

Successful police problem-solving

A practice guide

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Foreword

Preventing crime is a core mission of the police service. The effectiveness of routine and systematic problem-solving to prevent crime has long-been established. It is common-sense and a way to reduce demand whilst better serving the public. Within the police service itself, who needs to be involved in problem-solving? Who needs this guide? The short answer is everyone.

- Most obviously problem-solving assists neighbourhood teams tackle those re-occurring local issues that affect quality of life in local communities.
- Problem-solving is relevant to response officers too, as they often witness the causes to many of the recurring issues we have to deal with and will have ideas on ways to prevent and reduce them.
- Some mistakenly think problem-solving is beyond the remit of detectives. However some of the very best examples of problemsolving has come from these officers as their wider geographical remit allow them to see similarities between incidents and to identify patterns that warrant problem-solving. As with patrol officers, a detective's knowledge of how crimes are committed places them in a strong position to contribute to problem-solving.
- Those who work in scientific support will often be in a position to identify patterns that relate to offenders, hitherto unknown offender linkages, and emerging MOs that can provide a key to imaginative problem-solving.

- The role of civilian analysts is obvious. Using specialists skills to understand police and partnership data, analysts are able to test hunches about what is going on as well identify emerging trends that can inform efforts to nip problems in the bud, before that get out of control.
- Finally, specialist crime prevention officers and designing out crime officers have expertise in ways of altering the environment such that opportunities for criminal and antisocial behaviour can be reduced or, in the case of new developments, pre-empted.

The problem-solving process helps work out what to do, who needs to do it and how to get them involved. This brief guide, drawing on extensive research and experience, aims to go further than most other guides currently held within our individual police forces. It seeks to increase understanding and provide a wider range of techniques to help you become better problem-solvers and consequently better police officers. It will also point you towards further sources of sound advice in relation to specific issues. However, there is only so much you can learn from reading guides. You need to engage in problem-solving yourself. It's no different from learning other skills in this respect. Whilst reading manuals and talking to successful practitioners can undoubtedly help, you only get better when putting it into practice.

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One Page Summary: Ten Rules for Successful Problem-Solving

1. Identify and define your problem

Focus your efforts on a specific problem. In the context of problemsolving, problems refer to patterns of repeated incidents that the police are expected to deal with. The more precisely the problem is described the better the chance of finding an effective solution.

2. Take advice:

There is lots of informed advice and experience to draw on from both within and outside your organisation. Use advice thoughtfully to better understand and respond to your problem.

3. Understand your problem

It's one thing to know there is a problem, quite another to understand who or what produces it. You need to understand the problem well enough to work out what can be done to reduce it.

4. Devise a response strategy

Decide how to respond to your problem based on your understanding of it, and where that understanding shows there may be opportunities for intervention. Previous research and experience can guide you in developing and implementing your response strategy.

5. Don't forget ethics

Don't forget ethics: It is not enough to develop and deliver an effective response. It must also be ethical. As well as being undesirable in and of themselves, unethical interventions are liable to backfire and may erode public confidence in the police. Good problem-solving is ethical and effective.

6. Take action yourself, or get others to take action

Take action yourself, or get others to take action: What the police can directly deliver will seldom be enough for long-term solutions to knotty problems. Effective problem-solving often requires the involvement and mobilisation of third parties.

7. Check out what happens to your response and your problem

Check out what happens to your response and your problem: Interventions are sometimes implemented poorly. They often fail to deliver what is expected. Check what is being delivered and whether the problem is being reduced or removed. If the problem persists, try something else.

8. Tell the world what you achieved:

Tell the world what you achieved: We need to learn from each other. Report your problem-solving successes and failures so that others can draw on your experience to improve what they do.

9. Begin again

Begin again: New problems for policing keep emerging. Offenders adapt. We can never afford to be complacent. So, when you think you've cracked a problem move on to the next one using the same problem-solving approach.

10. Think about the future

Think about the future: We don't have to wait for problems to surface. Anticipate problems that haven't yet arisen and try to pre-empt them.

Introduction

Why problem-solving?

All successful organisations, like all successful people, routinely root out and solve problems. They also aim to continuously improve what they do. Many of you are natural problem-solvers. Resolving issues that affect the public is why a lot of you joined the police service. This problem-solving guide aims to build on what many of you already do and to help the police service work towards continuous improvement.

Problem-solving involves the systematic identification of repeat, related and recurring problems that affect the community and in turn produce heavy demands on police resources. It is then about the implementation of appropriate responses that aim to have a sustainable impact on these problems.

This kind of problem-solving will help you do your job better. But it will often require a departure from conventional police work. It will involve the analysis of data, consultation with communities and colleagues, and may require that resources be brought in from outside of the police service. It is likely to be conducted over the longer-term. It will involve on-going assessment and a review of impact.

The **best evidence** we have tells us that problem-solving is the way to improve policing, make best use of resources, and serve the public effectively. This guidance is designed to help you deliver high-quality problem-solving.

Why publish this guide now?

There is a long history of police problem-solving in England and Wales. Police services have experimented with the idea of problemsolving for over three decades. Presently there is a resurgence of interest in problem-solving. It figures prominently in Home Office and National Police Chiefs' Council thinking. It is core to the Policing Vision 2025, the College of Policing's neighbourhood policing guidelines, Her Majesty's Inspectorate of Constabulary and Fire & Rescue Services inspection process, and Her Majesty's Government strategy on tackling serious and organised crime. National interest is also reflected in much local practice. In recent years several police forces have established their own problem-solving awards and conferences and have invested in problem-solving training. However, despite these positive developments, officers are unlikely to be able to conduct good quality problem-solving without receiving guidance. Officers need to be able to understand the principles of problemsolving if they are to confidently apply the approach and maximise its benefits. This guide is here to help.

About this guide

This guide is a start in helping you solve problems effectively, but there are plenty of other resources for you to draw on as you develop your skills and focus on specific problems. Some of these resources are listed at the end of this guide.

The guide is structured around the SARA problem-solving model which stands for Scanning, Analysis, Response and Assessment (see Box 1). The guide lays out ten rules for successful problem-solving with indications of how they link to SARA. You may well be familiar with the SARA model. It forms the basis of many local problem-solving guidance documents, which this guide is designed to complement.

Box 1: The SARA model:

Scanning, Analysis, Response and Assessment

'SARA' refers to a systematic problem-solving process, where 'S' stands for 'Scanning', the first 'A' for 'Analysis', the 'R' for 'Response' and the second 'A' for 'Assessment'.

- Scanning identifies patterned problems that call for police attention.
- Analysis aims to identify the causes or conditions that lead to or enable problems to persist, which might also be open to preventive interventions of one kind or another.
- Response develops and implements the intervention selected to try to reduce or eliminate the problem by removing the causes or altering the necessary conditions identified in the analysis.
- Assessment figures out whether the response has worked out as intended and whether the problem has been removed or improved.

