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**Governing police-public encounters mediated
by the use of Body-Worn Cameras**

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Abstract

This paper explores emerging governance structures surrounding the use of Body-Worn Video (BWV) cameras in policing contexts, with specific reference to the UK. It reviews existing knowledge about the diffusion of BWV, in relation to the purpose of the technology, existing regulatory arrangements and the perceived benefits and impacts of the technology. The focus of the paper is the nature of police-citizen interactions mediated by this specific technology and roles played by emergent scrutiny mechanisms. The paper will identify and assess the different types of police-citizen interaction involving BWV, from armed responses to 'stop and search', and identify the existing rules, protocols and regulations governing their use in these scenarios. In the paper, it is argued that the rationale for the use of BWV in policing is well established, is afforded a good level of public support, and that it is also evident, that across UK police forces, there is differentiated use of the technology and associated governance mechanisms. The paper also establishes that across the UK there are novel emergent mechanisms used to govern BWV in relation to scrutiny and accountability. These include dedicated 'scrutiny panels', practices referred to as random 'dip sampling', as well as dedicated codes of practice and use protocols. Here, it is evident that across the UK the provision and practice of BWV deviates by police force and region, resulting in a governance 'patchwork'. The core underlying argument is the technology diffuses and 'lived experiences' shape use over time, and that simultaneously mechanisms for oversight and accountability emerge and are shaped by existing institutional arrangements. The research presented in this paper derives from an 'evidence led review' conducted by the authors for Police Scotland in November-December 2021 (Webster, et al. 2022). This review included an extensive literature review and interviews with key stakeholders. The outcome of the review is intended to inform the future provision of BWV by Police Scotland.

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 COP26 climate change summit, which took place in Glasgow during the first two weeks of November 2021¹.

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 face-recognition. Human rights, privacy and ethics issues are increasingly important as policing agencies seek to execute their 'legitimate authority' while balancing these citizen rights against the emerging possibilities which new technologies like BWV now offer. These possibilities include facial recognition software and automated evidence generation, yet there is concern about the possibility of 'constant' surveillance and threats to privacy which BWV can provide (Mateescu, Rosenblat and Boyd, 2016). BWV, as a technology and associated management practices, has now matured and 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.

This paper presents unique findings from an in-depth evidence led review of what is published/known about BWV in a policing context, with specific reference to police-citizen interactions and scrutiny and accountability mechanisms. Initially, the paper explains what is meant by BWV, the extent of diffusion, public support and the perceived benefits of the technology [sections 3, 4, 5 and 6]. Following this, the paper explores what is known about the impact of BWV on police-citizen interactions [section 7] and specific areas of concern [section 8]. Sections 9 and 10 identify and assess existing formal governance mechanisms in the UK and technology specific scrutiny mechanisms utilised by policing agencies. The final section, section 11, offers up some concluding comments and recommendations.

2. Methodology

This paper is based on commissioned research conducted for Police Scotland and administered by the Scottish Institute for Policing Research (SIPR) in 2021/22 (Webster et al. 2022). This research provided an 'evidence review' of the use of BWV in a policing context, with specific reference to police-citizen interactions and scrutiny mechanisms. 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 consisted primarily of two core

¹ United Nations Climate Change Conference, UK 2021, URL: <https://ukcop26.org>

methods: (1) an extensive literature review and (2) semi-structured interviews with high level BWV experts and policy-makers. 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. In total, over one hundred publications were identified and assessed for inclusion in the review. 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. Prior to undertaking the research formal ethics approval was granted by the University of Stirling General Ethics Panel (GUEP No.4304). The purpose of the research was to provide an evidence base to inform Police Scotland of best practice in BWV provision and use.

3. Body-Worn Video Camera Technology

The London Metropolitan Police provide a useful short overview of BWV:

"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).

The key point to note from this description is that we should not see BWV as simply technological kit - it by definition involves data processing of sensitive personal data, it is diffused alongside existing policing practices and institutional norms, and can be used in situations which influence citizen-state relationships and will influence the outcome of legal proceedings. Whilst BWV footage is seen as a source of 'independent' evidence of events and situations, its integration and use for policing purposes points to the technology not being 'neutral'.

