STARTING AN EMS BODY-WORN CAMERA PROGRAM

They bring lots of protection, but there’s a lot to get right

By Erik S. Gaull, NRP, CEM, CPP

First of two parts
About half of police departments in the United States have implemented some sort of body-worn camera (BWC) program. Adoption of BWCs by law enforcement agencies has roughly doubled since 2014, the year of the officer-involved shooting of Michael Brown in Ferguson, Mo. Axon, Inc., the largest manufacturer of BWCs in the United States, has seen growing interest in the use of BWCs by EMS agencies in the United States and elsewhere. [Disclosure: the author holds stock in Axon, Inc.]

In conjunction with Axon, Cypress Creek EMS (CCEMS), outside Houston, Texas, initiated a trial BWC program that ran for 18 months between 2013 and 2015. The program was a success, and in 2019 CCEMS became the first EMS agency identified in the United States to require BWC use by its lead field providers on every unit.

According to CCEMS Assistant Executive Director Wren Nealy, BWCs “improve clinical practice and the safety of our personnel” and have not resulted in any complaints from patients or the medical community. The London Ambulance Service began a BWC program in late 2018 to help keep its responders safe from violent patients, and New South Wales Ambulance in Australia began its program in late 2019.

Why Use BWCs in EMS?
There are both pros and cons to making recordings of EMS patient encounters. The main anticipated benefits include higher-quality patient care, better behavior (from both providers and patients), and stronger evidence for legal proceedings. EMS quality assurance (QA) and training programs can use videos captured during calls to identify both good and poor patient care. It will soon be possible to use BWCs as telemedicine cameras to enable base station physicians and nurses to see what field personnel are seeing in real time. Additionally, using an app, EMS personnel can play videos recorded in the field for emergency department personnel to improve the quality and amount of information communicated during a patient handover. A recent pilot study in Hennepin County, Minnesota, suggests BWC recordings allow EMS personnel to produce higher-quality patient documentation because they can review time-stamped videos of the encounter as they write their reports.

BWC videos also give supervisors the ability to know what happened on any given call without having to be there in person, and they can help improve employee behavior because personnel know their actions are subject to review. A 2015 study of BWC usage in law enforcement demonstrated that the cameras created a neutral “third eye” that deescalated interactions and led to improved behavior on the part of both suspects and officers. There is every reason to believe this same effect would occur in an EMS setting as well.

Contemporaneous BWC recordings are admissible in court as evidence because commercially available BWC systems are designed with a chain-of-custody and antitamper mechanisms in mind. Videos can also provide solid documentation of refusals of care—something that can be hard to do well in a patient care report.

Videos of patient encounters can also be pivotal in substantiating or disproving assault allegations against either providers or patients, especially during transport, when only the patient and provider are in the patient compartment of the ambulance. Recordings can show patient care was either adequate or substandard. As long as providers deliver treatment according to their standard of care, recordings can help reduce legal liability.

Arguments Against
Those against using BWCs in EMS tend to cite one or more of three basic arguments: the increased likelihood of an agency or a provider being held liable in a lawsuit if the video demonstrates poor patient care; objections to “big brother” watching providers’ every move; and the costs associated with implementing and maintaining a BWC program.

The first of these arguments is undeniably valid. BWC documentation of poor patient care could certainly make it harder to defend a negligence lawsuit. However, as attorney Matthew Streger of the EMS law firm Keavney and Streger points out, “If you provide good care and do what you’re supposed to do, then you have nothing to worry about. Even when care may be lacking, if you can show you’re using the BWC videos to do QA and you’re working to improve standard care when you identify it, you will be in a more defensible position. In either case, you’re better off with a BWC showing exactly what happened than if the events are left up to the imaginations of attorneys and jurors.”

Streger further points out members of the public record many scenes with their cell phones. “I want an EMS BWC recording that doesn’t have gaps and shows care from our perspective in order to present a full picture of what may have happened,” says Streger.

Employees may express concerns about being watched all the time when a BWC program is being planned; however, as the law enforcement BWC experience has demonstrated, these fears generally give way to an understanding that the protection BWCs offer outweighs the concerns officers may initially have. As a recent study suggests, after gaining experience with BWCs, law enforcement offi-
The benefits of decreased liability and higher public confidence in an agency could far outweigh the costs.

Ccers generally viewed them positively and felt that “no good cop should fear a camera.”