SARA should not be understood in simple linear terms, although there is a clear logic to the sequence. In practice, analysis may lead to redefinitions of the problem, responses often need fine tuning which may call for further analysis, and assessments may suggest that the problem has persisted or changed in ways that mean the problem-solving process needs to be started again.

Source: Eck, J.E. and Spelman, W. (1987). *Problem-solving: Problem-oriented Policing in Newport News*. Washington DC: Police Executive Research Forum.

The ten rules for successful problem-solving

Rule 1: Identify and define your problem (Scanning)

Summary

- Pick a recurring problem that you or your force is dealing with. This may or may not be related to crime.
- On't depend on anecdote or intuition to identify problems. Some problem patterns are not obvious. Use diverse sources of information.
- Prioritise problems that matter to the community and cause harm.
- Focus on problems that can be prevented rather than broad issues that you will be unable to change.
- Be very specific in defining the problem. This will help you find practical solutions. Broad categories are unhelpful.
- Check on the concentration of your problem by place, offender and victim. Places are normally easier to change than people, in the short term.

The first stage of the problem-solving process is to identify a problem. But what problem to pick? The police are expected to deal with a wide range of issues. Some of these relate to crime, such as burglary, theft and assaults. Some are not directly to do with crime, such as missing persons, traffic congestion and attempted suicides, but nonetheless place significant demand on the police and so may form the basis of problem-solving. Problem-solving is not about responding to individual incidents. Problem-solving is about identifying patterns of recurring incidents that the police are expected to handle.

Problems might be identified in different ways. This could include analysis of calls for police service, the observations of you and your colleagues, or community complaints. Sometimes, the patterns in problems will be obvious. You will likely know about the person who calls again and again to complain about their neighbour. You will also likely be aware of the shop that repeatedly reports shoplifting and criminal damage. In other cases, patterns may not be so obvious. Take domestic burglary. We know from research that those who have experienced a burglary are at heightened risk of repeat victimisation. We also know that near neighbours of victims are at a heightened risk of being burgled for a short period of time. However, these patterns are not always obvious because of the ways that crimes are recorded. Yet, once such a pattern is recognised it provides clues about how to reduce the problem (see Box 2 for an example).

You may find it tricky to decide what problem to focus on. One way to help you to decide is to check whether the problem CHEERS! Ask yourself:

- 1. Who in the **community** is affected by this problem?
- 2. What **harms** does this problem cause?
- 3. What **expectations** do the public or partners have in relation to this problem?
- 4. What **events** make up this problem? (Focusing on specific harmful events always makes problem-solving easier)
- 5. How often do these events **recur**?
- 6. In what ways are the events that make up this problem **similar** to one another? (i.e. same location, victim, offender and so on)

If your answer to any of these questions is 'none' or similar, think about whether this problem should be a priority. Clearly you will want to concentrate on problems that matter to the community, that cause harm and that fall within your remit as police. But you cannot realistically deal with undesirable long-term societal issues such as gender inequality. What you can try to do is find measures to reduce the recurrence of sufficiently similar harmful events such as repeat incidents of domestic abuse.

Once you've identified a suitable problem you need to define it. In general, the more tightly you define the problem the easier it will be to solve. There is a tendency for crime problems to be defined in very broad terms – e.g. 'burglary', 'violent crime' or 'youth crime'. Thinking about problems in this way is unlikely to be helpful for the purposes of problem-solving. This is because broad categories often mask the existence of numerous problem types. For example, 'violence' incorporates 'common assault', 'robbery', 'manslaughter', 'murder' and 'domestic abuse', and may or may not involve offensive weapons. Examples of well-defined problems for the purpose of problem-solving include:

- A Repeat missing incidents involving children from care homes
- Theft of copper cabling from the railway network
- Assaults using glasses in bars

Box 2:

Understanding and preventing residential burglary

A housing estate had a very high annual burglary rate: 25 per 100 dwellings. Detailed analysis of police data revealed high levels of repeat victimisation – the chances of a second or subsequent burglary were over four times as high as the first. The increased risk of repeat victimisation was not obvious to police officers attending incident after incident because shift patterns meant that any one officer typically did not respond to two burglaries at the same address, even though repeat burglaries were common.

Once patterns of repeat victimisation were identified, they provided important clues about which homes to concentrate preventative attention on and how to respond. It was reasoned that the victimised properties remained attractive to burglars because the features of the property that caused it to be vulnerable remained over time.

The chosen response targeted attention on properties that had been victimised to reduce the risk of repeats. The security of the dwellings was improved and small Neighbourhood Watch schemes – known as 'cocoon watches' – were established amongst clusters of houses surrounding the property where the burglary occurred. The assessment of the impact of the intervention showed that repeat victimisation came to an end within 7 months and the overall recorded rate of burglary fell to six per 100 dwellings on the estate. There was no evidence of burglaries going up in surrounding properties or other estates nearby.

The lesson? Repeat victimisation patterns should be routinely examined when problem-solving, it may offer clues for how to reduce vulnerability. This is the case not only for domestic burglary but also for a wide range of other offences.

Source: Forrester, D., Chatterton, M., Pease, K., & Brown, R. (1988). *The Kirkholt burglary prevention project, Rochdale*. London: Home Office.

Many problem-solving projects focus on hotspots. Understanding your hotspots is an important part of scanning. What has emerged clearly from many research studies is that crime is heavily concentrated in certain places. As much as 50% of a city's crime might be concentrated in just 5% of its streets. Much can be done to reduce the demands made on police services by focussing preventive efforts on high-risk locations. Neighbourhood police officers are often well-placed to suggest where many of these locations are, but it is always worth checking with data. Impressions have sometimes been found to be misleading.

Hotspots are only one form of concentration. There are others. Problem-solving draws heavily on the principle that a few people and a few places account for many police-relevant events. Remember the 80:20 rule, also known as the Pareto Principle. It's universal. Roughly 20% of any base population (places, victims, offenders, products, complainants, times, internet sites, businesses) are responsible for roughly 80% of cases (crimes, calls for service, complaints, harms). Problem-solving is about the effective use of preventive resources, but 'getting the grease to the squeak' needs to begin by finding the squeaks! Box 3 provides some examples.

