

# A follow-up analysis on the 2015 Domestic Violence Evidence-in-Chief (DVEC) reforms

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# Outline

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# Introduction to DVEC

- DVEC is applicable to all DV charges commencing on or after 1 June 2015.
- Under DVEC victims can now provide testimony through a pre-recorded video and/or audio statement with police for criminal proceedings.
- Conditional on consent, police take the statement as soon as practical to the time of the offence.
- Once the police have the recording they no longer require the complainant's permission to play the recording at court.
- The accused must see/hear the recording at least once prior to court.
- The complainant must be available for cross-examination.

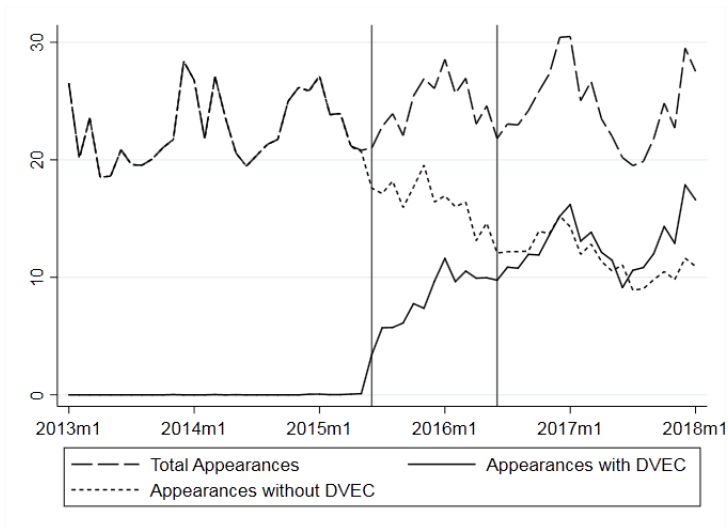
# Objectives of DVEC

- Reduce trauma for complainants associated with recounting events in front of the offender.
- Reduce the difficulty in recalling events (for cross-examination).
- Illustrate the demeanour and experience of the victim proximate to the time of the offence.
- Reduce the capacity of the defendant to intimidate the victim into changing/recanting their evidence.
- Increase both the conviction rate and the number of guilty pleas.

# Rollout of DVEC

- Only NSW police officers with special training are allowed to take DVEC statements.
- Officers received training at different times.
- Information on when and which LACs received training is unavailable.
- Substantial variation in the uptake of DVEC across various LACs.

# Uptake of DVEC



# Refresher from last time

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## Evaluation of the 2015 Domestic Violence Evidence-in-Chief (DVEC) reforms

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**Aim:** To investigate the impact of the 2015 Domestic Violence Evidence-in-Chief (DVEC) reforms on court outcomes for Domestic Violence (DV) assaults in New South Wales (NSW).

**Method:** Court outcome data from the NSW Bureau of Crime Statistics and Research's Prosecuting Database (PDOC) and DVEC data from the NSW Police Force's Computerised Operational Policing System (COPS) were extracted for the period January 2014 to June 2016. These data were used to assess the impact of DVEC using two different identification strategies. First, an instrumental variables approach was employed in order to estimate the causal effect of a DVEC statement on the probability that an individual defendant: (i) has at least one proven offence (a conviction) or (ii) pleads guilty to at least one offence at their court appearance. We also use this approach in order to estimate the impact of a DVEC statement on the time taken to finalize a DV assault matter conditional on a guilty plea being entered. Second, a dynamic panel data model with fixed effects was employed in order to investigate the relationship between each Local Area Command's (LAC's) monthly conviction and guilty plea rate for DV assaults and its uptake of DVEC.

**Results:** We find no evidence to indicate that DVEC has had a significant impact on the probability of a guilty plea or the time to finalisation for matters resulting in a guilty plea. We do, however, find limited evidence to indicate that the presence of a DVEC statement may increase the probability of a conviction by about two percentage points. With respect to the monthly LAC level analysis, we find no evidence to indicate that a LAC's DVEC uptake rate has any significant effect on its rate of convictions or guilty pleas. Both of these results are extremely robust to a variety of specifications.

**Conclusions:** Once factors like seasonality and systematic differences between LACs are taken into account, there is limited evidence of a significant impact of the NSW DVEC reforms on court outcomes for DV assaults.

