



# Implementing a Burglary Prevention Program with Evidence-Based Tracking: a Case Study

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## Abstract

**Research Questions** How was a system of tracking and feedback implemented to achieve a high percentage of treatment delivered as intended to residences targeted for super cocooning, and how successful was the tracking in ensuring implementation of the cocooning program?

**Data** The case study of implementing a tracking system for notifying neighbours of burglary victims is based on intensive tracking of all 43 burglaries in a 2-month summer period in one small area of Greater Manchester.

**Method** The system of tracking featured a written paper and pencil report on each residence visited, with entries audited against GPS records of where each reporting officer was located at the times and places listed in the written report. Body-worn video records were used to triangulate the written and GPS records. The policy tracked was the goal of face-to-face contact with residents of four houses on either side of each burgled residence, plus the initially burgled home, or nine visits per burglary.

**Results** Of the potential 387 homes to visit after each burglary, only 266 occupied dwellings were identified, of which 230 (93%) were visited by Police Community Service Officers (PCSOs) assigned, 141 of them within 2 days after the initial burglary (61%). These visits and second visits resulted in 154 face-to-face discussions warning occupants about an elevated risk of burglary (58%). No contact or leaflet at all was delivered to 12.5% of all potential properties. The case study showed that the tracking and feedback was instrumental in delivering these outputs.

**Conclusion** The time and effort needed for supervisors to track the delivery of an evidence-based, tested crime prevention programme does not exceed supervisory time available, making tracking systems of this kind a feasible element of police business as usual.

**Keywords** Tracking · Implementation · Burglary · Cocooning · GPS · Feedback

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## Introduction

This case study reports an effort to measure the implementation of all elements of a burglary intervention known as ‘super cocooning,’ in a part of the City of Manchester Division of the Greater Manchester Police (Gorton North and South) identified as an area of high repeat and near repeat burglary. The effort employed Global Positioning Systems (GPS) and Body Worn Video (BWV), as well as traditional pen and paper, to create a robust system of tracking implementation burglary by burglary. The aim of the tracking system was to find out just how much of the treatment intended was actually delivered and whether it was delivered to the required standard. The aim of this case study is to describe the system that was established.

Super cocooning is a domestic burglary prevention programme widely used in UK policing. Its core tactic is visits from police officers or Police Community Support Officers (PCSOs) to the residences at which a burglary has occurred, and also to its immediate neighbours (usually in most recent tests limited to four on either side). The occupants of these residences receive information aimed at preventing repeat burglaries. Research has found an elevated risk of victimisation at these locations in the immediate aftermath of a burglary event (Pease 1998; Morgan 2000; Johnson and Bowers 2004; Bowers and Johnson 2005; Johnson et al. 2017). Little is known, however, about the exact dosage of treatment police deliver to properties identified for super cocooning. Some studies have created an assumption that the tactic is always deployed as intended with a 100% compliance rate. This study is based on the premise that only tracking can determine how much, if any, compliance is achieved for any given burglary.

## Research Questions

This case study seeks to fill a larger evidence gap about what police personnel actually do when they are given assignments, exactly where they are located at a given time, and whether they are complying with directions. In focusing on the super-cocooning strategy, it demonstrates the challenges of implementing any kind of tracking system, with feedback to those tracked, for better implementation of the programme being tracked.

1. What percentage of treatment was delivered as intended by PCSOs to the residences identified for super cocooning under the designed tracking and feedback system for this study?
2. Was the super cocooning strategy implemented in a high-quality manner, and was the tracking system feasible and manageable?

## Data and Methods

As a case study, the primary data and method is a qualitative narrative of what was done from start to finish. Quantitative data on each element of implementation are introduced as part of the narrative, but these numbers are subordinate to the story itself. Since the conclusions derive from the way the story turns out, the descriptive statistics of tracking the police actions take back seat to the design and success of the system.

The narrative and implementation of this study followed the principles and recommendations set out by Fixsen et al. (2005), who developed various stages of implementation to be followed. These authors understood that even whilst identifying and developing evidence practice improves, the implementation of these approaches with ‘fidelity and good outcomes’ was not as advanced. Furthermore, Sherman (2013) described tracking the compliance of policies as critical to the successful implementation of evidence based practice in policing:

All too often, police leaders are flying blind about whether policies or operations are being implemented. Tracking evidence provides independent audits on a timely basis about whether the plans are being delivered. If they are not, the commanders can be transferred and tighter control can be imposed. If they are, then rewards can be given and medals can be pinned. (Sherman 2013, pp.60)

In spite of overwhelming evidence that high quality implementation is of great importance, the evidence suggests that most policing policies are introduced with low quality implementation (Slothower et al. 2015). Some programs that would otherwise have yielded positive results for policing may fail due to implementation with without evidence.

