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# GPS Tagging – Community Sentence Pilot Final Evaluation Report

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**M O P A C**

**MAYOR OF LONDON**

OFFICE FOR POLICING AND CRIME

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## Executive Summary

In 2016, the Ministry of Justice (MOJ) agreed to work with the Mayor's Office for Policing And Crime (MOPAC) to test the use of mandatory GPS tagging for prolific offenders through the Persistent Offender Programme (POP). The main aims of the MOPAC pilot were to test whether GPS tagging - increased compliance with the requirements of a Community Order (CO) or Suspended Sentence Order (SSO), offered sentencers an alternative to custody, and supported crime detection and/or the apprehension or prosecution of offenders by providing information on an offender's location at a specific date and time.

Consequently, GPS monitoring under the electronic monitoring requirement of community sentences was made available in the Magistrates' and Crown Courts of the North and North East London local justice areas between March 2017-March 2019. Two dedicated pre-sentence report writers from the National Probation Service based at Thames and Highbury Corner Magistrates' Courts had the option to recommend GPS tags as a requirement of a CO or SSO. Under the POP pilot, probation Offender Managers (OMs) were able to access and monitor location data for their cases. Where the tag wearer was the subject of an SSO and an OGRS score of 50+<sup>1</sup>, the police were also able to undertake crime mapping, matching location data with crime data where it was relevant and justified for the detection of crime. In addition, between October 2018 and March 2019, the use of GPS tagging was extended to cover offences involving the use or possession of a knife in the 8 boroughs served by Thames and Highbury Corner Magistrates Courts.

Overall, there have been **a total of 135 GPS tags imposed** across the pilot timeframe. This splits across the POP cohort (n=117) and knife crime cohort (n=18).

Taking the POP cohort first:

- Over the pilot period **117** GPS tags were imposed by the judiciary (**87** at Highbury Corner Magistrates', **29** at Thames Magistrates', and **1** at Snaresbrook Crown Court): an average of **1.1** tags imposed per week.
- Of the **117** GPS tags imposed, **70** were imposed as a requirement of a Community Order and **47** as part of a Suspended Sentence Order. Alongside the electronic monitoring requirement, most orders imposed also included a Rehabilitation Activity Requirement (RAR, **108** cases, 92%). Most GPS tags imposed included a requirement of access to 24-hour whereabouts monitoring (**94%**, n=110),<sup>2</sup> which meant that the tag wearer's location data from any time or location was able to be accessed by the

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<sup>1</sup> The Offender Group Reconviction Scale (OGRS) is a risk assessment tool used to estimate likelihood of re-offending using static factors such as age, gender and criminal history. It gives a score, which shows the likelihood of someone re-offending over a 1 year or 2-year period, expressed as a percentage or on a range from 0 to 1. A lower score means a lower likelihood of re-offending.

<sup>2</sup> Now also known as "trail monitoring".

Offender Manager where this was relevant to the management of the case. Seven tags were imposed in conjunction with a restrictive requirement (e.g., GPS being used to monitor compliance with an exclusion zone).

- The success rate (i.e., the % of GPS tags recommended by the PSR writers for the POP cohort which were subsequently imposed by the judiciary) in the first year of the pilot was 70%.
- Of the **117** tags imposed over the POP pilot's operation, **61** were completed successfully ('compliant' tag wearers), while **56** were unsuccessful ('non-compliant' tag wearers), either revoked for a failure to comply with the GPS requirement and/or imprisonment following further offending or were in the process of being breached: a completion rate of **52%**. By comparison, the GPS knife-crime cohort (n=18) was generally more compliant, with 14 of the 18 tags completed satisfactorily (a rate of **78%**). For the four cases that were breached, 'failure to attend' was cited in 3 cases, as well as failure to charge, and failure to comply with electronic monitoring.
- The majority of tag wearers in the POP cohort were male (**84%**, n=98) and the average age was just over **33** years. Three-quarters of tag wearers were aged under 40. Where the ethnicity of the tag wearers was known (2 cases were blank or refused), **59%** (n=39) were White, **21%** (n=24) Black, **9%** (n=10) Asian, **10%** (n=11) Mixed, and **2%** (n=2) 'Other ethnic group'. Offence details were available in 112 of the POP cases. Of these, **39%** were theft (n=44, 4 of which were motoring related), **18%** burglary (n=20), **11%** offences of violence (including DV) (n= 12), **9%** public order/racially aggravated public order (n= 10, 5 of which were racially aggravated), **6%** criminal damage (n=7), **5%** drug possession supply (n=6), **4%** breach (n=5), **4%** possession of offensive weapon (n=4), **2%** driving offences/motoring (n=2), with one case of harassment and one case involving a dangerous dog.

For the Knife crime cohort:

- There were **18 tags for knife crime offences** imposed during the pilot period (5 from Highbury Corner, 13 from Thames Magistrates Courts). Twelve individuals had the tag imposed as part of an SSO, while the remainder were COs – almost exactly the reverse of the pattern for the POP cohort. Alongside the electronic monitoring requirement, most orders imposed included a Rehabilitation Activity Requirement (17 of the 18 cases). The average length of the GPS requirement was **3.8** months, slightly shorter than the average for the POP (4 months).
- For the group tagged for knife crime offences, 16/18 were male and the mean age was just under 29 years (with a range between 18 and 61, median of 23.5 and a joint mode

of 19/24). In terms of ethnicity, 6 of those tagged were Black, 4 were White, 3 were Asian, and one was Mixed (the ethnicity of four was unknown).

Across all individuals, there were few measurable differences between the compliant and non-compliant tag wearers; non-compliant wearers had significantly **lower levels of motivation**. For both groups, the most prevalent risk factor displayed was drug use, followed by mental health.

Overall, findings from the research show that the GPS tagging pilot was implemented well (something never to be taken from granted when implementing innovation) and has been well received by practitioners and tag wearers alike. Offender Managers were positive and willing to use the tags. Tag wearers were confident that they would successfully complete the monitoring period and knew what they needed to do to comply. Furthermore, tag wearers generally thought that the tag would have a positive impact on their life. Although, as in E&I's earlier interim evaluation report, concerns were expressed (by tag wearers and practitioners) about the difficulties caused for this cohort by the requirements to keep the tag charged.