Box 3:

Concentrate on concentrations - The 80:20 rule

The 80:20 rule has been found to apply to:

- **1. Repeat offending**: a small proportion of offenders account for a high proportion of detected crimes.
- **2. Repeat victimisation**: a small proportion of victims account for a high proportion of all crimes.
- **3.** Hot spots: a small number of locations account for a high proportion of all crimes and other incidents to which the police are called.
- **4. Hot products**: a small proportion of products account for a high proportion of goods stolen. High-theft products tend to be CRAVED (concealable, removable, available, valuable, enjoyable and disposable).
- **5. Risky facilities**: a small proportion of organisations of any given kind (for example bars, airports or hotels) account for a high proportion of incidents occurring at those types of organisation.
- **6. Leaky systems**: a small proportion of systems of any given kind (for example internet dating sites) account for a high proportion of crimes within that system.
- **7. Repeat missing from home**: a small proportion of those who go missing account for a large proportion of all missing episodes.

Rule 2: Take advice (for all of SARA)

Summary

- Find reputable sources of advice. There is a lot of it available. The specifics of your problem will be unique, but others will have addressed similar problems.
- Don't take advice uncritically. Check whether the specifics of your problem do or do not match up to those of your sources of advice.

You have selected a problem and defined it appropriately. The specific details of the problem in your area are likely to be unique: times, places and offenders vary. However, it is very unlikely that noone has faced similar problems. It is important when doing problem-solving to learn from others who have tried things that failed. It is better to learn from others' mistakes than your own!

There are lots of sources of advice on problem-solving (see Box 4). One of the best is the Center for Problem-Oriented Policing website. Here you will find user-friendly guides to help resolve over 70 specific problems. Although the website is based in the United States, many of the examples are British and much of the guidance is written by British authors. It is worth reading at least one problem-specific guide to get a feel for what's involved in systematic problem-solving.

JDI Brief, produced in association with the Jill Dando Institute of Security and Crime Science, is an online library of short briefing notes about crime and security problems, and analytical techniques that can be applied to understand them better. They have been written by experts and provide examples of, and recommendations for, effective practice.

The College of Policing's online Crime Reduction Toolkit, provides a list of what is known (with what confidence) about what works in crime reduction, the settings in which interventions are found to be most effective and the costs of interventions.

It can sometimes be useful to draw on local expertise, especially with the analysis and assessment parts of problem-solving. You may have specialists in your own force, for example problem-solving advisors or analysts to call on. You may also be able to draw on relevant specialists in nearby universities. Some police forces have databases where problem-solving plans are stored and are searchable. You can also browse and post queries on the Knowledge Hub, established to enable officers and partners to connect digitally, share knowledge and insight, and to learn from one another. The Knowledge Hub can be used to canvas others' experiences in trying to resolve the specific problem you are focussed on. It also stores and makes available previous entries to the Tilley Award. You will, of course, generally discuss your specific problem with front line colleagues and partners, but always also look for independent advice too.

Box 4:

Ten useful sources of advice on problem-solving

- 1. Center for Problem-Oriented Policing
- 2. JDI Brief
- 3. College of Policing Crime Reduction Toolkit
- 4. Knowledge Hub
- 5. Campbell Collaboration
- 6. Global policing database
- 7. Center for Evidence-based Crime Policy
- **8.** Clarke, R. V. & Eck, J. (2003). Become a Problem-Solving Crime Analyst In 55 Steps.
- **9.** Goldstein, H. (2018). On problem-oriented policing: the Stockholm lecture. Crime Science
- 10. 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, University College London.

Rule 3: Understand your problem (Analysis)

Summary

- Find out what is producing your problem or enabling it to persist. This will involve visiting locations where the incidents occur, thinking, and consulting third parties.
- Focus on possible causes and enablers that are open to intervention. There is little point in looking at causes or enablers that cannot be changed.
- Use the 'problem analysis triangle' to think through the range of possible causes and enablers.
- If your problem is one of organised or complex crime, work out who is involved and what they do to commit the offences. This often helps work out where the weakest links are and where you can successfully intervene.
- Amendments Remember that your initial hunches about causes and enablers may be mistaken. Check them against the best information you can reasonably muster. We are all sometimes wrong!

Having identified and defined a suitable problem, you need to analyse it systematically. You don't need to know everything about your problem. But you do need to know enough about its causes to work out what might be done to reduce it.

Analysis is not only about statistical data. Data alone will never be enough. At the heart of problem-solving is the need to think about what is enabling or encouraging a problem to persist. It is

often invaluable to go and look at the locations where the problem is concentrated. You can involve investigators who may have developed a good idea of what is producing or allowing the problem to continue. You may find it useful to see what analyses of similar problems have found elsewhere to check whether the same goes for you.

There are many sources of information about crime and related problems to draw on – see Box 5 for some examples. In some cases, relevant information may not be held by the police but by other agencies and organisations. Processes may need to be put in place to share data across agencies. It is important to recognise that all sources of information have strengths and weaknesses and you should try and understand what these are. For example, some crimes are well-reported to the authorities and so we have good information about them – others are not, and less is certain.

It may sometimes be necessary to 'recode' data for the purposes of problem analysis. This can be technically difficult and time-consuming, but may be necessary. Suppose your problem is stabbings of young men in local housing estates. Your hunch is that knife-crime in a local neighbourhood results from competing gangs made up of otherwise similar young men, who are involved in a wide range of offences. Gathering the data to check this will involve the extraction and recoding of information from differing data sets. In this case, you may need to call on a local analyst with specialist expertise. Box five shows a range of possible data sources relevant to problem-solving. Don't be put off. You need only use that information that is relevant and necessary for you to get a sufficient grip on your problem so as to inform your intervention. And often adequate analysis need not be complicated.

Box 5: Data for problem-solving

Police data

Police data (such as those routinely collected related to recorded crimes and incidents, findings from investigations, and detected offenders) are good for analysing and understanding patterns of well-reported crimes such as burglaries and vehicle thefts, but not so good for under-reported crimes such as domestic violence, sexual assault or cybercrimes. The police are less likely to have reliable information on these problems and you may need to look elsewhere to develop good understanding on them. Police data also can reflect police activity, such as patterns of arrests and stop and search, which is important to bear in mind when looking to determine the impact of an intervention.

Local authority data

Local authority departments often have information that can contribute to problem analysis. For example, housing departments may have information on problems such as criminal damage, antisocial behaviour and noise complaints. Environmental services may have data on patterns of graffiti. Education departments may hold information on crime and disorder within and around schools. Local authorities may also operate CCTV systems which can yield useful information for some problems.

Health	Accident and emergency departments may have information on victims of assaults or knife crime. GPs may have information about patterns of domestic abuse.
Community	Surveys are a good way of generating information about community priorities. Focus groups or interviews are alternatives. Neighbourhood policing teams will often be well placed to canvass community views. Partner agencies may also have information that can be drawn on or ways of assessing community concerns that can inform problem-solving.
Other	Be imaginative in thinking about who might have data related to your problem. Private organisations might be able to help with understanding some problems. Bus or train companies may collect information on damage to their property or violence against staff. Shops may have information about retail crimes. Venues within the night-time economy may have information on incidents which occur within their premises but which are not always reported to the police. Banks will have information on frauds. Trading standards, housing authorities, the fire and rescue service, licensing bodies and insurance companies, for example, may likewise hold data that may be useful. Photographs and videos can also sometimes be illuminating. And, you can always collect new information if what you need is not available. It all depends on the specific problem you are trying to resolve.