The primary data for this case study to show how it tried to insure tracking of police services is organised around the Fixsen et al. (2005) framework of the sequential phases of implementation: exploration and adoption, choice of area, program installation, identification of properties to be super cocooned, the number of properties in which residents should be notified, and the cocooning message.

**Exploration and Adoption** The first stage of the implementation process, using the Fixsen et al. (2005) principles, is ‘exploration and adoption’. Super cocooning itself is well documented as effective in the reduction of repeat and near repeat burglary (Weems 2014; Rowley 2013). It is doubtful, however, whether the form of super cocooning implemented in GMP has been successful where its application has tended to be sporadic and not in accord with the best recent research. GMP has defined treatment areas as a 200-m radius from the burgled property, sometimes encompassing as many as 90 residences. This approach had proven unsustainable with some parts of Manchester not conducting super cocooning at all because of resource limitations.

A number of additional problems had also been identified: there were several differing methods of cocooning being deployed with little understanding of its purpose; it was being conducted inconsistently with no data analyses on whether any repeat or near repeat burglaries had taken place; an apparent disconnect existed between the ‘guardians of the spreadsheet’ and those at street level; there was limited understanding among PCSOs about the purpose of their visits; there was no structure and little understanding as to which properties and how many were to be cocooned. In addition there was huge variation in the ways PCSOs conducted their duties and little supervision by senior officers. Super cocooning had become stale, was misunderstood, and its purpose had become lost somewhere in the day to day business of policing. It was clear that a new approach to implementation was required.

**Choice of Area** The choice of area in which to conduct the study was considered carefully. The decision to select the area of Gorton North and South was made based on the high volume of repeat and ‘near repeat’ burglaries in the area. The rate was calculated using Ratcliffe’s (2009) Near Repeat Calculator, which showed that the chance of a repeat victimisation at the original property which suffered the burglary within a 7-day period was 400% greater than if there had been no repeat victimisation pattern. The Sergeant for that area was also keen to be involved in an evidence-based policing experiment. Having support at both the strategic and tactical level to explore how super cocooning was being conducted and to identify areas for change and improvement was essential for the study.

**Program Installation** The primary objective of implementing a tracking system was to create a high quality, feasible, and manageable operation for super cocooning each burglary. The system had to be capable of identifying and tracking the treatment delivered by PCSOs. It had to offer feedback to them, and their immediate line management, identifying those who were consistently delivering the treatment as intended, and especially those deserving of recognition. It would also identify any problems early to allow for timely supervisory correction to ensure that high quality treatment was delivered in a consistent manner.

A system of tracking via Global Positioning Systems (GPS) with a BWV backup system formed part of the overall design. These automated, digital records supplemented the paper records PCSOs completed that included both location and the times that they were present at each address.

**Identification of Properties To Be Super Cocooned** The responsibility for identification of properties to be treated was that of the shift sergeant, who identified burglary dwelling calls for service in Gorton North and South every morning for the preceding 24 h. The system was designed so that the shift sergeant could then task the super cocooning out to available PCSOs with timely precision. The paper form that the PCSO used to collect the information about the delivery of super cocooning was handed to the PCSOs by the shift sergeant and collected from them upon completion. This method allowed for the immediate checking of the paper form and the delivery of instant feedback and correction if required. It also enabled the shift sergeant to input the data into a super cocooning divisional tracker, which was situated on the shared drive for the City of Manchester division to allow access for different sergeants.

The paper form consisted of various data fields concerning (a) whether or not the house existed, (b) whether it was occupied, (c) dates of the first and second visits to each targeted house, (d) the times the first and second visits started and ended, and (e) whether or not a face to face contact was achieved. Whether contact was achieved or not, a burglary crime prevention leaflet was left at all occupied properties, either with the occupant or posted if there was no face to face contact on either visit.

The shift sergeant checked the GPS for each super cocooning intervention so as to track the PCSOs’ movements and ensure they were present at the specified addresses at the times they had stated on the form. This tracking was backed up by BWV if the GPS signal dropped.

