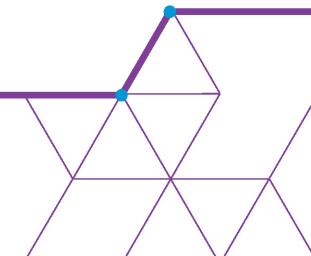# HM Prison & Probation Service

Body Worn Video Camera (BWVC) Pilot Evaluation

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Her Majesty's Prison and Probation Service

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1.   Summary

In response to rising levels of prison violence, HMPPS commissioned the Violence Reduction Project, with the aim of reducing levels of assaults against staff and prisoners. Findings from international research suggest that use of cameras can lower rates of assaults in prisons, by increasing accountability and transparency, reducing staff reporting workloads, enhancing evidentiary capability and acting as a potential behaviour change mechanism. As such, HMPPS piloted the use of Body Worn Video Cameras (BWVCs) to investigate how their use might serve to keep staff and residents safe in the prisons of England and Wales.

Six hundred BWVCs were deployed to 23 establishments across the prison estate to pilot and evaluate their effect on prison violence. The pilot of BWVCs ran from June 2015 to December 2015. Survey data was gathered in June 2015 (pre pilot) and December 2015 (post pilot). Fieldwork for some aspects of the research continued until April 2016. Data used for the impact evaluation was gathered from December 2014 to February 2016. The research team evaluated the impact of BWVCs on assault and use of force rates, as well as their perceived impact on relationships, safety and fair treatment. The project also considered how BWVCs could be used in staff training and disciplinary proceedings. The project involved 2,800 responses from staff and 800 from prisoners through their contributions to interviews, surveys and action research.

Whilst the evaluation has some limitations in terms of the number of sites included in the study, variation in the recorded violence monitoring data between prison sites and the limited follow-up periods, and the potential for survey findings not be representative of all views held in the pilot prisons the researchers were able to conclude:

- BWVCs had a varying impact on the levels of recorded violence and use of force across the pilot sites with some sites showing an increase and some a decrease in various types of assault rates. Overall, there was no statistically significant difference in assault rates between the pilot and comparator sites following the use of BWVCs.
- Staff and prisoners involved in the study were more positive and more likely to support the use of BWVCs when they had been well- informed about their purpose, and had seen or been involved with the use of BWVCs.
- BWVCs were reported to have both positive and negative impacts on relationships between staff and prison residents.

- In some cases, staff and prisoners reported benefits of BWVC use, such as a calming effect on prisoners and improving the management of poor behaviours. However, the reports of positive changes were not consistent across the pilot sites and were affected by practical issues such as limited access to the equipment and attitudinal barriers such as some staff members' ambivalence or resistance to change.

If BWVCs are used transparently, consistently and fairly, this research indicates that they can: provide staff with a greater sense of physical protection; provide better evidence to assist with the adjudication process; effectively de-escalate and deter incidents (particularly less serious indiscipline and verbal disputes); improve relationships by encouraging open and respectful interactions; offer innovative opportunities for learning and development for staff and prisoners; and support the development of a rehabilitative environment by improving relationships, perceptions of fairness and trust and increasing transparency.

When information and guidance on the purpose and use of BWVCs was not clearly communicated or adhered to, staff and prisoners involved in the study experienced negative effects such as some staff and prisoners expressing fear about the consequences of the use of BWVC (with mistrust and suspicions about others' motives), some prisoners thinking that staff might purposefully manipulate use of BWVCs with the sole intention of punishing them, and some staff being fearful that their language and behaviour would be judged unfairly and that the camera footage would be used for disciplinary action against them.

Based on the findings it is suggested that effective implementation of BWVCs may be dependent upon;

- A clear communication strategy, including recognising and addressing any existing cultural barriers that can impact on the effective use of BWVCs.
- A comprehensive training package and adequate resourcing so that staff can be supported and encouraged to use BWVCs fairly and consistently.
- The development of monitoring systems to assess the ongoing impact of BWVCs on safety and quality of relationships in each prison.

After conducting this research, we focused on embedding the findings into policy, to inform a wider scale roll out of BWVCs across the Service, before proceeding with publication. BWVCs have now been rolled out to all prisons across England and Wales, with these findings and recommendations included in training and roll out procedures.

2. Context

2.1 BWVCs in the Criminal Justice Setting

Police forces have increasingly moved to equip officers with body worn video camera (BWVC) technology (Miller, Toliver, & Police Executive Research Forum, 2014; Rieken, 2013), citing the potential benefits of increased accountability and transparency, reductions in reporting workloads, enhanced evidentiary capability and its role as a potential behaviour change mechanism (Drover & Ariel, 2015). However, in a recent comprehensive narrative review of the research evidence base for BWVCs, 70 empirical studies of BWVCs covering the impact of cameras on US police officer behaviour, officer perceptions, citizen behaviour, citizen perceptions, police investigations, and police organizations were examined (Lum, Stoltz, Koper & Scherer, 2019). The authors concluded that although police officers and citizens were generally supportive of BWVC use, BWVCs have not had statistically significant or consistent effects on most measures of officer and citizen behaviour or citizens' views of police. Additionally, despite the large growth in BWVC research, the authors note that there continues to be a gap in the knowledge on the impact that BWVCs have on police organizations and police–citizen relationships more generally and that more research is needed to identify the potential harms and benefits of BWVC use. Examination of four recent literature reviews also suggest that these perceptions of efficacy are based on an evidence base that is still scant, consisting of only a small number of studies none of which are without methodological difficulties (Cubitt, Lesic, Myers & Corry, 2017; Ellingwood & Yamamoto, 2014; Lum et al., 2015; White, 2014).

