problem, but they may not answer all your questions. Good problem solving sometimes involves collecting primary data to plug knowledge gaps. Primary data for the purposes of this guide relates to data collected by those doing the problem solving, again with the express purpose of helping work out what is causing a presenting knife crime problem and what might be done to address it. Forms of primary data collection that might assist knife crime problem solving include:

- visits to the places where knife crime is shown to concentrate
- interviews and focus groups with young people believed to be involved in knife crime
- interviews with retailers identified as playing a part in the sale of knives used in crime
- surveys of local residents to gauge community confidence and/or their perceptions and experiences of knife crime interventions
- reviews of case files and interviews with investigating officers involved in knife crime in your local area

### Box 2: Overview of data relevant to problem solving knife crime

Source of data	How it might be used when problem solving knife crime
Police crime data	Crime data is likely to be the largest volume and most in-depth source of information available in any given jurisdiction regarding knife crime. Crime data contains many variables useful for problem solving trend analysis, identification of space-time patterns, characteristics of victims, offenders and locations. Detailed free-text data drawn from victim or witness accounts and offender interviews as part of investigative work can also be useful for understanding narratives around knife crimes, how they unfold and whether they recur among specific individuals or groups. Exploration of this data can assist in grouping similar or recurring types of events to focus on specific problems involving the carrying, use or threat of knives.
Police call data	Call data is useful for understanding the space-time distribution of events involving knives, particularly those requiring priority and immediate police response. Call-handling systems can be searched for relevant key terms, such as 'knife', 'blade', 'stabbing' or 'slash'. Some systems may even have opening or qualifying codes for knife-involved events. Call data may also include incidents not otherwise captured elsewhere in police data that can help build a better understanding of your local knife crime problem (for example, reported incidents where the parties involved cannot be traced on police arrival).
Police stops data	Stop-and-search data can provide details of the people involved in knife crime and weapon carrying, and can help you to understand the types of weapons routinely being seized and where on the body they were concealed. While patterns of stops reflect patterns of police activity as much as patterns of crime, search data can still be useful.

Source of data	How it might be used when problem solving knife crime
Police intelligence	Police intelligence reports can provide large volumes of free-text information. This can include information about who is carrying knives, where they are getting the knives from and where knives are stored, as well as information about related crimes (such as drug use or dealing) and peer relationships (such as gang offending or county lines). Sometimes, there will not be the time or resources to read every intelligence report when problem solving, but analysts can help by keeping track of relevant reports as they are submitted and collating them for later use. Frontline officers can help this process by remembering to use relevant flags or markers when submitting reports.  Some knife crime problems, especially those related to drug supply or gangs, might also involve the exploitation of vulnerable people. If so, there might be useful information held in police systems for recording concerns about vulnerable adults or children, as well as reports of missing persons.
Police property management	Police property management databases can be used to analyse the type of knives recovered by police and assess for any differences in trends between event types and circumstances. For example, the types of knives found in possession offences may differ to those used in serious violence. This is important to know when problem solving – for example, if police stops are being used to prevent violence but are only recovering knives that are unlikely to be used in violence. Property data may contain significant variation in the level of detail captured.

Source of data	How it might be used when problem solving knife crime
Health data	When considering violent injury involving the use of knives or sharp objects, ambulance call-out data provides a harm-based source of information with reliable geographic and temporal data and long-term time series. Emergency department data provides a similar source of information, although may be of marginal value to problem solving in cases where volumes are exceptionally low (on average, there is less than one record per month per community safety partnership area in England and Wales), and there is inconsistent data quality (especially if hospital staff do not know where an incident occurred). Work with emergency departments may be needed to improve data collation before it can be useful for problem analysis <sup>27</sup> .
Local authority data	Local authority departments often have information that may contribute to problem solving. In relation to knife crime, trading standards may hold records of complaints and outcomes of inspections or enforcement visits of businesses concerned with the sale of prohibited items. They may actively undertake age-related test purchases for knives and sharp objects. In some areas, street cleansing services may hold data on sharp objects, including knives, which have been removed and discarded following resident complaints. This may include identification of locations where potential weapons have been found concealed in communal areas or public spaces. Education departments hold information on pupil behaviour and can provide access to speak directly with schools. There may be concerns about weapon carrying or the discovery of weapons on pupils that may not have been brought to police attention.

<sup>27</sup> Giacomantonio and others (2014).

### Source of data How it might be used when problem solving knife crime Other Offender management datasets based on assessments of those charged with knife crimes can provide information on the supposed reasons why individuals carry and or use knives. This includes understanding the most frequent types of support required during interventions (eg, substance misuse, mental health, financial support). Such information may be useful when thinking about developing interventions to support and manage at-risk individuals. However, this data represents only a small proportion of offenders who were charged and convicted. When narrowed to knife use, it may provide extremely small samples. If a knife crime problem is concentrated in a privately managed public space, such as a school or university campus or a shopping centre. those organisations may hold records of incidents or of concerns reported by their own staff, as well as having access to CCTV or data from access-control systems that might help understand the problem in that area. Likewise, if your problem occurs in an area partly covered by another police force (either a neighbouring force or a specialist force, such as transport or port police), they may hold data that can help you generate a more complete picture of your local knife crime problem.



#### Scanning checklist

Although there is a logical sequence to the SARA process, in practice, good problem solving is often not linear.

Analysis may lead to redefinitions of the problem and a return to scanning, responses may need tweaking that calls for further analysis, and assessments may indicate that a problem remains, suggesting that the process needs to be started again. Consequently, when working through the SARA model, treat the different elements as fluid, and be willing to revisit earlier stages as new information emerges and modifications are required.

That said, there are certain general requirements that should be met before moving through the different stages of SARA. The simple checklist below is designed to help ensure that those requirements have been met before proceeding from scanning to analysis.

- 1. Have you identified a specific knife crime problem?
- 2. Does your identified problem meet the CHEERS criteria?
- 3. Have you established the extent and trend of the identified problem?
- 4. Have you identified ways in which your selected knife crime problem is patterned, considering place, time, offenders, victims and the knife itself?
- 5. Have you explored different data sources to better understand the extent, patterns and harms of the identified problem?

If the answer to any of these questions is 'no', continue scanning. Once the answer to all of these questions is 'yes', you can move onto the next phase of SARA, Analysis.

## **Analysis**

Drawing on a wide range of data and intelligence sources, you have now decided on a specific type of knife crime on which to focus your problem-solving efforts. You know how the problem is trending, where and when it is most concentrated, and the harms it generates. The next step is to dig deeper to identify the causes and conditions that enable your problem to persist. This step is analysis.

At this stage of the SARA process, it is important to keep in mind that problem solving does not require you to identify and address all of the causes that give rise to your selected problem. That would be unrealistic. Knife crime, for example, is caused by a very wide range of factors, from background conditions, such as unemployment and poverty (see **Box 3**), to more immediate situational factors, such as the presence of peers and alcohol. All may contribute to your local knife crime problem, but some will be beyond the reach of practical local problem solving. Instead, effective problem analysis is about analysing a problem to identify so-called 'pinch points'.

Pinch points are those causes and conditions that contribute to a problem and are open to preventive intervention by the police and partners. The goal of problem analysis is therefore to help you identify an appropriate and effective response that is based on those pinch points and can be delivered within the resources of your organisation. For example, identifying that those who engage in knife crime are more likely to have had adverse childhood experiences might help explain their offending, but reducing such experiences is largely beyond the ability of policing and, if successful, would take many years for any benefits to be realised. The art of effective problem solving is finding pinch points that can be changed by responses that can be implemented in a reasonable time frame, but which also have a sustained impact.

This section of the guide will help you identify pinch points to inform response selection. It comprises two main parts. The first part describes two tools that are commonly used in problem solving, which can

help break down your identified problem and structure your problem analysis. These tools are the problem analysis triangle and crime scripts. The second part of this section outlines a series of questions to ask when analysing your identified knife crime problem. Consulting available data and partners to answer these questions will help you select the most promising set of responses.

#### Box 3: How and why are weapons used?

An obvious reason for carrying and using a knife is to do serious harm to another person. To this end, knives are highly effective. But knives can also give a person power over others. Ironically, the 'coercive power' of a knife can mean that violence isn't always necessary – a person may rely on threat alone to control another person.

Research has identified three main reasons why someone might carry a knife: motivation, peer influence and contagion.

#### **Motivation**

A person may carry a knife for offensive or defensive reasons, and/or to present themselves in a certain way. Many people report carrying a weapon for self-defence<sup>28</sup>. This may be because they expect to be involved in violence or because they are fearful in their local neighbourhood. Carrying a knife can also shape how a person is seen by others. For example, carrying the same weapons can cement feelings of closeness within a group. A person might also believe that being known for carrying a knife offers protection from attack.

#### Peer influence

Friends matter when it comes to weapon carrying, and evidence shows that peers are an important influence on the decision to carry a weapon, particularly among young people<sup>29</sup>. Research has shown that when one member of a friendship group begins to carry

<sup>28</sup> Brennan (2017).

<sup>29</sup> Brennan (2018).

a weapon, others are more likely to follow<sup>30</sup>. Weapon carrying is also self-reinforcing: carrying a weapon increases a person's belief that their peers carry weapons, and believing that one's peers carry weapons increases the acceptability of weapon carrying<sup>31</sup>.

#### **Contagion**

When a new weapon is introduced into a community, it may have a contagion effect, increasing the attractiveness of that weapon type<sup>32</sup>. For example, if one or more people begin to carry large knives, others may 'level up' to match them.

Weapon carrying and use is usually preceded by other less serious forms of violence either as a victim, a perpetrator or both. Self-report surveys show that most young people who reported carrying a weapon had been involved in violence the year before<sup>33</sup>. However, because it is less serious, it may not feature in police, school or health records. In addition to exposure to violence, factors associated with weapon carrying include being male, being in late teens, having friends who have been in trouble with the police, low trust in the police and substance misuse<sup>34</sup>. Individually, these factors probably do not cause weapon carrying but are symptomatic of a lifestyle and environment where violence may be common<sup>35</sup>.

<sup>30</sup> Dijkstra and others (2010).

<sup>31</sup> Hemenway D and others (2011).

<sup>32</sup> Blumstein and Cork (1996)

<sup>33</sup> Brennan IR (2021); Spano, Pridemore and Bolland (2012).

<sup>34</sup> Brennan (2018).

<sup>35</sup> Brennan (2018).



#### The problem analysis triangle

Problem analysis triangles, as shown in <u>Figure 1</u>, can help structure the analysis of your local knife crime problem.

The inner triangle refers to three conditions that must occur for a knife crime to take place:

- the presence of an equipped offender (someone in possession of a knife)
- who is at the same time in contact with an accessible victim.
- in a location where there is no adequate guardianship

The middle triangle refers to those in a position to prevent knife crime, by:

- 'guarding' those who are potential victims of knife crime
- inhibiting ('handling') the person(s) engaging in knife crime
- overseeing ('managing') locations in ways that reduce the opportunities for knife crimes to occur

The outermost triangle relates to so-called 'super controllers', who are those able to apply levers to relevant handlers, guardians or place managers, to persuade them to act in ways that will lessen or eliminate a particular knife crime problem<sup>36</sup>. For example, a nightclub chain may introduce a policy mandating club (place) managers to check for weapons on entry. Or, regulation might be put in place to clamp down on the sale of combat knives, thereby reducing the likelihood that motivated offenders can gain access to certain knife types.

<sup>36</sup> Sampson, Eck and Dunham (2010).

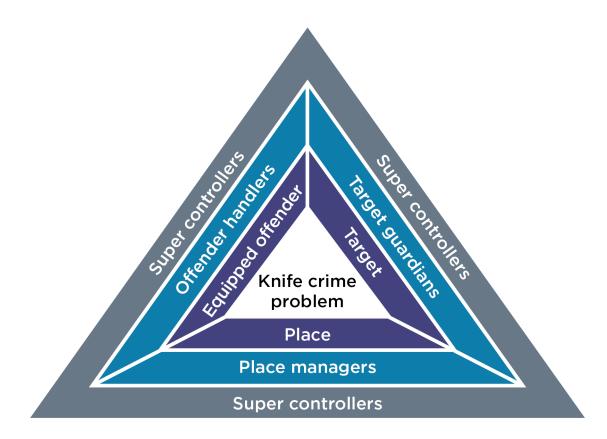


Figure 1: The problem analysis triangle.

The problem analysis triangle provides you with a framework to begin to break down your identified knife crime problem to work out which elements are most open to intervention. For example, how might the locations where knife crimes are concentrated be made less conducive to violent offending? How might the potential targets of knife crime be better protected to make them less vulnerable? And how might those behaving in undesirable ways be handled, diverted, deterred or removed from situations where knife crime is most likely?

The problem analysis triangle also highlights that offences need more than just offenders, which means that it's possible to reduce knife crime even when influencing offenders is difficult or impractical. For example, just as offenders can be discouraged from carrying knives by personal appeals from their loved ones (the offender 'handlers' in the problem analysis triangle), it's also possible to prevent knife crime by improving the management of

places at which knife crimes are most likely to happen, or to prevent injury by better protecting those most likely to be victims. It's often recognised that you can't arrest your way out of many crime problems – the problem analysis triangle is a tool to help identify alternative ways to prevent crime.

#### **Crime scripts**

All crimes have a beginning, middle and end, with offenders making separate decisions at different stages in the crime commission process. This is clearly true of knife crime - for example, knives have to be acquired, stored, transported, used and potentially discarded.

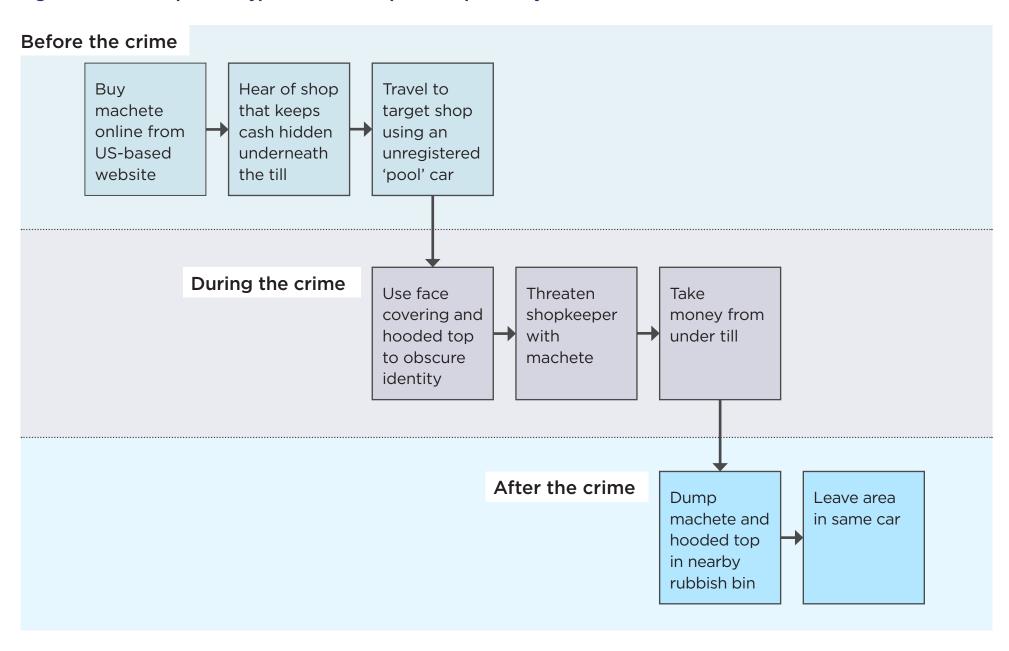
A crime script refers to the stages needed for an offence to be committed. Scripts can be useful when problem solving to help break down problems into the sequence of actions adopted prior to, during and following an offence. Constructing scripts can help identify a fuller range of preventive pinch points at which you might direct your problem solving responses.

There is no set method for devising a crime script<sup>37</sup>. Police data, investigation files, and interviews with offenders and victims can all help piece together information to create a script that reflects your local circumstances. Other data sources of the sort described in the **Scanning** section might also shed light on the crime commission process.

A crime script for offences involving knives is shown below, which includes both offenders and victims. While this script is deliberately simple, it illustrates what a script looks like and how detailing the steps required for knife crime commission might suggest promising means of intervention. In examining each stage, the key question is whether there is any scope to disrupt the script in ways that will prevent the crime.

37 Borrion (2013).

Figure 2: Crime script for a hypothetical knife-point shop robbery.



Preventive possibilities that emerge from the script above might focus on:

- supply chains for machetes
- cash handling by shops
- use of automatic number plate recognition software to track suspicious vehicle movement (and publicity for it)
- shops indicating that they only admit customers whose faces can be seen (with CCTV use in shops)
- installation of protective screens for shop staff
- searching for and conducting forensic examination of recovered knives following a reported incident (again with publicity)

## Asking the right questions about your local knife crime problem

In the **Scanning** section, we described data and intelligence sources that might be drawn on when trying to define and quantify your local knife crime problem. Those same datasets also provide an important source of information when trying to work out what is causing your identified problem to persist (**Analysis**), supported by tools such as the problem analysis triangle and crime scripts. But data is only as good as the questions you ask of it. Good problem analysis requires that you ask the right questions of relevant data, which allow you to better understand what is driving your local knife crime problem and what can be done to try to address it.