The data you need and the sorts of analysis you do depend on the nature of your problem. The purpose of analysing data is to answer questions. Sometimes you will be able to do your own analysis, but as already noted you might need to get the help of crime analysts employed by the police service or partner organisations. Examples of the sorts of questions that you might use data to answer are provided in Box 6. They follow the 5Ws (what, when, where, why, who) and an H (how) model.

Box 6:

Indicative analysis for problem-solving

What is the problem? What at first sight appears to be one problem is invariably a collection of distinct sub-problems. For example, the issue of 'missing persons' generally comprises the different problems of teenagers running away from home or residential care, children being abducted or elderly individuals being waylaid or disoriented. Use data to drill down into your problem so as to arrive at a more precise definition.

Where does the problem occur? Try and be as specific as possible. For example, if you are looking at the problem of theft from vehicles, identify spatial hotspots but then look deeper - are there specific streets or carparks within that hotspot where most thefts are occurring? If so, try and understand what it is about those locations that makes them especially vulnerable to theft – visit them and speak to colleagues who know about them.

When does the problem occur? Crime and disorder often concentrates at different times of the day, different days of the week and at different points in the year. Knowing when problems occur provides clues about what is causing the problem. For example, you may have high rates of bike thefts in a city, but do they concentrate in the summer as tourists arrive or in the autumn when new students start university? Likewise, does crime around stadiums occur regardless of the event or only for football matches? Knowing when problems concentrate may suggest different preventive responses.

Who is involved? You need to know about the key people in your presenting problem. For many crimes this relates to knowing who the victims and offenders are. Information about both will be important when thinking about how to respond effectively. Information about victims is likely more readily available than information about offenders because so much crime is not detected. Useful information about victims will include, for example, their gender, age, ethnicity, and whether they have been the victim of crime before. For non-crime sources of demand, such as the missing persons issues discussed above, while the categories of victims and offenders do not apply, problem-solving still requires understanding of the sorts of persons who are reported missing (repeatedly) and whether recurrent patterns are identifiable.

How is the problematic behaviour carried out? It is important to know how crimes and other troublesome issues are occurring. Ask why it is that some victims are vulnerable and how does the offender take advantage of this? For example, in the case of child sexual exploitation, how are offenders typically finding victims?

Likewise for online romance scams, how is the offender defrauding the victim? When examined across a series of related incidents, do recurrent patterns emerge that can inform your response?

Why is the problem persisting? There are often many reasons why problems recur. A better understanding of the reasons why a problem persists can be helpful in orienting responses. Are people committing on-street robberies to buy drugs, pay their rent, because they are under the influence of drugs or alcohol or because they are being pressured by others to do so? In many cases it may not be essential or possible to address all the things that might underlie a problem in order to reduce it. Focus instead on identifying those causes that can be manipulated by police or partner action.

Ultimately the sorts of questions set out in Box 6 will help you think about what is going on in relation to your particular problem and help you think about how to respond. Understanding the problem is not an end in itself. The purpose is to find pinch-points (i.e. practical ways of altering one or more condition that allows a given problem to persist) to target in your response. In some cases, identifying pinch-points may be easy, and in others more challenging. There are several tools that may help structure your analysis to help you work out what to do to reduce the impact of the problem you have identified.

The 'problem analysis triangle' (PAT), as shown in Box 7, is one such tool to help you develop a practical understanding of most problems. It is based upon a longstanding criminological idea, known as Routine Activity Theory. The three sides of the triangle refer to 'place', 'target' and 'offender' (or person whose behaviour lies behind the problem). PAT recognises that most problems require locations that allow or attract problem behaviours; the availability of targets (people and/or things) that are the focus of the problem behaviour; and of course, the presence of those able and inclined to act in the problematic ways. The idea of analysing problems in this way is to find out which elements are most open to intervention: How might the location be made less conducive to the problem behaviours? How might targets be altered, removed or better protected to make them less vulnerable? And, how might those behaving in undesirable ways be controlled, diverted, deterred, or removed from situations where their behaviour is causing problems?

Crucially, the PAT also highlights that there is more to offences than offenders. Problems can be effectively reduced without arrests and enforcement but by focussing on the other sides of the triangle that are necessary for problems to occur. This is particularly apt in light of the growth in cybercrimes often committed by offenders who are unknown to the authorities and living in different countries.

Box 7: The problem analysis triangle Orenoer/subject of complaint Super controller Problem (CHEERS) Place Manager Super controller

The inner triangle refers to the problem of interest and the situation enabling it to occur. The middle triangle refers to those in a position to prevent the incident from occurring, by guarding the target (be it a person or thing), inhibiting ('handling') the person/s engaging in the problem behaviour, or by overseeing (managing) the location in ways that reduce its conduciveness to problem behaviours. 'Super controllers' are those able to apply leverage to relevant handlers, guardians or place managers to persuade them to act in ways that will lessen or eliminate the problem behaviours.

Source: Sampson, R., Eck, J. E., & Dunham, J. (2010). Super controllers and crime prevention: A routine activity explanation of crime prevention success and failure. *Security Journal*, 23(1), 37-51.

Another tool relevant to problem-solving is the script. Scripts can be used to help think through the aspects of a problem that might be amendable to intervention. Scripts in the context of problem-solving are accounts of the steps involved in committing a crime. They are especially relevant to complex organised crimes, such as drug trafficking or modern slavery that require extensive planning, the participation of diverse people, and an extended period for crime benefits to be realised. The advantage of scripts is that they help identify multiple points in the crime commission process that might be open to intervention. Previous investigations and interviews with offenders can help you piece together scripts. See Box 8 for an example of a crime script relating to theft of lead from church roofs. In this case the crime is relatively simple, but it illustrates what a script looks like and how detailing the steps required for successful crime commission can suggest possible means of intervention.

Box 8: A sample crime script - theft of lead from churches

All problems consist of a series of steps, but some problems have more steps than others. Breaking down the crime process into small steps can help you identify promising pinch-points for intervention.

