

ELECTRONIC MONITORING IN THE CONTEXT OF DOMESTIC AND FAMILY VIOLENCE

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Australia's National Research Organisation for Women's Safety for the Queensland Department of Justice and Attorney-General

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The findings reported here are drawn from the analysis of interviews and focus groups in light of the available literature on electronic monitoring and the literature on risks and risk management of domestic and family violence. The analysis, and therefore the reported research results, cannot be attributed to those who participated in the research project.

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Acknowledgement of Country

ANROWS acknowledges the traditional custodians of the land across Australia on which we work and live. We pay our respects to Aboriginal and Torres Strait Islander elders past, present and future, and we value Aboriginal and Torres Strait Islander history, culture and knowledge.

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Abbreviations

ANROWS	Australia's National Research Organisation for Women's Safety
ADVO	Apprehended Domestic Violence Order (NSW)
A-GPS	Assisted GPS
EEMG	Electronic & External Monitoring Group (NSW)
EM	Electronic monitoring
EMP	Electronic monitoring program
DCS	Department of Corrective Services
DCSCC	Department of Corrective Services Community Corrections (SA)
DFV	Domestic and family violence
DJAG	Department of Justice and Attorney-General
DoJ	Department of Justice (Tas)
DPFEM	Department of Police, Fire and Emergency Management (Tas)
DVO	Domestic violence order (Qld)
DVPO	Domestic Violence Protection Order (Qld)
DVS	Domestic violence services
FVO	Family Violence Order (Tas)
GEO fence	A virtual geographic boundary, defined by GPS or RF technology
GPS	Global Positioning System
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communications
IBS	Intensive Bail Supervision
JA	Justice agency (Qld)
PFVO	Police Family Violence Orders (Tas)
QCS	Queensland Corrective Services
QPS	Queensland Police Service
RF	Radio frequency
SaPol	South Australia Police
SB	Supervised Bail
SIM	Subscriber identity module
TasPol	Tasmania Police
VS	Victim/survivor
Wi-Fi	Wireless fidelity

Executive summary

Background

In its report, *Not Now, Not Ever*, the Queensland Special Taskforce on Domestic and Family Violence (The Taskforce) noted the potential of Global Positioning System (GPS) tracking "as a tool to increase perpetrator accountability and improve protection for victims of domestic and family violence" (2015, p. 309). It recommended that the Queensland Government trial GPS monitoring of high risk perpetrators of domestic and family violence.

Subsequently, legislative amendments to the *Bail Act 1980* (Qld) and the *Corrective Services Act 2006* (Qld) have, respectively, enabled electronic monitoring of defendants and offenders as a condition of bail and parole. Further, the Queensland Department of Justice has commissioned Australia's National Research Organisation for Women's Safety (ANROWS) to deliver an evidence base for the development of electronic monitoring programs (EMPs) in the context of domestic and family violence, including an assessment of whether monitoring would be appropriate in specific criminal law contexts (i.e. bail, probation and parole).

The project sought evidence from the literature, current EMP trials in other Australian jurisdictions and interviews with victims/survivors of domestic and family violence, and stakeholder representatives from specialist domestic and family violence support services, police and corrective services in several jurisdictions, including the Queensland Police Service and Queensland Corrective Services.

Insights were gained from the current or emerging trials of EMP for domestic and family violence defendants/offenders in other Australian jurisdictions. However, none of these jurisdictions has completed an evaluation of its trial, therefore the evidence available from these trials is limited to the preliminary research undertaken to develop the trials, the operational models in practice, and observations of community corrections staff in South Australia.

Analytical framework

The analysis of the data collected is embedded in an understanding of domestic and family violence (DFV) as a gendered phenomenon, characterised by coercive tactics of abuse, whether physical or non-physical, which seek to control the victim/survivor. DFV is predominantly perpetrated by men against women and can result in femicide and filicide as a final act of control over their lives. Domestic violence related homicide committed by women is usually in response to violence perpetrated against them (The Australian Domestic and Family Violence Death Review Network, 2018). The risk of DFV-related femicide and filicide is heightened during, or soon after, separation from a violent partner. This is a critically important consideration in the context of EMPs for DFV because inclusion in such programs understandably requires that the defendant/offender and victim/survivor are separated.

Perceived benefits and limitations of EM in general

Internationally, the literature identifies three main benefits of EM, which motivate the use of EMPs in the criminal justice system. They are:

- 1. Enhanced community safety.
- 2. Reduction in recidivism.
- 3. Reduced incarceration rates (and an associated reduction in costs).

Benefits from the perspectives of victims/survivors and defendants/offenders are also identified in the literature. Victims/survivors of interpersonal violence have reported an increased sense of safety and independence despite there being no guarantees of safety being provided by EM. Defendants/offenders reportedly benefit from the structure associated with exclusion/inclusion zones, curfews and programs (e.g. training and employment programs, and behaviour change programs) accompanying EMPs. Additional benefits from the perspective of defendants/offenders are the ability to defend false accusations, and the opportunity to maintain (or gain) employment. These benefits are also likely to avoid recidivism by maintaining family and community relationships and engagement in socially acceptable endeavours, while imprisonment severs, or impedes, those connections.

The literature also identifies a number of limitations of EM including:

- the net-widening effect and privacy impacts where low-risk offenders (including youth offenders and women) are monitored;
- the strong private sector involvement in service delivery that could create a commercial incentive to expand its use;
- stigmatisation;
- the need for defendants/offenders to maintain equipment (e.g. keeping the EM device battery charged);
- the potential for 'false' alerts and deficiencies in the monitoring systems;
- a lack of awareness of the public and decision-makers regarding the limitations of EM. (Nellis, 2014; Hucklesby & Holdsworth, 2016; Bartels & Martinovic, 2017)

These limitations are not sufficient reason not to establish EMPs, including in the context of DFV, but they do have implications for:

- the development of EMP models, including scope;
- eligibility criteria for assigning defendants/offenders to an EMP;
- training for criminal justice agency staff involved in the application of EMPs; and
- communications to victims/survivors and the broader community about EM capability.

Current experience of EM in Australia

EMPs were introduced in Australia in the 1980s, first using radio-frequency (RF) technology. The utility of RF is limited because of the need for close proximity to a static transmitter. Thus, in the context of offender management it is effective for home detention or curfews but it is not effective in cases requiring monitoring of movements beyond the immediate vicinity of the RF transmitter. GPS technology is now widely used, in combination with RF in some circumstances, to monitor movements of defendants/offenders using a tracking device (usually an ankle bracelet worn by the defendant/offender). Monitoring is generally conducted by community corrections staff, who respond to an alert from a tracking device (e.g. an inclusion

or exclusion zone programmed into the device has been breached), rather than real-time tracking of individual defendants/offenders. However, high-risk offenders on GPS are also subject to intensive supervision and/or intensive monitoring. Queensland Corrective Services staff report that the cost of intensive monitoring and supervision of Dangerous Prisoners and Sex Offenders is approximately the same as imprisonment, while one of the perceived benefits of EM is that it is comparatively cheaper than imprisonment.

Three Australian jurisdictions (New South Wales, South Australia and Tasmania) are currently conducting trials of EM in the context of DFV. These trial EMPs provide for electronic monitoring as a condition on a civil Family Violence Order (Tasmania), at bail and probation (South Australia), and at parole (South Australia and New South Wales). The evaluation results of these trials will provide a valuable evidence base for EM in the context of DFV when they are completed in 2020.

Key issues for electronic monitoring in the context of domestic and family violence

Analysis of the international literature and qualitative data collected for this project indicates that the capacity of EM to reduce risk to victims/survivors of DFV at the individual level is questionable, although it may reduce recidivism overall. That is, the number of defendants/offenders who breach a no-contact condition on a court order may be reduced, but some victims/survivors may still be at risk of harm. The results of focus groups conducted in Queensland suggest that EM will increase safety for an individual victim/survivor if:

- the defendant/offender is deterred from re-offending;
- police have time to take action if the defendant/offender is not deterred from reoffending; and
- the criminal justice system is responsive and supportive of victims/survivors.

Assessment of the risk to the safety of the individual victim/survivor, as well as the risk of recidivism is necessary to ensure victim safety. South Australia's four-tiered offender management regime, including "control" using the most rigorous levels of supervision by the most experienced corrections officers, is one way of managing high risk offenders. In Queensland, police and courts cannot consider EM as having the potential to mitigate risk for defendants/offenders considered an "unacceptable risk" to the safety of victims/survivors or others. This position is supported, although the establishment of concrete criteria for determining "unacceptable" risk, and effective training and communication on this criteria, will be required for its application.

The project also identified multiple potential unintended consequences of EM in the context of DFV. They include:

- The potential for EM to elevate risk.
- Continued emotional abuse and coercive control through means (including using a third party or communications technology) that are not detected by GPS tracking.
- Inadvertently alerting the defendant/offender to the whereabouts of the victim/survivor through the use of exclusion zones.

• Creating a false sense of security for victims/survivors if their expectations of the technology exceed its actual capabilities.

None of these issues is sufficient to conclude that EM is not appropriate in the context of DFV. However, they do warrant careful consideration in the design and implementation of such EMPs.

The most critical considerations in assessing a defendant/offender's suitability for EM in the context of DFV are risk to the victim/survivor's (and associated others') safety, and the ability to effectively manage the risk. Various EMPs, including those under trial in Australia, are applied at bail, probation and parole and there is no evidence that suggests EM in the context of DFV is not appropriate at any of these stages, subject to considerations of risk and risk management.

Best practice principles

EM cannot stand alone: to be effective in reducing recidivism and increasing victim/survivor safety it must be part of a broader program, which has flexibility to address criminogenic needs of individual defendants/offenders. Further, the project has identified five inter-connected principles that, together, should underpin any EMP related to DFV defendants/offenders. They are:

- 1. Comprehensive risk assessment and risk management.
- 2. Evidence-based, reliable EM technology and responsive monitoring systems
- 3. Effective supervision of defendants/offenders and their participation in structured programs.
- 4. Co-operation and information-sharing between technology providers and criminal justice and community agencies.
- 5. Active inclusion in decision-making and information-sharing and safety planning with those who are at risk of further harm from the offender.

Ongoing evaluation of EMPs in the context of DFV, is an overarching good practice requirement, particularly given the nature of the relationship between the victim/survivor and defendant/offender that does not usually exist in other offence categories.

Conclusion

The utility of EM in the context of DFV is limited and conditional. Limitations arise from: 1) the nature of DFV; 2) the character of the defendant/offender; 3) the capability of the technology itself; and 4) the criminogenic risks and needs of defendants/offenders. However, these limitations can be overcome or otherwise addressed (e.g. inclusion criteria) in an EMP that prioritises victim/survivor safety.

EMPlus, based on the five principles listed above, provides a best practice framework for the development and implementation of EM in the context of DFV, but must be implemented as an adequately resourced complete set of components. The risk represented by the individual defendant/offender to the safety of the victim/survivor, or others, is more important than whether or not EM should be applied at any particular stage of the criminal justice process (bail, probation or parole).

1. Introduction

Background

Australia's National Research Organisation for Women's Safety (ANROWS) was established as an initiative of the *National Plan to Reduce Violence against Women and their Children 2010-2022* (the National Plan) to build the evidence base and support the take up of evidence in policy and practice to support achievement of the National Plan outcomes. Its Core Grant funding is provided jointly by the Commonwealth and all state and territory governments of Australia for this purpose.

In addition to its Core Grant funding, ANROWS undertakes research commissioned by individual jurisdictions and agencies. This research on electronic monitoring in the context of domestic and family violence was funded by the Queensland Department of Justice and Attorney-General (DJAG) pursuant to recommendation 123 of the Queensland Special Taskforce on Domestic and Family Violence (The Taskforce, 2015).¹

In its report, *Not Now, Not Ever*, the Taskforce noted the potential of Global Positioning System (GPS) tracking "as a tool to increase perpetrator accountability and improve protection for victims of domestic and family violence" (2015, p. 309). Due to the concerns and limitations of GPS tracking, and the current lack of an evidence base to support the implementation of a GPS tracking program, the Taskforce concluded that the best way forward was for the Queensland Government to trial " ... GPS monitoring for high risk perpetrators of domestic and family violence (Recommendation 123, p. 309). In response, the Queensland Government committed to "explore options to monitor high risk perpetrators of domestic and family violence, taking into account the full range of potential technological solutions including the use of GPS monitoring, and then trial the most promising model to improve victim safety" (Queensland Government, 2015).

The Queensland DJAG contracted ANROWS to deliver an evidence base for the development of electronic monitoring programs (EMPs) in the context of domestic and family violence, including an assessment of whether monitoring would be appropriate in specific criminal law contexts (i.e. bail, probation and parole). Since the release of *Not Now, Not Ever* (The Taskforce, 2015), and the Government response to it in 2015 the *Corrective Services (Parole Board) and Other Legislation Amendment Act 2017* (Qld) and the *Bail (Domestic Violence) and Another Act Amendment Act 2017* (Qld) have specifically enabled the use of electronic monitoring for parolees, and defendants on bail, respectively. Notwithstanding the title of the legislation, the *Bail (Domestic Violence) and Another Act Amendment Act 2017*, which commenced on 30 March 2017, enables a court to impose a GPS monitoring device on *any* defendant released on bail, not just those charged with an offence related to domestic and family violence.

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¹ "The Queensland Government trials the use of GPS monitoring for high risk perpetrators of domestic and family violence."

In addition, the *Bail (Domestic Violence)* and *Another Act Amendment Act 2017* strengthens bail laws, particularly in relation to domestic and family violence defendants. For example, the legislative changes reverse the presumption of bail for a specific group of domestic violence defendants and require the court or police, in considering an application for bail for any domestic violence offence, to consider the risk of further or associated domestic violence.

Other factors discussed by the Taskforce (2015), and vitally important in the development of a trial EMP for perpetrators of DFV include:

... the use of GPS monitoring for perpetrators should be directly linked to the identification of high risk for the aggrieved and as a tool to mitigate this risk [and] ... the need to construct expert assessments of risk to ensure appropriateness of GPS tracking for each perpetrator and victim. (The Taskforce, 2015, p. 309)

Challenges and concerns identified by the Taskforce (2015), and needing particular attention in the development and implementation of a GPS trial for perpetrators of DFV include:

- the risk of an increase in contested applications, rather domestic violence protection orders (DVPO) being made by consent, and consequent negative impact on victims,
- reliability of the technology;
- civil liberties of victims should they be required to wear an electronic transmitter;
- community expectations of an appropriate justice response (incarceration versus community corrections);
- unrealistic expectations and the potential for a false sense of security, as well as potential complacency in the event of repeated false alerts; and
- the costs of implementing and maintaining an EMP.

In addition to the concerns, above, ANROWS identified that the rights of defendants on bail need to be given particular consideration. Similar concerns were debated in Australian jurisdictions, including Queensland, in the 1980s when considering the then proposed police and court powers in civil domestic violence laws. Of particular concern were the limited powers of detention without arrest, and restrictions on the freedom of movement of respondents to civil DVPOs. Ultimately, parliaments across Australia determined that the exceptional powers were necessary in the circumstances (Nancarrow, 2016). Nevertheless, GPS monitoring of defendants on bail, particularly bail for DFV related charges, requires careful consideration.

In Queensland, electronic monitoring using GPS technology was first applied to dangerous sex offenders, including offenders on orders under the *Dangerous Prisoners (Sexual Offenders) Act 2003* (Qld), whose unsupervised release would pose a serious danger to the community. The use of GPS technology has expanded more recently to other categories of offenders, with the legislative amendments referred to above now enabling its application to parolees and defendants on bail, including those whose alleged offences relate to DFV. In 2013, the *Mental Health Act 2000* (Qld) was amended to enable the Queensland Director of Mental Health to require a condition that allows a treating health service provider to monitor a patient's location using a GPS tracker while on limited community treatment (Miller, 2015). However, in the one

case for which this condition was applied, the mental health patient appealed and the decision of the Director of Mental Health was overturned.

Project scope

In delivering evidence for the development of a trial EMP in the context of domestic and family violence, the research responded to the objectives identified by DJAG and a set of questions designed to meet these objectives. These are shown in Table 1, below.

Table 1. Research objectives and questions

Research objectives	Research questions	
a) Whether electronic monitoring of perpetrators of domestic and family violence in the criminal justice system (i.e. bail, probation and parole) is effective in increasing victim safety.	What is currently known about the effects of electronic monitoring (EM) on victims/survivors' safety? Do victims/survivors and Specialist DFV Service providers perceive increased safety for victims/survivors due to EM? Are there unintended consequences for victims/survivors (e.g. privacy limits in wearing GPS device also)?	
b) If so, what technology is likely to be most effective (including cost effectiveness) in undertaking such monitoring?	What technology is currently available for EM programs? What is currently known about benefits and limitations of technologies, including costs, and capacity for upgrade as technology advances and procurement with private providers?	
c) What context (bail, probation and parole) is most practical and effective for such monitoring?	What evidence about the relative merits of EM in the context of bail, probation and parole currently exists? What does the evidence say about the practical application and effectiveness of EM in these contexts?	
d) What measures should be taken to mitigate risks that perpetrators may re-offend while being electronically monitored?	What role, if any, should victims/survivors have in an EMP?	
e) The best practice features of an electronic monitoring trial/program targeting domestic and family violence perpetrators, including examining models underpinning trials and programs targeting to these perpetrators in other jurisdictions?	What is considered best practice in EMPs for domestic violence offenders? What are the key features of these programs? Are they consistent with key principles established under the National Plan to Reduce Violence against Women and their Children 2010-2022?	

The evidence base provided by ANROWS was produced in two phases. The first phase was a review of the literature, including identification of best practice principles for establishing electronic monitoring in the context of domestic and family violence, available in the literature at that time. The results of phase 1, the current state of knowledge of electronic monitoring in the context of domestic and family violence, are summarised in section 3 below. Section 3 also

includes a summary of the use of EM in Australian jurisdictions, to date. The second phase of the project involved: analysis of relevant technologies currently available in Australia (section 4); acquiring information about and describing the current trials of EM in the context of domestic and family violence operating within Australia (section 5); and empirical research drawing on the experiences of domestic and family violence victims/survivors, specialist DFV Service Providers, and police and correctional officers involved in the implementation of GPS monitoring of defendants/offenders including, in some cases, DFV related offences Section 6).

Key areas of inquiry

Responding to the brief from DJAG, the research focused on the following areas of inquiry:

- 1. The gendered nature of DFV, coercive control and risks.
- 2. Offender management principles in criminal justice and their application to EMPs.
- 3. Models and technology used in EMPs in Australia and internationally.
- 4. Evidence on effectiveness of, and challenges with electronic monitoring of DFV offenders at all stages of the criminal justice process—bail, probation and parole.
- 5. Victim/survivor perspectives on EMPs.
- 6. Guiding principles for the application of EMPs for DFV defendants/offenders.

2. Project approach and methodology

Literature review

Peer reviewed literature was identified through electronic databases—Australian Criminology Data Base (CINCH) via Informit, and ProQuest—using key search terms such as electronic monitoring AND offenders; electronic monitoring AND domestic violence; GPS monitoring AND domestic violence OR offenders; best practice AND electronic monitoring OR GPS tracking. Further details of the search results are provided in Appendix 1.

Recognising the rapid advancements in electronic monitoring technology, the focus of searches was predominantly on peer reviewed or grey literature published post-2010. Literature available only in languages other than English was not selected. Grey literature, including key government reports and policy documents, was identified primarily through key informants including staff of DJAG, Queensland Police Service, staff in relevant state corrections departments, and reference lists. Relevant legislation was accessed from the Australasian Legal Information Institute (AustLII, http://www.austlii.edu.au/).

The searches revealed numerous publications relating to electronic monitoring of sex offenders and other violent offenders, but there were fewer publications specifically on electronic monitoring in the context domestic and family violence. However, many issues raised in the sex offender and EM literature and research are applicable to DFV, due to the prevalence of gender-based sexual and physical violence, and because violence and intimidation can persist beyond legal intervention.

Theoretical perspective and methodology

The research was guided by an analysis of DFV as a gendered phenomenon, based on an international evidence base and consistent with framework of the *National Plan to Reduce Violence against Women and their Children 2010-2022* (the National Plan), and the Queensland Premier's Special Taskforce on Domestic and Family Violence Report *Not Now, Not Ever* (2015). The evidence indicates that intimate partner violence is the most prevalent form of DFV (except for child abuse) and is predominantly perpetrated by men against women. The 2016 Personal Safety Survey (Australian Bureau of Statistics (ABS, 2017) found that approximately 1 in 4 Australian women had been subjected to intimate partner violence, compared to approximately 1 in 22 men. Further, the evidence shows that gender inequality, entrenched in all aspects of socio-cultural, economic and political life, is a primary driver of DFV because it results in disrespect for women and creates conditions for attitudes supportive of violence against women (Our Watch, ANROWS, & VicHealth, 2015; Webster, Diemer, Honey, Mannix, Mickle ... & Ward, 2018).

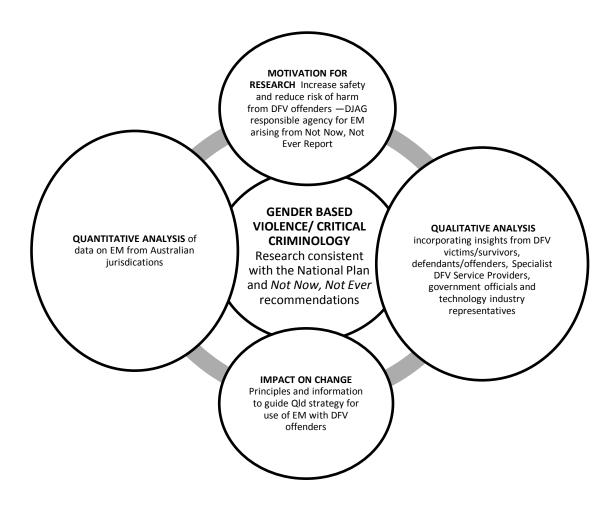
Not only is gender a pervasive influence in culture and violence, it also shapes values in the social processes of scientific inquiry (Ramazanoglu & Holland, 2002). Therefore, this research explores the application of EM programs for male DFV offenders, through the lens of gendered violence and a feminist/critical criminological framework and standpoint (See Figure 1). Feminist standpoint theory recognises the value of drawing on women's experiences in understanding crime, justice and crime prevention (Naffine, 2014, p. 47) and critical criminology seeks to change the conditions that contribute to phenomena under investigation.

The research is also impact-driven, analysing international and national experience to produce an evidence base, including best practice principles to inform the use of EM in the context of domestic and family violence. Therefore, it also includes analysis of qualitative data collected from police and corrective services personnel in several jurisdictions (New South Wales, Queensland, South Australia, and Tasmania), with experience relevant to EM in the context of domestic and family violence, and specialist domestic and family violence service providers and victims/survivors of domestic and family violence in Queensland.

In summary, the research involved an international literature review and qualitative data collected via interviews and/or focus groups from victims/survivors of domestic and family violence, and stakeholders (specialist domestic and family violence service providers, police and corrective services personnel) with experience of EM.

Where possible, quantitative data were also collected in relation to the scope of EM trials in Australia and, for example, the number of breaches of conditions attached to an EM program such as breaches of exclusion zones and tampering with EM devices.

Figure 1: Project Methodology



Qualitative data collection and analysis

Data collection

Data were collected in September and October 2018, following ethics approval from Bellberry Limited (http://www.bellberry.com.au/, Protocol number 2018-07-553). Focus groups were primarily used for the collection of data from police and corrective services personnel, victims/survivors, and specialist domestic and family violence service providers. Focus groups enable more efficient use of short periods of time available for data collection and analysis, compared to one-to-one interviews. Other advantages of focus groups include group interaction prompting more in-depth thinking and discussion of particular issues or concepts, and group reaction (including body language), as individuals within a group speak. However, recognising the sensitive nature of the issues being discussed, prospective participants were advised that, if preferred, a private interview would be conducted. Interviews were also conducted for convenience. Table 2 provides details of focus groups and interviews.

Table 2. Participant numbers by data collection method

Focus groups		
	Group	Number of participants
	Police	6
	Corrective services	8
	Victims/survivors*	9
	Specialist DFV Service providers*	3
Interviews		
	Group	Number of interviews
	Police	2
	Victims/survivors	9
	Specialist DFV service providers	3
	Technology industry representatives	2

^{*} These participants also participated in individual interviews, so the total number of in dividual participants is 30

Data analysis

A thematic analysis of the qualitative data for each participant group, corresponding to the research objectives, was conducted separately by members of the research team. Initially, the inclusion of quotes from participants to support the thematic analysis was considered; however, a summary of views expressed is provided instead, due to the relatively small number of participants in each group. This strategy reduces the risk of participants being identifiable based on the context of comments made.

Limitations of the project

The project has the following limitations: small number of participants in each group; absence of perspectives from defendants/offenders; lack of data to respond to objective 2; challenges, such as "groupthink", in the predominant focus group data collection method; and lack of empirical evidence from the current Australian EM trials. Each limitation is discussed below.