**Keywords:** DVEC, domestic violence, pre-recorded evidence, generalized method of moments, forward orthogonal deviation, instrumental variables, impact evaluation, two-stage least squares

### INTRODUCTION

The NSW Crimes (Domestic and Personal Violence) Act 2007

defines a Domestic Violence (DV) offence as 'personal violence committed by a person against another person with whom the person who commits the offence has had a domestic relationship'. The Act defines a domestic relationship as occurring with another person if the person:

- is or has been married to that person or has been the de facto partner of that person;
- has or has had an intimate personal relationship with that person;
- is living or has lived in the same household/residential facility as that person;

- has or has had a relation involving mutual dependence on the ongoing (unpaid) care of that person; and/or
- is or has been the relative of that person.<sup>1</sup>

Less than 50 per cent of DV incidents are reported to police (see: Australian Bureau of Statistics (ABS), 2006; Skibey & Snowball, 2013; Gnoch & Burgess, 2011). Based on interviews with recent DV assault victims who did not report the DV to police, Skibey and Snowball (2013) note the most commonly cited reasons for under-reporting include: fear of revenge, further violence, embarrassment/shame, reporting taking too much time and reporting being too much of a bother.

Hoyle (1998) argues that under-reporting occurs as a result of victims's cost-benefit analysis of providing evidence.<sup>2</sup> Specifically,

<sup>1</sup>Original citation: Yeung, S. & Poynton, S. (2017). Evaluation of the 2015 Domestic Violence Evidence-in-Chief (DVEC) reforms (Crime and Justice Bulletin No. 206). Sydney: NSW Bureau of Crime Statistics and Research.

- Proven offence - limited evidence of a 2%pt increase.
- Guilty pleas - nothing.
- Plea delay - nothing.

## An extract from p.13 of previous report

*The impact of DVEC on court outcomes should continue to be monitored... It may take time for complainants to begin to trust the new process, be willing to consent to video statements and pursue criminal charges. Police expertise in collecting evidence of sufficient quality will also continually improve... [O]ver the longer term we may see the DVEC reforms achieve their ultimate aim; to enhance victim safety and reduce domestic and family violence in our community.*



# Whats new?

- 1 More data (last report had only 15 months post-policy, now we have 36).
- 2 Better methods.

- Merge extracts from COPS and ROD.
- Unit of analysis: Finalized local court appearance.
- Appearance had to involve at least one DV assault charge.
- DV assault had to be reported to police between 1 June 2015 & 30 June 2018.
- The usual controls (demographics, priors, court/PAC id, offence/finalization dates etc).
- New variable: Unique identifier for victim(s) associated with each incident in COPS.

# Outcome measures

- 1 **Conviction:** Probability that the defendant is found guilty of at least one offence.
- 2 **Guilty plea:** Probability that the defendant pleads guilty to at least one offence.
- 3 **Conviction at trial:**
  - Restrict sample to cases that proceed to a defended hearing.
  - Estimate the probability that the defendant is found guilty of at least one offence.
- 4 **Withdrawal:** Probability that the prosecution withdraws all charges.

# Why is this so tricky?

- We cannot just compare conviction rates in cases with vs. without DVEC statements.
- Omitted Variable Bias (OVB):
  - ① Impact probability of a conviction.
  - ② Correlated with DVEC.
  - ③ Can't see it in the data.
- OVB could cause us to over or underestimate the effect of DVEC.

# Three OVB problems

## 1 Victim bias:

- More cooperative  $\Rightarrow$  more likely to provide DVEC.
- More cooperative  $\Rightarrow$  provide better evidence.

## 2 Police bias:

- More strongly encourage victim to provide a DVEC statement in 'marginal' cases.
- Marginal cases have weaker evidence.

## 3 Visiting bias:

- More visits  $\Rightarrow$  more likely to provide DVEC.
- More visits  $\Rightarrow$  more likely to get convicted.

