



**Rapid Research Project:
Evidence Review into Public Experience and Confidence of
Body Worn Video in a Policing Context**

June 2022

**Report to:
Police Scotland**

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Executive Summary

This report provides research findings from a rapid research project reviewing the use of Body-Worn Video (BWV) cameras in a policing context, with specific reference to police-citizen interactions and scrutiny mechanisms. The research was conducted in November and December 2021, using a methodology consisting of a literature review and a sequence of semi-structured interview with BWV experts. The research was undertaken with a view to providing advice and guidance to Police Scotland for the potential widespread future roll-out of BWV in Scotland. It is evident, from the research reviewed here, that BWV is being deployed internationally by law enforcement agencies and other public service providers. Typically, BWV is recognised to provide evidence of incidents, provide a level of personal protection and increased transparency in policing. The rationale for the use of BWV in policing is well established and is afforded a good level of public support. It is also evident, that across UK police forces there is differentiated use of the technology and associated governance mechanisms. In this respect, Police Scotland is in an advantageous position in that it can learn from what is perceived to be ‘best practice’ elsewhere in the UK and beyond. It is apparent that across the UK there are novel emergent mechanisms used to govern BWV in relation to scrutiny and accountability. These include dedicated Scrutiny Panels and practices referred to as random ‘dip sampling’, as well as dedicated codes of practice and use protocols. Here, it is suggested that Police Scotland review what other police forces are doing in this area and design processes that are compatible with Police Scotland’s institutional arrangements. The research presented here also suggests that BWV use protocols and data management procedures are established prior to the widespread deployment of the technology. One aspect in which published literature was lacking was in relation to the impacts of BWV on minority groups and ethnic minorities. Here, the evidence is mixed with some authors claiming BWV strained community relations, whilst others claimed BWV made police interactions more transparent. This points to both, a need for further research, plus the use of caution in the use of BWV in certain situations. It is also noted, that whilst there is a general level of public support for BWV, this relates primarily to basic BWV camera units and that this level of support cannot be assumed from more sophisticated data processes, such as those associated with face recognition and live streaming technologies. Here, it is recommended that Police Scotland implement mechanisms that ensure a degree of oversight and accountability in how BWV cameras are used. This can ensure legitimacy of use and facilitate public confidence in the use of the technology.

Recommendations

This review report presents evidence of BWV deployment in policing contexts, including police-citizen interactions and scrutiny mechanisms. This evidence points to a series of recommendations that can be considered before the widespread deployment of BWV in Scotland. Police Scotland is in an advantageous position, in that it can build on best practice from elsewhere and can implement scrutiny and accountability governance processes that can ensure public support and legitimacy for the use of this technology. **Section 5** of this report sets out the recommendations in full. They are not intended to be prescriptive and assume that any new protocols or institutional mechanisms are tailored specifically for the Scottish policing context. In brief, the recommendations are (over page):

Citizen and Community Engagement

1. To continue to engage with the public and diverse communities to consider their concerns as they have direct experiences of BWV, and as governance mechanisms and the technology evolves.
2. To seek to build trust with vulnerable communities, via ongoing dialogue, about the role, purpose and function of BWV.
3. To facilitate and keep abreast of research on the use and impacts of BWV in public service contexts, especially in relation to trust in service provision and accountability mechanisms.
4. To be very cautious about ensuring public support if Police Scotland consider merging BWV with other technologies and software processes, especially face recognition and live streaming. Public support for BWV cannot be assumed if the capability of the technology changes.

BWV use in policing and best practice

5. To engage with other public and emergency services to ascertain best practice in the use of BWV and its governance.
6. To ensure that the provision of BWV and its governance is contextualised to the unique legislative and regulatory environment of Scotland, including in relation to data protection and biometric requirements.
7. To ensure that knowledge about previous use of BWV in Scotland, by armed officers and during CoP21, is codified and shared in order to inform best practice.
8. To develop clear protocols covering all elements of BWV use, including in relation to operational and training matters, technical specifications, data protection requirements, performance indicators, a dedicated Code of Practice, and formalised mechanisms for accountability and governance.

Governance of BWV: Legal and Ethical issues

9. To comply with the recommendations and guidance published by representative bodies such as The College of Policing (2014 and 2019) and the UK Information Commissioner's Office (ICO) to support the process of BWV adoption, training and implementation. This would include compliance with recommendations concerning ethics.
10. To develop standardised practices for the operation and governance of BWV in Scotland.
11. In conjunction with the Scottish Police Authority, to develop strategies and mechanisms to realise effective scrutiny and oversight to ensure that the provision of BWV is accountable and delivered in the public interest. In this report, it is recommended that independent forms of scrutiny and oversight are developed.

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Background

Police Scotland has provided funding to support a Rapid Research Project administered by the Scottish Institute of Policing Research (SIPR) to undertake a comprehensive review of academic research and grey literature (including wider evidence from policing organisations and the media) into the citizen and community experience of interactions with police using Body Worn Video (BWV). This is to gain insight into the lessons that can be learned, and the factors driving confidence and acceptance of BWV, that can be used to inform the design and deployment of BWV within Scottish operational policing. A research team from the University of Stirling, led by Professor William Webster of the Stirling Management School, was commissioned to undertake the review, which was carried out in November and December 2021.

Police Scotland has undertaken an initial appraisal of research evidence, including, an evaluation of BWV in the North East of Scotland, two national public surveys and qualitative engagement involving 13 focus groups with diverse communities across Scotland (Police Scotland, 2021) (1). This engagement consisted of two phases. The first focused on the use of BWV within armed policing. The second involved a 12-week public consultation including a national survey and qualitative engagement on the use of BWV in other aspects of operational policing. This included a series of 13 focus groups with diverse communities and those affected by crime, including survivors of domestic abuse, those with experience of the children's care system and young people. The results from this research show substantial public support for BWV:

- The majority of respondents supported the use of BWV;
- A majority of respondents reported that BWV has the potential to increase trust and confidence in policing; and
- The majority of respondents noted that BWV increased feelings of safety.

This commissioned review brings together academic research evidence and grey literature on the use of BWV in policing. This includes published research and commentary of BWV prior and post implementation in a number of international contexts. This will form a key element of the Police Scotland's approach to fully develop, understand and consider a robust evidence base ahead of BWV implementation at a national scale. The research findings will also support engagement with and future updates to the Scottish Government's Justice Committee, in partnership with the Scottish Police Authority. This report provides a review of what is currently known about the use of BWV in a policing context, especially in relation to police-citizen interactions and in the formation of BWV governance mechanisms.

1. Introduction

Over the last ten years, Body-Worn Video (BWV) cameras, also referred to as BWC (Body-Worn Cameras), have diffused into a range of public service settings (Leleux and Webster, 2020), including policing in the United Kingdom (UK), where initially this deployment was focused on armed response units and pilot trials. Over time, the technology has been adopted more widely across all the emergency responder services, the prison service, transport services such as railways, and many front-line local government services. All police services in the UK are now using BWV. In the case of Scotland, all armed officers were issued with this technology in advance of the COP 26 climate change summit, which took place in Glasgow during the first two weeks of November 2021. Ahead of considering proposals to issue BWV to all front-line officers, an analysis of the extensive public consultation on BWV in Scotland during 2021, is now approaching completion (Police Scotland, 2021) (1). Police in Scotland had previously undertaken trials of BWV in the north-east and in Renfrewshire in 2008 (Leleux and Webster, 2020).

BWV has been introduced to provide personal protection of police officers and to capture footage for use in prosecutions, although they have also been useful for staff training and managing incidents. As the roll-out of BWV has taken place, different agencies and police forces have adopted differentiated working practices in relation to its use, how data processes are managed, and how oversight is realised. There have been concerns about citizen-police relations and compliance with data protection principles, especially in relation to informed consent and the prospect of retrospective face-recognition. BWV, as a technology and its associated management practices, has now matured and diffused. Robust evaluations exist, and multiple governance and practice frameworks are in place. For a front-line public service provider, it is essential that the public have confidence in the way that BWV is used and how personal data is handled.

The purpose of this evidence review is to explore published research and grey literature on BWV and to provide a comprehensive review about how BWV is being applied in policing, with a focus on community relations and scrutiny mechanisms. The review also provides evidence into the following:

- Citizen and community experience (including diverse communities, survivors, witnesses and perpetrators) of BWV;
- Identifying case studies on the impact of BWV on outcomes for survivors from a policing and criminal justice perspective;
- Consideration of the use of BWV on human rights and ethical practice;
- Factors driving public confidence in the use of BWV; and
- Good practice in the use of BWV through benchmarking with other police, blue light and public services.

Outputs from the review include:

- Case studies of citizen and community experience of BWV;
- Factors which shape public attitudes towards, and confidence in, the use of BWV;
- Principles for good practice in the use of BWV and the situations these apply;

- Identification of police forces for Police Scotland to potentially collaborate with in sharing knowledge and learning;
- Approaches to engaging and involving citizens and communities in assessing BWV practice; and
- Recommendations for the governance of BWV, including oversight arrangements and benchmarking with other emergency services.

Description of Body Worn Video

The Metropolitan Police provide a short overview of what BWV is:

'Body Worn Video (BWV) cameras are small, visible devices worn attached to the officers' uniform (usually on the chest). They're used to capture both video and audio evidence when officers are attending all types of incidents. They're issued to all officers who come into contact with the public. The position of the camera means those watching the footage see the situation from the officer's perspective. The camera acts as an independent witness. The camera records the footage onto an internal storage device. At the end of the officer's shift the footage is uploaded to a secure location so it can be used as evidence at court or other legal proceedings or deleted if it's not needed' (Metropolitan Police, 2021).

Further detail of how BWV is deployed across police forces in the UK is provided later in the report (**Section 2.3 and 2.5**).

Drivers for the Introduction of BWV

Within police services in the UK, and indeed internationally, the main drivers for the roll-out of BWV have tended to follow similar arguments, which include:

- Supporting the criminal justice process with better evidence;
 - Increasing public confidence through transparency in policing;
 - Increasing the potential of evidence-based prosecutions to support vulnerable victims;
 - Improving the investigation of complaints; and
 - Capturing events in a way that can't be captured in writing.
- (Police Service of Northern Ireland, 2021) (1)

The expansion of police BWV within the UK, North America and Australasia is covered in fuller detail in subsequent sections. To provide some initial context on the diffusion of BWV across other public services in the UK, the authors would like to draw attention to the differing drivers for the introduction of BWV within policing compared to those drivers used to introduce BWV in other emergency responder and public services (such as Ambulance, and Fire and Rescue, front-line National Health Services (NHS), the prison service, railway services and front-line local government services). For these other front-line emergency and public services, the strongest drivers are the need to provide evidence of assaults by the public on staff, and importantly to reduce the growing number of assaults which are taking place by the public against a range of public sector workers and sometimes private sector employees engaged on an agency basis in delivering public services, such as roadworkers (Express and Star, 2021; Railway Technology, 2021; BBC News, 2019). The Health and Safety Executive report that assaults, categorised as verbal, threats and physical violence, are becoming

normalised in the NHS through findings from operation Cavell, a London-wide operation during late 2020 and early 2021 involving the Metropolitan Police, the NHS and the Crown Prosecution Service to convict those who assault NHS staff:

'...one of the biggest challenges officers and NHS staff face is that many NHS workers feel being assaulted is "part of the job". Prior to the pilot, 50% of NHS staff in London who were assaulted would not support an investigation whereas the last three months has seen that number drop to 25%' (Safety and Health Practitioner, 2021).

There is also strong evidence that assaults by the public on the police and other public service workers have escalated since restrictions on people's lives in the UK were introduced in response to the Covid-19 pandemic. This evidence is even more remarkable given the reduction in demand for some of these public services during periods of restriction on people's movements and activities. For example, The Herald (2021) reported that analysis by Police Scotland found over 1,000 assaults on police staff in the past year involved spitting and coughing or were otherwise linked to coronavirus. It also showed that assaults on police officers and workers had increased overall by 6.3 per cent in 2020-21 compared to the previous year, with 6,942 attacks recorded. Other examples of assaults on public service workers having increased during the period of restrictions imposed due to Covid-19 include: Policing services (The Telegraph, 2021; BBC News, 2020 (1); BBC News, 2020 (2)), the NHS (BBC News, 2021 (1); The Independent, 2021; The Chronicle, 2021), and the Railway services (Byline Times, 2021).

'Bystander Video'

Due to the 'instant' world of media and social media accessibility in which many people now live, citizens are increasingly capturing videos of police interactions with members of the public and then sharing these images on internet platforms – a growing phenomenon known as 'bystander video' (Newell, 2019). Coupled with the need for greater accountability by the police in its public interactions with the public, 'bystander video' has undoubtedly led to an escalation in public reaction, often violently so, and sometimes on a nationwide and prolonged level, involving protests at perceived wrongdoings, victimisation or criminality by the police. In the case of the arrest of George Floyd (New York Times, 2021) in Minnesota (US), who died while being restrained by a police officer, the subsequent release of video footage captured by members of the public led to nationwide riots and civil disturbance. Bystander video of incidents has led to an increase in the demand for an expansion of BWV amongst police forces, for example in Canada (Glasbeek, Alam and Roots, 2020), while similarly, the absence of police BWV in the deaths of citizens in the US such as Michael Brown in 2014, Freddie Gray in 2015, and Mark Duggan in the UK (2011) also led to calls for wider coverage of the use of police BWV (Leleux and Webster, 2020). The California Peace Officers' Association (CPOA) (2017) has a differing interpretation of 'bystander video', claiming that the public and news media outlets share a one-dimensional and often distorted perspective of what has transpired. The CPOA (2017) claim that in an attempt to increase public trust, to comply with public demand, and improve police legitimacy, many police departments have adopted the use of BWV to provide an account of officer-involved incidences.

Citizen and Community Experience of BWV

A substantial section of the report (**Section 2.4**) is devoted to providing examples of case studies from the available literature on citizen and community interactions involving the use

of police BWV in a wide variety of contexts. This data is supplemented through the provision of a typology containing some of the police/citizen interactions which take place and may be recorded through police BWV, what the current literature tells us about the nature of these interactions, and what our interviewees have told us about their views on BWV being used in these situations based upon their experience as practitioners, regulators, prosecutors, and industry experts. This typology is presented in **Appendix VI** to identify gaps in the literature which might then be the subject of further reflection or research, and to test assumptions which may be evident on the use of BWV in these circumstances. The authors recognise that the typology of police-citizen interactions is not exhaustive, and the terminology used may not be directly transferrable from one country to another. The short timeframe with which this research was completed, prohibited the capture of citizens' views on their 'real-life' experiences of BWV in these situations.

Benchmarking with Other Police, Blue Light and Public Services

As detailed in the Introduction, there has been a proliferation in recent years of BWV within all the UK's emergency responder services and public services such as the NHS, railways and local government (Leleux and Webster, 2020). Excepting the police, the principal driver for this emergence of BWV is down to increasing numbers of assaults on employees. Examples of good practice are listed throughout the report and include police forces within the UK, North America and Australasia which could be approached to potentially collaborate for the sharing of information, knowledge and learning. Similarly, examples are provided from within the UK of public services which are using BWV and could be open to a similar approach. The authors have not approached police forces or public services to discuss the possibility of collaboration.

Human Rights and Ethical Practice

Human rights, privacy and ethical practice issues are discussed in the context of the police executing their 'legitimate authority' while balancing these rights against the emerging possibilities which new technologies like BWV now offer. These possibilities include facial recognition software, and their potential for integration with BWV. The possibility of 'constant' surveillance which BWV can provide has raised concerns about privacy from civil rights groups (Mateescu, Rosenblat and Boyd, 2016). Reflection on the use of facial recognition technologies and potential for integration with other technologies are provided at the end of **Section 2.8**.

Overall, the authors believe that the evidence base provided in this report is presented in a format that will facilitate and hopefully guide consideration of the future provision of police BWV in Scotland. The report incorporates findings from the 2021 Police Scotland public consultation and the evaluation of BWV in the Police Scotland North-East Division. This Report has been structured according to the original research commission: **Section 1** is the Introduction, **Section 2** provides the Evidence Review, **Section 3** presents a summary of key points from the interviews, **Section 4** offers up Concluding Comments and Recommendations, followed by the Appendixes and References. The accompanying attachment **Scrutiny, Oversight and Public Engagement - Analysis from Interviews** provides much more detail on the findings from the interviews conducted.

2. Evidence Review

2.1 Development of Police BWV: North America

United States of America (USA)

Over the past ten years there has been growing demand for police BWV in the US, from legislators, the public, citizens' representative organisations, and from some policing bodies. The reasons for these demands are varied and include: public reaction to citizen deaths in police custody where no BWV was available (and in particular young male ethnic minorities) 'bystander video' of incidents involving police interactions with the public including some where citizens died, and which had then been made available on social media and traditional media outlets; and recognition from legislators and prosecuting bodies that greater police accountability is required to maintain public confidence in policing. BWV has been seen as a medium to provide independent proof of interactions which will help with evidence, prosecutions and complaints. The reaction by the public to deaths in police custody both where video footage was available and where it was not, has led to rioting, looting, civil disturbance, and damage to race relations including police/public trust and accountability.