**Number of Properties To Be Super Cocooned** The study had to create a manageable, successful, and sustainable system of super cocooning whilst trying not to introduce any unnecessary paperwork or an increase in workload. It was agreed that the recent Operation Swordfish (Johnson et al. 2017) model of cocooning nine properties, four either side of (and in addition to) the original burgled property, was appropriate. This approach makes the number of properties more manageable and achievable than the failing GMP approach that used a 200-m radius of the burglarised properties. When the burgled property did not have four properties either side of it, only those properties that existed within the stated boundaries were treated.

**The Super Cocooning Message** The PCSOs needed to be educated on the message they were to pass on to the people they encountered when delivering the treatment. A meeting was held with the PCSOs to address any concerns they had. This was followed up with regular conversations with the PCSOs and, coupled with feedback, led to a transparency around the study so that the PCSOs understood that this was a straightforward piece of research with no ulterior purpose.

The implementation was dependent on the PCSOs' understanding of what super cocooning was designed to do. To this end, they were educated in the basics of the theory of routine activities (Cohen and Felson 1979), situational crime prevention (Clarke 1980), and repeat and near repeat victimisation in relation to burglary (Johnson and Bowers 2004; Bowers and Johnson 2005; Pease 1998). They were taught in small groups within the station environment and informed about what a common occurrence repeat victimisation was in the areas they served. This ensured that the PCSOs were delivering the right message during these interactions, and an absolute focus was placed on telling residents that they were at an elevated risk of burglary following the recent nearby burglary. Getting this message correct was of paramount importance, and ensured that residents who received face to face contact were in no doubt that they needed to become capable guardians of their own properties.

## Findings

### Research Question 1

What percentage of treatment was delivered as intended under the designed tracking and feedback system for this study?

The purpose of the implementation tracking system was to test with a high degree of accuracy—but minimum intrusiveness—the delivery of a super cocooning experiment, with a view to it being scaled up into a larger system for a more rigorous study in the near future. This phase 1 test was conducted over 2 months in one police area in Greater Manchester. During this period, 43 residential burglaries occurred within that area that were deemed suitable for super cocooning treatment.

**Finding One** According to recent conventions around super cocooning (see for example, Johnson et al. 2017), the maximum number of 'cocoonable' properties should be nine (the burgled property itself and 4 either side). In this study of 43 burglaries,

therefore, the maximum number of potential properties was 387. To be ‘cocoonable’ requires that those properties exist and are occupied; the ‘un-cocoonable’ may simply not exist or exist but not be occupied. In this study, we found that only 266 of the 387 potential properties existed, meaning an average of 5.8 properties for each cocoon (including the original burgled property). Of these 266 properties, 248 properties were occupied, including the burgled properties (3 burgled properties were not occupied).

This reduction in the average number of properties that both existed and were occupied made the task of super cocooning far more achievable and manageable than the existing policy of Greater Manchester Police to attempt to cocoon all properties within a 200-m radius. Finding the right level of dosage, in terms of the number and location of addresses that require a visit, will require more rigorous testing: the question remains as to the optimal number to be visited. Whether it may be possible to reduce it further and maintain effectiveness is an area worthy of further exploration. Nevertheless, the finding that so many theoretically eligible properties in this study were not viable is of substantial significance for future applications of super cocooning, making the intervention possibly less resource intensive than might be feared.

**Finding 2** Of the 248 properties that both existed and were occupied that could have been super cocooned, 230 received a first in-person visit by a trained PCSO, a compliance rate of 92.7%. In total, 121 of those 230 first visits (52.6%) resulted in a face-to-face contact. These 121 successful face-to-face first visit contacts did not require a second visit, leaving the total number of possible second visits at 109. The number of properties that received a second visit was 90, a compliance rate of 82.6%. Of these 90 properties, 33 (36.7%) received a successful face-to-face second visit contact, for a total of 154 face-to-face contacts out of 266 (58%).

**Finding 3** A total of 217 properties within the super cocoon received a burglary information leaflet (87.5% of the 248 eligible properties) This number consisted of all 154 properties that received a face-to-face contact and an additional 63 properties where there had been an unsuccessful attempt at gaining a face-to-face contact on the second visit.