Four large reviews highlight the lack of methodological rigour in this field as a whole. When examining only journal-published, peer-reviewed studies which used the highest methodological rigour (including the random allocation of staff to trial camera use in) there is considerable variation in the findings. Whilst one US study from the reviews found that camera use could reduce use of force incidents (Ariel, Farrar & Sutherland, 2015), another more recent multi-site study covering both the US and UK found that this may depend on the duration of camera use, with the use of force increasing when cameras are switched on and off, and decreasing when cameras are switched on for officers' whole shifts (Ariel et al., 2016). Some individual studies have highlighted the potential benefit of BWVC technology, including the reduction of complaints against the police (Ariel et al., 2015; Farrar, 2013; Goodall, 2007; Katz, Kurtenbach, Choate & White, 2015) and quicker complaint resolution (Katz et al., 2015; ODS Consulting, 2011).

Camera use has been shown in one US randomised controlled trial to result in fewer incidents of resistance and serious complaints (Jennings, Lynch & Fridell, 2015), but in another recently published study there was an *increase* in assaults against staff when cameras were used (Ariel et al., 2016). A further relevant study was an evaluation of the impact of BWVCs in two prisons, in New Zealand (Beales & Marsh, 2016; Marsh, 2014). Despite some methodological weaknesses in study design, the authors claimed 15-20% reductions in incidents when comparing the twelve months prior to the trial with the six-month trial period. The research also claimed that the frequency and intensity of assault events was reduced, there was less use of physical force, staff felt safer and more confident, and cameras appeared to have a calming effect on the unit. It was reported that camera footage was used effectively for other purposes including the management of misconduct and training, development and coaching for prisoners, but little detail on these applications is included in the published report.

Despite some discrepancies in the outcomes observed, the evidence does describe how the effective implementation of BWVCs may depend on a range of factors including the skill of the user, the level of resistance to change and ability to plan for this, the uptake of cameras, and using training as an opportunity for staff engagement (Drover & Ariel, 2015; Laur, LeBlanc, Stephen, Lane & Taylor, 2010).

Much of the evidence base around the use of BWVCs comes from their use by the police; there is little research around the use of such cameras in prisons. The present research was designed to advance our knowledge of the use of BWVCs in a UK prison setting.

2.2   Study aims

In recent years police forces have increasingly moved to equip officers with body worn video cameras. Alongside the growing trend to equip police officers with BWVC technology, staff and residents in prisons in England and Wales have in recent years experienced increasing levels of violence. It is this context that has led HMPPS to look to technology in the form of BWVCs as one element within a suite of responses, which aim to bring about greater environmental stability (HM Inspectorate of Prisons, 2018).

Behaviour management statistics for prisons show that self-harm incidents, prisoners on prisoner assaults, assaults on staff, overall assaults and serious assaults are reaching record highs, and have been on an upward trend since 2014. In the 12 months to December 2018, for example, there were 24,424 prisoner on prisoner assaults, an increase of 15% from 2017,

to a new record high, and 10,213 assaults on staff, up 21% from the previous year (Ministry of Justice, 2019).

Following the proposed deployment of BWVCs in response to this upward trend, this research project aimed to evaluate the impact of the cameras on indices of prison safety as well as identify effective practice, potential benefits and any unintended consequences of BWVC use in a prison setting.

Specifically, the pilot answered the following questions;

1. What is the impact of BWVCs on violence and use of force?
2. What are staff and prisoner perceptions of BWVCs on the perceived impact they have on safety, relationships and fairness?
3. To what extent can BWVCs feed into local processes such as adjudications and allegations made in relation to staff and prisoners?
4. How can BWVCs be used for staff and prisoner development?
5. What are the possible risks or issues associated with the use of BWVCs?
6. What examples of effective practice are there to inform any future national roll-out of BWVCs?

3.   Approach

The 23 pilot sites were chosen to represent prisons serving different functions and presenting with different levels of violence. A range of approaches were applied to meet each of the pilot aims. This included an impact evaluation (described in 3.1), as well as a process evaluation using different methodology to understand how BWVCs were implemented, used and experienced by staff and prisoners (described in sections 3.2, 3.3, 3.4 and 3.5). In the Annex, there is a table showing the contribution of each prison site to each component of the research. All prisons took part in the impact evaluation. Fifteen sites reached the threshold for inclusion for the staff pre pilot survey, and eleven sites post survey. For the prisoner survey, five sites originally volunteered to distribute surveys, but only three of these sites met the threshold for inclusion both pre and post pilot. For all other aspects of the research, prison sites volunteered to take part.

