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## Update on Body Worn Video and Street Checks

Police Diversity Working Group October 29, 2018

# **Body-worn video**

Review of the evidence and implications for HRP – presentation given to Board of Police Commissioners







- What problem are we trying to solve?
- Review of recent literature
- Cost and cost-effectiveness of BWV
- Implications for HRP





# What problem are we trying to solve?

- The **primary categories** used in police services elsewhere to justify the implementation of BWV are:
  - Public confidence and transparency
  - Behavior modification (both officer and public)
  - Collection of Evidence
  - Non-criminal litigation
- These areas are all worthy of attention and continuous improvement:
  - However, we do not at present know if BWV represents an *effective strategy* and/or *the most appropriate strategy* to achieve improvements.
  - Recent literature may provide some guidance on what to expect from BWV.





# Summary of recent literature on BWV (1)

- The predominant themes in existing literature relate to the impact of BWV on:
  - citizen complaints
  - officer use of force
  - officer injuries/assaults on officers
  - use of BWV content in court cases, and
  - public and police attitudes toward BWV
- Overall, the results of research on the effectiveness of BWV have been mixed with different studies suggesting BWV has positive, nil, or negative effects.





## Summary of recent literature on BWV (2)

- Literature on BWV deployment shows impacts on citizen complaints and officer use of force, but only when officers have low discretion on when to turn cameras on/off.
- BWV can also introduce unintended or negative consequences such as increased violence against police, decreased professional discretion, and increased officer use of force.





# Summary of recent literature on BWV (3)

- Members of the public in English-speaking jurisdictions are largely supportive of BWV, however support is lower among people with more negative attitudes toward police.
- The measured positive effects of BWV may decrease or disappear over time
- There are many unanswered questions about the policy and legal basis, related to:
  - Privacy for citizens (and to a lesser extent for police employees)
  - Workload for police officers and records clerks
  - Workload for PPS, defense attorneys, courts





# Summary of recent literature on BWV (4)

#### HIGH-END MEASURES OF EFFECTIVENESS

- 90% reduction in complaints (Ariel et al 2015), possibly as high as 96% with 'full compliance'/low discretion (Hedberg et al 2016)
- No effect on officer injuries (White, Gaub and Todak 2017)
- 50% reduction in use of force during arrests (Henstock and Ariel 2016; White, Gaub and Todak 2017)
- 65% reduction in injuries to persons arrested
- 28% of content potentially usable in justice system processes/court cases (Grossmith et al 2015)
- 3x increase in convictions in intimate partner violence (IPV) cases (Morrow et al 2016)

#### LOW-END MEASURES OF EFFECTIVENESS

- 10% (statistically non-significant) reduction in complaints (Ariel et al 2016b; see also Grossmith et al 2015)
- 71% increase in use of force (Ariel et al 2016a, see also Henstock and Ariel 2016)
- 15% increase in assaults against officers (Ariel et al 2016c)
- 3x increase (statistically non-significant) in injuries to officers during arrest (Henstock and Ariel 2016)
- 6-10% of content potentially usable in justice system processes/court cases (professional correspondence)

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 Mixed results in IPV cases and increased processing times (Morrow et al 2016)



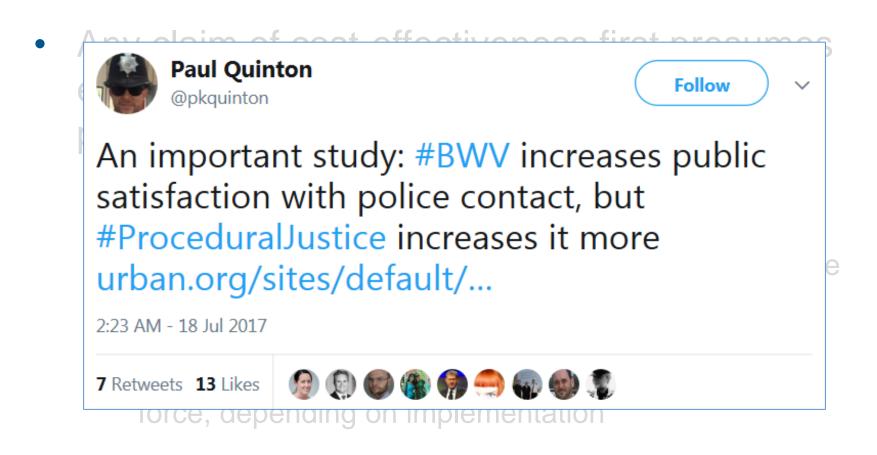
## Cost and cost-effectiveness of BWV (1)

- Any claim of cost-effectiveness first presumes effectiveness – which is an open question at present (i.e. not evidence-based)
  - And 'effectiveness' needs to be defined again, what problem would BWV potentially solve?
    - For example, BWV may increase trust and confidence in populations with already high opinion of police, but reduce it in populations where trust issues exist.
    - BWV may increase or decrease incidents of use of force, depending on implementation





# Cost and cost-effectiveness of BWV (1)







## Cost and cost-effectiveness of BWV (2)

- Direct costs of BWV have reduced somewhat
  - If we are comfortable with the cloud storage option, fixed costs related to data storage and security are lower now than in 2016
  - And camera usage can be scaled up/down more readily.





## Cost and cost-effectiveness of BWV (3)

- Nonetheless, indirect costs especially the labour required to process video data – will likely remain high regardless of direct costs, for police as well as courts
  - A large amount of video will need to be vetted and curated for potential use in investigations and trials
  - And there will be additional costs and considerations related to availability of video through for example FOIPOP
  - There are unanswered questions about data custody in the long term (e.g. if there was a change in BWV service provider)

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# Cost comparison, Cloud versus in-house storage

Areas	In-house storage	Cloud storage
Direct costs (cameras, chargers and other equipment; data storage costs)	\$2.19 million	\$1.93 million
Indirect costs (labour, training, tagging and processing evidence, etc.)	\$5.33 million	\$5.33 million
Total 5-year cost	\$7.52 million	\$7.26 million

All figures assuming 50 cameras purchased and operational at HRP each year, with 400 user licenses in the Cloud storage option





# **Implications (1)**

- Any decision rests on an answer to the question about what problem BWV may solve
  - Data on effectiveness of BWV remains equivocal and is context-specific
- If BWV proved to have a positive impact, it still may not be justified given the direct and indirect costs
  - For example, what else could we do with a similar amount of funding and labour?





# **Implications (2)**

- Scalability of costs in the Cloud option makes a small pilot of the technology potentially more palatable, but should not be a priority for HRP
  - Even a pilot would require substantial policy and training development in advance.
    - E.g. Privacy impact assessment, video evidence management strategy for investigations and court, camera use and metadata protocols, community consultation.
  - Potential negative impacts ('pre-mortem') would need to be considered and any impacts properly measured (through ongoing evaluation)



