

VIOLENCE REDUCTION

Good Practice Case Studies

LB Croydon
Harmspot patrols

By using highly granular data to identify the 'micro-harmspots' within areas that account for a significant proportion of violent crime, increased regular police patrols are boosting public confidence, improving intelligence gathering and helping to reduce the overall level of harm impacting on communities.



The problem

As of July 2020, statistics show that Croydon was ranked the highest borough in London for violent offences and ranked third highest for non-domestic violence with injury. By implementing the Cambridge Crime Harm Index in its analysis, the borough used crime harm as well as crime count to measure violence. This highlighted a high level of violent harm that was being committed in the borough and identifying 'harmspots', which was strongly linked to 'street-based' violence. The main harmspots were identified in the town centre where even though it represents 2.7 per cent of the borough's total geographical area, it accounted for almost a fifth of all violence in the borough. A linked problem was the low proportion of positive outcomes of stop and search across the borough. The 17 per cent positive outcome rate of stop and search in the borough was representative of the whole MPS. This low success rate demanded a more intelligence-led approach to stop and search.

The solution

Research has shown that within a hotspot (or, in this case, 'harmspot') there are a proportion of 'micro-harmspots' or 'micro-places' that account for 25 -50 per cent of all crime. This type of analysis has been widely used and reinforced the common recommendation that it should be used when coordinating interventions to reduce crime e.g. police patrols. Therefore, after identifying the micro-harmspots within the areas of high levels of harm, 'micro-patrols' were conducted by the Police in the area, which was called Operation Peel.

Partners involved

LB Croydon

Croydon Safer
Partnership

MPS

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These patrols were derived from what is known as the 'Koper Curve', where its main principle suggests that random 10-15 minute patrols at least every two hours in hotspots optimised deterrence. The principles of the Koper Curve on patrol time were adapted to the dense urban context of London and together with temporal analysis of street based violence formed the framework for patrols during the study, randomised within the blocks of time offences were known to occur. Croydon adapted these patrols to consist of 30 minute patrols for four times a day, excluding throughout the night. Another desired outcome was an increase in the proportion of stop and search where there were positive outcomes. The increase in patrols was expected to result in increased community cooperation and intelligence, therefore leading to a more evidence-based approach to stop and search and increasing positive outcomes.

Background

The strategic assessment for Croydon covering crime in the borough for all of 2019 provided the following headline statistics on violence in the borough:

- Croydon was the second highest borough in London for volume of violent offences with 9,851 offences committed in 2019. This ranking had not changed in the last three years.
- There were 2,300 non-domestic violence with injury offences committed in the borough in 2019. This ranked the borough as the third highest in London for this type of offence. The borough's ranking had been climbing steadily in the last three years.
- The borough was ranked second highest for youth violence and fifth highest for serious youth violence in 2019.

The strategic assessment highlighted the notion that not all crimes are equal and, therefore, the current common process of summing up all crimes by the count of offences and measuring performance this way is very misleading. It highlighted the necessity for a meaningful measure of how harmful a particular crime is comparative to other crimes. This resulted in Croydon exploring where the highest levels of harm were being committed in the borough by using the Cambridge Crime Harm Index. This method identified particular areas of high harm which may not have been identified by crime count and provided a much more accurate focus of specific areas which should be targeted. Many of these harmspots did fall within high hotspot areas and so ultimately the objective was to prevent high harm being committed in these areas and, inevitably, crime count will decrease too.

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What does the approach encompass?

Intelligence gathering and analysis:

One of the recommendations of the strategic assessment was for the borough to implement the use of the Cambridge Crime Harm Index in its analysis of crime, specifically violence, in the borough. Another recommendation was to use patrols of micro-places to drive down violence in the primary hotspot of the borough, which is the town centre. These recommendations were presented to the Safer Croydon Partnership in May 2020 and they were agreed to be used where they can.

It was through the recently set up Violence Suppression Unit (VSU) in the local police where first stage of the planning of micro-patrols within harmspots began to take place in July 2020. The Intelligence and Performance Manager of Croydon Council's VRN and the Chief Inspector of the VSU began to discuss conducting more up-to-date analysis of high harm areas in the borough. It was agreed that the analysis should firstly involve identifying the Lower Super Output Areas (LSOAs) with the highest level of harm in the borough. An LSOA is defined by the Office of National Statistics (ONS) as a "distinct small area in England with an average population size of 1,500 residents or 650 households."