Finally, while BWC programs do represent an additional cost, they might not be as expensive as one might think, and the benefits of decreased civil liability and increased public confidence in an agency and its providers could potentially far outweigh costs associated with implementation.

Policy Development
Nealy suggests developing sound BWC policies is the cornerstone to a successful EMS BWC program. “Privacy concerns and the added concern of PHI/HIPAA mandate a sound policy that governs the use, storage and protection of that video,” he says.

According to Nealy, interested agencies should begin by forming a BWC policy committee consisting of management, frontline providers, labor representatives (in unionized agencies), legal counsel, hospital administrators, and medical direction. The committee should address policy considerations including BWC operational guidelines, permissible video uses, storage practices, protected health information (PHI) issues, and state laws governing the making of recordings.

Operational Concerns
Personnel need to know when recordings should and should not be made. Should a recording be started when the call is received or when the provider makes contact with the patient? Some agencies may wish to capture the response as well as the on-scene and transport portions of calls.

For some agencies in-vehicle cameras may capture the response. For others it may be too expensive to store the additional video. There is no right answer as to when to initiate the recording; however, the agency will need to give its personnel clear guidance on this issue.

Likewise, the policy will also need to state when a recording may (or must) be ended. For example, a policy might state that personnel may end a recording once the patient signs a refusal. Other agencies may wish to capture the patient transfer. Exactly when to end a recording is a matter the policy committee must decide and make clear. Similarly, the policy should delineate areas off-limits to recording (e.g., public rest rooms, security-related facilities).

The policy should also address when and how videos are to be “tagged” (the process by which metadata is attached to the video file), the resolution required (this is generally selectable by the agency and preprogrammed for all BWC devices), and the amount of pre-activation recording time. This last feature refers to the amount of video buffered prior to manual activation of the camera by the user.

Most BWCs can be programmed to record continually without user activation but to keep only a certain number of seconds of video before the record button is pressed. This ensures that events leading up to an activation will be included in a recording, which is valuable when circumstances change rapidly.

For example, if an EMT were suddenly to be assaulted while not on a call, it would be nice to have the moments leading up to the assault recorded. Agencies can determine how long this buffer should be, with the understanding that long videos cost more to retain.
PHI Concerns

One of the most frequently raised policy issues deals with how the privacy provisions of the federal Health Insurance Portability and Accountability Act (HIPAA) affect BWC recordings. The answer, according to Streger, is that making recordings while rendering patient care is perfectly permissible under HIPAA, but the law requires an EMS agency to maintain the confidentiality of such recordings because they contain protected health information. This means agencies must safeguard against the unauthorized release of BWC videos.

Commercially available BWC systems already address this because of the evidentiary value of the recordings in judicial proceedings, but agencies wishing to store videos on secure commercial servers would need to execute a HIPAA business associate agreement to be fully compliant with HIPAA. Users upload BWC videos to a secured evidence retention system, and access to stored videos is limited to only certain users with a legitimate need to see them.

Further, video storage systems prevent the videos from alteration (although agencies can redact videos for certain authorized releases). Under HIPAA, patients (or their authorized representatives) must be given access to videos that are part of their medical record in the same way they must be able to get copies of their patient care reports.

Consent Concerns

Another privacy concern deals with patient rights with respect
to making a recording. In some states only one party need consent to a making a recording; however, currently in 16 states both parties must consent. It is important for BWC policies to spell out how EMS personnel must obtain consent and when it is permissible for a patient to revoke or deny it.

Permissible Use

BWC policies must also address the circumstances under which agencies may make copies of videos and the process for their legitimate release. BWC policies should clearly delineate what constitutes legitimate use of BWC video.

These may include QA review (an area expressly permitted under HIPAA), telemedicine and patient handover, preparation of a legal defense, training, discipline, and compliance with any legal court order. Finally, no BWC policy would be acceptable without clearly prohibiting unauthorized viewing, downloading, or release of videos (especially on social media).

Streger stresses that policies should address the use of BWC videos within an agency’s overall QA program. Discovery laws vary from state to state, so it is important the BWC policy committee thoroughly research the applicable laws and work with legal counsel to ensure the BWC policy will be legally sufficient to protect videos from release under simple Freedom of Information Act requests while still allowing agencies to access them for self-critical analysis.

Retention Concerns

Video storage on secure servers can be expensive, so the retention policy should prescribe a standard length of time after which videos are expunged automatically. Because records retention laws vary by state, legal counsel should weigh in on how long videos should be retained.