Multiple trials of police BWV have now taken place across the US at various locations including Rialto, California in 2013. Schneider (2018) reporting on the Rialto study, believed to be the first of its kind in the US, found that use of force incidents decreased (by approximately 50 per cent), as did reduction in complaints against the officers (by 90 per cent). BWV cameras were first introduced in Las Vegas, Nevada, in 2014, and the National Institute of Justice (NIJ) sponsored a study which involved a 12-month randomized control experiment with 400 officers to better understand the effectiveness and impact of BWV. The Las Vegas study found that police were more proactive in crime prevention activities when wearing cameras; they provided compelling evidence to build legal cases; their use largely affirmed and validated positive officer behaviour; protected police from false or frivolous complaints; reduced inappropriate use of force incidents, and saved the Las Vegas Metropolitan Police Department millions of dollars through a reduction of complaints against officers (NIJ, 2017). In the trial of BWV which took place in Spokane, Washington in 2014, it was reported by White, Gaub and Todak (2017) that complaints against officers wearing BWV declined (between 50-78 per cent); officers' use of force declined by 39 per cent, although no relationship was found between BWV and officer injuries. However, not all trial results were overwhelmingly positive, as evidenced in a major randomised control trial study of 2,224 Metropolitan police department officers using BWV in Washington DC (Yokum, Ravishankar and Coppock, 2019). Yokum *et al* found that the benefits to police use of BWV were somewhat less than the previous trials had reported:

'BWCs have very small and statistically insignificant effects on police use of force and civilian complaints, as well as other policing activities and judicial outcomes. These results suggest we should recalibrate our expectations of BWCs' ability to induce large-scale behavioral changes in policing' (p1).

Similarly, a study undertaken by Arial *et al* (2017) showed that the deterrence effect of BWV ranged from 'miminal deterrence' to 'maximum deterrence' depending on the officer's

discretion and behaviour, and given the mechanisms that are in play, more attention ought to be given to officers' discretion and training on the appropriate use of BWV.

President Obama in 2015, as part of his commitment to building trust and transparency between law enforcement and the communities they serve, authorised the release of substantial state aid towards the funding of police BWV. The United States Department of Justice subsequently awarded \$23m to 32 states to develop BWV programmes (United States Department of Justice, 2015). The NIJ is the research, development and evaluation agency of the United States Department of Justice and saw BWV as one way to improve law enforcement practice more generally. They claim that BWV technology has diffused rapidly across the United States, and that in 2013, approximately one-third of U.S. municipal police departments had implemented the use of BWV, and that members of the general public continued to embrace the technology (NIJ, 2018). Estimates vary on the diffusion of BWV across policing and law enforcement agencies in the US, and the overall picture is rather difficult to assess due to number of different bodies involved, but they are unarguably increasing. According to Lum *et al* (2019), as of 2016, 60 per cent of local police departments and 49 per cent of Sheriffs' Offices had fully deployed BWV. In November 2018, the Bureau of Justice Statistics published a report on the use of BWV which stated that, as of 2016:

- 47 per cent of general-purpose law enforcement agencies had acquired BWV, and for large police departments, that number is 80 per cent; and
- Among agencies that had acquired BWV, 60 per cent of local police departments and 49 per cent of Sheriffs' Offices had fully deployed their equipment. (NIJ, 2017)

The main benefits of BWV are described by the NIJ (2018) as:

Better transparency. First, body-worn cameras may result in better transparency and accountability and thus may improve law enforcement legitimacy. In many communities, there is a lack of trust and confidence in law enforcement. This lack of confidence is exacerbated by questions about encounters between officers and community members that often involve the use of deadly or less-lethal force. Video footage captured during these officer-community interactions might provide better documentation to help confirm the nature of events and support accounts articulated by officers and community residents;

Increased civility. Body-worn cameras may also result in higher rates of citizen compliance to officer commands during encounters and fewer complaints lodged against law enforcement. Citizens often change their behavior toward officers when they are informed that the encounter is being recorded. This "civilizing effect" may prevent certain situations from escalating to levels requiring the use of force and also improve interactions between officers and citizens;

Quicker resolution. Body-worn cameras may lead to a faster resolution of citizen complaints and lawsuits that allege excessive use of force and other forms of officer misconduct. Investigations of cases that involve inconsistent accounts of the encounter from officers and citizens are often found to be "not sustained" and are subsequently closed when there is no video footage nor independent or corroborating witnesses. This,

in turn, can decrease the public's trust and confidence in law enforcement and increase perceptions that claims of abuse brought against officers will not be properly addressed. Video captured by body-worn cameras may help corroborate the facts of the encounter and result in a quicker resolution;

Corroborating evidence. Footage captured may also be used as evidence in arrests or prosecutions. Proponents have suggested that video captured by body-worn cameras may help document the occurrence and nature of various types of crime, reduce the overall amount of time required for officers to complete paperwork for case files, corroborate evidence presented by prosecutors, and lead to higher numbers of guilty pleas in court proceedings; and

Training opportunities. Law enforcement trainers and executives can assess officer activities and behavior captured by body-worn cameras - either through self-initiated investigations or those that result from calls for service - to advance professionalism among officers and new recruits. Finally, video footage can provide law enforcement executives with opportunities to implement new strategies and assess the extent to which officers carry out their duties in a manner that is consistent with the assigned initiatives.'

Canada

Brown (2020) provides an overview of police BWV in Canada and identifies 'considerable disparity' in terms of the extent of its deployment, which has been on a much-reduced scale when compared to the US. Brown attributes this to the Canadian federal government not having allocated funding for police BWV in the same way as has happened through federal support in the US, and due to higher levels of public trust from Canadian citizens due to adequate mechanisms in place to hold police officers accountable for misconduct. Brown (p129) also cites reluctance on the part of some municipalities to meet the costs of rolling out BWV to front-line police officers (e.g. Victoria, Montreal, Hamilton), while Calgary (Canada's third largest city with 1.4m residents) has issued BWV to all its front-line police officers. However, Brown (2020) questions how long police administrations and federal government can resist calls to introduce more police BWV if a substantial majority of the Canadian population and the country's front-line police officers call for BWV to be introduced as standard equipment. Laming (2019) also contends that Police in Canada have been 'slow and/or disinterested' in joining the trend of other nations forces in deploying BWV. Laming examines a case study of police use of BWV in Canada and refers to growing calls by politicians and civil rights groups on police in Canada to adopt BWV to improve accountability. Laming calls for more research to examine how citizens and officers perceive body cameras as this will offer insight into the opinions of stakeholders, who may influence whether law enforcement agencies choose to adopt BWV. Also that, future research should continue to explore the impact that BWV evidence has on courts and prosecutions, with the current limited evidence suggesting that BWV footage greatly improves conviction rates.

Bud (2016) argues that for BWV to be used appropriately, legislation should be drafted to strike an appropriate balance between privacy concerns and the recording of citizen interactions for legitimate law enforcement purposes. Without such legislation, police BWV runs the danger of becoming yet another tool for police surveillance and social sorting, which had already started occurring at the Calgary Police Service, as a consequence of their

integration of BWV and facial recognition software. Although police services in Canada have broad authority under Freedom of Information laws to collect and use personal information for law enforcement purposes, the Calgary Police Service has not identified how it will ensure individual privacy rights with the adoption of facial recognition technology. Bud (2016) states that in many cases involving misconduct investigations, police supervisors are in charge of reviewing these recordings once a case of misconduct has been filed. However, placing the locus of control with police officers results in the situation where the organisation that is meant to be held accountable will have the power to prevent recordings from being created or shared. Consequently, Bud (2016) claims that there is a significant level of risk that recordings may be deleted or tampered with by officers or supervisors.

Saulnier, Bagg and Thompson (2021) in their 2019 study of police BWV policy in Canada found that at least 36 per cent of Canadian police services have considered or trialed BWV, with news reports suggesting that this number continued to rise in 2020. The policy areas identified were: BWV users; supervisors; data management and retention; and video disclosure. The summary was produced by situating the contents of existing Canadian BWV policies in relation to key international content (e.g., BWV research and policy guidelines) and Canadian content (e.g., domestic BWV research, policy recommendations, and legislation) relevant to BWV policy. Their main recommendation was for standardisation of police BWV policy across Canada.

Glasbeek, Alam and Roots (2020) in their study of 'race and body-worn cameras in Canada' refer to the impact of racialised policing and its impact on society, contending that police in Canada have insisted that this is an 'American problem'. They further argue that Canadian police services have been slow, at best, to roll out BWV, despite public demands, and that there is ample evidence of racist policing which is an equally divisive Canadian problem. This argument is supported through the publication of academic articles including a report by the Ontario Human Rights Commission (OHRC) (2020) which found that black people were disproportionately charged, arrested, struck, shot or killed by Toronto Police Service members in comparison to other populations. Additionally, Black people were grossly overrepresented in lower-level charges where officers have significant discretion in deciding whether to lay a charge. Specifically, the OHRC (2020) found that although black people represented 8.8 per cent of Toronto's population in 2016: they represented 32.4 per cent of all charges reviewed; they were 3.9 times more likely than white people and 7.1 times more likely than other racialised groups to be represented in all charges; they made up 42.5 per cent of those charged with obstruction of justice (misleading a police officer, refusing to provide evidence, falsely accusing another person of a crime); they represented 35.2 per cent of those charged with driving offences where the officer may have observed the driver's race before deciding to stop them or check their licence plate; they were 4.3 times more likely than white people to be charged with cannabis possession and 3.2 times more likely to be charged with possession of other drugs, even though many studies have demonstrated black people do not use drugs more than other racial groups, and black males represented four per cent of Toronto's population in 2016, but represented almost one-third (29.1 per cent) of all charges. The reason for these disparities stated by the OHRC is due to 'systemic racism'. Glasbeek *et al* (2020) contend that the very racialised tensions that community members experience and what the new mobile technologies can make visible are precisely those that police-worn technologies cannot capture.

2.2 Development of Police BWV: Australasia

Australia

Taylor (2016) reports that BWV was first trialled in Western Australia in 2007 and has been rolled out extensively across all parts of Australia from 2012 onwards. Despite significant expenditure, absence of empirical evidence regarding impact and effectiveness, and, in some states, little guidance or protocol regarding usage, the adoption of cameras has continued with pace. The cameras have been largely popular with frontline staff, so much so that there have been reports of police officers purchasing their own personal wearable cameras to record their activities and interactions, downloading and storing the resulting images at home. This raises considerable issues regarding the quality and impartiality of this footage, its admissibility in court, and the interoperability of systems and associated software; not to mention huge privacy and data protection issues. Taylor (2016) also claims that, globally, police relations with the public, and particularly minority groups, have been fraught with tension; accusations regarding excessive use of force, prejudicial treatment, and abuse of power are common. BWV provides an important means of documenting hitherto obfuscated interactions between the police and members of the public. This can bring many benefits, such as increased accountability and transparency. Taylor (2016) states that positive role they can play hinges on one thing - police autonomy in their operation – and in particular, choosing what and when to record. Taylor (2016) argues that the ability of officers to ‘edit on the fly’ fundamentally undermines any potential benefits the cameras introduce.

Palmer (2016) also provides an overview of the diffusion of BWV to police forces across Australia, commencing with trials in Victoria (2012) and Northern Territory (2014), followed by Queensland (2015,) Western Australia (2015), and New South Wales (2015). The reasons for deployment are described as a combination of: enhanced police accountability; decreased use of force; decreased public misbehaviour, including assaults against police; better outcomes in prosecutions and convictions; and decreased complaints against police, particularly false complaints. Additionally, the Queensland Premier introduced BWV as a means of enhancing police responses to domestic violence. Palmer (2016) argues that the key issue identified in the literature is how to overcome the ‘dark figure’ of police deviance - police malpractice that is not recorded. BWV might assist in addressing this problem and encourage more complaints, if complainants are permitted to access recorded data, but this rests upon many assumptions, such as having a robust records and storage system, policies relating to when an officer may turn the BWV on or off, accessibility of request systems and freedom of information. However, to compound these concerns Palmer (2016) claims that the policing literature is replete with the police failings on data management.

In a more recent study, Clare *et al* (2021) report on the results of a randomised controlled trial of police BWV cameras in Western Australia, with a focus on how cameras influence evidence gathering, court processes/outcomes, and police/public behaviour. The authors conclude it is likely that future BWV camera interventions would benefit from additional pre-implementation focus on determining the context-specific mechanisms by which BWV is a part of the solution to existing problems. Additional clarity around purposes for the cameras will help determine how to utilise this technology and appropriately measure its impact. Understanding more about why some officers engage/disengage with the cameras is crucial to maximising and evaluating the efficacy of BWV. Prior to implementing BWV, police

agencies should consider the (publicly funded) cost–benefit ratio of deployment for a discussion of these issues. This is not to argue that cameras cannot have a cost-saving effect in terms of reduction in citizen complaints resulting from camera use, nor that cost savings should be a sole/primary driver of BWV deployment, but that police departments must also consider factors like starting rates for complaints, targeted use of cameras, and develop realistic expectations of their likely benefits/impact before commencing wholesale rollout (Clare *et al* 2021).

Further work on BWV in Australia has been carried out by Taylor and Lee (2019) from the perspective of BWV and police detainees. This is covered in a separate section later in the report.

New Zealand

The position is unclear on the extent to which the National Police Force in New Zealand has deployed BWV. In 2018, New Zealand Police stated that they would monitor developments in BWV but had no plans to introduce them (Briody and Prenzler, 2020). On 24 February 2021, in response to an Official Information Request (equivalent to a Freedom of Information request in the UK) on BWV, New Zealand Police replied:

‘By way of context, BWCs have not been the subject of any specific acquisition process or proposal, however they have been considered within the context of the Taser programme as a potential further assurance and evidential adjunct to the existing Taser camera. The technology has also been the subject of occasional background research associated with monitoring Australasian and global trends in law enforcement. Notably, this included work to establish a specific research project into BWCs, which was initiated in early 2018 and put on hold with only a literature review and early scoping work having been done’ (New Zealand Police, 2021).

2.3 Development of Police BWV: United Kingdom

The first trials of BWV in UK policing took place in Plymouth in 2006, supported by the Home Office. This was followed by trials in Scotland in Aberdeen and Renfrewshire in 2010, the results of which showed positive evidence for both police officers and community wardens (working in partnership with the police) in relation to: reductions in crime; reductions in the number of assaults on the police; and early guilty pleas before cases were brought to full hearings in the criminal justice system (Leleux and Webster, 2020). Operation Hyperion in 2013, involved police officers from Hampshire Constabulary based on the Isle of Wight (IoW) being issued with BWV. The study involved a series of measures being taken in the year prior to camera use compared to the same measures in the year after and included: data on changes in public opinion; occurrences and crime; criminal justice processes (domestic assault) and complaints against police. In addition, there was also a survey of IoW officers’ views on BWV cameras and observational fieldwork, and analysis of public opinion on police use of BWV. Ellis, Jenkins and Smith (2015) in their report on Operation Hyperion noted: overwhelmingly positive public opinion (84-96 per cent) towards police use of BWV in gathering evidence identifying criminals; increasing convictions; improving training; and improving disciplinary procedures. However, Ellis *et al* (2015) also noted that the area of BWV is currently under-researched and larger robust studies are required in a greater number of locations to strengthen the evidence base:

'Future research on complaints (and use of force too) needs better quality data and fieldwork to explore the link between BWV cameras potentially increasing officer self-awareness and a drop in complaints' (p41)

Ariel *et al* (2017) report the results from a multisite randomised controlled trial involving Cambridgeshire Constabulary, West Midlands Police, Police Service of Northern Ireland, Rialto Police Department (US), Ventura Police Department (US) and West Yorkshire Police, on whether or not BWV reduces citizens' complaints against the police and argue that BWV affects entire police departments through a process which they have labelled as 'contagious accountability'. The survey team reported that all officers were acutely aware of being observed more closely, even when the cameras were not in use, and collectively everyone in the department(s) attracted fewer complaints. The caveat to this conclusion, which is important for future experiments of BWV is not that the camera device alone caused the 'contagious accountability', but rather there is a two-stage process at play:

'First, the treatment effect incorporated the camera as well as a warning at the beginning of every interaction that the encounter was being videotaped. We urge practitioners to acknowledge that the verbal warning, which our protocol dictated should be announced as soon as possible when engaging with members of the public, is a quintessential component of the treatment effect. It primed both parties that a civilized manner was required and served as a nudge to enhance the participants' awareness of being observed. Without the warning, the effect might easily have been reduced or failed to materialize.

The second element to the process is the need for affirmation that the videotaped footage can be used. People may be aware of CCTV or bystanders filming the encounter but still conduct themselves inappropriately, believing the camera to either not be recording or not monitoring their demeanor. Without the actualization of the warning, transgressors may be quick to assume that the threat of apprehension and risk of sanctioning are not real. Therefore, the fact that the officially collated, recorded footage can be used against the participants moves this intervention from being a "toothless policy" into an effective technological solution' (Ariel, 2012, p57).

Police BWV in the UK, and more widely across other public services, such as local government, operate within a broad framework of legislation, codes of practice issued by regulators and other strategic guidance some of which does not apply in Scotland, but may be used as a matter of good practice:

- *The European General Data Protection Regulation (GDPR)*
- *Protection of Freedoms Act 2012 (POFA)*
- *Surveillance Camera Commissioner (Code of Practice on Surveillance Camera Systems)*
- *Regulation of Investigatory Powers (Scotland) Act 2000 (RIPA)*
- *UK Data Protection Act 2018 (DPA)*
- *National Strategy for Public Space CCTV in Scotland 2011*
- *Digital Strategy for Justice in Scotland 2014*

- *Information Commissioners Office (ICO) Code of Practice: 'In the picture: A data protection code of practice for surveillance cameras and personal information'*
- *Police Scotland: Body Worn Video for Armed Policing: Code of Practice; Police Scotland/SPA Equality and Human Rights Impact Assessment (EqHRIA) Publication Scheme; Body Worn Video for Armed Policing Standard Operating Procedure; Data Protection Impact Assessment: Body Worn Video Project – Publication Scheme. (Police Scotland, 2021) (2).*

The College of Policing has produced a publication on BWV to add to their *Crime Reduction Toolkit: Spotlight on the evidence: Body Worn Cameras* (CoP, 2021). This assesses their impact on police and public behaviour when used in a law enforcement context. It suggests that while BWV may not have a clear or consistent effect on reducing crime (measured by assaults/resistance against officers wearing cameras), or on officers use of force, they can reduce the number of complaints made against officers. Their use is also thought to have an impact on officer and public behaviour by increasing awareness that the interaction is being recorded which may have a moderating effect on all parties, although this was not specifically tested in the research reviews (CoP, 2021).