Function	Offender action	Potential interventions
Preparation	Select suitable church	Work with church representatives to identify churches most at risk of theft and seek to reduce vulnerability
Preparation	Acquire necessary tools	Work with local businesses to lookout for suspicious purchases of theft-related equipment
Preparation	Acquire means of transporting stolen lead	Prioritise the investigation of stolen vans and specialist equipment
Pre-condition	Access church	Post rules, advertise crime prevention schemes and install alarms in at-risk locations

Pre-condition	Scale roof	Remove or secure items (such as ladders and wheelie bins) that could make scaling a church roof easier
Theft	Remove lead from roof	Replace lead with alternative materials (perhaps after a previous theft)
Post- condition	Get stolen lead to ground level	Encourage neighbours to report anyone spotted on the church roof
Exit	Exit church with stolen lead	Encourage neighbours to report anyone in churchyard at unusual times
Profiting	Locate a scrap metal dealer or local handler willing to buy stolen metal	Conduct regular checks on scrap dealers to encourage compliance with requirements to check ID and maintain proper records
Profiting	Receive payment for stolen lead	Enforce regulations prohibiting scrap yards from dealing in cash
Exit	Exit scrap metal dealer	Install CCTV and record images of those leaving scrap yards thought likely to receive stolen lead

Source: Price, V., Sidebottom, A., & Tilley, N. (2014). Understanding and preventing lead theft from churches: A script analysis. Heritage Crime . Palgrave Macmillan, London.

Rule 4: Devise a strategy (Response)

Summary

- Start by generating possibilities for how to respond to an identified problem. Home in on the most promising and practicable responses. There are no magic bullets.
- Think about what others can do as well as you to deal with the problem effectively.
- Focus on the causes and conditions that are most open to preventive intervention.
- Do not confine your strategy to traditional police activities such as enforcement and patrol.
- Consider whether there is scope to change the locations where the problem behaviours concentrate, making them more difficult, more risky or less rewarding.
- Consider whether any provocations or temptations for the problem behaviour can be removed.
- Consider whether attractive crime targets can be removed or disguised.
- Consider whether friends, family, partners or other community members can be mobilised to help deter or dissuade repeat offenders.
- Consider whether problem places could be better managed and who could do so.

Good problem analysis should help you identify pinch-points for intervention. The next step is to devise a response strategy designed to have an impact on the problem you have defined. Problem-solving often requires creativity. Innovation is encouraged. Don't focus only on the application of the criminal law, most notably enforcement and police patrol. Both have a role to play in dealing with problems, but they do not exhaust the possibilities that may emerge from analysing a problem. Other responses may be more effective. Moreover, if you are dealing with a problem that has persisted over a long period, it is likely that standard police tactics have already been tried and not been effective: it is worth checking. In addition, default police tactics will scarcely be relevant to many of the issues the police are expected to address that are largely unrelated to crime, such as missing persons, trespassing and traffic injuries. Problem-solving is about being proactive and seeking to minimise future harm by targeting and tailoring responses to specific problems, be that by focusing on the offender or victim or location.

The techniques used in 'situational crime prevention' can be a useful starting point in thinking about a response strategy. These are based upon a criminological idea known as Rational Choice Theory and the five main techniques are:

1. Increase the effort: What makes it easy for those likely to behave in problematic ways to do so, and what might be done practically to make it too difficult or even impossible for many to bother? Think first of location. Can it be made harder or impossible to get to a given location or can those likely to behave in the problematic ways be diverted elsewhere? Then think about the target. Can targets of crime be disguised, removed, hidden, or locked away so that they cannot be accessed easily? For example, security screens in buses make it more difficult to rob bus drivers.

- 2. Increase the risk: What leads those behaving in problematic ways to think they can get away with it? What might be done to make undesirable behaviour seem more risky to those thinking of offending? How do you convey an increased sense that offenders will be caught if they offend? Would publicity help? If so, how can this message be best delivered? For example, well-advertised CCTV in car parks has reduced levels of car theft by making it seem more risky to prospective offenders.
- 3. Reduce the reward: What leads the problem behaviour to seem rewarding for those engaging in it, and what changes might be introduced to make it seem less rewarding? Think about the person causing offence: might the disapproval of those close to them (for example parents, partners, friends) be brought home to the offender? Think about the target: what might be done to make the target less rewarding (for example dye tags in clothes shops) or what could be done to remove the target (for example tools in the back of vehicles)? And think about place: could problem locations be made less fun for those causing annoyance to local residents, even if unintentionally? For instance, could the bench that has been a convenient place for young people to congregate be moved to a place where their behaviour will no longer cause offence?
- 4. Reduce provocations: Is there something that is stimulating or prompting problem behaviour, and can those provocations be lessened or removed? For example, where violence takes place in taxi queues, a taxi marshal might reduce frustrations and hence lessen the risk of violence.

5. Remove excuses: Is there something where and when the offending concentrates that seems to excuse the problem behaviours? 'Broken windows', for example, provide an excuse for offending – when people see a messy unregulated environment they assume that nobody cares and it is therefore OK to urinate, daub graffiti and fly tip. Rapid clearance of rubbish and other signs of disorder removes the excuse that 'everybody does it'.

Box 9 provides further examples of each of these situational techniques used to address specific problems.

Box 9: Some examples of situational measures used when problem-solving

1. Increase the effort

- Vandalism by throwing rubble at trains from a bridge: arrange for council to clean up area around the bridge thereby removing the rubble
- Burglary through replacement windows: install window (and door) locks meeting minimum security standards
- Suicide from a high point: add fencing at known risky locations

2. Increase the risk

- Obscene phone calls: caller number display
- Car crime in car parks: install CCTV
- Vandalism to underground line: police helicopter or drone overflies line when returning to base and publicise idea that offenders can be seen

3. Reduce the reward

- Robbery of takeaway drivers: take card payment during ordering so drivers do not carry cash
- Theft of white goods in newly built houses: postpone installation until properties are occupied
- Graffiti: rapid removal so vandals cannot enjoy/show their work

4. Reduce provocations

- Violence in crowded bars: serve at table rather than bar
- Late evening conflict in taxi queues: deploy marshals or increase the number of taxi spaces
- Violence at football matches: keep rival fans apart and unable to communicate directly with one another

5. Remove excuses

- Theft of towels and bathrobes in hotels: post notice saying where towels and robes can be purchased
- Benefits frauds: make it necessary to make signed declaration explicitly acknowledging that fraudulent claims are illegal
- Speeding: use flashing signs reminding drivers of speed limits when they exceed them

There are various ways in which more serious criminal activities can be disrupted. Organised crimes, for example, require collaboration between different offenders. What can be done to make collaboration more difficult, for example by seeding suspicion among those involved? Can life be made difficult for those engaged in the behaviour, by focusing on more easily identified and enforced minor infractions, for example those to do with driving, as suggested by the phenomenon of offender self-selection (see Box 10)?