**Finding 4** There were 31 properties that received no visit or treatment at all. This represented 12.5% of all potential properties which could have been cocooned but were not, owing to no sergeant being present at the police station on those days to identify the burglary and give out the tasking for super cocooning.

**Finding 5** In terms of time accuracy, the study allowed for 30-min tolerance before and after the time that the PCSO assigned to carry out the treatment recorded on the paper form as the time visited. A total of 16 visits occurred outside this 30-min tolerance. Fifteen of these occurred during the first visit (compliance rate of 93.5%) and one when conducting a second visit (compliance rate of 98.9%). A check was completed to ensure that the visit had actually occurred by monitoring against the BWV backup system.

**Finding 6** The aim was to initiate the super cocooning treatment as soon as possible after the report of burglary. For 39 (17%) of the 230 properties visits were attempted within 1 day of the burglary being reported to the police; a further 102 (44.3%) were

attempted within 2 days, leaving 107 properties (38.7%) that did not receive treatment within the first 2 days. It should be noted that PCSO shift patterns and rest days meant there were up to 4 days a month when no PCSOs for that area were on duty and treatment could not be delivered at all.

**Finding 7** The properties that were not visited ( $n = 31$ ) and received no treatment were generated by three burglary events, each reported on days when there was no immediate supervisor present at the station to identify, coordinate, target, and task out the properties to be visited. Notably, these properties were spread across three different beat areas so at least three different PCSOs had not checked whether burglary dwellings had occurred in their area in the sergeant's absence. Such checking had been in place prior to commencement of this study and PCSOs may have thought that this process had changed because of the study, raising the possibility of a communication problem with some of them.

**Finding 8** The communication of evidence at each stage with the PCSOs involved was critical to gaining their support to do things differently. This study required intrusion into their daily working lives and, as such, the communication of the reasons why this extra work was needed and the anticipated benefit of conducting such a study was critical.

## Research Question 2

Was the super cocooning strategy implemented in a high-quality manner and was the tracking system feasible and manageable?

Upon gaining authority to conduct the study and agreeing the location where the study was to be conducted, the first step was a visit to the police station in that location, Gorton Police Station. This took place with the supervisory staff present (inspector and sergeant). The purpose of the study was communicated and an agreement that they would support the study was reached—a necessity for completing the study within the tight parameters laid out in the methodology. It was of paramount importance that the supervisory staff with responsibility for the Gorton North and South area were fully aware of what was going to happen there. As Skogan (2008) noted, sergeants are very influential and resistance from them can see attempts at reform fail.

**Training** The next task was to gain authority from the Chief Officer group to enable the PCSOs to wear Body-Worn Video cameras (which PCSOs did not normally do), and then train the PCSOs on how to use it. The PCSOs were told a month before the study started that the e-learning package on BWV was to be completed by the date of the study going live. By that date, however, only three out of the 12 PCSOs involved in the study had completed the e-learning. It became apparent that being told to complete the e-learning package motivated some not to complete it, knowing this meant they could not be tasked with super cocooning. This non-compliance about e-learning could also have been due to a lack of communication, as some PCSOs claimed they had not been told about it.

The message to complete the e-learning package was relayed to them by the neighbourhood police constables, who had a line management role for the PCSOs. One of these constables had ensured that all of her PCSOs had completed the training and were ready to go on go live date. The others, when spoken to, made known the competing demands placed on them, and stated that this was not their top priority. They said that burglary was no longer a priority for them and spoke of vulnerability, mental health, and domestic abuse as being the issues they concentrated their efforts on. Clearly, these are all high priority areas for contemporary UK policing. However, they did not understand the complexities of burglary: they lacked awareness of the implications of repeat victimisation and the fact that it was such an issue in the area for which they had responsibility.

This resistance required a conversation about what the study served to do and how, if done correctly, it could ultimately reduce the demand placed on them. Explaining to them that repeat victimisation in itself shows a vulnerability of either place or person, or both, helped them realise that it was important to address the repeat and near-repeat phenomena of burglary. It was also mentioned that the Chief Constable and Deputy Chief Constable had an interest in the study, as well as the command team for the City of Manchester division (the division in which they served). These were all motivating factors for them to ensure that they and their PCSOs took this experiment seriously. Within 1 week of the 'go live' date, all PCSOs had successfully completed the e-learning package on BWV.