Number of participants

This research used a purposive sampling method in which the researchers used their judgement and knowledge of a population and the aims of the research to select a sample (Tranter, 2010). As researchers, we identified: a supportive domestic violence service (BDVS), which facilitated access to DFV survivors for individual interviews and several DFV advocates; key justice stakeholders in several jurisdictions undertaking EM for DFV offenders, and whilst we approached a number of EM technology companies, only two agreed to be interviewed. The sample was small across all participant groups. However, purposive samples are not intended to be representative of a population; rather, they provide specialist, in-depth insights on the issue under investigation.

Absence of perspectives from defendants/offenders

Defendants/offender perspectives were able to be gained from the literature review, but not directly from interviews or focus groups, as intended. Ethics approval required that neither Queensland Corrective Services nor Queensland Police Service were to be involved in the

recruitment of defendant/offender research participants, due to the power dynamic between those agencies and potential participants, and the risk that participation may be seen as a requirement; that is involuntary, or coerced. Three non-government agencies that deliver DFV Behaviour Change Programs agreed to assist with recruitment of potential participants, resulting in one referral, only. At least four attempts were made to contact the potential participant, without success.

Lack of data to respond to objective 2

Objectives for the project identified by DJAG included "what technology is likely to be most effective (including cost effectiveness) in undertaking [EM] monitoring?" A technical consultant had been engaged on the project to identify and conduct interviews with relevant technology industry experts to meet this objective. However, and largely due to a tender process being conducted by QPS during the data collection period, only two industry representatives agreed to speak with the technical consultant. Further, those representatives declined to provide any commercial-in-confidence information, including research and development plans and pricing for their products, due to the contemporaneous tender process for a supplier for the Queensland Government.

Focus group methodology

Focus groups were conducted as part of this research. Where focus group discussions are conducted there may be the possibility of "groupthink". Groupthink can be defined as "the manner of thoughts that happens when the desire for harmony in a decision-making group overshadows a pragmatic appraisal of alternatives" (Boateng, 2012, p.55). However, focus group discussions can also lead to the identification of different aspects of a problem or issue that may not have emerged in an individual discussion, and which can then be explored more thoroughly by the group (Boateng, 2012). All focus group participants were forthcoming, enthusiastic about the aims of the project and the information gleaned was instructive.

Lack of results from current Australian trials

Although it was anticipated that the project would be able to report on learnings from trial EM projects in other Australian jurisdictions, none of the trial evaluations have been completed. Two jurisdictions were willing to share observations about their trials to date, and one was not. Nevertheless, the background information provided by all three jurisdictions discussed in section 5 enables important learnings about EM in the context of DFV.

3. Review of the literature

The gendered nature of DFV, coercive control and risks

Whatever the problem, understanding its prevalence, nature and dynamics is central to the development of strategies to address it. In relation to domestic and family violence (DFV) the following three intersecting factors must be considered in any response, including electronic monitoring of defendants/offenders.

The gendered nature of DFV

The most recent Australian Bureau of Statistics' Personal Safety Survey (ABS, 2017) found that almost 1 in 4 women in Australia had experienced violence perpetrated by an intimate male partner,² compared to approximately 1 in 13 men. Further, women who experienced physical assault by a partner, were twice as likely as men similarly assaulted to have experienced anxiety or fear for their safety. Women are also much more often than men the victims of intimate partner homicide.

Almost 80 percent (79.6%, n=121) of 152 intimate partner homicides investigated by Domestic Violence Death Review teams³ involved a male killing his current or former female partner (Australian Domestic and Family Violence Death Review Network, 2018). A significant majority (92.6%, n=112) of the men who killed a female intimate partner was the primary DV abuser,⁴ while none of the women killed by an intimate male partner was a primary DV abuser. That is, women typically killed in self-defence or retaliation for violence perpetrated against them, but men who killed women had other motives.

Further, Dobash & Dobash (2018) draw attention to the gender differences in filicide—the killing of one's son or daughter (biological or not), citing Pritchard et al. (2013). Mothers who kill their children "were likely to have been suffering from mental illness at the time ... [while] ... men with previous convictions for violence ... were five times more likely than women and men with mental illness to have committed an abuse-related homicide of a child" (Pritchard et al., 2013, cited in Dobash & Dobash, 2018, p. 83).

In short, the motivations of men and women who kill partners and children are different in ways that are important in understanding and responding to DFV in the criminal justice

² The category "Intimate partner" includes current or former co-habiting partners and dating, and girlfriend/boyfriend, relationships where the couple have never cohabited. The figures for "Partner violence" (current of former co-habiting partners) are 1 in 6 women, compared to 1 in 22 men.

³ The homicides investigated by Domestic Violence Death Review teams across Australia occurred over the 4-year period from 1 July 2010 to 30 June 2014.

⁴ The Australian Domestic and Family Violence Death Review Network (2018, p. ix) defines "primary DV abuser" as: The person who primarily initiated domestic violence in the life of the relationship and/or was the main aggressor of domestic violence after the relationship had ended. This term is designed to highlight that a person may have been the primary user of domestic violence prior to the homicide, and the homicide may have been perpetrated by a person who was typically a victim of domestic violence (for instance, a victim who kills an abuser in self-defence).

system. While women's violence, including homicide and filicide, is typically linked to self-defence or mental health, men's violence is more often motivated by coercive control of women with whom they have, or have had, an intimate relationship.

Coercive control

Stark (2006, 2007) defines coercive control as an "attack on autonomy, liberty and equality" (2006, p. 1023). In a broader context of gender inequality, women "typically lack the social facility to impose the comprehensive levels of deprivation, exploitation, and dominance found in coercive control" (Stark, 2006, p. 1024). Coercive control reflects a proprietorial attitude—a sense of ownership and entitlement to dominate and control a partner—and may be exerted in the absence of any physical violence. Combined with social and economic inequality, male physical power, relative to women's, contributes to a man's ability to coercively control his partner through psychological and emotional abuse, intimidation and fear (e.g. loss of social and economic security, humiliation, and threats of violence), as well as actual violence.

The Queensland Death Review and Advisory Board noted a proprietorial attitude of some perpetrators of domestic violence related femicide (homicide of women): "particularly during periods of actual or intended separation, a perpetrator may ... use coercive controlling tactics to terrorise a victim and keep them under their control, perhaps best described as an attitude of "*if I can't have her, no one can*" (2018, p. 52). This phenomenon is often identified in the literature as a morbid jealousy or possessiveness found in men who commit post-separation violence (Dutton, 2006), while others use the term *proprietariness*, "as it implies a more encompassing mindset than the word 'jealousy'" (Queensland Death Review and Advisory Board, 2018, p. 53).

Filicide may also be deployed as punishment and control of the child's mother/carer (see Dobash & Dobash, 2018; Dawson, 2018; Johnson & Sachmann, 2018). Research in Australia found that filicide, in the context of familicide-suicide (killing one's family members then oneself) "emanates from a retaliatory motivation, where ... rage is expressed by murdering the children to cause the maximum pain to their mother ... it is an expression of defensive omnipotent control aimed at destroying the relationships the woman loves most of all" (Johnson & Sachmann, 2018, pp. 139-140).

Coercive controlling behaviour continues, and often escalates during and after separation. Preventing or deterring the relentless pursuit of women is difficult in many DFV cases because the offender is likely to be familiar with the routines and networks of his ex-partner and children. This enables the offenders to intimidate and harass the family members at work, school, shops, and the residences of family friends and relatives, including with the use of mobile phone and other technology. The pattern of coercive control, intimidation and fear continues to cause harm to many victims/survivors of DFV and their children after separation and the commencement of legal action and access to advocacy and support. A particularly significant concern is that male offenders will often seek out the women who will be called as witnesses to court proceedings to demand that they retract their complaints, or fail to appear in court (Erez, Ibarra, Bales, & Gur 2012).

Risks

Women are often expected by the general public and, at least in the past, statutory child protection agencies to leave violent men. However, post-separation is a period of heightened risk of violence for women and children (Fleury, Sullivan, & Bybee, 2000; Kaye et al., 2003 cited in Douglas, 2018). Nationally, almost half (47.7%) of the men who killed their former partner between 2010 and 2014, did so within 3 months of the relationship ending (Australian Domestic and Family Violence Death Review Network, 2018).

Of course not all perpetrators of domestic and family violence commit homicide. However, it is impossible to say with certainty that a perpetrator will not commit homicide: hence risk assessments focus on the likelihood of serious harm, or lethality, rather than the converse. DFV-related homicide rarely occurs "out of the blue" (Dobash, Dobash, & Cavanagh, 2009) and the ability to identify high risk for homicide is increasingly sophisticated, although a sizeable task, given the prevalence of domestic and family violence.

The Queensland Police Service (State of Queensland, 2017), reports that in the year 2016-17 there were 62,264 DFV-related incidents,⁵ and 1049 DFV-related strangulation offences in Queensland (infographic p. ii). Further, it reports that 15 percent of all recorded offences against the person⁶ involved partners and ex-partners, and women were the victims/survivors of the offence in 88 percent of those cases (p. 103).

The serious risk posed by many DFV offenders reinforces the need to conduct empirically sound risk assessments and to better manage risk (Belfrage et al., 2012). Risk assessment tools are becoming more sophisticated in identifying levels of risk, risk management strategies, and the likelihood of recidivism (Belfrage et al., 2012). Common risk assessment tools are also being promoted in jurisdictions, like Queensland, to enable agencies to adopt consistent assessment, to share this information more readily, and to 'case manage' high risk offenders. The issue of risk assessment is discussed further, below, in *Guiding principles for electronic monitoring in the context of DFV*.

Evidence demonstrates that a failure to acknowledge the gendered nature of violence and the dominating pattern of coercive control that many men exert, can lead to ineffective risk assessments; heightened risk to victims/survivors and the legal system acting inadvertently as a secondary abuser (ALRC, 2010; Klein, 2009, cited in Douglas, 2018, p. 94). Douglas reported that "... it is likely that justice system actors including judicial officers, prosecutors and lawyers will make more appropriate decisions when they understand that DFV is rarely a single incident rather that it is manifested in a pattern of coercive control" (2018, p. 94). An understanding of DFV as coercive control also makes it easier to understand why DFV often continues post-separation. Post-separation litigation can be seen as part of the ongoing effort to maintain control over the survivor (Miller & Smolter, 2011, p. 647 cited in Douglas, 2018).

⁶ Broad sub-categories included in "Offences against the person" include homicide, assault, sexual offences, robbery and "other offences", such as kidnapping and abduction, stalking, and life endangering acts.

⁵ This includes police and private applications for Domestic Violence Protection Orders, responding to interstate orders and other action)

It is increasingly acknowledged that coordinated, multi-agency and integrated responses in interventions targeting both victims and/or perpetrators are best practice in responding to violence against women (Breckenridge et al., 2015; The Taskforce, 2015). Integrated responses involve multi-agency development of clear coordination protocols for working in a holistic manner with victims/survivors and offenders. All Australian jurisdictions have developed some form of integrated mechanism to respond to DFV that features collaboration among criminal justice and community service agencies, including High Risk Teams operating under a shared risk assessment framework, and information sharing protocol, in Queensland.

Further, ANROWS has published research focusing specifically on Australian integrated response models (Breckenridge et al., 2015), and National Risk Assessment Principles (Toivonen, & Backhouse, 2018). Some jurisdictions have also published guidelines and protocols on information sharing between agencies on DFV matters. From this work across jurisdictions, the following range of elements are commonly accepted as key features of appropriate DFV responses:

- *Investigation and law enforcement response* Aim is to swiftly and fully investigate DFV to hold perpetrators accountable and enhance victim/survivor safety.
- Risk assessment and safety planning Evidence-based risk assessments are undertaken
 and reviewed routinely with offenders. Safety planning and risk to victims is regularly
 monitored and reviewed.
- Monitoring and supervision Compliance with mandated treatment and other forms
 of monitoring for offenders (including, electronic monitoring, drug testing,
 surveillance/supervision by probation staff and specialist courts to ensure compliance
 with protection orders and other legislative provisions).
- Victim safety planning Aims to address factors that may increase victim/survivor
 vulnerability to ongoing abuse and provide additional resources to reduce the risk of
 threat or harm.
- Support through better integration of service systems Collaborative action with the aim to: reduce the risk of re-offending and enhance safety through DFV perpetrator programs, counselling, substance abuse and health programs or education and training; and provide victims/survivors with comprehensive support (emotional, financial, housing and more).
- Information sharing among agencies Legislative guidance and agency protocols enable appropriate information sharing to better manage risk. Under the Domestic and Family Violence Protection Act 2012 (Qld) a prescribed entity or specialist domestic and family violence service provider may give information to any other prescribed entity or specialist domestic and family violence service provider if it reasonably believes a person fears or is experiencing domestic violence; and giving the information may help the receiving entity assess whether there is a serious threat to the person's life, health or safety because of the domestic violence (Department of Communities, Child Safety and Disability Services, 2017, p. 6).

EM cannot be a stand-alone response by one agency. The focus on integration of service systems, collaboration and information sharing among all relevant agencies will be instructive in developing guidelines for the targeted application of EM to DFV offenders. In addition, the gendered nature of DFV, coercive control and post-separation risks of increased harm, homicide and filicide must be taken into account in considering the utility of EM in the context of domestic and family violence.

Offender management principles

Central to the criminal justice system is the promotion of community protection through law enforcement, sentencing measures, rehabilitation of offenders and crime prevention. Sentencing, and the use of measures like EM, aim to achieve incapacitation of offenders, deterrence, retribution and rehabilitation. The growing reliance on technologies in criminal justice systems that monitor, track and remotely observe offenders—creating virtual detention and incarceration—is shaped by political, economic and safety interests. This technological shift in law enforcement and penal functions raises numerous ethical, penology, legal, socio-cultural, and practical issues. Queensland Corrective Services (QCS) endorses the Standard Guidelines for Corrections in Australia (2012), which include support for a range of practice principles, including two of particular relevance to this review:

- 1. The management of offenders should be based on an assessment of the security risk they present and their risk of re-offending, and should be tailored to address their individual criminogenic (dynamic factors which, if changed, increase or decrease the likelihood of a person re-offending) and other needs.
- 2. The needs and safety of victims should be considered across all offender service development and delivery (p. 7).

The Offender Management Framework (Corrections Victoria, 2018) provides one of the most recently revised models within the Australian correctional context. Based on four pillars (*Integrity, Risk, Need, Responsivity*) it draws on the theoretical insights from Andrews and Bonta (2006) who promote the following three core principles of offender management:

- *Risk principle*: Match the level of service to the offender's risk to re-offend.
- *Need principle*: Assess criminogenic needs and target them in treatment.
- *Responsivity principle*: Maximize the offender's ability to learn from a rehabilitative intervention by providing cognitive behavioural treatment and tailoring the intervention to the learning style, motivation, abilities and strengths of the offender.

The commonly adopted aims of offender management are to:

- maintain a safe and secure community;
- identify and monitor offenders' risks and needs;
- based on these risks and needs, coordinate and prioritise offenders' access to appropriate programs, services and activities; and
- motivate offenders to engage in and continue with programs and services. (Corrections Victoria, 2018).

The principles that underpin offender management frameworks provide guidance to governments on effectively and ethically managing offender interventions, including EM.

The Australian criminal justice system applies a criminological framework that incorporates both punitive and rehabilitative measures: therefore, offenders subject to EM post-sentence are generally required to also undertake rehabilitative initiatives, such as substance abuse, sex offender and mental health counselling, aligned with their individual risk assessment and circumstances. In the case of domestic and family violence, rehabilitation would likely include some kind of domestic and family violence perpetrator intervention program.

Perceived benefits of EM for offender management

Some scholars (e.g. Bagaric, Hunter & Wolf, 2018) advocate for the widespread application of 'technological incarceration' (technological barriers and restrictions on offenders) as a solution to the heavy demands on prisons. In their proposal Bagaric et al., (2018) argue for a three pillar model of 'technological incarceration' that imposes proportionate punishment and community protection: a) offenders would be subject to EM (i.e. effectively imprisoned) to ensure they do not move outside of the defined geographical areas; b) 'prisoners' would be compelled to wear sensors so that unlawful or suspicious activity could be monitored remotely by computers; and c) conducted energy devices would be used remotely to immobilize prisoners who attempt to escape their areas of confinement or commit other crimes.

The support for EM is primarily based on evidence indicating that it can: a) enhance community safety and protect those at risk of harm; b) reduce recidivism rates; and c) reduce incarceration rates and costs (Hucklesby & Holdsworth, 2016). Nellis (2014, p. 79) suggests that of the three inter-connected sets of penological framework ("managerial-surveillant", "punitive-repressive", and "humanistic-rehabilitative"), the broad adoption of EM emerged from the managerial-surveillant discourse—a shift in community corrections toward reducing dangers that offender populations pose for the public, rather than offender rehabilitation. However, international best practice indicates that sanctions that encompass rehabilitative provisions based on individual case-planning which address offenders' specific risks/needs are associated with reduced recidivism rates (Henderson, 2006 cited in Bartels & Martinovic, 2017, p. 95).

Perceived limitations of EM for offender management

Numerous stakeholders and criminologists are critical of, or at least cautious about, the expansion of EM, calling for more empirical evidence of its value. Primary concerns are:

- the net-widening effect and privacy impacts where low-risk offenders (including youth offenders and women) are monitored;
- the strong private sector involvement in service delivery that could create a commercial incentive to expand its use;
- the 'false' alerts and deficiencies in the monitoring systems;
- and the lack of awareness the public and decision-makers have of the limitations of EM. (Nellis, 2014; Hucklesby & Holdsworth, 2016; Bartels & Martinovic, 2017)

Given that increased application of EM in Australia and internationally seems likely, commentators call on governments to ensure the use of EM generally conforms to the evidence

base on good practice. In the Australian context, Martinovic (2013) has highlighted the need for stakeholders to work collaboratively and share information, to include rehabilitative and reintegrative strategies in the use of EM, and to conduct ongoing independent evaluation that informs continual improvement. It is recommended that electronic monitoring administrators obtain continuous stakeholder support. This will improve the implementation of the EM program as they rely "... heavily on the cooperation of agency partnerships, particularly between law enforcement, supervision agencies and wider social institutions, as well as public acceptance of and confidence in such initiatives" (DeMichele and Payne, 2009b, cited in Bartels & Martinovic, 2017, p. 93).

Introduction of EM in Australian jurisdictions

EM was first introduced in Australia in the 1980's as part of a range of new community based sentencing options (Bartels & Martinovic, 2017). Home detention programs using electronic monitoring as an alternative to prison commenced in Australian mainland states between 1986 and 2004 (Bartels & Martinovic, 2017). Where radio frequency monitoring was initially used in some jurisdictions within Australia, GPS technology for EM is now applied in all Australian states and territories.

National data on corrections (Australian Bureau of Statistics, 2016a) reports on the number of persons on community corrections orders, but does not indicate if they are subject to any form of EM. As a result, it is not entirely clear how many people are subject to EM in Australia at any time, or what the parameters of their monitoring are (Bartels and Martinovic, 2017, p. 88).

Some Australia state governments, assisted with federal government funding under the Third Action Plan of the *National Plan to Reduce Violence against Women and their Children 2010-2022*, are trialling and evaluating the use of EM for high-risk DFV on civil protection orders.

Following is a summary of the use of EM, in general, in Australian jurisdictions. Appendix 2 provides a complete list of relevant legislation governing use of EM in Australian jurisdictions, as well as information on the technology used. Section 5 provides more detailed information about the EM trials in the context of DFV in New South Wales, South Australia and Tasmania.

New South Wales

NSW introduced electronic monitoring home detention programs for offenders in 1997 and these remain operational. Only small numbers of offenders have been historically subjected to EM via this program. In 2014-2015, after a promotion of the home detention EM program to the judiciary by NSW corrections, numbers increased to over 200 offenders being subject to the program in 2016 (NSW Government, 2016 cited in Bartels & Martinovic, 2017).

In May 2018 the Reintegration Home Detention Scheme came into effect under the *Parole Legislation Amendment Act 2017* (Department of Justice, 2018a). This scheme allows suitable parolees to serve the final six months of their sentence in home detention subject to certain conditions that may include electronic monitoring.

After an overhaul of Intensive Corrections Orders (ICO) in NSW in 2018, supervision of offenders on these orders became mandatory and courts could add a condition of EM. (Department of Justice, 2018b).

NSW currently has legislation that allows EM for offenders subject to low risk home detention, parole, Extended Supervision Orders (ESO's) - Violent and Sex Offenders, and Intensive Corrections Orders (ICO's). The NSW government is currently conducting a three-year trial of GPS monitoring for DFV offenders who are on parole and assessed as medium to high risk for recidivism. The trial is outlined further in section 5 of this report.

Victoria

Victoria introduced EM using radio frequency for home detention in 2004 but, like NSW, experienced the issue of low offender numbers being subject to these orders (Melbourne Centre for Criminological Research and Evaluation, 2006; Victorian Sentencing Advisory Council, 2008 cited in Bartels & Martinovic, 2017). The program was revoked in 2011 and in 2013 GPS EM was introduced by the Victorian Government as an available condition for parole and community correction orders (Bartels & Martinovic, 2017).

Although offender numbers subject to EM on these orders have remained small since the introduction of GPS technology, they have slowly increased over time. In June 2016 there were 87 offenders subject to EM on parole and community correction orders (Adult Parole Board of Victoria, 2016 cited in Bartels & Martinovic, 2017).

A trial of EM for young offenders who have committed serious offences and are transitioning back into the community is due to commence in 2019 (Office of the Premier, 2018).

Victorian legislation also allows for bush fire arsonists, and serious sex and violent offenders to be subject to EM (see Appendix 2).

South Australia

At 30 August 2018, there were 761 offenders subject to EM across the state of South Australia (South Australian Corrections, personal communication, 30 August, 2018). Home detention with electronic monitoring as a mandatory or optional condition is available post-release from prison, as an alternative to prison, and as a condition of bail orders (South Australian Department for Correctional Services, 2014; Victorian Parliamentary Library Research Service, 2011 as cited in Bartels & Martinovic, 2017).

Intensive Probation Supervision has been a court ordered sentencing option since 1999 in South Australia and includes a condition of EM in most cases. Home Detention has been a sentencing option in South Australia since 1986 and involves strict release conditions which may include EM of offenders. Bail and Intensive Bail Supervision (Home Detention Bail) can also include an EM condition (South Australian Attorney Generals Department, 2015). South Australia is the only state that has the option of bail home detention and it is by far the largest cohort of offenders currently subject to EM in that jurisdiction (401 of the total 761 on EM at 30 August 2018) (South Australian Corrections, personal communication, 30th August, 2018).

Extended Supervision Orders with the possible condition of EM have been used in South Australia since 2016 for high risk offenders (serious sexual offenders and serious violent offenders) (TimeBase, 2016). Further details are provided in section 5 of this report.

Northern Territory

The Northern Territory (NT) has overseen a roll out of electronic monitoring since 2014 (Middlebrook, 2015). The NT currently has home detention orders as a sentencing option which include an EM condition for all offenders subject to these orders (Northern Territory Government, 2018a; Middleton, 2015). EM can also be used on young offenders in the NT (Youth Justice Legislation Amendment Bill, 2017).

In 2017, NT Police were granted authority to issue and fit EM devices to defendants released on police bail, including young offenders after their first offence (Northern Territory Government, 2017). Electronic monitoring can also be applied to offenders on parole (Northern Territory Government, 2018b).

Western Australia

Like the Northern Territory, Western Australia is also using EM for young offenders and offenders on bail (Western Australian Government, 2010; Western Australia Government, 2016). In 2012 legislation was passed to allow GPS tracking of Dangerous Sex Offenders with the first devices being fitted to this cohort in 2013 (Western Australian Government, 2013).

There is currently no legislative capability to use GPS EM at parole in Western Australia (see Appendix 2).

Tasmania

Tasmania passed the *Sentencing Amendment (Phasing out of Suspended Sentences) Act 2017* in November 2017 to allow home detention for offenders including a condition of electronic monitoring. Recruitment is currently underway for the Monitoring and Compliance Unit that will support the introduction of home detention in Tasmania (Department of Premier and Cabinet, 2018).

A 3-year trial in Tasmania provides for EM as a condition on an FVO for high-risk perpetrators of DFV, under the recently amended *Family Violence Act 2004* (Tas). Within the trial a relatively small number of victims/survivors will be offered the opportunity to use an electronic safety device (Tasmanian Government, 2017). The Tasmanian EM trial for DFV offenders/defendants is further outlined in section 5 of this report.

Queensland

The Queensland *Corrective Services Act 2006* (Qld) provides that offenders released on community-based release orders may be required to wear a device that monitors the offender's location. In 2007 Queensland commenced EM using radio frequency technology on offenders who were subject to supervision under the *Dangerous Prisoners (Sexual Offenders) Act 2003* (Queensland Government, 2007). In 2011, GPS technology replaced radio frequency technology for EM in Queensland (Queensland Government, 2011).