4. Drivers for Body-Worn Video

For policing, the main drivers for the roll-out of BWV have tended to follow similar arguments, which include: (1) supporting the criminal justice process with better evidence; (2) increasing public confidence through transparency in policing; (3) increasing the potential of evidence-based prosecutions to support vulnerable victims; (4) improving the investigation of complaints; and (5) capturing events in a way that can't be captured in writing (Police Service of Northern Ireland, 2021). In the USA, there has been growing demand for police BWV, from legislators, the public and policing bodies. The reasons for these demands are varied and include: (1) public reaction to citizen deaths in police custody where no BWV was available, and in particular when these incidences involved young male ethnic minorities; (2) '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

(Newell, 2019); and (3) 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 (CPOA, 2017). In the USA, 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. A National Institute of Justice (NIJ) report from 2018 sets out the main benefits of BWV:

Table 1. The Perceived Benefits of Body-worn Video Cameras in Policing

Perceived benefit of BWV	Summary
Better transparency	BWV 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	BWV 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 behaviour 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	BWV 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	BWV footage may also be used as evidence in arrests or prosecutions. Proponents have suggested that video captured 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
Training opportunities	Law enforcement trainers and executives can assess officer activities and behaviour captured by BWV - 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

[Source: Adapted from NIJ, 2018]

5. Studies of Body-worn Video

BWV is now a reasonably well-established technology, with the perceived benefits largely well recognised, and consequently the technology has diffused widely into police settings. Prior to adoption a number of trials and evaluations took place to establish the viability of the technology and any impacts and consequences. These trials have taken place in a number of international settings, including: the USA (Schneider, 2018; NIJ, 2014; White, et al. 2017; Yokum et al. 2019; Ariel et al. 2017; Lum et al. 2019), Canada (Brown, 2020; Saulnier et al. 2021), Australia (Taylor, 2016; Palmer 2016; Clare et al. 2016), New Zealand (Briody and Prenzler, 2020) and the UK (Ellis et al. 2015; Ariel et al. 2017). These studies show a mixed picture of the impacts and consequences of BWV. They show some positive trends in the collection of evidence, complaints about police behaviour, public support and the number of assaults on police officers, but overall the benefits to policing tend to be overstated and are less significant than often 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”* (Yokum et al. 2019: 1). Further to this, a number of these studies raise concerns about the use of BWV in policing. Notable, are concerns about: discretionary use (Brown, 2020; Taylor, 2016); legitimate use and data process compliance (Bud, 2016; Palmer, 2016); evidence of impacts on prosecutions (Clare et al. 2021; Laming, 2019); ensuring accountability in use (Ariel et al. 2017); privacy and surveillance (Mateescu, Rosenblat and Boyd, 2016); and, evidence of adverse impacts on race relations (Glasbeek et al. 2020). Overall, whilst the technology has started to diffuse across policing, and the perceived benefits of the technology are well recognised, it is clear that the evidence base around the full societal impacts of the technology is still emergent and that further studies are required to fully understand the consequences for societal relations. This points to a need for a better understanding of the direct impact of BWV on citizen-police interactions and a focus of governance and accountability, to ensure oversight and legitimacy in use.

6. Public Support for Body-worn-Video

In academic literature and grey material there are numerous examples of public support for BWV, 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). Public support for BWV is further evidenced in a number of surveys, including Crow et al. (2017), Kerrison et al. (2018), Todak et al. (2021), and Graham et al. (2019). Here, there is unequivocal support for the technology and a sense that BWV will help improve citizen-police relations. Kopp and Gardner (2021) do note that it is not clear why the public support the use of the technology, because research on the potential benefits and related deployment issues is still in its infancy, and that there is diverse use of the technology in different local national and international settings, making broad statements about public support difficult to justify.

These studies give a mixed view of citizen and community experiences 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 that BWV technology is having an impact on citizen-state relations and changing the behaviour of both police officers and the public. It is further evident that attitudes change, or evolve, with citizens' 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 evidence base 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 many of the studies noted above, is the reliance on survey research and the subsequent 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 in-depth studies. Additionally, as more officers and citizens are exposed to the use of BWV so more questions are posed about its use.