Analysis is not just for analysts. While statistical data of the sort described in the **Scanning** section is important for determining what is producing your problem, it is seldom sufficient. Good problem analysis also often involves visiting the locations where your selected problem concentrates, speaking to affected parties, and consulting investigators who have a good idea of what is allowing your selected problem to continue. Likewise, neighbourhood policing teams, the community and the voluntary sector can all provide valuable context that adds nuance to your analysis.

In the section that follows, we list some questions to ask when analysing your local knife crime problem, organised according to the VOLTAGE analysis framework<sup>38</sup>. Not all of these questions will be relevant to your own local knife crime problem. Likewise, some specific knife crime problems may call for different analysis questions to be answered.

#### **Victims**

- Does your identified knife crime problem concentrate on certain victims? If so, who are they and why does it concentrate on them?
- Were the victims known to the police before their involvement in knife crime? If so, why?
- Are there repeat knife crime victims for your identified knife crime problem? Why are they repeatedly the victims of knife crime?
- Do repeat knife crime victims differ from one-time knife crime victims? If so, how, and is it relevant to how you might respond?
- Did the victim carry a knife? If so, where did they get the knife from and why were they carrying it?
- What are the circumstances surrounding knife crime victimisation in your local area? Is it related to gangs, drugs, organised crime, the night-time economy, alcohol or some combination thereof?
- Are victims typically attending hospital for knife wound treatment?

#### **Offenders**

- What do you know about the individuals perpetrating your selected knife crime problem (for example, age, residential area, occupation or school, common activities)?
- Are the offenders new to your area or are they residents in another part of the force or country?
- Were offenders known to the police before their involvement in knife crime? If so, why?

38 Ratcliffe (2018).

- What proportion of offenders have a history of violence (knife-enabled or otherwise)?
- How much of your local knife crime problem can be attributed to a few repeat offenders?
- Where are offenders acquiring the knives used in your identified problem?
- Why are they carrying a knife?
- Do offenders know their victims? If so, what are the relationships between the offender(s) and victim(s)? Does this pairing of victim and offender appear in previous police records?

#### Locations

- Does your identified knife crime problem concentrate at particular locations? If so, what is it about those locations that is conducive to knife crime?
- Do other crimes also occur at these locations? If so, what types of crimes or other police and non-police demand calls?
- Are the knife crime incidents happening near to a place where weapons can be stored and/or discarded such as parks or waste grounds?
- What is the history of violence in the places your knife crime problem is occurring?

# Box 4: Analysing knife crime offenders: a case study

In Essex, a problem analysis of non-domestic knife use was developed using the VOLTAGE framework. Analysis found that offenders were overwhelmingly young males between the ages of 15-24 and resident within Essex (as opposed to, for example, visitors from London involved in 'county lines' crime). Repeated use of knives by offenders was unusual, which presented challenges for focusing on repeat knife offending. However, a significant proportion of those who went on to use a knife had been involved in previous violent crimes without the use of weapons.

Analysis of their prior known offending history, intelligence categories and warning markers found that more than half had participated in illicit drugs markets (more frequently as end users rather than dealers, and this is how victims and perpetrators were often known to one another), and they were three times more likely than non-weaponusing offenders to have carried out their crimes with co-offenders. Different profiles, relationships between actors and characteristics of knife-use offences were identified, with underlying cross-cutting themes of residing in areas of socio-economic disadvantage and misuse of illegal substances. Through this approach, Essex Police sought to develop more focused and targeted interventions directed at individuals considered most likely to commit knife crime.

# Box 5: Examining the links between knife crime victims and offenders

Who are the victims and perpetrators of knife crime? Are they different groups? And how much of the violence can be attributed to conflict and retaliation between gangs and/or organised crime groups? Laura Bailey and colleagues addressed these questions using four years of knife crime data from Thames Valley Police, comprising over 14,000 individuals and 10,000 crimes<sup>39</sup>. They found that victims and offenders had similar demographic characteristics, as well as similar offending and victimisation histories. Three-quarters of offenders and four in ten victims had a prior criminal record, while around one in five offenders and one in ten victims were affiliated with a gang or organised crime group. Around 9% of knife crime victims were knife crime offenders, and around 8% of offenders had a history of knife-related victimisation. Using a technique called social network analysis, they concluded that the people involved in knife crime are not closely connected but, instead, the network is better described as a collection of one-off violent incidents. While there were examples of violence affiliated with gangs and organised crime groups, acts of retaliatory violence in their dataset were relatively rare.

#### **Times**

- When does your identified knife crime problem mainly occur (time of day, day of the week, month of the year)? What is it about the identified peak times which might account for a higher frequency of knife crime?
- How does the temporal profile of your identified knife crime problem compare to other forms of knife crime and violence more generally? What might account for any observed variation?

<sup>39</sup> Bailey, Harinam and Ariel (2020).

#### **Attractors**

Are the places where knife crime is concentrating examples of crime generators - busy places that create opportunities for crime, such as transport hubs - or crime attractors - less busy places that draw in people who are motivated to commit crime, such as a location where illicit drugs are sold?

# **Groups**

- Are knife crime victims and/or offenders members of a gang?
- Are knife crime victims and/or offenders members of an organised crime group?
- Are knife crime victims and/or offenders associated with a particular school or sports team or other social group?

### **Enhancers**

- What types of knives are typically used in your selected knife crime problem? Do these differ from the knives used in other forms of knife crime? If so, why?
- Where are these knives sourced?
- How frequent is the weapon carrying required to commit the offence(s) - was it constant or regular, or was it just for the purposes of committing the crime?
- Is there an illicit market in knives in your area? Who are the suppliers and how do they market, take and fulfil orders?
- Are there other factors to consider that may be part of the problem, such as the presence and use of alcohol or substance misuse, mental health issues and so on?
- Are there neighbourhood factors that may elevate the risk of knife crime, such as high prevalence of violence, fear or distrust of the police?

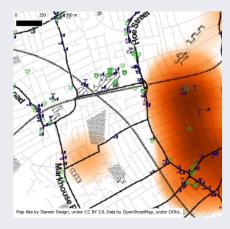
# Box 6: Analysing knife crime places and times

Analysis of places can reveal important differences in specific hotspots and hot times. To illustrate, consider the two crime maps below. They demonstrate the different spatial patterns observed in the distribution of knife-enabled robbery (left panel) and knife-enabled wounding (right panel) for a small area of London. This is an example of scanning. For knife-enabled robbery (left panel), offences were clustered within a gentrifying area populated by expensive restaurants and bars. The reason that robbery clustered where it did (analysis) was because of the regular throughput of professionals in this area making their way home from the nearby busy transport interchange. These individuals provided readily available targets for equipped offenders seeking items that could be easily exchanged for cash or services, including drugs, in nearby areas outside of the hotspot.

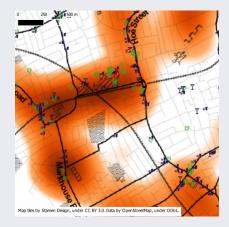
For the knife wounding hotspot (right panel), the spatial clustering is very different. These forms of knife crime were found to cluster around local convenience stores, cash machines and fast-food premises. Public concern and police reports had highlighted problems in this area with the drug trade and youths congregating around these late-opening venues, with potential for market participants to be carrying weapons when exchanging drugs.

These two examples show the importance of focusing on specific types of knife crime when problem solving, as described in the **Scanning** section. Focusing on the broad category of knife crime conceals important variation and limits our ability to tailor and target responses.

#### **Knife-enabled robbery**



#### **Knife-enabled wounding**



# Box 7: Analysing knives: the four 'A's of knife selection

It is trite but nonetheless true that knife crimes require knives. One important step in problem analysis is to understand the types of knives that are used in violence in your local area and to draw conclusions about why some weapons are used (or not) and in what types of knife crime. Understanding these patterns can help frame your choice of response. For example, if kitchen knives account for much of the violence in your area, then tackling the availability of knives through knife amnesties or weapons sweeps may not be a productive response. Alternatively, if rare and more specialised knives are being used, then tackling their availability may be effective.

When analysing the types of knives being used in your local area, consider the four 'A's.

- Availability how prevalent are different knife types in the community?
- Attractiveness what features of a knife make it attractive to users?
- Affordability how much resource does it take to acquire a particular knife type and what are the associated costs in doing so?
- Accessibility what restrictions are in place to prevent access to knives and how effective are they?

# **Availability**

Unlike firearms, knives are in most homes, are in many workplaces and can be legally purchased online. Although legislation has banned some knife types and, in doing so, has reduced their availability, domestic kitchen knives and craft knives are ubiquitous. But availability alone cannot explain the observed patterns in the types of knives that are carried or those used in violence. Knife use for criminal purposes is also affected by attractiveness, affordability and accessibility, which if altered may increase or decrease the likelihood that someone might use or carry a particular knife.

#### **Attractiveness**

Although knives have high availability, many have features that mean they are not well-suited for use in violence. These features may be practical, such as having too small a blade to cause damage or lacking a guard that protects the user from accidental injury. Features that make a particular type of knife attractive can also be aesthetic: more menacing-looking and less available knives often have higher status or are more effective in threatening people, while more readily available knives and less dangerous knives have lower status. Consequently, it is not inevitable that someone will carry a kitchen knife just because a more attractive weapon is less accessible

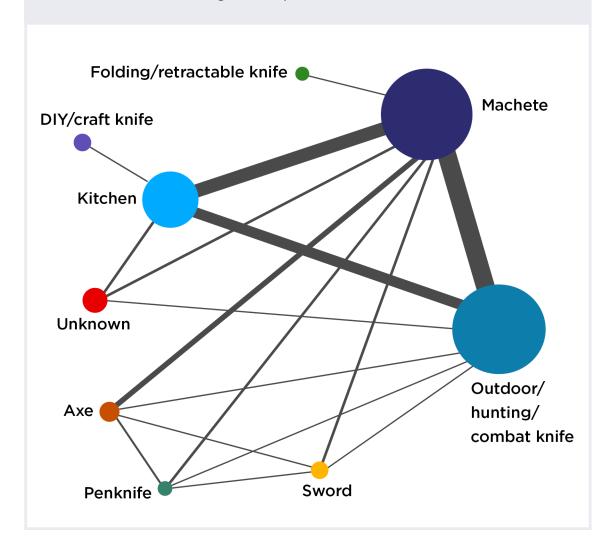
# **Affordability**

Acquiring different types of knives have different costs, and these costs are both financial and (potentially) punitive. At one end of the spectrum, a kitchen knife in a person's home has high affordability but there are consequences of being found in possession of one outside the home. At the other end of the spectrum is an illegal or rare knife, such as a 'zombie knife', that is more expensive and has higher punitive costs. It is therefore important to balance attractiveness and availability with affordability. An implication for problem solving is that an expensive weapon with low affordability, such as a zombie knife, is less likely to be discarded in a park or a knife bin. When their availability and attractiveness is high, an illicit market or loan system for these knives may also emerge.

# **Accessibility**

Although a particular knife type may be readily available in shops or from online retailers, there are often restrictions in place to limit how easy it is for a person to access them. In shops, this might be security restrictions to prevent the knife being stolen, policies around age restrictions or keeping knives behind a counter. In online retail, the Offensive Weapons Act 2019 has extended these restrictions to doorstep deliveries. Outside of retail accessibility, situational interventions like knife arches can significantly reduce the accessibility of a knife to certain premises.

In producing this guidance document, we examined the types of knives used in fatal violence in London in 2019/20. Informed by the four A's framework (attractiveness, availability, affordability and accessibility), we found that the attractiveness of certain knives, such as machetes, appears to outweigh the difficulties of sourcing them (availability and accessibility) or the risks of being arrested in possession of them (affordability). In the image below, the size of each circle shows how often a particular type of knife featured in murder in London in 2019/20. The width of the line connecting the circles represents how frequently two types of weapons were used in the same incident, thereby indicating group violence. The image tells us that specialist knives are indeed a serious problem in London (at least over the period analysed) and that group violence tends to involve multiple specialist knives. Therefore, tackling the availability of these types of knives in an effort to reduce kniferelated violence is a logical response.





# **Analysis checklist**

Before moving on to the **Response** section, check that you have considered the following items.

- 1. Have you checked the specific locations where knife crimes have been committed?
- 2. Have you worked out what draws vulnerable victims and likely offenders to the locations where knife crimes are concentrated?
- 3. Have you worked out why offences tend to occur in specific locations at specific times?
- 4. Have you checked what led up to knife crimes being committed in the locations where they occur most often?
- 5. Have you worked out how knives are being obtained and why they are being carried in the local area?
- 6. Have you checked on how those using knives leave the scene of the crime and dispose of the weapons they used?
- 7. Have you worked out what aspects of the situation enabling or provoking the commission of knife crimes are most open to preventive intervention, thinking about victims, offenders, locations, times, attractors, groups and enablers? Do you know which pinch points are the most promising for intervention?

If the answer to any of these questions is 'no', then you may need to undertake further analysis or scanning before moving on to the next phase of SARA, response.

# Response

Following <u>Scanning</u> and <u>Analysis</u>, you should now have focused your attention on a specific type of knife crime problem. You should also have a better idea of the scale of your selected problem, how it is patterned and the factors contributing to it. You should also have identified one or more pinch points that you believe are open to intervention by the police and partners. Now is the time to decide how best to address those pinch points as part of your response.

Response is the stage of SARA that arguably comes easiest to police problem solvers. Most individuals join the police service to resolve persistent problems. They are action-oriented. Indeed, research shows that one of the main challenges in problem solving is avoiding the temptation to rush straight to response, without completing the scanning and analysis necessary to suitably frame a problem and select appropriate responses<sup>40</sup>.

Another challenge is how to respond. It goes without saying that there is no single cure for knife crime, and pursuit of such a cure is misguided. This is because, as indicated in the **Scanning** section, the term 'knife crime' in fact refers to a variety of different offence types involving different groups of individuals and likely requiring different responses. Similarly, problem solving is not prescriptive. It doesn't tell you what response will work for your specific knife crime problem. The specific details of the knife crime issue in your area are likely to be unique: times, places, victims and offenders vary. Key to effective problem solving is a commitment to select responses not on the basis of popularity or precedent but because they make sense, given what you have learned from your local scanning and analysis.

Two questions can help you in devising your response strategy:

- What has worked previously to reduce knife crime?
- Will a response work for me in addressing my local knife crime problem?

40 Bullock, Erol and Tilley (2006).

# What has worked previously to reduce knife crime?

Knowing an intervention's track record of successful or unsuccessful use is clearly important. Indeed, when embarking on any problemsolving project, it is useful to find out what has been tried previously to address similar problems, and to what effect. Similarly, it is important to critically assess what has been done locally to address the problem, and ask why the problem remains.

But knowledge of an intervention's track record takes us only so far. The challenge of crime prevention is that responses seldom work everywhere and every time. What worked to reduce knife crime in Liverpool may not work to reduce knife crime in London. The problem may differ (eg, gang-related or robbery), the location may differ (eg, city centre or housing estate), the perpetrators and victims may differ (eg, similar or different demographics), and so on.

# Will a response work for me in addressing my local knife crime problem?

The inconvenient truth of crime prevention is that you can never answer this question with a definitive 'yes'. Crime is too complex to state with absolute confidence that a given response will work in every place and every time. Context matters. What you can do is gauge the plausibility of your selected responses and assess whether they make sense, based on what is known about your local problem. Because we cannot be sure that a given intervention will work, evaluation is therefore important. We return to this in the **Assessment** part of this guide.

# Common responses to knife crime

Listed below are eight common responses to tackle knife crime, as identified from previous research and through consultation with police forces and Violence Reduction Units. These responses fall into two broad categories.

- Reducing the incidence of crimes involving knives:
  - school-based knife crime interventions
  - police stop and search
  - focused deterrence
  - import enforcement
- Reducing the likelihood that individuals will carry and/or use knives:
  - knife sweeps
  - knife bins
  - knife arches
  - knife crime interventions based on 'teachable' or 'reachable' moments

In this section of the guide and for each of the eight responses listed above, we summarise what is known from the research evidence organised around the EMMIE evaluation framework (explained in **Box 8**). We present a logic model (explained in **Box 9**) outlining how each response is expected to work, as well as the 'outputs' and 'outcomes' (an important distinction, which is explained in **Box 10**) that we might see if the response is working.

We also present potential negative side effects, which are highly important in the context of knife crime. Evidence shows that crime prevention activities can sometimes backfire and make matters worse<sup>41</sup>. This may occur because of the content of an intervention (ie, what people are asked to do) or because of the way in which it is delivered. In relation to the latter, much research shows that police

<sup>41</sup> Welsh and Rocque (2014); Braga (2016).

interventions that are experienced as 'procedurally fair' (ie, respectful, inclusive, neutral and unbiased) tend to be viewed by the public as more legitimate, are more likely to garner greater cooperation and are therefore more likely to generate the desired crime-reduction goals<sup>42</sup>. Many of the knife crime responses presented here require community support and involvement. The potential for unintended community harm is therefore ever-present. Being open to, and mindful of, the possibility of unwanted side effects is important when problem solving. This will allow you to identify the early signs of possible backfire effects and, where necessary, take corrective action.

Before proceeding, some qualifications are needed. First, although the responses included here are presented separately, efforts to reduce knife crime often involve a combination of different responses, sometimes implemented sequentially (such as enforcement efforts targeted at prolific offenders followed by community-oriented interventions).