EM of offenders subject to parole commenced in Queensland in 2017 (Queensland Government, 2017a). As of March 2018, EM can also be applied as a condition to any person granted bail in Queensland under the *Bail (Domestic Violence) and Another Act Amendment Act 2017.*

Models and technology used internationally

More than 120 federal, state, and regional law enforcement agencies, predominantly across the US, UK, Europe, New Zealand, and Australia, use EM/GPS systems to track low risk offenders and high risk sex and other violent offenders. The EM technology used, the infrastructure, and models of supervision established in each jurisdiction varies considerably between jurisdictions, and will vary for individual perpetrators depending on the level of risk they pose. The technology is applied at some or all stages of the criminal justice process in pre-trial supervision, on probation, parole, or as an alternative to detention (Evans, 2011, p. A-2).

Pre-trial

In the UK for example, EM is available for all adult defendants, whether or not they are charged with offences subject to terms of imprisonment: "it is used in both cases where there is no likelihood of pre-trial detention and in cases where pre-trial imprisonment is a clear possibility" (Hucklesby & Holdsworth, 2016, p.13). Breaches are reported to the police when defendants have missed a very short period of curfew. Police have the power of arrest in that event. New schemes are emerging (e.g. in the UK and Spain) where GPS monitoring can apply for DFV offenders subject to civil protection orders (Hucklesby & Holdsworth, 2016), as discussed in the next section on electronic monitoring for DFV offenders. A new bilateral pilot scheme for defendants on bail for DFV is operating in Northumbria, UK. It is voluntary and involves the use of an ankle tag for defendants and a handheld GPS device for victims/survivors (Gaskarth, 2016). Fixed exclusion zones are imposed and adjusted to follow the movements of the victims. Defendants and victims are made aware of breaches of the exclusions zones as they occur.

Primary sentencing

Electronic monitoring is currently available as a primary sentence in the United States and is generally considered to be somewhat more lenient than prison, but harsher than probation. In the UK standalone EM, that is, single requirement orders, can be imposed following a wide range of offences from very minor to very serious. Curfew requirements can be imposed for up to 16 hours a day and for a maximum period of 12 months. Curfew requirements are monitored using Radio Frequency technology. Probation services case manage multi-requirement community and suspended sentence orders and home detention, but are not involved in single requirement orders. Supervision only takes place when stipulated as one of the other conditions of the community or suspended sentence orders (Hucklesby & Holdsworth, 2016).

Post-prison

In New Zealand early release of specified prisoners with electronic monitoring has been available since 1999. Appendix 2 provides an overview of electronic monitoring within the criminal justice system in New Zealand.

In 2016, about 125,000 offenders were said to be on EM technology throughout the US at any one time (PEW Charitable Trusts, 2016). In 2016-17 in the UK, around 12,300 to 14,000 offenders were under tagging orders at any one time. Of these, up to 20 subjects, equivalent to less than one person for every other police force area, had their movements tracked using GPS (National Audit Office, 2016, p. 13).

Compared to other countries, the use of EM in Australia is lower, and the use of EM is notably higher in New Zealand. Table 3 shows the proportionate use of EM among the offender population⁷ in selected countries.

Table 3. The use of EM among offender populations

Country	Offender/defendant	No. offenders/defendants	% offender/defendant
	population	on EM	population on EM
New Zealand	9,914	4,021	40.5%
England & Wales	85,128	13,210	15.2%
USA	2,200,000	125,000	5.7%
Australia	39,005	1,000	2.5%

Adapted from Martinovic, 2017 (citing Pew Charitable Trusts, 2016; ABS, 2016; Lis, personal communication, 2016; New Zealand Department of Corrections, 2016; Ministry of Justice, 2015; Hucklesby & Holdsworth, 2016).

Martinovic (2017) provides an overview of the use of electronic monitoring in New Zealand, and reports it has positive results, compared to prison, in cost-saving and reduction of recidivism. Although it appears "family violence offenders who pose a high risk to their victims" (Martinovic, 2017, p. 3) are subject to EM, Martinovic does not provide any specific analysis of EM results for this sub-population of offenders. She does, however, comment on the "disproportionate level of media coverage" (Martinovic, 2017, p. 3), despite the benefits of EM. The negativity appears to be limited, however, to the ability of the offender to remove the monitoring device and abscond. As Martinovic (2107) shows, absconding and re-offending rarely occurs. Further, technology has advanced to make tampering with a device detectable, and facilitate prompt action. Nevertheless, the consequences of perpetrators of domestic and family violence being able to remove a monitoring device and abscond are potentially very serious, even fatal.

Electronic monitoring technologies

In a market survey for the National Institute of Justice (USA), Taylor, Subramania, Evans, and Mahaffey (2016) collected information from nineteen technology vendors on the features and capacities of their electronic monitoring products and systems. EM technology, consisting of hardware and software components, reports an individual's location and corresponding time data at programed intervals. A non-removable.⁸ bracelet with an embedded receiver, is affixed to an offender's leg or arm by a relevant authority. The receiver determines the individual's

⁸ It is intended that the bracelet cannot be removed without relevant equipment, but in reality bracelets have been removed by cutting the strap or breaking the locking mechanism. Advances in technology, including tamper resistant materials and tamper alerts, have been introduced to address this limitation in EMPs for offenders.

⁷ Martinovic (2017) uses "prison population" and "% of prison population", perhaps applying the concept of "technological incarceration". We use the term "offender/defendant", to avoid confusion since EM is an alternative to conventional prison.

location by using signals from GPS satellites, global navigation satellite system (GLONASS), Wide Area Augmentation System (WAAS), Wi-Fi, or other means. This information is transmitted via a wireless signal or traditional wired telephone line to monitoring software located in a monitoring centre. Within this general framework, an end user can actively or passively monitor offenders or implement a hybrid design using either a single or multi-piece architecture (National Institute of Justice, 2016a).

The various types of technologies available provide different capabilities for detention, restriction or surveillance of individuals within the criminal justice system. Radio-frequency technology is typically used as a base technology for low-to-medium risk offenders. GPS technology is generally utilised for high-risk offender cohorts, such as sex offenders and perpetrators of domestic violence. All states and territories in Australia that use EM have now transferred to using GPS monitoring technology (Bartels & Martinovic, 2017, p. 81), which is sometimes used in conjunction with Radio-frequency technology.

The various technology systems are commonly categorised as active, passive or hybrid/Global Positioning Systems. Drawing on Taylor et al., (2016, p. 3-1) each is briefly described below.

Passive systems collect offender location data throughout the day at rates similar to active systems: however, the data are typically transmitted once per day to monitoring software. In these systems, offenders are periodically contacted by telephone to verify the individual's location and identity.

Active systems collect offender location data as frequently as once per minute and transmit it to monitoring software via wireless communications in near real-time. Active systems impose restrictions through the installation of monitoring devices in places where the person is not permitted to go. If the person goes into those areas, an alert is activated and action is taken. Active systems can also be used to restrict an individual's access to other people if those people (for example, victims/survivors) are given a device that detects if the person under surveillance comes too close.

Hybrid/ Global positioning systems consist of three components: satellites, a network of ground stations, and mobile user devices (e.g. ankle strap). Measuring the user's distance from three different satellites (triangulation) identifies their location. Detention with GPS is achieved in the same way as with an active system. The device user is monitored to ensure curfew hours are kept. Place-restriction (geo-fencing) is enforced through an alert that is triggered if the user goes into prohibited areas. The user's proximity to other people can be controlled if those people also carry GPS devices, or are regularly informed of the defendant/offender's location. Surveillance is achieved by continuously monitoring the user's location. An even more sophisticated device includes a miniature video camera that enables officials to observe the wearer's location and activities, while other devices can measure biochemical characteristics such as the wearer's blood-alcohol level. Hybrid systems generally operate in passive mode until a triggering event occurs (e.g. zone infractions, tamper indications, low power status), at which time they switch to an active reporting mode.

In their market survey, Taylor et al., (2016, p. 3-1) reported that although each vendor has unique software to process and monitor the location data provided by the bracelet, most

provide end users with access to their software over the Internet. They also typically provide the ability to create inclusion zones, exclusion zones (particularly relevant to EM in the context of domestic and family violence) and schedules that can be stored either in the device or in software at a data centre. Either the agency or the vendor may perform offender monitoring. In their National Standards for Electronic Monitoring, the US Department of Justice (National Institute of Justice, 2016b) identified future trends in the technology that procurers of the technology can be mindful of. Features relevant to DFV monitoring identified by Taylor et al., (2016) include:

Hardware

- Field-replaceable battery solutions that allow the agency to replace the batteries as needed.
- Omni-directional antennas that facilitate better reception and transmission of cellular signals.
- Wi-Fi backup.
- Better ability to track offenders indoors, underground, and out of direct-line-of-sight of the satellite system.
- Detect intentional signal blocking/jamming.
- Tethering technologies, alternative to a device strapped to the ankle.

Software

- Improved mapping capabilities including: movement trails displaying speed and direction, overlays showing important public areas such as schools and parks, as well as locations known to be associated with criminal elements that are automatically correlated with movement points.
- Archived satellite imagery will provide both correlation of movement with points of interest, as well as "advance reconnaissance" information to officers in situations where apprehension may be necessary.
- Better analysis of client movement including tendencies.
- Correlation analyses between data provided by the GPS system and data provided by other law enforcement agencies.

The use of electronic monitoring for domestic and family violence offenders at bail, probation and parole.

Approximately 30 Australian and international jurisdictions subject domestic violence offenders to EM. There are numerous international jurisdictions where EM has been increasingly incorporated as a tool for managing the risks posed by DFV offenders on the issuing of a civil protection order, at bail, pre-trial, probation and parole. Trials are emerging in Australia where GPS is also being used alongside civil domestic violence orders (see Appendix 2 and section 5). Most of the domestic violence and EM literature appears to focus on the pre-trial stage.

In some US jurisdictions EM has, for some time, been applied in DFV cases during the pre-trial phase of the justice process. These jurisdictions recognise pre-trial is an especially volatile time: an alleged perpetrator may seek further control over the putative victim to avoid punishment, or to take revenge, resulting in harassment, intimidation or injury (Erez et al., 2012). The rationale for the use of electronic supervision pre-trial is that it strengthens protective orders—'giving them teeth'—by reinforcing to the offender and community that protection orders are to be taken seriously and that serious consequences apply if the orders are breached.

Erez et al., (2012) have shown that GPS monitoring has increased the effectiveness of protective orders, as shown by fewer protective order violations by GPS-monitored offenders. They cite, for example, the Massachusetts site that reported no violations of protection orders by GPS-monitored offenders over a 3-year period. The researchers suggest that without GPS monitoring, the victim might not be aware of offender's presence until it is too late for the victim to escape and too late to notify the police. The relevant statute creates a fixed standard, requiring the offender to be deemed "a high-risk offender" before GPS monitoring can be ordered. A dangerousness assessment is used to assess the risk and help identify victims who need the most protection from their abusers. GPS programs rely on the ability and capacity of their officers to effectively supervise DFV defendants: therefore, on average, GPS officers monitor less than half as many clients as non-GPS officers (Erez et al., 2012).

The success of electronic monitoring at the pre-trial/protection order stage has prompted advocacy in other US jurisdictions. Advocates in Tennessee have waged a strong campaign for legislative change to enable electronic monitoring to be available on the issuing of protection orders. (Malone, 2012).

In her review of electronic monitoring in New Zealand, Martinovic (2017) reported that EM was introduced as a condition of regular bail in New Zealand in September 2006. It can be applied to defendants charged with more serious offences who have been remanded in custody. The Department of Corrections supervises defendants on EM bail. In late 2016, EM legislation was passed to enable two additional community based sanctions: 1) temporary release from prison on conditions; and 2) intensive supervision. At sentencing, probation staff can recommend EM to be imposed as a condition of one of these sanctions. The Department of Corrections provides the courts with pre-sentence reports that outline whether offenders are suitable to have their whereabouts restricted and be electronically monitored. These presentence reports are likely to target the following sub-populations of offenders sentenced to a short prison sentence or intensive supervision: family violence offenders who pose a high risk to their victims; gang-affiliated offenders who pose a high risk to public safety, and high-risk sex offenders.

The new UK Domestic Abuse Perpetrator GPS Proximity Device Pilot in Northumbria features bilateral GPS monitoring (an EM bracelet for offenders and a security device for victims/survivors) at the bail stage. Hucklesby & Holdsworth (2016) report that the GPS tagging technology in the pilot scheme is underutilised because many alleged perpetrators are unwilling to volunteer to use it and the Courts cannot force them to do so. Further, victims/survivors are reported to be enthusiastic about the scheme due to their enhanced feeling of safety (Gaskarth, 2016; Hucklesby & Holdsworth, 2016). There is community pressure, and some parliamentary

debate, for legislative change so that UK Judges may impose GPS tagging on the offenders deemed to be at high risk of re-offending (Gaskarth, 2016).

Alleged domestic violence perpetrators in Spain and Portugal can be tagged involuntarily on the recommendation of a regional judge where an alleged perpetrator has been charged but not bailed and there is the chance of an incident happening between charge and conviction. In advocating for this scheme to be widely adopted in the UK, Gaskarth (2016) reported that:

In Spain, since 2009 (when the proximity tagging system was first trialed), there have been no homicides in cases where both the alleged perpetrator and the victim have been monitored. Only fifteen per cent of the perpetrators have been sent to jail since 2009 for not complying with the program. Perpetrators are required to remain more than two kilometres away from the victim and as of December 2009 there were just under eight hundred active pairs in the domestic abuse tagging program in Spain. For those who are accused and think the charges are fabricated, tagging provides a clear way of proving their innocence—so there are some benefits for the alleged perpetrator too.

Evidence on effectiveness of, and challenges with, electronic monitoring

Overall evidence of effectiveness of electronic monitoring

The evidence suggests that electronic monitoring, in the variety of models and modalities in which it functions, is having a positive impact on recidivism, although Hucklesby & Holdsworth (2016) report that an evidence base is lacking in England, Wales and Europe generally, due to reliance on small pilot studies. Similarly it is claimed that the U.S. lacks rigorous research, leaving questions about the efficacy of community supervision with electronic monitoring unanswered (DeMichele, 2014, p. 393). Commentators caution against electronic monitoring being considered a 'standalone panacea' to concerns about insecurity and prison overcrowding (Nellis, 2016; DeMichele, 2014). The positive impact of electronic monitoring is enhanced with complimentary interventions, such as: mandatory treatment strategies (e.g. substance abuse treatment, sex offender treatment and mental health counselling); rigorous surveillance; and case management through a probation/ corrections service (Ibara, Gur, & Erez, 2014). Electronic monitoring provides structure and can be 'habit-breaking' by keeping offenders away from places, people and activities that lead to offending (Hucklesby & Holdsworth, 2016, p. 9; Hudson & Jones, 2016; Erez et al., 2012).

The evidence indicating positive impacts includes:

- A Florida study of 76,000 offenders placed on home curfew found that offenders
 monitored with either radio-frequency or global positioning systems (GPS) had
 significantly lower rates of revocations for technical violations or new crimes as well as
 lower absconding rates (Padgett, Bales, and Blomberg, 2006), compared to those without
 any monitoring.
- Bales et al. (2010 cited in Martinovic, 2017) conducted a follow-up study in which they found that electronic supervision offenders using RF had a 31% lower failure rate than

comparable offenders not on electronic supervision. Those monitored with GPS had a 6% lower failure rate than those on radio-frequency monitoring. The finding was that being subjected to RF monitoring reduces the likelihood of failure under community supervision by about 30 percent, and that GPS monitoring has a further 6 percent compliance improvement rate when compared with RF monitoring.

- A Californian study found low arrests, reconvictions, and returns to prison among sex offenders in California on electronic monitoring, and similarly positive findings were found with a sample of released gang members (Gies et al., 2012, 2013 cited in DeMichele, 2014 p. 395).
- Citing Martinovic, (2017), the New Zealand Ministry of Justice (2011) reported that the rate of re-offending while on electronically monitored bail was quite low, and significantly lower than the average rate of offending on regular bail without the EM component (7 and 17 percent, respectively). The latest evaluation outcomes reported by the New Zealand Department of Corrections (2012) indicate that EM sanctions are continuing to produce effective results. After serving a sentence on EM versus imprisonment, offenders are less likely to re-engage in further offending. This is seen by the 19 percent re-conviction rate for those on home detention (within 12 months of sentence start date) versus 42 percent for those imprisoned (within 12 months of date of release).
- The New Jersey State Parole Board GPS monitoring report (2007, cited in Bartels & Martinovic, 2014, p. 83) suggested that GPS monitoring of sex offenders contributed to a much lower recidivism rate compared with statistics from across the US (0.4% vs 5.3%).
- A mixed methods UK study involving interviews with offenders and activity data (Hudson & Jones, 2016) showed a reduction in adversarial Police contact by participants, leading the researchers to conclude that when used in a measured and targeted way, GPS tracking can contribute effectively to offender rehabilitation and the management of risk, as well as providing enhanced possibilities for prevention and detection of crime.

Martinovic (2017) reported that positive findings were drawn from two major studies that presented "lessons learned" regarding recidivism and deterrence in the GPS monitoring field: a) Brown, McCabe and Wellford (2007) in their empirical studies sponsored by the USA National Institute of Justice; and b) Hucklesby's (2009) summary of the presentations at the 2009 Electronic Monitoring Conference in the Netherlands. The lessons include:

- GPS monitoring prevents offenders from committing crime;
- offenders subjected to GPS feel "observed", and are therefore more likely to comply;
- offenders avoid particular locations and victims due to GPS exclusion zones;
- offenders are not likely to maintain contacts with former associates due to GPS tracking;
 and
- it is unknown whether GPS monitoring has a sustainable impact on offenders' behaviour modification.

Some studies indicate little or no positive impact of EM. A UK reconviction study with a sample of 63,584 (Marie et al., 2011 cited in Hucklesby & Holdsworth, 2016, p. 11) compared prisoners released on home detention (HDC) with electronic monitoring with those who were eligible, but not released on HDC. The study found that offenders released on HDC were no more likely to be reconvicted than those who were merely eligible. The UK 2005-06 electronic monitoring pilots subject to independent evaluation (Shute, 2007 cited in Hudson & Jones, 2016) reported that 58 percent of offenders wearing a GPS tracker were recalled or had community penalties rescinded for breaking their regimes. UK research has also indicated that the number of violations of EM is high for bail, curfews and HDC, with most violations in the less serious category (time violations and equipment tampers) which do not result in immediate breach (Hucklesby & Holdsworth, p. 10).

Effectiveness of electronic monitoring with DFV offenders

Although electronic monitoring of DFV perpetrators is currently being trialled and evaluated in several Australian jurisdictions, with South Australia and New South Wales most advanced, there are no results from these trials on which to draw an evidence base for the Queensland Government's consideration. Elsewhere, researchers acknowledge that it is difficult to isolate electronic monitoring from other interventions to determine what is effective in managing the risk posed by DFV offenders. 'What works' is complicated by the interplay of social and individual risk factors in the lives of perpetrators and victims, and the variety of interventions that make up the coordinated community response to domestic violence. However, the evidence indicates that when electronic monitoring of DFV offenders is used in conjunction with other interventions (and not as a substitute for prison with very high risk offenders), it can provide a sense of safety for victims/survivors and can contribute to some reduction in offending. A summary of supporting evidence is provided below.

In the USA, Erez et al. (2012) examined the implementation of GPS-based monitoring technology in enforcing court mandated "no contact" orders in domestic violence (DV) cases in three geographical sites. Relevant key findings from Erez et al (2012) include:

Over time (that is, during a follow up of one year), enrolment in the GPS program had a significant impact on re-arrest outcomes generally and for DV specifically in two of the research sites and overall increased offender compliance with the law in all three sites (p.135).

In all sites, GPS defendants stayed away from the exclusion zones reinforcing the no contact orders— at least in regards to physical contact (p.147).

The qualitative data from interviews with women victims/survivors, male offenders and criminal justice stakeholders showed that:

- Victims/survivors reported feeling more peace of mind, less harassment and greater capacity for independence, despite there being no guarantees of their safety (p.144).
- While expressing concern with the restriction on their liberties; and onerous responsibilities in managing equipment and reporting to authorities, many offenders considered the GPS provided them with structure, an ability to defend false accusations against them, and an opportunity to gain employment that they could not do if they were imprisoned (p. 146).

A 2009 Swedish study of 260 individuals on an early release from prison EM program (Marklund & Holmberg, 2009) showed a statistically significant effect on re-offending among low to medium risk offenders, but only a small (and possibly coincidental) reduction in re-offending among high risk offenders. This evaluation attributed reductions in re-offending to the DFV program features (that is, the requirement on release that all participants be engaged in employment or training, regular drug and alcohol screening and transition to community social work support).

Challenges with EM programs

Electronic monitoring is a tool, and its effects cannot be separated from the officers and agencies monitoring these devices (DeMichele, 2014, p. 394).

There are a number of challenges and risks with EM, particularly as it applies in DFV cases. The common view expressed in the literature and trial programs is that electronic monitoring is a technology—a tool, rather than a quick-fix solution—and what matters most is the human resource support systems, case work and legal framework around the technology (DeMichele, 2014; Erez et al., 2012). Challenges related to technology, legal and justice processes, ethics, diversity, and procurement identified in the literature are discussed below.

Technological issues and resource implications. GPS monitoring technology does not have intrinsic supervisory powers. It provides an indication of a person's location but reveals nothing about what they are doing (DeMichele, 2014). There are issues with the operation of GPS monitoring, including its inability to maintain a continuous signal when there is no clear path between GPS satellites and tracking units (Evans, 2011; Nellis, 2010) and issues with accuracy when it is near water, or static for a long period (Scottish Government, 2013). 'False alerts' (an alert is triggered but no actual breach has occurred) also occur as a result of technological limitations. The example of California illustrates some of these technological challenges. Evans (2011) reported that California uses a two-way GPS EM device that allows a probation officer to contact the offender if an alert is sent from the EM device. Field tests in 2011 revealed that approximately 55 percent of the time, half (50%) of the parolees being monitoring did not register a signal of any kind. The GPS manufacturer originally attributed the failure to register a signal to interference from buildings, cars, and trees. The system's failure to identify false positives, and register signals was compounded by a county policy requiring that all signals be sent to every probation officer supervising a parolee. Like other jurisdictions, California experienced high alert volumes that inundated its correction officers with false alerts. In 2013, LA County Sheriffs monitored more than 3,000 offenders released from jail under California's early release program. California currently tracks more than 8,000 state parolees. Reports in 2014 revealed that some corrections monitoring staff received as many as 1000 messages daily, many of them were false positive signals due to lost signals, reports of boundaries being exceeded, and other extraneous data (Evans, 2011, 36 A-7). Offenders report problems with charging batteries and the lack of waterproofing of some EM body-worn equipment. It is reported that EM technology is constantly advancing, becoming less intrusive and cheaper overall (Martinovic, 2013 cited in Bartels & Martinovic, 2017).

In the UK an evaluation of the pilot GPS monitoring scheme found significant problems: it was used less than expected; the breach rate was more than half (56 percent); it was difficult to

enforce breaches; in just over half of breach cases the technology played no part in the breach; the reconviction rate was 26 percent; the amount of information generated was very large; there were technical problems with the technology; very little active tracking took place; and it was costly (National Audit Office, 2017; Shute, 2007 cited in Hucklesby & Holdsworth, 2016, p. 30).

It is also reported that offenders have mixed views about being subject to the technology. Some have found it to provide structure yet it can be stigmatising wearing a device, and problematic in recharging batteries and managing technology failures (Vanhaelemeesch & Vander Beken, 2014; Young, Prentice, & McLaughlin, 2013).

Issues with the breach reporting processes. Research across jurisdictions is showing that there are significant problems with the high volume of breaches and their enforcement processes (Hucklesby & Holdsworth, 2016). The UK contracts, for example, require its Electronic Monitoring Service (EMS) to notify responsible authorities each time breach thresholds are reached during different curfew periods. This results in agencies being overwhelmed with the volume of statements relating to multiple breaches for individuals and inability to respond to all notifications (Hucklesby & Holdsworth, 2016, p. 43).

Relationships between EM and probation. Early in the UK roll-out of EM, the Probation Service and its staff did not engage well with EM. They were reluctant to recommend EM in presentence reports, contributing to lower take-up of EM (Walter, 2002; Mortimer and May, 1997 cited in Hucklesby & Holdsworth, 2016). Instead of making a Probation Officer's job easier, EM can increase the workload and costs associated with supervision (DeMichele, 2014, p. 394). Perceived threats to the role of probation staff, increased workloads and concern for an ideological shift in the UK to technological management of offenders, led to the UK's National Association of Probation Officers' (NAPO) long-standing scepticism and hostility towards EM (Nellis, 2016).