3.1   Impact Evaluation

An impact evaluation was completed to identify if the use of BWVCs had an impact on the number and type of assaults and use of force incidents over the course of the pilot. A before-and-after design was used to compare the violence data for six months before with six months after the introduction of the BWVCs at the 23 pilot sites. Using purposive sampling, each of the pilot sites was paired with a similar comparator prison that was not issued with BWVCs to estimate any changes that could be directly attributed to the use of BWVCs. The comparator groups used in the Prison Rating System (PRS)[1] formed the basis for selecting the comparator prisons. Any sites that were not eligible for the pilot (e.g. open establishments) were excluded from the list of potential comparators. The PRS groups rank comparators based on their statistical similarity to the establishment across a range of variables (for example prison function, average population, and average prisoner age) and the closest possible match from the PRS group was selected as the comparator.

Consideration was also given to the assault rate per 1,000 prisoners of the comparator site to ensure the pilot site and the comparator group were experiencing similar trends in their levels of assaults.

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[1]   The Prison Rating System is used to measure the performance of both public and private sector prisons in relation to four key areas: Public Protection, Reducing Reoffending, Decency and Resource Management and Operational Effectiveness. For more information: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/541175/prs-2015-16-specification.pdf

3.2   Staff and Prisoner Surveys

Part of the process evaluation involved use of surveys, which were undertaken with staff and prisoners before and at the end of the pilot. For staff, the survey was distributed via an online survey tool; for prisoners, surveys were distributed to four of the pilot sites via paper copies and at one site electronically using the same online survey tool. The exact period of data collection varied by prison but averaged around three to four weeks, for both staff and prisoners, pre and post pilot.

We know that surveys in prison contexts can achieve lower response rates than surveys in other contexts (e.g. Gojkovic, Meekk & Mills, 2011), and that online surveys often achieve lower response rates too (Nulty, 2008). In order to maximise the response rate, and to include more prisons in the survey, we called on the assistance of a designated single point of contact (SPOC) at each prison to distribute the surveys. Members of prison staff were emailed the survey and prisoners were given the survey to fill out, or it was distributed via the kiosk system. The advantage of using local staff to administer the survey brought also some disadvantage in inconsistent administration. Although all sites will have experienced issues with providing sufficient computer access for staff, it seems that at some sites the SPOC was more successful in encouraging staff to take part. We know too that the data collection for the prisoner survey differed between sites. At some prisons surveys were distributed only to some wings or living units and not others; at other sites surveys were distributed only to those in the workshops. We cannot report response rates here as we are not able to determine precisely how many staff members or prisoners actually *received* the surveys. In the light of the variation in survey delivery across sites we took the decision not to include the data from prisons where returned surveys represented less than 15% of all possible staff or prisoners at that site, as that implied less than adequate survey implementation and a sample unlikely to be representative of the whole. This cut off also meant that we retained a good proportion of the prison sites to ensure a large overall sample. Thus the responses included were from samples representing at least 15% of the total population of prisoners or staff at that prison (the average staff sample was 28% of all staff on roll at pre-test and 24% at post-test; prisoner samples averaged 16% of all prisoners in the prison at pre-test and 18% post- pilot).

Despite these challenges we were satisfied that we had exceeded our prior minimum expectation in terms of necessary sample size. Power calculations identified a minimum sample of 361 staff and 327 prisoners (95% CI with 5% margin of error) reflecting the staff and prisoner populations at those prisons that passed the sample size criterion. For the staff survey, out of 23 pilot prisons, 15 met the sample size criterion pre-pilot, and 11 prisons post-

pilot. Eight of the eleven sites included in the post survey sample were also in the pre survey sample. For the prisoner survey, three of the five sites reached the sample size criterion at the pre-pilot stage and only these were included at post-pilot. The survey was anonymous so it was not possible to determine if the same people completed the survey at both the pre and post stages. In total we achieved a sample size of 1695 pre and 970 post for staff, and 337 pre and 383 post for prisoners – sufficient to bring confidence that estimates derived from these observations would be close to the population mean.

3.3   Staff and Prisoner Survey Focus Groups and Interviews

Staff and prisoners took part in focus groups and individual interviews at six out of the 23 pilot sites who had volunteered to be take part in the interviews. This formed part of the process evaluation. Researchers visited most prisoner and staff areas within each site to talk to staff and prisoners in small groups or individually. Areas included house blocks, workshops, Education, canteens, programme departments, healthcare, care and separation units (CSU), security units, staff offices, Chaplaincy offices and libraries. This approach allowed the researchers to talk to greater numbers of staff and prisoners without disrupting the prison regime. Non-uniform staff do not routinely wear BWVCs but were included in the study to capture their views. To allow anonymity, staff and prisoner details were not requested or noted down so views and quotes cannot be attributed to a particular individual. Staff and prisoners were informed that the conversations were confidential, and anyone wanting to speak in confidence, did so on a one to one basis. Two researchers attended each site; one researcher led the discussion while the other took comprehensive notes.

In total 252 people were interviewed: 80 prisoners and 172 staff. Notes were taken during the interviews, and analysed to identify patterns or themes in the responses.