Second, the menu of responses presented here is not an exhaustive list of all the tactics that might be deployed to tackle knife crime. Responses discussed here are those that were most frequently identified by interviewees and focus group participants consulted as part of this research. You may find other relevant interventions at the College of Policing's online **Crime Reduction Toolkit**.

Third, the responses and logic models presented here are meant to inform, not dictate, how you deal with your local knife crime problem. Not all responses will be suitable for all circumstances. Nor should you limit yourself to approaches that have been tried before. Problem solving is a creative endeavour – innovation is encouraged.

Fourth, despite the scale and harms of knife crime, the evidence base for knife crime reduction is underdeveloped. Robust evaluations of the impact of common knife crime interventions are sparse<sup>43</sup>.

<sup>42</sup> Bolger and Walters (2019).

<sup>43</sup> McNeill and Wheller (2019).

### Box 8: What is EMMIE?

The acronym EMMIE describes the kinds of research evidence that can support police and crime reduction decision-making<sup>44</sup>. It provides the framework of the College of Policing's **Crime Reduction Toolkit**. EMMIE stands for:

- **Effects** What is known about the impact of an intervention?
- Mechanism What is known about how an intervention produces its effects?
- **Moderators** What is known about the conditions in which an intervention works best?
- Implementation What is known about how to successfully implement an intervention?
- **Economics** What is known about the costs and cost effectiveness of an intervention?

It is argued that these five broad categories of evidence can inform and improve police decision-making. Likewise, decisions made in the absence of these forms of evidence are liable to produce undesirable outcomes or the ineffective or inefficient use of resources.

<sup>44</sup> Johnson, Tilley and Bowers (2015).

# Box 9: What is a logic model and how do I use one?

A logic model depicts how a crime prevention scheme is intended to work. It is like a roadmap that indicates how the input and activities of a given initiative might produce the desired outputs and outcomes (in other words, how what you do might get you to where you want to be). Logic models, like any decent roadmap, should also indicate places where things might go off-course, and signpost the unintended negative outcomes that might plausibly arise following the implementation of a given crime-prevention programme.

In problem solving, logic models serve several important functions. They can help you to:

- think critically as to whether a response might work in your local context
- communicate with partners about what needs to happen as part of a response plan
- challenge assumptions that what is being done is guaranteed to be effective
- identify what can be done to maximise the likelihood of achieving the desired outcomes while minimising the chances of generating unwanted negative outcomes
- monitor the progress and impact of your response

The logic models presented in this guide comprise five columns. Taken together, these five columns depict a causal sequence running from left to right. These five columns refer to:

- resources and inputs describing who and what is needed to implement and sustain a response
- activities describing the various actions that need to occur as part of a response
- outputs describing what you have delivered as part of a response

- mechanisms describing how what you have done (or not done)
   might produce effects
- outcomes describing the effects observed when mechanisms are (de)activated by your activities and outcomes

Spanning these five columns is **context**, which describes those factors that may determine the extent to which your response is effective.

All logic models are simplifications. They cannot capture the complexity that is characteristic of most crime prevention projects. The logic models presented here are also generic. They are constructed based on what is known from the research literature and through interviews with those knowledgeable about knife crime prevention. They do not refer to a particular project in a particular time and place. The logic models presented here are therefore intended to act as general templates in need of revision and refinement to reflect the specifics of your own local context and identified problem. Working with partners and affected parties to make such corrections can help you think through whether a response you are considering makes sense in your circumstances.

# Box 10: Distinguishing outputs from outcomes, and why it matters

In crime prevention, it is important to distinguish outputs from outcomes. Outputs are a measure of activity. They tell us what has been delivered to have an impact on crime. In the context of knife crime, common outputs include the number of knives seized, the number of people arrested or the number of search warrants issued. Outcomes refer to the impact or effects of those activities. Major positive outcomes of interest include reductions in the number of knife offences and reductions in the harms caused by knife offences.

Distinguishing outputs from outcomes matters. It matters because outputs do not accurately convey the impact of an intervention. Positive outputs do not always lead to positive outcomes. Consider knife seizures. The police seizing 100 knives is patently a good thing. This means that 100 knives that are no longer on the streets or available to cause harm. But the seizure of 100 knives alone may not lead to discernible reductions in the overall levels of knife crime. It may not do so for several reasons. Perhaps the knives that were seized are not those liable to be used in knife crime. Or perhaps the 100 knives constitute such a small proportion of the total pool of available knives that is does little to diminish the overall knife problem.

Positive outputs are important, but problem solving carries a commitment to being outcome-focused. It asks that all outputs be considered through a single lens. Has it helped to resolve the persistent problem that causes harm in the community?

# School-based interventions

### What is the focus of the intervention?

There is a wide array of schools policing programmes, including primary interventions (such as education and awareness-raising) and secondary interventions (such as the identification and referral of pupils deemed to be at risk of involvement in knife crime, intelligence gathering and situational prevention of knife crime in, and around, schools). Note that 'primary' and 'secondary' refer here to types of intervention, rather than school types.

#### Effect - Has it been shown to work?

Evidence on the impact of schools policing programmes is mixed and sparse<sup>45</sup>. Some studies have shown that locating police officers in schools on a full- or part-time basis is associated with positive outcomes, including reductions in truancy, reductions in involvement in crime, improvements in police-student relations and increases in students' feelings of safety. Other studies find no clear effect of the presence of police in schools on levels of crime.

Although school-based interventions on knife crime often report a large number of outputs, such as the number of children engaged, evidence on the effectiveness of primary-type interventions in reducing violence is lacking, in part because involvement of school-age children in knife crime is rare<sup>46</sup>.

Concerns have been raised about potential unintended negative consequences associated with greater police presence in schools, including the increased criminalisation of children ('net-widening'), stigmatising of children and areas receiving police in schools and breeding hostility between students, parents and the police.

<sup>45</sup> Posch and Jackson (2021); Raymond (2010).

<sup>46</sup> Ramshaw, Charleton and Dawson (2018).

#### Mechanism - How does it work?

Schools policing programmes can target knife crime through primary interventions that are relatively untargeted, such as:

- raising students' awareness about the risks and consequences of routine knife carrying
- developing students' abilities to resist pressure to carry knives
- challenging, and ideally changing, (perceived) social norms about knife carrying and knife crime
- building stronger bonds with, and trust between, the police and students

More targeted secondary and tertiary interventions are also available tactics, such as:

- referring children found to be at risk of knife crime to allied services and support options
- the gathering of intelligence relevant to knife crime

In addition, the presence of police may also reduce incidents of knife crime within the school itself, through increasing the perceived risks associated with being caught carrying a knife.

#### Moderator - In what contexts does it work best?

Schools policing programmes are likely to be more effective when:

- carried out in collaboration with the affected schools and partners
- targeted at pupils liable to carry knives
- delivered in a manner that is perceived to be (and experienced as) just, appropriate and respectful, in accordance with the principles of procedural justice

There are also ethical concerns about what (level of) intervention is appropriate in educational settings. It is therefore essential that school-based policing activities are appropriate for the age of the child or

group. Useful guidance can be found in 'Police in the classroom: A handbook for police and PSHE teachers'47.

# Implementation - What is known about implementing the intervention?

Noted barriers to successful implementation include inadequate contact between police officers and school children, bottlenecks in referrals to allied services, minimal buy-in from school children and challenges in retaining staff to consistently deliver school-based interventions over the long term (as opposed to one-off bursts of activity).

# Economics - What is known about the costs and returns of the intervention?

Both schools and police services clearly incur costs in developing local material and delivering school-based interventions focused specifically on knife crime, which need to be warranted in light of other diverse demands on both school and police resources.

# General considerations

It is unlikely that primary interventions like school-based information sessions on knife crime are harmful and their cost is low. However, the rare nature of knife carrying and involvement in serious violence means that, for a large proportion of young people, lessons around knife crime may not be directly relevant. With regard to secondary and tertiary interventions that target specific groups within a school, it is essential that age factors and the ethical appropriateness of these activities are considered. There is the potential for backfire effects, such as damaging trust in the police and stigmatisation of young people.

<sup>47</sup> PSHE Association and NPCC (2019).

## **School-based intervention programmes**

# Inputs/resources

Police

School leaders and teachers Parents and guardians

Local authority

## **Activities**

Identify schools to receive the intervention Inform parents, staff and pupils why the school has been selected and the purpose of the intervention Identify pupils in targeted school to receive (and provide rationale for) the intervention Inform selection pupils of risks of knife carrying

#### **Outputs**

Increased students' feelings of safety
Positive interactions between police and young people at risk of involvement in knife crime
Referrals of at-risk children to relevant support services
The gathering of credible and actionable intelligence

## Potential mechanisms

#### Intended

Increased awareness of the risks and consequences of knife carrying

Targeted children better able to say no to knife carrying

Denormalising knife carrying

At-risk children identified and support provided

#### Unintended

Stigmatisation of affected schools and pupils Criminalisation of affected school pupils Increases fear of knife crime

Normalises knife carrying

### **Potential outcomes**

#### Intended

Reductions in knife carrying among youths receiving the intervention

Diffusion of benefits to children in school not receiving the intervention

Reductions in knife crime involving affected youths
Reductions in (knife) crime in the school setting
Improved perception/trust in police among students, staff and community

#### Unintended

Increases knife carrying among affected pupils

Increases mistrust and hostility towards the police

#### Context

- Rationale for police presence in schools made clear to affected staff, students and parents/guardians
- School involved in the design and delivery of the specific intervention
- Intervention delivered in a manner that is fair, just and equitable, in accordance with the principles of procedural justice
- ❷ Where relevant support services can be referred to for those children judged to be at risk of involvement in knife crime
- Where 'mission creep' can be minimised to avoid perceptions of criminalising young people

# Stop and search

### What is the focus of the intervention?

Stop and search is a collection of legal powers, derived from <a href="mailto:section">section</a>

23 of the Misuse of Drugs Act 1971 and <a href="mailto:section">section 1 of the Police and</a>

Criminal Evidence Act 1984, which allow police officers to search people whom they have grounds to reasonably suspect to be in possession of prohibited items (such as weapons or drugs) or stolen goods. <a href="mailto:section">Section 60 of the Criminal Justice and Public Order Act 1994</a>
allows searches to be carried out without suspicion in a defined area for a fixed period of time (usually 24 hours) when authorised by an officer of rank inspector or above.

#### Effect - Has it been shown to work?

Evidence on the effectiveness of police stop and search to prevent crime is modest. A study conducted by the College of Policing indicated that changes in the rate of police stop and searches in London were not associated with any discernible changes in crime<sup>48</sup>. Evidence regarding the use of stop and search as part of 'hotspot' policing or as part of an everyday level of police activities strategies is more favourable. However, the precise role that stop and search plays within hotspot policing is less clear<sup>49</sup>.

Concerns have also been raised about ethnic disproportionality in police use of stop and search. Where the use of stop and search is perceived to be unfair or disrespectful, it can have damaging consequences. These may include lower levels of trust in the police, reduced legitimacy of the police, people being less willing to cooperate with the police and even people being more willing to break the law<sup>50</sup>.

<sup>48</sup> Quinton P, Tiratelli and Bradford (2017).

<sup>49</sup> Braga, Papachristos and Hureau (2012); Ratcliffe and others (2011); Weisburd and others (2015); Del Toro and others (2019).

<sup>50</sup> Del Toro and others (2019).

#### Mechanism - How does it work?

The legal purpose of most stop and search powers are to support a police officer, where they have reasonable grounds, by enabling them to search for prohibited articles. By extension, this enhanced potential to detect crime may have a deterrent effect that is expected to reduce (knife) crime in the local vicinity. Use of stop and search may increase the risk, perceived or actual, that those in possession of or using a knife will be apprehended. This deterrence effect may operate at two levels:

- knowledge that the police have the power to perform stop and searches may deter those liable to carry knives (general deterrence)
- experience of being stopped and searched may make an individual perceive knife possession as being too risky and they may therefore no longer carry a knife (specific deterrence)

The recovery of knives seized through stop and search may also reduce knife crime through decreasing the stock and/or availability of knives for criminal purposes. Finally, intelligence generated through stop and search interactions may assist crime reduction.

#### Moderator - In what contexts does it work best?

It is likely that stop and search works best in investigating and deterring crime when it is deployed cautiously and sensitively through the use of supporting intelligence and when accompanied by other interventions. The potential backfire effects of stop and search are likely to be reduced when:

- there is a genuine and objectively reasonable suspicion that a person is in possession of a prohibited article or item for use in crime
- individuals are informed and understand why they have been stopped and searched, and are treated justly and respectfully
- affected communities understand why stop and search is being used and are able to give feedback to the police about their perceptions and experiences

# Implementation - What is known about implementing the intervention?

It is important that the targeting of places and persons – as well as its manner of use – is lawful, necessary, proportionate, and procedurally and distributively fair. This is the case in the interests of maximising effectiveness, maintaining public confidence and police legitimacy, and maintaining adherence to the key principles of British policing. Because of controversies over its use and concerns about the potential negative effects of stop and search, community consultation should be considered where possible in advance of its use in knife crime hotspots. Where this is not possible, an explanation should be provided once it has been initiated<sup>51</sup>. Those involved in stop and search should be mindful of the principles of procedural justice and the potential for negative consequences if misused.

# Economics - What is known about the costs and returns of the intervention?

Stop and search may be resource-intensive and hence expensive<sup>52</sup>. When used more frequently without strong justification and supporting intelligence, it is likely to yield diminishing returns. Stop and search needs to be used with caution, as the impact on community relations can be high.

<sup>51</sup> College of Policing (2015).

<sup>52</sup> Quinton, Tiratelli and Bradford (2017).

### **Stop and search**

# Inputs/resources

Police analysts
to identify those
areas where
police stop and
search should take
place, drawing on
relevant data and
intelligence
Police officers
to implement a
stop and search
programme
and deal with
any offences
discovered

## **Activities**

Stop and search in targeted high crime rate areas
Stop and search in response to incidents or intelligence
Publicising the items acquired and arrests made as a result of stop and search

#### **Outputs**

Increased number of stop and searches Increased number of knives/weapons recovered Increased number of arrests for weapons and related offences Increased generation of intelligence about carrying weapons Increased recovery of drugs and other prohibited articles Increased arrests for drugs and other prohibited articles Increased intelligence about crime and offending

### Potential mechanisms

#### Intended

Increased risk of carrying knives deters people from doing so Reduced availability of

Reduced availability of knives for crime

### **Potential outcomes**

#### Intended

Reductions in knife crime in targeted areas

Reductions in hospital admissions for assault with a sharp object

Reductions in deaths from wounds inflicted in knife crime

Drop in other crimes in targeted areas

Diffusion of benefits to nearby areas not receiving stop and search

#### Unintended

Offender adaptation
Reduced trust in the police among those stopped
Reduced community trust in the police
Reduced police legitimacy
Negative media interest

#### Unintended

Reduced cooperation between the police and members of the public

Higher rates of recorded crime Crime displacement to other areas Secreting rather than

Secreting rather than carrying knives

Increase in complaints from public

Switch to women/children carrying knives

### Context

- High levels of trust in and support for the police in affected area
- Stop and search is targeted based on high-quality intelligence
- Stop and search interactions are carried out in accordance with the principles of procedural justice

# **Focused deterrence**

### What is the focus of the intervention?

Focused deterrence interventions<sup>53</sup> – also known as 'pulling levers' approaches – focus on offenders and members of groups and gangs, in this case making use of knives in crime. Individuals and groups are called in collectively to meetings with the police. They are then informed that their identities are known and that if they persist in the specified criminal behaviours, the police have a wide range of enforcement options at their disposal. If knives continue to be used, enforcement action will be taken immediately and will apply to the individuals involved and the criminal peer groups to which they belong. Close family and community members are also called in to meetings with known offenders and offender groups to voice their concerns about and disapproval of knife crime. In this approach, other agencies are also drawn in to engage with individuals to offer alternative life choices providing routes out of violent, criminal lifestyles.

## Effect - Has it been shown to work?

There is evidence that focused deterrence strategies are associated with reductions in violence. However, this evidence comes overwhelmingly from studies undertaken in the US, which have focused on gun rather than knife crime<sup>54</sup>. This type of intervention was found to be at its most effective when the unit of intervention was a group as opposed to an individual. The positive effects of focused deterrence are also often found to extend beyond the targeted area or group, a phenomenon known as diffusion of crime control benefits.

An evaluation of a focused deterrence programme in Scotland found promising reductions in the number of weapon-related offences in an intervention group compared to a selected control group<sup>55</sup>. An evaluation of the US group violence initiative, Operation Ceasefire,

<sup>53</sup> Scott (2017).

<sup>54</sup> Braga and Kennedy (2021).

<sup>55</sup> Williams and others (2014).

in London in 2014-16 was inconclusive and suffered from severe implementation problems<sup>56</sup>.

## Mechanism - Has does it work?

Focused deterrence can reduce knife crime in several ways, through:

- deterrence, by increasing the perceived risks and reducing the perceived rewards of knife carrying and use
- focused informal social control (clear disapproval or shaming),
   applied by close kin and community leaders to those involved in knife crime
- informal social control applied within offending groups to avoid the broad-based enforcement attention that would follow if any group or gang member engaged in knife crime
- arrest of those individuals who persist in criminal behaviour
- the diversion away from knife crime, especially where gangs are involved, and towards alternative (non-violent and non-criminal) pathways

# Moderator - In what contexts does it work best?

Although focused deterrence can be used with individuals or drug markets, the impact of focused deterrence strategies is greatest when targeted at criminally active groups<sup>57</sup>. Focused deterrence can also only be applied where there is very strong intelligence on the individuals and groups involved in knife crime. This needs to be mapped carefully prior to the implementation of the intervention if it is to have good prospects of success. Strong support from the affected communities and a willingness to collectively say 'no' to violence is also vital. Finally, focused deterrence is both stick and carrot, offering either engagement or enforcement. The carrot relates to the offer of engagement with support services towards non-criminal pathways. It follows that the availability and speed with which support services can be mobilised is also an important determinant of success.