In establishing Community Rehabilitation Companies (CRCs) —comprising consortia of private and voluntary agencies which are responsible for the management of low-to-medium risk offenders on EM in England and Wales—Nellis (2014, p. 186) argued that the market imperative for the CRCs to drive down costs of delivering services may well "lead them to prefer cheaper EM-technologies over people-skills." Nellis (2014) cautions against the demise of probation services in the UK context where high numbers of offenders are subject to electronic surveillance and the delivery of EM is being diffused into a matrix of commercial organisations who he claims have no meaningful history in offender supervision, no allegiances with or connections to the policy networks, bodies of evidence or professional values that have governed its operation in the past. Ibarra et al., (2014) promote the US case work model within the probation service to function alongside EM, rather than a UK model in which private EM providers are contracted to conduct much of the supervision or support to offenders being monitored. They claim that EM companies can be penalised if officers do not respond to alerts quickly enough, respond to too many curfew violations, or take too long to install equipment or submit documentation. Given these benchmarks, offenders do not receive a long-term focus or forms of support from officers. Ibarra et al., (2014, p. 422). Ibarra et al. (2014) argue that in the current political and economic climate financial and ideological factors are driving policymakers to augment or replace "people-centred" work with technology and that

rehabilitative and other criminological outcomes are more likely when EM is integrated with other support measures to offenders.

Ethical concerns. There is limited examination of the ethics of EM from the perspective of either punishment or surveillance. Ethical considerations and potential challenges identified by Bülow (2014) and Nellis (2013) include:

- whether exclusion from public space can be justified;
- the stigmatising effect of wearing an EM device and lifetime monitoring of offenders' mobility;
- public risks and risks to the offender;
- loss of privacy for offenders and family;
- whether EM is a cause for unfairness; and
- reconciling EM with the aims of punishment.

A more specific concern about the use of EM relates to the challenges of a profit driven industry with private sector involvement from the companies that manufacture and manage EM devices and systems. There is support in the literature for governments to retain overall control and supervision of offender management, and carefully manage the private aspect of EM (Bartels and Martinovic, 2017, p. 87; Nellis, 2014). In Australia, private sector involvement in the EM programs is mostly limited to supply and maintenance of the technological equipment. The state and territory governments are responsible for sanctioning infringements and supervising and supporting offenders.

Diversity issues. In the UK context, Hucklesby & Holdsworth (2016) reported that there are communication and other challenges that arise for monitored individuals and victims/survivors who are unable to understand English, and those who have physical or intellectual disabilities. For example, a telephone translation service contracted by a private provider was not used appropriately, with family members being used more for translation. Overall Hucklesby & Holdsworth (2016) expressed concern about the lack of inclusion and responsiveness to the diversity of the communities throughout England and Wales evident in the EM programs.

Procurement concerns. The UK experience with EM has relied heavily on multiple private sector companies managing various stages of EM programs, including supply and management of the technology and supervisions and breach of offenders. There have been a number of public scandals involving alleged over-charging by private companies in EM. The National Audit Office (2017) review of EM in the UK was scathing of the five year delay and procurement process for the funded roll-out of the new generation GPS technology. Despite the controversies surrounding the involvement of the private sector in EM, Nellis (2014) predicts that private sector involvement in the UK is set to continue into the future as it reflects the wider move within criminal justice system in the UK towards an increased role for the private sector in probation and other systems. Nellis remains sceptical about the system of offender supervision being carried out by "... an uncoordinated array of private and voluntary organisations whose quality in their early years of operation will in no way substitute for what has been lost" (2014, p. 506).

Women on EM. Although men historically have been the majority of clients subjected to court ordered interventions for DFV, arrests of women for domestic violence occur and the cross-application of domestic violence protection orders is relatively high in Queensland. The implication of these trends is that women are becoming likelier candidates for EM programs "...raising questions about how women fare in programs designed with male batterers in mind" (Ibarra & Erez, 2011, pp. 11-12).

Victim/survivor perspectives

The role of the victim/survivor is still being defined and aligned with technological efforts to enhance supervision of high risk offenders. The overwhelming majority of programs lack victim-centric features that would offer accountability to victims/survivors (Erez et al., 2012, p. xvii). Research indicates that participating women describe feeling more empowered and having improved quality of life while the offender was under the monitoring regime (Erez et al., 2012; Erez & Ibarra, 2007). Victims/survivors reported that protection orders did not deter the offenders, until the EM was implemented (Rados, 2016). This sense of safety and empowerment results from them remaining in their home where they can retain some sense of a normal life without fear of assault, ambush or vandalism, beyond the controlling presence of the abuser (Erez & Ibarra, 2007). There are, however, significant concerns with the limited information victims/survivors may have about EM: how it operates and its limitations. Key findings from the research by Erez et al., (2012) include:

- The majority (70%) of criminal justice personnel interviewed agreed that victims misunderstand the capabilities of GPS tracking, and over half agreed that it gives victims a false sense of security—yet 80% thought it made the general public safer" (p. xv).
- Although many victims did not understand how the technology works, most expressed an awareness of the technology's limitations in terms of guaranteeing their safety, and felt that the offenders could manipulate the technology or subvert its capacities.
- The least utilized function in the regimes evaluated by Erez et al (2012) was one that allows victims to receive texts enabling them to take their own precautions without having to rely on law enforcement —a vital option "considering fewer than half of the programs report that law enforcement automatically responds to defendant violations or alerts" (p. xvii).
- Some victims expressed satisfaction at being able to covertly visit estranged partners enrolled in the GPS program as they could come and go "on their own terms" (p. viii).

It is suggested that agencies involved in EM programs for DFV offenders must make victim/ survivors central to the program by maintaining good communication between agency and victims; by conducting effective risk assessments and safety planning, and personnel should be watchful for possible discrepancies between victims' expectations for program performance and the program's actual capabilities and practices. Although victims/survivors who are correctly informed about the limitations of EM protections may not feel safe, they are likely to take precautions congruent with how offenders are actually supervised. This will minimize the risk of frustration, fear, loss of confidence, or a false sense of security developing on the part of victims/survivors (Erez et al., 2012).

Despite the harm they have been subjected to, abused women can still be emotionally or economically attached to offenders, especially where they have children, and some remain connected to their abuser through fear. Connection to a violent partner can be exacerbated for marginalised women who experience "...complex and intersecting connections between domestic violence, law, mental health provision, entitlement to welfare services, which function alongside constructions of 'culture' and cultural identifications, structures of racism, class and gendered oppression" (Burman & Chantler, 2005, p. 59). Some may desire non-violent contact with the offender and be reluctant and afraid to participate in the prosecution of their expartner (Dichter et al., 2011 cited in Rados, 2016). At times, due to these dynamics, they will allow their abuser to contact them despite the presence of a court order banning such association (Erez et al., 2004). This dynamic has implications for EM programs. Despite the frustrations that arise for EM staff or advocates, rather than penalising victims/survivors, it is suggested that program staff and advocates can enhance the safety of victims/survivors by recognising the prevalence of this dynamic and managing it within EM programs (Erez et al., 2012). In some cases victims/survivors do not consider the EM of the offender beneficial. Rados (2016, p. 42) reported a victim advocate as saying: "It's not up to the victim whether GPS is ordered or not, it's all up to the judge ... when the offender can't live in the house with them anymore they can get pretty angry and do anything to get the GPS removed."

A further issue is the importance of correctional staff engaging with victims/survivors at the time of the impending release of offenders from prison. In their work on developing and evaluating a Safe Return program, Bobbit, Campbell, & Tate (2011, p. 58) found that only a handful of state departments of correction had begun to engage men in domestic violence intervention programming prior to their release, and still fewer directed any services specifically to intimate partners of those being released or to victims/survivors of domestic violence. Participants in the research agreed that successful reentry planning must include the families of those returning from prison, particularly when there is a risk of DFV and a likely requirement for EM.

Guiding principles for electronic monitoring in the context of DFV

It is evident from the literature that guiding principles for EM ought to be grounded in both: a) ethical and ideological considerations about the place of EM in future criminal justice systems; and b) ethical and practice guidelines on what constitutes effective practice in the management of DFV offenders to enhance the safety for victims/survivors.

Commentators argue for ongoing consideration of the criminological context and principles to guide EM in a period where criminal justice systems are trending towards forms of 'technological incarceration' for both demand-management and criminological goals (Bagaric et al., 2018). The Council of Europe has been a leading player in devising human rights-derived regulations for best penal practice, in respect of both prisons and community sanctions, developing rules to guide the development of EM in Europe (Nellis, 2014, p. 501). To maintain effective and ethical practices in the application of EM programs the research highlights the importance of EM programs being underpinned by well-developed practice guidelines, human-rights derived regulations; legal regulation of GPS technologies for criminal justice purposes to

ensure appropriate and proportionate use, and routine program evaluation (Bartels & Martinovic, 2017; Hucklesby & Holdsworth 2016; Nellis, 2014).

In its report to the Council of Australian Governments (COAG), the COAG Advisory Panel on Reducing Violence against Women and their Children recommended that all state and territory governments support the development and use of a national common risk assessment framework for violence against women and their children (Council of Australian Governments, COAG, 2016, p. xvii). Subsequently, and pursuant to the Third Action Plan of National Plan to Reduce Violence against Women and their Children 2010-2022, ANROWS has produced the National Risk Assessment Principles (Toivonen & Backhouse, 2018). The National Risk Assessment Principles 9 do not replace existing risk assessment tools: they are a set of evidencebased principles for further state and territory work on risk assessment for adult victims/survivors, perpetrators, children and others. The background evidence for the development of the principles emphasises that risk assessment must be seen as a dynamic process, because the level of risk fluctuates (Albuquerque et al., cited in Backhouse & Toivonen, 2018). It also notes that victims/survivors assessments of risk of further assaults are generally accurate, and in one study shown to be about "as accurate in predicting reassault by their partner as key international risk assessment tools which have undergone predictive validity testing" (Heckert & Gondolf, 2004, cited in Backhouse & Toivonen, 2018). However, others warn that women have also minimised the violence they've experienced and the risk of lethal harm (Campbell et al., 2009; Murray et al., 2015, cited in Backhouse and Toivonen, 2018).

A further important principle derived from the literature is reflected in Martinovic's (2017) conclusion that "EM sanctions can make a contribution to reducing recidivism, but they must contain rehabilitative and reintegrative initiatives" (2017, p. 6). This principle is also reflected in the National Outcome Standards for Perpetrator Interventions (NOSPI), an initiative of the Council of Australia Governments (Commonwealth of Australia (Department of Social Services) 2015). Standards 1, 3 and 4 are particularly relevant to the development and implementation of an electronic monitoring program for perpetrators of domestic and family violence. They are, respectively: Women and their children's safety is the core priority of all perpetrator interventions; Perpetrators face justice and legal consequences when they commit violence, and Perpetrators participate in programmes and services that change their violent behaviours and attitudes.

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⁹ Survivors' safety is the core priority of all risk assessment frameworks and tools; A perpetrator's current and past actions and behaviours bear significant weight in determining risk; A survivor's knowledge of their own risk is central to any risk assessment; Heightened risk and diverse needs of particular cohorts are taken into account in risk assessment and safety management; Risk assessment tools and safety management strategies for Aboriginal and Torres Strait Islander peoples are community-led, culturally safe and acknowledge the significant impact of intergenerational trauma on communities and families; To ensure survivors' safety, an integrated, systemic response to risk assessment and management, whereby all relevant agencies work together, is critical; Risk assessment and safety management work as part of a continuum of service delivery; Intimate partner sexual violence must be specifically considered in all risk assessment processes; and All risk assessment tools and frameworks are built from evidence based risk factors.

4. Technologies and hardware for electronic monitoring

As identified in section 3, electronic monitoring technology currently used throughout Australia, New Zealand and Europe comprises two components: the monitoring technology; and the hardware (the actual device), both of which will be discussed in more detail throughout this section. The monitoring technology and processes, and the type of hardware used in EMPs, vary between jurisdictions.

Technologies

Technology currently available for electronic monitoring in the context of domestic and family violence is the Global Positioning System (GPS), Assisted GPS (A-GPS), General Packet Radio Service (GPRS), Global System for Mobile Communications (GSM), Radio Frequency (RF), and Wireless Fidelity (Wi-Fi). These are often used in combination within two broad categories: GPS and Radio Frequency. Further, GPS and RF may also be used in combination.

GPS provides accurate location data using a tracking device on a monitored person when they are away from home (and therefore able to go about daily routines, such as attendance at work or study). RF operates from a static home base station, or beacon, and assists with reporting on compliance with a curfew (e.g. home detention).

Global Positioning System

The Global Positioning System (GPS) uses a number of orbiting satellites (21-24 depending on operational response and downtime for maintenance) to allow a GPS receiver on earth to receive a signal. The satellites are positioned approximately 60 degrees north and 60 degrees south, enabling a signal to be received anywhere in the world, at any time. Simultaneously receipt of three or four satellite signals "triangulates" the data to confirm the geographical location (longitude and latitude co-ordinates), generally within 1-10 metres of the receiver (e.g. an electronic monitoring device attached to a defendant/offender).

Global System for Mobile Communications

GSM is digital cellular technology used by Mobile phone companies to transmit voice and data over a mobile communication network.

General Packet Radio Service

The GPRS system assists in providing large volumes of data quickly across networks. Once the GPS has been determined, the data packet (e.g. location, movement) will be transmitted back to the monitoring platform via the GPRS network. This can transmit the information up to ten times faster than GSM alone.

Radio frequency technology

Radio frequency (RF) refers to the rate of oscillation of electromagnetic radio waves. In RF monitoring, an electromagnetic field is created when two or more components with the capability of detecting each other (RF base station and EM ankle bracelet), are within range to produce an RF signal (up to 100metres if used in conjunction with a battery operated device

that both receives and transmits signals back to the designated base station). The signal can be transferred to a monitoring centre via an antenna. This technology is suitable for home detention, but limited for EM in the context of DFV because it is not mobile.

The use of RF technology combined with GPS technology, allows monitoring when the device user is away from the RF base. Using RF technology when appropriate will extend the battery life of the GPS unit.

Wireless Fidelity

Wi-Fi allows computers, smart phones and other devices to connect to the internet and communicate wirelessly within a designated area.

The use of Wi-Fi technology assists with providing location accuracy indoors, or where GPS signals may be blocked. The use of Wi-Fi to assist location identification, utilises the Wi-Fi access points by measuring the intensity of a signal received, its SSID (Service Set Identifier) or MAC Address (Media Access Control Address).

In the context of EM, a wearer may enter a high-rise building which may affect the GPS signal. The electronic monitoring device will then utilise Wi-Fi locations to provide an approximate location based on the distance between Wi-Fi access points measured by signal strength or another designated means.

Hardware

Global Positioning System (GPS)

Typically, hardware using GPS and supporting technologies (e.g. GSM, GPRS and Wi-Fi) is an ankle bracelet in the form of either a Single Monitoring Unit, or a Two-piece Monitoring Unit. Some EMPs also use a Standalone Victim Duress Unit. Each devices is described below.

Single Monitoring Unit

A single monitored unit such as the Buddi device offers all the available technology to be housed in the one single device.

For example, the technology housed in the one ankle bracelet may be a combination of GPS/GPRS/GSM/Wi-Fi with the added advantage of dual SIM.

This allows the operating system to "switch" between location identification services and carriers where required.

The battery capacity of the unit may be effected by the concurrent systems operating within the single unit, however this may also be effected by the required location refresh rate.





Buddi ankle bracelet: single monitoring unit

3M/Attenti ankle bracelet: Two-piece unit

Two-piece Monitoring Unit

A two-piece (offender) monitoring unit such as the one offered by 3M/Attenti, has the RF receiver located in the form of an ankle bracelet. This may be a passive, active or hybrid version depending on the client's requirement.

The GPS unit is located separately and is not fixed to the monitored person but carried in the pocket or by other similar means.

The RF receiver and the GPS unit are then linked, allowing an alarm to be triggered if the GPS unit is outside a set distance. In this case, there will be an RF base station located at the home or designated area.

Standalone Victim Duress Unit

Standalone duress devices operate with Wi-Fi and SIM cards to enable a person in need of assistance to send an alert to a monitoring centre for immediate response. Some enable two-way communication and recording of events as they unfold. Duress alarms also have GPS capability to enable the location of the person in need to be detected. They may be used in a variety of contexts, including for medical emergencies; for lone, and remote workers; and for DFV victims/survivors.

Monitoring

When an EM device is assigned to an individual it is programed to recognise set parameters including exclusion, or inclusion, zones, curfew times, and frequency of signalling (e.g. every two minutes, daily) to allow monitoring of the individual's location. These parameters are programed within the monitoring software and linked to the specific EM device.

If the monitored person breaches exclusion zones, an alert or event is initiated through the platform allowing the monitoring staff to triage in accordance with the respective organisations "actions on" process.

All of the monitoring software platforms are web-based platforms. This allows monitoring to be conducted anywhere there is an internet connection, including off shore. However, if the monitoring is conducted in Australia and the program offers a duress alarm to the victim/survivor, it is important that the device complies with the requirements set out in the *National Police Alarm Activation Response Guidelines*.

This guideline was produced by The National Emergencies Communications Working Group-Australia and New Zealand (NECWG-A/NZ) comprising industry experts and representatives from all Australian and New Zealand Policing jurisdictions. It outlines how Police and Monitoring services should respond to Personal Duress Alarms (specifically in the context of DFV) and includes the functional requirements of the respective duress Alarms.

Benefits and limitations of the EM technology

Benefits

The process of early intervention with concentric layered geo-fencing barriers in place, provides adequate breach notification to law enforcement agencies. If used appropriately, an added duress function may offer protection to the victim.

The GPS element of the monitoring programs allows for more coverage in rural areas, provided that the respective network coverage is in place. Given the potential for outages a dual SIM device, ensuring continuity of coverage, should be considered paramount. Further, the use of Wi-Fi technology should be explored as it offers another layer of location accuracy with the ability to operate indoors. The availability of Wi-Fi access points, including free Wi-Fi hotspots offered by communications carriers, is rapidly expanding.

Limitations

The public perception of the GPS and its capabilities is sometimes limiting due to unrealistic expectations of location data, perception of live tracking capabilities and response times. Further limitations include interrupted network connections, GPS drift (produced by multiple signals reflecting off buildings or a boy of water for example), and tampering with a device, or its operation such as shielding or blocking GPS trackers. Product research and development are increasingly addressing these limitations; in the interim, however, policies and procedures of relevant agencies can mitigate risks associated with these limitations.

Major suppliers and their products

It appears there may be up to 12 companies with relevant technology and interest in operating within Australia. However, as discussed in the section on limitations of the research, ANROWS was able to interview representatives from only two, Buddi and 3M/Attenti. Others declined to be interviewed at all and Buddi and 3M declined to provide commercial-inconfidence information due to a competitive tender process afoot at the time of data collection. The authors understand that the Queensland Police Service has recently completed the most comprehensive and current assessment of the available technology, providers and products.

 $^{^{10}}$ Based on advice from QPS on the number of companies responding to a recent tender process.

5. EMP in the context of DFV - models in Australia

In 2015, the Australian Government announced a \$100 million funding package to support implementation of the *National Plan to Reduce Violence against Women and their Children 2010-2022*. The package included a commitment of funds to enable the Commonwealth to work with states and territories to jointly fund trials of innovative technologies to help keep women safe and hold perpetrators to account.

Funding for the Women's Safety Package Technology Trials was provided to Queensland, New South Wales, South Australia and Tasmania for trials related to EM in the context of domestic and family violence. ¹¹ Initiatives in New South Wales, South Australia, and Tasmania are discussed below.

New South Wales

The following information about the NSW trial is drawn from material provided by the NSW Department of Justice to the Queensland Department of Justice and Attorney-General, and other public documents obtained through internet searches.

The total cost-shared budget for the NSW Domestic Violence Electronic Monitoring (DVEM) program provided through the fund-sharing Women's Safety Package Technology Trials was \$1,356,600 over two years. The funds were provided to "trial 60 GPS devices to monitor and track selected domestic violence offenders in 2016-17 and 2017-18" (Schedule A, Project Agreement for the Women's Safety Package - Technology Trials (New South Wales), p. 1). However, the DVEM program has been extended to 30 June 2020, so it will run for four years.

The DVEM program comprises the following four stages:

- 1. Project management including development of a monitoring and evaluation framework, policies and procedures; and training for participating personnel.
- 2. A 3-month period of testing and evaluating relevant technologies within selected regional and metropolitan sites.
- 3. A 12-month trial of the DVEM program, including the following activities:
 - a. Fitting equipment to eligible and suitable offenders following a thorough assessment;
 - b. 24-hour monitoring for breaches of any order conditions; and
 - c. ongoing review and evaluation.
- 4. An evaluation of the program. Activities included in this component are:
 - a. The establishment of a working group (comprising representatives from the NSW Department of Justice (Electronic Monitoring Group and Community Corrections in Corrective Services NSW and the Crime Policy, Strategy and

¹¹ Information about the funded Women's Safety Package - Technology Trials is available online at: http://www.federalfinancialrelations.gov.au/content/npa/community_services.aspx.

¹² A Project Agreement for the Women's Safety Package - Technology Trials (New South Wales), Schedule A, was signed by The Hon David Elliott MP on behalf of NSW Government on 22 June 2017 and is available at: http://www.federalfinancialrelations.gov.au/content/npa/community_services.aspx.

- Policy division within Corrective Services NSW, the Justice Strategy and Policy Division and Victims Services), NSW Police and Legal Aid.
- b. Detailing lessons learnt and contributing to the development of national standards for appropriate sentencing options, and correct identification process for offenders. (Project Agreement for the Women's Safety Package Technology Trials (New South Wales), Schedule A, p. 2).

The policy context for the NSW initiative, which officially commenced on 7 November 2017, is a commitment to a 25% reduction in domestic violence offending by 2021 (based on the cohort of perpetrators in 2019) (NSW Premier's Priority, https://www.nsw.gov.au/improving-nsw/premiers-priorities/). Therefore, the primary aim of the trial is to deter the offender, although it also enables NSW police to detect breaches of Apprehended Domestic Violence Orders (ADVOs).

Priority for inclusion in the NSW trial is given to high risk offenders on supervised parole orders, who are identified before release from prison. Legislative authority for placing an offender on EM is provided in clause 214A(1)(d) of the Crimes (Administration of Sentencing) Regulations 2014 (which requires offenders to comply with reasonable directions given by the Community Corrections Officer).

Offenders eligible for parole within the DVEM program are identified by the parole unit when a request for a pre-release home visit is made.

Inclusion in the EM trial requires the following criteria to be met:

- Level of Service Inventory Revised (LSI-R). assessed as medium-high or high risk.
- A pattern of repeat domestic violence offending (or concerns regarding victim safety).
- Active ADVO with a "no-contact" condition and metered geographic restrictions.
- The victim resides in an area where EM can be managed effectively.

Further, an offender will be excluded from the DVEM program, if:

- The victim is living with the offender or wants the relationship to continue.
- There are current Family Law Orders that provide contact between the parties.
- The offender experiences a serious cognitive impairment or other issue which would impact seriously upon their ability to comply with the EM requirements.
- The imposition of monitoring would cause significant disruption to the offender which cannot be justified by any mitigation of the risk of re-offending.

When it is determined that an offender is to be placed on EM, the Victims Support Service is to advise the relevant Safety Action Meeting (SAM) so the victim can be added to the agenda and

¹³ The LSI-R is used by CSNSW to conduct a risk/need assessment based on two key principles: 1) that the level of services to an offender should match the risk level of re-offending; and 2) that criminogenic needs—factors related to re-offending—should be the targets for intervention. Needs considered in the LSI-R include: education/employment; financial; family/marital; accommodation; companions; alcohol/drug problems; attitude/orientation towards conventional or criminal behaviour.

his/her support needs addressed before the offender is released. Victims are consulted during the assessment process, however, the consent of victims to place an offender on EM is not required.

A decision may be made post-release to include a domestic violence offender on the DVEM program if, during supervision, there is a change in circumstances for behaviour that represents an escalated risk of further domestic violence offending. The process for imposing EM post-release involves a recommendation from the local Community Corrections management team, in consultation with the Electronic and External Monitoring Group (EEMG), with the final decision to be made by the Community Corrections Manager.

Provision was also made for the imposition of EM as a condition of a supervised suspended sentence (also known as a Good Behaviour Bond) under section 12 of the *Crimes (Sentencing Procedures) Act 1999* (NSW) or an Intensive Correction Order issued under s7 of the Crimes (sentencing Procedure) Act 1999 (NSW). Section 12 was repealed in September 2018. Intensive Correction Orders remain a sentencing option.

The DVEM program in NSW provides two options for monitoring, subject to availability of the total 60 monitoring devices:

- 1. *Offender only monitoring*. Movements in relation to a fixed location and the exclusion zone are monitored via a device with GPS capability fitted to the offender's ankle.
- 2. Offender and victim monitoring. With the consent of the victim a device about the size of a garage door remote control, and which can be clipped onto a belt, handbag or lanyard, is provided to the victim. The device has GPS and duress alarm capabilities, to enable monitors to detect, and warn the victim, if the offender is approaching (including unintentionally, outside an exclusion zone).

An exclusion zone is identified in the ADVO and may be a specific address, type of location (school or work location) or a geographically identified area, such as a particular suburb or town). Entering an exclusion zone is a breach of an ADVO, therefore a criminal offence. In addition to the exclusion zone identified in the ADVO, the DVEM program provides a buffer zone. All monitoring is conducted by the EEMG. Monitoring ends when either of the following occur: the ADVO expires; or the parole order is completed. The supervising Corrective Services Officer must notify the DVLO and a support service, if relevant, two weeks in advance of an ADVO expiry date. If the ADVO is due to expire before the supervised parole order is completed, the Domestic Violence Liaison Officer (DVLO) may apply to the court to extend the ADVO, if considered necessary, so that the offender can be monitored for the duration of the probation period. Services will notify the victim (where contact with the victim has been established). Victims are also to be advised if there is any change in Corrective Services protocol for an alarm response, so that the victim's safety plan can be reviewed and updated if needed.