Consistent with E&I's previous evaluation report, early non-compliance by tag wearers suggests there are issues around the identification of suitable individuals to be tagged that need to be addressed. Other challenges that have emerged are the repercussions arising from the restrictions placed on PSR writers making recommendations for SSOs in April 2018, which resulted in a reduction of SSOs with tagging requirements, and a reduction in eligible cases for the crime mapping strand of the pilot (which can only be undertaken on SSO tag wearers). Question marks about the effectiveness of the crime mapping strand in its current form, raised by staff in the previous interim report, remain.

Nevertheless, the implementation, overall completion rate for the scheme, particularly the high completion rate for the knife crime group (albeit for a small population), and the positive views expressed by practitioners and tag wearers about their experience with the GPS tag, continue to provide grounds for optimism.

# 1. Introduction

## Background to the pilot

A brief description of the MOPAC POP GPS tagging project is provided below, a more detailed account can be found in E&I's First Year Interim Report<sup>3</sup>, published in July 2018.

In early 2016, the Ministry of Justice (MOJ) announced its intention to pilot the use of GPS tags. The MOJ agreed to work with the Mayor's Office for Policing And Crime (MOPAC) to test the use of mandatory GPS tagging for prolific offenders through the Persistent Offender Programme (POP) pilot, starting in March 2017. Although GPS tags had been used on a voluntary basis in several small-scale pilots across London, this was the first-time that mandatory use had been piloted with such a cohort. Initially running for 12 months, MOPAC successfully applied to the MOJ to have the statutory instrument for this pilot extended for an additional 12 months; meaning that new cases could be tagged until March 2019.

Under the POP pilot, offender whereabouts and location data could be accessed by the allocated probation Offender Manager (OM) as part of an Electronic Monitoring requirement imposed as part of a Community Order (CO) or Suspended Sentence Order (SSO). New tools available to probation OM's included bespoke email notifications highlighting key locations visited by the offender in real time, heat maps and "Top 5 locations of the week" reports, so that patterns of behaviour associated with risk could be uncovered, explored and challenged.

Where the offender was the subject of an SSO, the police were able to undertake crime mapping, matching location data with crime data where it was relevant and justified for the detection of crime. There was also the capacity for the police to make external requests for location data from the GPS monitoring provider (Buddi) in relation to specific crime incidents. During the pilot there were 20 External Agency Requests (EAR) made.

GPS monitoring as described above was available in Thames Magistrates' and Highbury Corner Magistrates' Courts and the local Crown Courts between 20 March 2017 and the end of March 2019. Two dedicated pre-sentence report (PSR) writers from the National Probation Service (NPS) based at Thames and Highbury Corner Magistrates Courts were given the option to recommend GPS tags as a requirement of a CO or SSO.<sup>4</sup> It was envisaged that the Electronic Monitoring requirement would be used in conjunction with other rehabilitative measures (e.g. Rehabilitation Activity Requirements).

The main aims of the MOPAC pilot were to test whether GPS tagging:

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<sup>3</sup> [https://www.london.gov.uk/sites/default/files/mopac\\_gps\\_tagging\\_second\\_interim\\_report\\_2018.pdf](https://www.london.gov.uk/sites/default/files/mopac_gps_tagging_second_interim_report_2018.pdf)

<sup>4</sup> After April 2018, PSR writers were not able to recommend SSOs.

1. Increased compliance with the requirements of a Community Order or Suspended Sentence Order;
2. Offered sentencers an alternative to custody; and
3. Supported crime detection and/or the apprehension or prosecution of offenders by providing information on an offender's location at a specific date and time.

### **Location data available on pilot**

The type of location data available to the various agencies involved in the pilot differed depending on the type of order made.

#### ***Community Orders with Exclusion Zones or residence requirements***

- Probation would only get alerted if the offender breached the exclusion zone or residence requirement.
- The police had no access to location data (apart from EAR).

#### ***Community Orders with 24/7 whereabouts monitoring (also known as trail monitoring)***

- All the location data captured could be shared with the probation OMs. Alerts could be set against inclusion zones, points of interest (specific addresses) or interest zones. Requests for other data could be made via a secure email sent directly to Buddi - heat maps, top location reports etc.
- Other agencies could be involved in helping to suggest monitoring locations and support compliance i.e., drug workers, police intelligence analysts, criminal behaviour order (CBO) exclusion zones.
- The police had no access to location data (apart from EARs).

#### ***Additional functions available for Suspended Sentence Orders***

- The police would carry out automatic crime mapping and may be alerted to location data that matches a crime, so they could investigate further. They could also make EARs.

### **Extension of GPS tag to knife-crime offenders**

GPS tagging was extended to knife crime offences in the east London boroughs served by Thames Magistrates' Court from the 15<sup>th</sup> October 2018, and to the north London boroughs served by Highbury Corner Magistrates' Court from the 1<sup>st</sup> November 2018. The extension of GPS to knife crime offenders on community sentences was viewed as a test of GPS as a tool to manage those who posed a risk of serious harm to the public and to see whether GPS could be used to challenge the lifestyles of offenders who habitually carried knives. These goals

were seen as building on the work already done with Gripping the Offender/Persistent Offender Programme offenders<sup>5</sup>, learning early lessons about the knife crime cohort (such as their levels of compliance) with the future ambition (subsequently realised) of using GPS for knife crime on licence.

To be eligible the offender had to be:

- Appearing for sentence for an offence involving the use or possession of a knife;
- Aged 18+;
- Living in the 8 pilot boroughs;
- Be appearing for sentence in the relevant LJAs; and
- Have some type of accommodation – to charge the tag.

In addition, it was clearly stated that this option was available at the court's discretion for first time knife possession offenders, so as not to contradict the sentencing guidelines which directed a minimum of 6 months in custody for a second knife crime offence.

*N.B For the purposes of this evaluation report, the analysis of the data relating to the GPS knife crime offenders has been kept separate to that relating to the POP cohort, as it was felt that the characteristics of the two groups were too dissimilar to render the combination of the data meaningful.*

### **GPS tagging evaluation**

The Evidence and Insight team at MOPAC were asked to evaluate the GPS pilot, capturing learning around the implementation and design of the pilot, gaining insight into the experiences of practitioners and offenders, and measuring success. The evaluation of the GPS tagging pilot forms part of the wider POP evaluation. The overarching aims of the evaluation are to examine:

- *Performance* - monitor the key performance indicators, including numbers receiving the tag, types of orders, compliance rates, violations, breaches, order completions. This data is vital, especially within a new innovation.
- *Process* - understand the experiences of practitioners and offenders involved in the pilot through surveys, interviews and focus groups.