It is important to have a mechanism by which videos are preserved for use as evidence. If the agency deems the video to be part of a patient’s medical record, it may be required to keep it longer than it would otherwise want to (which could be extremely expensive, depending on call volume).

Streger recommends agencies weigh the idea of considering videos an adjunct to the call information, but having a standard time (e.g., 180 days) after which deletion occurs unless the agency is put on notice by an attorney that the videos would be needed as part of a legal case.

Since the time frame for notification of a pending lawsuit against an agency varies from state to state and depends on the type of agency involved, the BWC committee should be sure to create this policy with applicable laws in mind.

Discipline Concerns

One potential area of concern is that agencies will use BWC videos against employees in disciplinary cases. Nealy says carefully crafted policies can address such concerns: “We made it clear in our written policies that unless you commit a criminal act or something so egregious that we can’t get past it with remedial training, we will not use the videos for discipline or terminations.”

Nealy indicated the videos could be used in a discussion about what providers might do better in the future or more appropriate ways to interact with a patient, but they could not be used for formal discipline. While avoiding discipline, these videos will be invaluable in providing remedial training and process improvement for EMS providers and systems.

Legal Review

Legal counsel must thoroughly review all aspects of the BWC program for compliance with all applicable statutes. These include HIPAA, any state laws governing video and/or audio recording of conversations, state/local records retention laws, self-critical analysis and other privileges, applicable Freedom of Information requirements, and any other laws or regulations that might be relevant.

The importance of thorough and competent legal review cannot be overstated. Be cognizant that good legal review can take time. For CCEMS it took four months. Allow sufficient time in the implementation process to ensure legal review is not rushed.

Looking Ahead

This article has covered the rationale for implementing a BWC program in an EMS agency and some of the policy issues agencies must consider. A future article will address decisions agencies will need to make, including BWC features and operations, security, costs, and logistical realities in various EMS settings.

REFERENCES

3. Donnelly L. Paramedics to be given body cameras to protect them from violent patients. Telegraph, 2018 Jul 1; https://www.telegraph.co.uk/news/2018/06/30/paramedics-given-body-cameras-protect-violent-patients/.

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EMSWorldExpo.com OCT. 4–8, 2021, ATLANTA, GA
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There is increasing interest in the concept of body-worn cameras (BWCs) for EMS providers. A previous article (www.emsworld.com/article/1224612/starting-ems-body-worn-camera-program) explored the reasons for implementing an EMS BWC program and the legal and policy issues an agency should consider. This part discusses practical and logistical issues that must be addressed.

**BWC Selection Factors**

There are a number of commercially available BWCs an agency could consider using. No single BWC is right for every department or every use case.

Before making a purchase decision, an agency would be wise to speak with nearby law enforcement agencies to find out what make and model of BWCs they are using, how the agencies like them, and procurement/operating costs and other considerations. In addition, field personnel and supervisors should field-test several makes and models of BWCs. A formal program should be established to evaluate various types. Each model tested should be evaluated using common criteria. To ensure apples-to-apples comparisons, all criteria should be clearly defined, and employee testers should be trained thoroughly on the use of each BWC being tested.

Factors to consider in making a selection include ease of operation, mounting options, cost, durability, battery life, video quality, and video storage options.

**Ease of operation**—How difficult is the camera to activate and deactivate? Can it be activated or deactivated accidentally? How easy is it to upload and store videos at the end of a shift? How will videos be “tagged” (i.e., labeled for storage so they can be readily searched and located after uploading), and how easy is it to tag videos? How much training is required to enable field personnel to use the BWC?

**Mounting options**—Some chest-worn BWCs use a magnetic mount, while others use a clip. While magnetic mounts are convenient, the camera can be knocked off if bumped or brushed with sufficient force. This could happen while restraining, carrying (e.g., in a stair chair), or transferring a patient. Depending on the design, a chest-mounted clip may be a viable alternative, but clips can break, and some may not offer any easier placement than a magnetic mount.

One drawback of a chest-mounted BWC is that the camera records what is happening in front of the user’s chest, not where the user
is looking. BWCs mounted on eyewear offer the best view of what the wearer is actually seeing during the recording; however, such units are generally wired to a belt-mounted battery/recording mechanism, which some users find ungainly. Additionally, some users may not like to wear eyewear all the time, and cameras can make the eyewear feel lopsided.

Other alternatives include collar- or epaulet-mounted BWCs. Both have similar drawbacks to eyewear-mounted BWCs, and neither option shows where the user was looking.