3.4   Disciplinary Procedures

All of the pilot sites were invited to provide data concerning the use of BWVCs in their disciplinary procedures. Of the 23 pilot sites five sites volunteered to participate in this part of the study. Since we focused on the results of the sample as a whole we did not explore the characteristics of each individual prison. Data were gathered across these five pilot sites to describe and explore how BWVC footage had been used in prison disciplinary procedures. This involved observation of five prisoner adjudication hearings at one pilot site, three interviews with Adjudicating Governors at three different pilot sites and ten staff involved in the adjudications process across all five pilot sites, 13 case studies of BWVC footage used in

the adjudication process from four pilot sites, and five case studies of any BWVC footage used for staff allegations or disciplinary investigations involving staff from two pilot sites.

3.5   Action Research – Prisoner and staff development

Two of the pilot sites volunteered to take part in action research projects to explore how BWVC footage could be used for staff and prisoner development. Action research is an iterative, cyclical process of planning, acting, observing, reflecting and re-planning, involving continual collaboration between the prison team and researchers. At one category C prison, BWVC footage was used within Control & Restraint (C&R) staff refresher training events to aid staff development. Data were gathered through interviews with training instructors and trainees, observation of three training events on which BWVC footage was used, note taking at project meetings, and use of reflection logs and feedback forms. At another category C prison, BWVC footage was used by specialist substance misuse workers to give feedback to prisoners who had been under the influence of psychoactive substances (PS). The research explored the potential of using BWVC footage to support and facilitate behaviour change in prisoners. Data were gathered via interviews with staff and prisoners, feedback forms, diaries, note-taking at project meetings and focus groups.

Findings for research questions **5** and **6** would be extrapolated across the various strands of the pilot data collection.

4.   Results

4.1   Impact on Violence

BWVCs had a variable impact on the levels of violence and use of force in pilot sites, however overall there were no statistically significant differences between the pilot and comparator sites.

The aim in this analysis was to compare levels of recorded violence and use of force before and after the introduction of the cameras in the pilot sites. We examined rates of assaults, staff assaults, serious assaults, and use of force before and after the introduction of cameras in both pilot sites and over the same period in comparator sites. We observed a very mixed picture with both pilot and comparator sites reporting increases and decreases in assault rates, and use of force rates after the introduction of BWVCs.

A series of 'difference in difference' statistical tests, which took into account background trends, examined the overall impact of BWVCs on each of the outcomes measured. The analyses found no statistically significant differences in changes in violence rates or use of force rates between the pilot and comparator sites. The overall observation was that BWVCs sites saw fewer assaults and more use of force events after cameras were introduced, but these differences were not of sufficient magnitude to conclude an impact of camera usage. When we looked at before/after patterns of change in individual sites no consistent picture emerged – both pilot and comparator prisons saw both increases and reductions in assault rates and use of force. Just two pilot prisons reported reductions on every measure. For some prisons camera use coincided with a period where assaults were less frequent; for others this was not the case. With this mixed picture it is not surprising that no overall impact could be discerned. Table 1 provides detail of the patterns of changes within sites.

Table 1: The Impact of Violence in the Pilot and Comparator Prison Sites

Type of violence measured	Prison site type	Number of prisons with a rate increase	Number of prisons with a rate decrease	Number of prisons with no change in violence rate
Changes to overall assault rates	Pilot Sites	17	5	1
	Comparator Sites	21	2	0
Changes to staff assault rates	Pilot Sites	17	6	0
	Comparator Sites	16	6	0
Changes to serious staff assault rates	Pilot Sites	11	10	2
	Comparator Sites	12	7	4
Changes to use of force	Pilot Sites	16	7	0
	Comparator Sites	18	5	0

4.2 Staff and prisoners' perceptions of BWVCs – Surveys

We first examined the representativeness of staff and prisoner samples who responded to the survey. Pre pilot, 60% of the staff survey respondents were male, 64% had worked in the prison for 4 years or more, 77% had been employed within the Prison Service for 4 years or more, and 51% were officer grades. Post pilot, 66% of the staff respondents were male, 66% had worked in the prison for 4 years or more, 83% had been employed within the Prison Service for 4 years or more, and 60% were officer grades. Of the prisoner survey respondents, pre pilot the largest proportion had served less than a year on their current sentence (46%), whilst post pilot the largest proportion had served between 1 and 4 years on their current sentence (39%), followed by less than a year (35%). Pre pilot, 48% of prisoner respondents were serving their first prison sentence, whilst post pilot, 43% of respondents were serving their first prison sentence. The profiles of pre and post pilot respondents were similar, and the spread of staff characteristics and prisoners' sentence length and previous experience of prison suggests a good representation across a range of features potentially of influence on responses.

The surveys aimed to gather perceptions of staff and prisoners about BWVCs, and of the impact of using BWVCs at their prison. The findings indicated that overall the majority of staff and almost half of prisoners, who completed the survey felt that the introduction of BWVCs had had a positive impact on the prisons. At the end of the pilot, 41% of prisoners who filled out the survey thought that the introduction of BWVCs had had a positive impact (a similarly large proportion neither agreed nor disagreed that BWVCs had had a positive impact – 36%), and 79% of staff agreed that BWVCs had had a positive impact.