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<sup>5</sup> Details of the GtO (Gripping the Offender, later renamed the Persistent Offender (POP)) programme can be found in MOPAC's 2018 interim report [https://www.london.gov.uk/sites/default/files/mopac\\_persistent\\_offender\\_programme\\_interim\\_report\\_2018.pdf](https://www.london.gov.uk/sites/default/files/mopac_persistent_offender_programme_interim_report_2018.pdf)



- *Indicative Impact* - a robust impact evaluation was not possible due to the relatively small sample size. The evaluation has captured indicators of success (e.g., completion rates) and uses qualitative methods to gain learning about the success of the pilot.

This report shares findings and learning from two years of the GPS tagging pilot. It consists of performance and process aspects, including feedback from offender managers and tag wearers.

## **2. Methodology**

### **Performance**

Performance data was gathered from a range of sources, mainly the tagging provider Buddi and MOPAC delivery staff. This data included information about the tag wearers and the types of orders that they were on, and their compliance with the tag.

### **Offender Manager Surveys**

A survey was sent to offender managers (OMs) who were responsible for managing GPS cases in late February 2018 and again in late May 2019. The survey asked OMs about their experiences working with GPS cases, their perceptions of the tag, and how they have used the tag to manage their cases. 31 completed surveys were collected – nine following the February 2018 round and a further 22 following the May 2019 round (a response rate of 33%).

### **Tag Wearer Surveys**

Tag wearers were asked to complete a short survey at the point the tag was fitted, and again when it was removed. The surveys aimed to collect their anticipated and actual perception of the impact of wearing the tag on their offending behaviour, their relations with friends and family, and their lifestyle more generally. Data were available from 42 individuals where a tag had been fitted, and 24 cases where the tag had been removed. It should be noted that this is a small data set and is unlikely to be representative of the GPS tagging cohort overall because it comprises compliant offenders (both at the point of fitting and removal). Surveys were administered by the tag fitter (staff members from Buddi).

### 3. Results

#### Performance

Overall, there have been a **total of 135 GPS tags imposed** across the pilot timeframe. This splits across the POP cohort (n=117) and knife crime cohort (n=18).

In the following section analysis for the POP and knife crime cohorts is largely presented separately, because of the differences between the two groups, and to prevent confusion.

#### *POP cohort: GPS tags imposed*

Between the beginning of the pilot (March 2017) and its completion (March 2019), a total of **117** GPS tags were imposed by the judiciary (**87** at Highbury Corner Magistrates', **29** at Thames Magistrates', and **1** at Snaresbrook Crown Court): an average of **1.1** tags imposed per week. In terms of the number of tags imposed across the two years of the pilot, more tags were imposed in the first year of operation (73, 62%) than during the second (44, 38%). Possible reasons for the decline during the second year are discussed below.

The success rate (i.e., the % of GPS tags recommended by the PSR writers which were subsequently imposed by the judiciary) during the first year of operation of the pilot was 70%.

Of the **117** GPS tags imposed, **70** were imposed as a requirement of a Community Order and **47** as part of a Suspended Sentence Order. Again, there was a markedly different pattern between the first and second years of operation. In the first-year, tags as a condition of SSOs made up 47% of all orders, whereas in year 2 they made up 30%<sup>6</sup>. Alongside the Electronic Monitoring requirement, most orders imposed included a Rehabilitation Activity Requirement (**108** cases, 92%), while **28** had a Drug Rehabilitation Requirement and **8** included an Alcohol Treatment Requirement<sup>7</sup>. The average length of the tag order was just over **three** months (ranging from between 2 weeks to 6 months – the most popular tag lengths were 3 months (55 of the 116 cases where the tag length was known, and 6 months – 40 cases)).

Most GPS tags imposed included a requirement of access to 24-hour whereabouts monitoring (**94%**, n=110), which meant that the tag wearer's location data from any time or location could be accessed by the Offender Manager where this was relevant to the management of the case. **Seven** tags were imposed with a restrictive requirement (i.e., the data were only available in relation to a requirement not to go to a particular location). For the GPS tags

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<sup>6</sup> The explanation for the decline in the numbers of SSOs in the second year of the pilot is because, from April 2018 PSR writers were no longer able to make recommendations for SSOs

<sup>7</sup> There were 17 other conditions attached to tags. Five were for unpaid work of between 120 and 40 hours, four were curfews (of between 7 and 18 weeks), 4 were to attend a Thinking Skills programme, 2 were to attend a Building Better Relationships programme while 3 were for other accredited courses.

imposed, **61** Interest or Exclusion Zones had been set up by OMs. OMs receive an alert any time the tag wearer enters these zones.

Offence details were available in 112 cases. Of these, **39%** were theft (n=44, 4 of which were motoring related), **18%** burglary (n=20), **11%** offences of violence (including DV) (n= 12), **9%** public order/racially aggravated public order (n= 10, 5 of which were racially aggravated), **6%** criminal damage (n=7), **5%** drug possession supply (n=6), **4%** breach (n= 5), **4%** possession of offensive weapon (n=4), **2%** driving offences/motoring (n=2), with one case of harassment and one case of an offence involving a dangerous dog.

### ***Characteristics of tag wearers: POP cohort***

The majority of tag wearers were male (**84%**, n=98) and the average age of the tag wearers was just over **33** years. Three-quarters of tag wearers were aged under 40 years: **21%** (n=25) were 18-24 years and **55%** (n=63) were 25-39 years. **Twenty-four percent** (n=28) of tag wearers were aged 40-54 years, and only 1 was aged 55+. Where the ethnicity of the tag wearers was known (2 cases were blank or refused), **59%** (n=39) were White, **21%** (n=24) Black, **9%** (n=10) Asian, **10%** (n=11) Mixed, and **2%** (n=2) 'Other ethnic group'. In this respect, the characteristics of those receiving tags broadly reflected the characteristics of the POP cohort overall.<sup>8</sup>

During the first year of GPS tagging when the PSR writing service was available, there were 191 individuals in the POP cohort who received the service whose ethnicity was known: **45%** (n=86) were White and **55%** (n=105) Black, Asian or Minority Ethnic (BAME). Of these, **23%** (n=20) of White service users and **25%** (n=26) of BAME service users were recommended GPS tagging, suggesting the report writers proposed GPS tags on similar proportions of White and BAME individuals.