Box 10:

Offender self-selection

'Offender self-selection' can be a focus for analysing serious and organised crime problems, by homing in on the known offenders even though they may be hard to convict for their most serious crimes. Those who are strongly suspected of behaving badly in one (more serious) way typically also act badly in many other (more minor) respects. Is this the case with your serious crime problem? If so, then this opens up the possibility of interventions that will disrupt or deter (and hence reduce) the more serious behaviour without necessarily obtaining criminal convictions for it (think Al Capone!).

This is sometimes referred to as the Achilles heel tactic. If necessary, you can check on other offending simply by looking at criminal records. If you strongly suspect other offending going on, you may be able to check in more subtle ways, for example seeing whether cars are roadworthy, taxed, insured, whether accurate information has been provided in applications for mortgages, etc.

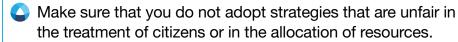
Self-selection and organised crime families

In one police force area, there was a network of individuals centred around one criminal family, who were committing serious crime and intimidating local residents who were frightened and therefore reluctant to complain about them. Community members also lost confidence in the police, who appeared impotent in the face of the organised crime group who routinely flouted the law. In response, the police systematically mapped members of the crime network and their relationship to one another. Instead of ignoring minor offences in the hope of securing convictions for more serious crimes sometime in the future, the police paid attention to the daily routines of members of the crime network to see how lawful or otherwise their behaviour was. In the event, the police found that disregarding requirements relating to insurance, vehicle licensing, chipping animals and driving whilst disqualified was woven into the everyday lives of the network members. Targeted enforcement activities on the easily detectable minor infractions yielded results. It (a) disrupted the organised group's more serious crimes and (b) led community members to have confidence that the offenders could not behave with impunity. This in turn increased the community's willingness to report suspicions to the police. The levels of criminality by the family and their associates fell substantially. Community confidence and wellbeing grew.

Source: Roach, J. & Pease, K. (2016). *Self-Selection Policing: Theory, Research and Practice*. Springer.

Rule 5: Don't forget ethics! (Response)

Summary



Problem-solving is about effectively and ethically meeting needs rather than satisfying demands, especially if the methods used treat people unjustly.

The early history of problem-solving was closely connected with police ethics – it was explicitly developed to provide police services with an ethical way of maintaining order and reducing crime whilst minimising the use of force and enforcement. This accords with the Peelian principles of policing, which too warn against police overreliance on arrest and enforcement and stress the importance of crime prevention. In any case, the belief that we could arrest our way out of most crimes is mistaken. It has never worked, except as a very short-term measure to contain problems.

Ethical policing rules out some ways of acting. Reducing demand by providing a poor service, treating people unjustly because they are seen by others as a nuisance, failure to recognise and respect human rights by unnecessarily intrusive surveillance, failures to act fairly in dealing with people on grounds of age, sex, race or any other attribute because it is economical to do so, for example, may all be tempting to secure short term reductions in problems. However they are to be avoided. In the longer term such breaches of trust with the public are liable to backfire.

Some police forces have an ethics board to help officers come to ethical decisions in their work. Involving communities in problem-solving – for example through formal or informal consultation – can

also help you understand potential ethical concerns at an early stage and take steps to respond to them.

Problem-solving focuses on need rather than want. This involves an important principle that guards against devoting resources to those who shout loudest and who call for actions that may be popular but ineffective. In all cases treating colleagues and members of the public in procedurally just ways (fairly and in accordance with rules) is important as a way of eliciting co-operation and avoiding the provocation of problem behaviours.

Rule 6: Take action yourself and/or mobilise others to take action (Response)

Summary

- Where necessary, get third parties on board. The police alone can rarely deliver effective long-term solutions.
- Amongst those who are habitual partners, just ask them and they will generally do their bit. Much partnership work has become a matter of course in UK policing.
- Amongst crucial but reluctant third parties, if they stand to benefit tell them so and they may then do as you ask.
- Amongst third parties whose policies or practices are contributing to problems, but the measures they need to take will produce costs for them, try initially to appeal to their sense of responsibility. Failing that think about ways to apply legitimate pressure. Senior officers and/or the Police and Crime Commissioner may be able to help.

Many of the knottiest problems are caused by factors that are beyond the control of the police. Although there is much that the police can do on their own, in the long-term, strategies of the sort discussed in Rule 4 will require others to play their part. How can you get them to play ball?

Some third parties have a statutory duty to work with the police, for example the local authority and the fire service (see Section 17 of the Crime and Disorder Act 1998, as amended). Some third parties also stand to benefit from working with the police to deal with problems that affect them directly, for example shops experiencing high levels of theft. However, some third parties are well placed to help implement strategies but may have little interest in doing so, especially where the intervention will incur costs for them. In other cases, third parties are prepared to bear losses rather than deal with the problem themselves. For example, garages whose forecourt arrangements make non-payment for petrol possible could easily change their systems but are prepared to carry the losses rather than inconvenience paying customers. All this means that in some cases the development and implementation of problem-solving strategies is tricky. Where this is the case, it can be useful to engage senior police officers or your Police and Crime Commissioner and their equivalents. For further information on the involvement of third parties, see Mazzerolle and Ransley (2006).

How, then, to mobilise third parties to help resolve persistent problems? Box 11 shows a hierarchy of 'levers', with examples, that can be used to get third parties on side when problem-solving, remembering that less is generally more when it comes to the application of pressure.

Box 11: Levers to persuade third parties to do their bit for problem-solving

Here is a list of ways to persuade other people, groups and organisations to act in ways that are designed to reduce or remove problems. The suggested 'levers' go from softer, quicker, cheaper and less coercive measures to those that are harder, slower, more expensive and more coercive. In most cases, start at the top of the list and only move on to the harder methods if the easier ones fail.

- 1. Helping others understand a problem, the impact on them and what they might do to address it, for example with victims of domestic burglary at risk of repeat victimisation.
- 2. Providing incentives to do as asked by the police, for example allowing operators to advertise that their car parks have police-approved security measures.
- **3.** Showing others that their actions (or inactions) have created a problem and that they have a responsibility to take action to reduce it, for example city centre bars operating in ways that foster violent behaviour.
- **4.** Refusing automatically to provide police services unless action is taken, for example with repeat false burglar alarms at commercial premises.
- **5.** Warning and (if necessary) making 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.

- **6.** Taking enforcement action to persuade third parties to act, for example when businesses such as convenience stores are subject to licensing laws.
- 7. Lobby for changes in local or national laws to require that action be taken, for example bye-laws against carrying open glass bottles in public places to reduce glassing.

Partners can help the police pull levers. They have levers of their own that can sometimes be used to put pressure on reluctant third parties where the police themselves are unable to do so. Trading Standards, inspectorates, environmental services, the fire service, planning authorities, housing departments, probation services, and licensing authorities are all cases in point. Think about their possible mobilisation when you are faced with individuals or organisations that are unresponsive to your requests for cooperation.