All police forces in the UK have plans currently under consideration to widen BWV coverage to front-line officers, and it is likely that the London Metropolitan Police Force will be the first to make BWV available to all officers.

Scotland

As of 30 June 2021, there were approximately 17,234 full-time (equivalent) police officers in Scotland (Scottish Government, 2021). As detailed in the introductory comments to this section, the first trials of BWV took place in 2008 in Scotland in Renfrewshire and Aberdeen. During 2021, Police Scotland sought views to help shape the use of BWV by their police officers, staff and special constables when interacting with the public in advance of a potential national-level roll-out of the technology. The reasons for using BWV by Police Scotland to record interactions with the public include the following:

- Improve the quality of interactions with the public;
- Reduce and resolve complaints;
- Increase officer safety;
- Reduce delays to justice; and
- Lead to greater public transparency.

This survey was the second of its kind. The first survey was undertaken in February 2021 to inform the introduction of BWV for armed police officers. This survey formed part of a 12-week public consultation to enable a conversation on the national roll-out of BWV to all operational police officers, staff and special constables in Scotland. In addition to this survey, the consultation involved qualitative engagement (including informed discussions and focus groups) with stakeholders, partners, and Scotland's diverse communities to understand the views and circumstances of different groups in more depth (Police Scotland, 2021) (1).

BBC News Scotland (2021) (2) reported further on the BWV consultation, quoting Chief Superintendent Matt Richards asking for more than 10,000 officers and staff to have access

to BWV technology in order to increase safety and accountability. He stated that the cameras would improve the quality of evidence from incidents and speed up justice for victims. Police Scotland is now asking the public for their view on the cameras being introduced nationally. Police Scotland has confirmed firearms officers patrolling the United Nations COP26 climate conference in Glasgow in November will have BWV. Richards said the cameras would increase safety, as new figures showed assaults on police staff increased by 6.3 per cent in 2020-21, with 6,942 attacks recorded (BBC News 2021) (3). He compared BWV with road-side breathalyser tests, saying those tests led to more people admitting their guilt "because of the science, the irrefutable technology element".

Northern Ireland

As of 1 November 2021, there were approximately 7,000 police officers in Northern Ireland (PSNI, 2021) (2). The Police Service of Northern Ireland (PSNI) established a pilot project to test BWV in 2014. PSNI (2016) reported that BWV has the potential to provide significant benefit to normal policing through the collection of additional evidence. Also, that BWV can prove to be a very cost-effective aid to policing especially in sensitive areas such as stop and search, public order offences, motoring offences and domestic violence. However, it was also noted that the BWV solution has the potential to create privacy issues for members of the public, as well as police officers and staff. Individuals going about their normal everyday activities will potentially be "captured" by devices worn on police uniforms and it is important that this is factored into the use of the devices. PSNI recognised that BWV is likely to raise issues of privacy, and published a privacy impact assessment (PIA) in 2016. The purpose of the PIA was to explain: the rationale for PSNI introducing and using this technology; the legislation underpinning its use; the likely operational scenarios into which the devices will be deployed and used; the key privacy issues and risks and how these will be mitigated; and how PSNI will monitor the use of the equipment and revisit privacy issues. There is further documentation available in addition to the PIA, namely: operational guides provided by the CoP and the National Chief Officers' forum (PSNI, 2016).

PSNI in 2016, estimated that there was a total of 2,100 BWV camera and charging units, and these will be used by up to approximately 3,200 officers following training. BWV has now been deployed in the following units: Local Policing Teams; Neighbourhood Policing Teams; Tactical Support Groups; Roads Policing Units; Dog Section; District Support Teams; Armed Response Unit (the use of BWV for armed response teams is subject to different procedures. However, in all cases, the use of BWV equipment must be incident specific, proportionate, legitimate, necessary and justifiable) (PSNI, 2016).

Women's Aid campaigned to have BWV introduced in Northern Ireland due to their effectiveness in other parts of the UK and America in collecting evidence of domestic abuse. The PSNI say that they are proving vital in building cases where victims of domestic violence may be too scared or traumatised to see a prosecution through to conclusion (Women's Aid, 2014).

England and Wales

As of 31 March 2021, there were approximately 135,301 full time (equivalent) police officers in 43 territorial police forces in England and Wales (UK Government, 2021). Police BWV has been deployed extensively in England and Wales following the trials of the technology as

described in the introduction to this section. The Metropolitan Police announced plans in 2016 to deploy the devices to all its front-line officers (approximately 22,000) (BBC News, 2016), and The Home Office estimated that by the end of 2017, 60,000 BWV cameras will have been deployed by police forces across England and Wales (United Kingdom Government, 2017). The Police Federation of England and Wales (2021) support the wider roll-out of BWV to forces for a wide variety of reasons, in particular for firearms and taser officers, based on the results of a survey in 2016 of its members. Details of case studies from two forces are provided below. First, in relation to a consultation on how the technology is to be used operationally, and second, on the objectives of BWV.

Staffordshire Police announced plans in 2020 to roll-out BWV to all its front-line officers as part of improved safety equipment for its staff, and to reduce assaults on police (Derby Telegraph, 2020). Prior to this development Staffordshire Police Ethics Transparency and Audit Panel (2016) conducted a review of BWV with the purpose being to seek views on how the public may react if the recording of 'stop and search', 'domestic abuse' and the 'use of force' or 'anticipated use of force' on BWV was made mandatory. The force considered these views, before arriving at a decision about deployment. The initial conclusions and recommendations stated: that the switching on of BWV should be mandatory for stop and search, domestic abuse and use of force or anticipated use of force. However, there needs to be a caveat which allows the switching off of BWV if continual use aggravates the situation, or the time delay to switch on a BWV device, places the officer in a life-threatening position or subject to personal injury. The panel members have also sought opinions from members of the public. They were of a similar view that mandatory recording if used appropriately, would not be an issue. They were aware of the use of BWV and felt it supported the work and protection of the police whilst giving them increased confidence in their methods of operation.

Merseyside Police (2020) updated its BWV policy and procedure document in October 2020 and stated that all users must be aware of their responsibilities in relation to its deployment and retention to safeguard users and the integrity of digital data. Officers and staff are reminded that all BWV footage is subject to disclosure and may be relied upon or referred to at any stage during an investigation, prosecution of a case or investigation of professional standards and behaviour. BWV technology records exactly what happened, what was said and when; it is an indisputable format of evidence. The objectives of BWV were identified as:

- Capture best evidence to maximise charging and out-of-court disposals;
 - Promote early guilty pleas and support evidence-led prosecutions and thereby reducing the number of cases proceeding to trial; the court appearances attended by vulnerable victims and witnesses; and unnecessary case building requirements;
 - Maximise the use of BWV to conduct voluntary PACE interviews, away from a police station improving efficiency and supporting vulnerable suspects and victims;
 - Increase the level and quality of intelligence gathered; and
 - Improve standards of professional behaviour to reduce complaints and civil litigation.
- (Merseyside Police, 2020)

2.4 Citizen and Community Experience of Police BWV (including case studies)

Introduction

In academic literature and grey material on BWV there are numerous examples of public support for the technology, both in the US (Miethe *et al*, 2019) and the UK (Police Scotland, 2021) (1). This positivity is embedded in a number of ‘normative assumptions’ about how the technology works and how the police operate, and in particular, long-held beliefs and values which citizens have about the police and in the apparent incorruptibility of BWV technology to provide ‘the truth’ surrounding events captured on camera. Combined, these assumptions perceive BWV to be a ‘good thing’ and help contribute to the ‘legitimate authority’ of the police (Jackson *et al*, 2012).

Policymakers working against a backdrop of general public support for police use of BWV, may look to such technologies to provide solutions to address societal issues which are evident today. These societal issues are often amplified by the media (and social media) and include: reducing trust in the police; worsening race relations; police use of force; the availability of ‘bystander video’ and doubts over the satisfactory resolution of citizens’ complaints against the police. The Guardian (2020) reported that Scotland Yard had decided not to routinely release its own BWV footage of controversial incidents after internal reviews showed errors by officers. The Metropolitan Police has been plagued by social media videos raising concerns about ‘stop and search’, ‘use of force’ and racial profiling, prompting calls for footage from BWV to be made public. But in an internal memo seen by the Guardian, a senior Metropolitan Police chief is reported as saying that incidents captured by BWV, recorded examples of “poor communication, a lack of patience, [and] a lack of de-escalation before use of force is introduced”. The memo also states that force used by officers on members of the public could probably have been avoided in some instances (The Guardian, 2020).

The ‘positivity’ surrounding police use of BWV is arguably quite general and based on the simplest forms of the technology, whereas in reality citizens’ perceptions are more nuanced and require closer examination. This might require more empirical research to be undertaken, such as longitudinal studies which could be spread at intervals over several years. There will be many factors at play which could influence someone’s opinion on the police use of BWV and this could depend upon: their age, gender, ethnicity, trust in the police, trust in the technology, and previous experiences with the police with or without BWV, etc. Citizen attitudes and assumptions towards BWV need greater scrutiny, especially the assumption that the technological capabilities of BWV are the same from one force to another, and possibly from one country to another. What is of relevance too, is the culture of the country, region or city in which the BWV studies are taking place, and the historical role of the police in exercising ‘legitimate authority’ in upholding the rule of law. For these reasons, it is not appropriate to assume that what is acceptable by the public and specific groups in one country, region or city in relation to police use of BWV, will be mirrored by public opinion elsewhere.

The following section provide a series of short case studies of citizen and community experiences of police BWV. The case studies cover a number of different scenarios, although it should be noted that domestic abuse, which is known to have very high levels of revictimisation (Sanderson, 2008), features in the first few cases. The deployment of BWV as

a tool to assist law enforcement and prosecutorial agencies in domestic abuse cases has been the subject of consideration by policy-makers for some years, and due to its importance several case study examples have been provided in this subject area:

Case Study 1: Domestic Abuse - The Essex Body Worn Video Trial

Owens, Mann and McKenna (2014) report on the impact of BWV on criminal justice outcomes of domestic abuse incidents. Overall, the trial showed that issuing officers with BWV could be effective at increasing the charging rates of detected domestic abuse incidents. However, the findings from the officer interviews and surveys also give good context of considerable practical challenges that the officers faced when using the cameras and a lower than expected usage rate by officers. Many officers interviewed felt that the cameras had the potential to increase the number of evidence-led prosecutions, where the victim's support may not be required at court, however a couple had concerns about the potential impact on victims. The research also has been unable to capture the perceptions of victims which is a key element in any work designed to support cases through the Criminal Justice System. Future research may want to explore the views and experiences of victims that have officers attending wearing BWV, or cases that have had footage used.

Case Study 2: Domestic Abuse - 'The Police Response'

The CoP produced specific advice to police forces in 2014 on the use of BWV in domestic abuse situations, which was updated in 2018 (CoP, 2018). HM Inspectorate of Constabulary and Fire and Rescue Services published an update report on the police response to domestic abuse (HMICFRS, 2019). The Inspectorate found that BWV can provide excellent evidence, however, forces don't always use the cameras in the same way, some forces only have a few cameras available and others don't have a clear policy on how they should be used. When they looked at cases as part of their file review, over 40 per cent of cases when BWV would have been applicable showed no evidence of the technology being used. In their last domestic abuse report, they recommended that the CoP should give clearer guidance to forces about when BWV should be used at domestic abuse incidents. This work has yet to be completed. The guidance, which the CoP should work on with the national policing lead on domestic abuse, should cover how forces can use this tool as effectively as possible according to Her Majesty's Crown Prosecution Service Inspectorate (HMICPSI).

Case Study 3: Domestic Abuse and Survivors

Responding to a joint report by HMICPSI and HMICFRS on evidence-led domestic abuse prosecutions, the Acting Chief Executive of Women's Aid (Adina Claire) stated: *"More than half of domestic abuse cases failed to proceed last year due to evidential problems and the victim not supporting police action, so this report is important and welcome. The criminal justice system can be a terrifying place for survivors of domestic abuse, who can often be at greater risk from their perpetrator once the police are involved. So it's vital that police forces and the CPS build the best possible case for every survivor, and don't rely on her to present in court. It's concerning that this report found that officers and prosecutors have no system to identify which cases can be led by evidence and not a victim, and therefore no opportunity to learn lessons and share good practice. It's*

essential that the police and CPS are equipped with the tools they need to deliver evidence-led investigations. Proper use of 999 tapes, witness statements and photographs at the scene, effective use of body-worn police cameras and digital evidence (e.g. mobile phone records) can remove the reliance on survivor testimony. Women's Aid delivers the CoP Domestic Abuse Matters programme to police force areas (as referenced in Case Study 1 above) which equips front-line officers and police staff with a better understanding of domestic abuse'' (Women's Aid, 2020).

Case Study 4: Domestic Abuse and Criminal Justice

Harris (2020) in a study of female victims/survivors of domestic and family violence in Australia, claimed there has been little consideration of how BWV might shape victim/survivor experiences of the justice system. Issues unpacked that women have flagged as important are: whether BWV footage might prompt reviews of police actions and failures to act, serve their best interests and impact their journey through the justice system. Exploring interdisciplinary literature and police and judicial statements in public discourse, expectations are examined about women's understandings of the dynamics and effects of domestic family violence. Questioning claims that BWV provide neutral footage, Harris (2020) contends that representations are subject to interpretation, governed by practical, ideological and social standpoints, biases and constraints. Harris (2020) argues that to understand BWV evidence we must consider the media, the incident-based focus of BWV and the relationality between image and spectator (Harris, 2020).

Case Study 5: CATO Institute/YouGov Poll

The CATO Institute claims it has injected a 'libertarian perspective' into mainstream policy debates across Capitol Hill (Washington DC) and the United States including BWV, where its website hosts a range of blogs and other commentary on various aspects of BWV. This includes a Cato/YouGov Poll conducted in 2015 of approximately 2,000 Americans which showed 92 per cent of those surveyed supported police BWV, while only 8 per cent opposed their use (CATO, 2016). The poll also showed that police BWV policy becomes particularly contentious when it comes to accessing the video footage, with 52 per cent of Americans saying police officers ought to be allowed to watch body camera footage before making their official statement about violent encounters, while 48 per cent opposed it. However, critics have warned that allowing officers to view the footage beforehand creates an opportunity for officers to change their stories in efforts to absolve themselves from blame, and this will likely remain a contentious policy issue going forward (CATO, 2016).

Case Study 6: Survey of Citizens (Florida)

Crow *et al* (2017) report that calls from the media and public for all police to adopt BWV have become commonplace, however robust research on the actual benefits of BWV has been slower to develop. The study of two Florida counties (Escambia, and Palm Beach) examined the multiple direct and indirect factors that influenced citizens' perceptions of the benefits of BWV and found that a large majority supported their use. BWV benefits were directly influenced by perceptions of police performance, privacy,

and police interactions, and indirect factors included demographic characteristics, concern for crime, and procedural fairness. Crow *et al* (2017) recommend that continued research should be undertaken on BWV to fully ‘unpack’ these relationships and provide insight into this important issue.

Case Study 7: Survey of Citizens (Birmingham, Alabama)

Today, Leban and James (2021) investigated citizen attitudes on public release of police BWV. They examined quantitative and qualitative survey data from a convenience sample of 535 citizens living in and around Birmingham, Alabama, USA. They found citizens’ attitudes ranged widely and were often contextualized based on the circumstances of the video and case. Race, gender, and police accountability concerns were significantly related to greater support for video release, with race being the strongest factor. Surveillance concerns were not significantly related to attitudes about video release. While numerous studies have shown that officers and citizens support the use of BWV in policing, questions about the public release of video are still under debate. Very few studies have examined the issue of video release for the purposes of developing evidence-based policy that satisfies the interests of diverse groups and minimises civil unrest following critical incidents. Further research is needed before clear recommendations can be made regarding optimum policies guiding BWV video release.

Case Study 8: Survey of Citizens (African Americans)

In their national-level US study of African Americans’ support for BWV Graham *et al* (2019) report growing concern over the policing of inner-city communities, including questionable incidents of use of force, and how equipping officers with BWV has emerged as a salient proposal for reform. The study showed that wide consensus exists among black citizens in favour of BWV since ostensibly “videos don’t lie” and implementing camera technology may be a means to increase police legitimacy. The survey included a subset of 45 black police officers, which found that these officers also supported BWV and most other of the proposed reforms, but at a level that was lower and less intense than African American members of the public (Graham *et al*, 2019).

Case Study 9: Survey of Citizens (Baltimore)

Kerrison, Cobbina and Bender (2018) argue that since the rollout of BWV is relatively new to law enforcement, researcher and practitioner communities have scant evidence of citizens’ attitudes toward BWV programmes on which to rely. The study by Kerrison *et al* (2018) provides a qualitative exploration of Black Baltimore citizens’ thoughts on the purpose and promise of BWV, particularly when deployed as a potential remedy for police ‘lethality’ and a long-standing strained police-civilian relationship. The ‘push’ for furnishing patrol officers with BWV in order to bolster accountability, professionalism, and faith in institutional legitimacy might be a misguided effort due to: first, evidence suggesting that because they are aware of their being recorded, wrongdoing police officers may plant weapons and invoke language at a crime scene that corroborates a justified response to suspects who pose a threat, and second, civilians and officers alike are aware of images of unjust state violence and that the presentation of even the most damning evidence does not necessarily deter officers from violating constitutional

protections, or reduce the likelihood of being acquitted when they do (Kerrison *et al*, 2018).