### ***Knife crime cohort: GPS tags imposed***

Between mid-October 2018 (in Thames Magistrates Court) and the beginning of November (Highbury Court Magistrates Court) and the end of the pilot (March 2019) there were 18 tags imposed on service users for knife crime offences (5 from Highbury Corner, 13 from Thames Magistrates Courts). Seventeen of the tag-wearers were being supervised by the London Community Rehabilitation Company (CRC), one from the NPS. Twelve had the tag imposed as part of an SSO, while the remainder were for COs – practically the reverse of the pattern for the POP cohort.

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<sup>8</sup> POP refresh data from January-February 2018 consisted of 91% Males and an average age of 30 years. A pan-London dataset compiled from CRC data from January 2018 and NPS data from October 2017 showed the following ethnic composition; Asian 14%, Black 26%, Mixed 8%, Other ethnic 2% and white 50%.

Alongside the Electronic Monitoring requirement, most orders imposed also included a Rehabilitation Activity Requirement (**17** of the 18 cases), while **4** had a requirement for unpaid work, **2** had a Drug Rehabilitation Requirement, **1** included an Alcohol Treatment Requirement, **1** a curfew condition, and **1** attendance at an Attendance Centre. The average length of the tag order was **3.8** months, longer than the average for the POP cohort (the length of tags ranging from 6 weeks to 6 months, the most popular tag length being 4 months (6 cases)). For the GPS tags imposed, **11** Interest or Exclusion Zones had been set up by OMs.

### ***Characteristics of Knife Crime tag wearers***

Of the 18 individuals tagged for knife crime offences, 16 were male and 2 female. The average age of the tag wearers was 28.8 years, but this figure was skewed by the fact that one of those tagged was over 60 (the median age was 23.5 and a joint mode of 19/24). In terms of ethnicity, 6 of those tagged were Black, 4 were White, 3 were Asian, and one was Mixed (data were unavailable for 4 service users).

### ***Compliance with the GPS tag***

#### ***POP cohort***

Of the **117** tags imposed over the pilot's operation, **61** were completed successfully ('compliant' tag wearers), while **56** were unsuccessful ('non-compliant' tag wearers), either revoked for a failure to comply with the GPS requirement and/or imprisonment following further offending or were in the process of being breached: a completion rate of **52%**.<sup>9</sup>

Characteristics of compliant and non-compliant tag wearers are presented in Table 1 below. In terms of the demographic characteristics, both groups predominantly consisted of males. There was no significant difference between the compliant and non-compliant groups in terms of age and ethnicity. In terms of disposal, the non-compliant group had a slightly higher proportion of tag wearers on a CO (35/56 compared to 35/61); again, this difference was not statistically significant.

Information was collected on the risk factors the two groups displayed (see Table 1). Specifically, individuals were measured on drug use, alcohol use, housing, physical health, mental health, and motivation levels. The non-compliant group had an average of **2.1** risk factors, out of the potential maximum of six<sup>10</sup>. The compliant group had a slightly lower average number of risk factors (**1.8**), but this difference was not statistically significant.

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<sup>9</sup> This is very similar to the rate of 51% (combining technical and non-technical parole violations) found in a study testing the effect of GPS tagging with a sample of high-risk gang offenders in California (Gies et al., 2013).

<sup>10</sup> The 6 risk factors identified by probation staff were; drug use, alcohol use, housing, physical health, mental health and low motivation.

For both groups, the most prevalent risk factor displayed was drug use, followed by mental health. Comparing individual risk factors across the two groups, there was only one statistically significant difference: the non-compliant group displayed significantly lower motivation than the compliant group.<sup>11</sup> The number of tag wearers assessed as having housing issues was low for both groups, but most likely reflects the fact that (relatively) stable accommodation is a prerequisite for the recommendation/ adoption of a GPS tag.

Table 1. POP cohort. Characteristics of compliant and non-compliant tag wearers

	Non-compliant (n=56)	Compliant (n=61)
<b>Gender</b>		
Male	47	51
Female	9	10
<b>Age (mean)</b>	33.9	32.5
<b>Ethnicity</b>		
White	34	34
BAME	21	26
<b>Order type</b>		
CO	35	35
SSO	21	26
<b>Risk factors</b>		
Drug use	37	42
Alcohol use	10	18
Housing	7	6
Physical health	4	7
Mental health	25	30
Low motivation***	<b>31</b>	<b>7</b>

Information about the reason for breach was available in 38 of the 56 non-compliant cases (it was missing in 3 cases, and n/a in 15 cases). The most popular reason for breach was ‘failure to attend/attendance’ mentioned in 28 cases, ‘failure to charge/charging’ was mentioned 19 times, and ‘non-compliance’/‘non-engagement’ 11 times.

Looking at the number of appointments attended with probation by individuals in the non-compliant group, these tag wearers attended an average of **4.3** appointments overall (ranging from 0 to 41 appointments). Interestingly, the subsequent pattern of attendance for those who did, and who did not, attend their first appointment with probation was markedly different. Individuals who attended their first appointment (n=29) attended an average of **6.5** appointments overall. Conversely, for the 27 individuals who failed to attend their first appointment, the average number of appointments attended overall was **1.9** (the difference

<sup>11</sup> Fisher exact test statistic value is 0.00001, significant at  $p < .05$

between the number of appointments attended by non-compliant tag wearers who either did or did not attend their first appointment was statistically significant).

What this pattern appears to suggest is that there is a group of tag wearers who are largely non-compliant right from the outset of the order, compared to other tag wearers who, while ultimately being breached, engage with probation over a longer period of time. Support for this conclusion is provided by analysis undertaken by probation staff who looked at the case records for the non-compliant group and, based on their contents (levels of attendance/charging/engagement etc) assessed the extent to which the service user had tried to comply with the tag. Of the 55 cases where data were available, 36 were deemed not to have attempted to comply, 4 to have partly attempted to comply, and 15 to have tried to comply. The fact that a group of offenders was (with hindsight) not motivated to engage right from the start of their sentence, despite having superficially indicated some readiness to engage during pre-sentence assessment (hence GPS being proposed as available option), would seem to indicate the problems in reliably assessing underlying motivation at the pre-sentence stage, especially for long term persistent offenders.