Source: Goldstein, H. and Scott, M. (2011) *Shifting and Sharing Responsibility for Public Safety Problems*: Response Guide No. 2.

Rule 7: Check out what happened: was the response implemented properly and has the problem reduced? (Assessment)

Summary

- Plan for your assessment from the start. Be clear about your objectives, what is to be implemented, and what information sources you will use for assessment purposes.
- Check that the planned response is being implemented correctly. 'Implementation failure' is common.
- Check that the expected effects are occurring. Many wellintentioned interventions fail from the start or when the initial impact fades.
- Look out for negative side-effects. Sadly, well-intentioned interventions sometimes unintentionally produce more harm than good.
- Where you find failures in implementation, and the intended effect is not produced or the side effects are harmful, adjust your response, abandon your response or start the problem-solving process again.
- Make sure that the data you plan to use are appropriate for your assessment purposes.
- Make the sophistication of your assessment proportional to the importance of expected lessons learned for future work. If it's really important to be as certain as possible that your response was successful, take expert advice.
- Do what you can by way of assessment. Don't be discouraged because it can sometimes be difficult and complicated. In assessment, don't let the ideal be the enemy of the possible. Remember too that the perfect, water-tight assessment has yet to be made!

A good problem-solving strategy will state who is to do what, when and will indicate how the chosen responses are expected to work in dealing with the identified problem. For example, suppose the problem is residential burglary. You expect the overall burglary rate to go down following the target-hardening of burgled properties and their near neighbours. This is your overall objective and it follows a strategy that was informed by your analysis of local burglary patterns, which confirmed that victims and near neighbours were at heightened risk in the short term following a burglary incident.

In this example, you should check that the target-hardening is being undertaken as planned (often referred to as 'monitoring'). Are repeat victims and their near neighbours being target-hardened very soon after a burglary (e.g. within 48 hours)? There are many reasons why prompt target-hardening might not occur as planned. If this is the case you will need to investigate why and make the necessary adjustments. Many initiatives fail because they are not implemented properly and that failure only emerges once the project has ended. Monitoring can be light or heavy touch. Dip sampling, say, every tenth case, by visiting those who should have been target hardened, may not be too labour intensive but could prove invaluable in seeing whether the initiative is being implemented properly and whether change is needed. Where actions are routinely logged, it is relatively easy to see whether they accord with plans. Assuming that plans or instructions are being followed automatically is a common mistake when problem-solving.

Assessing the impact of your chosen response is important for several reasons. Firstly, it tells you whether the community's concerns are being addressed effectively. If not you need to try something else. Secondly, it helps establish whether resources are being put to good use: do the outcomes justify the input. Thirdly, it

enables lessons to be learned by you and by others for the future – avoiding past failures and building on past successes. Finally, it may enable you to enter problem-solving competitions and enjoy the fruits of your hard work!

Assessment of impact can be more or less sophisticated. In the example given here, you should be able to check whether burgled properties and their near neighbours have indeed suffered a lower rate of burglary (re)victimisation than had occurred previously in the target area, and also whether this is associated with a lower overall rate of burglary. You may also want to compare the trend in burglary in the target area relative to the trend in a comparable area elsewhere.

Using your assessment findings you can then estimate the number of burglaries saved. You should also have a good idea of the costs involved in terms of staff time and materials. You should know how many properties have been target hardened. Armed with this information, you can estimate the cost per target-hardened property and the cost per prevented burglary. There are Home Office estimates of the overall social and economic costs of different crime types. Using this information, you can then work out whether the cost of the target-hardening initiative is less than the officially estimated cost of the burglaries prevented. If you manage all this you will have a pretty good assessment!

One wrinkle in assessment relates to 'unintended consequences': effects brought about by your activities that were not originally envisaged. Two common examples that you may be able to

include in your assessments include 'diffusion of benefits' and 'displacement'. Diffusion of benefits refers to positive effects extending beyond the operational range of your intervention (for example reductions in burglary beyond the streets in which your burglary initiative was implemented). Displacement refers to a switch in offending from those receiving the intervention to those that are not (for example burglaries moving to households that are not target-hardened).

Advanced assessments will measure diffusion of benefits and displacement to calculate net effects (direct effects of a response strategy plus diffusion of benefits minus displacement). Continuing our example, by comparing changes in burglary rate amongst those receiving target-hardening to those most likely to benefit from diffusion of benefits or suffer from displacement, you can attempt to estimate net displacement and diffusion of benefits to plug those numbers into your estimate of overall effects and thereby compute the overall cost-benefit outcomes.

It is easy to assume that any observed change in an identified problem is the result of our activities, when in fact it was something else. Box 12 lists some common reasons why we sometimes come to the wrong conclusions when assessing the impact of implemented responses (these are sometimes referred to as 'threats to internal validity'). Bear these in mind in working out how to assess your own problem-solving efforts.

Box 12: How we can easily come to the wrong conclusions or, ensuring internal validity

Threat to internal validity	Explanation	
1. History	Something happens to create change that would have happened anyway without any intervention.	
2. Regression to the mean	An unusual event (e.g. a month with much higher crime than normal) provokes police action but the event was so unusual that it was unlikely to happen again. Thus when (for example) crime goes back to normal next month, we might imagine police action was successful even though crime would have dropped without it.	
3. Seasonality	Changes may be part of a regular set of rhythms unrelated to the measures put in place.	
4. Continuation of longer-term trends	Where there are longer-term trends, they can mask real success or failure.	
5. Self-selected participants	Where those opting into treatment differ from those not opting into it, it cannot be assumed that the treatment itself led to changes in the treatment group	

Strong assessments will provide persuasive evidence that the problem disappeared or was reduced in scale or seriousness and that the response itself was responsible for the success. Although there is a consensus that assessment is important, there is less on the best, practical methods to use when assessing the impact of responses (see Fielding et al 2020). Guidance from the College of Policing is available can help, in the form of a policing evaluation toolkit.

When conducting your assessments, it can be helpful to think about someone who is likely to doubt the effectiveness of what you have done. What practical provisions for assessment can you make that would be most persuasive for them, whilst also being true? For 'big' problem-solving (expensive, wide-scale) initiatives, efforts to assess as rigorously as possible the effectiveness of what has been put in place will be worthwhile, particularly if it is hoped that the findings may be applicable elsewhere. Where the scale of your efforts or your apparent achievements warrant the costs and effort involved, take advice from experts in designing your assessment – maybe from analysts in the force, university partners or the College of Policing. Big projects may even warrant costly and complex bespoke data collection exercises.