Considerations relevant to suitability for victim monitoring under the DVEM program include:

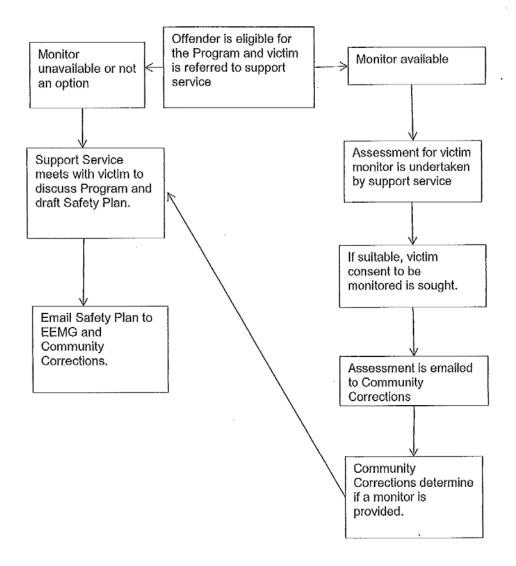
- A history of stalking away from the home.
- Victim agrees to ensure device is fully charged prior to leaving home, is always with the victim when away from home, and understands the limits of the technology.

- The victim is clear that they do not want contact with the offender.
- The victim does not already have a monitoring device or duress alarm form another program (e.g. provided through the NSW Staying Home, Leaving Violence initiative).

A victim may be considered appropriate for monitoring, but may not participate in the EMP either because they do not wish to, or because a monitoring device is not available. The process for responding to victims' needs is illustrated in Figure 2 below.¹⁴

Figure 2: Process for victim inclusion in EMP/support

Electronic Monitoring of Domestic Violence Offenders Program

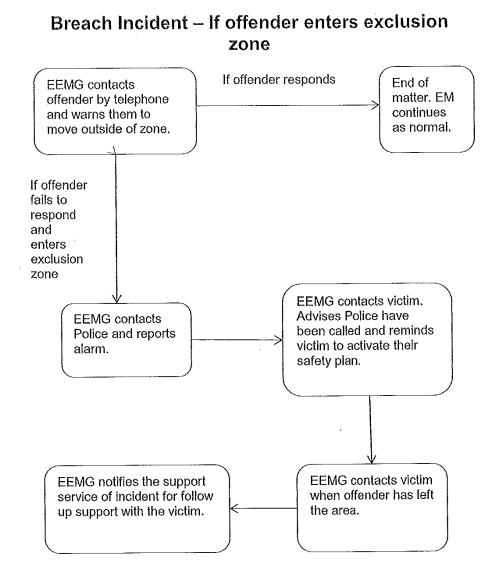


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¹⁴ Figures 2, 3, 4 and 5 were included in documentation provided by Corrective Services NSW, via the Queensland Department of Justice and Attorney-General.

Whether or not victim monitoring is provided, the victim is to be advised that the offender is on an EMP and made aware of the limitations of EM, including that it will not prevent unwanted contact such as by telephone and third parties; the technology may not work in some locations; and the potential for hardware to fail due to faults or batteries not being charged. The victim is also to be referred to a specialist support service (e.g. Women's Domestic Violence Court Advocacy Service for female victims or Victims Services for male victims) for advice on EM, support and safety planning. A victim's safety plan must include information on who to contact if support is required, particularly if they have been notified of a breach incident. A copy of the safety plan is to be provided to Corrective Services, subject to the victim's consent. This enables appropriate advice and support to be given to victims in the event of a breach incident, as illustrated in Figure 3.

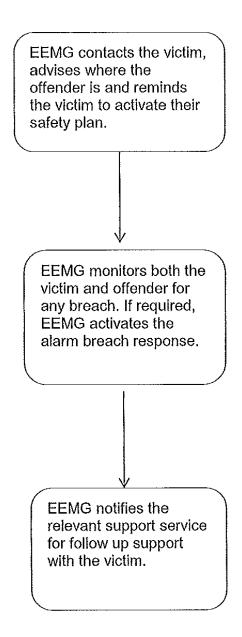
Figure 3: Responding to a breach incident



When victims are willing and able to participate in the EMP, the matched offender and victim devices enable the EEMG to detect and warn the victim of potential contact. For example, the victim and offender may simultaneously visit a location (e.g. a major shopping centre, a tourist attraction, a national park) that is not within an exclusion zone and in this case, signals from the devices will alert the monitoring centre of potential contact. Action taken by the EEMG in such cases is illustrated in Figure 4.

Figure 4: Response to potential inadvertent contact.

Potential inadvertent contact – where victim has a matched device

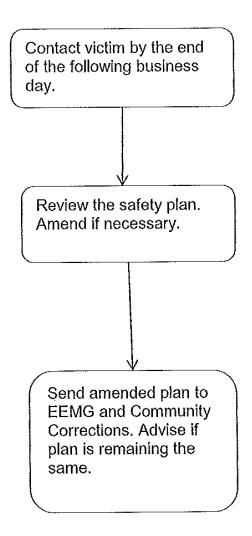


If there is an incident or a potential inadvertent contact between the offender and victim, the EEMG will contact the victim to advise that they implement the Safety Plan. The EEMG will also contact the Support Service to advise of the circumstances. By the end of the following business day, the Service will contact the victim and assess if the Safety Plan effectively met their needs and to amend the Plan if inadequate. The Service then advises EEMG or the outcome of the assessment and provides a revised Safety Plan if relevant.

Figure 5: Provision of support

Support Service

After an incident or breach, the support service will receive notification from EEMG. The service will undertake the following steps.



South Australia

Electronic monitoring of offenders has been used in South Australia since the 1990s (Black & Smith, 2003). In 2014, following a successful 2008 trial of electronic monitoring using GPS technology, the Department for Correctional Services (DCSCC) transitioned to EM with GPS capability to assist in managing medium to high risk offenders on intensive bail supervision, home detention and parole. In its funding proposal for the Women's Safety Package Technology Trials, DCSCC (2017) noted that GPS is seen as offering/enforcing greater levels of offender compliance due to its enhanced capacity to monitor offender movement in both real time and retrospectively.

The Women's Safety Package Technology Trials provided \$472,509 (matched by the South Australian Government resulting in total funds of \$945,018) for DCSCC to trial and evaluate an EMP, operating in a multi-agency context, for domestic and family violence defendants and offenders on Intensive Bail Supervision (IBS) between 2016/17 and 2019/20.

IBS is a pre-sentence alternative to being remanded in custody and includes electronic monitoring as a bail condition. That is, at the discretion of the court, IBS enables defendants at medium to high risk of re-offending to remain in the community, as well as defendants on Supervised Bail (SB) who are considered low risk and who are not subjected to EM. In addition to EM, the court may impose other IBS conditions such as a curfew, or that the bailee remain at a specified address (also known as Bail Home Detention). Bailees on IBS are strictly monitored by Community Corrections staff of DCSCC, using a combination of GPS and RF technology to ensure the defendant adheres to the bail conditions.

Technical requirements for the DCSCC trial, include hardware and software for electronic equipment that:

- has both GPS and radio frequency capability;
- can set exclusion and inclusion zones for the offender, confirm the offender's location, and provide real-time data to DCSCC and/or South Australian Police (SAPOL) in the event of a breach of conditions; and
- detects tampering with a device that can enable an immediate response from enforcement authorities.

Evaluation of the EMP trial

The DCSCC trial and evaluation of GPS with domestic family violence (DFV) defendants on IBS aims to determine whether GPS monitoring influences current behaviour, reduces reoffending, and improves victim safety (DCS, 2017).

The evaluation includes three key questions:

- 1. Does GPS deter DFV re-offending and support compliance with IBS conditions—and how does this cohort compare to a similar cohort with no GPS (those on SB)?
- 2. Does GPS support behaviour change among this cohort 6 and 12 months post order?
- 3. Do victims report improved levels of safety associated with offenders who are GPS monitored?

The evaluation also aims to address two subsidiary questions:

- 1. Are there specific characteristics associated with those who breach or re-offend while under GPS monitoring?
- 2. How is GPS monitoring of DFV defendants on IBS implemented and what are possible improvements?

DCSCC uses a hybrid GPS system, combining both passive and active monitoring, for three functions: active tracking of specific extreme risk individuals in exceptional circumstances; retrospectively reviewing data of an offender's movements; and alerting the Monitoring Centre if an offender is either breaking curfew or entering/exiting an inclusion/exclusion zone. Attempts to render the equipment inoperable (e.g. interfering with the device's ability to receive a GPS signal), or to remove it, can also be detected by the GPS technology allowing an immediate response targeting the offender's last known location.

GPS monitoring and response to GPS alerts is undertaken by the DCSCC Intensive Compliance Unit (ICU), which operates 24 hours, seven days a week. The ICU comprises a team of Monitoring Centre Officers who respond to alerts, and Intensive Compliance Officers who respond in the field undertaking, for example, drug testing, installation and checking of equipment, and home visits based on the offender's risk and the level of supervision required.

The viability of the proposed quasi-experimental design ¹⁵ of the evaluation was established with a two stage analysis of data relevant to defendants on bail (DCS, 2017, p.2). The first stage of the analysis involved point-in-time data collection to determine the number of offenders on pretrial orders who had: a DV warning flag (could be historical); DV as a primary or secondary offence; a DV-related Intervention Order (IO); or a combination of these, and who were likely to be subject to GPS monitoring. Recognising the fluctuation in the number of defendants on IBS at any one time, point-in-time data collection was conducted for two dates, separated by six months (7 November 2016 and 7 May 2017). There were 306 defendants/offenders in the community with various types of court or community corrections orders on the first date: of those 238 (78%) were on IBS. On the second date, there were 186 defendants/offenders on such orders, with 130 (70%) of those on IBS. Analysis of data collected on the second date for all defendants on pre-trial orders also showed that of a total:

- 450 on IBS, 328 (73%) had a DV warning flag, an IO defendant flag, or both.
- 700 on SB, 536 (76.5%) had a DV warning flag, an IO defendant flag, or both.

That is, approximately three-quarters of all bailees on some kind of pre-trial order, either had a DV warning flag or were defending a DV-related Intervention Order (and in many cases, both).

¹⁵ The evaluation design involves a control group (a cohort of defendants on Supervised Bail, who are not subject to EM), and an experimental group (a cohort of defendants on Intensive Bail Supervision who are subject to EM); however, the two cohorts are not randomly assigned to one or other group, so the design is quasi-experimental rather than experimental. Nevertheless, this method of comparing those who are subject to EM and those who are not in relation to the evaluation aims provides a high degree of rigour and should result in robust evidence regarding the effectiveness of EM as assessed against the evaluation questions referred to above.

The DCSCC trial of EM in the context of domestic and family violence is operating within the same policy, legislative, and practice frameworks that govern EM in South Australia in general, with additional elements specific to management of domestic and family violence defendants/offenders.

Commencing in 2014, the South Australian Attorney-General's Department embarked on a comprehensive review of the criminal justice system in that State, ¹⁶ involving extensive community consultation. The review sought to achieve "lower rates of recidivism, thereby enhancing community safety and slowing the increase in prisoner numbers" (SA Attorney-General's Department, 2015, p. 1). It included consideration of whether some individuals, convicted of sentences that would warrant a term of imprisonment, should be punished in other ways and serve their sentences in the community, thus increasing the prospect of rehabilitation and reintegration into law-abiding society.

The review resulted in the proposal that protection of the safety of the community be the primary consideration of a court in sentencing; with rehabilitation, denouncing behaviour and ensuring the defendant is punished and held accountable being secondary considerations. The review also resulted in the *Criminal Law (Sentencing) Act 1988* (SA) being repealed and replaced with the *Sentencing Act 2017* (SA), including two new sentencing options: community based orders; and intensive correction orders. The stated aims of these reforms were:

- increased community safety; and
- reduction of repeat offending.

The review recognised that GPS provided the technology for virtual incarceration, primarily as a form of punishment and constraint, but that reducing recidivism and slowing the growth in prison numbers would require structured programs for rehabilitation and reintegration, many of which are provided by community based services.

Pre-existing DCSCC approaches to defendant/offender rehabilitation and reintegration were included in consultation documents to inform considerations of alternatives to prison during the review process. Those approaches, particularly relevant to this report, include the following.

Integrated Offender Management

This is a framework that recognises the multi-disciplinary nature of effective offender management and reintegration, and facilitates government and non-government agency collaboration from the first point of contact with DCSCC to achieve these goals. The framework supports the delivery of rehabilitative programs that are specific to offence types, as well as effective case management, based on the risk, needs, responsivity model of offender rehabilitation.

https://www.agd.sa.gov.au/sites/g/files/net2876/f/160524_1224_publicfactsheet_sentencing_final.pdf?v=149076617_4; https://www.agd.sa.gov.au/projects-and-consultations/transforming-criminal-justice/better-sentencing-options

¹⁶ Transforming Criminal Justice: Putting People First.

Rehabilitation of Offenders in Prison

Progression through the correctional system is managed through an individualized case management system, providing access to psychological services, and various behavioural change programs (including The Violence Prevention Program, The Domestic Abuse Program, and the Sexual Behaviours Clinic Program), as relevant. Additional rehabilitation programs include: The Reintegration Program, assisting prisons pre-release and offenders in the community with access to accommodation, financial management skills, advocacy for vocation and employment services, and referrals to other support services.

Offenders in the community

The range of potential options available to courts for the management of convicted offenders and pre-trial defendants in the community include Parole, Probation, Intensive Probation Supervision, Home Detention, Community Service, and Supervised Bail or Intensive Bail Supervision (court ordered Home Detention Bail). DCSCC staff supervise offenders and bailees during their community based sentence or bail period, and deliver case management services. Community based supervision is also provided by the Department's Community Correctional Centres for offenders on parole and home detention.

Management of defendants and offenders in the community is conducted within the DCSCC four-tier Enhanced Community Corrections Framework, which directs resources according to defendants/offenders' risk to the community.

The four tiers are, from highest to lowest risk rating: Control, Change, Assist, and Monitor. The determination of risk involves examining each individual's offending history, all available reports (e.g. sentencing remarks, submissions, and psychological assessments), criminogenic needs and conditions of the court or parole order. The level of supervision and case management for each tier is discussed briefly, below.

Control – Individuals assessed as very high risk offenders, who pose a significant risk of reoffending, have high criminogenic needs, low responsivity and are resistant to change are assigned to this tier. They are subject to the most rigorous levels of supervision and are managed by experienced Community Corrections practitioners.

Change – Individuals assessed as being a high risk for re-offending, and who have medium to high criminogenic needs are assigned to this tier. Although they represent a threat to the community, this group of defendants/offenders has the potential to change with skilled supervision by experienced Community Corrections practitioners, and effective intervention programs relevant to their risks and needs.

Assist – This tier is for individuals who are generally compliant, are a medium risk of reoffending, and have low to medium criminogenic needs. Typically, these offenders are supported by less experienced Community Corrections practitioners, as well being referred to external agencies, primarily for behavioural change programs and assistance.

Monitor – Individuals with low risk of re-offending and low to medium criminogenic needs do not receive case management. They are simply monitored to ensure compliance with court or parole reporting requirements.

Tasmania

The *Family Violence Act 2004* (Tas) constitutes family violence (including physical violence, stalking, economic or emotional abuse, and damage to property) as an offence, fundamentally differing from the civil law approach to DFV legislation in other jurisdictions. The *Family Violence Act 2004* also provides, however, for the making of a civil Family Violence Order (FVO) by a court, and the making of Police Family Violence Orders (PFVO).

Following the passage of amendments to the Act in 2017, electronic monitoring may be imposed on a person as a condition of an FVO. That is, no substantive charge of a DFV-related offence is required for a court to impose electronic monitoring. However, the imposition of EM is limited to court orders, excluding PFVOs. Section 16 (3) (c) of the Act enables a court making an FVO, to require the person subject to the FVO to "submit to being electronically monitored by wearing and not removing, or always carrying an electronic device ..." If the person is not currently charged with a family violence offence, the court has to be satisfied they have been found guilty of a family violence offence, previously; or they have a history of committing family violence.

Section 12 (1) of the Act provides for a presumption against bail for a person charged with a family violence offence, "... unless a judge, court or police officer is satisfied that release of the person on bail would not be likely to adversely affect the safety, wellbeing and interests of an affected person or affected child." However, the matters to be taken into account when considering bail are not to be limited, and include "any ... matter the judge, court or police officer considers relevant." Therefore, it seems that EM could also be required as a bail condition, although that is not specifically stated in the legislation.

Tasmania's EM trial, Project Vigilance, commenced in November 2018. The 3-year trial (scheduled for completion in mid-2020) has a budget of \$2,790,000, cost-shared between Tasmania and the Commonwealth under the Women's Safety Package Technology Trials. The Department of Police, Fire and Emergency Management (DPFEM) is the lead agency in the implementation of the EM trial for family violence perpetrators who are subject to an FVO prohibiting them from approaching a victim/survivor or their workplace or similar.

In a separate but closely aligned project, the Department of Justice (DoJ) will trial the provision of personal safety alarms for victims/survivors of family violence. The victim/survivor safety alarms are capable of being monitored and to have two-way communication capability, GPS functionality and a SIM card. Victims/survivors may opt-in to the DoJ trial whether or not their ex-partner is subject to the EM under the DPFEM. Up to 100 EM devices (including 15 victim/survivor security alarms), will be available for Project Vigilance. Following a recent procurement process, Buddi has been selected to provide the EM devices for Project Vigilance. DoJ will provide a joint monitoring and compliance unit to be used by both DoJ and DPFEM for their trials with victims/survivors, and family violence perpetrators, respectively.

Project Vigilance has four overarching goals:

- 1. Increased safety to women and their children subjected to family violence.
- 2. Increased perpetrator accountability.
- 3. An increase in convictions for family violence and associated offences.

4. Reduced social and justice related costs.

Table 4 below provides more detail of the Project Vigilance objectives, target outcomes and outputs. It illustrates wide-ranging objectives from increased safety for victims/survivors to increased convictions and reduced cost to the justice system. It also illustrates comprehensive implementation planning, including a communication strategy, development of operational policies and procedures, and a change management plan incorporating training for operational and response personnel.

Table 4. Objectives, target outcomes and outputs

Objectives	Target outcomes	Outputs
 Deter Family Violence Perpetrators who are subject to electronic monitoring from breaching conditions of a Family Violence Order; Enhance the safety of victims of family violence and their children; Increase perpetrator accountability; Reduced social and justice related costs; Increase in convictions for family violence and associated offences against those perpetrators involved in the trial; and Provide a time appropriate response to potential family violence incidents. 	 Reduction in the incidence of Family Violence; Reduced reliance on victims during court proceedings where evidence of electronic monitoring can be used; Increase in convictions for family violence and associated offences; Improved intelligence capabilities with regards to target perpetrator movements; Continuation of developing closer associations with victim groups 	 The procurement of electronic monitoring devices that can be worn by perpetrators; A monitoring system that is responsive; A communication strategy that provides clear direction for consultation with Stakeholders inclusive of victim groups, civil rights groups, courts and operational police; A comprehensive operational response policy and procedures; A change management plan that will provide training for operational/response members

Source: Julian, Winter & Herrlander (2018, p.4)

6. Qualitative data analysis

In this section the results of data analysis are reported against the project objectives and questions. The analysis is supported with de-identified quotes from the research participants. Acronyms (e.g. DCSCC, TasPol) are used for government agency staff in jurisdictions outside Queensland, and the term "justice agency staff" (JA staff) is used to refer to representatives from Queensland Corrective Services and Queensland Police Service. Pseudonyms are used for the victim/survivor participants. The following information covers topics and key issues addressed in preceding sections: however, the purpose of this section is to identify and communicate current perspectives held within key stakeholder groups about EM in the context of DFV. The views expressed are not necessarily representative of those stakeholder groups, but they provide important insights to be considered, including insights for communications and training, in the development of an EMP in the context of DFV.

Objective A: Identify if EM increases victim/survivor safety

DJAG's first objective for the research is to identify whether electronic monitoring of perpetrators of domestic and family violence in the criminal justice system (i.e. bail, probation and parole) is effective in increasing victim safety.

What is currently known about the effects of electronic monitoring (EM) on victims/survivors' safety?

Risk reduction is questionable

It was notable that all participants reported that EM has questionable risk reduction outcomes when used on DFV offenders.

The views of JA staff both in Queensland and in other jurisdictions were based on limitations of the systems and attributes of DFV offenders. Their concerns included:

- It is not always possible, given the nature of DFV incidents, location and other variables, for police to respond to an alert in a timeframe necessary to ensure victim safety. It was explained that a Police response to an alert in a regional area, may take substantially more time than an urban response given distance that has to be travelled by police to get to the incident location, and potential resourcing issues at the time of the alert.
- The inability of the EM system to keep up with changes to victim or offender circumstances, such as the regular change in address that victims subject to unstable, insecure housing commonly experience. An exclusion zone may apply to an area in which the victim no longer resides.
- Limitations of the technology resulting in accuracy being compromised. Concerns related to technological inconsistencies in signals and reporting.
- There is not 'real time response' capabilities for all breaches; rather there is 'real time monitoring' and the non-high priority alerts/information is retrospectively used to inform case management interviews.

A common theme was that while GPS makes it easier to prosecute crimes, it cannot physically prevent them. Whilst GPS could pinpoint the whereabouts of the offender, it could not tell authorities what the offender was doing in that location, or who they were with, at that time.

JA staff suggested that evidence of a breach can be gleaned from the EM system, but EM is limited in preventing physical harm. Some of these participants further acknowledged that EM does not necessarily lead to better court outcomes for victims/survivors and stated that while police prosecutors provide expert witnesses in court to interpret the data from the GPS trackers, the data can be challenged. It was noted that EM cannot be used as stand-alone evidence in court—data from an EMD may aid evidence but it will not stand on its own.

Some JA staff indicated that EM is not applied as a risk mitigation strategy or to manage DFV for those persons under community based supervision. Due to its limitations, JA staff suggested it was still helpful to enhance case management and start conversations with offenders in future supervision around their past movements.

Do victims/survivors and Specialist DV Service providers perceive increased safety for victims/survivors due to EM?

Increased safety when offenders are deterred from offending

Seven of the 12 participants in the VS/DVS group (all seven of whom were victims/survivors) thought that EM of DFV offenders had the potential to increase safety for victims/survivors due to offenders being deterred from re-offending whilst on an EM program. It is notable that four of these seven acknowledged within their response that they did not believe all DFV offenders subject to EM would be deterred. One participant nominated conditions under which they thought it would reduce risk, namely: if the victim/survivor was wearing a device that audio taped the offender if they came close to the victim/survivor. Another participant stated that whilst she thought EM could deter DFV offenders from re-offending, she did not believe that the current technology and police response times were sufficient to really create increased safety for victims/survivors—that this could create a false sense of security for the victim/survivor.

Eve: Yes I think it would. Every time there is a step in the justice system that tries to prevent perpetrators from re-offending, I think it does cut down the portion of people who re-offend and the risks. For some it will have an effect, for some it won't but they know they are being monitored.

Jen: Depends on the offender and depends on the situation because some offenders will be very reactionary about it and some offenders it would sway them. In my instance it probably would have stopped him—the instant the law got involved he suddenly became very timid and shy. But for some it would be an inflammatory.

Victim/survivor safety is dependent on sufficient notice and time to act

Three of the 12 participants in the VS/DVS group believed that EM could increase the safety of victims/survivors if they were notified of any proximity breaches and then had time to enact their safety plans. One participant believed that even though the victims/survivors actual safety may not increase, their sense of safety could be increased by the offender being on an EM program and the belief that the offender was being held accountable.

Sophie: I think it can reduce the risk but I don't believe it will reduce the risk because it's a deterrent for the offender, I think the risk will be reduced because the victim is given an opportunity to get themselves to safety because they'll be aware that they (the offender) are close by

Georgia: But I think risk level in relation to a survivor is reduced particularly if it's done in an informed way, the risk could lower because they would be informed, it would have to be part of a safety plan, and then you would execute part of the safety plan - it would lower the risk because you would have notification and time in advance to prepare yourself.

One participant acknowledged that EM was an added mechanism to hold offenders accountable for their violence and the ongoing threats they pose:

Sarah: So I don't think it's a proactive risk mitigation strategy and while it may not actually increase the victim's safety, I have seen it increase their sense of safety, their own feelings. I know that a lot of 'aggrieveds' that we worked with have wanted the perpetrator to be on GPS so that there's these other eyes on him even though it's not going to stop him perpetrating DV and there's not someone watching him and calling him 24/7 and then proactively stopping him from attending the residence, but they still feel like it's an added mechanism to hold him accountable.