### ***GPS knife crime cohort***

Bearing in mind the small numbers, the knife crime cohort was more compliant than the POP cohort, with **14 of the 18 tags being completed satisfactorily** (a completion rate of **78%**). For the four cases that were breached, failure to attend was cited in 3 cases, as well as failure to charge, and failure to comply with electronic monitoring.

Again, information was collected on the risk factors the two groups displayed (see Table 2 on the next page). The non-compliant group had an average of **1.5** risk factors, out of the potential maximum of six. The compliant group had a very slightly lower average number of risk factors (**1.4**).

Table 2. Knife crime cohort; characteristics of compliant and non-compliant tag wearers

	Non-compliant (n=4)	Compliant (n=14)
<b>Gender</b>		
Male	4	12
Female	0	2
<b>Age (mean)</b>	31.0	28.2
<b>Ethnicity</b>		
White	2	2
BAME	1	9
<b>Order type</b>		
CO	0	6
SSO	4	8
<b>Risk factors</b>		
Drug use	1	9
Alcohol use	0	2
Housing	2	4
Physical health	0	0
Mental health	2	4
Low motivation	1	0

### Practitioner Feedback

Practitioner feedback was collected from offender managers (OMs)<sup>12</sup>. Surveys were sent to OMs in two rounds. Nine responses were returned (from 57 sent out) in the first round of surveys sent in February 2018 and 22 responses were returned (from 38 sent out) in the second round in May 2019, totalling 31 responses. The main themes are presented below.

#### *Use of GPS location data*

Twenty-four had accessed location data. Of those who had accessed location data, 14 respondents had used it to set up Interest Zones, 12 to request heat and other maps, nine to request 'top location' information, three to request information on a specific location, and two had used it to set up a Point of Interest. Reported data access correlated with reported confidence using GPS tagging in the management of their case(s). Eighteen respondents stated that they were confident using GPS tagging in their role and eight that they were unconfident or very unconfident, with those indicating confidence reporting on average two types of location data use compared to an average of one type reported by respondents indicating a lack of confidence.

#### *Use of location data to manage cases*

<sup>12</sup> The previous evaluation report contains details of feedback from the PSR staff



OMs were also asked how they used the location data to manage their case(s) resulting in many varied uses<sup>13</sup>. Fifteen replied that they had used it to inform discussions with the tag wearer, 11 to monitor attendance at a place linked to risk of reoffending, 11 to challenge the tag wearer about his or her behaviour in supervision, 11 to find out new information about the tag wearer's lifestyle, 10 to monitor attendance at substance misuse treatment, seven to praise the tag wearer for compliance and positive behaviour, seven to monitor attendance at a place linked to risk of harm, six to try and locate a tag wearer who had gone missing, and four to protect known potential victims. The average number of types of data use reported by OMs was similar whether they stated feeling 'confident' or 'unconfident'/'very unconfident' using GPS tagging in their role. This being the case, while stated confidence appears to impact on reported data *access*, confidence does not appear to impact on reported data *use*, which suggests that whether OMs feel confident in using GPS tagging predominately relates to how able they feel in navigating and interpreting the technical aspects of the GPS information being supplied. Respondents who had accessed location data were also asked how easy it was to do so. Of the 21 who responded, 20 felt it was 'easy' or 'very easy', only one respondent felt it was 'difficult'.

#### *Understanding of the technology*

For the seven respondents who had not accessed location data, three stated that this was because they were not aware that they could set up an Interest Zone or Point of Interest, two had only been allocated their cases at the end of the GPS tagging requirement, one did not know how to set up an Interest Zone or Point of Interest, one did not think an Interest Zone or Point of Interest would be useful, and one had a service user who did not charge their GPS tag (therefore making location data unavailable).

Of the 31 respondents, 26 agreed or strongly agreed that they understood *when* they could access and use location data, and 22 indicated they knew *how* to access and use location data. Unsurprisingly, OMs who had not accessed location data were less likely to respond that they understood when and how to access and use location data. Twenty-four respondents agreed or strongly agreed that they understood the restrictions and processes for sharing location data, with only one respondent (who did not access location data) indicating that they did not understand this aspect of managing the GPS tag (the remainder neither agreed nor disagreed). Twenty respondents agreed or strongly agreed that they understood the different ways GPS tagging worked for COs and SSOs.

#### *Views on GPS tagging as a probation tool*

OMs were asked to select their top three from several possible uses of GPS tagging. The uses that were selected most frequently were to monitor compliance with an exclusion zone or other restrictive requirement (n=20) and to deter service users from re-offending (n=17).

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<sup>13</sup> Multiple responses were possible, so the totals do not add up to 24

Other commonly selected uses were to monitor attendance with Rehabilitation Activity/Drug-Rehabilitation and Alcohol Treatment Requirement (RAR/DRR/ATR) appointments (n=10), to use location data to match with potential new offences (n=9), for enforcement and support of breach proceedings (n=7), and to improve risk management (n=6)<sup>14</sup>.

When asked if they felt that GPS tagging was a useful way to tackle prolific offending, 28 of the 31 respondents either 'agreed' or 'strongly agreed' with the statement. Similarly, when respondents of the endpoint survey were additionally asked if they felt that GPS tagging was a useful way to tackle knife-crime offending, 19 of 22 either 'agreed' or 'strongly agreed' with the statement. When asked whether GPS location data had improved their ability to manage the case(s) and engage the service user(s) in positive change, OMs' feelings were slightly more equivocal, although most still agreed or strongly agreed (n=20). Notably, while OMs who had not accessed location data were more likely to disagree or strongly disagree that it had improved their case management and service user engagement, most still indicated that it had done so.

In the most recent survey, respondents were asked an additional question about the types of offences for which they feel GPS tagging is most useful based on their experience. Of the 22 respondents, the majority felt that GPS tagging is most useful for prolific theft (n=15), burglary (n=14), and knife crime (n=13). Several also felt that GPS tagging is useful for Serious Group Offending (SGO) cases (n=11), robbery (n=10), sex offences (n=10), and moped enabled crime (n=10). A minority of respondents felt that GPS tagging is useful for violent offences (n=6) and female offenders (n=4).

#### *Contact with Buddi*

Respondents were complimentary about the quality of the communication with Buddi, the GPS tagging provider, with 23 of 30 stating it as 'good' or 'very good/excellent' and comments describing Buddi as providing regular updates and a valuable service with helpful, responsive staff. A few respondents did raise some issues, however, including the volume of email received and difficulties arranging the removal or changing of tags.

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<sup>14</sup> Response option 'to improve risk management' was listed on the endpoint survey only.