In all cases of assessment issues of data availability and quality arise (revisit Box 5 and the text immediately before it). In some areas police data are quite difficult to deal with in tracking and assessing what has been achieved: they may be inaccurate; they may not include information you need; the categories used in coding may change or be too imprecise for your purposes; public incident reporting practices may alter; police recording practices in relation to incidents reported may change; and so on. Take care!

Problems also arise when other data sources are used (for example, hospital, social services, educational, cleaning services, rubbish collection, or housing data). As with analysis, the rule of thumb is: use the best data you can get hold of and check what those data suggest happened to the problem you are focusing on, but thereafter efforts need to be proportional to the likely use of your findings.

All this might sound rather forbidding. Please don't be put off. As with other elements of problem-solving, talk to others to learn from them. You will also get better at assessment with practice!

Rule 8: Tell the world what you've achieved (Assessment)

Summary



Disseminate your findings, whether they are positive or negative so that others can learn from them.

If you have good grounds for believing that your problem-solving efforts have been successful, make sure others know about it. Indeed, if you have tried something that was promising, but in the end failed to reduce the problem, it is also a good idea to let others know. The reasons for publicising results are obvious. Others may be able to draw on your achievements if their problem is similar to your own in relevant respects. Likewise, if your response looked promising but did not deliver the expected benefits, telling others can save them from going down a similar line. If the response still looks promising, but there were hurdles to its proper implementation, again it can be helpful to others to hear of your experience so that they can learn from it. Entries to problem-solving awards competitions and

posting on the Knowledge Hub provide opportunities to disseminate your results and how they were achieved.

Rule 9: Begin again! (SARA revisited)

Summary



Keep on problem-solving. There are always new problems, sometimes our best efforts fail, and old problems morph, sometimes in response to preventive efforts. There is no end to problem-solving!

Sadly, there will never be an end to the need for problem-solving in policing. Administrative changes, technological progress and the development of new products, innovations by offenders, changes in the kinds of problem the public bring to the police, and new commercial and housing developments, for example, mean that even if you succeed in dealing with one problem there will always be plenty more that need addressing. And, if your initial effort produced disappointing results or if the same problem comes back (perhaps as offenders adapt or new ones surface or if conditions for the crime re-emerge) you will need to start again, though not necessarily from the beginning.

Rule 10: Think about the future (Scanning and Responding)

Summary



Try to pre-empt problems before they surface. With some effort it is often possible to see problems on the horizon. Good problem-solving stops them in their tracks.

We don't always have to wait for new problems to hit us. We can try to anticipate them and ward them off before they happen. The police often do this already for high profile events, for example when expecting public demonstrations or troubles at football matches. Moreover, specialists in Crime Prevention through Environmental Design in the form of Designing Out Crime Officers already try to pre-empt problems before they surface in relation to new property developments. If we come to understand what drives trends in problems we can be ready to deal with them when the time is right. For example, we have strong evidence that metal theft closely tracks (with a slight lag) relevant metal prices. If copper prices begin to spike we can be sure that copper thefts will soon rise in tandem. Accordingly, we can try to figure out in advance what to do and allocate resources to the right places at the right times, drawing on previous experience.

Conclusion

This document has laid out ten basic rules to guide successful problem-solving. They are intended to act as a starting point. Box 13 is a checklist, incorporating the points included in this guidance, that you can use to make sure that your problem-solving is on track.

Box 13:

A checklist for good problem-solving

Scanning

- 1. Has the problem been tightly defined?
- 2. Have relevant data and information sources been interrogated to establish the extent and seriousness of the problem?
- 3. Does the problem meet the CHEERS criteria?

Analysis

- 4. Has the problem been analysed prior to the development of a response?
- 5. Has the analysis looked for pinch-points for intervention, using all three sides of the problem-analysis triangle?
- **6.** Has the analysis assessed concentration: targets, people, places, facilities, systems and so on?
- 7. Have relevant experts, evidence and/or resources been drawn on to inform analysis?

Response

8. Does the response align with the findings of the analysis?

- 9. Is the response ethical and unlikely to provoke public anger?
- **10.** What has been done to deal with the problem in the past? Can lessons be learned to improve the current response?
- **11.** Have the most important aspects of the problem and its harm been addressed in the response?
- **12.** Does the response activate one or more mechanisms (risk-increase, effort-increase, reward-decrease, provocation-decrease, excluse-removal) relevant to the behavior of those whose actions comprise the problem?

Assessment

- **13.** Is the assessment focused on the intended outcome of the response: to reduce, remove or lessen the harms associated with the problem?
- **14.** Has the assessment attempted to measure side effects such as displacement and diffusion of benefits?
- **15.** Has the assessment documented whether the response was implemented as planned?
- **16.** Does the assessment rule out alternative explanations for the outcomes observed?
- **17.** Have your findings been disseminated to improve future problem-solving?

Source: Sidebottom, A., Tilley, N., & Eck, J. E. (2012). Towards checklists to reduce common sources of problem-solving failure. *Policing: A Journal of Policy and Practice*, 6(2), 194-209.

Resources

Want to know more? Below is list of resources that you can consult to deepen you understanding of problem-solving and your expertise at it. The material contained in these documents lies behind most of what is included in this guidance.

Ashby, M and Chainey, S. (2012). Problem Solving for Neighbourhood Policing. London: Jill Dando Institute.

Braga, A. (2002). Problem-Oriented Policing and Crime Prevention. Criminal Justice Press: New York.

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

Clarke, R. V. and Eck, J. (2003). Become a Problem-Solving Crime Analyst in 55 Steps. London, Jill Dando Institute of Crime Science, University College London.

College of Policing's Policing Evaluation Toolkit available at: https://whatworks.college.police.uk/Support/Pages/Evaluation-Toolkit.aspx

Eck, J. E. (2004). Assessing responses to problems: An introductory guide for police problem-solvers. US Department of Justice, Office of Community Oriented Policing Services.

Fielding, N., Bullock, K. and Holdaway, S. (2020) Critical Reflections on Evidence-based Policing. London: Routledge.

Goldstein, H. (1990). Problem-oriented Policing. Wiley

Goldstein, H. (2018) On problem-oriented policing: the Stockholm lecture. Crime Science 7:13.

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Mazzerolle, L. and Ransley, J. (2006) Third Party Policing. Cambridge University Press.

Ratcliffe, J. (2018). Reducing crime: A companion for police leaders. Routledge.

Read, T. and Tilley, N. (2000). Not Rocket Science? Problem-solving and crime reduction. London: Home Office.

Scott, M. (2000). Problem-Oriented Policing: Reflections on the First 20 Years. US Department of Justice, Office of Community Oriented Policing Services.

Scott, M. and Clarke, R. (2020). Problem-oriented Policing: Successful case studies. Routledge.

Sparrow, M. (2018) Problem-oriented policing: matching the science to the art. Crime Science 7:14.

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