This meeting, and the PCSO education on the theoretical underpinning of the intervention, occurred during the first week of the study at the beginning of the shift. The first author ensured that all PCSOs understood the message that they were to deliver when conducting super cocooning. The message was that a burglary offence had happened at a neighbouring property and that evidence suggested that these offenders were likely to return to the area. But a message creating a heightened state of alert went against the nature of what PCSOs usually do during their daily work. They are neighbourhood-based officers and their primary purpose is to create reassurance. Super cocooning is an activity that consists of a message that is not reassuring; it is a message filled with menace, and as such this did not sit comfortably with some of the PCSOs who were to deliver that message. Indeed, the PCSOs needed to be reassured that it was the right thing to do, to create unease and a sense of worry in the people in their area.

**GPS Tracking and Body Worn Video** The PCSOs were shown the computer programme used to track officers' GPS signal locations, from which they would be tracked. This information left them under no illusion that they were being watched and the degree with which their movements could be pin pointed to a particular space and time.

Following their first super cocooning visits, the PCSOs were shown the footage from the BWV recordings and how this could be cross-referenced against the paper management sheets they were filling out. This allowed them to see first-hand the clarity and high quality of the recordings they were making. This method of ensuring accuracy was made available to the PCSOs with complete transparency so that they could see exactly how their presence at the targeted properties would be measured. This transparency was essential for the intention of ensuring

compliance and alleviating concerns that may have remained with the PCSOs that this was a covert way of tracking their daily activities.

**Answering the Research Question** In the main, this implementation system was successful. It identified early parts of the process that did not work and ensured that these were corrected quickly. There was a lot of learning in this implementation, a lot of innovation, and some amendments to get it running smoothly. Overall, the treatment delivered was of good quality and the tracking system devised was difficult to fool. It was a system in which it was easy to identify non-compliance and to correct accordingly and swiftly.

This study illustrated what other research reveals (Sherman 2013): that there can be no assumption that treatment as intended is delivered in the implementation of a policing intervention. The importance of tracking and monitoring is evident in this study: even when the participating PCSOs were told that rigorous monitoring was in place and that this study had the support and interest of high ranking officers, 100% compliance was not achieved. A strong recommendation is that governance for compliance requires regular weekly feedback sessions, attended by at least a superintendent in rank. This emphasises the importance of knowing what actually happens in any policing intervention, and not concentrating solely on outcomes.

## Conclusion

Super cocooning is a burglary prevention programme that targets residents at the highest risk of crime and harm, and intervenes in a way that has been shown to reduce that risk. Super cocooning can be an effective crime reduction measure. But like any other intervention, it must be tracked to ensure it is delivered at all, and preferably in the most effective manner. This case study illustrates how tracking can be introduced as a means of ensuring compliance with policy. Equally, it shows how the successful use of tracking provides a method for quickly identifying problems with policy, and to amend the system as required. Its lessons are equally valid for any other innovation in policing.

Although this study of super cocooning was small—only 43 burglaries were involved—and it was run over a short time period, it taught many important lessons. It shows, not unexpectedly, that adequate supervision is essential for compliance in carrying out the tasks involved. Feedback and communication more generally with front-line staff also was clearly critical, both to address concerns, to correct deviations and to solve problems. Individual feedback by sergeants, positive as well as corrective, worked successfully in achieving high compliance, helped as well by the monitoring of the area inspector and superintendent.

These higher ranked supervisors turned out to be especially important. It seemed essential to have the active support of those who control the area where the innovation was operationalised. These visits and other expressions of direct support mean the participating staff hear first-hand from the mouth of their leadership that they want success, rather than hearing second-hand from a sometimes more junior practitioner that ‘the boss fully supports this’.

This study demonstrates the feasibility of creating an efficient system of tracking and feedback for delivering super cocooning as a crime prevention intervention. It also shows how tracking is particularly useful in the early refining of procedures in delivering an intervention. This method of timely and intrusive accountability equips police leaders with the ability to see when policing interventions are not going to plan. This may happen because of poor communication and resulting misunderstanding about the nature of the task, poor supervision, and poor senior level support or many other reasons. But the question still stands: how do we know what the police officers or staff delivering policing interventions are actually doing? Whilst this study has tracked in the context of super cocooning offences of residential burglary, the methods of tracking used in this study could be easily adapted and utilised in a variety of crime prevention studies as well as in the implementation of policy initiatives more generally.

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