<sup>56</sup> Davies, Grossmith and Dawson (2016).

<sup>57</sup> Barthe (2006).

# Implementation - What is known about implementing the intervention?

The track record of implementation in the UK is mixed. Key elements of the intervention are sometimes omitted, meaning that the intervention is used selectively by those favouring only particular elements of it, instead of as a single coherent package. Focused deterrence requires skilled and informed implementation, as well as dedicated resources – for example, to fund diversionary opportunities. Crude and poorly targeted measures would likely backfire by producing community resentment and mistrust of the police.

# Economics - What is known about the costs and returns of the intervention?

Focused deterrence initiatives mainly require system changes leading to a focus on groups and individuals driving knife crime, rather than additional net resources, although effecting these changes may entail short-term costs as the changes are implemented. Where key components cannot be provided by refocusing existing services, there may also be some additional longer-term costs, but these will vary by area. Where lives are saved or serious injuries are prevented, monetary costs can be quickly outweighed by monetised benefits.

#### General considerations

To date, the majority of focused deterrence studies have taken place in the US. Applications in the UK have not always been successful, although this is likely due to poor implementation.

#### **Focused deterrence**

### Inputs/resources

Police including analysts Local authority Community groups and organisations Youth service providers Crown Prosecution Service Courts

## **Activities**

Detailed analysis of offending groups and their criminal activities Call-ins for known offenders, offending groups and families Focused communication of risks to likely offenders and offender groups if

Focused enforcement where warnings ignored

offending persists

Focused community disapproval of knife crime

Mobilisation of services for youth at risk of victimisation and offending

## **Outputs**

Meetings with targeted youth and their significant others (family community) Services for at

risk and offending individuals wanting to exit/avoid crime Publicity for rules and for consequences of breaching them for targeted individuals and groups

Arrests followed by speedy and vigorous prosecutions for those who persist in offending/ignore warnings

### Potential mechanisms

#### Intended

Informal social control over knife crime (family, peer group, etc) Sense of community acceptance of individuals but not behaviour Individual/group deterrence from knife crime Reduced criminal and increased

Reduced disposition to commmit knife crime

non-criminal opportunities

Denormalisation of knife carrying

#### **Potential outcomes**

#### Intended

Reduced use of knives in crime Reduced carriage of knives Reduced membership of knife-using gangs

#### Unintended

Offender adaptation Offender status enhancement Increased neighbourhood distrust Adverse labeling of targeted neighbourhoods Perception that response is 'soft'

Mistrust of police

#### Unintended

Changed offending patterns

Reduced cooperation with police

Neighbourhood decline

Reduced community intelligence

#### Context

Hospitals

- Strong partnership between different agencies and with the community, including good communications
- Good data and advanced analytic capacity
- Peer group offending
- Adequate community trust in police
- Community willingness to collectively stand-up to violence

# Import enforcement

## What is the focus of the intervention?

This intervention is a collaboration between the police service and Border Force. The Border Force identifies incoming packages suspected to be containing knives, with a particular concern for knives that are banned. They confiscate banned knives and destroy them. They pass on information about the destinations for knife packages intercepted to local police services. Local police services follow up the information with consignees, to issue warnings (for instance, about sales to underage customers) or take other enforcement action as relevant.

#### Effect - Has it been shown to work?

There are no published studies on the effectiveness of border force operations to reduce knife crime. The outcome effectiveness of this approach is therefore unclear. However, anecdotal evidence suggests that such operations are effective in stemming the supply of some illicit weapons. Moreover, police follow-ups with sources and intermediaries – for example, websites through which knives are sold – have apparently led to reductions in the ease with which knives liable to be used in crime can be acquired. It is not known whether thwarted offenders adapt by acquiring knives from different sources, or whether they simply give up efforts to acquire them.

#### Mechanism - How does it work?

Import enforcement operations can reduce knife crime in two main ways, through:

- making it more difficult to acquire knives for criminal use
- alerting suppliers to their civic responsibility or deterring them from the reputational risk they face if they are seen to facilitate the acquisition of knives for criminal purposes

Intercepted packages might also help identify individuals involved in the supply or usage of knives hitherto unknown to the police.

### Moderator - In what contexts does it work best?

Import enforcement operations are likely to be more effective where there are efficient (prompt and reliable) communication channels between Border Force and local police services, and where follow-up visits by local police services are speedy and locally sensitive. Efforts to change the practices of retailers found routinely to be supplying intercepted knives may require the support of senior officers and/or police and crime commissioners (or their equivalents).

# Implementation - What is known about implementing the intervention?

It can be difficult to distinguish suspicious and unsuspicious packages and/or destinations. Moreover, the number of consignments potentially containing knives can be large, making the process of feeding back to – and following up by – local police services unwieldy. This has led to more focused or targeted follow-ups.

# Economics - What is known about the costs and returns of the intervention?

There is a significant investment associated with both Border Force identifying packages and liaising with local police services, and from local police services and their partners (for example, Trading Standards) following up on the intelligence received.

#### General considerations

Border Force collaborations with police have the potential to lead police to the homes of people involved in a range of crimes. Alternatively, they may also reveal the addresses of vulnerable individuals who have been coerced into using their address for delivery of weapons, thus identifying exploited victims. Consideration should be given to this possibility when following up on import enforcement intelligence.

### **Border Force import enforcement**

#### Inputs/resources

Border Force
(BF) officers and
analysts
Royal Mail facilities
Police officers and
staff

### **Activities**

BF identifies

incomina consignments of knives BF informs police of consignee details Police selectively follow up investigations of consignee BF/police follow up with suppliers of interest where knives commonly used in crime are being imported (for example, internet sales platforms) Police visit those purchasing

#### **Outputs**

Warnings and prosecutions of consignee (who may illegally supply knives to minors) Communication with suppliers/supplier chains where knives commonly used in crime are imported Improved intelligence on final destination of imported knives commonly used in crime Identification of individuals involved in the purchase and/or distribution of knives domestically

Interceptions of illegally

imported weapons

### Potential mechanisms

#### Intended

Reduced availability of intercepted knives, most-harmful imported knives

Disruption in supply chain for knives used in crime

Disruption in supply chain for knives to underage users

Deterrence from illegal acquisition of knives for criminal use

### **Potential outcomes**

#### Intended

Reduction in knife crime incidents

Reduction in injury from knife crime incidents

#### Unintended

Adaptation by those in supply chain

Adaptation by those using knives for criminal purposes Increased scarcity value of banned high-status knives

#### Unintended

Changes in preferred platform for supply of dangerous knives

Greater use of equally dangerous but readily available knives

Interruption in supply of legitimate knives used for legitimate purposes

#### Context

- Identifiability of packages containing knives at borders
- Clear communications channels between BF and police service

intercepted knives

- Availability of levers for application to those in the supply chain of illegal knives and of those commonly used in crime
- ☑ Identifiability of local destination of dangerous knives

# Box 11: Communications and publicity for knife crime prevention

A common theme among the knife crime responses described here is the use of communications. There is a large body of evidence relating to the use of communications in crime prevention<sup>58</sup>.

In the context of knife crime, communications may be planned as part of a deliberate strategy. For example, communications form a core part of focused deterrence, where they have been used to:

- alert those carrying weapons to the consequences of doing so
- mobilise key local community members to exert informal social control over young people who are liable to carry and use weapons

These are examples of targeted communications used with specific purposes in mind. Communications can also be used strategically. For example, there is evidence to show that targeted publicity describing police activities to be undertaken in circumscribed areas can produce reductions in crime before those police activities take place. These are so-called anticipatory benefits in crime prevention<sup>59</sup>.

However, communications might also produce unwanted negative consequences. For example, publicising knife crime problems in a local area may increase fear of victimisation. This could lead potential victims to carry weapons for self-defence. It could also cause sections of the population to spend more time in their homes, thereby reducing the number of potential guardians in public places, and negatively affecting the health and wellbeing of affected individuals.

Communications are important because people act in terms of their perceptions. Publicity can try to shape those perceptions. However, perceptions will also be influenced by the messages that police and partners convey through the way they treat people. For example, some stop-and search-practices risk being perceived by

<sup>58</sup> Barthe (2006).

<sup>59</sup> Smith, Clarke and Pease (2002).

those stopped and searched as being discriminatory and unjust, thereby potentially jeopardising future co-operation with the police. Moreover, those perceptions may not be limited to the person stopped. They may extend to their peer groups, families and wider community networks within which the individual is embedded, again jeopardising future co-operation. It is important to recognise that different sub-populations may respond to the same communication in different ways.

All strategies will inevitably involve communications with offenders, victims and community members in the places where knife crime problems are being addressed. Your response will need to include a communications element oriented towards helping achieve preventive purposes while avoiding negative side effects. This is an area in which public health practitioners have substantial expertise and your local public health team may be able to support you in designing an effective communication strategy.

# Box 12: Partners in knife crime prevention, and how to mobilise them

The police are not the only agency with a part to play in tackling knife crime. In problem solving, the process of the police apportioning responsibility for responding to an identified problem is sometimes referred to as 'shifting and sharing responsibility'. It is a process common to many problem-solving projects, particularly those aimed at thorny problems, such as knife crime. Listed below are some of the levers that might be available to persuade other people, groups and organisations (the 'guardians', 'handlers', 'place managers' and 'super controllers' in **Figure 1**) to act differently in a bid to reduce presenting problems<sup>60</sup>. These levers, summarised below in the context of knife crime, generally go from softer, quicker, cheaper and less coercive options to those that are typically harder, slower, more expensive and more coercive. In most instances, it is best to start at the top of the list and only move on to the harder methods if the easier options fail.

- 1. Work with local communities to better understand the local knife crime problem and its impact on them, and identify collaborative opportunities to address the problem.
- Provide partners with incentives to act as instructed by the police

   for example, by encouraging venues to advertise that they use
   knife arches as a condition of entry or requesting that retailers
   keep accurate records about knife sales.
- 3. Show others that their actions (or inactions) have created a problem and that they have a responsibility to take action to reduce it for example, with retailers whose branding of knives is designed to appeal to young persons.
- 4. Warn and, if necessary, make it publicly known that a person or organisation is refusing to act as requested - for example, by giving interviews to local media about the causes and consequences of a pressing problem.

60 Goldstein and Scott (2011).

- 5. Take enforcement action to persuade third parties to act for example, when businesses such as retail stores are found to be selling knives to minors.
- 6. Refuse automatically to provide police services unless action is taken for example, with venues where knife incidents are common but where security measures (such as checking patrons for weapons on entry) are lax or non-existent.
- 7. Lobby for changes in local or national laws to require that action be taken for example, by introducing import tax levies for those knives routinely used for criminal purposes.

### **Knife sweeps**

### What is the focus of the intervention?

Police searches of locations where knives are believed to have been discarded or hidden for later use. Knife sweeps are sometimes undertaken in collaboration with the community. The knives recovered during sweeps are often publicised through print and social media. Acquired weapons are then destroyed. Sweeps may be used in different ways – for example, as weeks of action in knife crime hotspots, or in response to specific intelligence.

### Effect - Has it been shown to work?

There is evidence to show that knife sweeps result in the identification of knives and can be positively received by the community (an output). There is limited evidence to show that knife sweeps are associated with reductions in knife crime and associated harms (outcomes).

Indirectly related to knife sweeps is evidence that clearing overgrown areas is associated with a reduction in firearm violence<sup>61</sup>. In this and similar studies, researchers have suggested that clearing these areas reduces the number of places that a gun can be hidden in a community, thus reducing firearm accessibility when the opportunity for violence arises and reducing opportunities for disposal once a weapon has been used. While this mechanism matches that of knife sweeps, an alternative explanation is that clearing overgrown areas are effective because they limit opportunity for criminal association or the act of clearing may increase natural surveillance in the area. Therefore, the success of clearing overgrown areas cannot confidently be generalised to knife sweeps.

<sup>61</sup> Branas and others (2018).

### Mechanism - How does it work?

Knife sweeps may reduce knife crime in three main ways:

- the accessibility of knives secreted in locations where they can be accessed for criminal purposes
- the stock or circulation of knives that can be used in crime
- the perceived need to carry knives for defensive purposes, if it is believed that others will be denied access to knives

Insofar as knife sweeps are effective, those effects may be extended if those liable to carry knives over- or under-estimate the operational range and timeframe of knife sweeps. Knife sweeps may also help with community engagement where visible action is taken against knife crime.

In terms of backfire effects, it is possible that advertised knife sweeps may give rise to offender adaptation, whereby offenders opt to use other weapons and/or knives are secreted in different locations and at different times not covered by the knife sweeps. It is also possible that publicising the types of knives found in a given area might increase fear of knife crime among some individuals, thereby increasing knife carrying for defensive purposes.

### Moderator - In what contexts does it work best?

Knife sweeps are likely to be more effective if reliable intelligence indicates that knives used for criminal purposes are secreted for future offensive or defensive use, and identifies the locations where such knives are likely to be hidden and/or discarded.

# Implementation - What is known about implementing the intervention?

Deficiencies in intelligence and/or analysis about where knives are routinely discarded may make the targeting of knife sweeps more imprecise. Limited availability of personnel to conduct sweeps will clearly restrict the impact of this intervention.

# Economics - What is known about the costs and returns of the intervention?

Knife sweeps are relatively low-cost. Much of the cost associated with knife sweeps relates to the analysis necessary to identify suitable locations and the deployment of police officers (and other partners and volunteers) who are searching for knives. However, as with all interventions, there are opportunity costs, whereby those resources devoted to knife sweeps could be put to alternative uses.

### General considerations

The knives seized during knife sweeps may not be representative of the types of knives used for criminal purposes in your area. To explore this, it may be helpful to compare the proportion of different knife types acquired through knife sweeps to the proportion of knives used in crime (as measured by police-recorded crime data) and seized via stop and search.

### **Knife sweeps**

#### **Activities** Potential mechanisms **Potential outcomes** Inputs/resources Outputs Police officers and Search for weapons Retrieval of knives Intended Intended Fewer local knifestaff secreted in public Reducing the availability and Destruction of knives or communal areas accessibility of secreted knives enabled crimes Volunteers Media attention (print, in high knife crime for criminal purposes Reduced fear of knife Communications broadcast, social) neighbourhoods Reduced perceived need to crime Community awareness Destroy knives carry knives for defensive Diffusion of benefits of knife crime seized through purposes beyond time and place prevention activities sweeps Misperceptions about where sweeps occur Publicise that knife operational range of sweeps in sweeps are taking terms of time and space place Positive community engagement Publicise the through being seen to take knife quantity and type of crime seriously Unintended knives recovered as Spatial displacement Unintended a result of the knife Temporal displacement Adaptation among those sweeps carrying and/or using knives Use of alternative weapons Knife sweeps and resulting weapon seizures increase fear of Increased public fear knife crime victimisation Increased weapon carrying

#### Context

- Knives/weapons secreted for future offensive or defensive use (perceived as too risky to carry because of stop and search and/or knife arches)
- Knives/weapons secreted after use (perceived as potential indicators of guilt following use to inflict injury)
- No knives secreted by likely offenders, but by those using them as fashion items (perceived as taboo by family members)

### **Knife bins**

### What is the focus of the intervention?

A purpose-built secure unit where knives and other sharp objects can be disposed of safely and anonymously.

### Effect - Has it been shown to work?

There is evidence to show that when knife bins are placed in a community, they are used (an output). However, it is unclear if the types of knives deposited in bins match the types of knives used in the commission of knife crimes. There is also limited evidence to show that the use of knife bins is associated with reductions in knife crime (outcomes).

Little rigorous evaluation of knife bins or knife amnesties has been undertaken. There is some evidence that knife-related offences decreased in the months following a national knife amnesty (the Tackling Knives Action Programme) in 2006, wherein 90,000 knives were collected over a six-week period<sup>62</sup>. However, the study design, which compared rates of knife violence in short periods before and after the knife amnesty, and which did not include a comparison area, limits the extent to which the observed decrease in knife crime can be attributed to the knife amnesty.

In related research, gun buyback schemes, which aim to reduce the number of available firearms in a community by exchanging firearms for money or gift tokens have been evaluated in Australia and the US. These interventions have been found to have little direct effect on firearm-related violence<sup>63</sup>. Furthermore, analysis of the types of guns surrendered through gun buyback schemes and amnesties found that they were not the types of guns commonly used in gun violence<sup>64</sup>.

<sup>62</sup> Metropolitan Police Service (2006).

<sup>63</sup> Makarios and Pratt (2012).

<sup>64</sup> Kuhn and others (2002).

### Mechanism - How does it work?

Knife bins may reduce knife crime in two main ways, by reducing:

- the stock or circulation of knives that can be used in crime
- the perceived need to carry knives for defensive purposes

Knife bins may also help with community engagement through being seen to take action against knife crime, particularly if paired with local media coverage and appeals to the public to share information pertaining to knife crime. While sometimes coordinated by police forces, bins may also be operated by community groups in ways that facilitate the anonymous disposal of knives.