The Council's Intelligence and Performance Team extracted crime data of all street-based violence committed in the borough from January to June 2020. By "street-based" this meant not just those violent crimes where the location type provided was described as the "street", but also those location types which were committed in other public-accessed areas e.g. shops, parks, bus stops etc. Each violent offence was then cross-referenced with the Cambridge Crime Harm Index (which is available online by Cambridge University's Centre of Evidence-based Policing) to provide a harm score for each. All offences were thematically mapped by LSOA determined by the sum of harm scores in each area.

The LSOAs of high harm in the borough were, unsurprisingly, those areas covering the town centre. After these LSOAs were identified, further analysis was conducted to establish the micro-places within these areas where harm was highly concentrated. Two areas which were identified were London Road outside West Croydon Station and George Street. The distance of these areas are different, with West Croydon around 150m long, while George Street is around 520m long. An area of around 150 to 200m is ideal for micro-patrols but it was agreed that officers would patrol the whole of George Street for two main reasons. Firstly, it would be useful to compare the effectiveness of micro-patrols in these areas and to determine whether George Street was not "micro enough" to maximise deterrence.

After the LSOAs were identified, further analysis was conducted to establish the micro-places within these areas where harm was highly concentrated

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Secondly, George Street is an open area with high footfall throughout and so it was deemed more logical for the patrols to cover the entire street.

Partnership with police

From the outset it was established that with the VSU willing to provide the officers to conduct the micro-patrols, it was the Croydon Council VRN's Intelligence and Performance Team who were the analytical strand of the operation. By initially providing the harmspots in order to conduct patrols, the team would also regularly provide analysis on the patrols to feedback on the effects on reducing violence in these places and the wider areas. This analysis would not only provide the impact the patrols had on crime but also the team would analyse all return forms provided by every team of officers completing each patrol detailing the location, date and time of all four patrols that day along with the number of members of the public interacted with, number of businesses visited, details of stop and searches conducted and intelligence reports created.

Operational tasks

Four patrols were conducted randomly in each of the micro-harmspots per day for 30 minutes each. These patrols were conducted throughout the week but did not take place during the night i.e. from midnight. Each patrol consisted of two officers who were predominantly probationary constables (90+ per cent) with less than 9 months' service on commencement of the operation. After each patrol, each team of officers would complete a return form providing details of the patrol and sent it to the Sergeants, Inspectors and Chief Inspector of the VSU, who in turn would send it on to the Intelligence and Performance Manager of the Council's VRN.

Challenges

The most obvious challenge of the operation was that they were being conducted during the time of a global pandemic and, through a series of lockdowns and restrictions being implemented by the government throughout 2020, it was always difficult to determine whether any positive effects of violent crime in the micro-harmspots were a result of the patrols or these governmental actions. Analysis of the operation was conducted to provide the most accurate representation of normal societal everyday activity but there still had to be an acceptance of abnormalities of public behaviour due to the pandemic.

Another challenge due to impact of Covid-19 is the demand for police officers, not only for the expansion of their role in enforcing new laws in relation to restrictions and lockdown but also leading to significant reduction of officers through illness. This led to the operation being paused in January 2021 as the

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local BCU saw a 25 per cent reduction in officer numbers solely due to coronavirus.

Using the Cambridge Crime Harm Index as the main performance measure of the operation was always going to provide a significant challenge. Where a small increase or decrease in crime count does not result in a major shift in comparative analysis, all that is required is one high harm offence (or a small number of high harm offences) to lead to the harm score to fluctuate. Therefore, this can result in a harsh assessment of the operation in that it is deemed as a failure. However, on the other hand, measuring the operation against a period where there was a high harm offence (or a small number of offences) can lead to an overstated conclusion that the operation was a complete success. This is why Croydon always used the harm to supplement count rather than replace it.

Planning the patrols to be “random” was not entirely adhered to in that no patrol was conducted throughout the night. Again, this was due to officer availability. This could result in time displacement of offences, especially those of high harm.

Geographic displacement of offences is a challenge of any intervention in a high crime area. In this instance, there was always a concern of a displacement of high harm violent crime and the aim is to instead see a diffusion of benefits of the operation.

Results

In order to provide the most accurate comparison in a year of the Covid-19 pandemic, two 65 day periods were compared which did not fall within any stage of government-imposed lockdowns and contained as minimal or, at the very least, similar restrictions as possible.