Case Study 10: Police and Citizen Encounters (Las Vegas)

Following the 2014 randomised control trial of BWV at the Las Vegas Metropolitan Police Department, Braga *et al* (2018) report on the effects of BWV on police activity and police-citizen encounters. In addition to reducing complaints and use of force reports for treatment officers relative to non-BWV comparison officers, the results support the position that BWV may de-escalate aggression or have a civilizing effect on the nature of police-citizen encounters. The complaint and use of force reductions associated with placing BWV on police officers may be particularly important for improving police-community relations in impoverished, ethnic minority neighbourhoods. The video recording of police-citizen encounters could enhance citizen perceptions of transparency and accountability in the day-to-day work of the officers that serve them. Lawfulness certainly matters to citizens when they appraise the legitimacy of the police, putting BWV on officers may increase their adherence to the rule of law when stopping, searching, frisking, and/or arresting citizens.

Case Study 11: Police and Citizen Encounters (Research Findings)

Saulnier *et al* (2020) report that in combination with results from a handful of similar studies, their study suggests that BWV may be a tool that can be leveraged to enhance public perceptions of encounters with police, although more research is needed to substantiate this claim. In particular, the development of evidence-based policy on this matter necessitates continued studies that address issues, like sample imbalances (e.g., gender and ethnic minority status), length of the interaction studied (i.e., experimental dosage), and controlling for officer behaviour. Continuing with this theme, research by Kopp and Gardiner (2021) state that it is not really known why the public supports BWV usage by police, because research on the technology's potential benefits and related deployment issues is still in its infancy. The few studies that have sought to unravel the predictors of public support for BWV have focused their attention on the benefits the public perceives will accompany the use of BWV to the virtual exclusion of the concerns they may have with the technology. Using survey data collected from 431 residents of a mid-size city in Southern California, their study includes details of the public's perceived concerns, including privacy, cost, technology limitations, and the possible manipulation of BWV footage.

Case Study 12: Police and Citizen Encounters (Mediating Effects on Behaviour)

Results from eight UK and US police forces reveal rates of assault against officers are 15 per cent higher when they use BWV. The latest findings, from one of the largest randomised-controlled trials in criminal justice research, highlight the need for cameras to be kept on and recording at all stages of police-public interaction – not just when an individual officer deems it necessary – if police use-of-force and assaults against police are to be reduced. If officers turned cameras on and off during their shift then use-of-force increased, whereas if they kept the cameras rolling for their whole shift, use-of-force decreased. (Ariel *et al* 2016). White, Todak and Gaub (2017) assessed perceptions of BWV among citizens who had BWC-recorded police encounters and explored the

potential for a civilizing effect on citizen behaviour, through the BWV trials which took place at Spokane, Washington in 2014. Respondents were satisfied with how they were treated during the police encounter and, overall, had positive attitudes about BWV. However, only 28 per cent of respondents were aware of the BWV during their own encounter. The authors also found little evidence of a civilizing effect, but did document a significant, positive connection between awareness of the BWV and enhanced perceptions of procedural justice. Lum *et al* (2019) claim to provide the most comprehensive narrative review to date of the research evidence base for BWV. Seventy empirical studies of BWV were examined covering the impact of cameras on officer behaviour, officer perceptions, citizen behaviour, citizen perceptions, police investigations, and police organisations. Although officers and citizens are generally supportive of BWV use, BWV has not had statistically significant or consistent effects on most measures of officer and citizen behaviour or citizens' views of police. Lum *et al* (2019) call for further research into how BWCs can be used in police training, management, and internal investigations to achieve more fundamental organisational changes with the long-term potential to improve police performance, accountability, and legitimacy in the community.

Case Study 13: Detainees' Experience of BWV in Australia

Taylor and Lee (2019) claim that entirely absent from debates about the desirability and potential impacts of police BWV are the views of individuals who have recently experienced arrest by a police officer. Data from interviews with 907 police detainees in Australia reveal that they are largely in favour of officers wearing cameras, believing that they can provide greater accountability and improve the behaviour of both law enforcement officers and members of the public. Interviews were held in five locations across four states: New South Wales, Queensland, South Australia and Western Australia. Queensland's investment in BWV represents the largest number of devices issued to any law enforcement agency in Australia, and one of the highest in the world. The majority (83.4 per cent) of the respondents were male. On average the detainees were 32.65 years of age; 46.2 per cent were recorded as 'Offences against government procedures, government security and government operations', inferring that these individuals were in breach of bail, a community order or parole conditions, thus obscuring the offence type for which they had originally been charged and/or convicted. As such, it was not possible to disaggregate findings by offender type. 76 per cent of detainees agreed or strongly agreed that it is a 'good idea' for police officers to wear them. Support for the cameras largely stemmed from the perception that they could improve the behaviour of both police officers and arrestees. For some, the cameras could instil what White (2014) has termed a 'civilizing effect' amongst both the police and public, with many participants expressing sentiments along the lines of 'everybody is protected' if the encounter is recorded. In a separate study (Clare *et al* 2019) of police, public and offender perceptions of BWV, which were generated within a single jurisdiction and contributed to a randomized controlled trial of BWV by the Western Australia Police Force. They found that there were inconsistent attitudes about the potential for BWV to influence police behaviour, although officers' perceptions changed through the trial to suggest they felt the technology had limited impact on their behaviour. In contrast, the public and offender surveys indicated these groups felt cameras would improve police professionalism, respect, and fairness. Aligned with

police impressions and the impressions of public survey participants who had been in contact with police wearing BWV, only 52 per cent of offenders agreed cameras would reduce the likelihood they would be violent towards police and only 33 per cent thought there would be less crime. As with the public survey respondents, offenders agreed BWV would make police treat people more fairly and reduce the likelihood of excessive force.

Overall, these case studies give a mixed view of citizen and community experience of the police use of BWV. There are a number of common themes worth noting. It is evident that there is general support for the use of BWV by the police, this is based on the assumption that police use follows good practice and that the technology is perceived to be effective. It is also apparent from these cases that BWV technology is having an impact on citizen-state relations and changing the behaviour of both police officers and the public. It is also evident that attitudes change, or evolve, with citizen exposure to BWV, and that personal positive or negative experiences shape attitudes towards the technology and the police. In this respect, the citizen and community experience of BWV is not static and positive attitudes towards the technology should not be seen as permanent or taken for granted. The same applies for police officers' attitudes towards BWV. Another theme emerging from the cases is the discretionary ways in which BWV is used and where this discretion deviates from perceptions about how the technology should be used then its legitimacy is called into question. This may strain community relations. A further theme emerging from these case studies, is the reliance on survey research and subsequently calls for more in-depth qualitative robust research. To date, the focus has been on identifying attitudes towards the technology and not the impacts of the technology, with the latter requiring longitudinal studies. Additionally, as more officers and citizens are exposed to the use of BWV so more questions are posed about its use.

2.5 Good Practice in the use of Police BWV (United Kingdom)

Scrutiny and Oversight

For England and Wales, the College of Policing (CoP, 2019) provides Authorised Professional Practice guidance on the Management of Police Information (MoPI) which includes BWV. The 43 geographic police forces in England and Wales have developed policy and procedure documents using the MoPI guidance from the Home Office and the CoP. Some forces have collaborated with others in producing joint documents. Examples of good practice including in relation to scrutiny and oversight are provided in **Appendix I**. Additionally, some examples from Police and Crime Commissioners have been included too, where these relate to citizen engagement with oversight for BWV. It is important to note that in England and Wales there is no identical model for scrutiny and oversight of police BWV, or for the processing of Subject Access Requests.

Appendix VII presents examples of good practice of BWV scrutiny and oversight from police forces across the UK. Here, the practices covered include dedicated protocols and codes of practice, through to 'dip sampling' and formal institutionalised scrutiny panels. The police forces and Police and Crime Commissioners listed in **Appendix VII** could be useful points of contact for Police Scotland for collaborative discussions. Further examples of potential partners for information sharing and learning are provided in **Section 2.6**.

Scotland

Governance around Police Scotland's use and impact of BWV, including data protection considerations, is contained in the following documents which are publicly accessible:

- *Code of Practice on BWV for Armed Policing;*
- *Joint Police Scotland and Scottish Police Authority Equality and Human Rights Impact Assessment Publication Scheme (BWV);*
- *Data Protection Impact Assessment: BWV Project – Publication Scheme; and*
- *BWV for Armed Policing – Standard Operating Procedure.*
Police Scotland (2021) (2)

Additionally, the position of Police Scotland in relation to good practice for the deployment of BWV in Scotland can be found in submissions made to the Scottish Government Independent Advisory Group on Emerging Technologies in Policing, at their meeting in March 2021 (Scottish Government, 2021) (2). Details were provided of the joint strategy between the Scottish Police Authority (SPA) and Police Scotland on the 'Engagement, Consultation, Design and Implementation of BWV'. The public consultation survey generated over 7,000 responses, which had been overwhelmingly positive. Representatives of Police Scotland detailed the evidence they had gathered, the extensive engagement they had undertaken and the internal governance arrangements that are in place. They further detailed the legal and ethical considerations that they have undertaken. Police Scotland representatives confirmed:

- That they are aware of tensions around Data Protection, Human Rights and confidentiality in relation to BWV and that they had conducted various impact assessments to ensure they were considering these aspects as the technology was being introduced;
- That the Regulation of Investigatory Powers (Scotland) Act 2000 covers BWV, although they recognise that there is a potential legislative gap relating to general use;
- That their view was that BWV is an overt tool and not a covert tool;
- That their primary intention with introducing the technology was in crime prevention and detection, but as highlighted by the Dame Eilish Report and Metropolitan Police Ethics Panels it was noted that BWV could also be a useful tool when it comes to police complaints. They highlighted that the number of complaints against police dropped when BWV was introduced in London;
- That they currently have publicly available policies in relation to weeding and retention of data;
- That data is initially stored for 31 days and then destroyed. If the footage is used for court purposes then it would be deleted after a prosecution had been finalised;
- That the data is encrypted from the moment of recording through to download;
- That while the technology has the potential capability to be used for a wide range of purposes, such as using software for context scanning or face recognition, they are focusing on baseline capability of prevention and detection of crime. It was recognised that any extension to that purpose would require further consideration and consultation; and
- That the intention would be to advise that a camera is recording but in extreme instances it might be impossible for officers to do this.

Northern Ireland

PSNI (2021) (1) advises that police officers' use of BWV must be justified as being proportionate, legitimate, and necessary. Cameras can only be used by officers trained in the use of BWV in line with National Guidance. The BWV camera will normally be turned off. The specific guidance for officers is summarised as follows:

'The Officer makes a professional judgement/assessment to activate the camera based upon guidance and training. A warning that video and audio is being recorded will be issued by the Officer as soon as practically possible. The device is turned off once the incident has concluded. Officers have been trained that they should record Domestic Violence and Stop and Search encounters and the following types of incidents can be recorded: public order offences, traffic offences, anti-social behaviour, premises and crime scene searching, scene attendance, witness first accounts, during arrest (list not exhaustive).

Once the officer has captured video images they will return to the station and dock the device. The data will be stored automatically onto a secure back-office storage area. The source video images cannot be altered. Additionally, a partial extract may be produced. This extract will normally be a subset of the video shot, focussed on the offence whilst ensuring sufficient contextual information is displayed. The back-office video management software also enables the officer to pixilate any bystanders appearing in the evidential video who are not associated with the case. If the information recorded is not saved as evidential and will not form part of a subsequent prosecution, the information will be automatically deleted after 31 days' (PSNI, 2021) (1).

England and Wales

The CoP in 2020 reported on the results of a pilot project undertaken by Merseyside Police involving the use of BWV in interviews. In 2019, they had launched a pilot allowing staff to record suspect interviews for all offences on BWV camera at flexible locations, where it was appropriate and safe to do so. As the Covid-19 pandemic hit the UK, Chief Constable Andy Cooke provided official authority for a full rollout. After an initial Skype training input, staff can now use the process to protect themselves and the public from the spread of the virus, and to assist with social distancing while still progressing investigations to a timely outcome for victims. Here it is argued that staff feel empowered to make decisions for the right reason, to help keep communities safe, and have been able to interview shielded persons at their home address with full Personal Protective Equipment (PPE) (CoP, 2020).

BBC News (2016) reported that following a trial period of nearly one year, involving ten London boroughs, the Metropolitan Police Service is adopting BWV across most of the force, believed to be the largest-scale use in the world, with approximately 22,000 front-line police officers in the force being equipped with them. Guidance is provided on when and how BWV should be used:

'When the camera is turned on it will start capturing a rolling 60 second loop of video but no audio. This 60 seconds of video is not saved by the camera unless the officer activates the camera to record. When the camera is activated to record that previous 60 seconds of video is included in the recording. Officers activate their cameras at the

start of an incident or encounter, and under normal circumstances will continue to record until it's no longer 'proportionate or necessary' or another Met system takes over, e.g. CCTV within a police station. The use of BWV is incident specific; unless they're part of a specific operation, officers won't be recording as part of normal patrolling. When it's recording, flashing red lights will appear in the centre of the camera and officers will make people aware that they are being recorded' The Metropolitan Police (2021).

Greater Manchester Police use a 30 second 'buffer' for video only (Greater Manchester Police, 2020).

The Metropolitan Police further advise that typically officers use the cameras when they: provide evidence in the investigation of an offence or suspected offence; provide transparency, e.g. during a stop and search or when force is used; as an aide-memoire to help officers to submit a written report of an encounter or incident. Additionally, officers will almost always use BWV when they are: stopping a vehicle; going somewhere to arrest someone; searching a property, land or a vehicle; performing a stop and search; attending a critical incident; using force against someone or someone's property; and attending a domestic abuse response.

The Independent Police Complaints Commission (IPCC, 2016) provides a position statement on BWV, which provides useful context for its deployment in England and Wales. Relevant excerpts from the position statement are included below:

'Some forces are now adopting full personal issue of BWV, making it part of an officer's personal protection equipment. In parallel with the increasing use of BWV in general operational policing, the IPCC is also seeing a growing number of cases where BWV forms part of the available evidence presented to us by forces. While it is accepted that the primary purpose of BWV is to support operational policing, it may also provide other valuable information in connection with complaints, conduct matters and death or serious injury matters.

Although BWV may be a useful tool it is not a complete answer. There is no doubt that BWV raises a number of other issues that need to be thought through and resolved. These include but are not limited to: the impact on privacy, the potential for members of the public to be suspicious about the reasons for cameras being turned on or off at specific times, or cameras not working. Police forces should consider these issues carefully and create and share appropriate guidelines. They should also provide their officers with appropriate training.

In summary, the IPCC welcomes this technology and acknowledges the benefits that it may bring. But we do so with a note of caution. We would urge that its use is carefully monitored, and that answers are sought to the questions posed by its use. We will keep this position statement under review as new information and learning comes to light' (IPCC, 2016).

2.6 Benchmarking with other Police, Blue Light and Public Services

Potential Collaboration with Other Police Forces

Research conducted by HMICFRS (2019) found that 42 out of the 43 police forces in England and Wales were using BWV. Within this report, there are case studies of police forces in England and Wales (working on distinct aspects of BWV, or who had participated in BWV trials) which could be considered as potential partners for Police Scotland to collaborate with for sharing knowledge and learning. It should be noted that the police forces listed below have not been contacted to discuss this possibility:

- Metropolitan Police (multiple references)
- Police Service Northern Ireland (multiple references)
- Devon and Cornwall Police (National Police Chiefs Council lead and Plymouth BWV trials)
- Hampshire Constabulary (Isle of Wight BWV trials)
- Cambridgeshire Constabulary (international multi-site trial of BWV – see Ariel *et al* 2017)
- West Midlands Police (international multi-site trial of BWV – see Ariel *et al* 2017)
- West Yorkshire Police (international multi-site trial of BWV – see Ariel *et al* 2017)
- Staffordshire Police (proposed roll-out of BWV to all front-line staff in 2020)
- Merseyside Police (policy and procedure document)
- Greater Manchester Police (use a 30 second ‘buffer for video, compared to the Metropolitan Police which uses 60 seconds).

Good Practice: Blue Light and Public Services

As outlined in the Introduction, the deployment of BWV has extended rapidly in the UK in recent years to all the emergency services, NHS, the prison service, public transport and to many of the services provided by local government (Leleux and Webster, 2020). Whereas surveys on police BWV have focused on many different aspects and purposes of its deployment, including the impacts on citizens generally and some distinct groups, there is comparatively little published academic research on its deployment in these other areas of the public sector. Most of the available literature can be classified as ‘grey’ and concerns BWV deployment in response to: the increasingly high levels of assaults by the public on staff; the need to de-escalate conflict; and to provide evidence which might assist in prosecutions. There is evidence that the level of assaults has increased during the Covid-19 pandemic, as previously detailed in the Introduction. Examples of where BWV is being deployed in these other areas of the public sector, and its intended purposes are discussed below.