There are several potential backfire effects associated with knife bins. The presence of knife bins may provide cover for individuals found carrying knives locally – for example, 'I was just taking my knife to put it in the knife bin'. It is possible that the placement of bins in certain neighbourhoods may increase the fear of knife crime and the perceived need among some individuals to carry knives for defensive purposes. Knife bins may also stigmatise neighbourhoods in which they are located as dangerous high-crime areas. Finally, knife bins may give rise to defiant acts – for example, through attempts to break into them, deposit needles or paint graffiti on them. These acts of defiance, if left unchecked, may undermine the police image in the affected neighbourhood.

### Moderator - In what contexts does it work best?

Knife bins are likely to be more effective if placed in locations where intelligence indicates that knife crime is more prevalent and where there is a reluctance or limited opportunity to dispose of knives safely and securely.

# Implementation - What is known about implementing the intervention?

The potential impact of knife bins may be undermined if the bin is damaged or defaced. A quick response to address these issues is important. There is anecdotal evidence about the difficulties experienced in mobilising third parties to routinely empty knife bins.

# Economics - What is known about the costs and returns of the intervention?

There is an initial outlay associated with the purchase of knife bins but once purchased, the bins are relatively low-maintenance and there are limited associated personnel costs.

### General considerations

There is noted variation across forces in where knife bins are located. Some opt for locations near police stations. Others elect to install bins in locations where knife crime activity is known to occur. Others opt for 'neutral' locations, such as churches.

Like knife sweeps, the knives deposited in knife bins may not be representative of the types of knives used for criminal purposes. This again can be explored by comparing the proportion of different knife types acquired through the deployment of knife bins to the proportion of knives used in crime (as measured by police-recorded crime data) and seized via stop and search.

#### **Knife bins**

### Inputs/resources

Police responsible for the placement and operation of the knife bins
Voluntary groups responsible for maintaining and emptying knife bins
Local authority or other organisations

affected by the

placement of

### **Activities**

Purchase/loan of knife bins
Installation of knife bins
Advertising the presence and purpose of knife bins
Routine emptying of knife bins and destruction of knives

### **Outputs**

Collection of knives surrendered via bins
Destruction of knives surrendered via bins
Media attention advertising the knives surrendered via bins
Community awareness of police action against knife crime and resulting weapon surrenders

### Potential mechanisms

#### Intended

Reduction in supply/
availability of knives for
harmful criminal use
Reduced perceived need to
carry knives for defensive
purposes
Positive community
engagement through being
seen to take knife crime
seriously

### **Potential outcomes**

#### Intended

Reduced use of knives in crime in target area Reduced carriage of knives in target area Reduced knife crime harms in target area Increased cooperation with police Increased community intelligence

### Context

knife bins

- Knife bin placed in locations where intelligence indicates the presence of knives used for criminal purposes
- There are limited opportunities to safely and anonymously dispose of knives in targeted area
- Those liable to use knives for criminal purposes are aware of the knife bin and the potential to dispose of knives securely and anonymously
- The knives surrendered are those likely to be used in crime
- Knife bin is located in area with sufficient guardianship (such as CCTV)

#### Unintended

Increased fear of knife crime among those liable to carry knives

Increased fear of knife crime in community where knife bins are installed

Increased negative perceptions of targeted neighbourhoods

Defiance, such as breaking into knife bin and/or adding graffiti to it

#### Unintended

intelligence

Knife possession
increases among
young people
Knife crime increases
Reduced cooperation
with police
Neighbourhood
decline as a result of
perceived high knife
crime area
Reduced community

### **Knife arches**

### What is the focus of the intervention?

A walk-through metal detector to identify the presence of knives and other metallic offensive weapons. Knife arches are often accompanied by both uniformed and plain-clothed police officers, in part to identify, engage with and, where grounds exist, search those individuals who actively avoid walking through the detector.

### Effect - Has it been shown to work?

There is evidence to show that knife arches result in the arrest of individuals carrying knives and the confiscation of their weapon (an output). They are also widely credited with preventing knives and other metallic offensive weapons from entering specific locations covered by knife arches, such as selected schools, sporting events and festivals.

However, there is limited evidence to show that the use of knife arches is associated with reductions in knife crime and associated harms (outcomes). Evaluations of the use of metal detectors in US schools<sup>65</sup> and hospitals<sup>66</sup> indicate that they have limited impact on violence rates but may reduce overall severity of violent injury. Evaluations that have sought to test the impact of metal detectors on feelings of public safety have been equivocal. Some have found that they improve it, while others have concluded that they damage it.

### Mechanism - How does it work?

Knife arches may reduce knife crime in two main ways:

- by increasing the perceived likelihood of being caught in possession of a knife
- by reducing the accessibility of knives for criminal use through confiscating those detected by the arch

<sup>65</sup> Gonzalez, Jetelina and Jennings (2016).

<sup>66</sup> Anderson, FitzGerald and Luck (2010).

In a general sense, knife arches may help with community engagement through the police being seen to take action against knife crime. More specifically, knife arches might improve feelings of safety where they are used as a condition of entry at certain locations (such as sporting events and festivals). Knife arches also provide an opportunity for police officers to engage positively with members of the public passing through the knife arch.

Knife arches may also reduce other forms of crime. For example, those in possession of drugs might actively avoid the knife arch, thereby providing grounds to be stopped and searched by the police.

In terms of backfire effects, the use of knife arches may result in more offenders hiding knives in certain locations in an effort to avoid knife arches.

### Moderator - In what contexts does it work best?

Knife arches are likely to be more effective when deployed strategically in locations where intelligence indicates there is a high volume of knives passing through and/or where the presence of knives might provoke violence. Key to the effectiveness of knife arches is the use of officers to detect those who double back to actively avoid passing through the arch. For this reason, having a sufficient number of strategically placed police personnel is an important part of this response.

# Implementation - What is known about implementing the intervention?

The deployment of knife arches can be time-consuming. Moreover, knife arches may place a burden on the general public, leading to delays in movement and hence public resentment. This can be a significant challenge when deployed in areas with high footfall (such as busy train stations).

# Economics - What is known about the costs and returns of the intervention?

Knife arch operations can be expensive. There is a significant cost associated with purchasing and maintaining the knife arches. Knife arches also need to be 'worked' and so the cost of personnel (both uniformed and plain clothes) must also be factored in.

### General considerations

Knife arches involve members of the public coming into contact with the police. Overwhelmingly, these individuals will have nothing to do with crime in general or knife crime in particular. Consequently, it is vital that the interactions with the police are experienced as procedurally fair, whereby the police inform affected individuals of the rationale for the knife arches and, where appropriate, why they are being stopped and searched. This is especially important for knife arches because, in public places, members of the public are not legally obliged to walk through the knife arch.

Insofar as knife arches are effective, evidence is currently unavailable as to the relative contribution of the two dominant mechanisms accounting for those effects – increased risk of detection or increased seizure of knives. If it is the former, and in light of the high costs of knife arches, one consideration is whether the same risk-increase mechanism could be activated in cheaper ways, such as through the use of high-visibility police officers.

criticism

#### **Knife arches**

#### **Activities** Potential mechanisms **Potential outcomes** Inputs/resources **Outputs** Number of individuals Knife arch (Re)deploying knife Intended Intended passing through the arch The presence of knife arches Reduction in knife Staff time knife arch increases the risk of being Monitoring flow of crimes and hospital caught with knives and deters admissions for injury individuals through Identification and people from carrying them with a sharp object recovery of weapons arch detected by knife arch Reduced availability of knives Increased use of public Engaging with and for criminal use spaces entered via potentially searching Investigations/stops and arches those indicated by the recovery of knives Public reassurance that risks the arch and other illegal items of knife crime are being among those avoiding addressed Surveillance of and knife arch attention to those Increased sense of safety at avoiding arches Arrest of individuals location where knife arches are found in possession a condition of entry of knives and other illegal items, either at or Unintended Unintended avoiding the knife arch Offender adaptation to avoid Crime displaced to other places detection Increased community fear on Offenders secrete Context rather than carry seeing police activity Knife arches are placed in location with a throughput of knives liable knives Community resentment of police to be used in crime Knife arches are placed in locations with sufficient surveillance if tactic is seen as unfair Public avoidance of opportunities and access to spot individuals who actively avoid the areas targeted knife arch Delays for innocent Knife arches are operated by personnel who act in accordance with people stopped the law and the principles of procedural justice The public are generally willing to accept some inconvenience in the Media/community interests of detecting illegal knife carrying

### Teachable moments in victim interventions

### What is the focus of the intervention?

A 'teachable moment' is an unplanned opportunity or event where the likelihood of changing someone's behaviour is maximised. Recognising and taking advantage of teachable moments now forms the basis of many behavioural change programmes in education, health and policing, usually directed at young people. Attendance in hospital or a trauma centre as the result of a violent injury is widely considered to be an example of a teachable moment, as is detention in police custody following arrest. The potential for intervening at teachable moments has given rise to a series of interventions involving structured interactions, typically between the affected young person and the police, youth workers and/or relevant hospital staff. These interactions, which can vary widely from mentoring to life skills coaching, are designed to:

- encourage the young person to reflect on their current circumstances
- offer him or her longer-term support a 'wrap around' service attending to their particular social needs and designed to initiate a positive change in their behaviour

### Effect - Has it been shown to work?

There is little high-quality evidence to show that UK-based hospital-based interventions targeted at young people during 'teachable moments' are effective in reducing criminal involvement and repeat hospital attendance. Some evaluations have reported positive outputs in the form of contacts with eligible clients<sup>67</sup>, but there is limited evidence to date that these interventions are associated with reductions in violence or weapon-related offences. Similar hospital-based schemes have been evaluated in the US and returned similar results. Although some positive results were obtained in terms of contacts and reductions

67 Goodall, Jameson and Lowe (2020).

in self-reported injury, this small number of studies experienced issues with high and biased intervention drop-out and difficulties in obtaining follow-up data<sup>68</sup>.

Evidence of the effectiveness of custody-based interventions is mixed, in part because of the varying nature of interventions that begin in custody and that seek to capitalise on a 'teachable moment'. Some are implemented as a combination of diversion from punishment and teachable moment ('pre-charge'), while others simply apply the principles of teachable moments after criminal processing ('post-charge'). In the former, more serious violent and weapon-related offences are often ineligible for pre-charge diversion programmes, so the evidence that they are effective – at least with young people – in reducing re-arrest<sup>69</sup> cannot be generalised to most violent offending. Post-charge interventions are growing in popularity in the UK and elsewhere but there has been little rigorous evaluation of their effectiveness in reducing violent re-offending<sup>70</sup>.

### Mechanism - How does it work?

Teachable moments programmes can reduce knife crime in several ways:

- through encouraging the victim in hospital or the arrestee in custody to consider and question the seriousness of their current circumstances and recognise their own vulnerability
- through treating hospital attendance or arrest as possible 'turning points' where a change in lifestyle is possible
- by setting out and offering assistance in taking advantage of alternative, pro-social life choices

In terms of backfire effects, it is possible that hospital-based teachable moments programmes might inadvertently increase a person's sense of vulnerability and increase their likelihood of weapon carrying, or

<sup>68</sup> Chong and others (2015).

<sup>69</sup> Wilson, Brennan and Olaghere (2018).

<sup>70</sup> Lynch-Huggins and others (2021).

that custody-based teachable moments might reinforce the arrestee's criminal identity. They may also risk alienating recipients if victims of knife crime consider themselves to be labelled as knife crime perpetrators.

### Moderator - In what contexts does it work best?

Hospital-based teachable moments programmes are likely to be more effective in reducing knife crime in areas where there is a high degree of victim-offender overlap, where there are strong police-healthcare-youth worker partnerships able to quickly attend hospital in the immediate aftermath of a knife injury, and where follow-up services are available, suitable and sufficiently funded. Evidence also suggests that impact can be maximised when using trained professionals to deliver interventions at teachable moments.

# Implementation - What is known about implementing the intervention?

Noted barriers to implementation include failure to recruit, train and retain the staff needed to deliver the intervention and bottlenecks in referring participants to relevant allied services, which then limits the longer-term potential impact from intervening at the teachable moment.

# Economics - What is known about the costs and returns of the intervention?

There are substantial potential cost savings associated with reductions in criminal involvement, hospital attendances and the harms caused by related risky behaviours. However, teachable moments programmes are also resource-intensive and therefore may be more cost-effective in settings where there are a lot of knife injuries or arrests related to knife crime. There are significant costs associated with the hiring, training and funding of staff tasked with delivering these interventions. There are also costs associated with running the longer-term support services typically offered as part of this response.

### General considerations

Participation in this type of programme is voluntary. Previous studies report both low initial take-up rates and high attrition over the course of the intervention. These observations limit the confidence with which findings can be generalised.

It should also be acknowledged that in certain circumstances, the term 'teachable moment' is considered inaccurate, and 'reachable moment' might be more applicable. The latter is generally used when referring to individuals who may be exploited or in vulnerable circumstances, and may not have the choice to change the direction of their lives (because they are under duress, offending for sustenance, addicted to drugs, and so on), or cannot be 'taught' (they perhaps already know), but rather they need 'reaching' and taking out of the circumstances they are in.

### **Teachable moments victims interventions**

Availability of follow-up services tailored to victim/offender needs

#### Inputs/resources **Activities** Potential mechanisms **Potential outcomes Outputs** Police Identify victim of Short-term sessions Intended Intended knife crime in A&E with recent victims Shock and recognition of Reduced revictimisation Ambulance service of knife crime vulnerability of knife crime victims Call skilled or Hospitals (A&E) attending A&E significant other for Longer-term follow-Creation of a potential turning Youth workers prompt attendance up interventions with point in victim/offender's life Reduced arrest rates for engaged victims at treated victims of knife Provide brief and Availability and recognition timely intervention risk of alternative, non-violent life crime to elicit interests in Reduced criminality among choice change (teachable treated knife crime victims moment) Reduction in risky behaviour Follow up with by treated victims longer-term treatment/support Unintended Unintended Increased violence by Labelling of victim as potential offender treated victims Increased violence against Creation of enhanced sense of vulnerability and hence need treated victims for self-protection Peer group reintegration into protective criminal group Context Effective where there is a substantial overlap between victims and offenders Identifiability of victims who may also be offenders Prompt availability of credible providers of initial intervention to the recently victimised



### Response checklist

Before moving on to the assessment stage, check that you have considered the following items.

- 1. Have you consulted the existing sources of evidence on what has been found effective and ineffective in addressing the kind of knife crime problem you are focusing on?
- 2. Have you decided on one or more promising pinch points in relation to your local knife crime problem? Do the proposed responses align with these pinch points? Put differently, are your responses justified based on what was learned through scanning and analysis?
- 3. Have you devised one or more logic models describing how the proposed responses are expected to reduce the identified knife crime problem, as well as possible unintended (desirable and undesirable) side effects that might arise following your activities?
- 4. Have you considered the EMMIE framework and, in particular, the conditions in which the selected responses are most likely to work?
- 5. Have you checked that those who need to play a part in implementing and sustaining the chosen responses are able and willing to take the actions and/or provide the resources required for the intervention(s) to be put in place?
- 6. Have you subjected your initial plans to critical scrutiny by those competent to assess their plausibility and promise?

If the answer to any of these questions is 'no', then you may need to undertake further work before moving on to the assessment stage.

## Assessment

### Why assess when problem solving?

Assessment forms the final stage of the SARA problem-solving process. There are two main purposes of assessment in problem solving. The first purpose deals with the here and now. It helps you determine whether a knife crime problem persists following the implementation of responses. Knowing this can help you decide whether further problem-solving efforts to address the selected problem are needed. The second purpose of assessment is to learn lessons for the future – to understand how your efforts to reduce knife crime might inform your work going forward and to contribute to the wider evidence base about what is, and what is not, effective in tackling knife crime.

For the first purpose of assessment, it may be enough to know whether your local knife crime problem remains, regardless of whether your problem-solving work was responsible for any observed reductions. However, this won't help you know whether to use similar responses if your problem comes back in the future. For the second purpose of assessment, we need to know much more, including whether it was what you did that led to a decrease in knife crime and whether there were any side effects because of your activities. This approach will help you and others know whether your responses are worth trying when tackling new knife crime problems.

Meeting the first purpose of assessment is relatively straightforward. The second is more challenging, and will vary in its level of complexity depending on the scale of your local knife crime problem, the nature of the responses implemented, and the skills and resources available.

It is important to decide early in the problem-solving process what purpose is to be served by the assessment. Deciding this has implications for what you do in other parts of the SARA process. For example, if you are aiming to learn lessons for the future, you will need to start planning your measurements before any responses are put in place. If you find that numbers of knife-enabled robberies have declined

and then look for evidence that what you did was responsible for those falls, this risks producing biased findings.

This section of the guide provides practical guidance for conducting both kinds of problem-solving assessment.

# Purpose of assessment one: To decide if continued problem-solving efforts are needed

As part of scanning, you will have quantified the specific type of knife crime problem you are addressing. Simply comparing the levels of the selected problem before and after your response will help you decide whether the problem has fallen enough for you no longer to need to devote resources to trying to reduce it. If the selected problem has fallen sufficiently, you may elect to close the current problem-solving project and move on to addressing the next problem.