In the West Croydon micro-harmspot, there was a 10 per cent decrease in count and an 81 per cent decrease in harm in all street-based total-notifiable offences. For street-based violence, there was a 67 per cent decrease in count and a 99 per cent decrease in harm. Examining violence further showed a 75 per cent decrease in the count of violence with injury offences and a 99 per cent reduction in harm. For violence without injury there was a 60 per cent reduction in count and a 97 per cent reduction in harm.

By examining the proportion of crime, 46 per cent of the count and 89 per cent of harm in the area before the operation was violence-related. In the period of the operation the count of violent crime dropped to 17 per cent and violent harm dropped even further to 4 per cent. In the period of the operation, it is worth

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highlighting that 87 per cent of all street-based harm in the area was caused by just two personal robberies. There was also a significant increase in positive outcomes in stop and searches. The borough-wide positive outcome rate of stop and search was 24 per cent, which is closely reflected London-wide. However, Operation Peel increased the positive outcome rate to 33 per cent in West Croydon.

By using the Weighted Displacement Quotient (WDQ), Croydon measured if there was a displacement of crime or a diffusion of benefits as a result of the operation in the area. It must be noted that the WDQ can only calculate this by using count rather than harm and the analysis involved calculating the count of all TNOs for more reliability. The WDQ showed that there was a diffusion of benefits effect rather than a displacement of crime.

In the wider LSOA in which the West Croydon harmspot sits within, there was a 22 per cent decrease in count and a 27 per cent decrease in harm in all street-based total-notifiable offences. For street-based violence, there was a 32 per cent decrease in count and a 61 per cent decrease in harm. Examining violence further showed a 44 per cent decrease in the count of violence with injury offences and a 55 per cent reduction in harm. For violence without injury there was a 17 per cent reduction in count and a 95 per cent reduction in harm.

By examining the proportion of crime, 26 per cent of the count and 61 per cent of harm in the area before the operation was violence-related. In the period of the operation the count of violent crime dropped to 23 per cent and violent harm dropped even further to 33 per cent. Even though the West Croydon area remained the micro-hotspot for crime count in the LSOA throughout both periods, the area was no longer the primary micro-harmspot in the period of the operation.

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West Croydon Micro-harmspot

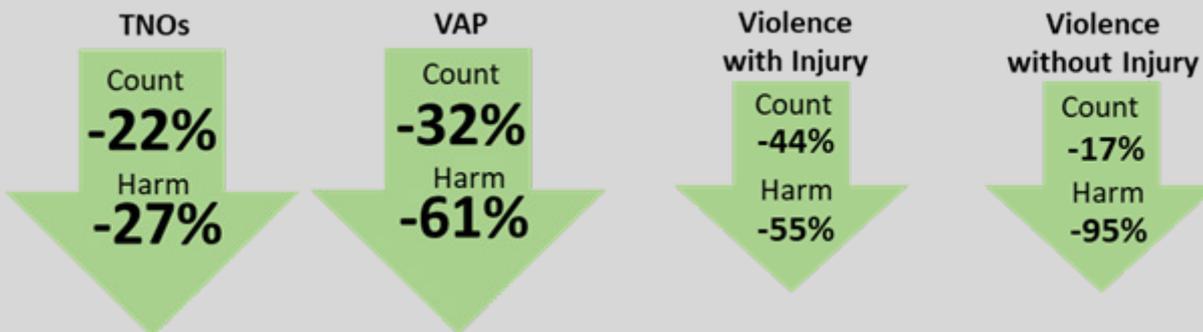


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West Croydon LSOA



In the George Street micro-harmspot, there was a 32 per cent decrease in count and a 34 per cent decrease in harm in all street-based total-notifiable offences. For street-based violence, there was a 35 per cent decrease in count and a 90 per cent decrease in harm. Examining violence further showed a 14 per cent decrease in the count of violence with injury offences and a 74 per cent reduction in harm. For violence without injury there was a 46 per cent reduction in count and a 97 per cent reduction in harm.

By examining the proportion of crime, 28 per cent of the count and 25 per cent of harm in the area before the operation was violence-related. In the period of the operation the count of violent crime dropped slightly to 27 per cent and violent harm dropped significantly to 4 per cent. In the period of the operation, it is worth highlighting that 86 per cent of all street-based harm in the area was caused by only five personal robberies. The WDQ of the area showed that there was a diffusion of benefits rather than a displacement of crime.