Prison Service

The National Offender Management Service (2017) for England and Wales issued a Prison Service Instruction (PSI 04/2017) to provide instruction and guidance to prisons in the use of BWV and the management of the data captured. The desired outcomes include: de-escalation of conflict or confrontation; the prevention or detection of crime and disorder; the apprehension and prosecution of any person who has committed a crime within a prison (including the use of images as evidence in criminal proceedings); safe resolution of internal staff disciplinary investigations; improving public and employee Health & Safety; the

protection of staff, visitors and prisoners; safeguarding the security of the establishment; development of staff skills through use of operational footage for training purposes.

HM Prison and Probation Service (HMPPS, 2020) in response to rising levels of prison violence, commissioned the Violence Reduction Project, with the aim of reducing levels of assaults against staff and prisoners. HMPPS piloted the use of BWV to investigate how their use might serve to keep staff and residents safe in the prisons of England and Wales. Six hundred BWV were deployed to 23 establishments between June 2015 to December 2015. BWV 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 BWV: staff and prisoners involved in the study were more positive and more likely to support the use of BWV when they had been well-informed about their purpose, and had seen or been involved with the use of BWV; BWV 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 BWV 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.

Ambulance Service

NHS News (2021) announced that thousands of ambulance crews across the country will be provided with BWV as part of an NHS crackdown to reduce attacks on staff. The introduction of the cameras comes alongside data that 3,569 ambulance staff were physically assaulted by the public last year (2021), which was 30 per cent more than five years ago. Following successful trials in London and the North East, the NHS in England will roll out the cameras to crews in the 10 ambulance trusts across the country, which is three years ahead of the NHS Long Term Plan target. Medics will wear the cameras and be able to press a button to start recording if patients or the public become aggressive or abusive, with filming made available to police where needed. The announcement follows the launch of the first ever national Violence Prevention and Reduction Standard at the beginning of the year, with every NHS trust in the country expected to publish a plan to tackle violence towards staff.

Hospitals

BBC News (2020) (3) reported that BWV units have been given to hospital staff to make them feel more safe around potentially violent and aggressive patients. Security staff, casualty nurses and medical teams at Ashford and St Peter's Hospitals are trialling them in an attempt to deter confrontations and boost confidence among the workers. The cameras attached to their clothing are not running the whole time but can be triggered by a button if the staff member feels the need to. They have to tell the patient or visitor that the camera is about to be turned on. Steven Hill, non-clinical risk manager for ASP Hospitals NHS Foundation Trust, said the idea came after staff highlighted in a survey about their working environment that dealing with an aggressive or violent incident at work was a concern. Steven Hill said there are, on average, about 23 to 25 incidents of violence and aggression, both physical and verbal, towards staff reported every month across the Trust. The International Fire and Safety Journal (2020) (1) reports that Motorola Solutions have announced that NHS England has selected its

VB400 BWV solution to increase transparency and safety for its frontline workers and citizens across the country.

Fire and Rescue Services

The International Fire and Safety Journal (2020) (2) reports that the National Fire Chiefs Council (NFCC) is calling for all UK fire services to use BWV, following a spate of mindless attacks on crews. In a video shared on NFCC's social media channels, crews reveal shocking first-hand stories and footage of firefighters being pelted with fireworks and verbally abused by members of the public. Between 2015 and 2020 there were more than 3,800 attacks on firefighters, and in 2019/20 alone, around 950 attacks were recorded in England and Scotland. The 2020 bonfire period saw a sharp rise in the volume and severity of attacks, with fireworks, stones and bricks being thrown at crews. Such attacks risk impacting the mental and physical health of firefighters. In some areas of the country, firefighters can no longer attend some types of fires unless they have a police escort. NFCC warns these can escalate quickly into large scale fires, putting properties and lives at risk.

An alternative view on the deployment of BWV to firefighters was offered by the Fire Brigades Union (FBU, 2017) which condemned the worrying increase of 18.6 per cent in attacks on firefighters but was very concerned at the suggestion that BWV was the right solution. The FBU believes that when firefighters engage with communities, this sort of anti-social behaviour reduces. With drastic cuts to firefighter numbers, there are 11,000 fewer firefighters now than there were in 2010, there are in many instances insufficient personnel to carry out this important work. The vast majority of the attacks on fire engines, fire service equipment and firefighters themselves are relatively minor and occur in some of the most impoverished communities in the UK. These offences can however develop into more serious crimes. The FBU believes that compromising the neutrality of firefighters within these communities and turning them into virtual law-enforcers will have a significant impact on how they are perceived. It could even result in them being denied access to peoples' homes when they badly need it, on emergency call outs for example.

Railways

Virgin Trains announced that following a successful pilot scheme in 2018, 250 Additional BWV units will be rolled out across the Virgin Trains network and will be used by station staff and on-board teams (Global Railway Review, 2019). After becoming the first UK train operator to provide the cameras to cover all its frontline teams, the train operator will now equip a further 250 of its people with cameras, bringing the total to over 500. These extras cameras are being issued following a pilot scheme that ran from February 2018 and September 2018 which saw the introduction of 275 BWV, reducing the number of assaults on Virgin Trains staff. Further analysis has seen physical assaults on Virgin Trains' employees drop by 30 per cent in the period between April and September 2019 compared to the same period in 2018. In another first for the rail industry, Virgin Trains granted the British Transport Police direct access to footage from the cameras to carry out investigations where needed, thanks to a state-of-the-art cloud-based system. This allows footage to be viewed when the cameras are docked, speeding up investigations and possible prosecutions.

Leleux and Webster (2020) in their empirical study of BWV, which included Scotland's railways, found that although management were very keen to deploy this technology, staff

were less so. After an initial roll-out with 200 volunteers, this reduced to around 70 after the ten-day trial period. There was peer-to-peer pressure amongst staff and there was a fear that management would use the tool as a means to 'spy' on them. In response to the trial of BWV on Virgin Trains, the Rail and Maritime Union General Secretary, Mick Cash, said:

'There must be zero tolerance of assaults on rail staff and this is a victory for RMT's campaign to reduce attacks on our members. However, there is still much more to be done and the use of devices such as BWCs must be accompanied by proper safeguards to protect staff which don't leave them singled out for disciplinary action. It is also no good bringing in such protective measures when at the same time the Government and train operators are de-staffing trains and stations, leaving the workforce and the travelling public more vulnerable to assaults and anti-social behaviour.'

Local Government

Leleux and Webster (2020) carried out an empirical study in 2016 into the deployment of BWV within car parking services and warden services, both of which were managed by separate local authorities. This work was carried out simultaneously with studies of BWV within policing services and railways. The main purposes of deploying BWV in car parking services (South Lanarkshire Council) was to attempt to reduce assaults on staff, through the camera unit acting as a medium for de-escalating tension and enabling improved behaviour. However, on occasions the existence of the camera, which would normally be explained by the officer, did not stop an assault taking place. The unanswered question is whether or not the existence of a BWV inflamed certain interactions with the public? Car parking officers were largely in favour of using BWV, after some initial hesitation. Deployment of BWV within warden services (Renfrewshire Council) was also accepted by the majority of the staff as a means of personal protection and to provide evidence of incidents which would lead to improved prosecution rates, and fewer complaints. Trials of BWV also took place with Warden Services (Aberdeen City Council, 2011). Roadworkers, including some who have been working on an agency basis for local authorities, such as Carillion, have become increasingly targeted by the public for verbal and physical abuse, leading to deployment of BWV and a reduction in aggressive incidents (Wireless CCTV Ltd, 2021).

2.7 Human Rights and Ethical Practice

Introduction

The technological capability to integrate BWV footage with other systems, as a form of 'Smart' surveillance, has been available for some time (Webster *et al* 2012) and undoubtedly can be attractive to law enforcement bodies (Introna and Wood, 2004). Surveillance literature has long recognised that alternative forms of surveillance often spring from the unintended consequences (or opportunities) which new technologies can provide (Lyon, 1994). However, having the technological capability to combine systems does not give policing bodies a 'green light' to proceed to integrate or mediate them, as there are sensitive and important privacy, human rights considerations and protections to take into account. 'Function creep' is another term used to describe how new technologies can be used for purposes other than that originally planned. This was alleged in the case of Durham Constabulary described by The Times (2017), which reported that police were using body cameras to compile image databases of repeat offenders and known "villains" in order to help track them down in future

investigations. The Times (2017) reported that Durham Constabulary has become the first force to routinely gather videos of regular offenders so that officers can study their gait and mannerisms, as well as facial features, which means they are no longer reliant on finding suspects using old 'mugshots'.

Miranda (2021) raises awareness of the potential which BWV provides for engagement with other technologies, such as police vehicles and dash cameras, CCTV, drones, tasers, computers and IT systems more generally. Due to their increased data collection capabilities, including biometric data, Miranda (2021) suggests that it is also particularly important to consider other challenges and risks that might emerge with the development of new video camera technologies and their potential integration with BWV: from face matching or recognition to behavioural pattern or even automated emotion recognition. Where BWV is combined with other technologies or software processes, its function and technological capability can change considerably.

Policing authorities in many countries have been trying to find a route through the need to balance the interests of prosecuting crime, while operating ethically and within human rights' governance, and still satisfying the interests of all parties involved: front-line police; criminal justice organisations; regulatory bodies and the public. Some policing authorities (see following paragraphs) have decided not to proceed with the use of facial recognition software, while others, such as Police Scotland (2021) (2) have responsibly sought to address some of the ethical and human rights issues arising from BWV by creating specific documents (as detailed in previous sections) relating to its use and transparency. For example, a Code of Practice, Operating Procedure, Data Protection Impact Assessment, and an Equality and Human Rights Impact Assessment.

BWV Footage

There are varied practices adopted across different countries and even within the same country (e.g. the United States) regarding governance of access by citizens to view BWV footage. Adams and Mastracci (2017) advise that the dangers of indiscriminate distribution of BWV footage are clear. Allowing wide, anonymous access to BWV footage, with few barriers between the requester and the case at hand, risks much. Victims, aware that their respective police departments are equipped with BWV, and with the knowledge that footage can be distributed and posted onto the Internet, may not call police at all in order to protect their privacy (Newell, 2021). Policy should demand both considerable officer discretion and the ability to hold officers accountable for misuse of discretion as counterbalance. Similarly, policy restricting dissemination of BWV footage to involved parties after the conclusion of legal proceedings should be paired with streamlined, inexpensive, and transparent procedures for releasing the footage when appropriate. Through this type of policy friction, communities can properly balance transparency and exposure: Victims can be assured that their heightened concerns regarding BWC surveillance are being attended to, and society at large can still be sure it is capturing the benefits to police transparency and legitimacy sought through BWV (Adams and Mastracci, 2017).

Diverse Communities

Çubukçu, Sahin, Tekin & Topalli (2021) explore the role of BWV technology in adjudicating the outcome of investigations involving citizen complaints against the police in Chicago over an

eight-year timeframe. Their analytic strategy was predicated on determining whether the availability of BWV footage enhances the efficacy of evidence used to formulate a conclusion of responsibility, and on whether racial disparities in the outcomes of complaint investigations would subsequently be reduced. Their findings indicate that BWV led to a significant decrease in the dismissal of investigations due to insufficient evidence ("not sustained") as well as a significant increase in disciplinary actions against police officers ("sustained" outcomes") with sufficient evidence to sanction their misconduct. They further found that disparities in complaints across racial groups for the "unsustained" category fade away with the implementation of BWV, although concerning the "sustained" finding, it appears that the presence of a BWV helps investigation of cases regardless of complainant's race and ethnicity.

Glasbeek, Alam and Roots (2020) report that a CBC News investigation in 2017 by Andrea Huncar into the Edmonton (Canada) Police Service practices of street checks, otherwise known as carding, found that indigenous people were six times more likely to be stopped by police, and indigenous women nearly ten times more likely to be stopped than white women, and black people were five times more likely to be stopped than white people. Glasbeek *et al* (2020) further advise that Canada, like many countries around the world, was rocked by the killing of George Floyd in Minneapolis on 25th May 2020, as well as by the uprisings that followed demanding racial justice, including, a radical rethinking of policing. This racial reckoning occurred at the same time that several black, indigenous, and ethnic minorities were killed by police across the country while police brutality, especially against indigenous people, was brought to light through video witnessing. As Canadian politicians and police organisations 'tripped over each other' in their rush to respond by publicly acknowledging systemic racism in policing, BWV reappeared on the Canadian landscape. Canadian Prime Minister Justin Trudeau called upon the federal police service, the RCMP, to deploy BWV.

As previously stated, the Ontario Human Rights Commission (OHRC, 2020) found that black people were disproportionately charged, arrested, struck, shot or killed by Toronto Police Service members in comparison to other populations. Additionally, black people were grossly overrepresented in lower-level charges where officers have significant discretion in deciding whether to lay a charge. Ray, Marsh and Powelson (2017) report that recent killings of black people by police have renewed a national discussion about crime, racism, unjust treatment, and implicit bias. Outfitting police officers with BWV is heralded by federal and state lawmakers as one solution to providing more transparency during police encounters. Missing from this discussion is what everyday citizens think about the potential effectiveness of BWV. Using data on residents of Prince George's County, Maryland, the study explores racial differences in views about police treatment and the effectiveness of BWV. They found that ethnic minorities report more fear of and mistreatment by the police than whites. Regarding BWV, they found that respondents are either supporters or sceptics. On one hand, respondents either believe that BWV will illuminate the difficulties of policing, police supporters, or create more transparency to hold officers more accountable for their actions - citizen supporters. On the other hand, sceptics fall into one of two types, respondents who think that BWV may put police officers at risk (privacy sceptics) or those who do not see BWV as structurally changing the power dynamics between citizens and police officers (structural sceptics).

Facial Recognition Technology and BWV

Urquhart and Miranda (2021), in their study of present and future uses of intelligent facial surveillance in law enforcement, provide an empirical and legally focused case study of Live automated Facial Recognition technologies (LFR) in British policing. Insights from 26 frontline police officers are explored, including their concerns and current scepticism about LFR. It was recognised as being problematic if BWV incorporated LFR, as police officers agreed they should only record specific interactions with these devices. However, participants believe LFR will become common practice in the future and that specific guidance is needed on how to manage the data effectively.

Ringrose (2019) reports that commercial companies are racing to integrate BWV with facial recognition technology, hoping to eventually use artificial intelligence to recognise faces captured in real time, despite privacy concerns. Once equipped with facial-recognition technology, BWV could dramatically increase the number of individuals logged in law enforcement facial-recognition networks. Anyone passing a police officer equipped with this technology may be scanned, identified, and catalogued in a facial-recognition database without being suspected of any crime or even communicating with the officer. Ringrose (2019) believes it is time for the law to address the critical gaps in democratic and constitutional protections that BWV and facial-recognition technologies create. There needs to be a national consensus on the retention and utilisation of real-time camera footage accrued by BWV. Ringrose (2019) argues, that at the very least, cities and states should begin regulating law enforcement's use of facial-recognition software as BWV become more ubiquitous. More generally, lawmakers must address the various dangers technological integration presents before we unwittingly become a surveillance state (Ringrose, 2019).

Park and Pang's (2019) study considers how BWV, an information gathering tool, interacts with Facial Recognition Technology (FRT), a data analysis tool. Machine learning-powered FRT appears to augment the effectiveness of BWV in apprehension. They recognise that their study is not without limitations, as it does not account for privacy costs from the increase in on-view arrests by BWV and FRT. Since anyone passing a police officer equipped with this technology may be scanned, identified, and catalogued in a facial recognition database without being suspected of any crime, BWV and FRT in combination could raise privacy concerns (Ringrose 2019). Although this was not the focus of their study, they do not downplay the importance of privacy costs regarding BWV and FRT. Because of data limitations, they do not know whether any arrested suspects were convicted in the law courts. If this is not the case, an unwarranted search and arrest supported by BWV might erode the Fourth Amendment to the U.S. Constitution and the presumption of innocence. They call for future research to extend the evidence of the effects of BWV on conviction rates (Park and Pang, 2019).

Hood (2020) merges empirical and theoretical work on BWV with conceptual, discursive, and technical work on facial recognition to outline the dangers of what may occur if these technologies collide. Hood focuses on the reciprocal relationships between the physical body, state power, and social marginalisation, acknowledging that within the context of social control, the body has long been used to reflect and enact surrounding social hierarchies. The political nature of the body will become all the more important as biometric data become a

more powerful form of capital, and as policing attempts to contort the public private boundary of the body. Future research must assess the efficacy of BWV and facial recognition software, along with critical research investigating their social consequences. Intelligence and data-driven policing are rapidly creating a new reality of data-driven discrimination. Researchers, policymakers, and local communities must stay attuned to the modernizing culture of policing and to how increased surveillance will affect the most vulnerable populations (Hood, 2020). Bromberg, Charbonneau and Smith (2020) carried out a telephone and web-based survey in New Hampshire, and further afield in the USA, on public support for facial recognition via police BWV. They contend that emerging technologies like facial recognition have the potential to change the delivery of public services, but also to reshape the notion of citizenship provided that real citizen support for this exists. They found that gender, age and political affiliation matters to explain support for facial recognition.

2.8 Areas for Further Consideration

Facial Recognition Technology: Future Development

Introduction

Continuing with the themes discussed in the previous section, the authors of this report predict that the potential for integrating BWV footage with facial recognition software, in ‘real time’ and retrospectively, will become an increasingly contested area amongst the various actors involved. The following sections provide some context on facial recognition technology, and recent developments both internationally and within the UK.