Individual survey items were first examined descriptively. Both pre and post pilot, more staff than prisoners felt that violence was a major issue. Eighty one percent of staff pre-pilot, and 78% of staff post-pilot agreed or strongly agreed that violence was a problem at their prison. In contrast, 62% of prisoners pre-pilot and 57% of prisoners post-pilot agreed with the same statement. Prisoners, however, reported greater concerns than staff about unfair use of force; whilst 86% of staff pre-pilot and 92% post-pilot felt that use of force was applied fairly, only 51% (pre) and 39% (post-pilot) of the prisoners felt the same.

Four key variables were analysed, representing prisoner and staff perceptions of: expected impact of BWVCs; current prisoner/staff relationships; expected impact of BWVCs on procedural justice during adjudications; and safety. Scores for these four variables were produced for every respondent. Table 2 shows the pre and post survey scores for these

four variables, for both staff and prisoners. For all variables, higher scores are more positive. Differences between pre and post scores were examined.

Table 2: Staff and Prisoner Perceptions before and after the Pilot

	Impact of BWVCs on improving prison		Staff/Prisoner Relationships		Impact of BWVCs on procedural justice		Safety	
	N	Mean (SD)	N	Mean (SD)	N	Mean (SD)	N	Mean (SD)
Staff								
Pre pilot	1215	43.04 (9.96)	1497	11.41 (2.71)	1425	12.13 (2.03)	1238	32.63 (7.91)
Post pilot	705	41.58 (9.90)	832	12.21 (2.90)	747	11.55 (2.14)	738	34.71 (7.56)
Prisoners								
Pre pilot	301	33.66 (10.14)	314	13.86 (3.60)	313	11.88 (2.68)	292	35.86 (9.93)
Post pilot	323	29.79 (9.68)	357	13.11 (3.43)	339	10.23 (2.86)	327	35.62 (9.92)

All the differences reported below were statistically significant ($p<0.5$)[2] and therefore unlikely to be due solely to chance variation. As the surveys are different we cannot directly compare the staff and prisoner survey results.

- Both staff and prisoners reported more positive views about the impact of BWVCs on improving prisons generally and the impact on procedural justice before the pilot compared to after. This suggests that perceptions of the potential positive impact of BWVCs reduced over the course of the pilot.

- However staff perceptions of staff/prisoner relationships and perceptions of safety improved over the course of the pilot, suggesting that for staff, cameras may have a positive impact on relationships and perceptions of safety.

- In contrast to staff, prisoners' perceptions of staff/prisoner relationships reduced significantly over the course of the pilot, suggesting that the use of cameras may have a negative impact on prisoner perceptions of staff-prisoner relationships.

- Whilst overall staff felt safer after the cameras were introduced, scores pre and post pilot on the safety variable for prisoners remained the same; prisoners did not feel safer.

- Both staff and prisoners who felt better informed about BWVCs had more positive perceptions of BWVCs and their capabilities. For example, the perceptions of BWVCs improved when staff used them.

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[2]   A number of comparisons were made between subgroups of respondents and were corrected for multiple comparisons.

- Differences (both pre and post) were also observed between different types of staff. Female staff and non-uniformed staff were more positive about the expected impact of BWVCs on the prison generally (pre and post) and on procedural justice specifically (pre only), and had more positive perceptions of staff and prisoner relationships (pre only), compared with male staff and uniformed staff respectively. Non-uniformed staff also felt safer than uniformed staff both pre and post the introduction of BWVCs.

- Further differences between prison types were also examined. Differences in staff and prisoner perceptions were observed across prison type, suggesting that contextual and cultural factors of different types of prison may impact perceptions. For example, staff from YOIs were more positive about the impact cameras could have generally on prison life, and procedural justice specifically, but were less positive about staff-prisoner relationships than other types of prisons.

4.3 Staff and prisoners' perceptions of BWVCs – Interviews and focus groups

Building on the results of the survey, interviews and focus groups with staff and prisoners provided a more in-depth understanding of their perceptions of BWVCs. Thematic coding identified six principal ways in which the cameras were perceived or applied:

Protection

Despite some concerns, most staff and prisoners expressed hope that BWVCs could protect them. Specifically, staff and prisoners saw BWVCs as a tool that made them feel safer, protected them from physical harm and false allegations, and increased the overall safety of the prison.

> *"From the feel-good-feel-safe perspective it's got to make you feel better to have extra protection from your kit."* (Uniformed officer)

Staff felt protected by the evidential footage that the BWVCs can provide. This appeared to be linked to a view the cameras could be used to deter bad behaviour, by making it more likely that people would be found guilty of wrongdoing through the adjudications process.

Mistrust and Fear

Despite overall positive reactions to the BWVCs, both staff and prisoners also expressed high levels of mistrust and fear of BWVCs. Staff feared that senior management and the general public would use the footage to judge their behaviour. As a result, they felt vulnerable and feared reprisal and punishment.

> *"I also have a question whether footage is only viewed when an incident happens or whether managers with access just view all footage for the fun of it or to catch people out."* (Uniformed staff)

> *"I do not trust who has access to the footage, or the actual recording times"* (Uniformed staff)

Prisoners were uncertain about how the footage from the BWVCs would be used and were fearful that their privacy would be compromised, and that the cameras would be used against them.