7. Citizen-Police Interactions and BWV

Citizens and police officers interact in a number of different situations and contexts, and BWV may play a different role and purpose in each. This in turn, relates to its effectiveness and perceived legitimacy, and points to a need for a more nuanced understanding of how the technology should be used and governed. Experiences of, and attitudes towards, the technology, are likely to be different in different contexts and to evolve over time. The following section sets out a number of policing scenarios and what is known, from the existing evidence base, about the impact of BWV in these situations. The citizen-police interactions listed here are not comprehensive, just indicative of a number of citizen-police scenarios, they include 'stop and search', house visits and policing protests. For each 'type' of interaction presented in **Table 2**, there is a comment on the state of the evidence base and a sample quote from the expert interviews conducted for this research. The evidence presented in this typology points to a number of commonalities. That there is a conformity of views around the usefulness of BWV is certain discrete situations, namely for officers attending armed incidents and domestic abuse situations, and for personal protection, but that there is a much more limited evidence base supporting use in other interaction scenarios. Published research is appearing in relation to interactions like 'stop and search' and the policing of protests, but these tend to be isolated studies which inevitably call for more research. In this respect, the evidence base around the impacts and consequences of BWV use and citizen-police relations in many scenarios is scant, underdeveloped and emergent at best.

Table 2. Typology of Citizen-Police Interactions with BWV and the Emergent Evidence Base

Police/Citizen Interaction Type	Literature Evidence Base	Interview Comments
Armed police incident	Multiple references to incidents where BWV was used. BWV appears to be a standard requirement 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 research 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 a 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.
Custody suite	Published research is limited on this area.	<i>‘The custody suite is already covered by CCTV...however, there is additional benefit for BWV to make sure that everything is seen and provides additional footage, and generally I think better audio quality...that the full evidential chain until an individual is placed within a cell - 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>

House visits (Domestic abuse)	The literature review contains several references to BWV and domestic abuse. 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, including College of Policing guidance (2014; 2018).	<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 demeanor 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, there's a judgment to be made where one would want to turn it off, but I actually think in evidential terms it will provide additional corroborative evidence that will be of value to the wider system.'</i>
Marches/protests	Published research is limited on this area. Indirect reference included in work by Ullrich and Knopp (2018).	<i>'In terms of policing of protests, 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>
On the beat	Limited references. Smylka <i>et al</i> (2016) refer to other published work on police officers wearing BWV on the beat. Miranda (2021) provides specific considerations of interactions of police and citizen encounters.	<i>'I don't think it's required to record everything that an officer does for the 10-12 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 in the evidential chain - where we end up in a complaint about police and our interactions with the public.'</i>
Attending an incident	Published research is limited on this area. There is recognition of the diverse range of incidents attended by police officers and the benefits of discretionary use.	<i>'There's a difference here when we talk about the firearms world and the non-firearms world because from the firearms it is 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...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. (In a) critical incident: there's an expectation you will record, but we wanted to give the officers the discretion because they're knowledgeable of circumstances.'</i>
Road traffic accidents	Published research is limited on this area.	<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 (there is no need to use BWV).</i>

Remote interviews	Some discussion in the literature. Use of on-street interviews, without legal representation, and using BWV would be challenging for the UK legal system.	<i>'Our understanding of (current legislation) would be that you need to be brought to a police station to be arrested. However, there is a conversation about the use of BWV for low level crimes and interviews taking place out with a police station...I think that's more proportionate, and that's something that we would want to consider, but...we need to work through..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.

[Source: Adapted from Webster et al. 2022)

8. Body-Worn Video: Evidence of Areas of Concern

The BWV evidence base points to a few areas of major concern associated with the deployment of the technology. The two main concerns relate to the impact on citizen and community relations and technological developments that change the nature of the citizen-police relationship. Both are rooted in issues associated with human rights and ethical practice.

8.1 Body-Worn Video and Community Relations

Table 2 sets out a range of citizen-police interaction scenarios and the research evidence about what is known about the use of BWV in these situations. This line of thinking can be extended to consider the consequences of BWV on race relations in diverse communities. Çubukçu, et al. (2021) explore the role of BWV 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. In relation to race, Glasbeek, et al. (2020) report 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. Both studies cited here imply a degree of sensitivity is required around the use of BWV in diverse communities.