International Context

The World Economic Forum (WEF) (2021) states that FRT has the potential to help conduct faster investigations, bring offenders to justice and thus resolve, stop and prevent crimes. However, its eventual widespread use by law enforcement agencies raises concerns over the potential risk of wrongful arrests, surveillance and human rights violations. A new white paper from the WEF, in partnership with the International Criminal Police Organization (INTERPOL), the Centre for Artificial Intelligence and Robotics of the United Nations Interregional Crime and Justice Research Institute (UNICRI) and the Netherlands police, offers a framework to ensure the responsible use of FRT. Tests of this framework will start in January 2022. In April 2021, the European Commission (EC) released its much-awaited Artificial Intelligence Act, a comprehensive regulatory proposal that classifies Artificial Intelligence (AI) applications under distinct categories of risks. Among the identified high-risk applications, remote biometric systems, which include FRT, were singled out as particularly concerning. Their deployment, specifically in the field of law enforcement, may lead to human rights abuses in the absence of robust governance mechanisms.

Policy, Privacy and Data Protection Considerations

The WEF (2021) further advises that across jurisdictions, policymakers are increasingly aware of both the opportunities and risks associated with law enforcement’s use of FRT. In this context, striking the right balance appears difficult. Policymakers may explore various options ranging from an outright ban to the introduction of additional accountability mechanisms to limit the risk of wrongful arrests. In the US, cities such as San Francisco, Oakland and Boston have banned the use of FRT by public agencies, while the US states of Washington, Virginia

and Massachusetts have introduced legislation to regulate its use. In other regions, court decisions play an important role in shaping the policy agenda, including the UK Court of Appeal decisions on FRT used by South Wales Police (*see following paragraphs*). At a more global level, the United Nations Office of the High Commissioner for Human Rights' (OHCHR) recent report on the right to privacy in the digital age recommends governments halt the use of remote biometric recognition in public spaces in real-time until they can show there are no significant issues with accuracy or discriminatory effects. It also suggests that these AI systems must comply with robust privacy and data protection standards (WEF, 2021).

Live Facial Recognition Software (UK)

The Home Office (UK Government, 2019) reported on trials which took place involving the Metropolitan Police and the South Wales Police on the use of Live Facial Recognition software. Regarding the legality of using this software, the Home Office stated:

- The police have common law powers to prevent and detect crime which allow them to use surveillance cameras and LFR in public places;
- The judgment in the South Wales Police case confirms that there is a clear and sufficient legal framework for the use of LFR in the UK, which includes ensuring that it is necessary and proportionate; and
- We continue to work with the police and others to ensure that we maintain public trust and confidence in law enforcement (United Kingdom Government, 2019).

The judgement concerning the South Wales Police by the United Kingdom Court of Appeal (Royal Courts of Justice, 2020) included decisions that the deployment of FRT by South Wales Police (on a trial basis) had been unlawful in certain respects:

(1) The Respondent's use of Live Automated Facial Recognition technology on 21 December 2017 and 27 March 2018 and on an ongoing basis, which engaged Article 8(1) of the European Convention on Human Rights, was not in accordance with the law for the purposes of Article 8(2).

(2) As a consequence of the declaration set out in paragraph 1 above, in respect of the Respondent's ongoing use of Live Automated Facial Recognition technology, its Data Protection Impact Assessment did not comply with section 64(3)(b) and (c) of the Data Protection Act 2018.

(3) The Respondent did not comply with the Public Sector Equality Duty in section 149 of the Equality Act 2010 prior to or in the course of its use of Live Automated Facial Recognition technology on 21 December 2017 and 27 March 2018 and on an ongoing basis.

Metropolitan Police

The Metropolitan Police already use 'Live Facial Recognition' (LFR) software. This technology takes images and compares them to images of people on their watchlist. It measures the structure of each face, including distance between eyes, nose, mouth and jaw to create a facial template. Where it finds a match it sends an alert to officers on the scene. An officer then compares the camera image to the person they see and decides whether to speak to the

person or not. The officer always explains why they have stopped someone, and they are given a leaflet that explains how they can contact them to ask further questions. The system will only keep images that have generated an alert, these are kept for up to 31 days or, if an arrest is made, until any investigation or judicial process is concluded. The biometric data of those who don't cause an alert is automatically and immediately deleted. The LFR system also records CCTV footage, which is kept for up to 31 days. Anyone can decide not to walk past the LFR system, it's not an offence or considered 'obstruction' to avoid it. The Metropolitan Police claim that their approach to LFR is different to the South Wales Police cases which were appealed: *This reflects our policing needs, which given the complexity of keeping London safe and the different crime issues impacting the capital, are very different from those in South Wales* (Metropolitan Police, 2021).

The emergence of FRT can be separated into two strands of activity, those systems which offer 'live' face recognition (LFR) and those which offer 'retrospective' face recognition. To date, most interest and published work has focussed on LFR, and such systems have proven to be very controversial. Retrospective face recognition, where recorded images of faces of interest are run through software to seek matches to aid identification. These systems are more accurate and their use tends to be targeted towards specific individuals and incidents. In this respect, such systems are perceived to be more proportionate in their data protection practices. Both types of FRT can potentially be integrated with BWV and where this is considered and operationalised then there is a need for full public disclosure and consultation.

3. Body-Worn Video Interviews: Summary of Key Points

Much of the evidence presented in this review derives from published literature on BWV. To supplement this evidence base a series of interviews were conducted with BWV experts. **Appendix VI** compares core findings from the literature alongside insights emerging from the interviews. The 11 interviews conducted for this research followed the interview topic schedule set out in **Appendix V**. Key findings, which complement and add to the literature review, are as follows:

- Use of BWV in armed policing responses appears to be a mandatory requirement in England and Wales. Clarification is required on the position in Scotland;
- 'Dip sampling' of BWV footage is taking place in England and Wales, and can involve senior police officers, lay persons on scrutiny panels, and PCCs;
- BWV is being used in 'stop and search' in England and Wales, although further research may be required on the extent of its use and availability of guidelines;
- Benchmarking undertaken by Devon and Cornwall Police highlighted lack of standardised practices for BWV deployment across forces in England and Wales;
- Use of BWV in domestic abuse situations requires discretion from officers, balancing the needs of victims with requirements for evidence gathering;
- BWV can be used as a training aid both for the police and other partners (such as NHS), for example from interactions involving citizens with mental health issues;
- BWV can add value in RTA's where suspected criminality has taken place;
- BWV is seen as an important tool in building public confidence, establishing transparency, and bringing greater accountability;

- BWV is able to provide a full unedited account of exactly what has occurred, and can be used to hold police officers to account if professional standards have slipped;
- The opportunity could exist to use BWV for certain interviews conducted outwith a police station in Scotland, subject to further discussion with COPFS;
- Scrutiny, oversight and engagement with citizens in policing operations involving new technologies, including BWV, is a developing practice in England and Wales involving police forces, a range of community and scrutiny panels, and PCCs;
- With the anticipated roll-out of BWV to front-line police officers in Scotland, it is expected that the SPA will consider how their governance and scrutiny arrangements will respond to this, including the need for greater understanding of the value which can be added through community panels;
- The public seem to be supportive of BWV, although it is uncertain how well informed they are and how visible/accessible their communications channels are;
- Whilst it is apparent that there is general support for basic BWV, this relates to basic camera systems, and should not be assumed for more complex systems incorporating face recognition or live stream processes. The use of face recognition technology in a policing context is contentious and is likely to be contested;
- Existing consultation on the use of BWV, as well as Data Protection Impact Assessments will be void if the technological attributes and capabilities of BWV change significantly, for example if integrated with FRT or live streaming processes;
- Awareness of disability issues should be considered before roll-out of BWV rather than afterwards. Civil liberty groups should be engaged and informed too;
- Ethical and moral issues should be considered too, with expectation on the operator that they exercise sound judgement of what is necessary and proportionate;
- Data protection impact assessments must explore all legal requirements, retention periods, identification of risks. Where some risks cannot be mitigated then there is a legal requirement for the organisation to go through prior consultation with the UK Information Commissioner's Office (ICO) before processing takes place;
- The ICO provides useful advice and web-based guidance on BWV, including how organisations can comply with data protection law. The guidance is being revised in 2021/2 and will incorporate technologies such as BWV, drones, and facial recognition;
- It was noted that where face recognition technology is allied to BWV a shift in regulatory frameworks occurs, as in Scottish law face recognition is classified as biometric data and falls with the inspection remit of the Scottish Biometrics Commissioner;
- Robust data process and governance mechanisms should be established prior to widespread deployment of BWV in Scottish policing;
- Compliance with data protection regulation, including Subject Access Requests protocols is essential;
- Policymaking needs to be dynamic, not fixed, and responsive to evolving technologies and current events;
- The evolution of BWV camera technology is likely to include in the near future, face recognition technology (live and retrospective), noise recognition technology, live streaming and remote footage access; and
- There is a complicated landscape of overlapping (UK and Scottish) regulators and different legislation being applied to common UK databases, which has an impact on the storage, processing and classification of data, and in particular BWV images.

4. Concluding Comments: What is the Literature Telling us?

Public Opinion

Available research shows that the public has consistently supported police BWV. The major survey carried out by Police Scotland in 2021 also confirmed this, and showed BWV had the ability to instil high levels of trust, confidence, and increased safety. Arguably, the surveys on public opinion of police BWV have included a very low number of citizens with direct experience of police BWV. Therefore, public opinion may be based upon normative assumptions that BWV is a good thing for the police to have. The survey of detainees in Australia (Taylor and Lee, 2019) also showed positivity about BWV use, possibly as a means by which some protection was offered to those being detained. This is interesting as it shows that BWV is not necessarily just for the benefit of the police. To date, much of the research around public attitudes towards BWV is in relation to basic camera units and it should not be assumed that the same levels of support apply to more sophisticated BWV units, for example those with face recognition or live streaming capability. Arguably, more longitudinal research could reveal how citizens' attitudes might change about BWV over time, as personal experience changes, although if citizens have little or no direct experience of it, then there will remain a knowledge gap. Just as the technologic is evolving, it should not be assumed that public opinion is static.

Rationale for Introduction of BWV

There is consistency across the UK and other countries regarding the rationale for introducing BWV. Internationally, the roll-out of BWV is still taking place, for example in PSNI, Metropolitan Police and other forces in England, the USA, Canada and Australia. The recognised (perceived) benefits of introducing police BWV tend to follow similar arguments:

- improving the investigation of complaints;
- reducing the number of unwarranted complaints against the police;
- reducing the number of assaults on the police;
- improving the quality of evidence and helping prosecutorial agencies;
- positioning BWV as being able to provide an indisputable version of events;
- increasing public confidence through improved transparency of policing operations;
- and
- increasing support to vulnerable victims.

There is mixed evidence on the use of BWV in reducing police use of force. Ariel *et al* (2016) found that there was a reduction provided the camera is switched on for the duration of the entire shift. However, other studies have revealed no measurable impact of BWV on police use of force or citizen complaints (Louis, Saulnier & Walby, 2019). There is also mixed evidence on the effects of BWV in reducing assaults on police, although reducing the level of assaults on the police has consistently been an objective of those promoting its introduction.

Negative Consequences of BWV

Some studies have questioned the completeness of BWV footage as it can usually only capture what happens directly in front of the camera and cannot present an entire version of an incident. In the UK, the technology can retrospectively capture between 30 and 60 seconds of what occurred previously once it is activated. There is also evidence of underlying mistrust

in the police by some members of the public in the belief that the police can corrupt the footage after the incident during which it was used. There are no uniform data processing/subject access request procedures across the UK. Police forces across the entire UK have stringent procedures in place to prevent access to BWV footage by the officers involved in an incident.

The lack of standardisation of policy and procedure surrounding police use of BWV across the 43 geographic forces in England and Wales, could lead to some inconsistencies of approach. PSNI and Police Scotland are better placed in this respect, being national police forces. The divergence of use, across different police forces in the UK, means that citizens get a differentiated service depending on where they live.

The use of officer discretion about when the recording device is activated or switched off is a central issue in determining what has occurred in any given situation. To that extent, it has been argued that the police can have an advantage in determining what evidence is recorded/presented. However, police forces in the UK and representative bodies such as the IPCC, the NPCC and the College of Policing have produced guidelines to front-line officers about the circumstances when BWV should or should not be deployed. This guidance would need to be revised if BWV incorporated live streaming of footage back to a control centre, or where the control centre could operate remote access to units.

BWV evidence can be used in domestic abuse situations leading to some women having to attend court, face their attacker and possibly experience re-victimisation under cross-examination. HMICFRS (2019), and the College of Policing (2014) for England and Wales have produced specific guidance on police use of BWV and taking of evidence from victims in domestic abuse situations. The availability of BWV in domestic abuse incidents can however help achieve prosecutions and is therefore a valuable tool.

Scrutiny and Oversight

The building of public trust and confidence in the police, and improving accountability and transparency are critical factors for the successful introduction or extension of police BWV. Some police forces in England and Wales (including some with neighbouring forces as part of a strategic alliance) and some Police and Crime Commissioners have established distinct bodies for the scrutiny and oversight of police operations involving BWV, or where BWV is included with other technologies and operations, such as tasers and stop and search. Further details are provided in **Appendix VII**. These bodies include for example: Governance and Scrutiny Panels, Police Powers Scrutiny Groups, Safer Neighbourhood Panels. Typically, they contain lay members, are often chaired by a lay member and act as a 'critical friend' to the Police and Crime Commissioners and the Constabulary. They can also 'hold local policing commanders to account' and in certain circumstances undertake 'dip sampling' of BWV footage and provide recommendations. Scrutiny and oversight of police operations involving BWV is also often undertaken internally by police forces in England and Wales, either through a BWV project board for example, or more informally through a tiered approach of 'dip search' access to BWV footage depending upon the seniority of the officer. The growth and development of these scrutiny and oversight arrangements can be regarded as a human response and counterbalance to the technological opportunities which police BWV provides.

It is evident that different internal and external scrutiny mechanisms exist within UK police forces and that best practice here is still in its infancy.

Other Issues

There is limited evidence of the impact of BWV within diverse communities, and within other groups such as: survivors, witnesses and perpetrators. This is notably absent from the published literature. There is a reasonable body of research into BWV and domestic violence, but a potential gap exists on the impact on women who testify, and the percentage of cases which are not pursued through the courts due to women being unwilling to testify due to concerns over revictimisation.

In certain circumstances BWV has been seen to exacerbate racial tensions. Racial tensions are very evident in policing in certain cities and areas of the US and Canada. There are also racial tensions in policing in the UK too, for example the Metropolitan Police was found to be institutionally racist in 1999 (Macpherson report). A YouGov poll in September 2021 found around equal numbers of around 36 per cent who believed that the Metropolitan Police was, and was not, institutionally racist (from a public sample of around 1700). There is contrasting evidence on the impact which BWV can play in race relations. Some evidence exists which shows that racial groups do not believe that police BWV will make the police more accountable or transparent (Ray, Marsh, and Powelson, 2017). Alternatively, there is evidence of support for police BWV from a survey of African Americans (Graham *et al* 2019) based upon the belief that 'videos don't lie'. There is some evidence that police BWV can mediate the behaviour of police officers (Ariel *et al* 2017) when they are aware that their activities are being filmed.

5. Recommendations

The evidence of BWV deployment in policing contexts, including police-citizen interactions and scrutiny mechanisms, presented in this review report point to a series of recommendations that can be considered before the widespread deployment of BWV in Scotland. Police Scotland is in an advantageous position, in that it can build on best practice from elsewhere and can implement scrutiny and accountability governance processes that can ensure public support and legitimacy for the use of this technology. The recommendations presented here are not prescriptive and they assume that any new protocols or institutional mechanisms are tailored specifically for the Scottish policing context.

Citizen and Community Engagement

1. BWV is often implemented to improve transparency and accountability of police-citizen interactions, following demands by politicians and civil rights groups. However, there is still limited research on citizens' perspectives on BWV use. **It will be important to continue such engagement and discussions with diverse members of the public to consider their concerns, as they have direct experiences of BWV.** The processes established by Police Scotland (e.g. the public consultation, national survey and focus groups) could be expanded so there is a longitudinal analysis of public opinion throughout the lifespan of the BWV programme to ensure ongoing dialogue with the

public. **There is a need for a continuous engagement with communities and citizens in all aspects of the development and use of BWV.**

2. **Building trust with vulnerable communities.** It will be particularly important to develop more systematic processes for engagement with citizens deemed more vulnerable i.e. youth, ethnic minorities, different religious beliefs, disabilities, previous experiences with the police and the criminal justice system. This is even more important when there are racialised tensions between police and community. **This can be realised through enhanced dialogue with such communities about BWV and other emerging technologies.**
3. There is a need for **continued research on BWV use and how this will impact public confidence in policing**, particularly within specific community groups. This is crucial if emerging technological capabilities are associated to BWV (i.e. facial recognition), as these might change public support for its use (Bromberg, Charbonneau and Smith, 2020). Different scenarios of police-public encounters (for example, 'stop and search', domestic settings) should also be considered when exploring citizens' perspectives on how BWV mediates those encounters.
4. It is recommended that **extreme caution is taken prior to merging BWV with other technologies or software processes**, and that the evolution of function and purpose could potentially damage public support for the technology, and consequently policing more generally. **Public support for BWV cannot be assumed if the technological capability of the technology changes.** This is especially pertinent to the use of face recognition and live streaming technologies.