> *"Who's to say if and when cameras are on operationally and if there is no one tampering while wearing the devices?"* (Prisoner)

> *"There is a feeling of being watched all the time."* (Prisoner)

> *"It is another intrusion of the little privacy I had left."* (Prisoner)

Punitive Use

Some prisoners believed that staff intentionally manipulated situations to provoke them into behaving in certain ways for which they would then be punished. Prisoners commonly reported that the BWVCs only benefited staff and that their use was biased, punitive and unfair. Both staff and prisoners reported unforeseen and unhelpful uses of BWVCs.

> *"Body worn cameras are used to video offenders when they are not in a good state of mind. Sometimes used to disgrace offenders that are going through a bad time."* (Uniformed staff)

> *"Body worn cameras are not being used as it should be. It is being used just to set up prisoners for nicking."* (Prisoner)

Behavioural Change

BWVCs were seen as being effective in de-escalating and deterring incidents, particularly low level indiscipline.

> *"The vast majority of prisoners calm down when you switch the BWVCs on, as they know that the footage will be used as evidence…… it's also evidence for staff."* (Uniformed staff)

BWVCs were regarded as less calming for younger, impulsive prisoners or those under the influence of illicit substances. Both practical and attitudinal barriers to change were reported by staff and prisoners. These included problems with the technical equipment and access to the BWVCs and staff ambivalence or resistance to use of the cameras.

> *"I'm old school and haven't worn them much (BWVCs). I can get by using my mouth."* (Uniformed staff)

Impact on Roles and Relationships

There was a difference in how uniformed and non-uniformed staff viewed the use of BWVCs. In general, the majority of non-uniformed staff predicted benefits, and fully endorsed the use of BWVCs (but only for uniformed staff).

> *"I would not want to wear one if given the opportunity, as I would feel less like a nurse. It's not my vocation and not what I was trained to do – we have different role to officers it's not in my remit to wear and record incidents like they would."* (Nurse)

Uniformed staff as well as non-uniformed staff such as Healthcare, Education and Chaplaincy workers also spoke of their concern that BWVCs could undermine existing roles and relationships and have a negative impact on the development of trust.

> *"The use of body worn cameras in certain contexts may at times become a barrier to trust being created."* (Uniformed staff)

> *"Can I be tricked? The BWVCs put on and used as evidence without me knowing?"* (Prisoner)

Whilst largely the impact of BWVCs on relationships was perceived as negative, there were some staff and prisoners who felt relationships could be improved by BWVCs. Both staff and prisoners gave examples where the chance of being captured on camera would heighten awareness of what one might say or do, and that if this increased self-policing it could encourage more positive and respectful interactions. Some were optimistic that BWVCs could allow for an openness in all interactions that take place.

> *"Good thing for everybody. Inmates talking to officers and vice versa. Good way of maintaining respect."* (Prisoner)

Although some staff felt that they would be hesitant in performing their duties if they wore a BWVC, more commonly staff reported the benefit that BWVCs enabled them to feel more confident in carrying out their daily duties and when managing difficult and aggressive prisoners.

> *"Gave me the confidence to challenge a difficult prisoner without the fear of reprisals."* (Uniformed staff)

Some prisoners also felt staff were more mindful in their roles when wearing BWVCs.

> *"I find that staff are more mindful of their actions and behaviours too in situations of conflict."* (Prisoner)

Transparency

Prisoners, and, to a lesser extent, staff, commonly reported a lack of knowledge of BWVCs and expressed a wish for greater transparency about their purposes and training in their use.

> *"They were introduced quite suddenly with no information given to them…... which fuelled their suspicion to begin with."* (Uniformed staff)

Most of the prisoners stated that they had little or no knowledge of the cameras, either their purpose or how they were used.

> *"They should roll out more BWVCs but the organisation needs to step up to this and there needs to be an openness of how information is recorded and what it will be used for."* (Prisoner)

For some prisoners the lack of transparency resulted in anxiety.

> *"You don't actually know that the member of staff wearing one has it on or not, makes me too anxious."* (Prisoner)

Staff also raised their concern about the lack of available training and the need for more information.

> *"Staff still do not activate cameras' as a matter of course. Some training is required to identify the benefits of its use for all aspects of work."*
> (Uniformed staff)

Prisoners also reported that they wanted clarity on the process of evidence gathering and felt it should apply both ways so that they too can request the use of BWVCs to evidence conversations they had had with staff.

4.4   The use of BWVCs in prison disciplinary procedures

Thematic analysis of interviews and focus groups identified three themes around the use of BWVCs in the adjudications process:

The Evidential Value of BWVCs

Staff across pilot sites reported that the biggest benefit of BWVC was that footage enhanced the adjudications process by providing a superior quality of evidence. Staff felt that combining evidence sources, including CCTV and written statements, increased the utility of BWVCs in adjudications hearings.

Impact on the Adjudications Process and Outcomes

BWVC footage reportedly made the adjudications process quicker and more efficient in achieving a final outcome and staff felt this made it a fairer and more just process. The number of adjudications did not reduce over the time the BWVCs were in use, but anecdotal evidence suggested an increase in the number of early guilty pleas and a reduction in the number of hearing adjournments. Staff involved in the adjudications process felt they had more confidence in this system as a result of BWVCs, but were aware of the negative effects that distressing footage may have on prisoners and staff.