Out of the stop and searches conducted, the proportion of those which produced a positive outcome was 20 per cent. This was four percentage points lower than the Croydon-wide rate. This was linked to a low number of intelligence reports being created by officers in the area compared to West Croydon, which was relatively high.

George Street evenly covers two LSOAs and, therefore for simplicity, the analysis involved merging these two LSOAs into one when proving the impact of patrols on the wider area. In these LSOAs there was a 32 per cent decrease in count and a 34 per cent decrease in harm in all street-based total-notifiable offences. For street-based violence, there was a 35 per cent decrease in count and a 91 per cent decrease in harm. Examining violence further showed a 14 per cent decrease in the count of violence with injury offences and a 74 per cent reduction in harm.

[In the George Street micro-harmspot]... for street-based violence there was a 35 per cent decrease in count and a 90 per cent decrease in harm

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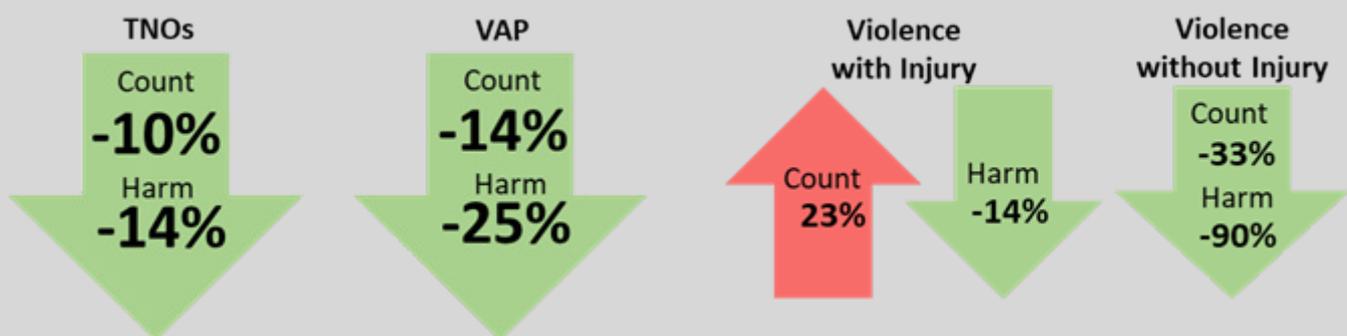
By examining the proportion of crime, 28 per cent of the count and 27 per cent of harm in the area before the operation was violence-related. In the period of the operation the count of violent crime dropped slightly to 26 per cent and violent harm dropped to 23 per cent. Even though parts of George Street remained the micro-**hotspots** for all TNOs in the LSOAs throughout both periods, the area no longer was one of the primary micro-**harmspots** in the period of the operation.

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George Street Micro-harmspot



George Street LSOA



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Recommendations:

Croydon's primary source of using harm in identifying areas to target in the borough and measuring the performance of the intervention has proved extremely useful. It provides a different picture of crime in the borough and is a more sophisticated way of identifying areas involving more serious offences. However, it should be used to supplement other measures and not replace them. This is to provide more of a full picture of crime in the area so certain places can be confidently selected as priority places for intervention.

To implement a new tool like crime harm in a local partnership's thinking and functionality requires it to firstly be explained and demonstrated to partners. Croydon's approach was to do this in its strategic assessment, which is a shared public document. By explaining and demonstrating its effectiveness, its implementation was then provided as a core recommendation which was agreed by the Croydon Safer Partnership.

Even though the micro-patrols were effective in both areas, it is shown that the smaller area was more effective than the other. This can be linked to the distance covered by the patrols. Therefore, for maximum results, it is recommended to keep areas from 150m to 200m maximum.

It is important to target areas where there has been high harm over the medium to long-term (e.g. at least 6 months). An 'emerging' micro-harmspot outside of Croydon Town Centre was targeted by Operation Peel but due to the relatively low harm in the area, it provided mostly poor results. This is because only one high harm crime was needed to be committed in the area to deem the intervention not successful.

One principle highlighted by the 'Koper Curve' is to randomised patrols. Even though the patrols were random, none were carried out during the night i.e. after midnight. This may want to be explored in order to maximise the impact of the intervention.

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