# Identification strategy - in math

$$DVEC_{idpt}^* = DVEC_{idpt} - lawpart_i - day_d - \theta_p - \lambda_t \quad (1)$$

$$Z_{ipt} = \left( \frac{1}{\eta_{pt} - \eta_{ipt}} \right) \left( \sum_{k=0}^{\eta_{pt}} DVEC_{kdpt}^* - \sum_{i=0}^{\eta_{ipt}} DVEC_{idpt}^* \right) \quad (2)$$

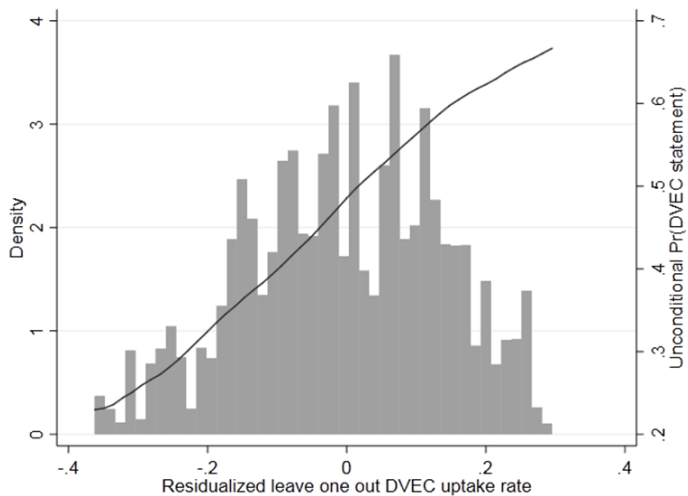
$$Pr(DVEC_{idpt} = 1) = \pi Z_{ipt} + \phi \mathbf{X}_i + ANZSOC_i + lawpart_i + day_d + \theta_p + \lambda_t + v_{idpt} \quad (3)$$

$$Pr(Conviction_{idpt} = 1) = \beta DVEC_{ipt} + \gamma \mathbf{X}_i + ANZSOC_i + lawpart_i + day_d + \theta_p + \lambda_t + \epsilon_{idpt} \quad (4)$$

# Identification strategy - in words

- 1 Purge DVEC indicator of problematic components.
  - Offence severity, dow, passage of time, seasonality, differences between PACs.
- 2 Calculate each PAC's proportion of cases with DVEC statements.
  - Call it the DVEC uptake rate.
  - For each case; we re-calculate the DVEC uptake rate leaving out all police encounters with the index victim.
  - This accounts for police visiting the same victim more than once.
- 3 Predict whether a victim provides a DVEC statement using DVEC uptake rate.
  - DVEC uptake rate is not related to victim, police or visitation bias.
- 4 Use this prediction to get the causal effect.

# First stage





# Results

	(1)	(2)	(3)	(4)
	Conviction	Guilty plea	Conviction at trial	Prosecution withdraws
OLS Estimates	0.032*** (0.007)	0.024*** (0.007)	0.043*** (0.012)	-0.025*** (0.005)
2SLS Estimates	0.064** (0.032)	0.052 (0.033)	0.153** (0.074)	-0.033 (0.030)
Observations	36,113	35,935	8,511	36,113
Controls	Y	Y	Y	Y
Offence FE	Y	Y	Y	Y
PAC FE	Y	Y	Y	Y
Time FE	Y	Y	Y	Y
Court FE	Y	Y	Y	Y

## Question: Why are the new results different?

- 1 Police & community needed more time to adjust to the technology/practice.
- 2 Old methods were incorrect.
- 3 Both.

To answer this question we can use the new methods on the old data.

Answer: Police & community needed more time to adjust

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	Conviction		Guilty plea	
	OLS	2SLS	OLS	2SLS
Old method - old data	0.020*** (0.007)	-0.027 (0.039)	0.000 (0.007)	-0.046 (0.044)
New method - old data	0.027*** (0.009)	0.013 (0.081)	0.013 (0.010)	-0.054 (0.098)

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# Summary

- It has taken time for police and the community to fully adopt/adjust to the reforms.
- DVEC is raising the overall probability of a conviction.
  - Driven by large increase in convictions for cases proceeding to a defended hearing.
  - Limited evidence that DVEC increases the probability of a guilty plea.
  - Limited evidence that DVEC lowers the probability of the prosecution withdrawing.
- Evidence supports police bias argument.
  - $2SLS > OLS$
  - Marginal cases are more likely to proceed to defended hearing where effect is particularly strong.