Are there unintended consequences for victims/survivors (e.g. privacy limits in wearing GPS device also)?

Multiple potential unintended consequences

Both JA staff and VS/DVS raised many unintended consequences for EM of DFV offenders for the victims/survivors. The VS/DVS participants identified the following four main unintended consequences of EM:

- The potential for EM to elevate risk.
- That being subject to EM could lead offenders to use emotional abuse, coercive control, and associates to perpetuate abuse to avoid breaching the 'physical' violence and geographical conditions of EM.
- The inadvertent identification of the whereabouts of the victim/survivor through the use of exclusion zones.
- Creating a false sense of security the expectations of the technology exceed its actual capabilities.

A number of victim/survivor and DFV sector participants raised concerns around EM having the potential to elevate risk for the victim/survivor. They expressed concern that the restrictions and stigma that apply to EM could compound anger and frustration in offenders, leading them to escalate their violence. It was suggested that in particular offenders who experience mental health, substance abuse issues, and who have a deep-rooted disregard for women may not care about consequences of their actions, and the EM could escalate not reduce their risk of violence. One participant described men who would see retaliation on women as "a badge of honour."

Further these participants expressed the views that non-physical DFV offender behaviour, including emotional abuse and coercive control, may escalate while offenders are part of an EM program, and that some offenders may well engage associates to continue harassment of the victims/ survivors on their behalf. The rationale being that these actions can be difficult to gather evidence on and to prove for the purposes of pursuing a breach of a DVPO or EM order. Due to these concerns some victims/ survivors indicated their reluctance to consent to the offender being subject to EM. The following dialogue illustrates these concerns:

Natalie: Maybe I would be physically safer but I would not be safer emotionally. There would be more emotional abuse in my case because that person is wearing a foreign thing and he will have mental health issues and he will blame me for that and emotionally abuse me because that can be done from anywhere and through other people. Not only me but my family and other family members will be abused if my partner had an EMD on. He'd get other people to verbally abuse me. (Interviewer: If you would have had a chance for your offender to wear an EMD, would you have then said no?) Yeah, I would have said no.

Natalie: Also if they have mental health and substance abuse they will do anything even if they have this tracking. Sometimes they will not care about the consequences.

Sarah: I don't think it's an effective tool to mitigate risk by a proactive means because given the dynamics of DV we know there is more than one way to commit DV. It really doesn't stop coercive control. It doesn't stop them coercing the aggrieved to come around to the house or utilising associates.

The VS/DVS participants raised the issue of geo-fencing alert zones around the victim/survivor's location as having the potential to alert offenders to the general vicinity of the victim/survivor when they may have not had this knowledge previously.

Carol: How many offenders are going to come just close enough to get an alert and terrorise the women - time and time again. They will work it out. With do not approach distance conditions on DVPO's we know they will come just within the distance to scare the woman. Technological gas lighting. These guys are so tech savvy and motivated to get these woman. They will spend all their time working this out or they will get someone to do it for them.

Georgia: I think that with the data side of things the thing that pops into my mind is isn't there some type of way, we would have to be connected in some way, they're going to come into an area and it's going to ping and then going to ping to me. I would say is it possible for them to reverse engineer any of that. For one it's based on technology and to go into one area and know it's going to ping to that tower and then resend to her. So if it's going to be sent one way, why couldn't it be retrieved the other way? Also, if someone is being breached and you don't necessarily know what area I'm in or if I've changed suburbs, and you decided that one a day a week you were going to go into different suburbs around Brisbane and then you get breached because on this day you were in this suburb you're now going to have narrowed down the location of where the victim/survivor lives. I can see how that could be used to track someone down as well.

There were concerns expressed by VS/DVS participants about a potential false sense of security that EM could create for victims/survivors and police who may not be aware of the limitations of EM GPS technology. They stressed the importance of victims/ survivors, the criminal justice system (and the wider community) being much better informed of the capabilities and limitations of EM.

Kylie: The major concerns I have are giving a false sense of security to the victim. If the tracking isn't geographically specific enough or there's a risk it will fall out or someone isn't monitoring it where there's a red flag if they get into it (an exclusion zone), it's all very well to have some evidence that can be used in court but it could be too late by the time someone gets there.

Lily: The police said that because he had an ankle tracker they thought me and the kids were safe.

The JA staff also identified unintended consequences of EM programs as a significant concern that could elevate risk for victims/survivors. JA staff, like VS/DVS participants, identified the risk of the offender blaming the victim/survivor for having to wear the device, with the potential for retaliatory violence, comparing this with the potential for increased risk faced by a victim/survivor if a DVPO is imposed. JA staff reported that the parolee population can be quite impulsive and undeterred by consequences. It was reported that they commonly blame the victim/survivor for their criminal justice sanctions and have made threats to "get them" when they are off the EM program. The suggested that offenders may ruminate, manipulate and plan retaliation whilst subject to EM. Some JA staff described how offenders can be frustrated with the responsibilities of routinely charging the device and the restrictions imposed. They asserted that when these frustrations are combined with anger, EM can contribute to elevating, rather than minimising, risk. This risk was considered particularly significant in the context of EM being used on bail where there is: no supervision, no behaviour change programs, little known about the offender prior to coming onto the EM program, and no follow-up of a frustrated, "woman-blaming" offender when he leaves the program.

Other unintended consequences identified by JA staff include:

- The potential for offenders to use their GPS monitor to harass their victim by deliberately generating alerts from it.
- The general location of the victim can be inadvertently identified to the offender as exclusion zones indicate the victims/survivors general location.
- Community and victim/survivor expectations of EM are not on par with the capability of EM programs, giving a false sense of security to victims and the wider public.
- Modification of behaviour by the offender due to exclusion zones and/or monitoring that would give cause for the victim/survivor to attend the offender's location where there is no indicator to monitoring staff that a) the victim/survivor is there, and b) what is happening at that location.

All JA staff were frank about the limitations of EM and that it cannot be relied upon to enhance safety in the absence of other measures. They recommended that ongoing public education and

information to victims/survivors was essential to promote a realistic understanding of the role and capability of EM.

Victim Personal Carrier Devices

JA staff expressed concern about the low take up by victims/survivors of personal carrier devices. The experience shows that the anxiety of victims/survivors can increases, not diminish by using these devices. In addition, in one jurisdiction victims/survivors were generally not engaging in safety planning with corrections around what action to take when they receive a proximity alert. In some jurisdictions, JA personnel are collaborating with advocacy groups to improve "buy-in" from victims/survivors.

DCSCC do not use victim/survivor devices within their EM programs. This is based on feedback to DCSCC from the domestic violence sector in South Australia who were concerned about the potential of the devices to increase victim/survivor anxiety. DCSCC are awaiting further feedback from the NSW trial regarding outcomes of the use of victim/survivor personal carrier devices.

JA staff also identified concerns around the unintended consequences of victims/survivors using personal carrier devices that set off proximity alarms when the offender breaches an exclusion zone. The victims/survivors may feel panic and go into "meltdown." These issues were affirmed by the VS/DVS participants in comments, such as:

Kylie: What happens to the victim when their watch goes off? I know I used to panic when my text went off. If my phone went off to say he was in close vicinity, what care or training or support is going to be given to those victims to make sure they don't go into melt down because a lot of them have PTSD. It has to be a bullet proof system, it has to be bang on the money because we don't want it going off falsely because of the affect it will have on the women.

Georgia: I think there needs to be a specific amount of training and/or support that would fall into informed consent for a survivor that's wearing a watch because there is the potential for that to be a trigger. So really ensuring that if someone is going to have a watch, they have all of those psychological and psychosocial supports in place. Maybe it is that they're linked into a DV service or something to that affect to support them when these things are happening, or knowing that they have a safety plan for when that goes off. It's a matter of informed consent and knowing there are other safety mechanisms in place because a watch alone isn't going to keep someone safe necessarily. I think we still need to be mindful off the limitations of that.

Carol: Watches can often make women more fearful and they are completely and utterly pointless unless there is a systems response to help her after the alert goes off.

Responsive, supportive criminal justice system needed for risk reduction

Notably 11 of the 12 VS/DVS participants identified concerns that without the current criminal justice system working effectively to support swift consequences for DFV offenders, EM would not reduce risk for victims/survivors.

Seven VS/DVS participants reported that poor police attitudes and responses can lead to inconsistent follow through with DFV incidents and breaches. Offenders are not always held to account and victims/survivors are rendered potentially unsafe. These participants stated that effective, swift consequences for offenders is integral to effective EM programs. The following comments from victims/survivors expose their concerns:

Kylie: Even if it is used in court and I don't want to sound too cynical here, we also know that people can breach numerous times and it doesn't necessarily mean they get into too much trouble for their behaviour. And every time they breach and get away with it, it's permission to breach again in my opinion.

Eve: As long as I knew that the police were actually going to do something, because historically the police have not done much with breaches of DVO's.

Bridget: And all of this relies on other variables to work - like the police being swift. If the police were swift in their response to breaches it would be a different story in the current system. And if they didn't treat the breach as something they need to see if she's at fault for.

Jen: Unfortunately there isn't a lot of (police) follow through in a lot of [breach] cases.

Georgia: The police just told me they thought I was some vindictive ex who kept coming down to report it all the time. I said, if I didn't come down all the time, you wouldn't have seen the pattern and you wouldn't have investigated. When police turn you away it reinforces what perpetrators say.

JA staff also reinforced the importance of an informed, integrated response from the criminal justice system, stakeholders and the DFV sector —that EM was simply one tool in this wider systemic response. They described how important it was for Magistrates, the judiciary, Police and Corrections staff to be well informed about the dynamics of DFV; the limitations of EM, and the importance of working with and listening to victims/survivors and DFV advocates when making decisions about the use of EM.

In summary, research participants identified that the capacity of EM to reduce risk in the context of DFV is questionable. It can increase safety for victims/survivors if offenders are deterred from re-offending, or if authorities have sufficient time to act in the event of a breach of an exclusion zone, or an alert related to incidental contact in cases of bi-lateral monitoring.

However, participants also identified multiple potential unintended consequences of EM in the context of DFV, including increased risk to victim safety, the use of the device to scare the victim/survivor, and the perceived increased safety facilitating contact between the victim/survivor and defendant/offender beyond an exclusion zone. To be effective in risk reduction EM in the context of DFV must be situated within a responsive and supportive criminal justice system.

Objective B: Analysis of the merits and costs of technology options

If effective, what are the relative merits of, and costs associated with, electronic monitoring technology options (including GPS)?

What technology is currently available for EM programs?

TasPol have selected Buddi as the provider for their GPS trial after an extensive tender process. Buddi's EM device offered a high level of reception that provided coverage for the more remote parts of Tasmania enabling EM to be conducted there. TasPol also stated they liked the extra level of technology offered by the Buddi devices which are the only devices on the market that are Wi-Fi enabled, allowing monitoring within shopping centres where GPS does not work.

QCS used radio frequency (RF) monitoring when they first applied monitoring in 2006. They transitioned to GPS in 2011/12 and now use Buddi devices. QCS acknowledged that they "are no strangers" to GPS monitoring, stating that their expertise is "mature" with dangerous prisoners/sexual offender applications. QCS indicated that in regard to how GPS applies to parolees the agency was "on a steep learning curve."

NSW Corrections also use Buddi devices for their current DFV EM trial, as does QPS for their current EM trial.

DCSCC has used G4S devices since 2014 for their EM programs but are at the end of the current tender cycle and will be testing the advances on the market through their current procurement process.

Maintenance issues with EMD's

JA staff identified ongoing maintenance and resourcing issues with the EM devices. JA participants reported that although they did have staff with the technical expertise, it was the case managers in each office (who were not the experts in fitting the devices) who were usually fitting them. Maintaining the equipment and keeping the equipment in a usable fashion can be problematic and requires substantial resourcing. JA staff recognised that staff across the state may at some stage be doing installations. They will need to have stock available but realistically stocking all locations with equipment is challenging. From a logistical perspective, numbers, and localised availability of the devices is limited. The locality at which the devices are needed changes on a daily basis due to offenders transitioning in and out of the EM program. It was acknowledged that the parolees also are not taking care of their devices whereas the Dangerous Prisoners and Sex Offenders (DPSOs) were.

Cost and perceptions of what the technology can do

JA staff identified concern that technology companies and EM supporters may be overstating the device capabilities to public officials and the wider public. The perception the community has of EM appears to greatly outweigh its actual capabilities. DCS has a highly resourced EM program for DPSOs, which they state costs as much as the offenders being in prison. In applying EM to a DFV offender cohort, JA staff have concerns about the high cost and capacity of the justice agencies to meet the demands of device provision, supervision of DFV offenders and timely responses to the breach and return to custody demands on justice agencies.

What is currently known about the benefits and limitations of various technologies, including capacity for upgrade as technology advances, and procurement with private providers?

Four of the Australian jurisdictions that took part in the research are currently using Buddi as their device provider and one is using G4S. Buddi is the only provider on the market which has Wi-Fi enabled devices. This provides for monitoring capability in such indoor areas as shopping centres where GPS cannot reach by utilising the Wi-Fi of businesses within the centre.

DCSCC are currently working with G4S to investigate the possibilities around G4S providing Wi-Fi enabled trackers and location based triangulation:

Perceived limitations of GPS technology for EM

JA staff identified limitations in the current EM technology that potentially created risk for victims/survivors. These limitations included: the device being able to be cut off by the offender; victim/survivor risk increasing once moving outside any exclusion zones; GPS drift; questionable mobile coverage in some areas impacting EM; and inadvertent breaches in smaller geographic areas.

One agency acknowledged that it is possible that an offender will go outside the exclusion zone, cut the tag off and that will not be known until the device loses power. Another acknowledged that due to technology limits of remote areas, EM may not be widely available for use with population groups in those remote areas. Two agencies identified that they had not experienced GPS drift as a notable issue, while DCSCC identified that most of their false alerts were related to GPS drift.

At the time of research for this report being conducted, QPS were undertaking a confidential procurement process with twelve suppliers of GPS electronic monitoring devices. QPS were not able to provide any information to the researchers around the suppliers who had tendered or the outcome of the process. However, this information will be extremely instructive within an information sharing capacity between QPS and DJAG.

Objective C: Identify if EM appropriate at bail, probation or parole

What context (bail, probation and parole) is most practical and effective for such monitoring?

What evidence about the relative merits of EM in the context of bail, probation and parole currently exists? What does the evidence say about the practical application and effectiveness of EM at these different points in the criminal justice system?

Bail

Bail home detention is by far the largest cohort of offenders subject to EM currently in South Australia with 401 of the total 761 on EM (SA is the only state that does bail home detention). However it is important to note that DCSCC also observed that it is the bail home detention cohort who are the most chaotic.

TasPol and QPS are also both currently using EM at bail for some offenders including some DFV offenders. One JA staff member identified that while EM was useful for some bail conditions such as not associating with certain people and monitoring of curfews, they were not confident that EM for DFV offenders at bail would reduce risk.

JA staff identified the possibility that bailees may be more compliant on EM as they are still awaiting a court/sentencing outcome.

Issues for EM on Bail

JA staff raised concerns around bailees being an unknown risk as they have had no previous engagement with the criminal justice system in some cases. JA staff also highlighted that bailees are given no risk assessment prior to the application of EM leading to questionable risk reduction for the victim/survivor.

All of the EM devices currently being used by QPS are kept in Brisbane and must be transported to other locations for offender attachment in those areas. Offenders must present back to their local watch house for a fitting within 3-5 days of a bail condition of EM being applied. This time frame is dependent on the location of the watch house and allows time for the device to be transported to that location. This waiting period may be problematic if offenders fail to return for their GPS fitting. Queensland has had one incidence of an offender absconding during this waiting period since the legislation allowing application of EM at bail commenced in March 2017. The risk of this occurring may be mitigated by each Watch-house having devices on site rather than waiting for them to be transported from Brisbane.

Other issues identified by JA staff around the use of EM on bail were:

- The frequency that some bailees can change their addresses during their time on bail.
- There is no formal supervision or wrap around support in place to address causal factors sitting behind offender behaviour whilst they are on bail (unlike probation and/or parole).
- Possibility of offenders ending up on dual orders EM on bail alongside a less restrictive community based supervisory order.
- A potential increase in remand numbers due to the increase in the likelihood of detection whilst on an EM program.

One participant from the VS/DVS group cautioned that violent offenders should never be given bail as she did not believe an EMD could stop their violence.

Bridget: I don't think they should get bail if they are a threat to women because that (an EMD) is not going to stop them from doing violence. I wouldn't be confident it would stop anyone in the rage they get into with these DV's. It's such an act of emotional irrationality half the time that being rational and thinking 'oh they know I've done it' isn't going to worry them.

Positive aspects of EM for bail

Three of the 12 VS/DVS participants believed that using EM for DFV offenders on bail was justified, may result in lower risk for victims/survivors, and may assist with evidence of breaches.

Sarah: I know with parole they are making an assessment so they may not necessarily be on the order for DV but they might still be using it to manage risk and again they may not necessarily be convicted DV offenders but they are subject to EM because of DV. The same applies in bail, in that someone is making an assessment around whether that would be a good risk mitigation tool. They already have bail conditions around curfew and location restrictions that a magistrate can impose if they choose, if they see fit so I guess that's just an added means. I can see how civil libertarians may have issues around that unlawful imprisonment but I don't necessarily buy into that though. If someone has made a decision that is a good risk mitigation tool then there's grounds for it.

Eve: I think it's appropriate on bail if there's enough circumstantial evidence - if there's enough evidence for a committal hearing, there should also be enough evidence to wear an EMD.

Georgia: When it comes to bail, I would really advocate for it. In my situation I waited 12 months for him to be sentenced and he continually stalked me and harassed me and perpetrated and did all of those things. So in my situation I would have actually had evidence of him stalking me. I think there is definitely value in that (EM for bail) - I know that's going to be a harder win but I was actually made unsafe to collect that evidence to prove that and that just increased my anxiety, it increased my panic attacks. I was strangled in November and he was incarcerated on the 23rd July so I lived another 6 months with that, and he stalked and harassed me the whole time before he went to jail.

One VS/DVS participant thought there may be a backlash against the victims/survivors if EM were applied to bailees who may blame women. However she identified that blame can be part of a DFV relationship and should not be reason to do nothing.

Carol: There could be a back lash against women. It's only that we've set up the DV order system to be civil that they are not criminalised. Of course they will blame the women for everything. So what's the alternative - to do nothing? The whole basis of the relationship is for him to blame her. Either way she is already copping a lot of abuse.

EM as alternative to custody

The DCSCC EM program in South Australia has a very clearly defined place and purpose within an alternatives to custody policy, and is part of the "better sentencing options" under the *Sentencing Act 2017.*

DCSCC: We can actually supervise some individuals that are spending a 2 month sentence inside and keep them on the outside where they can still be within the family unit, receive whatever counselling and treatment they've got, still work, pay taxes rather than cost the taxpayer money. We found that with the alternatives to custody reform

that court ordered home detention (front end sentencing options) have been the biggest driver of increase in numbers in the EM program. Where people were getting a term of imprisonment, they're now getting court ordered home detention in some circumstances.

Other JA staff raised concerns around the possibility of EM being used as an alternative to prison for violent offenders who should not be released, and the impact that would have on victim/survivor risk and safety.

One participant from the VS/DVS group highlighted the differences in motivation to commit offences between DFV offenders and other offenders and indicated that "power and control" was at the centre of DFV offending making these offenders less likely to be deterred by consequences.

Carol: They (DFV offenders) are driven by completely different motivations. So many other offenders, for example, drug offenders, are driven by their own substance use that make them dependent - that's what drives them and often there is criminality around that. But with DV offenders the motivation is really quite different - driven by power and control. They'll go above and beyond to commit the crimes irrespective of the consequences.

Parole and post-sentence

QCS can currently apply EM to parolees and to DPSOs post-sentence. JA staff identified significant differences between these two cohorts. These differences manifested in the DPSO group being found to be generally compliant with very few cutting off their EM devices (only one and a half attempts since 2006), whilst the parolee group were found to be more non-compliant and displayed higher levels of non-caring, impulsive risk taking behaviour resulting in 63-64 devices being cut off by parolees since the commencement of the parolee EM program on 16th June 2017.

DVPO breach numbers are up on the current NSW trial and while there has been a variety of reasons that offenders on the trial have gone back into custody (including victim contact and breaching exclusion zones), there has been no actual physical violence used by any offender on the program as of September 2018.

JA staff also identified that the behavioural differences they had observed in the parolee cohort resulted in issues with the group recharging their EMD's. They also raised concerns around the impulsivity and non-caring attitude of the parolee cohort on EM leading to potential risk elevation for victims/survivors.

JA staff identified homelessness and transience as issues for the application of EM at parole and bail due to issues related to recharging devices for offenders, and difficulty in policing transient offenders, generally.

Objective D: Identify measures to mitigate recidivism while on EMP

What measures should be taken to mitigate risks that perpetrators may re-offend while being electronically monitored?

EM not a stand-alone solution - need "EM Plus"

A very clear message from all participants was that EM would not be effective in mitigating risks posed by DFV offenders if used in isolation. The VS/DVS participants spoke of the importance of EM being a feature of a more holistic criminal justice response in which all agencies worked collaboratively. This view was affirmed by JA staff who reported that EM should be used alongside overall supervision, support and programs to monitor offenders, foster their behaviour change and ensure swift consequences for offending behaviour. One JA staff member described EM as a tool in the overall program—not the solution.

The comments by VS/DVS describe their views on how risks can be mitigated using EM:

Kylie: I would like to see EM as part of a holistic program. In my view, it can't be a stand-alone solution.

Jen: We should be looking at this as part of a holistic approach so we should be getting them into offender programs so it needs to a component not a sole feature. It needs to be catered to a case by case basis making sure it's helping the women not making them feel more victimised.

Bridget: Monitoring without programs just becomes part of their lifestyle and doesn't change behaviour or outlook. It's like prisons just locking people up and not doing anything with them. You institutionalise them and then wonder why they can't cope on release.

Carol: But it needs to be part of a whole of system response. We can't rely upon it too heavily in isolation or it will just become tick and flick and 'she'll be right because we've got this thing in place now and we are not going to bother with the other things to help keep her safe'. And if we do it that way, women's lives will be more at risk.

Sarah: ... EM is just one potential strategy that might be on offer. I don't think that anything should ever be used in isolation. There needs to be definite consequences, an opportunity to change the behaviour so that's in the form of behaviour change programs, potentially EM if its assessed as appropriate, the involvement of an integrated response. I don't really think many DV interventions should be put in place without an integrated response around contact with the woman, involvement with police and DV services and Child Safety where there's children. I don't think any of it sits in isolation and I don't think that's isolated to EM. I would say the same about perpetrator programs, for any DV intervention to be effective, there needs to be opportunity to change behaviour, contact with the woman and integrated response. It's a tool and I don't put it above an of those other strategies - I don't say well you're going to use EM so therefore you need to use the others, I say you've got to have the others, do you also want EM.

Kylie: Case management that does everything to support the perpetrator to do everything that needs to be done so they can stay away. And then the case manager being involved in that ongoing monitoring of like "you went into the exclusion zone, why did you do that?" So that they know they are being monitored all the time but that they are also being given every chance to adhere to the exclusion zones because ultimately we just want to keep women safe.

Jen: Well that comes back to the holistic approach though. It's really crucial that we not look at it as such a black and white issue, it needs to be holistic in terms of the victim needs their support services, the offender needs their support services and that's where you should be building stuff from. Without breaking that cycle, regardless of what you do EMP's or whatever, it's not going to fix it.

One of the VS/DVS participants raised concerns around the ongoing mental health of offenders being monitored whilst on any EM program.

Natalie: Case management is an important factor I think and also monitoring the psychology and the mental health of the offender. Also if they have mental health and substance abuse they will do anything even if they have this tracking. Sometimes they will not care about the consequences. Behaviour change programs can be incorporated. Victim tracking - should be consulted with the victim before giving them a tracking device.

A strong theme from JA staff was that DFV offenders on EM needed to be supported with supervision and offender programs. The DCSCC EM program is supported with supervision and offender programs such as "Repay SA" and the "structured day". In the "Repay SA" program, the aim is for community corrections to run structured programs enabling offenders to give back to the community even though they are on detention. In the structured day the offenders can spend 8 hours with corrections staff supervising them. The offenders are kept connected and actively occupied in meaningful work, which appears to be beneficial in managing their offending behaviour. Another agency described how offenders might be required to attend a drug rehabilitation facility or have drug ban conditions on their order. These become decisions of the case management discussions —the aim being to reduce the risk of re-offending.

It was apparent, particularly from the VS/DVS participants, that the persistent coercive and controlling tactics used to intimidate and violate the victims/survivors of DFV differentiates DFV offenders from others. Participants were clear that thorough risk assessments must guide decisions about the appropriate use of EM for DFV offenders, and that in all cases EM must be employed within a systemic response in which partner agencies share information and strategies.

What if any role should victims/survivors have in an electronic monitoring program?