BWV use in policing and best practice

5. The importance of **engaging with other public and emergency services** (such as other police forces, prisons, emergency, local government and transport services) to discuss BWV experiences and share knowledge and learning. A common benefit associated to BWV within these different services is the potential for gathering evidence of assaults by the public on staff. However, it is important to consider that these technologies vary in these services and their use is impacted by different organisational, social, and cultural dynamics.
6. It will be important to **always contextualise BWV use in Scotland**. Specific challenges might be faced depending on the operational unit or context of use. For example, deployment will significantly differ if BWV is used in the Central Belt of Scotland or in the Borders, Highlands and Islands. There are specific operational challenges to consider regarding the physical, spatial, and digital conditions of BWV use, i.e. the lack of light in more remote areas or connectivity and telecommunications network issues (Miranda, 2021). In this respect, **the provision of BWV must be shaped to national and local institutional and societal contexts.**
7. **Development of key lessons learned from the use of BWV by armed officers (Scotland).** Before issuing BWV to all frontline officers, it is important to obtain detailed

feedback from Police Scotland firearms officers regarding their experience with BWV in specific operational scenarios detailed in the Code of Practice on BWV (such as 'stop and search', domestic abuse, during an arrest or critical incident, etc). Their operational perspective and situated experience is invaluable when implementing these technologies more widely.

8. **Develop clear protocols covering all elements of BWV use.** This would include when to use BWV and all associated data processes. Such protocols should cover **operational and training matters, technical specifications, data protection requirements, performance indicators, a dedicated Code of Practice, and formalised mechanisms for accountability and governance.**

Governance of BWV: Legal and Ethical issues

9. To consider the recommendations and guidance made available by representative bodies such as The College of Policing (2014 and 2019) or the UK Information Commissioner's Office (ICO) to support the process of BWV adoption, training and implementation (from legal requirements and management of information to operational use and codes of practice). However, appropriate legislation balancing privacy concerns and use of recordings for law enforcement purposes is needed before BWV deployment (**pre-implementation focus**). This is particularly relevant if BWV is integrated with other technologies (such as facial recognition). **A constant review of BWV policy and privacy considerations** (privacy/data protection impact assessments), to ensure these issues are revisited when using BWV in policing practice, currently and in the future. This will be particularly important to address specific legal and ethical challenges emerging from new technological possibilities. **It is also important to ensure BWV use is compliant with relevant legislation, including the soon to be published ICO 'Code of Practice'** (due to be published in 2022).
10. British police forces have adopted different practices and processes of data management, and evidence shows difficulties with this approach (Palmer, 2016). **Police BWV policy and procedure should be standardised** across Scotland to avoid such inconsistencies. Broad framework of legislation can be applied in Scotland but tailored to this context. Further research in relation to different governance mechanisms and practices is still necessary. For instance, regarding BWV policies on how data is managed (namely, clear policies stating when BWV is turned on and off, how footage is edited, used in court or made available to the public, how accessible request systems are, etc). Clear guidance should also be established governing the exchange of BWV data with other police forces and public agencies, especially where facial images are deemed to be biometric and differentiated data collection processes exist.
11. **The development of strategies to improve scrutiny and oversight.** For example, to consider the introduction of bodies such as the scrutiny and legitimacy groups or the community panels, similarly to other police forces in England and Wales. This would allow continuous engagement with the members of the public regarding policing practice and the use of technologies such as BWV. **There is a requirement for an independent scrutiny mechanism to oversee the governance and operation of BWV.**

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Appendix I. The Research Team



The research supporting this rapid review of evidence was undertaken in November and December 2021 by a research team based at CRISP (Centre for Research into Information, Surveillance and Privacy), University of Stirling, Scotland. The Principal Investigator was Professor William Webster.

Centre for Research into Information Surveillance and Privacy (CRISP)

CRISP is a collaborative initiative between the University of Stirling, University of St Andrews, University of Edinburgh and the University of Essex. CRISP research focuses on the political, legal, economic and social dimensions of the surveillance society and particularly the unintended consequences and impacts of technologically mediated digital technology. CRISP's core aim is to generate and disseminate new knowledge about 'information, surveillance and privacy'. Specifically we aim to:

- Provide a platform for world class social scientific and legal research and knowledge exchange in CRISP's subject area;
- Provide an international focal point for existing and future research activities in this area;
- Build on existing synergies that exist, in terms of current research projects and interests, between the partner institutions and researchers, and thereby enhance research capacities;
- Provide a solid foundation for future grant applications and knowledge exchange activities;
- Provide a vibrant environment for doctoral training and supervision in this subject area;
- Provide a platform which will allow engagement with policy-makers and practitioners relevant to this subject area; and
- Engage with the public on relevant issues connected with Information processing, surveillance and privacy.

CRISP also incorporates the Scottish Privacy Forum, a group of Scottish privacy, data protection and information professionals. CRISP is directed by Professor Charles Raab (University of Edinburgh), Professor Kirstie Ball (University of St Andrews), Professor William Webster (University of Stirling) and Professor Pete Fussey (University of Essex).

Website: <http://www.crisp-surveillance.com>

Twitter: @CrispSurv

Professor C. William R. Webster, University of Stirling

William Webster is Professor of Public Policy and Management at the Stirling Management School, University of Stirling. He is a Director of CRISP (the Centre for Research into Information Surveillance and Privacy), a research centre dedicated to understanding the social impacts and consequences of technologically mediated surveillance practices. Professor Webster has research expertise in the policy processes, regulation and governance

of CCTV, surveillance in everyday life, privacy and surveillance ethics, as well as public policy relating to data protection, eGovernment, and electronic public services. He is currently co-Editor-in-Chief of the journal Information Polity, co-chair of the Scottish Privacy Forum and co-chair of the EGPA (European Group of Public Administration) Permanent Study Group on eGovernment, and between 2009 and 2014 he led the Living in Surveillance Societies (LiSS) COST Action. He has also led a number of international research projects, including the ESRC SmartGov (Smart Governance of Sustainable Cities) project and the European Commission funded Increasing Resilience in Surveillance Societies (IRISS) and 'ASSERT' projects.

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Dr Diana Miranda is a Lecturer in Criminology at the University of Stirling. Her research aligns criminological and sociological approaches to understanding emerging biometric and data driven technologies in the Criminal Justice System. In particular, she explores how surveillance impacts our bodies and identities through processes of technologically mediated suspicion: in policing, criminal investigation, smart cities, security of borders and prisons. Before Stirling and SCCJR, Diana worked in different UK HE institutions (Northumbria University, Keele University, Open University and Birkbeck - University of London) and also in Spain (U Girona) and Portugal (University of Minho, University of Porto and University of Coimbra). She has published widely on leading international journals such as Criminology & Criminal Justice, Policing & Society, Surveillance & Society, and Information & Communications Technology Law.

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Charles Leleux is a Research Assistant in the Stirling Management School, University of Stirling. He has worked on European Commission funded research projects involving surveillance in society, and an ESRC funded project (SmartGov, 2015-19) on the engagement of citizens in decision-making using new ICTs. He has worked as a senior manager in local government with responsibility for committee services, performance management, Best Value Assurance, and scrutiny and evaluation. He has published on a range of subjects relating to new technology and public services.

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Appendix II. Methodology

The research methodology supporting this review followed an integrated sequential process, from design to implementation, dissemination and impact, and through which knowledge was cumulatively created and becomes impactful. The research followed the following stages:

Table 1. Research Methodology

Stage	Research Activity
Stage 1.	Research design and methods negotiated/agreed with stakeholders
Stage 2.	Research methods implemented
Stage 3.	Research findings presented to stakeholders
Stage 4.	Research disseminated across multiple platforms for different audiences
Stage 5.	Realisation of research impacts and outcomes

The research consisted of two core methods: a (1) literature review and (2) interviews with BWV experts. The literature review consisted of a review of published academic, practitioner and media sources, including ‘grey’ literature. The literature review was conducted by the research team using a variety of search engines, but primarily Google Scholar for academic publications, and Internet searches for grey material which included news outlets - both broadcast media and published items. Multiple combinations of the search terms detailed in Table 2. below were used involving ‘snowballing’ techniques where one reference often led to another.

The search findings have not been quantified in terms of total numbers of articles or grey material identified. This was because of the very broad range of the search terms, the embedded nature of specific areas being searched, and the sequential nature of developing the searches. In total, over 100 published items were identified and are contained in the references section.

Table 2. Literature Review

Literature Review	
Search Terms	Findings
<p><i>Body worn cameras; Body worn video; Bodycams; Surveillance Cameras; Case Studies; Police; Policing; Police detainees; Police BWV trials; Bystander video; Public support; Public confidence; Criminal justice; Public services; Front-line services; Human rights; Ethics; Diverse communities; Benchmarking; Engaging citizens and communities; Domestic abuse; Local government, NHS front-line; Ambulance services; Firefighters, Railways, Prison Service; Wardens; Roadworkers; Information Commissioners Office; Surveillance Camera Commissioner; Scottish Government; Good practice; USA; UK; Northern Ireland; Scotland; Canada; Australia; New Zealand.</i></p>	<p><i>Final report and appendices.</i></p>

To support the emergent evidence base, 11 semi-structured interviews were conducted with key stakeholders. The interviewees were experts on BWV, especially in relation to policy, practice and regulation, and included representatives from a range of agencies with an interest in the police provision of BWV. Interviewees were anonymous and their names have been redacted in this final report. Interviews were conducted with representatives of the following areas:

- Scottish Police Authority;
- Police Scotland (2);
- Retired Police Scotland Superintendent;
- Crown Office and Procurator Fiscal Service;
- Scottish Biometrics Commissioner;
- Biometrics and Surveillance Camera Commissioner for England and Wales;
- UK Information Commissioner's Office ;
- National Police Chiefs Council (England and Wales);
- Devon and Cornwall Police; and
- An international Academic Expert on BWV.

The interviewees listed above had either agreed previously to be interviewed for this research as detailed in the research team's bid to undertake this commissioned work, or subsequently had been recommended for interview by the lead clients for the research. Interviews were conducted on MS Teams, they were recorded and transcribed. The interview schedule of topics discussed followed the general structure of the commissioned research presented in this report and was agreed with Police Scotland prior to implementation.

In 2022, and following on from the publication of this report a series of stakeholder workshops are planned, with the intentions of guiding and informing the provision of BWV in Scottish policing.

Ethics

Prior to undertaking this research formal ethics approval was granted by the University of Stirling General Ethics Panel (GUEP No.4304). Ethical considerations included the collection and storage of research data and the anonymisation of interviewee data. All interviewees were given a Participant Information Sheet and were asked to complete a Consent Form prior to being interviewed. The interview question schedule was circulated to interviewees prior to their interview. The Participants Information Sheet is attached at Appendix III, the Consent Form at Appendix IV and the Interview Guide at Appendix V.

Appendix III. Participant information Sheet



Participant Information Sheet

1. Research Project Title

Evidence Review into public experience and confidence of Body Worn Video in a policing context

2. Background, aims of project

We would like to invite you to take part in this research project developed at the University of Stirling. The research team (Professor William Webster, Dr Diana Miranda and Mr Charles Leleux) has prior experience of undertaking research into BWV in a policing context. This project aims to learn from that experience to provide a comprehensive review of what is known about the use of BWV in policing. This will support the provision of BWV in Scotland, by identifying: 1) legal and regulatory requirements, 2) identifying 'best practice' in provision and governance, and 3) 'best practice' in community engagement and public support for BWV.

3. Why have I been invited to take part?

You have been invited because this project is focused on the views and perceptions of BWV experts. This research aims to generate greater knowledge about the use of these cameras in policing contexts and your collaboration will inform this, particularly in relation to policy, practice and regulation.

4. Do I have to take part?

If you do decide to take part, you will be given this information sheet to keep and be asked to sign a consent form. You can withdraw your participation without needing to explain and without penalty by advising the researcher of this decision. You can withdraw your data within 2 weeks. To withdraw your data email diana.miranda@stir.ac.uk with your participant number (Participant Consent Form).

5. What will happen if I take part?

You will be interviewed on a one-to-one basis. This interview will be conducted online and it will last approximately 30 to 60 minutes (maximum).

6. Are there any potential risks in taking part?

There is a very small risk that sensitive or confidential information may be revealed. To help prevent these risks the interviewer will be careful not to lead participants to reveal anything that they would not otherwise wish to.

7. Are there any benefits in taking part?

There will be no payment for taking part in this project.

8. Legal basis for processing personal data

As part of the project we will be recording personal data relating to you. This will be processed in accordance with the General Data Protection Regulation (GDPR). Under GDPR the legal basis for processing your personal data will be public interest/the official authority of the University.

9. What happens to the data I provide?

The research data will be kept anonymous though the use of a pseudonym and participation number. Data will be stored on a secure data centre on the Stirling campus and it will be securely destroyed after 4 years from the date of collection.

10. Recorded media

We will ask all participants for their permission to record the interview (audio/video). If accepted, audio/ video recordings will then be transcribed verbatim. We will ask all participants for their permission to use direct quotes.

11. Future uses of the data

Due to the nature of this research, it is very likely that other researchers may find the data to be useful in answering other research questions. We will ask for your explicit consent for your data to be shared in this way and, if you agree, we will ensure that the data collected is untraceable back to you before letting others use it.

12. Will the research be published?

The research will be published for academic audiences (academic journals and conferences), practitioners (policing) and the general public. A report on the use of BWV in policing contexts will be written and presented to Police Scotland and other relevant stakeholders. You will not be identifiable in the report or any publication.

The University of Stirling is committed to making the outputs of research publicly accessible and supports this commitment through our online open access repository STORRE. Unless funder/publisher requirements prevent us this research will be publicly disseminated through our open access repository.

13. Who is organising and funding the research?

The Scottish Institute for Policing Research/ Police Scotland is funding this research.

14. Who has reviewed this research project?

The ethical approaches of this project have been approved via The University of Stirling General University Ethics Panel.

15. Your rights

You have the right to request to see a copy of the information we hold about you and to request corrections or deletions of the information that is no longer required.

You have the right to withdraw from this project at any time without giving reasons and without consequences to you. You also have the right to object to us processing relevant

personal data however, please note that once the data are being analysed and/or results published it may not be possible to remove your data from the study.

16. Who do I contact if I have concerns about this study or I wish to complain?

If you would like to discuss the research with someone please contact us:

Professor William Webster (william.webster@stir.ac.uk)

Dr Diana Miranda (diana.miranda@stir.ac.uk)

The University of Stirling, FK9 4LA, Stirling

You have the right to lodge a complaint against the University regarding data protection issues with the Information Commissioner's Office (<https://ico.org.uk/concerns/>). The University's Data Protection Officer is Joanna Morrow, Deputy Secretary. If you have any questions relating to data protection these can be addressed to data.protection@stir.ac.uk in the first instance.

You will be given a copy of this information sheet to keep.

Thank you for your participation.

Appendix IV. Participant Consent Form



Participant Consent Form

GUEP/NICR Approval Number [4304]

Participant number/ID []

Research Project Title:

Evidence Review into public experience and confidence of Body Worn Video in a policing context

Please initial box	
I confirm that I have read and understood the information sheet dated [09/11/2021] explaining the above research project and I have had the opportunity to ask questions about the project	
I understand that my participation is voluntary	
I understand that I am free to withdraw my data within 2 weeks without giving a reason, and without any penalty. I understand that beyond 2 weeks, when data analysis has started, it may not be possible to remove my data from the study.	
I understand that my responses will be kept anonymous and I give permission for members of the research team to have access to my anonymised responses.	
I consent to being audio/video recorded. The audio/video will not be broadcast or published.	
I am aware that I will not be named in any research outputs, but I could be identified by people I know through the stories I tell.	
I agree for research data collected in the study to be given to researchers, including those working outside the EU to be used in other related research studies. I understand that any data that leave the research group will be fully anonymised so that I cannot be identified.	
I agree for my quotes to be used, and I am aware that the research team will seek my direct agreement for any quotes to be attributed directly to me.	
I agree to take part in this study	

Name of Participant

Signature:

Date:

Name of Researcher

Signature:

Date:

Appendix V. Interview Guide



Evidence review into public experience and confidence of Body Worn Video in a policing context

Interview Guide

Note for Interviewer:

- Thank the interviewee for participating in the interview.
- Explain the purpose of the study and the interview.
- Check that Consent Form is signed and explain why the interview is being recorded.
- Explain that interview is meant to be 30mins long but may overrun.

Questions:

1. Just for the purpose of the recording and accuracy can you confirm your title/name, job role and institutional affiliation?
2. Could you explain your main roles, activities or responsibilities in relation to BWV?
3. Could you briefly say how you think BWV will/does impact on police-citizen/community relations in the following scenarios:
 - Armed police response
 - Stop and search
 - House visits (general)
 - Policing marches and/or protests
 - Attending road traffic accidents
 - During arrests
 - On the beat (general)
 - In the police station and at the custody suite
 - House visits (domestic abuse)
 - Attending an incident
 - Interviews/investigations

Potential follow up questions:

- In which communities (or circumstances) has BWV found to be most/least supportive?
 - How has the management and use of BWV been adapted to the different scenarios?
 - Are there any marginalised groups (e.g. people living with disability) which need a unique approach in relation to the use of BWV?
4. What do you think the main challenges are for using BWV in policing contexts (are there aspects of governance and use that need to be better understood):
 - Are there any legal issues that have to be navigated and are causing concern? (e.g.?)
 - Are there any data process issues that are causing concern? (e.g.?)
 - Are there any ethical issues that have to be addressed? (e.g.?)
 - Are there specific codes of practice developed for the use of BWV (e.g.?)
 - Are there satisfactory mechanisms for oversight and independent scrutiny? (e.g.?)

- Are there satisfactory practices in place to achieve transparency? (e.g.?)
- Which aspects of the above are most and least well developed? (e.g.?)