However, in relation to knife crime, there are some challenges for before-and-after measurement. The obvious starting point for this type of assessment is to repeat the measurements used in scanning to see whether the problem has dropped or disappeared. But data used to measure knife crime needs to be handled with care. There are several issues to be mindful of, which are given below.

# Changes due to knife crime recording and reporting practices

As indicated in the **Scanning** section, knife crime data generally derives from records kept by the police, hospitals and ambulance services. These records depend on decisions to report incidents or to seek medical attention, and then on how these incidents are classified. Changes in reporting and recording practices can therefore make comparisons of knife offences over time hazardous<sup>71</sup>. For example, simply by selecting a particular knife crime problem as the focus of problem-solving work – such as domestic abuse

<sup>71</sup> For a related discussion, see: Office for National Statistics (2021).

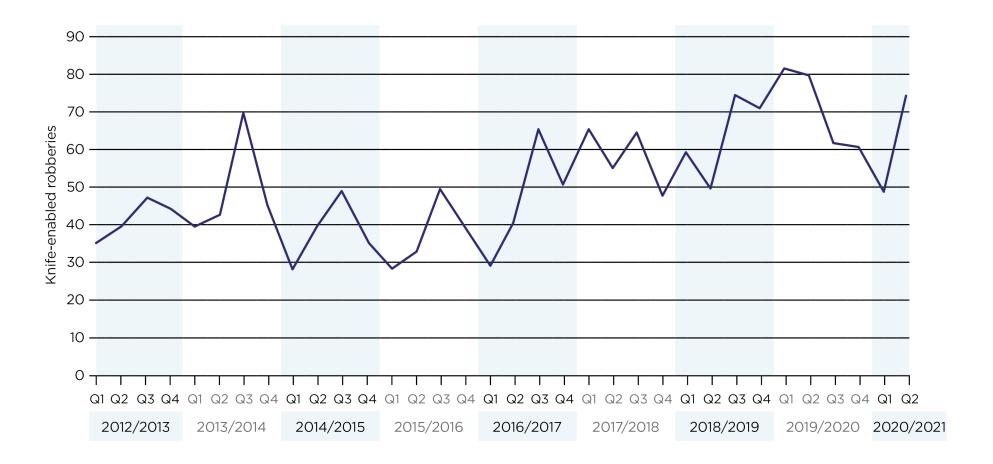
involving knives - may mean that agencies become more diligent in adding relevant 'flags' to indicate that a knife has been used. This could potentially suggest an increase in the problem when in fact the observed increase may be a result of changes in data recording. Similarly, police services may become more attentive in looking out for incidents where knives have been used in crimes and classifying them accordingly. This means, for example, that an intervention may have had a positive impact, but this is masked by improvements in recording. Data cleaning may be needed to check that the information you plan to use in assessment makes sense and to remove any anomalous records. It may also make sense to clean data before embarking on an intervention, to make sure that knife crime has been recorded as accurately as possible. Where possible, comparison of numbers where the data is most likely to be robust notably, homicides involving knives - will help you ensure that more discretionary reporting and recording practices do not explain apparent changes in the numbers of incidents in your local area.

### Changes due to normal fluctuations in knife crime

The numbers of knife crime incidents at the local level tend to be small. Knife crime rates are therefore liable to fluctuate widely month by month, regardless of any problem-solving responses that are put in place. This fluctuation comprises a kind of 'noise' in the data. Obtaining a 'signal' relating to real change against this background noise is challenging. To illustrate this, see Figure 3, which shows the quarterly recorded knife-enabled robberies for Lancashire Constabulary from April 2012 to June 2020. It can be seen that even across a whole police service area and using quarters rather than months, the numbers of police-recorded knife-enabled robberies bounce around a lot, making identification of real short-term changes difficult. A consequence is that longer-time trends are useful for increasing confidence that a knife crime problem has actually fallen. It is important to take account of possible seasonal variations in levels of knife-related crimes when making before-and-after comparisons.

Knife crime: A problem solving guide

Figure 3: Quarterly knife-enabled robberies recorded by Lancashire Constabulary April 2012 to June 2020.



# Purpose of assessment two: For lessons for future problem solving

Knowing that your local knife crime problem has reduced is different from knowing whether it was what you did that was responsible for that reduction. Knowing the latter is crucial for working out what can usefully be learned for tackling future problems.

But assessment for lesson learning has long been one of the weakest elements in the SARA process<sup>72</sup>. This is partly because it is challenging to do well, especially with small-scale, local projects. However, when attempting this form of evaluation, it is important to try to produce assessments that will be useful for others who hope to learn from your experience, both within and outside your organisation. It will also be useful for you should a similar knife crime problem emerge again.

Assessment for lesson learning means collecting and analysing the kind of evidence that others can usefully draw on. It also means making sure that assessments are honest. They must not claim more than can be justified from the data at hand. This too can be challenging. It is natural to think that what we are doing is helping to resolve a pressing problem. Our confirmation biases tend to make us look for information that supports our hopes for impact and to disregard information that might dash them. Confirmation biases also mean that we are liable to draw false conclusions without any intention to do so. This can easily happen. In relation to knife crime, in particular, there are often differing metrics that can be used as indicators of effectiveness (for example, the number of recorded offences, number of people hospitalised for stab wounds, number of people found with blades in stop and search, number of people charged with carrying knives as offensive weapons, and so on). It will almost always be possible to find one metric that does (or does not) indicate success. Good problem solving involves calling it as it is. Failure on some occasions is inevitable. Moreover, failure is an important source of learning, and a stimulus for taking corrective action in the interests of continual improvement.

<sup>72</sup> Read and Tilley (2000).

## Measuring effects in knife crime projects

Of the five EMMIE components (see **Box 10**), effects tend to receive most attention. This is understandable. Practitioners want to know whether an intervention has worked previously and hence whether it is worth trialling in the future. As discussed previously, this cannot confidently be known by simply observing whether a knife crime problem has changed following our problem-solving activities. This is because there are many possible explanations for why crime goes up and down, including – but not limited to – the following:

- changes in economic conditions
- the movement of key offenders
- the increased availability of legitimate local opportunities
- the arrival of a pandemic
- freak weather conditions
- new housing developments
- a changed road layout

Few of these possibilities can be eliminated simply by observing that there has been a reduction in a problem following intervention. To identify what caused a change in crime, this requires methods of estimating the effects of your selected responses as rigorously as possible. Those methods are discussed here.

It is crucial to know how your response works when you are estimating the effects of that response. Put differently, to assess the impact of your response, it helps to have a clear idea of the outcomes you want to achieve and how your selected response might plausibly generate those outcomes. Logic models like those presented in the **Response** section serve this purpose – they depict a 'theory of change' showing the processes through which your intervention is expected to have an impact your local knife crime problem. We have already seen in the **Response** section how a theory of change can help you work out whether a selected response is appropriate for your local context. But it can also help you work out how to assess whether the intervention

put in place is having its expected impact, and what you can most easily measure to check whether the response is working out as intended. The more specific your intervention, the easier it will be to find measurements to determine effectiveness.

Let us take the specific problem of knife-enabled robbery of school children travelling home from schools on buses as an example. We might introduce high-visibility police patrols on those bus routes at those specific times to increase the perceived likelihood of offenders being caught, with the aim of deterring robberies. If falls are occurring in ways that are inconsistent with our intervention - for example, knife-enabled robbery is falling at different times of the day - then that counts strongly against attributing the cause of the fall to our problem-solving endeavours. However, if the falls in robbery closely follow what we would expect to see if the intervention is working as intended, then that counts in favour of attributing the cause to the response we have put in place. Of course, we may still be mistaken, but the more closely we can specify expected chains of events that would have to occur if our response were responsible for the observed changes, the more it becomes up to others to suggest alternative accounts of what would explain the observed changes.

### Specificity

Specificity is again important. Just as good problem solving calls for responses to be tailored to local conditions, good problem-solving assessment requires that you focus your evaluation on specific aspects of your local knife crime problem that might plausibly be affected by your choice of responses. We would not expect that police patrols deployed to high-risk bus routes would cause any change in the levels of, for example, knife-related violence associated with the night-time economy or domestic disputes involving knives. If knife crime is falling across the board, then it is likely that something else is going on to explain these patterns.

### Counterfactual comparison

In trying to estimate whether a problem-solving intervention has been effective, we normally try to find some benchmark against which we can compare trends. In doing this, we are looking for a so-called 'counterfactual' – an estimate of what would have happened to your local knife problem had you not put in place your selected responses. You can't directly observe the counterfactual. It can only be approximated through comparing the observed knife crime patterns with, for example, an estimate based on past trends, or what is going on in the wider area beyond the reach of the intervention, or through selecting people or places that are similar to the people or places where you have implemented your response (such as another similar urban area in your force).

There are many approaches for estimating the impact of an intervention. **Box 13** summarises the different options for assessing effects, indicating what is involved, what can be learned and what to consider in deciding on their use. None of these methods is perfect and some are only possible in special circumstances. Advice on which methods are most suitable for your own problem-solving initiative can often be sought from research partners or the College of Policing.

Whichever approach you adopt, you are strongly advised to use statistical process charts that keep track of what is done and of trends in indicators of the knife crime problem you are addressing, with built-in estimates of statistical significance. The National Health Service has pioneered these and you can download a user-friendly version in Excel<sup>73</sup>. The site also has a brief explanatory video that illustrates the application of the tool. The tool can easily be adapted for use in a knife crime problem-solving initiative. It will help you see whether you are achieving success or whether things are going awry, in which case you may need to consider modifications.

73 NHS (2021).

# Box 13: Methods for measuring the effects of an intervention

Research design	What's involved?	What can be learned?	Considerations
Time series	Key expected outcomes are tracked over a sustained period of time to determine whether there has been a discernible change at the points predicted by the theory of change.	Whether the intervention was causally associated with the intended changes.	Depends on the consistency of data collection over the period covered. Reporting and recording practices are apt to change, which may invalidate long-term comparisons.
Shift share	Track change in the proportion of incidents in target area compared to those in a wider area. For example, if knife-enabled robberies had consistently made up 10% of all knife crimes in the previous five years, but this reduced to 5% following the response, this would indicate success.	Whether the distinctive changes within targeted groups accord with expectations.	Consistency of share trends needed before the intervention is put in place. Record keeping needs to be consistent over time both for the targeted incidents and wider population.
Randomised controlled trial	Interventions are randomly allocated to treatment and non-treatment groups (whether people or places).	Provides strong evidence that measured change was associated with the intervention and not some other unknown factor.	Best suited to single, simple measures where a population is well defined. Randomised controlled trials do not work so well where a number of interventions are implemented at the same time, as is common in problem-solving projects.

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Research design	What's involved?	What can be learned?	Considerations
Comparison areas	Comparisons are made between intervention areas and areas with similar social, economic and/or demographic attributes but which do not receive the intervention.	Fairly strong evidence for estimating the effect of an intervention on intended outcomes in the target area.	Generally used where the unit of intervention is a geographical area rather than individuals.  Areas may not be similar enough and it can be difficult to compare areas where other activities are going on in the two areas.
Before and after	Simple before-and-after measurements of intended changes.	Can sometimes provide plausible evidence of impact and is probably the most common research design when problem solving (see <b>Box 14</b> ).  Indicates whether continued problem-solving efforts are needed.	It avoids the problem of finding and making comparisons with other areas or randomly selecting.  The problem is that you cannot be sure that any positive outcome was the result of the initiative rather than some other factor.

Before describing the practicalities of conducting assessments for future lesson learning, it is important to make clear that in describing the 'effect' element of EMMIE, we refer to negative effects as well as positive ones. As discussed above, all crime prevention measures have the potential to backfire, as was highlighted in the logic models outlined in the **Response** section of this guide. Sometimes well-intentioned and well-executed responses make things worse. Good assessments in problem solving are attentive to unintended consequences and make provision for their measurement.

# Box 14: Before-and-after study evaluation of knife crime prevention initiative<sup>74</sup>

Operation Blade began in February 1993 following a 15-year increasing trend in violent crime in the Strathclyde region of Scotland. The Operation included:

- a knife amnesty
- an intensified stop-and-search campaign
- safety measures, such as:
  - CCTV at public entertainment venues
  - metal detectors
  - improved lighting
  - training of stewards
  - talks to knife retailers and to secondary-school pupils
  - a change in licensing hours (earlier closing and prohibited re-entry)
- a high-profile media campaign

Before-and-after data from the Accident and Emergency Department at Glasgow Royal Infirmary were analysed to assess the effectiveness of Operation Blade. The main comparison was of cases in January 1993 and in January 1994. Total numbers of assault victims, of those with penetrating injuries, and of those directed to the chest and abdomen directed to the resuscitation room were compared.

The results found no statistically significant change. In January 1993, 282 victims of assault attended A&E, compared to 290 in January 1994. Of these victims, 60 presented with penetrating injuries in January 1993 compared to 53 in January 1994. In January 1993, 10 of 40 knife assault victims were directed to the resuscitation room, compared to 14 of 36 in January 1994.

74 Bleetman and others (1997).

The assessment also noted that following the start of Operation Blade, there was a short-term drop in serious stabbings, but this fully recovered within 10 months, when numbers of previous equivalent months were surpassed.

The authors cite police figures suggesting that there had been a 19% reduction in violent offences in 1993, compared to 1992, and a 33% reduction in violent crimes involving the use of a knife, but add that, 'It is well-recognised in published reports that less than half of violent crime is in fact reported to the police'.

The authors take the view that the initial fall they found in knife crimes reflected 'increased police presence in the city centre, particularly at pubs and clubs.' They also conclude that: 'In order to maintain decreased levels of violent crime, this type of operation would have to be repeated at regular intervals, as with the annual drink-drive campaigns, so that cultural attitudes may be changed in the longer term'. However, the authors provide no evidence to support this contention.

## The practice of assessment: SARA meets EMMIE

In this final section of the guide, we bring together the different elements of the SARA model to provide a detailed step-by-step guide for how to carry out an EMMIE-compliant assessment when problem solving. These steps are further illustrated with two case studies presented in **Boxes 15** and **16**, which describe ideal assessments of knife arches and knife sweeps, respectively.

### Building on scanning and analysis

The groundwork for assessment begins with scanning. You need
to specify the particular knife crime problem you are trying to
address and assemble quantitative data relating to it, such as the
number of incidents, trend over time and patterns of concentration.
These figures will provide you with the benchmark against which
you will later assess the impact of the selected responses.

- 2. Problem analysis will also feed into assessment for lesson learning. As described previously, good problem analysis is focused and specific, and both identifies and measures the key causes and conditions that enable your selected knife problem to persist. In particular, problem analysis helps work out which of those causes and conditions you will focus on in your response. You need to decide on ways to **measure** whether the targeted causes and conditions are changing, in accordance with your **logic model** for the intervention.
- 3. What you find through scanning and analysis will help map out the interventions you plan to implement as part of your response strategy, which in turn (according to our logic model) will lead to the reduction or elimination of the specific problem you are focusing on. This will allow you to identify barriers to implementation that may be encountered during your assessment, so that these can be reported for anyone thinking about emulating what you have done (the 'implementation' part of EMMIE). In addition, you need to track implementation as the response is being delivered, to inform adjustments to your strategy where necessary.

### Deciding the scope of your assessment

- 4. Following steps one to three, decisions can now be made about the scope of your assessment. Your decision needs to be based on answers to the following questions.
  - a. Within the scope of your problem-solving project, are the starting numbers of targeted knife crimes high enough and is the expected change in them large enough to make meaningful measurement of change a realistic prospect? If not, then including quantitative impact in your assessment is not a viable option.
  - b. Are there viable means for quantitatively estimating the counterfactual? For example, how many relevant knife crimes would there have been without the intervention, compared to how many there were with it (to find out the effect element of EMMIE)?

### Key issues to cover in your assessment

- 5. In addition to determining effect, you will ideally want to know whether the response is working as expected (the mechanism and moderator elements of EMMIE). Using the logic model that you developed for your response, you can **check** on this. To do so, you need to check that your **planned response** is actually being put in place. This can be achieved by observing interventions directly or by checking administrative records, or by dip-sampling a sub-set of them. For example, are weapons sweeps happening when they are supposed to? Are police officers routinely stopping those who double back from installed knife arches? To better understand the implementation process, you can do the following.
  - a. Track intermediate steps along the expected causal chain are the expected outputs observed ahead of the sought-after outcomes? For example, are knives being found in knife sweeps? If they are not, then it is clearly less likely that knife sweeps are responsible for any changes in knife crime.
  - b. Interview those delivering the intervention or targeted by the intervention to find out whether they are delivering and experiencing the intervention and the immediate response to it. For example, are officers and citizens delivering and experiencing stop and search as expected?
  - c. **Examine data signatures**, which are the patterns of events that you would expect to observe if your response is working as expected. Such data signatures could take many forms depending on your response and your theory of change. For example, if knife arches are only used on selected days and at selected venues, do the observed changes in knife offences correspond to the targeted days and venues, as compared to other days and other venues? The more precisely your theory of change specifies how intended effects should be brought about, the less scope there is for alternative causes to be at work in producing observed changes, such as other police activities or other local changes that might affect levels of knife crime.