8.2 Body-Worn Video and Advances in Technology

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). 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 consider. 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 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. 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. Ringrose (2019) argues, that at the very least, cities and states should begin regulating law enforcement's use of facial-recognition software and that lawmakers must address the various dangers technological integration presents before we unwittingly become a surveillance state (Ringrose, 2019). Where BWV is combined with other technologies or software processes, its function and technological capability can change considerably and it cannot be assumed existing use protocols will suffice.

The evidence base on BWV also points to other areas of concern, including the degree to which: the main surveillance subjects are police officers and what this will mean for policing practice; the legal requirement for subject access requests are realised and actionable; the extent of police discretion in BWV use; and the degree to which data protection requirements are adhered to. 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, including front-line police, criminal justice organisations, regulatory bodies and the public. This has led to a range of scrutiny and accountability mechanisms across the UK and elsewhere.

9. Formal Governance of Body-Worn Video

In the UK, police use of BWV operates within a broad framework of legislation, codes of practice issued by regulators and other strategic guidance which may be used as a matter of good practice. At a formal level the data processes embodied in BWV are governed by rules established in: the European General Data Protection Regulation (GDPR); the Protection of Freedoms Act 2012 (POFA); the Biometrics and Surveillance Camera Commissioner's (Code of Practice on Surveillance Camera Systems) (England and Wales only); the Regulation of Investigatory Powers (Scotland) Act 2000 (RIPA), the UK Data Protection Act 2018 (DPA); and the National Strategy for Public Space CCTV in Scotland 2011 (Scotland only). In most cases, these rules and guidance are not technology specific but relate to the use of surveillance cameras generally. This would include the Information Commissioner's Office (ICO) Code of Practice: 'In the picture: A data protection code of practice for surveillance cameras and personal information' and the Biometrics and Surveillance Camera Commissioner's Code of Practice. Guidance specific to BWV has started to emerge, for example in Scotland, Police Scotland has published 'Body Worn Video for Armed Policing: Code of Practice' and 'Body Worn Video for Armed Policing Standard Operating Procedure', etc. (Police Scotland, 2021) (2) and, 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), which assesses the impact of BWV on police and public behaviour. In general, these rules and protocols provide instruction on how to comply with the minimum standards set in legislation, and often relating to data process requirements, and how to maximise operational use of the technology - but less on how to navigate human interactions around the technology or mechanisms to ensure oversight is realised. Together, these regulations and frameworks, combining general rules and technology specific protocols, offer a patchwork of governance rules that are difficult to interpret and offer considerable discretion in both use and how the technology is managed and governed. This poses challenges for policing agencies wishing to deliver best practice in legitimate use and effective oversight.

10. Use Protocols, Scrutiny and Oversight

As BWV has become more commonplace in policing guidance documents and use protocols have started to emerge. 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. Examples of good practice, both in relation to use protocols, and scrutiny and oversight mechanisms, are provided in **Table 3**. In essence, this table provides a comprehensive overview of good practice relating to BWV scrutiny and oversight by police in the UK. Here, the practices covered include dedicated use protocols and codes of practice, through to 'dip sampling' and formal institutionalised scrutiny panels. Also, examples of Police and Crime Commissioners have been included, where these relate to citizen engagement with explicit oversight of BWV.

It is important to note that in the UK there is no single model or approach for scrutiny and oversight of police use of BWV. So, just as BWV practices differ between police forces, so do governance arrangements designed to offer forms of accountability. From **Table 3**, there are some clear emerging trends: (1) that use protocols, codes of practices and policy documents exist in a number of police forces and have done so for some time; (2) that these protocols, codes and policies differ by police area and are region specific, meaning the citizen-police interaction with BWV is partly determined by where the interaction takes place; (3) that a number of police forces have established generic oversight bodies, often including lay representation, such as 'scrutiny panels', to provide oversight of the police use of emerging technologies; (4) that very few police forces have introduced dedicated technology specific scrutiny mechanisms for BWV; and, (5) that a small number of police forces have introduced novel techniques, such as 'dip sampling', to review the way BWV is used. Dip sampling is a practice that can be undertaken by a senior police officer or an authorised member of the public to periodically and randomly check citizen-police interactions captured by BWV. This checking is distinct to where BWV footage is used as evidence of incidents for prosecution or of complaints about police behaviour.