Potential follow up questions:

- How can BWV footage be shared with the general public, for example in an appeal (please give examples)?
 - How can BWV footage be used for monitoring the activities of police officers (please give examples)?
 - What types of training is available to police officers in relation to BWV?
 - Has there been any feedback from police officers about BWV training?
5. What do you think will be (is) the impact of the use of BWV on policing practice in relation to the following?
- How does the use of BWV relate to public confidence in policing?
 - In which scenarios do you think citizens would find the use of BWV acceptable or unacceptable (please give examples)
 - What BWV scenarios have been challenged or contested? And, in which do you think will be challenged?
 - How does BWV have a role to play when citizens complain about the activities of police officers?
6. How do you think BWV will evolve in the future, both in terms of deployment and technological capability?
- How do you see BWV being integrated with emerging technology (e.g. face recognition - either live or retrospective)?
 - What are the opportunities around innovation for BWV?
 - How is this evolution likely to influence police-citizen/community relations?

Thank you.

Appendix VI. Rapid Review Evidence Base

Police/Citizen Interaction Type	Literature	Interview Comments
Armed police incident	Multiple references to incidents where BWV was used. Police Scotland introduced BWV for all of its armed officers (600) prior to COP 26. BWV appears to be a standard requirement in England and Wales for attendance by armed officers at incidents (see interview response below on 'Attendance at Incidents'). Further research is required on the extent of this deployment in practice.	<i>'Armed police response is our highest end use of force and therefore comes with the greatest amount of scrutiny, both internally/externally. As such BWV and the evidence that it provides leads to a far greater level of transparency and accountability and therefore will create benefit for both external agencies and the public, and indeed internally for the service.'</i>
Stop and search	Initial search has some references to stop and search and BWV: Owens and Finn, (2018); and Coudert, Butin & Le Metayer (2015) who also refer to the term 'stop and frisk' by police officers using BWV in New York.	Interviews have revealed common practice in England and Wales of 'dip sampling' of BWV footage in stop and search scenarios by, variously: scrutiny bodies (sometimes involving lay members), Police and Crime Commissioners, and senior police officers up to Chief Constables.
Custody suite	Published research is limited on this area. The Determination of Sherriff Paspornnikov into the death of Kyle Stewart in 2019 cites BWV as instrumental in determining the circumstances surrounding his death (Sheriffdom of Grampian, Highland and Islands at Elgin, 2021)	<i>'The custody suite is already covered by CCTV within the police service of Scotland, however, there is additional benefit for having BWV to make sure that everything is seen and provides additional footage, and generally I think better audio quality. So looking at best practice from the National Police Chiefs Council (NPCC) and the experiences of England and Wales, to follow that full evidential chain until an individual is placed within a cell it does add value - particularly helpful in complaints about police.'</i>
House visits (General)	Published research is limited on this area.	<i>'..... if you look at the public consultation that we've undertaken, and it's extensive..... it shows that the public have a desire for us to use BWV in most circumstances. If we are to agree to that desire from the public, then in a general house visit you might well say that the police should then record all interactions. However, there's a contrary view to suggest that it would only be in contentious situations that BWV would be appropriate for use. That, in terms of our overall policy, is the way that we have come down: to say that actually it's only in those contentious situations because there's limited battery life and limited recording facilities within the equipment, so it's best used in the most appropriate circumstances.'</i>

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<p>House visits (Domestic abuse)</p>	<p>The literature review contains several references to BWV and domestic abuse in the Case Studies section. Advice to police forces on the use of BWV in domestic abuse situations appears to be under regular review and can be found in force BWV guidelines, HMCPSI reports, and College of Policing guidance (2014), which was updated in 2018.</p>	<p><i>'... there are considerations about the sensitivity of the situation that the police are entering. What it does do is provide additional corroborative evidence. The initial feedback from the victim, the state of the house, general circumstances, the demeanour of the suspect. And it provides a higher degree of evidence that can be provided to the wider criminal justice system - clearly in some circumstances there's a higher level of distress, or maybe children, and there's a judgment to be made. At the point where one would want to turn it off, which an officer might take and be able to justify, but I actually think in evidential terms it will provide additional corroborative evidence that will be of value to the wider system.'</i></p>
<p>Marches/protests</p>	<p>Published research is limited on this area. Indirect reference included in work by Ullrich and Knopp (2018).</p>	<p><i>'In terms of policing of protest, again, if it's a peaceful protest we don't need to record all of that. It's only when we get to the point where that behaviour moves to unlawful action that we need to take executive action. Sometimes demonstrations can be unlawful but still facilitated. So, it's only for when we move into a position where we'd be looking to arrest - there's a five-stage warning process that you'd want to record and show that had been undertaken prior to moving to an arrest.'</i></p>
<p>On the beat</p>	<p>Limited references, Smylka <i>et al</i> (2016) refer to other published work on beat cops wearing BWV in Milwaukee. Miranda (2021) provides specific interactions of police and citizen encounters.</p>	<p><i>'I don't think it's required to record everything that an officer does for the 10 hours, 12 hours that we may be on duty. There's a balance between their privacy and that has to be considered as well so that they can have a conversation with colleagues, they can use the facilities, they can take a refreshment so not everything needs to be recorded. I think it's about value within the wider evidential chain or to manage something that - where we end up in a complaint about police and our interactions with the public.'</i></p>
<p>Attending an incident</p>	<p>Published research is limited on this area.</p>	<p><i>'There's a difference here when we talk about the firearms world and the non-firearms world because from the firearms world there was governance that came out in 2016 that made it mandatory that BWV cameras must be used, and they must be worn. When you talk about the non-firearms world, the broad range of policing activities is so vast you would struggle to write them all down and make sure you haven't missed anything. I did a benchmarking request recently around all UK forces to understand what their guidance was to officers: do you mandate you must record, or you should record? Because that's still very much, you know, in debate. No two forces do the same thing. Some forces have gone, "you must record domestics, you must record stop and search", but everything else is officer discretion. We've gone slightly differently where, (in a) critical incident: there's an expectation you will record, but we wanted to</i></p>

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		<i>give the officers the discretion because they're knowledgeable of circumstances, at 2-3 in the morning that, when we wrote the policy, we weren't aware of.'</i>
Road traffic accidents	Published research is limited on this area. There is a published study of BWV and their use during police traffic stops in Turkey.	<i>'The deployment of BWV for road traffic accidents again is about evidential capture where there's a concern that criminal activity may have taken place. However, for the administration of first aid and general reporting of a road accident where there's no criminality involved, unless its behaviours that would warrant that (and what I mean by that is people getting angry, shouting, getting upset) but generally not for every road accident, we wouldn't see that we'd necessarily need to use BWV. '</i>
Interviews	Some evidence in the literature but will require closer examination.	<i>'The current compliance with, and our understanding of it in terms of the 2016 act would be that you need to be brought to a police station. However, there is a conversation that I wish to have with COPFS about the use of BWV for low level crimes and interviews taking place out with a police station, it provides that opportunity. I think that's more proportionate, and that's something that we would want to consider, but there are legal interpretations of the 2016 Act that we need to work through with the Procurator Fiscal, about the appropriateness of that.'</i>
Arrests	Limited published research (see Henstock, 2015).	General agreement that BWV footage is part of the evidential chain and therefore should be used.

Appendix VII. Examples of Good Practice of BWV Scrutiny and Oversight

Police Force	Policy/Body	Comments
Avon and Somerset Police and Crime Commissioner	Scrutiny of Police Powers Panel (SoPPP) Scrutiny of Police Powers Panel OPCC for Avon and Somerset (avonandsomerset-pcc.gov.uk)	<p>Implemented: 2017</p> <p>Aims/Scope: To act as a ‘critical friend’ to the PCC and Constabulary by providing feedback on reviewed Police Powers records. The SoPPP will review records and video footage, e.g. Taser use, deployment of Police Officer BWCs, Stop and Search and the use of force from a local citizen’s viewpoint. To improve and maintain public trust and satisfaction in the Constabulary. To support the openness and transparency of the Constabulary in delivering a high-quality policing service.</p> <p>Scrutiny and Oversight: The panel will review Records and BWV footage through a quarterly dip-sampling of documentation and video recordings. The Panel will provide a qualitative round table discussion on each case, focusing on a particular category of Police power deployed, a geographic area or specified record selection criteria. The review will look at the appropriateness of the use of the Police power, commenting on positive points as well as issues of concern and operational learning. This approach will be reviewed for effectiveness by the Panel as it progresses in its work.</p>
Bedfordshire Police, Cambridgeshire Constabulary and Hertfordshire Constabulary (BCH)	BCH20/005 Body Worn Video (BWV) Policy FOI201903504-June2019AnnexA.pdf (herts.police.uk)	<p>Implemented: Assumed to be 2015.</p> <p>Aims/Scope: Provide officers/police staff with correct procedures for collection, downloading, processing and presentation of video evidence and appropriate retention. This will be in compliance with relevant legislation and codes of practice. Ensure BWV is used correctly so that: BCH gains maximum benefit from the operational use of BWV; BWV is used for a policing purpose and that processes are accurate and transparent. Public safety, community confidence and the criminal justice process will be improved by providing additional evidence in the form of BWV footage of incidents attended by BCH.</p> <p>Scrutiny and Oversight: The BCH BWV policy includes a detailed Code of Ethics (2015). Single Points of Contact (SPOCs) have been appointed (with supervisors) to be responsible for dip sampling and reviewing captured footage to ensure compliance with legal requirements, policies and standards. Any issues will be dealt with accordingly in alignment with existing management procedures.</p>

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<p>Devon and Cornwall Police and Dorset Police</p>	<p>Public Information Leaflet on BWV (2018): <i>'BWV: What you need to know'</i> bwvideo-external-leaflet.pdf (devon-cornwall.police.uk) Surveillance Camera Commissioner: Certificate of Compliance, BWV (2018). scc20certificate20of20compliance.jpg (642x912) (dorset.police.uk) Webpage: Body Worn Video Dorset Police Governance and Scrutiny Panels.</p>	<p>Implemented: 2016 Aims/Scope: Officers will use video to record these incidents (and others where necessary for policing purposes): Stop and search or stop and account; Stopping a motor vehicle; Attending premises to make an arrest; Searching premises/land/vehicles; And also in other critical incidents where: Someone uses force against a another person or property; Giving an order to an individual or group under any statutory power; Where domestic abuse or modern slavery may be suspected. Scrutiny and oversight: Governance and Scrutiny Panels. The public have recourse by submitting Subject Access Requests through the police Data Protection Office.</p>
<p>Gloucestershire Constabulary</p>	<p>Body Worn Video Policy body-worn-video-policy (gloucestershire.police.uk)</p>	<p>Implemented: 2017 Aims/Scope: References will be made to the College of Policing guidance and legislation. This Policy will ensure: The integrity and continuity of any evidence or intelligence gathered; The admissibility, in court, of any evidence; Maintenance of public confidence in the police and their use of BWV; Adherence to legal requirements. Scrutiny and Oversight: BWV Project Board</p>
<p>Hampshire Constabulary and Thames Valley Police</p>	<p>Body Worn Video – Use and Deployment (31900 Policy) 31900_policy - body worn video - use and deployment.pdf (hampshire.police.uk)</p>	<p>Implemented: 2017 (although Hampshire was using BWV as part of trials in 2013 – Operation Hyperion) Aims/Scope: Achieving best evidence to protect and safeguard the vulnerable; Achieving best evidence to bring offenders to justice; Maintaining and improving public confidence; Being used at an individual users discretion where it will assist in delivery of a positive outcome for the community; Maximising the safety and confidence of officers and uses, and enhance legitimacy in policing through more effective and consistent procedural justice; Capturing any other activity as mandated by the Chief Officer's teams; Improving the professionalism of the service and in the professional development of staff. Scrutiny and Oversight: Not identified by research team. 'This policy will be reviewed on a regular basis or in response to significant changes in Force strategy, national policy or legislation.' 'Professional Standards Department and line management will not routinely search the back office system for misdemeanours or offences committed by users, but if a complaint is received interrogation of the system is an appropriate line of enquiry.'</p>

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<p>Humberside Police</p>	<p>Policy and Procedure: Body Worn Video (URN SC 96) <u>Body Worn Video Policy V5.0</u> (humberside.police.uk)</p>	<p>Implemented: 2019. Next review: 2022. Aims/Scope: Outline the use of devices, recording of evidence, storage and handling of data and maintenance of equipment; Ensure that officers comply with legislation and guidance to create best evidence for use in court proceedings and for other policing purposes; Achieve and promote public reassurance within our communities demonstrating the use of BWV as legitimate, proportionate and transparent. Scrutiny and Oversight: Senior Leadership Team SPOCs: Monitoring and reviewing operation of the policy locally. Additionally, there is a Police Powers and Scrutiny Group which comes under the control of the Humberside Police and Crime Commissioner (see next section).</p>
<p>Humberside Police and Crime Commissioner</p>	<p>Police Powers Scrutiny Group <u>Police Powers Scrutiny Group</u> (humberside-pcc.gov.uk)</p>	<p>Implemented: n/a Aims/Scope: Objectively scrutinise, recognise and promote good practice, and robustly challenge how Humberside Police exercise use of some of their legal powers. To report findings to the OPCC Independent Ethics and Scrutiny Board. Scrutiny and Oversight: The Group will meet at least quarterly and comprise of the following representative groups: Scrutiny Volunteers (at least three to attend to be quorate) – representatives to be recruited from those affected by the use of police powers, e.g. youth and BAME communities (OPCC to develop the recruitment). Force representatives: Leads for Stop and Search/Use of Force/Operational Support Team (OST), Force Data Lead(s). OPCC representatives: Statutory Operations Manager, Head of Assurance and Statutory Duties, Engagement Lead(s), Administrative Support. External representatives: Clinical Lead from Humber Teaching NHS Foundation Trust.</p>
<p>Greater Manchester Police</p>	<p>Body Worn Video: Policy & Procedure <u>Pan Greater Manchester Procedure for</u> (gmp.police.uk)</p>	<p>Implemented: 2020 Aims/Scope: This policy and procedure is intended to enable officers to comply with legislation and guidance to create evidence for use in court proceedings. It also stipulates the training required, use of the device, capture, retention of footage and how this will be shared. This will ensure maximum benefit from the use of BWV, ensuring 'best evidence' is secured and correctly retained in accordance with legislation, Force requirements and the Human Rights Act. Scrutiny and Oversight: GMP has undertaken engagement with communities as an essential part in its introduction of BWV including completion of a communication and consultation programme with the following bodies: Police and Crime Commissioner consultation: April 2013 to current; Questionnaire: Officers and members of the public: July 2014; Ethics Committee: September 2014 to current.</p>

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<p>Merseyside Police</p>	<p>Body Worn Video Policy and Procedure body-worn-video-force-policy.pdf (merseyside.police.uk)</p>	<p>Implemented: 2014. Latest version - October 2020. Aims/Scope: Putting the Community first by promoting public confidence through the appropriate use of BWV to maintain integrity and transparency; To ensure the integrity, retention and continuity of any evidence or intelligence gained; The admissibility, in court, of any evidence obtained; Bring more offenders to justice by the production of digital evidence; To improve the effectiveness of PACE interviews by way of presenting key evidence to the suspect; To modify behaviour to help prevent harm to the public and to deter people from committing crime and anti-social behaviour; To support our officers and staff whom may be subject to crime themselves in the course of their duties; Compliance with relevant legislation, force guidelines and the Human Rights and Equality Acts. Scrutiny and Oversight: ‘Appropriate use of BWV may be subject to scrutiny by supervisors, PSD and/or the Public Scrutiny Panel to ensure compliance, integrity and transparency.’</p>
<p>North Wales Police</p>	<p>Body Worn Video Policy body-worn-video-policy-144v1.5.pdf (northwales.police.uk)</p>	<p>Implemented: 2019 Aims/Scope: Ensure officers make the best use of BWV technology to ensure a safer North Wales by preventing crime and disorder and where appropriate gathering evidence to support bringing offenders to justice. BWV will achieve this by (inter alia) reassuring the public and improve trust and confidence. Scrutiny and Oversight: Not identified by research team. However, Policy does state: Compliance with Home Office and CoP Key Principle 7 (Forces will consult locally with their communities on the use of BWV).</p>
<p>Staffordshire Police and Crime Commissioner</p>	<p>Safer Neighbourhood Panels Local panels to examine police body camera footage, says PCC - Staffordshire Commissioner (staffordshire-pfcc.gov.uk)</p>	<p>Implemented: 2016 Aims/Scope: Safer Neighbourhood Panels, set up by Staffordshire’s Police and Crime Commissioner to scrutinise and shape policing at the most local level, will examine BWV footage from police officers. Scrutiny/Oversight: Local people, councillors and a magistrate sit on panels which have been established across Staffordshire and Stoke-on-Trent to hold Local Policing Commanders to account and look at wider criminal justice/community safety issues. Safer Neighbourhood Panel members have received training to examine video recorded on police BWCs from stop and searches. The training follows a report by the county-wide independent Ethics, Transparency and Audit Panel also established by PCC Matthew Ellis, which recommends mandatory use of BWV video for every stop and search incident in Staffordshire.</p>

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West Midlands Police	Force Policy Document: Body Worn Video Ops/34 Policy Template (west-midlands.police.uk)	<p>Implemented: 2019.</p> <p>Aims/Scope: To direct officers in the correct use of body worn cameras. To provide guidance on the correct procedures for the force to administer BWCs and the video that is produced by them; to provide specific guidance on: Training; Operational use; Auditing of hardware.</p> <p>Scrutiny and Oversight: 'The policy should be considered a living document and subject to regular review to reflect upon any Force, Home Office/ACPO, legislative changes, good practice (learning the lessons) both locally and nationally, etc. A formal review of the policy document, including that of any other potential impacts i.e. EQIA, will be conducted by 29.10.21'.</p>
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