Governance and Monitoring of Footage

The administration and retention of footage was resource intensive, particularly in the early stages when BWVC use was still being embedded. Pilot sites which had dedicated additional resource were able to facilitate more frequent, systematic and comprehensive review, identification and downloading of BWVC footage.

Only two sites provided details of use of BWVC footage in staff discipline proceedings. The benefits to staff were clear; it provided them with a greater level of protection and refuted false accusations made against them. Where examples of use of footage to vindicate staff or to punish a prisoner were known to staff, the benefits of BWVCs were powerfully promoted. Conversely, it had the same powerful effect when BWVC footage had been used in investigations into staff misconduct.

4.5   The use of BWVCs in staff development

Action research at one category C prison explored the use of BWVC footage in staff development. The research focussed on use of force training using BWVC footage to highlight good use of Control and Restraint (C&R) techniques and improve practice, and to focus on de-escalation and resolving incidents without use of force where possible. BWVC footage was used on a number of C&R refresher training courses, three of which were observed by the researchers. Four overarching themes were identified from the data gathered:

Footage provides the capacity to enhance staff learning on training events

Use of BWVC footage for staff development worked well. The researchers observed how the BWVC footage appeared to enhance the learning made on C&R refresher training events, by improving engagement, increasing responsivity and increasing the relevancy of material presented. Use of BWVC footage enabled the C&R instructors to identify training need amongst their staff population, which in turn helped them to select appropriate footage to use later in the course, to aid learning.

Footage facilitated new learning

Specific learning by trainees included focusing on de-escalation, improvements in particular C&R techniques, effective incident management and an awareness of the impact of psychoactive substances in relation to the use of force. There was also learning in relation to using BWVCs in the most effective way.

Capacity for using BWVCs in future training depends on site-dependent factors

The capacity for using BWVC footage to develop staff is likely to depend on appropriate resource and guidance being provided to sites to access footage and build it into training/staff development efforts, a focus on positivity rather than performance management, having effective trainers involved in the process, and a positivity around the use of BWVCs in the prison more generally. Ethical issues impacting on consent and security also need to be considered. For example, some individuals who attended the training events were seen in the training footage but had not provided prior consent to the footage being used and the researchers noted that more secure processes are needed when transferring footage from the BWVC main computer to the training events. Currently this is done via disks, but there are potential security risks associated with this method.

There are further ways in which BWVC footage can be used that are worthy of exploration

Other ways in which BWVC footage could be used to develop staff include delivering specific BWVC training, using footage for other events such as training for managers or new-entrant prison officers, and working one-to-one with individual staff members to enhance practice. Use of BWVC footage on C&R training events has the capacity to benefit staff development and ensure effective use of BWVCs within prisons.

> *"Cameras scared me. But my views have changed slightly from this training event. Today has shown me that used properly they are a god send."*
> (Member of staff)

4.6   The use of BWVCs in prisoner development

Action research at one Category C prison focussed on the use of BWVC footage as a means to tackle use of psychoactive substances (PS) in a prison. Case studies of five prisoners were used to explore the perceived impact of use BWVC footage in individual drugs harm minimisation sessions. Sessions were led by Drug and Alcohol Rehabilitation Service (DARS) staff who worked collaboratively with prisoners to examine their use of PS and their behaviour while under the influence. Prisoners were interviewed about the experience of being exposed to BWVC footage in this context and staff involved completed reflective diaries, interviews and a focus group to provide their perspectives on whether such use served as an aid to prisoner development. Views were mixed on this use of BWVC footage. Specialist DARS staff felt that **viewing the footage resulted in no changes in prisoner drug taking behaviour**, or very small temporary changes, which were not sustained. The use of footage also raised for staff numerous **safeguarding issues** pointing to a need for

much more extensive investigation of impact of exposure to what can be distressing and graphic footage for both staff and prisoners over a longer pilot period, before this approach should be extended any further.

> *"There's a lot more to it than showing the footage. There's a lot of issues to take in and to consider both before you show the footage and after you have shown the footage."* (Member of staff)

Prisoners said they believed that exposure to the PS related footage could bring about enduring changes in their use of the drugs. However, their behaviour following exposure to the footage did not support this intuitive view, as most later reported reverting to using PS.

5. Limitations

Although the various stands of this pilot drew on data from different sites (in fact 20 sites were involved in more than one strand of the research), we saw enough local variation in culture and practice to be cautious about concluding we have seen the whole picture here. There will have been perceptions and behaviours that we have not captured.

Detailed monitoring data on how often BWVCs were used during violent incidents, and a number of instances where footage was downloaded for evidence, was unavailable throughout the evaluation. Details about variation in use is therefore anecdotal but it is clear that BWVCs were used differently in each site and take up was variable. This made comparisons across sites particularly difficult.

In the impact evaluation, limitations included the short follow-up period, differences in the timings of implementation practices across sites and the inability to control for other interventions and changes made in the pilot and comparator sites during the pilot period. As such, it is difficult to state that any observed changes in the data could be solely attributed to the use of BWVCs.