- 6. In addition to testing your theory of intended change, you should also devise and test plausible **theories of unintended change**. Sadly, we know that some well-meaning crime prevention interventions inadvertently cause harm. There are some unintended harms that should routinely be checked. These include crime displacement by place, time, type of crime, offender and MO. It is never possible conclusively to rule all of these out. Instead, you need to decide which forms of displacement you consider to be most likely in the case of your response, then put measurements in place that can best capture them.
- 7. Most problem solving comprises a form of action research. This means that we start with the best strategy we can based on our analysis and formulate the most plausible theory of change we can. However, we also want to learn as we go and make adjustments to what we do when things are not working out quite as expected. You therefore need to build in feedback loops to use when fine tuning - or even making more radical changes to - your response plan if you find the intervention is going off-track. This is tricky. Many interventions take a long time to implement and, when implemented, there are often teething troubles before the final response becomes fully operative. The primary reason for problem solving is to deal effectively with problems, so making adjustments based on feedback makes sense, even if it makes impact assessment more difficult. What is crucial is that you log any feedback received and adjust and revisit your theory of change if necessary. For future users of your assessment, this will be useful. However, it may require adjustment to some of the measurements you make as part of your assessment.

### Data collection for your assessment

8. At this point, you need to design your **data collection instruments**. What are you going to measure to determine the impact of your response plan, and how are you going to measure it? As detailed in the **Scanning** section, the main sources of data in the case of knife crime will be administrative records, within which you would expect to see change if the response were working as expected.

To determine the resources devoted to your initiative, ideally you will need an account of all that went into delivering it.

This includes costs that could have been used for different purposes and potentially produced different benefits.

- a. The **total costs** of a knife crime response will cover such things as:
- police and other staff time
- transportation (for example, cars used to go to hotspots)
- hardware (for example, knife bins or knife arches)
- office space
- volunteers

Ideally, all need to be monetised (estimated in cash terms).

- b. You also need to be able to estimate the **net effects**, both direct intended effects on knife crime and also side effects. These benefits then also have to be monetised, which can be done using standard Home Office estimates of the overall costs of crime<sup>75</sup> (differentiating between offence types affected). Comparing costs and benefits allows one to say that for every pound spent on the response, a given monetary return was achieved.
- c. Making robust estimates of the costs and benefits of a problem-solving initiative focused on knife crime will be technically very difficult. This is reflected in the very poor track record of economic evaluation in crime prevention more generally<sup>76</sup>. In practice, if you can catalogue the broad costs incurred and list these, and also estimate the net number of knife crimes prevented, you will be doing well. The importance lies as much in informing others who might want to emulate what you have done about the types of costs they should expect to have to incur, as it is to determine whether the initiative was worthwhile in economic terms.

<sup>75</sup> Heeks and others (2018).

<sup>76</sup> Tompson and others (2020).

d. To keep tabs on broad costs, you could maintain a simple ledger. For more complex and complete economic assessment, the **Manning** tool can be employed. This comprises a computer package that allows you to enter relevant figures and then crunch the answers relating to economic costs and values. For large-scale problem-solving initiatives relating to knife crime, it is worth using the Manning tool. An alternative tool for assessing cost-benefit is available on the **Knowledge Hub**.

#### Analysis for assessment

- 9. As data is being collected, analysis can begin, drawing multiple sources of information together. Different analyses test the theory of change that informed the intervention in a range of ways.
  - a. Analysis of data on what was delivered (drawing on interviews of those involved in the initiative) finds out whether what was planned was actually done. Where there are mismatches, they need to be described and explained. It is here that you will identify issues relating to implementation that can be reported when the project is written up.
  - b. Analysis of data collected on intermediate steps in your logic model will check whether the causal path was working as expected, and how it diverged (if at all).
  - c. Analysis of the interviews of those delivering or targeted by the intervention indicates whether they delivered or experienced the initiative as expected.
  - d. Analysis of the before-and-after data (including those related to comparison groups for estimation of the counterfactual) estimates the effect of the intervention as expected according to the theory of change (and also includes estimates of anticipated possible side effects).
  - e. Monetising observed patterns of change using Home Office costs of crime will allow you to compare observed net effects to

the overall costs of the inputs to your problem-solving efforts to estimate the cost-benefit ratio.

#### Disseminating assessment findings

10. Problem-solving efforts need to be documented, shared and celebrated. It is important to be honest in your final assessment, to avoid misleading others about what was achieved. Failures can be particularly instructive.

SARA provides a neat format for writing up problem-solving work, with general conclusions at the end and a methods appendix that describes the data you've used. In a final report, it is generally good practice to produce one-page and three-page summaries before a punchy report. This should rarely need to be more than 25 pages long, but may be succeeded by supplementary material if needed.

When you have produced your draft final report, you should always ask for critical scrutiny from a competent independent outsider. Expect also to be asked to present interim and final results verbally as well as in writing – think about the simplest way to get an accurate message across. What are the two or three key messages that you want your audience to take home?

#### Conclusion

11. The perfect problem-solving assessment has yet to be conducted. What you are able to produce will always fall short of the ideal. We do the best we can do in the circumstances of the project and the resources we have available. If the project you are concerned with is large-scale and you think it may inform follow-up work that you and others may also do, then it makes sense to argue for the resources needed to do a thorough assessment, covering all bases, and to involve external evaluation experts (such as research partners or the College of Policing) to advise on or collaborate in the assessment. If a major demonstration project is on the cards, a small-scale pilot with

qualitative analysis focused on implementation, expected causal chains, and the experience of those delivering and targeted by the intervention may be prudent, to establish plausible parameters of a larger-scale initiative with provision for more elaborate assessment.

#### **Assessment checklist**

- 1. Have you decided on the purpose of your assessment?
  Is it to work out whether the identified problem has been reduced or removed, or is it to determine whether your selected responses were responsible for any observed changes in your identified problem?
- 2. Have you developed a theory of change (logic model) of how your responses are expected to reduce the selected problem?
- 3. Following the EMMIE model, have you devised methods to measure the effects of your response?
- 4. Following the EMMIE model, have you devised methods of capturing information about hurdles to implementing your response and what was done to overcome those hurdles?
- 5. Following the EMMIE model, have you devised methods of capturing information about the costs and cost benefits of your selected responses?
- 6. Have you worked out when and how you will provide feedback to those delivering the response?
- 7. Have you worked out what form your final report will take in terms of sections, tables and figures?
- 8. Using the evidence you have collected, are you able to explain the following?
- the problem
- why you selected that problem (from a range of other candidate problems)
- why the selected responses were chosen and how they were expected to work in your local area against the selected knife crime problem
- what was implemented in practice
- the obstacles encountered in delivering your response

- whether and how these obstacles were overcome
- the total cost of the response
- the outcomes overall and by subgroup

If you answered 'yes' to all of the questions above, then you are ready to write up your findings and share them with others.

# Box 15: Assessment plan for hypothetical knife arch operation

Weapons arches can be used in many ways. They are an integral part of airport security. They may be used at train or tube stations. They are sometimes seen at schools. In this problem-solving initiative, weapons arches are to be used in a violent-crime hotspot area in a town centre over a 12-month period. They will be deployed on busy nights of the week (Thursdays, Fridays and Saturdays) at the three main street entry points to the night-time entertainment area between 6pm and 10pm, when most people arrive for an evening out.

All those appearing to be aged 16-21 are to be invited to pass through the weapons arch, regardless of appearance or behaviour. Those deemed by police plainclothes officers to be deliberately avoiding the arch will be questioned and searched, if their behaviour warrants doing so. All officers will have body-worn cameras and all stops will be recorded whether or not they are accompanied by a search. As shown in the weapons arch logic model, the idea behind this initiative is to increase the perceived risk from weapon carrying by those who might otherwise carry them, who will be unable to select predictable times and places where the arches will not be operative.

Those asked to pass through the arches fall within the typical age range of those who have previously been found locally to carry knives. The unselective requests for individuals to pass through the arch if they look as if they fall within the target age range are intended to minimise the risks that there is either real or perceived discrimination against certain groups – for example, on the basis of ethnicity. The number of weapon arches deployments is set at 51 over the year.

The police force communications team arrange for news coverage for the start of the initiative (radio, print papers, posters, social media), reinforced through the year. This is partly to try to offset any public annoyance at any inconvenience caused by the weapons arches and partly to make sure that those who might carry knives know of the

increased risk that they may face from doing so. Past experience suggests that the typical number of knives found in weapons arch deployment in the area is zero, and the maximum in any previous deployment was three. The total number of knife-related crimes in the city centre has been 80, 77 and 89 over the previous three years.

The scenario above describes a typical weapons arch initiative designed to reduce knife-related violence associated with the night-time economy. The table below shows the ideal stages for an EMMIE-informed assessment of this knife arch initiative. It may not always be possible or practicable to complete all stages.

Stage	Evaluation activity	Include (Y/N)	Why include or exclude
a.	Track number of reported knife-related crimes (robberies, assaults and threats where a knife was used) in the target area (ie, the area intended to be covered by the arches) before, during and after the intervention. If hospital and/or ambulance data are available, use it in the ways described in the following steps as an alternative or addition to police data. Track also all reported crimes and incidents in the target area.		
b.	<ul> <li>Effect (intended outcomes): Randomise each of 51 Thursdays, Fridays and Saturdays to days when:</li> <li>the arches will be used</li> <li>the same number of police personnel will be deployed at the same times without the arches</li> <li>the average number of officers will be deployed as those in previous years</li> </ul>		
C.	Effect (intended outcomes): Compare the numbers of reported knife-related crimes and of all crimes across the three conditions described in b). Compare also the numbers with, for example, the equivalent days in the previous three years. These measurements provide two indicators of the impact from the additional staff resources and from the staff (and ancillary) resources when the knife arches are used. Use this data to estimate the number of targeted (and other) crimes saved by using the weapons arches.		

Stage	Evaluation activity	Include (Y/N)	Why include or exclude
d.	Effect (possible unintended outcomes): Identify the most likely displacement or diffusion of benefit areas without knife arches and track the number of reported knife-related crimes (robberies, assaults and threats where a knife was used) before and during the intervention, as well as the total number of crimes and incidents, to compare with the intervention area.		
e.	Effect (possible unintended outcomes): Track changes in footfall in the area in which the arches are used before, during and after the intervention, and compare that with comparable and wider areas without the knife arches.		
f.	Mechanisms and moderators: Monitor the number of people subjected to stop and search when refusing to go through or avoiding knife arch. Of these, monitor numbers on whom weapons were found, by type and sub-type of weapon. Observe recorded video footage of a random sample of those stopped and searched (eg, 20), to observe response to the intervention. Interview key personnel delivering the intervention.		
g.	Mechanisms: Conduct interviews and surveys with a sample of young people in the target area to gauge their perceptions of the intervention and their reactions to it, as well as a sample of community members, to gauge their knowledge and perceptions of the intervention.		
h.	Implementation, mechanisms and moderators: Observe the arches and behaviour surrounding them on 10 randomly selected occasions where arches are in use, to check how they are being operated and how citizens are responding to them and to invitations to pass through them.		

Stage	Evaluation activity	Include (Y/N)	Why include or exclude
i.	Implementation, mechanisms and moderators: Track planned and unplanned publicity accorded to the intervention before, during and after the use of weapons arches, noting both positive and negative comments (including social media, in particular tweet and retweet patterns).		
j.	Implementation: Monitor the implementation of knife arches, as well as times and places when arches were used. Note hiccups in implementation and if so, how they were overcome – for example, kit failure, staff absences or business opposition to arches. Check whether randomisation, staffing, and so on accorded with original evaluation plans.		
k.	Economy: Track costs in terms of paid personnel (eg, civilians, uniform officers, spotters), transportation, and physical assets used (eg, arches, calibration, storage, maintenance). Use Home Office costs of crimes data to estimate monetised benefits, to compare to costs for economic analysis.		
I.	Mechanisms, moderators and effects: Reanalyse data in light of findings from f), g), h) and i), as possible, to check on emerging conjectures about possible mechanism and moderator configurations.		

Stage	Evaluation activity	Include (Y/N)	Why include or exclude
m.	Mechanisms, moderators and effects: Use any 'natural experiment' thrown up by the initiative. For example, if a staffing crisis means that planned deployment of the arches is suspended for three months, check whether the number of knife crimes returns towards pre-intervention levels during this period, making any necessary seasonal adjustments.		
n.	Remember that with very low numbers of knife crime incidents in the before intervention and intervention periods, detecting effects specifically on knife-related crimes with any confidence will be challenging. Your results may, at best, be suggestive.		
O.	<ul> <li>Write up a report of your assessment under the following headings:</li> <li>the problem</li> <li>the area (include map)</li> <li>the planned intervention and its rationale (results of analysis leading to decision to use knife arches)</li> <li>assessment purposes and methods (data used and why)</li> <li>assessment findings (ideally under EMMIE headings)</li> <li>conclusion (major lessons learned, and uncertainties and limitations of findings)</li> <li>Add an appendix with detailed evidence. Do not be selective here. Include any evidence that counts against knife arches, as well as any evidence that supports their use.</li> </ul>		

# Box 16: Assessment plan for hypothetical knife sweep operation

Knife sweeps are conducted in diverse ways. In this scenario, the problem-solving response includes intelligence-led knife sweeps. Sweeps are undertaken when and where intelligence suggests that knives are most likely to be stashed in public places for use as and when required. Locations may include, for example, sites where street-level drug dealing is common or where gang-related fights are expected. The assessment plan described here focuses on 12 months, during which intelligence-led targeted sweeps are undertaken within knife crime hotspots. Given that sweeps are planned as responses to emerging intelligence, it is not possible in advance to predict how many deployments will occur, where they will take place and over what geographical area. They are intended to reduce the supply of weapons available for use by offenders who are reluctant to carry them for fear of being stopped and searched.

Sweeps are to be arranged quickly and will involve police staff, as well as volunteers and those from the local authority – in particular, environmental services, who may be in a position to remove or redesign convenient places where knives may be concealed (for example, removing bushes). No publicity is planned for the knife sweeps described here in order to avoid frightening residents by suggesting that they live in dangerous places and to avoid risks to intelligence sources, if they might be identified. Past experience suggests that the typical number of weapons recovered from targeted sweeps is one, with a maximum of three.

The scenario above describes a typical intelligence-led knife sweep initiative. The table below shows the ideal stages for an EMMIE-informed assessment of such an initiative. Again, it may not always be possible to complete all stages.

Stage	Evaluation activity	Include (Y/N)	Why include or exclude
a.	Track the number of reported knife-related crimes (robberies, assaults and threats where a knife was used) before, during and after the intervention. If hospital and/or ambulance data is available, use it in the ways described in the following steps as an alternative or addition to the police data. Track also all reported crimes and incidents.		
b.	Randomly allocate areas with high levels of knife crime to use and non-use of intelligence-led knife sweeps over a 12-month period.		
C.	Effect (intended outcome): Compare change in the numbers of recorded knife crimes (knives used in robbery, violence against the person, homicide, rape, threat and sexual assault) in areas where intelligence-led knife sweeps take place and in similar areas with high levels of knife crime where intelligence-led knife sweeps do not take place.		
d.	Effect (unintended outcomes): To check on possible displacement or diffusion of benefits, compare changes in the numbers of non-knife crimes using cases of robbery, violence against the person, homicide, rape, threat and sexual assault to those changes found in c).		
e.	Effect (unintended outcomes): To estimate displacement or diffusion of benefits, compare the timing and location of subsequent crimes in the area receiving knife sweeps to the timing and spatial patterns of crimes in and around a comparison area not receiving knife sweeps.		

Stage	Evaluation activity	Include (Y/N)	Why include or exclude
f.	Effect (intermediate outcome) and mechanism: Provide a count of weapons collected and by type and subtype of weapon (for example, firearms plus types, knives plus types, other weapons plus types). Add to count of weapons recovered by other means (such as stop and search). Compare year-on-year changes in intervention and non-intervention areas.		
g.	Implementation: Track implementation of sweeps. How many sweeps? Who was involved in sweeps? How long did each sweep last? What was recovered? Note any hiccups in carry out the sweep and if so, how they were overcome.		
h.	Implementation, mechanisms and context: Track planned and unplanned publicity accorded to the intervention before, during and after the sweeps, noting both positive and negative comments - in particular, social media.		
i.	Economy: Note costs in terms of paid personnel, volunteers, transportation and materials used (for costs, include special intelligence gathering, preparation for sweep and any continuing costs after the sweep, as well as the sweep itself). Use Home Office costs of crime data to estimate cost-benefit ratio.		
j.	Mechanisms and moderators: Check on other interventions and changes in the areas where the intelligence-led sweeps do and do not take place, to identify potential alternative sources to changes in numbers of knife crimes between them.		
k.	Remember that with low numbers of incidents in the area before, during and after the intervention, detecting effects with any confidence will be challenging. Your results may, at best, be suggestive.		

Stage	Evaluation activity	Include (Y/N)	Why include or exclude
l.	Write up a report under the following headings:		
	<ul><li>the problem</li></ul>		
	<ul><li>the area (include map)</li></ul>		
	<ul> <li>the planned intervention and its rationale (results of analysis leading to decision to use knife arches)</li> </ul>		
	<ul><li>assessment purposes and methods (data used and why)</li></ul>		
	<ul> <li>assessment findings (ideally under EMMIE headings)</li> </ul>		
	<ul> <li>conclusion (major lessons learned and uncertainties and limitations of findings)</li> </ul>		
	Add an appendix with detailed evidence. Do not be selective here. Include any evidence that counts against weapons sweeps, as well as any evidence that supports their use.		

# Recommended readings and resources

#### Knife crime

Brennan IR. (2018). 'Weapon-carrying and the reduction of violent harm'. British Journal of Criminology, 59(3), pp 571–593.