Cost—A study by the Department of Justice’s Office of Community Oriented Policing Services indicates BWC acquisition costs can range from $120 to $2,000 per unit. However, the true cost of a BWC includes much more than the initial price of the camera itself. Additional costs include maintenance, charging/uploading systems, video storage, replacements/spares, legal or administrative fees for complying with Freedom of Information Act (FOIA) requests or subpoenas, and (depending on the size of the agency and number of cameras purchased) a system administrator. Moreover, agencies will need to decide whether cameras can be shared because special procedures will need to be put in place to allow this, even though doing so may cut down on procurement costs.

Durability—BWCs are used in some unforgiving circumstances. Therefore, EMS agencies are well-advised to consider the relative durability of the BWCs they consider for purchase. Durability factors include life cycle, construction, ingress protection (IP) rating, and warranty.

- Life cycle—Consulting with area law enforcement may provide an EMS agency some idea of the relative life cycles of different units. While a longer life is generally preferable, as with other types of technology, features and capabilities of BWC units are constantly evolving, meaning a long life cycle may lock an agency into a BWC that becomes outdated or even obsolete.

- Construction—Agencies should also consider the construction of the BWCs. Questions to answer include whether the BWC is purpose-built or simply an app on a smartphone, materials used in manufacturing the BWC, and what kinds of testing have been performed (e.g., drop testing, submersion testing, real-life field testing).

- IP rating—The ingress protection (IP) rating is a universally accepted measure that defines how well the BWC prevents dust and moisture from entering. The greater the number, the better the protection. Although no minimum standards or recommendations exist in the United States for BWC IP ratings, the United Kingdom Home Office suggests a minimum rating of IP54 (i.e., protection against dust penetration and water splashes), although the report indicates that “most devices are at least IP65 (i.e., dust-tight and waterproof up to 1 meter depth).”

- Warranty—Purchasers should compare the warranties of each BWC being considered to ensure the best possible protection.

Battery life/recharging—Most BWCs are equipped with rechargeable batteries designed to last for an eight-hour shift (or longer) with normal use. Of course, actual battery life will vary based on agency recording practices. For example, a low-volume EMS agency might require BWCs be turned
on only after a call is dispatched, whereas in a high-volume EMS system, it may be easier to require that BWCs be turned on at the beginning of a shift and left on for the duration. Agencies should carefully weigh shift length versus estimated battery life to minimize the need for crews to recharge batteries midway through shifts.

BWCs are recharged through either a cable or a rack. The recharging system usually doubles as the means to upload videos for storage (unless this can be accomplished via Bluetooth or Wi-Fi). Racks tend to provide a faster charge and video upload, but they necessitate leaving the BWC in the rack for a while. Cables offer the convenience of recharging in a vehicle, at the station, or at home (which might be very convenient for EMS systems in which providers respond from home); however, cables are generally slower for both recharging and uploading videos. If a cable is used, agencies should consider whether the cable uses a standard USB or proprietary connector.

Video quality—As with other video recording systems, BWC recording capabilities range in quality from standard definition (SD) to high definition (HD), but a few are capable of ultrahigh-definition (UHD) recordings. The essential tradeoff is that higher-quality recordings (HD and UHD) consume commensurately more storage space (and hence cost).

When thinking about video quality, agencies should also consider whether a unit has a “night mode” (i.e., is capable of recording in low-light conditions) and what its lux rating (i.e., the minimum amount of light needed to produce an acceptable image) is. Most...
BWCs in common use have a lux rating of 1 (i.e., they can record in conditions comparable to dusk) or lower, and some have a lux rating of 0 (meaning they can produce an image in complete darkness).

**Video formats**—A final point of consideration is whether recordings are stored in a proprietary format that requires special viewing software. Such formats provide additional security precisely because most people would not be able to view a video were one to be accidentally released; however, if videos are stored in a proprietary format, an agency must be able either to convert the video to a commonly accessible format or provide a special viewer if the video is to be released to comply with a Freedom of Information Act request or subpoena.

**Conclusion**

BWCs offer promise for EMS agencies to improve care through better quality assurance and documentation. They can also provide solid evidence of the circumstances and quality of care as well as patient, provider, and bystander behaviors. BWCs are not all the same, so it is essential that EMS agencies make their procurement selection based on careful assessment of the various points of consideration presented in this article. Agencies need to weigh the pros and cons against the costs of the BWCs themselves as well as continuing costs for storage, administration, and maintenance.

**REFERENCES**


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