Our federated approach to distributing the survey brought some benefits and some issues. We were unable to report response rates for the survey, as we were not able to determine exactly how many staff and prisoners at each site were invited to take part in the surveys. Furthermore, we acknowledge that this survey will not have been accessible to a number of prisoners including those housed in segregation, those with learning or reading difficulties or those not fluent in English. In general we may have to question whether staff and prisoners who take the time to complete and return a survey are likely to be representative of the whole. Nonetheless the overall survey samples of prisoners and staff were substantial and exceeded our *a priori* power calculations. We were able to establish that participants represented a range of gender, grade and experience (staff) and sentence length (prisoners). The survey methodology was included as a means of hearing the voice of more people than we could talk to face to face; in this way, the survey findings are a useful triangulation of what we were learned from the other strands of work in the wider research programme.

Findings from the process evaluation are largely based on perceptions of staff and prisoners, which provide rich and contextual information but do not provide evidence of impact. Additionally there is a risk that some staff and prisoners may have been reluctant to share details with researchers during the fieldwork despite assurances of anonymity.

6.   Conclusions

Levels of recorded violence and use of force did not change consistently across the pilot sites and due to variable implementation and data limitations it is not possible to draw any firm conclusions about the overall impact of BWVCs in prisons. Overall there were no statistically significant differences between the pilot and comparator sites.

After the introduction of BWVCs, violence is still perceived to be a major issue by staff, and prisoners involved in the study. More staff than prisoners reported violence to be an issue. Prisoners reported greater concerns than staff about the use of force being applied unfairly. Staff were less positive about the potential impact of BWVCs on improving prison culture (reducing violence and improving relationships) and improving procedural justice (how fairly people feel they are treated) as the pilot progressed.

It is possible that use of psychoactive substance-related BWVC footage may inadvertently have a harmful effect on those exposed to its use.

When BWVCs are used transparently, consistently and fairly they can have a positive impact on staff and prisoners' perceptions of safety.

- Positive perceived impacts found in the study included; staff and prisoners' reported increased levels of perceived safety, potential deterrence and effective de-escalation of incidents, an increase in how fairly authority is perceived to be exercised, provision of evidence that protects both staff and prisoners and that helps to build open and trusting relationships, potentially providing support to the development of a rehabilitative prison culture.

- These findings are consistent with emerging evidence about the impact of procedural justice on behaviour. Procedural justice is the extent to which someone perceives processes and decision making by people in authority to be fair and just (Tyler, 2008). Prisoner perceptions of procedural justice are related, amongst other factors, to misconduct and reoffending outcomes, with more positive perceptions predicting less rule-breaking (including violence) and lower reconviction rates (Beijersbergen et al. 2016; Fitzalan Howard & Wakeling, 2019). Studies of the English and Welsh incentives and earned privileges processes suggest that if prisoners do not feel they are managed in a procedurally just way, they may disengage with authority figures and may become violent and hostile (Liebling, 2008).

7. Implications

Based on the findings of this study effective implementation of BWVCs may be dependent upon:

- A clear communication strategy to promote the potential benefits of BWVCs and their innovative potential.

- The development of a comprehensive training package to ensure that BWVCs are used consistently and fairly, including a focus on how they can be used with a rehabilitative focus.

- Recognising and addressing the existing cultural barriers that have negatively impacted on the effective use of BWVCs.

- Adequate resourcing prisons so that staff can be supported, supervised and encouraged to use BWVCs fairly and effectively.

- Within the adjudication process careful consideration is needed as to when and what footage is shown to prisoners and for what purpose.

- Recognising and sharing effective and innovative practice across the prison estate.

- The development of a monitoring system to assess the ongoing impact of BWVCs on safety and the quality of relationships in each prison.

- In their efforts to work constructively and collaboratively with prisoners who use PS, it will be important to safeguard staff and prisoners who may be psychologically harmed through exposure to graphic footage.

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Annex 1

Prisons' contribution to each part of the research design

Table 3: Prisons' contribution to each part of the research design

Prison	Impact Evaluation	Staff Survey - pre	Staff Survey - post	Prisoner Survey - pre	Prisoner Survey - post	Staff and Prisoner Focus Groups and Interviews	Disciplinary Procedures	Action Research
A	X	X				X		
B	X						X	
C	X					X		
D	X		X				X	
E	X	X	X					
F	X	X						X
G	X	X	X	X	X			
H	X							
I	X	X						
J	X	X						
K	X	X		X	X			
L	X	X	X					
M	X	X	X				X	
N	X							
O	X							
P	X	X	X			X	X	
Q	X	X	X					X
R	X	X	X				X	
S	X		X					
T	X		X					
U	X	X	X			X		
V	X	X		X	X	X		
W	X	X				X		

The table above shows the prisons which took part in each aspect of the research. Prisons are not named to ensure anonymity; they are given an alphabetical code instead. All prisons took part in the impact evaluation. For the staff survey component, sites were only included where returned surveys represented 15% or more of all possible staff at that site. For the prisoner survey component, five sites volunteered to conduct surveys, but again only those sites where returned surveys represented 15% of more of all possible prisoners at that site, were included. For all other aspects of the research, prisons volunteered to take part.