(See also points under Objective A, above, and Objective E, below)

Victim consultation prior to EM activation for offender

A strong theme that emerged from the VS/DVS participant interviews was that victims/survivors should always be consulted in a risk assessment of the relevant offender before applying EM. Caution was urged from one participant around the need to have DFV specialists involved in this consultation process due to the pervasive nature of coercive control that may not be fully understood by other stakeholders/agencies. Their comments included:

Natalie: The victims should be interviewed about what kind of person the offender is, are they afraid for their life or is there any chance of them harming them? I think the victim should be interviewed before giving an EMD to the offender.

Carol: Women's voices should be heard - needs to be structure and caveats around that. DV specialists definitely need to be involved in that process. Coercive control may impact what the women say and if you don't have specialists involved who understand that there is the potential for those consulting with the woman not to realise they are being coerced.

Sarah: I think their (victims/survivors) voice should always be heard in a risk assessment: [ask them] do you think EM will mitigate risk, could there be unintended consequences, looking for that pattern of behaviour because whilst EM works for one offender it could be a massive risk for another. We're only going to know that by virtue of the information that the aggrieved tells us.

This theme was also identified by some JA staff who agreed that the victim/survivor should be consulted about application of EM to relevant offenders, with one participant identifying this aspect of gaining consent from the victim/survivor prior to application of EM to an offender as "the most important thing" and that "... she's consented to that knowing of potential unintended consequences and risk as part of her safety plan ..."

One participant from the VS/DVS group raised the question of whether the victim/survivor would be consulted prior to the removal of any EM device from a relevant offender.

Stef: Can they apply to get rid of the EMD? And if so, do both parties have a say in this?

Alerts for victim via electronic device

Some of the VS/DVS participants thought that victims/survivors should be involved in the EM program by virtue of wearing a device that provided them with offender proximity alerts. Reasons given for this included a preference to know rather than not know when the offender was near; a lowering of personal anxiety levels due to the victim/survivor knowing whether threats from the offender to come to her location were real or not, and to give the victim/survivor time to enact their safety plan.

Sophie: I think that if the offender has the bracelet on the other party should have a watch on as well. If I'm given the opportunity to know when my abuser is close by, then I would prefer to know rather than not know.

Eve: Even though you might be triggered by it, if it wasn't there at all you just don't know. Even just having that watch on you when the offender is not around would make me feel safer, I'm sure there would be a lot of victims that would be prepared to wear it 24/7, it's that extra layer of safety. Sometimes just perceived safety allows you to function again when you might not be able to function at all. The person just needs to know what it can and can't do.

Sarah: I think it's a good strategy around also notifying her. If the aggrieved isn't going to be notified - you're notifying someone else but not her - how can she enact her safety plan if she doesn't know he is even close?

One participant identified that reference groups for women who were taking part in EM programs and wearing devices would be beneficial to refining best practice principles for victim/survivor participation in EM programs.

Kylie: I would also think about reference groups for women that are wearing them so that you can get that ongoing feedback to see how it's working and make it an ongoing process of refinement because like anything it's not going to be perfect first up.

In NSW, where possible, the EEMG contacts the victim/survivor immediately following an alert that the offender has breached an exclusion zone, thus enabling the victim/survivor to enact their safety plan. The victim/survivor is not required to be part of the EMP to receive this notification from the EEMG, however, it does require the victim/survivor to provide relevant information, including contact details, to the EEMG. Victims/survivors who are on the EMP have the advantage of being able to be warned of potential inadvertent contact with the defendant/offender.

Objective E: Identify best practice features of EM in context of DFV

What is considered best practice in EM programs for domestic violence offenders, and what are the key features of these programs?

There was a high level of consistent, clear information and suggestions from all participants in interviews and focus groups on what features could strengthen future EM schemes for DFV offenders. The following 10 key features were identified.

- 1. Integrated, interagency response: EM should be a part of integrated response to DFV between agencies and strong working relationship between police and corrective services is essential. Interagency collaboration, information sharing and communication is needed between criminal justice and community service agencies.
- 2. Combining EM programs with robust counselling, support and other structured programs for offenders.
- 3. EM must be supported by effective monitoring and supervision.
- 4. Robust risk assessment must feature and guide decision-making before and during the application of EM.
- 5. Training and education for police, magistrates and victims about EM must be ongoing.

- 6. Consulting the victim/survivor prior to the application of EM on offender is crucial and skilled specialist DFV staff are needed to undertake that consultation.
- 7. EM must be supplemented by safety planning for victim/survivor.
- 8. A timely and local police response is essential.
- 9. The use of exclusion zones must be appropriate to the geographic location and context to avoid identifying location of victim/survivor.
- 10. Strict protocols are needed for the use of victim devices, which respect the agency of victims to opt in or opt out.

These features are explored in further detail below.

1. Integrated, interagency response

Discussions with DCSCC indicated a respectful and collegial working relationship between DCSCC and SAPol, where both parties have clearly defined roles and responsibilities and good communication. DCSCC also discussed the importance of communication, information sharing and collaboration across multiple agencies as key to swift processes and the smooth running of what is Australia's largest EM program for offenders.

DCSCC commended the role the SAPol play in locating the relevant details about the DFV perpetrators and their prompt response to high-risk situations. It was also suggested the daily contact between DCSCC and SAPol can eliminate offenders from other investigations if they can confirm location of offender, freeing up their resources.

Interviews with JA staff indicated unease around whose responsibility it should be to monitor EM for bailees into the future.

It was identified that communication issues between justice agencies can result in offender information not being transferred between agencies in a timely manner after application of EM, including risk assessment information. Monthly working group meetings are held around EM programs in some jurisdictions to try and build on inter agency communication. One JA staff member indicated that "... communication and collegiality between stakeholders is crucial, each area has different areas of expertise. Not one single agency has all the information and all the power."

2. Combining EM programs with robust counselling, support and structured programs for offenders

A strong theme that emerged from consultations with JA staff was that electronic monitoring of offenders cannot be a standalone solution to domestic violence offending and must be supported with wrap around programs, support and supervision for offenders in an attempt to create understanding and real behaviour change for the offenders. The common message was that EM needs to accompany intervention by the criminal justice system to help offenders not to re-offend—including voluntary and mandatory program participation.

A staff member from one JA indicated that their staff have confidence in evidence based perpetrator programs and that a "whole integrated response is what's needed to do a proper risk assessment around a victims safety."

Another VS/DVS participant suggested that a restorative justice approach with offenders is needed. "... If we're going to have a DFV approach that says swift accountability and support for women and children, the offender approach needs to be part of a restorative justice approach—that includes understanding the impact of violent, controlling behaviour and why there is a need to "wear a bracelet."

3. EM Supported by effective monitoring and supervision

All of the justice agencies interviewed agreed that effective monitoring and supervision of offenders was imperative to any EM program for DFV offenders. Lack of resourcing was a common theme within the justice agency staff. A lack of police powers of arrest for corrective services ordered exclusion zone breaches was also an identified issue in one jurisdiction.

While TasPol have intensive monitoring, responding to and investigating breaches is dependent on available police resources at the time. Tasmanian Corrections are involved with tracking the offenders, but they cannot respond to breaches of the DV orders. Corrective Services Tasmania have set up three zones of monitoring for each EM device - outer, middle and inner zones. If, via this intensive monitoring, Corrective Services Tasmania identify that an offender has entered the inner perimeter, they will notify police who will proceed to where the breach is occurring and have powers to arrest the offender - if they have available resources at the time.

NSW Corrections have a responsive monitoring system in which offenders getting close to exclusion zones, and offenders not responding to phone calls from corrections both lead to police emergency responses.

JA staff also indicated that a "no contact" clause is preferable in the DVO whilst the offender is on the EM program.

DCSCC employ a robust supervision model with EM for offenders which includes DFV offenders. Not only are the offenders participating in programs such as 'Repay SA' and the "structured day", their movements are strongly monitored, and their supervision is vigorous.

DCSCC staff reported that with a high risk person on EM, they ensure a once a week visit in the office and a weekly or fortnightly visit at home as a minimum standard. Staff also retrospectively check movements of offenders who for example are provided with a pass to attend a visit with a lawyer.

QCS indicated that they have a robust supervision and surveillance model for those offenders on the Dangerous Prisoners and Sexual Offenders (DPSOs) EM Program, but parolees on EM are not under the same level of surveillance as DPSOs.

JA staff identified the large cost associated with the creation of rigorous monitoring models that are currently used for DPSOs (which they state costs the same as prison) on DV offenders.

4. Robust risk assessment before and during the application of EM

DCSCC also identified a very robust risk assessment protocol within their EM programs. DCSCC Team Leaders conduct risk assessments of every offender that comes into the EM program and identify whether or not they are subject to conditions on a current DVO. Even if DFV has not been the primary offence for which EM was applied, DCSCC will automatically address any DFV no contact condition with an exclusion distance and incorporate that into the EM exclusion zones. DCSCC staff reported that they are strict about applying the risk assessment and providing that risk information to the court.

5. Education for police, magistrates and victims about EM

VS/DVS participants indicated that education around the actual capabilities of the EM devices and GPS technology was an important aspect of any EM program.

Carol: Knowledge and training for those who use it and their victims/survivors [is needed]. We can't rely on technology to respond to and fix human driven actions and behaviours.

One VS/DVS participant had experience with an ex-partner who had been on an EM program. She raised concerns around that the Police did not seem as vigilant in responding to her reports due to their belief that EM would keep her and her children safe.

Lily: The police said that because he had an ankle tracker they thought me and the kids were safe.

JA staff identified that Magistrates have in the past deemed a DVPO unnecessary if there are bail conditions. This can be problematic if the offender then fails to appear in court for the next mention as the bail conditions are then no longer valid and there is no DVPO. JA staff reported that is essential to have a DVPO in place.

One jurisdiction identified training for police around their roles and responsibilities within an EM program for DFV offenders including what the necessary evidence to prosecute a breach under an EM program was.

6. Consulting victim/survivor prior to application of EM on offender crucial and skilled specialist staff need to undertake that consultation

A number of the VS/DVS participants stated that victims/survivors should always be consulted in a risk assessment of the relevant offender before applying EM. Caution was urged from one participant around the need to have DFV specialists involved in this process due to the pervasive nature of coercive control that may not be fully understood by other stakeholders/agencies.

A consistent theme identified by JA staff and DCSCC was that the victim/survivor should be consulted about application of EM to relevant offenders. This aspect of gaining consent from the victim/survivor prior to application of EM to an offender was identified as "the most important thing" by one JA staff member.

DCSCC: Even prior to offender coming on to our program...we may go out and meet the individuals (victims/survivors) at the residence. Talk to them about what is home

detention. Are they willing to have that discussion without the offender is crucial? We have a policy if we rock up and it's a DV victim because the court has asked us to ... we can say EM not suitable if DV victim says we don't want them there.

7. EM Supplemented by safety planning for victim/survivor

Throughout the interviews of both JA staff and VS/DVS participants, it was evident that there was concern around EM having the potential to create a false sense of security for victims/survivors, and victims/survivors disregarding safety plans as a result. For safety planning to be effective, risk assessment must also be robust and agencies acknowledged that improved information sharing with victims/survivors must occur.

8. Timely and local police response

Many participants acknowledged the challenges inherent in providing a timely response to EM breaches and that this must be an area of continuous improvement— particularly given the relentless pattern of coercion and control over women that is common to DFV offenders.

9. Using broad exclusion zones

JA staff reported on the need for exclusion zones to be clearly defined and understood by those subject to EM. For example, offenders may not know if they are coming close to breaching exclusion zones based on suburbs because suburb boundaries can be poorly defined. RF beacons can also be put in the victim's place of employment as another alert zone. An alert will indicate if the offender is approaching.

10. Strict protocols for victim devices, which respect victim/survivor agency to opt in or out

Strong support from participants emerged around utilising practices which actively included and informed victims/survivors about the EM program and its impacts on them and the offender. Most supported the principle that victims/survivors should be consulted on the use of EM with the offender, and provide their consent to its use. TasPol described how victims/survivors are involved in EM on an "opt in" basis. There are strict protocols for suitability criteria (e.g. victim and perpetrator cannot be looking to reconcile, or can't be hyper vigilant, or living within 1km of each other).

Are they consistent with key principles established under the National Plan to Reduce Violence against Women and their Children 2010-2022?

The principles under the National Plan are as follows:

- Domestic violence, family violence and sexual assault crosses all ages, races and cultures, socioeconomic and demographic barriers, although some women are at higher risk.
- Everyone regardless of their age, gender, sex, sexual orientation, race, culture, disability, religious belief, faith, linguistic background or location, has a right to be safe and live in an environment that is free from violence.
- Domestic, family and sexual violence are unacceptable and against the law.
- Governments and other organisations will provide holistic services and supports that prioritise the needs of victims and survivors of violence.

- Sustainable change must be built on community participation by men and women taking responsibility for the problems and solutions.
- Everyone has a right to access and to participate in justice processes that enable them to achieve fair and just outcomes.
- Governments acknowledge the legacy of past failures and the need for new collaborative approaches to preventing violence against Indigenous women.
- Responses to children exposed to violence prioritise the safety and long term wellbeing
 of children.

The features of an effective EM system raised in the previous section are consistent with the National Principles—especially in recognising (1) the severity and criminality inherent in DFV and that an efficient and effective criminal justice system response is fundamental to enhancing the safety of those subject to DFV; (2) that holistic responses, not a stand-alone EM response is required, and (3) collaboration among agencies is required.

7. Discussion and policy analysis

Internationally, the increasing use of GPS technology to electronically monitor defendants/offenders is largely driven by concerns about burgeoning prison populations and associated costs. Thus the primary policy objective of electronic monitoring has been lower-cost offender management through virtual incarceration. The stated objectives of EM in the context of DFV trials in NSW, South Australia and Tasmania include a focus on deterring defendants/offenders from re-offending.

Improved victim safety is also an objective of the EM trials in NSW, South Australia and Tasmania. Further, and in recommending that the Queensland Government trial GPS, the Queensland Special Taskforce on Domestic and Family Violence (2015) focused both on increased accountability of perpetrators, and improved protection for victims/survivors.

Reducing recidivism across a population of offenders, however, does not equate to increased safety at an individual level for victims/survivors. This insight informs the following discussion, which is based on our findings from the literature and the interviews and focus groups we conducted, as relevant to the objectives for the research project identified by DJAG.

Victim/survivor safety

DFV takes many forms and is characterised by patterns of coercive control, which is not limited to physical violence. Most DFV cases that come to the attention of the criminal justice system, however, do involve physical violence and defendants/offenders on EM related to DFV are most likely to have perpetrated physical violence on their ex/partner. As pointed out by the victims/survivors that we interviewed, EM of defendants/offenders will not be able to detect and deter coercive controlling tactics executed through mobile phones, or other technology. It may be useful in ensuring defendants/offenders cannot come close enough to cause physical harm to victims/survivors, but there are limits here too.

Understandably, eligibility criteria for EM in the context of DFV include that the defendant/offender and victims/survivor have separated and are not living in close proximity of each other. The evidence from the literature, presented in section 3, demonstrates the increased risk of harm, including increased risk of homicide, during or after separation. Therefore, assessment of victim safety is critical in considerations related to EM in the context of DFV.

While the focus of EM trials, and proposals for EM trials, in the context of DFV has been high risk offenders, both the literature and the results of interviews and focus groups question the capability of EM to keep victims/survivors safe. Further, there appears to be a perception in the wider community that defendants/offenders are monitored in real time, whereas real time response is limited to action on electronic alerts. That is, real time monitoring and response occurs after the monitoring unit receives an electronic alert. Monitoring unit staff can then follow up to ascertain the nature of the breach, and initiate appropriate action. There are some perpetrators of DFV, however, who will stop at nothing to harm their ex/partners, as shown in the case of Tara Brown, below.

The following case study is pieced together from information provided in three.¹⁷ news reports about the facts presented at the court case of Lionel Patea, who pleaded guilty of murdering Tara Brown on Queensland's Gold Coast in September 2015.

Case study - Lionel Patea and Tara Brown

Patea and Tara had been in a relationship since 2011 and had a daughter, Aria, in 2012. By 2015, Tara wanted to end the relationship with Patea. She was granted a DVO and interim arrangements were made under the provisions of the *Family Law Act 1975*, giving Patea joint access to their daughter. Patea killed Tara, just days after the joint access arrangements had been made.

At approximately 8am on 8 September 2015, Patea made a phone call to Aria's child care centre to confirm that she would be attending the centre that day. He waited until Tara delivered the little girl into the care of the child care centre and then chased her at high speed through the streets of the Gold Coast.

Tara called Triple 0 and she could be heard screaming for help as she was chased and her car rammed by a pursuing Patea. Witnesses saw Patea bashing on the windows of Tara's car when she had to stop at several intersections, and saw the pair speeding up to approximately 100km/h along Southport-Nerang Road, Ashmore Road and Macquarie Avenue.

At 8.35am Patea ran Tara's car off a public road; it crashed down an embankment and landed on its roof. As Tara lay trapped in her upturned car, screaming for help, Patea bashed her with a heavy metal plate from a fire hydrant. Two witnesses, a man and a woman, repeatedly tried to stop Patea but he fended them off and continued assaulting Tara in their presence.

Patea inflicted "non-survivable head injuries" during his attack on Tara. She died in hospital the following day.

Several features of this case illustrate the limitations of EM in reducing risk for victims/survivors, and as a deterrent for DFV offenders.

• There is the particular proprietorial attitude at play with DFV that drives offending regardless of consequences: "If I can't have her, no-one will." In this case it appears that circumstances contributing to Patea's killing Tara included the court order for joint

Zealand Herald, 28 February 2017 (https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11809015).

¹⁷ ABS News online 27 February 2017 (https://www.abc.net.au/news/2017-02-27/tara-brown-death-lionel-patea-pleads-guilty-murder-brisbane/8305604); The Gold Coast Bulletin, 27 February 2017 (https://www.goldcoastbulletin.com.au/news/crime-court/tara-brown-murder-i-killed-her-former-bandido-bikie-lionel-patea-pleads-guilty-to-bashing-ex-to-death/news-story/b63ed52f606aef385b913e937b2a247c); and New

access, after Patea had tried to deny Tara's access to their daughter (see The Gold Coast Bulletin, 27 February 2017; and New Zealand Herald, 28 February 2017).

- The consequences of breaching the DVO did not prevent Patea's offending behaviour escalating to murder. Patea had a criminal history that included previously breaching the DVO against Tara Brown, and multiple breaches of probation orders (see New Zealand Herald, 28 February 2017).
- It is unlikely that a GPS exclusion zone would have prevented Patea murdering Tara: the events leading up to and including the fatal injuries inflicted on Tara by Patea unfolded on public roads and road related areas during a geographically diverse ongoing high speed pursuit.
- The high speed, moving nature of this crime along public roads made a swift response from emergency services extremely difficult, even though Tara was able to call Triple 0. A breach of exclusion zone alert, even bi-lateral EM, would not have been effective in these circumstances.
- Patea seemingly had no concerns about fatally assaulting Tara in a public location in front of witnesses who attempted to stop him. An EM exclusion zone would almost certainly not have stopped him.

This case study supports the views expressed by victims/survivors and stakeholders that EM must never be used as an alternative to incarceration where there is a significant risk to victim safety. It also underscores the importance of victims/survivors voices being heard throughout any application of EM for DFV offenders, because it is the victim/survivor who knows most about the perpetrator, his behaviour and the triggers for escalated risk to her safety. It highlights the importance of including the victim/survivor in risk assessment with questions such as: Do you think he is so possessive of you that he will not let you leave him? How do you think he would react if you left him? Has he ever indicated that he will kill you if you leave him?

EM at bail, probation or parole

EM is being used at bail, probation and parole in New Zealand and several Australian jurisdictions, including in trials of EM in the context of DFV currently being conducted. Legislative reform has been undertaken in those jurisdictions to provide appropriate sentencing options and, in some cases, to enable a role for community corrections' staff in monitoring compliance with bail conditions through an EMP.

Exceptionally, Tasmania's trial of EM in the context of DFV focuses on the application of EM as a condition on a civil family violence order (FVO). Therefore, a breach of an EM exclusion zone is a breach of an FVO and police respond accordingly. This is enabled through legislative amendments to Tasmania's *Family Violence Act 2004* in 2017.

Concerns about the civil liberties of an accused being subject to EM at bail are dismissed by corrections staff in jurisdictions where this occurs. In South Australia, for example, corrections staff state that defendants recognise the benefits of EM as an alternative to being remanded in custody. This position is also relevant in Tasmania where there is a presumption against bail for those charged with an offence of family violence. However, it is not clear how the Tasmanian

legislature has overcome concerns regarding the civil liberties of those subjected to EM as a condition on an FVO. There is no reference in publicly available documents to any concerns raised by civil rights groups, and the only reference to such groups in the evaluation of the development phase of the Tasmanian trial is to a "communication strategy that provides clear direction for consultation with Stakeholders inclusive of victim groups, civil rights groups, courts and operational police" (Julian, Winter & Herrlander, 2018, p.4). The 2017 legislative amendments do require, however, that a review of the effectiveness of EM as a condition on FVOs be completed within 2 years of the commencement of the amended Act.

As noted in our introduction, above, legislators across Australia prevailed over civil liberty concerns in the 1980s when civil domestic violence laws were first enacted. Those laws also enabled restriction on the movements of those subjected to civil domestic violence orders, and they provided exceptional civil law powers for police and courts. Legislators at the time were persuaded that exceptional legislative responses were required to effectively respond to the exceptional circumstances of DFV (Nancarrow, 2106); three decades on, such legislative provisions are less exceptional. The developments in Tasmania regarding EM may reflect a similar position and, perhaps, a reluctance to challenge strategies aimed at holding perpetrators of DFV accountable, given the national focus on that policy objective under the *National Plan to Reduce Violence against Women and their Children 2010-2022*.

Another concern regarding EM at bail, particularly for DFV, is the volatility of the defendant and the risk of escalated anger, aggression and retaliation directed towards the victim/survivor for police intervention. This risk is also relevant at probation and, perhaps to a lesser extent, parole. Observing that DFV takes many forms, but is generally directed at one victim/survivor at any one time (even when others such as children are implicated), assessment of both the risk of re-offending, and the risk of harm, must accompany decision-making regarding bail, probation or parole. Such considerations should include whether the assessed risk can be managed through regular bail or EM at bail, or whether the potential risk of harm requires the defendant/offender to be held in custody.

Current law in Queensland—Section 16 (1A) of the *Bail Act 1980* (Qld), Refusal of Bail—prohibits a court or police officer granting bail to a person where there is an unacceptable risk to the safety and wellbeing of a victim/survivor (or anyone else). Further, "in assessing whether a defendant is an unacceptable risk (and therefore should be remanded in custody), a court or police officer cannot have regard to the availability of electronic monitoring as a condition of bail" (Queensland Government, 2017b, p. 3). Therefore, Queensland police and courts are limited to EM at bail in circumstances where the risk to safety and wellbeing of victims/survivors is deemed an acceptable risk. Given the current limits of EM technology and the potential for domestic and family violence offenders to disregard any consequences, this is a sound principle and one that should also be applied in consideration of probation and parole. However, concrete assessment criteria to distinguish between unacceptable and acceptable risk in the context of DFV will be required to support the application of this principle.

Apart from the concerns addressed above, and based on the evidence available to date, it appears that the application of EM can be appropriate and effectively managed at bail, probation or parole. However, effectively implementing EMPs at any of these points in the

criminal justice system in Queensland will require increased resourcing and legislative reform. Jurisdictions, such as South Australia, which are effectively implementing EMPs at these stages have established commensurate sentencing regimes and community corrections responses, including Intensive Bail Supervision, that do not currently exist in Queensland. These are discussed in sections 3 and 5, above.

Questions about which defendants/offenders should be engaged in EMPs are more pertinent than considerations regarding the stage in the criminal justice system at which EMPs should be deployed. In part, decisions about including a defendant/offender on an EMP will be guided by the primary policy objective of the EMP. As discussed above, objectives may include management of prison populations, reduction in recidivism for those awaiting judgement, or serving community-based sentences, and increased community safety. These objectives are not mutually exclusive; however, achieving an overall reduction in recidivism does not equate to increased safety at an individual level in all cases. This is discussed further in the following section on measures to mitigate risk.

Measures to mitigate recidivism

Although the research to date is limited, one study (Marklund & Holmberg, 2009), discussed in section 3, indicates that EM in the context of DFV may be less likely to reduce re-offending by high risk offenders, compared to low to medium risk offenders. These concerns have serious implications for victim/survivor safety as well as for reduction in re-offending. Julian, Winter and Herrlander (2018) also query the application of EM for high-risk defendants/offenders, rather than those who are a low to medium risk of escalating violence towards their ex-partners.

Marklund & Holmberg's findings may be explained in the same way that others have explained the effect of mandatory arrest, whereby perpetrators of DFV who do not have a "stake in conformity" are more to re-offend after arrest, compared to those who do have a "stake in conformity" (Fagan, 1996; Sherman, 1992; Sherman, Smith, Schmidt, & Rogan, 1992). Sherman (1995) suggests that such defiance of sanctions may result in cases where the perpetrator takes pride in being seen as an "outsider", or sees the sanction as unfair, or otherwise not legitimate.