Brennan IR. (2019). <u>Victims of serious violence in England and Wales,</u> <u>2011-2017</u> [internet]. College of Policing.

McNeill A and Wheller L. (2019). **Knife crime: Evidence briefing** [internet]. College of Policing.

Sutherland A, Brunton-Smith I, Hutt O and Bradford B. (2020). <u>Violent crime in London: Trends, trajectories and neighbourhoods</u> [internet]. College of Policing.

#### **Problem solving**

Braga A. (2008). 'Problem-oriented policing and crime prevention'. 2nd ed. Boulder, CO: Lynne Rienner Publishers.

Clarke RV and Eck J. (2003). <u>Become a problem-solving crime analyst:</u> <u>In 55 small steps</u>. Jill Dando Institute of Crime Science. London: University College London.

Eck JE. (2017). <u>Assessing responses to problems: Did it work? An introduction for police problem-solvers</u> [internet]. 2nd ed. Center for Problem-Oriented Policing.

Goldstein H. (1990). 'Problem-oriented policing'. Philadelphia, PA: Temple University Press.

Goldstein H. (2018). On problem-oriented policing: The Stockholm lecture. Crime Science, 7(13), pp 1-9.

Ratcliffe JH. (2018). 'Reducing crime: A companion for police leaders'. New York, NY: Routledge.

Scott M and Clarke R. (2020). 'Problem-oriented policing: Successful case studies'. New York, NY: Routledge.

Sidebottom A, Bullock K, Ashby M, Kirby S, Armitage R, Laycock G and Tilley N. (2020). **Successful police problem-solving: A practice guide**. Jill Dando Institute of Security and Crime Science. London: University College London.

Sidebottom A, Kirby S, Tilley N, Armitage R, Ashby M, Bullock K and Laycock G. (2020). **Implementing and sustaining problem-oriented policing: A guide**. Jill Dando Institute of Security and Crime Science. London: University College London.

#### Web resources

<u>Center for Problem-Oriented Policing</u> - An extensive library of problem guides, tools and resources relating to problem-oriented policing.

<u>Crime Reduction Toolkit</u> - Hosted by the College of Policing, this toolkit rates and summarises evidence relating to a wide range of crime prevention interventions.

<u>Fingertips</u> - Dashboard for violent crime and violent injury in England, maintained by Public Health England.

<u>Knowledge Hub</u> - The Knowledge Hub is an online forum for the police and partners. Groups exist on both problem-solving as an approach and knife crime.

<u>The Policing Evaluation Toolkit</u> - Hosted by the College of Policing, this toolkit provides advice on how to effectively evaluate the impact of policing and crime prevention interventions.

#### References

Allen G and Harding M. (2021). <u>Knife crime in England and Wales</u>. Briefing paper no. CP4304. London: House of Commons Library.

Anderson L, FitzGerald M and Luck L. (2010). 'An integrative literature review of interventions to reduce violence against emergency department nurses'. Journal of Clinical Nursing, 19(17-18), pp 2520-2530.

Bailey L, Harinam V and Ariel B. (2020). <u>Victims, offenders and victim-offender overlaps of knife crime: A social network analysis approach using police records</u>. PLoS ONE, 15(12), e0242621.

Barthe E. (2006). <u>Crime prevention publicity campaigns</u>. Office of Community Oriented Policing Services. Washington, DC: US Department of Justice.

Bleetman A, Perry CH, Crawford R and Swann IJ. (1997). 'Effect of Strathclyde Police initiative "Operation Blade" on accident and emergency attendances due to assault'. Journal of Accident and Emergency Medicine, 14(3), pp 153–156.

Blumstein, A. and Cork, D.L. (1996). Linking gun availability to youth gun violence. Law and Contemporary Problems, 59(1), 5-24.

Bolger PC and Walters GD. (2019). 'The relationship between police procedural justice, police legitimacy, and people's willingness to cooperate with law enforcement: A meta-analysis'. Journal of Criminal Justice, 60, pp 93–99.

Borrion H. (2013). **Quality assurance in crime scripting**. Crime Science, 2(1), pp 1-12.

Braga AA. (2016). 'The continued importance of measuring potentially harmful impacts of crime prevention programs: The Academy of Experimental Criminology 2014 Joan McCord lecture'. Journal of Experimental Criminology, 12(1), pp 1–20.

Braga AA and Kennedy DM. (2021). 'A framework for addressing violence and serious crime: Focused deterrence, legitimacy, and prevention'. Cambridge: Cambridge University Press.

Braga A, Papachristos A and Hureau D. (2012). <u>Hot spots policing</u> effects on crime. Campbell Systematic Reviews, 8(1), pp 1-96.

Braga AA, Turchan BS, Papachristos AV and Hureau DM. (2019). 'Hot spots policing and crime reduction: An update of an ongoing systematic review and meta-analysis'. Journal of Experimental Criminology, 15(3), pp 289–311.

Branas CC, South E, Kondo MC, Hohl BC, Bourgois P, Wiebe DJ and MacDonald JM. (2018). Citywide cluster randomized trial to restore blighted vacant land and its effects on violence, crime, and fear. Proceedings of the National Academy of Sciences, 115(12), pp 2946–2951.

Brennan IR. (2016). 'When is violence not a crime? Factors associated with victims' labelling of violence as a crime'. International Review of Victimology, 22(1), pp 3–23.

Brennan IR. (2017). 'High stakes: The role of weapons in offender decision-making'. In: Bernasco W, Elffers H and van Gelder J-L, eds. 'Oxford handbook of offender decision-making'. Oxford: Oxford University Press.

Brennan IR. (2018). 'Weapon-carrying and the reduction of violent harm'. British Journal of Criminology, 59(3), pp 571–593.

Brennan IR. (2019). <u>Victims of serious violence in England and Wales,</u> <u>2011-2017</u> [internet]. College of Policing. [Accessed July 2021]

Brennan IR. (2020). <u>Violence, worry and trust in the emergence of</u> weapon-carrying [internet]. SocArXiv. [Accessed July 2021]

Bullock K, Erol R and Tilley N. (2006). 'Problem-oriented policing and partnership'. Cullompton: Willan Publishing.

Chong VE, Smith R, Garcia A, Lee WS, Ashley L, Marks A and Victorino G P. (2015). 'Hospital-centered violence intervention programs: A cost-effectiveness analysis'. The American Journal of Surgery, 209(4), pp 597-603.

Clarke RV and Eck J. (2003). <u>Become a problem-solving crime analyst:</u> <u>In 55 small steps</u>. Jill Dando Institute of Crime Science. London: University College London.

College of Policing (2015). <u>Authorised Professional Practice: Stop and search</u> [internet]. [Accessed July 2021]

College of Policing. (2019). <u>Neighbourhood policing guidelines:</u>
<u>Supporting material for frontline officers, staff and volunteers</u>
[internet]. [Accessed July 2021]

College of Policing. (2021). <u>Crime Reduction Toolkit</u> [internet]. [Accessed July 2021]

Crown Prosecution Service. (2020). <u>Offensive weapons, knife crime</u> practical guidance [internet]. [Accessed July 2021]

Davies T, Grossmith L and Dawson P. (2016). 'Group violence intervention London: An evaluation of the Shield Pilot'. London: The Mayor's Office for Policing and Crime.

Del Toro J, Lloyd T, Buchanan KS, Robins SJ, Bencharit LZ, Smiedt MG, Reddy KS, Pouget ER, Kerrison EM and Goff PA. (2019). The criminogenic and psychological effects of police stops on adolescent black and Latino boys. Proceedings of the National Academy of Sciences, 116(17), pp 8261–8268.

Dijkstra JK, Lindenberg S, Veenstra R, Steglich C, Isaacs J, Card NA and Hodges EVE. (2010). 'Influence and Selection processes in weapon-carrying during adolescence: The roles of status, aggression and vulnerability'. Criminology, 48(1), pp 187-220.

Eck J. (2003). 'Police problems: The complexity of problem theory, research and evaluation'. Crime Prevention Studies, 15, pp 79–113.

Eck J and Spelman W. (1987). <u>Problem solving: Problem-oriented</u> <u>policing in Newport News</u>. Washington, DC: Police Executive Research Forum.

Farrell G. (2015). 'Crime concentration theory'. Crime Prevention and Community Safety, 17(4), pp 233–248.

General Medical Council. (2019). <u>Confidentiality: Reporting gunshot and</u> **knife wounds** [internet]. [Accessed July 2021]

Giacomantonio C, Sutherland A, Boyle A, Shepherd J, Kruithof K and Davies M. (2014). <u>Injury surveillance: Using A&E data for crime</u> reduction: Technical report [internet]. College of Policing. [Accessed July 2021]

Goldstein H. (1979). 'Improving policing: A problem-oriented approach'. Crime & Delinquency, 25(2), pp 236-258.

Goldstein H and Scott M. (2011). <u>Shifting and sharing responsibility for public safety problems</u>. Office of Community Oriented Policing Services. Washington, DC: US Department of Justice.

Gonzalez JMR, Jetelina KK and Jennings WG. (2016). 'Structural school safety measures, SROs, and school-related delinquent behavior and perceptions of safety: A state-of-the-art review'. Policing: An International Journal, 39(3), pp 438–454.

Goodall C, Jameson J and Lowe DJ. (2020). <u>Navigator: A tale of two</u> cities [internet]. Navigators Scotland. [Accessed July 2021]

Grove LE, Farrell G, Farrington DP and Johnson SD. (2012). 'Preventing repeat victimization: A systematic review'. Stockholm: The Swedish National Council for Crime Prevention.

Heeks M, Reed S, Tafsiri M and Prince S. (2018). <u>The economic and social</u> <u>costs of crime</u>, Second edition. Research report 99. London: Home Office.

Hemenway D, Vriniotis M, Johnson RM, Miller M and Azrael D. (2011).

Gun carrying by high school students in Boston, MA: Does

overestimation of peer gun carrying matter?. Journal of Adolescence,
34, pp 997-1003.

Hinkle JC, Weisburd D, Telep CW and Petersen K. (2020). <u>Problemoriented policing for reducing crime and disorder: An updated systematic review and meta-analysis</u>. Campbell Systematic Reviews, 16(2), e1089.

Johnson SD, Tilley N and Bowers KJ. (2015). <u>Introducing EMMIE: an evidence rating scale to encourage mixed-method crime prevention synthesis reviews</u>. Journal of Experimental Criminology, 11(3), pp 459-473.

Kuhn EM, Nie CL, O'Brien ME, Withers RL, Wintemute GJ and Hargarten SW. (2002). Missing the target: a comparison of buyback and fatality related guns. Injury Prevention, 8(2), pp 143–146.

Lynch-Huggins S, Rantanen K, Wishart R, Espasa J and Kelley N. (2021). **Evaluation of DIVERT: Full technical report** [internet]. College of Policing. [Accessed July 2021]

Makarios MD and Pratt TC. (2012). 'The effectiveness of policies and programs that attempt to reduce firearm violence: A meta-analysis'. Crime & Delinquency, 58(2), pp 222-244.

Massey J, Sherman LW and Coupe T. (2019). <u>Forecasting knife crime</u> <u>homicide risk from prior knife assaults in 4835 local areas of London,</u> <u>2016–2018</u>. Cambridge Journal of Evidence-Based Policing, 3, pp 1–20.

McNeill A and Wheller L. (2019). <u>Knife crime: Evidence briefing</u> [internet]. College of Policing. [Accessed July 2021]

Metropolitan Police Service. (2006). <u>Knife amnesty impact on knife-enabled offences</u>. London: Metropolitan Police Service.

NHS. (2021). **Statistical process control tool** [internet]. [Accessed July 2021]

NHS Digital. (2019). <u>ISB1594: Information sharing to tackle violence</u> minimum dataset [internet]. [Accessed July 2021]

Office for National Statistics (2021). Police recorded offences involving knives or sharp instruments: methodology changes [internet]. [Accessed July 2021]

Posch K and Jackson J. (2021). <u>Police in the classroom: Evaluation of a three-wave cluster-randomised trial</u>. London: LSE.

PSHE Association and National Police Chiefs' Council. (2019). Police in the Classroom: A handbook for the police and PSHE teachers [internet]. [Accessed 16 June 2021]

Quinton P, Tiratelli M and Bradford B. (2017). <u>Does more stop and search</u> mean less crime? Analysis of Metropolitan Police Service panel data, <u>2004-14</u>. London: College of Policing.

Ramshaw N, Charleton B and Dawson P. (2018). **Youth Voice Survey 2018** [internet]. The Mayor's Office for Policing and Crime. [Accessed July 2021]

Ratcliffe JH. (2018). 'Reducing crime: A companion for police leaders'. New York, NY: Routledge.

Ratcliffe JH, Taniguchi T, Groff ER and Wood JD. (2011). 'The Philadelphia Foot Patrol Experiment: A randomized controlled trial of police patrol effectiveness in violent crime hotspots'. Criminology, 49(3), pp 795–831.

Raymond B. (2010). <u>Assigning police officers to schools</u> [internet]. Center for Problem-Oriented Policing. [Accessed July 2021]

Read T and Tilley N. (2000). **Not rocket science? Problem-solving and crime reduction**. Crime Reduction Research Series Paper 6. London: Home Office.

Sampson R, Eck JE and Dunham J. (2010). 'Super controllers and crime prevention: A routine activity explanation of crime prevention success and failure'. Security Journal, 23(1), pp 37–51.

Scott M. (2000). <u>Problem-oriented policing: Reflections on the first 20 years</u>. Office of Community Oriented Policing Services. Washington, DC: US Department of Justice.

Scott MS. (2017). <u>Focused deterrence of high-risk individuals [internet].</u> <u>Center for Problem-Oriented Policing</u>. [Accessed July 2021]

Scott M and Clarke R. (2020). 'Problem-oriented policing: Successful case studies'. New York, NY: Routledge.

Sidebottom A, Bullock K, Armitage R, Ashby M, Clemmow C, Kirby S, Laycock G and Tilley N. (2020). 'Problem-oriented policing in England and Wales 2019'. Jill Dando Institute of Security and Crime Science. London: University College London.

Smith MJ, Clarke RV and Pease K. (2002). <u>Anticipatory benefits in crime prevention</u>. Crime Prevention Studies, 13, pp 71–88.

Spano R, Pridemore WA and Bolland J. (2012). 'Specifying the role of exposure to violence and violent behavior on initiation of gun carrying: a longitudinal test of three models of youth gun carrying'. Journal of Interpersonal Violence, 27(1), pp 158-176.

Sutherland A, Brunton-Smith I, Hutt O and Bradford B. (2020). <u>Violent crime in London: Trends, trajectories and neighbourhoods</u> [internet]. College of Policing. [Accessed July 2021]

Sutherland A, Strang L, Stepanek M, Giacomantonio C, Boyle A and Strang H. (2021). <u>Tracking violent crime with ambulance data: How much crime goes uncounted?</u>. Cambridge Journal of Evidence-Based Policing, 5, pp 20–39.

Telep CW and Hibdon J. (2019). <u>Understanding and responding to</u> <u>crime and disorder hotspots</u> [internet]. Center for Problem-Oriented Policing. [Accessed July 2021]

Tilley N. (2016). **Analyzing and responding to repeat offending** [internet]. Center for Problem-Oriented Policing. [Accessed July 2021]

Tompson L, Belur J, Thornton A, Bowers KJ, Johnson SD, Sidebottom A, Tilley N and Laycock G. (2020). <u>How strong is the evidence-base for crime reduction professionals?</u>. Justice Evaluation Journal, 4(1), pp 68-97.

Weisburd D, Wooditch A, Weisburd S and Yang S-M. (2015). 'Do stop, question, and frisk practices deter crime? Evidence at microunits of space and time'. Criminology and Public Policy, 15(1), pp 31-56.

Weisel DL. (2005). **Analyzing repeat victimization** [internet]. Center for Problem-Oriented Policing. [Accessed July 2021]

Welsh BC and Rocque M. (2014). 'When crime prevention harms: A review of systematic reviews'. Journal of Experimental Criminology, 10(3), pp 245–266.

Williams JD, Currie D, Linden W and Donnelly PD. (2014). 'Addressing gang-related violence in Glasgow: A preliminary pragmatic quasi-experimental evaluation of the Community Initiative to Reduce Violence (CIRV)'. Aggression and Violent Behavior, 19(6), pp 686-691.

Wilson DB, Brennan IR and Olaghere A. (2018). 'Police-initiated diversion for youth to prevent future delinquent behavior: A systematic review'. Campbell Systematic Reviews, 14(1), pp 1–88.

#### **Authors**

Aiden Sidebottom (University College London)

a.sidebottom@ucl.ac.uk

lain Brennan (University of Hull)

i.brennan@hull.ac.uk

lain Agar (Essex Police)

iain.agar@essex.police.uk

Matt Ashby (University College London)

matthew.ashby@ucl.ac.uk

Karen Bullock (University of Surrey)

k.bullock@surrey.ac.uk

Gavin Hales (GM Hales Research and Consultancy)

gavin\_hales@yahoo.co.uk

Nick Tilley (University College London)

n.tilley@ucl.ac.uk

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#### **About the College**

We're the professional body for the police service in England and Wales.

Working together with everyone in policing, we share the skills and knowledge officers and staff need to prevent crime and keep people safe.

We set the standards in policing to build and preserve public trust and we help those in policing develop the expertise needed to meet the demands of today and prepare for the challenges of the future.