## Tag wearer feedback

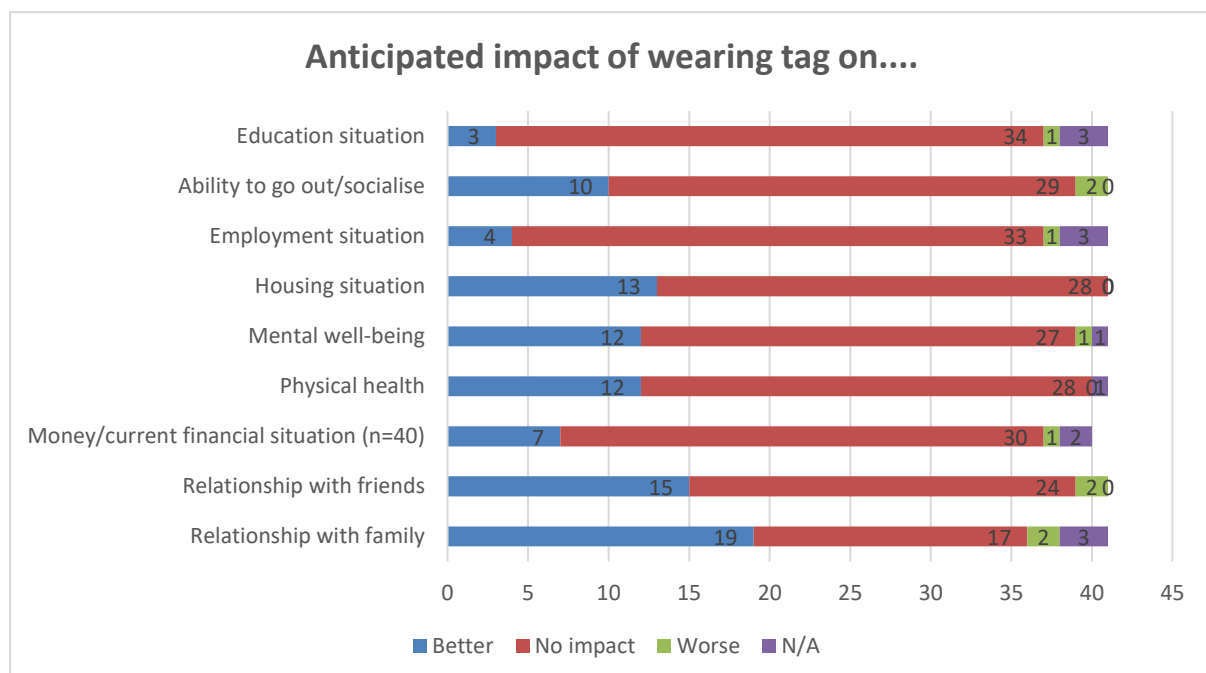
### Tag-fitting

Forty-two tag wearers completed the fitting survey. Positively, all but one stated that they understood why they had received the GPS tag, what they had to do to comply with the order, and how the tag operated with their other requirements.

When the tag was fitted, respondents were asked the extent to which they agreed or disagreed with several statements about the anticipated impact of the GPS tag. When asked if they were worried about what their friends and family would think about the tag, most respondents disagreed (n=32). Respondents were also asked to indicate how confident they were that they would complete the tag order successfully. All tag wearers but one described themselves as being either 'fairly confident' (n=21) or 'very confident' (n=20).

Respondents were asked what impact they thought wearing the GPS tag would have on specific aspects of their life ('better', 'worse', or 'no impact'). The results are shown in Figure 1 below.

Figure 1. Tag wearers' perception of anticipated impact of wearing GPS tag



Generally, respondents felt that the tag would either have a beneficial effect, or, more commonly, no impact at all; very few thought it would have a detrimental impact. Respondents were most positive about the potential impact of the tag on their relationships with family (19 tag wearers felt that the tag would make their relationships with family better). Respondents appeared to be more ambivalent in terms of their expectations of wearing the tag on their relationship with friends, their financial situation, their physical

health, their mental well-being, their housing situation, employment status, ability to go out or socialise, and their education situation. In every case the most frequent response was that the tag would have no impact.

When asked what the anticipated impact of wearing the tag would be on their life overall, 35/42 respondents felt that it would get better, while five felt that the tag would have no impact; one thought that their life would get worse. In terms of the impact of the tag on their offending behaviour, 37/42 respondents thought it would lead to an improvement and one thought it would get worse.

Respondents were also asked to provide general comments about their expectations on having the tag fitted (35 responses were received). The most popular assertion (mentioned by 21 respondents) was that the tag could help stop them from re-offending and/or make them 'think twice' about their behaviour in relation to potential re-offending, typified by the following statements:

"I hope wearing a tag for the first time will help me think about my behaviour, stay away from drink and keep using the support services that have been offered to me ... I know I have a problem with drink but need interventions like the tag to make me think about the consequences." Respondent

"I am 45-years-old and sick of offending. I hope wearing this tag will help me distance myself from crime and those who are a bad influence ... Knowing police and probation can see my whereabouts and link crimes to me is going to help me think about my actions." Respondent

Twelve respondents said that the GPS tag was preferable to a curfew tag (in that it was less restrictive). Similarly, 12 respondents said that wearing the tag was a preferred alternative to going to prison, recognising the likely negative impact on their lives of serving a custodial sentence. Ten respondents said that the tag would assist them in 'sorting their lives out'. Six respondents mentioned the positive impact of the tag in combination with engaging with support services, such as substance misuse services. Other factors mentioned were that the tag would keep them out of situations where they might cause harm to others, would assist in enforcing the restrictions of their order, would help to improve the wearer's familial relationships, and that it would show probation they were not offending. Typical quotes reflecting these sentiments were:

"I understand that I must stay away from my partner and the tag stops me going to her address. I think it will help me sort things out by reminding me I can't go to her address. I hope this and my counselling will make life better for me." Respondent