The correlation between relative risk for reoffending and the impact of EM in the context of DFV needs to be explored in evaluations of EM trials. This may be addressed in the South Australian trial through its subsidiary evaluation question: Are there specific characteristics associated with those who breach or re-offend while under GPS monitoring? In the interim, it seems that low to medium risk offenders are more appropriate candidates for EM in the context of DFV, despite the focus on high risk offenders in existing trials (e.g. NSW) and in recommendation 123 of the Queensland Taskforce on Domestic and Family Violence (The Taskforce, 2015).

The international evidence points to the significant role of programs accompanying EM, and which respond to individual offenders' criminogenic risks and needs, in the reduction of recidivism. Such programs assist in bonding defendants/offenders to the broader social system that imposes sanctions, therefore increasing the "stake in conformity" and the perception of

sanction legitimacy. The South Australian EMP operates within an integrated offender management framework, which uses the risk, needs, responsivity model of offender rehabilitation to plan and implement rehabilitative programs that are specific to offence types, as well as enabling effective case management.

South Australia also uses a four-tiered structure in the delivery of community corrections services, ensuring resources are directed as needed to manage the risk of recidivism. Ensuring defendants/offenders are appropriately allocated to one of the four tiers, which have varying degrees of intervention from community corrections (control, change, assist, or monitor), requires ongoing assessment of risk both in regard to recidivism and the level of risk to victims/survivors at the individual level. Women's Safety Services South Australia offers a model of integrated service provision, including risk assessment and management, with colocation of specialist DFV support services, police and corrections officers.

Buffer zones, in addition to EM exclusion zones, offer a more immediate strategy for reducing recidivism. A buffer zone will enable monitoring unit staff to be alerted to a potential breach and to warn a defendant/offender where entry to an exclusion zone seems likely. A breach of a condition of release and of a DVO, could then be averted. This approach is used in NSW where the primary policy objective of the EM trial for DFV is a 25% reduction in recidivism by 2019.

As noted above, EM will not deter some DFV defendants/offenders regardless of the stage in the criminal justice system at which it is applied. Breaches of courts orders (including ADVOs, DVPOs and FVOs) take various forms, some of which pose no threat to the physical safety of the victim/survivor (e.g. breach of a no-contact condition through text message), although they represent other harms and should be curtailed. Therefore, reducing the overall rate of recidivism does not necessarily make all victims/survivors safer. Increased victim safety is one among several objectives in the South Australian and Tasmanian trials and is an explicit focus of the evaluation of the EMP trials in those jurisdictions.

Best practice features of electronic monitoring—EMPlus

Electronic monitoring of domestic and family violence offenders can be a useful mechanism to hold some defendants/offenders accountable for their violence, and to better manage the risk they pose to those they have harmed. The evidence consistently points to the limitations of EM as a stand-alone mechanism and the risks to victims/survivors if it is not situated within a broader offender management program.

ANROWS proposes a conceptual model—EMPlus—which situates EM in the context of DFV within a systemic response. EMPlus incorporates the best practice features identified in the literature, EM trials in other Australian jurisdictions, and in the interviews with stakeholders and victims/survivors. EMPlus is founded on the minimum requirements of an EMP in the context of DFV. It comprises the following five elements, each essential for an effective systems response incorporating EM.

1. Comprehensive risk assessment and risk management

Risk assessment in determining eligibility for inclusion in an EMP in the context of DFV should not be limited to risk of re-offending. It is essential that criminal justice agencies, in collaboration with specialist DFV services and victims/survivors, conduct and review assessments of risk to the safety of victims/survivors before, during and after a defendant/offender's inclusion in an EMP. Risk assessment and risk management policy and procedures should be informed by the evidence-based National Risk Assessment Principles for domestic and family violence (Toivonen & Backhouse, 2018).

2. Evidence-based, reliable EM technology and responsive monitoring systems

State of the art GPS technology that is Wi-Fi enabled, and has capacity to switch between mobile network carriers, is essential to continuity of monitoring. Monitoring of offenders must be routine, reliable and responsive. Breaches of EM conditions must be reported to Police and Corrections staff and followed up immediately to maximise safety of those at risk of harm.

3. Effective supervision of defendants/offenders and their participation in structured programs

Offenders on EM must be under appropriate, risk-based levels of supervision with a plan of structured activities and responsibilities assigned to each offender on EM, based on individual criminogenic risks and needs. This may include employment training support (along the lines of the "repay SA" policy), housing support and attendance in behaviour management programs.

4. Co-operation and information-sharing between technology providers and criminal justice and community agencies

Clear lines of responsibility, accountability and information sharing among the statutory agencies involved are essential to ensure effective management of offenders on EM programs.

5. Active inclusion in decision-making and information-sharing and safety planning with those who are at risk of further harm from the offender

In cases where victims/survivors remain at risk and/or consent to being included in information-sharing and decision-making about the application of EM to an offender, this should be enabled and safety planning provided to the victims/survivors.

These principles are inter-connected and cannot be applied in isolation: the consistent, adequately resourced application of all five principles is essential to the effective application of EM in the context of DFV. As noted above, the application of EM in the context of DFV will require additional resources, including resourcing for EMP monitoring and response staff and risk assessment and management, in addition to the cost of EM technology. It may also require legislative reform, similar to the reforms in sentencing regimes in other jurisdictions discussed in section 5, which enable dynamic risk assessment and intensive bail supervision, for example.

Ongoing independent evaluation of EMPs is an overarching best practice principle. Any EMP should have clearly articulated primary goals and objectives, and systems for ongoing data collection to enable comprehensive evaluation against those goals and objectives. Any DFV intervention should prioritise victim/survivor safety, including EMPs for DFV defendant/offenders, even if victim/survivor safety is not the primary goal of the EMP.

8. Conclusion

Harms associated with DFV, including femicide and filicide, are preventable and EMPs can contribute to reducing reoffending and enhancing safety for victims/survivors. The utility of EMPs in achieving these objectives is, however, limited and conditional. Limitations arise from: 1) the nature of DFV; 2) the character of the defendant/offender; 3) the capability of the technology itself; and 4) the criminogenic risks and needs of defendants/offenders. However, most of these limitations are neither insurmountable, nor reasons not to proceed with EM in the context of DFV. Rather they need to be considered and managed in the development and implementation of any EMP.

The nature of DFV

EM in the context of DFV is limited because of the nature of DFV, which includes coercive controlling abuse that may be effected through various means beyond EM surveillance and response. For example, threats, intimidation and harassment may be conveyed via mail, email, mobile phone or text message or via a third party acting for the defendant/offender. Detection of and responses to these activities, as relevant to breaches of court orders, will continue to depend on conventional justice strategies. Nevertheless, some defendants/offenders who seek to exert control over their ex-partners though more direct means can be effectively monitored and restrained from contact with victims/survivors who may otherwise be subjected to direct emotional or physical harm. Others cannot be effectively restrained with EM.

The character of the defendant/offender

The intractable determination of some defendants/offenders to "punish" their ex-partner means that they will stop at nothing, including EM, to attack the victim/survivor. These defendants/offenders will find ways to manipulate the technology or avoid exclusion zones to do so. They represent an unacceptable risk to the safety and wellbeing of their ex-partners and are not suitable for EM as an alternative to incarceration. Relevant Queensland legislation (e.g. the *Bail Act 1980)* appropriately excludes defendants/offenders considered an unacceptable risk from EM as an alternative to being held in custody. However, defendants/offenders deemed an acceptable risk may be released on bail, serve a community-based sentence, or be released on parole with EM, reducing acceptable risk to negligible risk with EM. This can reduce recidivism and increase victim/survivor safety.

Effective assessment of the risk that an individual defendant/offender represents to the safety and wellbeing of the victim/survivor is more relevant than the stage in the criminal justice system at which EM is available. Recent developments in risk assessment and management in the context of DFV has increased accuracy in predicting risks of significant harm. These developments recognise the value of victim/survivor input into risks assessment, when possible, will support accuracy in the assessment of risk in particular circumstances.

Capability of the technology

The technology itself has limitations in regard to effectiveness and accuracy. For example, technology may not work in particular locations due to availability of GPS satellite connections or interference. Due to the potential lethality of DFV continuity of monitoring is critical and

sufficient time to act in the event of a breach is critical. This requires state-of-the-art hardware and software, including Wi-Fi and dual SIM capability. These features, respectively, enable monitoring where satellite connection is not available and the ability to switch between mobile communications carriers in the event of a mobile network outage. Monitoring unit staff skilled in the analysis of EM data and effective case managers, will also assist in effectively responding to breaches.

The concept of a buffer zone, in addition to an exclusion zone, provides an opportunity to intervene early to deter a defendant/offender at risk of breaching an exclusion zone, and to alert the victim/survivor to enact a safety plan. This requires expertise and front-end interagency coordination to ensure victims/survivors have safety plans and monitoring staff have access to relevant contact details if and when needed. Current Australian EMP trials provide structures to facilitate this (see for example, the diagrams related to the NSW model in section 5).

Criminogenic risks and needs of offenders

EM cannot be a stand-alone mechanism. While it can restrain some DFV defendants/offenders from reoffending, and increase safety for some victims/survivors, longer term reduction in recidivism and increased safety and wellbeing requires effective offender rehabilitation. Effective rehabilitation (re)connects offenders to social and cultural norms that reinforce non-offending behaviour for long-term reform. EM has to be part of an overall program incorporating interventions and programs that respond to the criminogenic risks and needs of individuals to achieve these goals.

Key principles guiding the application of EM in the context of DFV are reflected in the EMPlus model conceptualised by ANROWS. EMPlus can optimise the safety of victims/survivors while applying ethical and contemporary offender management frameworks and interventions.

EMPlus is founded on the following five key elements, each essential to the effectiveness of the others and requiring dedicated resources and legislative and/or administrative authority:

- 1. Comprehensive risk assessment and risk management.
- 2. Evidence-based, reliable EM technology and responsive monitoring systems.
- 3. Effective supervision of defendants/offenders and their participation in structured programs.
- 4. Co-operation and information-sharing between technology providers and criminal justice and community agencies.
- 5. Active inclusion in decision-making and information-sharing and safety planning with those who are at risk of further harm from the offender.

In addition to the five elements of EMPlus, effective implementation of an EMP in the context of DFV requires clear articulation of the primary objective of an EMP. Communication of the objective to the broader community will avoid unrealistic expectations. Increased safety for victims/survivors may be an outcome of an effective EMP, but there are significant challenges, particularly for those at highest risk of harm. Staying the growth of prison populations and reduction of recidivism may be more realistic primary objectives.

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Appendices

Appendix 1: Literature search results

Data Base/ Source	Search terms	Results
Peer reviewed literature		
ProQuest Social Sciences	EM and offenders peer review post 2010	427 results, 25 abstracts reviewed,12 articles cited
	EM and offenders full text post 2010	8331 results, many repeated from initial search, 5 additional articles/ reports from 300 titles reviewed, were useful and cited, then topics less relevant
	EM and DV offender peer reviewed post 2010	132 results 18 abstracts reviewed, 12 articles cited
	EM and DV offender full text post 2010	262 results 4 additional items to those above reviewed.
	GPS tracking and domestic violence full text post 2010	159 results, mostly repeats from initial search, 2 new abstract read, but not cited.
ProQuest Criminal Justice	EM and DV full text and peer review post 2010	972 results full text, 326 peer review. Many repeated from ProQuest Social Sciences, 10 abstracts reviewed, 2 additional cited.
	EM and guidelines full text and peer review post 2010	1878 results full text, 1095 peer review. 5 abstract read, most results not relevant
Australian Criminology	EM and DV	2 results
Data Base (CINCH)	EM and offenders	21 results, 16 abstracts read, 11 articles cited
	EM and best practice	0 results
	EM and guidelines	1 result, cited

Appendix 2: Jurisdictional overview of EM within the criminal justice system

*Adapted from information provided to the ANROWS research team by Queensland Police Service (QPS) 2018.

Jurisdiction	Cohorts that may be imposed with a GPS tracker	Power to impose	Legislation	Service model	Additional information
	Low risk home detention offenders	Courts	s82(1) Crimes (Sentencing Procedure) Act 1999.	Shared service model. Corrective Services NSW is the leading agency responsible for the monitoring of all defendants and offenders subject to GPS monitoring. An internal electronic monitoring centre operates within the Silverwater Correctional Complex. An alarm will alert the electronic monitoring centre if an offender is tampering with the device or has entered an exclusion zone. In the event of a breach, the internal monitoring centre will contact the Corrective Services Investigation Unit (CSIU) who will either respond to the breach or contact the NSW Police to respond to the breach (i.e., in the case of ESO offenders). Corrective Services have a Memorandum of	Spectrum of offenders range from low risk offenders including home detainees who are on in-home curfew monitoring, to high violent and sex offenders who have completed their prison
	Parole	Parole Board	s128 Crimes (Administration of Sentences) Act 1999		sentence but who the Supreme Court considers require monitoring on their release into the community. Corrective Services NSW (CSNSW) contract an
	Extended supervision orders (ESOs) – violent and sex offenders	Supreme Court	s11(e) Crimes (High Risk Offenders) Act 2006		external services NSW (CSNSW) contract and external service provider to provide anklets and software. The software that 'heat maps' areas most visited by offenders and a new 'interest zone' that can signal if two or more offenders are meeting up and where. Evidence collected from an offender's movements can be used in court if required.
	Intensive supervision orders (ISO)		s175(l) Crimes (Administration of Sentences) Regulation 2008		
				Understanding with the NSW Police Force for the secondment of 6 detectives to the CSIU.	

Jurisdiction	Cohorts that may be imposed with a GPS tracker	Power to impose	Legislation	Service model	Additional information
	TRIAL - DV parolees (medium- high and high-risk)	Courts, State Parole Authority, and Community Corrections Manager		Currently conducting a three-year trial of GPS monitoring for medium to high risk domestic violence perpetrators subject to a Family Violence Order. Offenders on parole are the primary focus (such offenders will be assessed for suitability for GPS tracking devices by the parole unit preparing their release). The trial involves Community Corrections,	Victims are given the option to carry their own GPS unit which alerts authorities in the event a perpetrator comes within a certain distance. The victim is then contacted by CSIU and advised of the imminent danger. GPS monitoring does not apply to a person solely the subject of an ADVO. They would need to have outstanding criminal charges or convictions for domestic violence.
	TRIAL - DV suspended sentence or Intensive Corrections Order	Courts		NSW Police, Victims Services, Legal Aid and the Electronic and External Monitoring Group (EEMG). The program is designed to shift the onus to	A Community Corrections Manager has the power to impose a GPS monitor on a DV perpetrator on parole in the event the
	TRIAL - DV defendants on bail	Courts		respond to domestic violence incidents to agencies rather than forcing the victim to navigate the system.	perpetrator exhibits concerning and/or changed behaviour whilst on parole.
				Those at high risk are referred to a "safety action meeting" of government and non-government service providers who develop a safety plan for the victim and their children.	
South Australia	Bail and Intensive Supervision Bail (IBS) (otherwise known as Bail Home Detention)	Courts	s11(2aa)(a)(ii) <i>Bail</i> Act 1985	Shared service model. The Department of Correctional Services (DCS) is the leading agency for GPS monitoring of defendants and offenders imposed with this device.	IBS is an alternative to remand in circumstances whereby the courts deem the defendant requires a higher level of supervision but do not necessary require being held in custody on remand. GPS monitoring is a mandatory condition of IBS.
	Release Ordered Home Detention	Home Detention Committee	s37A(3)(d) Correctional Services Act 1982	A two-week assessment period is conducted prior to a defendant or offender being issued with a GPS tracker. This includes ensuring the technology operates to a viable level within the community that the residential address for the	Community Corrections is responsible for managing the person with the bail agreement but they are not responsible for granting or
	Court Ordered Home Detention	Courts	s72(1)(h) Sentencing Act 2017		but they are not responsible for granting or 94

Jurisdiction	Cohorts that may be imposed with a GPS tracker	Power to impose	Legislation	Service model	Additional information
	(after the offender is found guilty, they may be sentenced to home detention rather than being sent to prison). Parole Extended Supervision Orders (ES0s).	Parole Board Court	s68(1aaa) Correctional Services Act 1982 s11(1)(a)(iii) Criminal Law (High Risk Offenders) Act 2015 s10(1)(e) Criminal Law (High Risk Offenders) Act 2015	wearer is appropriate and other tenants are complicit. GPS monitoring for the DCS is undertaken by the Intensive Compliance Unit (ICU). The ICU is made up of a team of Monitoring Centre Officers who are responsible for the actual monitoring of the GPS tracking devices and communicating any alerts or breaches to Intensive Compliance Officers (ICO). In the event of a breach, the ICU will respond immediately. All home detainees – Intensive Supervision Bail, Release Ordered Home Detention and Court Ordered Home Detention, are managed by Community Corrections. The level of supervision will depend upon the conditions set and the current regime of the home detainee.	setting the conditions of the bail agreement (only the courts can do this). Release Ordered Home Detention is an option available to the DCS and is considered by a Home Detention Committee which has representatives from the following areas: DCS Sentence Management, Psychological Services, Police, Aboriginal Services, Intelligence Officers and Community Corrections. An eligible prisoner in custody will be considered for Release Ordered Home Detention as part of their regular sentence. Eligible prisoners must have a set period of imprisonment; those who do not are not eligible. There is an in-principle agreement whereby is an offender is being considered for Home Detention who has a head sentence greater than 5 years, comment is sought by the Committee from the Parole Board.
Victoria	Bush fire arsonists Parole Community	Adult Parole Board. Courts	s74(5)(b) Corrections Act 1986 s48(1) Sentencing	GPS monitoring within Victoria is managed by the Corrections Victoria, and all monitoring is carried out internally within the Electronic Monitoring Centre. In the event an alert occurs – for example, an offender enters an exclusion blood along the corrections of the correction of	Corrections Victoria contract an external service provider to supply GPS tracking equipment. High fire risk areas are exclusion zones for arsonists. The GPS trackers have the capacity to monitor blood alcohol content enabling them to be used to monitor offenders whose conditions include
	Corrections Orders		Act 1991 break	breaks a curfew, Correctional Officers are notified, and they may then contact Victoria	alcohol bans. An alert is raised when an

Jurisdiction	Cohorts that may be imposed with a GPS tracker	Power to impose	Legislation	Service model	Additional information
	Serious sex and violent offenders	Courts and the Adult Parole Board	Serious Sex Offenders Monitoring Act 2005	Police depending on the nature of the offender and alert.	offender breaches a 'no-alcohol' condition of release. The use of GPS monitoring is incorporated as part of a larger risk management strategy to address an offender's risk. The courts or the Adult Parole Board can also force offenders to reside at a particular address, and impose a curfew, treatment orders, including alcohol and/or drug treatment, no-go zones, and strict reporting requirements.
Northern Territory	Police Bail	Police	Division 3 Bail Act	Northern Territory Police are authorised to issue and fit GPS tracking devices for defendants released to police bail. Tracking devices may also be imposed on juvenile offenders.	
	Supervised bail	Courts	Division 3 Bail Act	An external company provides the equipment and monitoring service for all GPS monitoring operations in the Northern Territory. The service provider will notify Community Corrections of any breaches. An initial investigation is completed by Community Corrections, who will then notify the Police of the breach, who will then make an arrest based on breach of bail conditions and return the matter to the Courts. Prior to be issued with a device, a Community Corrections officer is required to do an assessment to see if an offender is suitable for GPS monitoring. Community Corrections will	An offender may only be sentenced to home
	Administrative Home Detention	Courts	S44(3)(b) Sentencing Act		detention as an alternative to prison if their total term of imprisonment is less than 12 months.
	Parole General leave	Parole Board	s5A(4)(a)(i) Parole Act		

Jurisdiction	Cohorts that may be imposed with a GPS tracker	Power to impose	Legislation	Service model	Additional information
				then make a recommendation, including conditions, to the court. All persons issued with a GPS tracker by the court are managed by Community Corrections. A Community Corrections Officer will meet the offender, usually at their home address, and will fit them with the tracker. The equipment is tested to ensure the technology will operate sufficiently within the area.	
Tasmania	TRIAL - Family violence perpetrators who are subject to a Family Violence Order	Courts upon application by police	Family Violence Act 2004	Tasmania will soon commence a three-year trial of GPS monitoring for perpetrators of domestic and family violence. An Interim Evaluation Report on the planning and establishment phase was conducted by the Tasmanian Institute of Law Enforcement Studies (TILES) at the University of Tasmania. TILES will also evaluate the implementation phase. Details of whether Tasmania Police will carry out the monitoring, or outsource this function, as well as how victims will be contacted, have yet to be confirmed. New laws mean Tasmania Police can apply to the courts to require DV perpetrators to wear a GPS monitor as a condition of a Family Violence Order, irrespective of whether they have been convicted of a violent offence.	Victims can also volunteer to be monitored in a bid to increase their safety. Recorded movements by the perpetrator are stored and can be used as evidence in future family violence hearings before a court (albeit, not as evidence for any other crime).

Jurisdiction	Cohorts that may be imposed with a GPS tracker	Power to impose	Legislation	Service model	Additional information
New Zealand	Electronic Monitoring Bail (EM Bail)	Courts	s30 (2)(a) <i>Bail Act</i> 2000	Shared service model The New Zealand DoC has a contract with an external service provider, who is responsible for	EM Bail is an option for juveniles (aged 12 to 17 years) as well as adults. Radio Frequency is also used in New Zealand
	Home Detention	Courts	s80C(2)(d) Sentencing Act 2002 s80D(4)(e) Sentencing Act 2002	providing the electronic monitoring equipment as well as operating the Monitoring Centre that receives alerts from these devices. In the event a tracker is tampered with or removed, it sets off an alarm at the monitoring centre and the provider must take action within 60 seconds. A	specifically to monitor the defendant at their detention address. It is predominately used for Community Detention.
	Community Detention	Courts	s69E(1)(e) Sentencing Act 2002	field officer must be dispatched within 10 minutes of the alert and attend the defendant/offender's address. If the field officer	
	Parole	Parole Board	s15(3)(f) Parole Act 2002	discovers that the individual has absconded, the service provider will immediately notify Corrections, who will then notify Police. In cases of high-risk offenders, the monitoring centre contacts Corrections' specialist GPS Immediate Response Team who decide how to respond to an alert depending on the nature of the incident and sentence being served. This can include direct escalation to police, dispatching a	
	Extended Supervision Orders	Courts and Parole Board	s15(3)(f) Parole Act 2002		
	Intensive Supervision	Courts	s54G Sentencing Act 2002		
	Temporary Release from Prison	s63(1A) Corrections Act 2004	field officer, making contact with the offender or a combination of these.		
				Corrections and New Zealand Police jointly manage EM bail under a shared service model. Corrections is responsible for interviewing the defendant applying for EM bail and assessing them for suitability. Corrections also assesses the prospective residence and checks for suitability for EM bail, and will also interview the other occupants of the residence to gain	

Jurisdiction	Cohorts that may be imposed with a GPS tracker	Power to impose	Legislation	Service model	Additional information
				their consent and assess their ability to support the defendant.	
				Corrections submits its Electronic Monitoring Suitability Report to court as part of the application for EM bail. New Zealand Police are responsible for	
				responding to instances of non-compliance with EM bail.	
Western	Bail	Court	s17 Bail Act 1982	The Department of Corrective Services (DCS) in	While courts sentence offenders to serve
Australia	Home detention	CEO Corrections	s50L(1)(a) Bail Act 1982	administration, monitoring and response components of their electronic monitoring programs. However, the Western Australia Police Force provides ongoing supervision of offenders, particularly dangerous prisoners, on supervision orders. Previously, the Department of Corrections held a contract with 3M for the supply of electronic monitoring devices, however, this contract is now expired and they are undergoing a tender process. Whilst Western Australia appears to use electronic monitoring primarily as an alternative to detention, it is interesting to note that there is currently no legislation for its utilisation in relation to parole. The DCS has indicated they are looking to expand their	Intensive Supervision Orders and Conditional Suspended Imprisonment Orders, electronic monitoring is only used if a Community Corrections Officers imposes a curfew requirement for offenders subject to a community order. Defendants issued with Conditional Monitored Bail/Home Detention are those who do not need to be remanded in custody but who require additional conditions to be monitored
	Intensive Youth Supervision Order	CEO Corrections	s109B(1)(a) Young Offenders Act 1994		
	Intensive Supervision Order - curfew requirement	Community Corrections Officer	s75(2)(b) Sentencing Act 1995		
	Conditional Suspended Imprisonment Order - curfew requirement	Community Corrections Officer	s84C(2)(b) Sentencing Act 1995		by the Western Australia DCS. Such defendants are required to wear a GPS tracking device and reside at their home address or that of a sponsor during the bail period. They can only leave the home with the permission of their supervising community corrections officer. Other conditions may include a curfew and/or drug
				electronic monitoring program.	The court must be satisfied with a defendant's suitability for Conditional Monitored Bail. A report from a community corrections officer

Jurisdiction	Cohorts that may be imposed with a GPS tracker	Power to impose	Legislation	Service model	Additional information
					must be submitted and the court must be satisfied that, unless home detention was imposed, the defendant would not be able to be released on bail.