In sum, the widespread use of BWV is not matched by technology specific oversight and governance mechanisms, as the focus has been on effective use and not management and governance issues. Novel accountability mechanisms are emerging, but these are the exception and not the norm and in most cases there are no mechanisms for redress, other than through standard police complaints procedures. It is also apparent that all existing oversight arrangements are internal or aligned to policing institutions and that independent external scrutiny mechanisms are rare.

Table 3. Examples of Good Practice of BWV Use Protocols and Scrutiny and Oversight Mechanisms in UK Policing

Police Force	Policy/Mechanism	Comments
Avon and Somerset Police and Crime Commissioner	<p>Scrutiny of Police Powers Panel (SoPPP) Scrutiny of Police Powers Panel OPCC for Avon and Somerset (avonandsomerset-pcc.gov.uk)</p>	<p>Implemented: 2017. 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 and to support the openness and transparency of the Constabulary in delivering a high-quality policing service. 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)	<p>BCH20/005 Body Worn Video (BWV) Policy FOI201903504-June2019AnnexA.pdf (herts.police.uk)</p>	<p>Implemented: Assumed to be 2015. 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. 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>
Devon and Cornwall Police and Dorset Police	<p>Public Information Leaflet on BWV (2018): ‘BWV: What you need to know’ 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>
<p>Humberside Police</p>	<p>Policy and Procedure: Body Worn Video (URN SC 96) Body Worn Video Policy V5.0 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 Police Powers Scrutiny Group (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 Pan Greater Manchester Procedure for (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.</p>
<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>

North Wales Police	<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.</p> <p>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>
Staffordshire Police and Crime Commissioner	<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.</p> <p>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>
West Midlands Police	<p>Force Policy Document: Body Worn Video Ops/34 Policy Template (west-midlands.police.uk)</p>	<p>Implemented: 2019. 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>

[Source: Adapted from Webster et al. 2022]

11. Concluding Comments

There is consistency across the UK and other countries regarding the rationale for introducing BWV. Internationally, the recognised (perceived) benefits of introducing police BWV tend to follow similar arguments: (1) improving the investigation of complaints; (2) reducing the number of unwarranted complaints against the police; (3) reducing the number of assaults on the police; (4) improving the quality of evidence and helping prosecutorial agencies; (5) positioning BWV as being able to provide an indisputable version of events; (6) increasing public confidence through improved transparency of policing operations; and (7) increasing support to vulnerable victims. Research also shows that the public has consistently supported police BWV. Arguably, 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. 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. Just as the technology is evolving, it should not be assumed that public opinion is static.

The evidence base around the role played by BWV in shaping citizen-police interactions is also a 'mixed bag'. 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. 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 BWV will make the police more accountable or transparent (Ray, Marsh, and Powelson, 2017) and that BWV may exacerbate racial tensions. 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', and 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. There is also 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 and 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.

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 UK police forces 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. These bodies include for example: Governance and Scrutiny Panels, Police Powers Scrutiny Groups, and 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, 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.

The evidence of BWV deployment in policing contexts, including the police-citizen interactions and scrutiny mechanisms, presented in this paper, point to a series of recommendations that should be considered before the widespread diffusion of BWV. These would include: (1) a need for continuous engagement with communities and citizens in all aspects of the development and use of BWV; (2) continued research on BWV use impacts on public confidence in policing; (3) that extreme caution is taken prior to merging BWV with other technologies or software processes; (4) that public support for BWV cannot be assumed if the technological capability of the technology changes; (5) that clear protocols covering all elements of BWV use are developed, including 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; and that the provision of BWV must be shaped to national and local institutional and societal contexts.

The lack of standardised policy and procedures surrounding police use of BWV across the UK leads to deployment inconsistencies. The divergence of use, means that citizens get a differentiated service depending on where they live. Moreover, it is evident that different internal and external scrutiny mechanisms exist within UK police forces and that best practice is still in its infancy. The current situation provides police forces with considerable discretion in how they use and manage BWV, although it cannot be assumed this will always be the case.

12. References

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