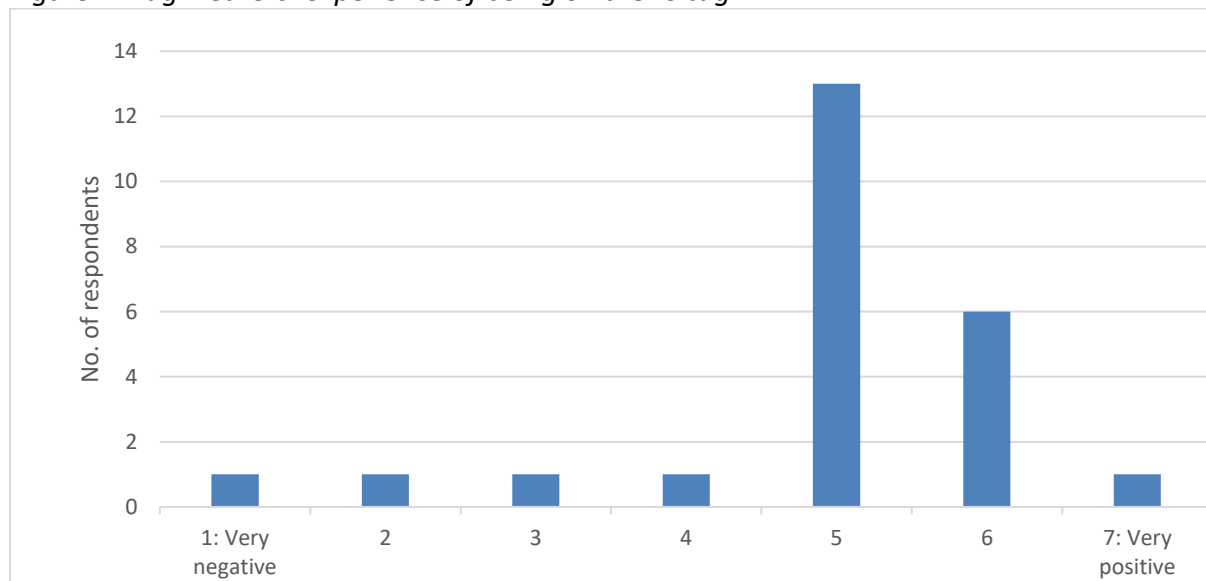
"I like this tag because I don't have a curfew and gives me space to try and get my life together. I don't want to go to prison but recognise that I still have a drug addiction." Respondent

One respondent described the fitting of the tag as his ‘last chance’, but felt he was being set up to fail due to the inability of drug services to see him to address his drug dependency. Similarly, another respondent expressed concerns that the tag would not make any difference as she was wearing it for a short period of a few weeks and had issues with drug use and homelessness.

### *Tag removal*

Tag wearers were also asked to complete a similar questionnaire when their tag was removed. 24 responses were received. Overall, across several questions tag wearers were generally positive on the experience. To illustrate, respondents were asked to rate (on a scale of 1-7, with 1 being ‘very negative’ and 7 ‘very positive’) their overall experience of being on the tag. The results are shown in Figure 2 below, and clearly indicate respondents’ positive perceptions (although it should be stressed that, as these individuals had completed the tag, they might be expected to be more positive/motivated).

*Figure 2. Tag wearers’ experience of being on a GPS tag*

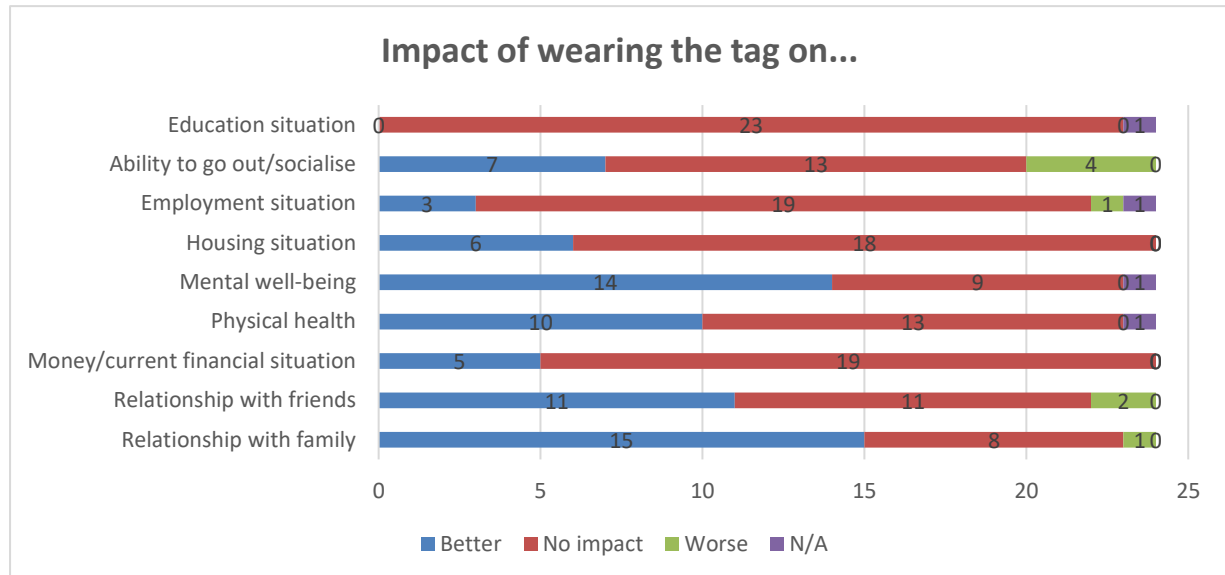


This positive outlook is reflected in responses to several related questions. For example, when asked if wearing the tag was better than they thought it would be, 21 respondents agreed, whilst only three disagreed. The tag wearers responded similarly to a question asking if they found the tag comfortable to wear, with 19 agreeing and five disagreeing. Respondents were also asked whether they had worried about what their friends and family thought about the tag, and most disagreed (n=18).

The removal survey repeated the questions from the fitting survey about the impact of the tag (‘better’, ‘worse’, or ‘no impact’) on a variety of aspects of respondents’ lives. All 24 respondents thought their offending behaviour had improved because of wearing the tag, and, in terms of life in general, 21 respondents thought the tag had made it better and only

one thought the tag had made it worse. Responses to the other questions are shown in Figure 3 below.

Figure 3. Tag wearers' perceptions of the impact of wearing the GPS tag



The pattern of responses in Figure 3 echoes the ambivalence of the responses received in the fitting survey, with the most common response across all questions being that the tag had had no impact on the specific aspect of the respondents' life, except for family relationships and mental well-being which most respondents felt had improved as a result of wearing the tag.

Respondents were also asked to provide general comments about their experiences of wearing the GPS tag (23 responses were received). The comments reflect the responses given to earlier closed questions and echo comments given by respondents when the tag was fitted. Sixteen people reported that the tag had helped them stay out of trouble and away from crime. Thirteen people mentioned that the tag had helped them think about or reflect upon their actions. Thirteen also stated that they preferred the Buddi tag to a curfew tag (again, in that it was less restrictive) and, similarly, 11 specifically mentioned the advantages of wearing the tag as an alternative to serving a custodial sentence. Five people said that wearing the tag meant that others who posed a negative influence or threat of harm stayed away from them.

Some respondents commented that wearing the tag had in general improved their lives or ability to engage in positive change (mentioned by five respondents), been a positive or better than expected experience (mentioned by three respondents) or left them feeling positive about the future (also three). Specific positive impacts of wearing the tag on their lives described by respondents include securing or maintaining stable accommodation (mentioned by six respondents), securing or maintaining employment (mentioned by two respondents), and improving family relationships (mentioned by three respondents). 10 respondents stated

that they would wear the tag again or were willing to continue to wear their current tag. Six respondents said that the tag was comfortable to wear. Typical responses included:

“I tried cutting off the strap to go and do crime, but I could not get it off. Because of this it stopped me and has helped me to think about my actions. Best tag I have worn, and I have worn a lot. If I had the choice, I would wear it again for longer.” Respondent

“To be honest, wearing this tag was better than I thought. It has made me think twice about offending, helped me stay away from people who were bad influences, stopped me from getting attacked when caught by someone from a gang who had beef with me ... My mum is ill in hospital and being out of prison and not on curfew means that I can spend valuable time with her. I hope the experience of wearing the tag has motivated me enough to keep it going ... I feel positive about my future.” Respondent

“I prefer the Buddi tag more than being on curfew because I work night shifts. To lose work because of a curfew would have made my living situation a lot worse and probably increased my risk of re-offending.” Respondent

However, respondents also raised several negative aspects of wearing the tag. Nine respondents mentioned problems they had charging the tag (not the act of charging the tag itself but being organised enough in their own daily life to do so), with one respondent suggesting that having a charger at their probation or drugs service might help in this respect. Other issues raised by respondents included that the tag was uncomfortable to wear (mentioned by five respondents), that they felt embarrassed or ashamed wearing the tag (mentioned by three respondents), that wearing the tag for three months was not long enough to change long-term behaviour (mentioned by two respondents), and that wearing the tag harmed their employment prospects (mentioned by one respondent). Examples of such comments were:

“I can see how this tag ... is good for some offenders but three months seems a short period of time to see any real results with changing people’s attitudes or offending.” Respondent

“As a female, I have not been able to wear a skirt as the tag will show. I have found it restricts my movements too much. The tag has felt uncomfortable to wear.” Respondent

“I did find it hard to get into a routine of charging my tag and got fed up with probation and Buddi constantly telling me to charge the tag.” Respondent

## Police Crime Mapping

Under the crime mapping intervention, which began in September 2017, a dedicated police analyst used an automated system to map the movements of tag wearers on SSOs against police crime data. Where the analyst believed that there was a sufficiently close match, details were forwarded to the relevant police IOM team for further investigation. A detailed account of the crime mapping intervention can be found in E&I's second evaluation report (MOPAC 2018). There is no additional information to be added in this report because the funding for the police analyst post had ceased at the point that the previous interim report was written, and no additional mapping activities were subsequently undertaken by the police.

The second interim evaluation report identified the low number of significant matches generated as a result of the crime mapping (46 were referred to the police IOM teams, which was described in the report as 'disappointing, bearing in mind the large number of crimes uploaded onto the system' (over quarter of a million). In addition, of these 46, in only two cases was the decision taken to look at the incident further; one case had been allocated for secondary investigation, and in the other, an EAR request had been sent to Buddi.

However, the report recognised the small size of the GPS-tagged population able to generate 'hits' (only 22 individuals in total were eligible for crime mapping<sup>15</sup>) and that the type of offences for which the matches were generated (largely theft and burglary) were likely to provide the greatest latitude in terms of the reported time of the offence and thus, the greatest difficulty in providing evidence that the individual had committed the offence. The report concluded 'in these circumstances, it is perhaps unsurprising that the level of significant matches was so small. It is difficult to know, as a result, whether the low number of yields from the crime mapping reflects failings in the implementation of the scheme, or in the theory behind the concept of crime mapping, particularly bearing in mind the type of offences which many of the POP cohort are committing (thefts and burglaries)'.

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<sup>15</sup> Individuals who were on SSOs and had been compliant.



## 4. Discussion

A total of 135 tags were imposed as part of the GPS tagging pilot (117 on the POP cohort and 18 on the knife crime cohort). The majority of Electronic Monitoring requirements (93% - 125 of 135) were imposed alongside an RAR – consistent with the intended use of the tags as part of a package of support, monitoring and punishment. The completion rate without recall for the POP cohort was 52%, that for the knife crime cohort higher at 78%, albeit on a much lower number of cases. The last figure is particularly interesting bearing in mind the subsequent agreement for MOPAC to use GPS tags with knife crime offenders released on licence from London prisons. Lack of attendance, failure to charge the tag and non-engagement were the three most common reasons for non-compliance.

Overall, findings from the research show that the GPS tagging pilot was implemented well (something never to be taken from granted when implementing innovation) and has been well received by practitioners and tag wearers alike, although the findings are based on small samples. Offender managers were generally positive about the GPS tag and were willing to use interest and exclusion zones as part of supervision. Tag wearers had positive expectations of the tag. They were confident that they would successfully complete the tag order and knew what they needed to do to comply. Furthermore, tag wearers thought that the tag would have a positive impact on their life and lead to them committing less crime. At tag removal, they thought that being on the tag had improved their offending behaviour and had made their life better in general (although, again, the number of respondents was small). However, there were some concerns expressed (from tag wearers and practitioners) about the difficulties caused for this cohort by the requirements to keep the tag charged.

It is clear from the data that there are still issues around the identification of suitable individuals to be given the tag, reflected in examples of early non-compliance. Question marks about the effectiveness of the crime mapping element of the pilot remain, and it is unclear whether these arise as a result of theory or implementation failure. Nevertheless, the successful implementation of the technology, the overall compliance rate for the scheme, particularly for the knife crime cohort and the positive views expressed by practitioners and service users about their experience with the GPS tag, suggests grounds for optimism.

## 5. References

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